

**Annual Groundwater  
Monitoring Report  
Walpole Park South  
Walpole, Massachusetts**

**Submitted to:  
Walpole Park South**

**August 8, 2005**



August 8, 2005

Mr. Donnell Murphy  
Walpole Park South  
Post Office Box 123  
Walpole, MA 02081-2552

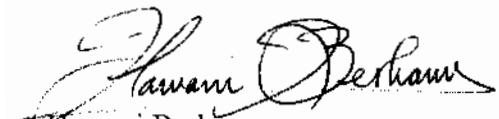
**Re: Annual Groundwater Monitoring Report  
Walpole Park South  
Walpole, Massachusetts  
RTN 3-21915**

Dear Mr. Murphy:

Rizzo Associates, Inc. is pleased to submit this Annual Groundwater Monitoring report for the above referenced property (the Site). This investigation included the collection of groundwater samples from existing monitoring wells for laboratory analysis. This report presents a narrative of our fieldwork and observations, tabulated groundwater analysis results, and a summary of our findings.

We appreciate the opportunity to provide these services to you. Please contact us if you have any questions regarding this project.

Very truly yours,

  
Hawani Berhanu  
Environmental Scientist

  
Raymond C. Johnson, P.G., L.S.P.  
Senior Vice President



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## 1.0 Introduction

Rizzo Associates performed this Annual Groundwater Monitoring for the Walpole Park South property located in Walpole, Massachusetts (the Site) on behalf of Walpole Park South. A Site Locus Plan is included as Figure 1 and a Site Plan is provided as Figure 2. This testing program was conducted to fulfill the requirements stipulated by the Walpole Board of Health (BOH). The results of our investigation are summarized below. This document is subject to the limitations presented in Appendix A.

## 2.0 Site Background and Information

The Site background and information summarized in the following sections has been based on a review of existing information related to the Site, including the June 4, 2004 *Phase I – Initial Site Investigation, Tier Classification and RAM Status Report* prepared by GeoHydroCycle, Inc. (GHC).

### 2.1 Site Description and History

The Site encompasses approximately 54 acres of land located at the intersection of US Route 1 and Pine Street in Walpole, Massachusetts as shown on Figure 1. The Site is divided into eight lots, seven of which contain buildings occupied by office and warehouse space that are leased to commercial and/or light industrial businesses. The current configuration of the Site and the configuration of the individual building lots are depicted on Figure 2. An access road, Walpole Park South Drive, crosses the Site from Route 1 to Pine Street. The buildings, driveways and parking areas cover the majority of the Site. The remainder of the property consists of landscaped areas adjacent to the buildings, wooded land and unpaved open areas. Prior to construction of the existing buildings the Site was vacant land, portions of which were used as a gravel pit. Development of the Site and building construction commenced in 1986.

### 2.2 Environmental Assessment History

A total of three Release Tracking Numbers (RTNs) (3-11220, 3-19859 and 3-21915) have been issued to the Walpole Park South property. RTNs 3-11220 and 3-19859 have achieved closure through the submission of Response Action Outcome (RAO) Statements. The three RTNs are discussed below.

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**2.2.1 RTN 3-11220**

On June 30, 1994 a release of diesel fuel from a fuel tank at 24 Walpole Park South was reported to DEP as a 2-hour notification condition.

Specifically, approximately 100 gallons of diesel fuel was released when a tractor trailer fuel tank was punctured during unloading of the truck.

Reportedly, about 80 gallons of diesel fuel was recovered and placed in 55-gallon drums, and the remainder of the fuel was contained using absorbent pads and sand that was containerized for off-site disposal.

Approximately 14 cubic yards of surficial soil was excavated from an unpaved area that was impacted by the release, and analysis of confirmatory soil samples indicated residual concentrations of total petroleum hydrocarbons (TPH) to be well below MCP reportable concentrations and Method 1 standards. After completion of response actions a Class A-2 RAO Statement was submitted to DEP by Clean Harbors Environmental Services on August 8, 1994, indicating that a Permanent Solution had been achieved for this RTN.

**2.2.2 RTN 3-19859**

Based on sampling performed in April 1999 and April 2000, elevated concentrations of chloroform and bromodichloromethane were detected in groundwater samples collected at the Site as part of periodic groundwater monitoring and sampling. The detected concentrations represented a 120-day notification condition under the MCP, and a Release Notification Form was submitted to the DEP on August 9, 2000. A Class B-1 RAO Statement was submitted by Carr Research Laboratory on July 25, 2001, indicating that a Permanent Solution had been achieved for this RTN. The RAO indicated that the source of the bromodichloromethane was treatment chemicals (brominating tablets) used in a residential swimming pool located on an upgradient property. The source of the chloroform was identified as a reaction between chlorine used for swimming pool disinfection at the same residence and septic tank effluent from the septic tank and leach field at the residence.

**2.2.3 RTN 3-21915**

In compliance with requirements issued by the Walpole Board of Health (BOH), seven groundwater monitoring wells were installed at the Site in December 1986 by Carr Research Laboratory (Carr). The wells installed at that time included two wells located on the upgradient side of the property (MW-1 and MW-2), and five wells (MW-3, MW-4, MW-5D, MW-5S and MW-6) on the downgradient portion of the Site. Wells MW-5D and MW-5S were installed as a deep/shallow well couplet, located near the northwest corner of the property. Carr performed annual groundwater

sampling during the period from 1987 to 2003 as required by the BOH, and also collected samples of surface water and/or sediment in eight storm water catch basins located in the southwest portion of the Site, upgradient from monitoring well MW-6. In September 2000 two additional monitoring wells, designated MW-8 and MW-9, were installed in the southwest portion of the Site. Sampling of the catch basins and the installation and sampling of MW-8 and MW-9 were implemented as part of investigations relating to the detection of chloroform and bromodichloromethane in groundwater samples collected from MW-6 in 1999 and 2000. This condition is associated with RTN 3-19859 as discussed above. In January 2004, seven additional monitoring wells were installed by GHC (GHC-1 to GHC-7) to further characterize soil and groundwater conditions and to evaluate whether a source of the compounds detected in groundwater could be identified. Groundwater samples were collected from both new and existing wells in February and April 2004.

In April 2002 it was noted that the lead concentrations reported by the laboratory for groundwater samples collected from monitoring wells MW-3 and MW-6 were 0.059 milligrams per liter (mg/l) and 0.023 mg/l, respectively; concentrations which exceeded the MCP reportable concentration of 0.020 mg/l for groundwater classified as RCGW-1 for reporting purposes. To further evaluate this condition confirmatory groundwater sampling was performed in May 2002. The results of this sampling indicated lead concentrations in samples collected from MW-3 and MW-6 of 0.046 mg/l and 0.018 mg/l, respectively. Based on these sampling results it was concluded that the detected lead concentrations represented a 120-day notification condition under the MCP. Therefore, a RNF was prepared and received by the DEP on July 2, 2002. In response to the notification, DEP issued a Notice of Responsibility (NOR) on August 15, 2002 and assigned RTN 3-21915 to the reported release.

Based on further review of the historic groundwater monitoring results by GHC, it was determined that additional compounds detected at concentrations exceeding the applicable RCGW-1 reportable concentrations had not been previously reported to DEP. These compounds included methylene chloride, total chromium, arsenic, tetrachloroethylene (PCE), cadmium, and antimony. Of these compounds, only lead and antimony were detected in samples collected after October 1993, the effective date of the MCP revisions which established specific reportable concentrations for oil and hazardous materials. Methylene chloride is a commonly used laboratory solvent and was only detected once at a concentration exceeding its reportable concentration, in a sample collected from MW-4 in March 1987. PCE was only detected once at a

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level exceeding its reportable concentration, in the sample collected from MW-1 in March 1988. Cadmium was detected above its reportable concentration once, in the sample collected in March 1991 from MW-5D. Total chromium was detected at levels exceeding its reportable concentration three times, all samples collected from MW-3, most recently in March 1991. Arsenic has been identified in samples from MW-1, MW-3 and MW-5D, but has not been reported at levels exceeding the current RCGW-1 standard since March 1988.

In general, periodic groundwater sampling has shown that the presence of elevated levels of these compounds is sporadic and intermittent, as the detected compounds have not been present in all Site monitoring wells, and compounds detected in specific wells have not been present in all of the samples collected from those wells. The results of the testing do not indicate a plume of impacted groundwater that can be clearly delineated, nor do they identify the source or sources of the detected compounds. The data do not suggest a correlation between the groundwater conditions at the Site and the activities of the tenants in the Site buildings.

In addition to the compounds noted above, bromodichloromethane and chloroform were detected in samples collected from MW-6 in April 1999 and April and June 2002. As noted previously, DEP was notified of that condition and a Class B-1 RAO Statement was submitted on July 25, 2001.

Based on historic monitoring results and the investigations implemented after submission of the RNF, a Phase I – Initial Site Investigation (Phase I) report and Tier Classification was prepared by GHC and submitted to DEP in June 2004. The Phase I report concluded that the nature and extent of contamination does not exhibit a regular pattern, relative to both the locations of wells in which levels exceed MCP Method 1 GW-1 standards and the detection of compounds over time. Based on the Numerical Ranking Scoresheet (NRS) prepared by GHC, the Site was classified as a Tier IB Disposal Site. An evaluation performed as part of the Phase I investigation concluded that the identified Site conditions did not represent an Imminent Hazard, indicating that implementation of response actions on an accelerated schedule was not necessary. In an internal memorandum dated July 9, 2004, the DEP Drinking Water Program (DWP) found that “the groundwater contamination levels at the site are all low, compared to most waste sites,” and “heavy metals have fairly low mobility in groundwater.” DEP concluded “the site does not appear to pose a threat to the Walpole municipal wells, because of the low groundwater contamination levels and the distance from the site to the wells.”

## 3.0 Groundwater Screening and Sampling

Of the sixteen monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5S, MW-5D, MW-6, MW-7, MW-9 and GHC-1 through GHC-7) previously identified at the Site, only fourteen were found during this sampling event. Of these wells, MW-8 was found to have a limited saturated thickness.

Because of the limited amount of water and slow rate of recharge, a sample could not be obtained from this well. Monitoring wells GHC-4 and GHC-7 could not be located during this investigation. GHC-4 is located in a grassy area to the north of the retention basin located adjacent to Building 23. This well is believed to have been destroyed by grade changes. GHC-7 is located in an area where mulch and landscaping materials are stored, and may have been buried or destroyed. Efforts to locate the wells during this sampling event were unsuccessful. If they cannot be located replacement wells will be installed before the 2006 sampling event.

The annual groundwater monitoring program consisted of field screening of groundwater samples for temperature, pH, specific conductance and volatile organic compounds (VOCs), and collection and laboratory analysis of groundwater samples. The results of this investigation are discussed in the following sections.

### 3.1 Groundwater Field Screening

On April 15, 2005, Rizzo Associates personnel performed the annual field screening of groundwater at the Site. Prior to the collection of the samples for field measurements of temperature, pH, specific conductance and VOC headspace screening, the depth to groundwater in each well was measured using an electronic water level meter following Standard Operating Protocols presented in Appendix B. The depth to water and depth to bottom were measured relative to the PVC riser in each well. No evidence of separate phase petroleum or odor was noted during the gauging of the monitoring wells. Figure 2 presents the approximate locations of the monitoring wells.

Prior to the collection of the samples each well was purged using a peristaltic or submersible pump, removing a quantity of groundwater equal to a minimum of three well volumes. After purging each well, a sample was collected for field screening for temperature, pH and specific conductance using a temperature/pH/conductivity meter (YSI 63). In addition, a second sample from each well was screened in the field for the presence of headspace VOCs using a photoionization detector (PID) equipped with a 10.2-eV lamp following Standard Operating Protocols

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presented in Appendix B. Results of the field testing are presented in Table 1. The depth to groundwater measurements and groundwater elevations are presented in Table 2. The groundwater elevations were generated using the groundwater gauging data and top of well casing elevations obtained from the Winter-Spring 2004 *Groundwater Sampling Report* prepared by Carr. Historical Site groundwater elevations data (1994-2004) obtained from the Carr report are included in Appendix C.

**Table I – Groundwater Field Screening Data**

<b>Well</b>	<b>Temperature (°C)</b>	<b>pH</b>	<b>Specific Conductivity (µS/cm)</b>	<b>PID (ppm)</b>
<b>MW-1</b>	8.3	6.82	512	ND
<b>MW-2</b>	11.7	6.18	1070	ND
<b>MW-3</b>	13.6	6.22	527	2.8
<b>MW-4</b>	12.0	5.59	149.6	4.0
<b>MW-5S</b>	10.8	6.34	105.7	ND
<b>MW-5D</b>	10.9	6.63	107.5	ND
<b>MW-6</b>	11.8	6.30	445.7	2.0
<b>MW-9</b>	11.4	6.58	152.5	ND
<b>GHC-1</b>	12.1	6.13	1124	ND
<b>GHC-2</b>	8.8	6.80	518	0.4
<b>GHC-3</b>	9.4	6.58	NM	ND
<b>GHC-5</b>	12.8	5.86	416.7	ND
<b>GHC-6</b>	11.3	6.15	897	ND

NM = Not measured due to insufficient volume of water in the well.

ND = Not detected

In compliance with the requirements issued by the Walpole BOH, one upgradient monitoring well (GHC-2) and two downgradient wells (MW-3 and MW-4) were selected for laboratory testing. The wells were selected based on positive screening results for headspace VOCs and the locations

of the wells in relation to the previously identified direction of groundwater flow.

### **3.2 Groundwater Sample Collection**

On April 18, 2005, Rizzo Associates personnel collected groundwater samples from monitoring wells GHC-2, MW-3 and MW-4. Prior to the collection of the samples each well was purged using a peristaltic or submersible pump, removing a quantity of groundwater equal to a minimum of three well volumes. After purging each well, the sample was collected in laboratory prepared bottles, placed on ice and submitted to Con-Test Laboratories in East Longmeadow, Massachusetts, a state-certified laboratory. All groundwater samples were submitted for analysis for VOCs by EPA Method 624, dissolved Priority Pollutant 13 (PP13) metals, base neutrals by EPA Method 625, total phenols by EPA Method 5530C, oil and grease by EPA Method 1664, TPH by Method 8100, nitrates, nitrites and sodium. In addition, three samples were collected from each well, placed on ice and submitted to Alpha Analytical Laboratories (Alpha) in Westborough, Massachusetts, for fecal coliform and fecal streptococci.

### **4.0 Analytical Results for Groundwater Samples**

Table 3 presents the positive analytical results for the groundwater samples collected during this investigation. The laboratory certificates of analyses are presented in Appendix D. The laboratory analytical results are compared to the Massachusetts Maximum Contaminant Levels (MMCLs) and applicable Reportable Concentrations (RCs) established by the MCP.

As shown in Table 3, no target analytes with the exception of sodium, zinc and nitrate were detected in the groundwater sample collected from monitoring well GHC-2 at concentrations exceeding the laboratory method detection limits. In groundwater sample collected from MW-3, copper, zinc, sodium, oil and grease, TPH, and nitrate were detected above the laboratory method detection limits.

No analytes with the exception of sodium and nitrate were detected above the laboratory method detection limits in the groundwater sample collected from MW-4. Fecal coliform was not detected in the samples collected from all three monitoring wells, and all fecal streptococci

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samples resulted in less than 2 most probable number (colonies) per 100 milliliters (MPN/100ml).

None of the analytes detected in the samples collected from all the monitoring wells (GHC-2, MW-3 and MW-4) exceed the applicable Reportable Concentrations for groundwater category GW-1 (RCGW-1) standards and the MMCLs.

## **5.0 Summary and Conclusions**

Rizzo Associates performed the annual groundwater monitoring for the Site to fulfill the requirements implemented by the Walpole BOH. Field measurements of temperature, pH, specific conductance and VOC headspace screening was conducted on samples collected from 13 existing monitoring wells. Based on positive VOC headspace screening results, three monitoring wells were selected for laboratory testing. Analysis of groundwater samples from the three monitoring wells (one upgradient and two downgradient) for VOCs, dissolved PP13 metals, base neutrals, total phenols, oil and grease, TPH, nitrates, nitrites, sodium, fecal coliform and fecal streptococci showed that all detected constituents were below applicable RCGW-1 standards and MMCLs.

Based on our investigations, the results of the groundwater screening and groundwater analysis appear to be within the range of results historically observed at the Site.

**Table 2 - Groundwater Elevation Data - April 2005**

Well	Rim Elevation* (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)
MW-1	259.36	14.67	244.69
MW-2	240.90	9.40	231.50
MW-3	236.67	36.55	200.12
MW-4	229.74	30.07	199.67
MW-5S	238.03	17.05	220.98
MW-5D	236.36	14.94	221.42
MW-6	250.55	21.81	228.74
MW-8	258.61	11.88	246.73
MW-9	256.08	26.95	229.13
GHC-1	241.95	8.83	233.12
GHC-2	258.51	13.96	244.55
GHC-3	252.40	14.13	238.27
GHC-4	NA	NA	NA
GHC-5	236.94	37.50	199.44
GHC-6	236.01	5.72	230.29
GHC-7	239.31	NA	NA

NA = Not Applicable; well could not be located during this round of monitoring.

\*Rim elevations of the wells was obtained from the Groundwater Sampling Report, Winter-Spring 2004.

Walpole Park South, Walpole, Massachusetts. August 10, 2004. prepared by Carr Research Laboratory, Inc.

Table 3 Groundwater Analytical Data (µg/L) - Walpole Park South, RTN 3-21915

Location:	Walpole, MA	Walpole, MA	Walpole, MA	RCCW-I
Sample Name:	GHC-2-041805	MW-3-041805	MW-4-041805	
Laboratory:	Contest	Contest	Contest	
Laboratory ID:	05B13973, 05B13977, 05B17968	05B13971, 05B13975,	05B13972, 05B13976	MNCL
Sample Date:	18-Apr-05	18-Apr-05	18-Apr-05	µg/L
Consultant:	Rizzo	Rizzo	Rizzo	Standard µg/L
<b>Volatile Organic Compounds</b>				
Benzene	<1.0	<1.0	<1.0	5
Bromo-dichloromethane	<2.0	<2.0	<2.0	NA*
Bromoform	<2.0	<2.0	<2.0	NA*
Bromomethane	<2.0	<2.0	<2.0	NA
Carbon Tetrachloride	<2.0	<2.0	<2.0	5
Chlorobenzene	<2.0	<2.0	<2.0	5
Chlorodibromomethane	<2.0	<2.0	<2.0	100
Chloroethane	<2.0	<2.0	<2.0	NA
Chloroethylvinyl ether, 2-	<10.0	<10.0	<10.0	1,000
Chloroform	<2.5	<2.5	<2.5	NA
Chloromethane	<2.0	<2.0	<2.0	5
Dichlorobenzene, 1,2-(<-DCB)	<2.0	<2.0	<2.0	NA
Dichlorobenzene, 1,3-(m-DCB)	<2.0	<2.0	<2.0	5,000
Dichlorobenzene, 1,4-( <i>p</i> -DCB)	<2.0	<2.0	<2.0	NA
Dichloroethane, 1,1-	<2.0	<2.0	<2.0	5
Dichloroethane, 1,2-	<2.0	<2.0	<2.0	5
Dichloroethene, 1,1-	<2.0	<2.0	<2.0	5
Dichloroethene, trans-1,2-	<2.0	<2.0	<2.0	600
Dichloropropane, 1,2-	<2.0	<2.0	<2.0	600
Dichloropropane, cis-1,3-	<2.0	<2.0	<2.0	5
Dichloropropene, trans-1,3-	<2.0	<2.0	<2.0	NA
Ethylbenzene	<1.0	<1.0	<1.0	70
Methyl tert-butyl ether	<1.0	<1.0	<1.0	5
Methylene chloride	<5.0	<5.0	<5.0	NA
Tetra-chloroethane, 1,1,2,2-	<2.0	<2.0	<2.0	5
Tetrachloroethylene	<2.0	<2.0	<2.0	0.5
Toluene	<1.0	<1.0	<1.0	NA
Trichloroethane, 1,1,1-	<2.0	<2.0	<2.0	0.5
Trichloroethane, 1,1,2-	<2.0	<2.0	<2.0	200
Trichloroethylene	<2.0	<2.0	<2.0	5
Trifluoromethane	<2.0	<2.0	<2.0	10,000
Vinyl chloride	<2.0	<2.0	<2.0	2
Xylene (total)	<2.0	<2.0	<2.0	6,000

Notes: NA = Not Available; \*NA = Not Applicable

Concentrations entered as &lt; indicate that they were below the laboratory method detection limit

MNCL = Massachusetts Maximum Contaminant Levels

Table 3 Groundwater Analytical Data (µg/L) - Walpole Park South, RTN 3-21915

Location:	Walpole, MA GHC-2-041805	Walpole, MA MW-3-041805 Contest	Walpole, MA MW-4-041805 Contest	Walpole, MA RCGW-1	
Laboratory I.D.:	05B13971, 05B13975, 18-Apr-05 Rizzo	05B13971, 05B13975, 05B17944 18-Apr-05 Rizzo	05B13972, 05B13976 18-Apr-05 Rizzo	MMCL µg/L	Standard µg/L
<b>Base Neutrals</b>					
Acenaphthene	<5.0	<5.0	<5.0	NA	20
Acenaphthylene	<5.0	<5.0	<5.0	NA	300
Acetophenone	<10.0	<10.0	<10.0	NA	10,000
Aniline	<5.0	<5.0	<5.0	NA	10,000
Anthracene	<5.0	<5.0	<5.0	NA	600
Benzidine	<70.0	<70.0	<70.0	NA	100
Benzoic Acid	<30.0	<30.0	<30.0	NA	10,000
Benz(a)anthracene	<5.0	<5.0	<5.0	NA	1
Benzaldehyde	<5.0	<5.0	<5.0	0.2	0.2
Benzofluoranthene	<5.0	<5.0	<5.0	NA	1
Benzoguaiacol	<5.0	<5.0	<5.0	NA	300.0
Benzofluoranthene	<5.0	<5.0	<5.0	NA	1
Benzyl Alcohol	<20.0	<20.0	<20.0	NA	NA
Biphenyl, 1,1-	<10.0	<10.0	<10.0	NA	NA
Bis(2-chloroethyl)methane	<10.0	<10.0	<10.0	NA	NA
Bis(2-chloroethyl)ether	<10.0	<10.0	<10.0	NA	NA
Bis(2-chloroisopropyl)ether	<10.0	<10.0	<10.0	NA	NA
Bis(2-ethylhexyl)phthalate	<10.0	<10.0	<10.0	NA	NA
Bromophenyl-phenylether, 4-	<10.0	<10.0	<10.0	NA	NA
Butylbenzylphthalate	<20.0	<20.0	<20.0	NA	NA
Chloraniline, 4-	<20.0	<20.0	<20.0	NA	NA
Chloranaphthalene, 2-	<10.0	<10.0	<10.0	NA	NA
Chlorophenyl phenyl ether, 4-	<10.0	<10.0	<10.0	NA	NA
Chrysene	<5.0	<5.0	<5.0	NA	6
Dibenzofuran	<10.0	<10.0	<10.0	NA	1,000
Dibenzofuranobifluorene	<5.0	<5.0	<5.0	NA	1,000
Dichlorobenzene, 1,2-	<5.0	<5.0	<5.0	NA	500
Dichlorobenzene, 1,3-	<5.0	<5.0	<5.0	NA	600
Dichlorobenzene, 1,4-	<10.0	<10.0	<10.0	NA	10,000
Dichlorobenzidine, 3,3-	<10.0	<10.0	<10.0	NA	10,000
Diethyl phthalate	<20.0	<20.0	<20.0	NA	200
Dimethyl phthalate	<10.0	<10.0	<10.0	NA	NA
Di-n-butylphthalate	<20.0	<20.0	<20.0	NA	NA
Di-n-octylphthalate	<20.0	<20.0	<20.0	NA	NA
Dinitrobenzene, 1,2-	<10.0	<10.0	<10.0	NA	100
Dinitrobenzene, 1,3-	<10.0	<10.0	<10.0	NA	100
Dinitrobenzene, 1,4-	<10.0	<10.0	<10.0	NA	100
Dinitrotoluene, 2,4-	<10.0	<10.0	<10.0	NA	NA
Dinitrotoluene, 2,6-	<10.0	<10.0	<10.0	NA	NA
Diphenylhydrazine, 1,2-	<5.0	<5.0	<5.0	NA	NA
Fluoranthene	<10.0	<10.0	<10.0	NA	NA
Fluorene	<10.0	<10.0	<10.0	NA	NA
Hexachlorobenzene	<5.0	<5.0	<5.0	NA	1
Hexachlorobutadiene	<10.0	<10.0	<10.0	NA	0.6
Hexachlorocyclopentadiene	<10.0	<10.0	<10.0	NA	500
Indenol, 1,2,3-cdipyrene	<5.0	<5.0	<5.0	NA	3
Isophorone	<10.0	<10.0	<10.0	NA	10,000
Methylnaphthalene, 2-	<5.0	<5.0	<5.0	NA	5,000
Naphthalene	<10.0	<10.0	<10.0	NA	10,000
Nitroniline, 2-	<10.0	<10.0	<10.0	NA	500
Nitroniline, 3-	<10.0	<10.0	<10.0	NA	NA
Nitroniline, 4-	<10.0	<10.0	<10.0	NA	10,000
Nitrobenzene	<10.0	<10.0	<10.0	NA	0.5
N-nitrosodimethylamine	<10.0	<10.0	<10.0	NA	NA
N-nitroso-N-phenylamine	<10.0	<10.0	<10.0	NA	500
Phenanthrene	<5.0	<5.0	<5.0	NA	50
Pyrene	<0.8	<0.8	<0.8	NA	200
Pyridine	<5.0	<5.0	<5.0	NA	500
Trichlorobenzene, 1,2,4-	<5.0	<5.0	<5.0	70	70

Notes:

NA = Not Available

Concentrations entered as &lt; indicate that they were below the laboratory method detection limit.

MMCL = Massachusetts Maximum Contaminant Levels

Table 3  
Groundwater Analytical Data (mg/L) - Walpole Park South, RTN 3-21915

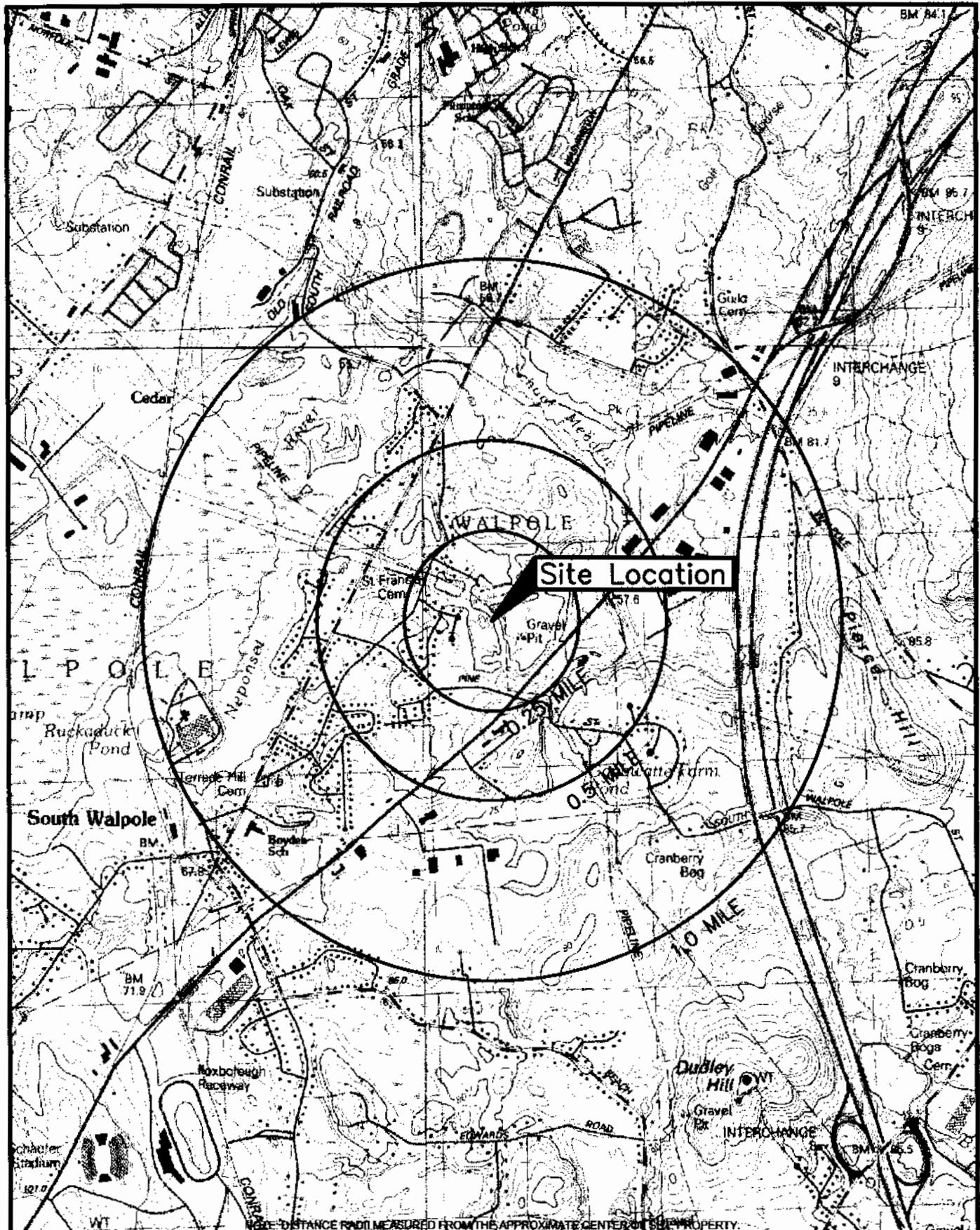
Location:	Walpole, MA			Walpole, MA	Walpole, MA	Walpole, MA
Sample Name:	GHC-2-041805			MW-3-041805	MW-4-041805	RCGW-I
Laboratory:	Contest			Contest	Contest	
Laboratory ID:	05B13973, 05B13975, 05B17944	05B13971, 05B13975,	05B13976	05B13972, 05B13976	MMCCL	Standard
Sample Date:	18-Apr-05	18-Apr-05	Rizzo	18-Apr-05	µg/L	µg/L
Consultant:				Rizzo		
<b>Phenols, Total (Phenolics)</b>	<50	<50		<50	NA	4,000
<b>Priority Pollutant 13 Metals</b>						
Antimony, Dissolved (mg/L)	<0.006	<0.006		<0.006	0.006	0.006
Arsenic, Dissolved (mg/L)	<0.05	<0.05		<0.05	0.05	0.05
Beryllium, Dissolved (mg/L)	<0.0025	<0.0025		<0.0025	0.004	0.004
Cadmium, Dissolved (mg/L)	<0.005	<0.005		<0.005	0.005	0.005
Chromium, Dissolved (mg/L)	<0.005	<0.005		<0.005	0.1	0.10
Copper, Dissolved (mg/L)	<0.005	<0.006		<0.006	1.3	10.0
Lead, Dissolved (mg/L)	<0.015	<0.015		<0.015	0.015	0.02
Mercury, Dissolved (mg/L)	<0.00004	<0.00004		<0.00004	0.001	0.001
Nickel, Dissolved (mg/L)	<0.005	<0.005		<0.005	NA	0.06
Selenium, Dissolved (mg/L)	<0.005	<0.005		<0.005	0.05	0.05
Silver, Dissolved (mg/L)	<0.005	<0.005		<0.005	NA	0.007
Sodium (mg/L)	151	96.3		20.3	NA	NA
Thallium, Dissolved (mg/L)	<0.002	<0.002		<0.002	0.002	0.002
Zinc, Dissolved (mg/L)	0.023	0.029		<0.01	NA	0.90
<b>TPH</b>	<200	320		<200	NA	2,000
<b>Oil and Grease</b>	<1,400	9,000		<1,400	NA	NA
<b>Nitrate</b>	930	1,910		3,140	10,000	NA
<b>Nitrite</b>	<30	<30		<30	1,600	NA

Notes: NA = Not Available

Concentrations entered as &lt; indicate that they were below the laboratory method detection limit.

MMCCL = Massachusetts Maximum Contaminant Levels

The RCGW-I standards and MMCCLs for metals are presented in milligrams per liter (mg/L).



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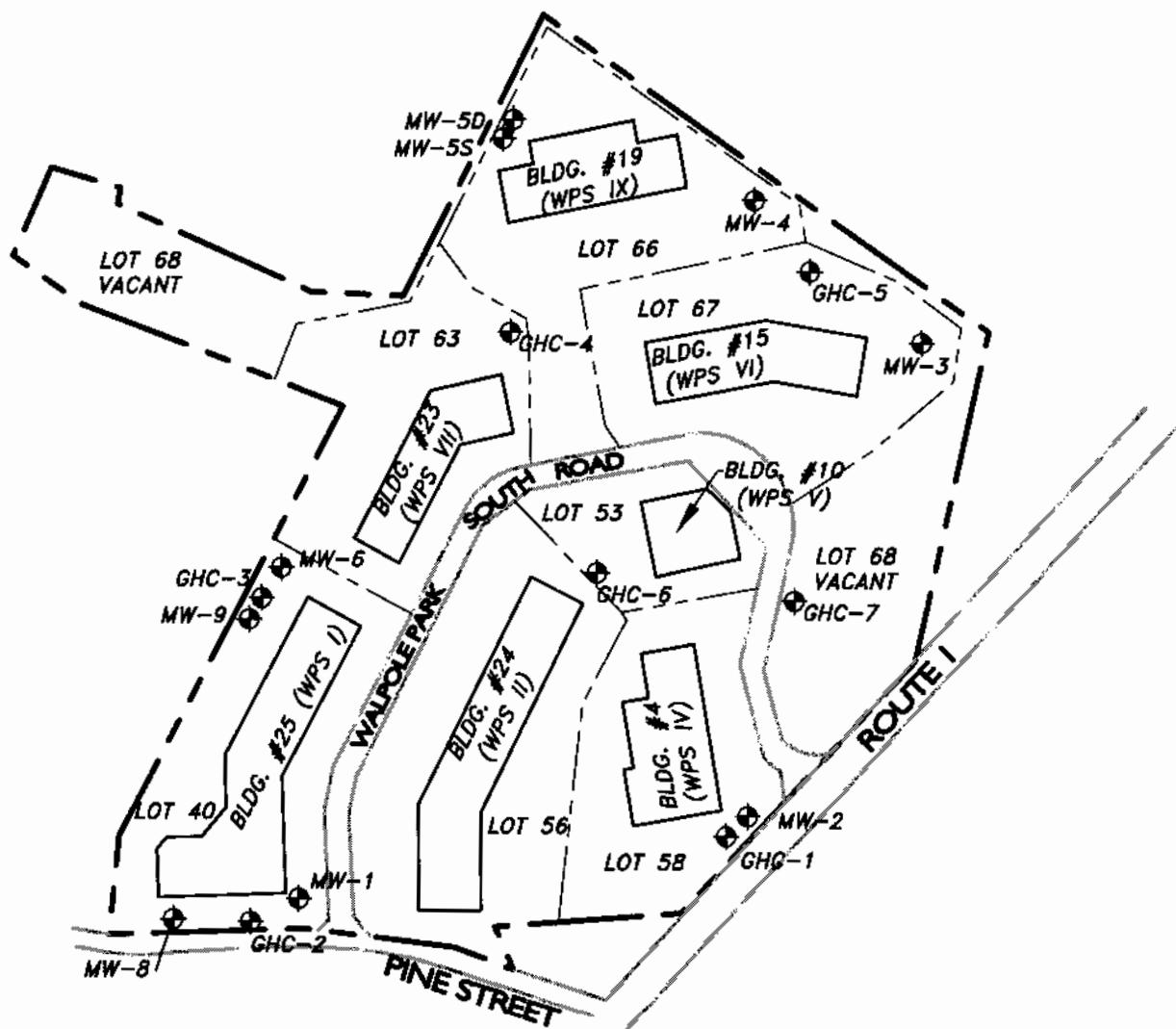
Information obtained from  
USGS Map of Mansfield, Massachusetts  
Quadrangle dated 1987 and  
USGS Map of Norwood, Massachusetts  
Quadrangle dated 1982-1985

Site Locus Plan

Figure  
**1**

02/15/2005 01:25:02 PM EST

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### LEGEND

- ◆ EXISTING MONITORING WELL LOCATION
- SITE BOUNDARY RTN 3-21915
- LOT BOUNDARIES

12700058P-ESP01

Walpole Park South  
Walpole, Massachusetts



**RIZZO  
ASSOCIATES**  
A TETRA TECH COMPANY

Site Plan by  
GeoHydroCycle, Inc.  
Dated 5/14/04

Site Plan with  
Monitoring Well Locations

Figure  
**2**

## **Appendix A**

### **Limitations**



## **Appendix A: Limitations**

1. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by Client. The work described in this report was carried out in accordance with the Terms and Conditions in our contract.
2. In preparing this report, Rizzo Associates has relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available to Rizzo Associates at the time of the site assessment. Although there may have been some degree of overlap in the information provided by these various sources, Rizzo Associates did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment.
3. Observations were made of the Site and of structures on the Site as indicated within the report. Where access to portions of the Site or to structures on the Site was unavailable or limited, Rizzo Associates renders no opinion as to the presence of hazardous materials or oil, or to the presence of indirect evidence relating to hazardous material or oil, in that portion of the Site or structure. In addition, Rizzo Associates renders no opinion as to the presence of hazardous material or oil, or the presence of indirect evidence relating to hazardous material or oil, where direct observation of the interior walls, floor, or ceiling of a structure on a Site was obstructed by objects or coverings on or over these surfaces.
4. Rizzo Associates did not perform testing or analyses to determine the presence or concentration of asbestos at the Site or in the environment at the Site.
5. It is ENGINEER's understanding that the purpose of this report is to assess the physical characteristics of the subject Site with respect to the presence on the Site of hazardous material or oil. This stated purpose has been a significant factor in determining the scope and level of services provided for in the Agreement. Should the purpose for which the Report is to be used or the proposed use of the site(s) change, this Report is no longer valid and use of this Report by CLIENT or others without ENGINEER's review and

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**Appendix A**  
**Limitations**

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written authorization shall be at the user's sole risk. Should ENGINEER be required to review the Report after its date of submission, ENGINEER shall be entitled to additional compensation at then existing rates or such other terms as agreed between ENGINEER and the CLIENT.

6. The conclusions and recommendations contained in this report are based in part, where noted, upon the data obtained from a limited number of soil samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
7. Any water level readings made in test pits, borings, and/or observation wells were made at the times and under the conditions stated on the report. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.
8. Except as noted within the text of the report, no quantitative laboratory testing was performed as part of the site assessment. Where such analyses have been conducted by an outside laboratory, Rizzo Associates has relied upon the data provided and has not conducted an independent evaluation of the reliability of these data.
9. The conclusions and recommendations contained in this report are based in part, where noted, upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. As indicated within the report, some of these data may be preliminary screening level data and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed, and the conclusions and recommendations presented herein modified accordingly.

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**Appendix A**  
**Limitations**

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10. Chemical analyses have been performed for specific constituents during the course of this site assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the Site.
  11. This Report was prepared for the exclusive use of the CLIENT. No other party is entitled to rely on the conclusions, observations, specifications, or data contained therein without the express written consent of ENGINEER.
  12. The observations and conclusions described in this Report are based solely on the Scope of Services provided pursuant to the Agreement. ENGINEER has not performed any additional observations, investigations, studies, or testing not specifically stated therein. ENGINEER shall not be liable for the existence of any condition, the discovery of which required the performance of services not authorized under the Agreement.
  13. The passage of time may result in significant changes in technology, economic conditions, or site variations that would render the Report inaccurate. Accordingly, neither the CLIENT, nor any other party, shall rely on the information or conclusions contained in this Report after six months from its date of submission without the express written consent of ENGINEER. Reliance on the Report after such period of time shall be at the user's sole risk. Should ENGINEER be required to review the Report after six months from its date of submission, ENGINEER shall be entitled to additional compensation at then existing rates or such other terms as may be agreed upon between ENGINEER and the CLIENT.
  14. ENGINEER has endeavored to perform its services based upon engineering practices accepted at the time they were performed. ENGINEER makes no other representations, express or implied, regarding the information, data, analysis, calculations, and conclusions contained herein.
  15. The services provided by ENGINEER do not include legal advice. Legal counsel should be consulted regarding interpretation of applicable and relevant federal, state, and local statutes and regulations and other legal matters.

## **Appendix B**

### **Standard Operating Protocols**

## **Standard Operating Protocol for Determining Subsurface Liquid Levels in Monitoring Wells**

In order to determine the hydraulic gradient at a site, groundwater elevation data can be collected from a system of monitoring wells (minimum of three), and a potentiometric surface can be mapped. This protocol outlines the collection of groundwater elevation data from monitoring wells for the purpose of determining groundwater flow direction, depth of the water table from the ground surface, and appropriate purge volumes required for sampling monitoring wells.

### **Procedures for Measuring Static Liquid Level**

1. A measuring point should be established and marked on the top of the casing of each monitoring well, or on the road box rim. The measuring points should be surveyed for location and elevation. All liquid level measurements should be made from the established measuring point. If a point on the top of the well casing is chosen as the measuring point, record the distance from this point to the road box rim.
2. Prior to measuring the liquid level in a monitoring well, the field engineer or scientist should determine whether the water in the well is at equilibrium with the groundwater in the surrounding formation. Improper well installation, surface water infiltration, and purging of monitoring wells can cause changes in water levels that are not representative of the water level in the surrounding formation.
3. For monitoring wells in which floating non-aqueous phase liquid (NAPL) has not been previously detected and is not suspected, use a water level meter consisting of a measuring tape and an electronic water sensing probe. Check the operation of the probe by inserting it into water and noting if the signal registers clearly. Check the tape for stretching and for evidence of splicing.
4. Slowly lower the probe and tape into the well until the signal is heard, indicating the presence of water around the sensing tip. Retract the tape slightly until the signal stops, and lower it again to accurately determine the level of water. Record the distance from the measuring point to the water to the nearest 0.01 feet. Decontaminate the sensing probe prior to lowering it into the next well.

5. The engineer or scientist may record a second static water level measurement after a few minutes to determine whether the static water level in a monitoring well is stable. If the measurements agree within 0.01 or 0.02 feet, the results are considered reliable. If not, the engineer or scientist should continue to record measurements until they stabilize or the reason for their instability is determined.
6. For monitoring wells in which floating non-aqueous phase liquid (NAPL) has been previously detected or is suspected, use a measuring device with a sensing probe that emits one of two distinct signals when it detects NAPL or water. Lower the probe into the well as described in 4 above. Record the distance from the measuring point to both the top of the NAPL layer (the air-oil interface) and the water (oil-water interface) to the nearest 0.01 feet. Decontaminate the sensing probe prior to lowering it into the next well.
7. When gauging a well containing viscous NAPL such as #4 or #6 fuel oil, the sensing probe can become coated with oil and unable to sense water. Wetting the probe with soapy water prior to gauging can facilitate movement of the oil off the probe as it passes through the oil-water interface. Lowering the probe into the well very slowly will also aid in the detection of the oil-water interface.
8. If elevation data collected from monitoring wells containing floating NAPL are to be used to calculate a potentiometric surface, the lower specific gravity of the NAPL relative to the water should be considered, and the elevations may have to be corrected.

***Adapted from:***

*Standard Test Method for Determining Subsurface Liquid Levels in a Borehole or Monitoring Well, ASTM D 4750-87 (Reapproved 1993).*

## **Standard Operating Protocol for Decontaminating Sampling Equipment**

Whenever possible, sampling equipment will be dedicated to each sampling location or disposable equipment will be used. When this is not possible, field decontamination of the equipment will occur prior to the collection of samples for chemical analysis. The method of choice for decontamination is that which most fully removes site contaminants from the sampling equipment with the least interference to the ultimate chemical analysis. Do not use fluids that have been stored in plastic bottles to decontaminate field equipment. Deionized water and methanol used for decontamination should be stored in nalgene or teflon bottles.

Equipment used to collect samples for chemical analysis will be decontaminated as follows:

1. Wash equipment with a nonphosphate detergent solution (e.g., Alconox) and a brush.
2. Rinse thoroughly with tap water.
3. Rinse with reagent grade methanol.
4. Rinse the equipment thoroughly with deionized water.
5. Equipment that is stored or transported will be kept in a dedicated plastic bag or wrapped in aluminum foil to prevent contamination prior to use.
6. When collecting water samples, rinse the equipment three times with the media being sampled before collecting the sample.

Steam cleaning is another acceptable technique for field decontamination.

Decontamination procedures will be recorded in the field book or on the field report form. These entries will include the date, time, location, personnel, equipment, and specific procedures used for the decontamination of field equipment and the source of all fluids, including water, used in the procedure. Deviations from the standard protocols will also be noted in the field log.

Waste water and methanol solutions generated during decontamination procedures will be discharged on-site, provided that the pH is between 2 and 12.

## **Standard Operating Protocol for Sampling Monitoring Wells**

### **Discussion**

To obtain a representative sample of groundwater, it must be understood that the water within the well casing and in close proximity to the well is generally not representative of the groundwater quality at that sampling site. Therefore, the well will be pumped or bailed until it is thoroughly flushed of standing water and contains water from the aquifer. Wells may be purged and sampled with a pump from the ground surface, with a submersible pump or with a bailer, depending on the specific needs of the sampling program. Bailers are generally preferred for collecting samples where volatile stripping is of concern. Pumps are useful for purging large volumes of water from deep wells or when a sample from a discrete depth below the water surface is desired. Refer to DEP Policy #WSC-310-91 to choose the appropriate method for purging and sampling a well and operate sampling equipment according to manufacturer's directions.

### **Procedures for Purging and Sampling**

1. Using clean, noncontaminating equipment (i.e., an electronic level indicator [avoid indicating paste]), determine and record in the field logbook the water level in the well, then calculate the fluid volume in the casing.

The volume of water in the well can be calculated using the following equation:

$$v = \frac{(\pi r^2 h)}{c}$$

where:

v = one well volume of water (gallons)

$\pi$  = 3.14

r = the radius of the well or one half of the diameter (inches)

h = the height of the water column in the well (inches)

c = 231 cubic inches per gallon; constant to convert cubic inches to gallons

2. Use a pump or bailer to begin flushing the well. Periodically during the purging of the well, measure and record the pH, temperature, and specific conductivity of the water being removed.
3. Avoid contamination and do not allow sampling equipment or the bailer line to contact the ground while sampling.
4. Continue purging the well until the following is achieved:
  - a. a minimum of three casing volumes have been removed from the well, and pH, temperature, and conductivity have stabilized; or
  - b. five well volumes have been removed; or
  - c. the well is evacuated to dryness

Three times the well volume (gallons) in a 2-inch-diameter well is approximately one half the height of the water column measured in feet.

5. After water pH, temperature, and specific conductance have stabilized, allow the water level to return to a sufficient level to collect a complete sample and proceed with the sample collection as described below.
6. Select sample bottles and preservative as required by the analysis. Sample bottles containing preservative may be obtained from the laboratory, or samples may be preserved in the field. Samples for metals analysis that require field filtering will be collected in a transfer vessel and then filtered into a preserved container.
7. When transferring the sample in the bailer to the sample container, tip the bailer to allow a slow discharge from the bailer top to flow gently down the side of the sample bottle with minimum entry turbulence.
8. When collecting a sample with a pump, the flow rate of the pump should be low so as to minimize disturbing the sample.
9. In order to compare analytical data for a given well over time, the same purging and sampling method should be used consistently at a given well.

**Rizzo Associates, Inc.**  
**Appendix B**  
**Standard Operating Protocols**

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10. Check that a teflon liner is present in the cap, if required. Secure the cap tightly.
11. Label the sample bottle with an appropriate label and waterproof ink. Record the sample number, location, well purging information, the temperature, pH, specific conductivity, and deviations from protocol and relevant observations, such as colors, odors, or sheens, in the field logbook. Complete the chain of custody. Samples will be stored in a cooler until they are delivered to the laboratory.
12. Discard disposable bailers after use in one well. If reusable bailers are used, clean and store each bailer according to the Standard Operating Protocol for Decontaminating Sampling Equipment.
13. Tubing used with a pump may be discarded after each well or cleaned by pumping the decontamination fluids through the tubing according to the Standard Operating Procedure for Decontaminating Field Equipment.

***Adapted from:***

*Standard References for Monitoring Wells*, The Massachusetts Department of Environmental Protection #WSC-310-91.

## **Standard Operating Protocol for Jar Headspace Screening**

The following procedures will be used to screen groundwater samples for volatile organic compounds with a portable photoionization detector (PID) or a flame ionization detector (FID).

1. Half-fill a clean glass 8-ounce jar with the sample to be analyzed. Quickly cover the open top with a sheet of clean aluminum foil and apply the screw cap to tightly seal the jar.
2. Vigorously shake the jar for 10 seconds both at the beginning and end of the headspace development period. Allow the jar to stand 10 minutes for headspace development. When ambient temperatures are below 32°F (0°C), allow the samples to stand in a heated vehicle or building.
3. After the headspace development period, remove screw lid to expose the foil seal. Puncture the foil seal with an instrument sampling probe, to a point about one-half of the headspace depth. Do not allow water droplets to touch the instrument probe.
4. Observe the instrument response and record the highest meter response as the jar headspace concentration. The maximum response should occur from two to five seconds after the probe is inserted into the jar.
5. Benzene or an equivalent compound will be used to calibrate the field screening instrument. Jar headspace sample results will be reported as total organic vapors in ppm (v/v). Instruments will be operated, maintained, and calibrated in accordance with the manufacturer's specifications. A calibration and maintenance log is kept at Rizzo Associates' office for each instrument. The daily calibration data are transcribed to the field log for each day that the instrument is used. Some samples may be collected and analyzed in duplicate to measure sample variability.

**Appendix C**

**Historical Groundwater Elevations and  
Analytical Data**

**Historical Groundwater Elevation Data (feet)**

Well	Run Elevation	May-94	Mar-95	Apr-96	Apr-97	Apr-98	Apr-99	Apr-00	Apr-01	Apr-02	Sept-02	Feb-03	Mar-03	Apr-03	May-03	Feb-04	Apr-05
MW-1	259.36	245.16	243.56	247.86	244.85	243.62	241.86	245.59	244.18	NA	NA	NA	NA	NA	NA	243.06	244.69
MW-2	240.90	224.50	224.20	NS	223.40	230.24	228.60	228.58	231.59	228.01	227.32	NA	NA	NA	NS	228.12	231.50
MW-3	236.67(new), 238.86(old)	260.96	196.46	NS	196.46	200.29	198.52	196.45	200.04	192.57	NA	NA	NA	198.45	199.42	196.55*	200.12
MW-4	229.74	189.14	197.24	189.19	197.36	195.28	195.52	198.96	191.45	191.17	NA	NA	NA	NA	NA	NA	199.67
MW-5	238.03	220.03	218.33	220.13	220.28	219.17	220.33	220.93	220.36	220.37	NS	NS	NS	NS	NS	220.78	NS
MW-5D	236.36	220.36	218.26	219.46	NS	220.03	219.09	219.42	220.81	217.94	216.60	NS	NS	NS	NS	218.11	221.42
MW-6	250.55	227.85	225.65	227.85	228.07	228.11	226.93	227.02	228.29	226.46	215.03	NA	NA	NA	226.97	228.25	226.03
MW-8	258.61	NA	246.75	NA	NA	NA	NA	NA	246.64	228.74							
MW-9	256.08	NA	246.73	NA	NA	NA	NA	NA	246.61	246.73							
MW-9	256.08	NA	246.73	NA	NA	NA	NA	NA	246.61	246.73							
GHC-1	241.95	NA	228.43	225.84	224.77	226.38	227.04	228.37	226.43	228.13							
GHC-2	258.51	NA	NA	NA	NA	NA	NA	233.12									
GHC-3	252.40	NA	NA	NA	NA	NA	NA	244.55									
GHC-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Dry
GHC-5	236.94	NA	NA	NA	NA	NA	NA	NM									
GHC-6	236.01	NA	NA	NA	NA	NA	NA	199.44									
GHC-7	239.31	NA	NA	NA	NA	NA	NA	230.29									
																	221.35

Notes: NA = Not Applicable; well did not exist or was unusable.

NM = Not Measured; well could not be located.

NS = Not Sampled

\* A new MW-3 was installed in May 2003; all MW-3 static water elevations since June 2003 are from the new MW-3.

The May 1994 through February 2004 groundwater elevation data is obtained from the following document:

Groundwater Monitoring Report: Winter Spring 2004, Wiss, Janke & Drost, Inc., Massachusetts, August 10, 2004, prepared by Carr Research Laboratory, Inc. - (Table 1)

Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts

Sample Date:	WELL-1															
	Aug-91	Aug-92	Dec-93	May-94	May-95	Apr-96	Aug-97	Aug-98	Apr-99	Apr-00	Apr-01	Apr-02	Apr-03	Feb-04	Apr-05	
pH (measured) (pH units)	7.2	7.09	7.19	5.68	5.69	5.67	5.67	5.72	5.7	5.36	NA	NA	NA	NA	6.4	6.62
TDS (mg/L)	NA	ND	NA	NA	NA	ND	ND									
Specific Conductance (mho cm)	2.62	350.1	192	565	261	403	322	776.1	270.5	352	NA	NA	NA	51.3	512	
Articlic	0.035	NA	<0.025	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	ND	ND	
Antimony	NA	NA	<0.10	0.09	0.09	0.02	0.03	NA	NA	0.02	NA	NA	NA	NA	ND	
Barium	NA															
Boron	NA	ND	ND													
Cadmium, Total	<0.005	NA	<0.01	<0.005	<0.005	<0.001	<0.001	NA	NA	NA	NA	NA	NA	ND	ND	
Chromium, Total	<0.02	NA	<0.02	<0.02	<0.02	<0.02	<0.02	NA	NA	<0.02	NA	NA	NA	NA	NA	
Chromium (VI)	NA															
Copper	NA	NA	<0.05	0.66*	<0.001	<0.001	<0.001	NA	NA	0.022	NA	NA	NA	NA	ND	
Lead	NA	NA	<0.01	<0.001	<0.005	<0.001	<0.001	NA	NA	<0.001	NA	NA	NA	NA	ND	
Mercury	NA	ND														
Nickel	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	<0.005	NA	NA	NA	NA	ND	
Selenium	NA	NA	<0.02	NA	<0.02	<0.02	<0.02	NA	NA	<0.02	NA	NA	NA	NA	ND	
Silver	NA	NA	7.1	10	13	13.6	15	17	NA	NA	NA	NA	NA	NA	ND	
Sodium	NA	ND														
Thallium	NA	ND														
Zinc	NA	ND														
Oil and Grease, Total	2.6	NA	6.2	<5.5	<5.0	<5.0	<5.0	NA	NA	<5.5	NA	NA	NA	NA	NA	
Pheophytin, Total	<0.01	NA	<0.02	<0.02	0.12	<0.02	<0.02	NA	NA	<0.02	NA	NA	NA	NA	NA	
Basic Neutral Nitrogen, Total (ppb)	ND	NA	NC	ND	NA	NA	NA	NA	ND							
Extractable Petroleum Hydrocarbons (ppb)	NA	ND														
Volatile Petroleum Hydrocarbons (ppb)	NA	ND														
Volatile Organic Compounds, Total (ppt)	NA	ND														
Nitrates/Nitrates	1.3	NA	2.6	1.7	3.33	4.6	2.3	NA								
Fecal Coliform (CFU/100ml)	0	NA	NA	0	<00	<2	<2	NA								
Fecal Streptococcus (CFU/100ml)	0	NA	NA	0	<00	<2	<2	NA								

Note: All values have units of ppm (mg/L) unless indicated otherwise.

A: new MW-1 was installed on 16 June 2003; the old MWV-1 had been damaged beyond repair. The new MW-1 is very close to the old MWV-1.

The well was not sampled during the 2001 round of sampling because it was damaged.

ND = None detected

NA = Not analyzed. Particular test was not performed on the given date.

\* = Exceeded a allowable limits

The April 1993 through February 2004 groundwater data is obtained from the following document:

“Groundwater Sampling Report for Walpole Park South, Walpole, Massachusetts, August 10, 2004, prepared by CCR Research Laboratory, Inc.”

The April 2005 sampling was conducted as part of MCP site investigation.

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

Sample Date:	Apr-93	Jun-93	Dec-93	May-94	May-95	Apr-96	Apr-97	Apr-98	Apr-99	Apr-00	Apr-01	Apr-02	Sep-02	Mar-03	Apr-03	Feb-04	Apr-05
pH raw (pH units)	7.3	7.2	6.77	5.93	5.47	5.83	Na	5.98	6.37	6.68	4.9	4.6	Na	5.0	5.5	5.7	5.18
PLD #ad	Na.	ND	ND	ND	ND	ND											
Specific Conductance (mho/cm)	962.0	263.4	286.0	663.0	743.0	397.0	Na	948.0	827.0	1630.0	1555.0	1315.0	1,112.0	666.0	256.5	256.5	1070
Arsenic	Na.	Na.	Na.	ND	ND												
Antimony	Na.	Na.	Na.	ND	ND												
Barium	Na.	Na.	Na.	ND	ND												
Boron	Na.	Na.	Na.	ND	ND												
Cadmium, Total	Na.	Na.	Na.	ND	ND												
Chromium, Total	Na.	Na.	Na.	ND	ND												
Chromium (VI)	Na.	Na.	Na.	ND	ND												
Copper	Na.	Na.	Na.	ND	ND												
Lead	Na.	Na.	Na.	ND	ND												
Mercury	Na.	Na.	Na.	ND	ND												
Nickel	Na.	Na.	Na.	ND	ND												
Selenium	Na.	Na.	Na.	ND	ND												
Silver	Na.	Na.	Na.	ND	ND												
Sodium	Na.	Na.	Na.	ND	ND												
Thallium	Na.	Na.	Na.	ND	ND												
Zinc	Na.	Na.	Na.	ND	ND												
Oil and Grease, Total	Na.	Na.	Na.	ND	ND												
Phenols, Total	Na.	0.086	<0.005	ND	ND	ND	ND	ND									
Basic Neutral Total (ppb)	Na.	ND	ND	ND	ND	ND	ND	ND									
Extractable Petroleum Hydrocarbons (ppb)	Na.	Na.	Na.	ND	ND												
Volatile Petroleum Hydrocarbons (ppb)	Na.	Na.	Na.	ND	ND												
Volatile Organic Compounds, Total (ppb)	Na.	0.8	0.66	1.11	0.91	2.6	Na.	ND									
Nitrates/Nitrates	Na.	<1	<2	<2	<2	Na.	Na.	0.7									
Fecal Coliform (CFU/100ml)	Na.	<1	<2	<2	<2	Na.	Na.	<2									
Fecal Streptococcus (CFU/100ml)	Na.	<1	<2	<2	<2	<2	<2	<2									

Notes: All values have units of ppm (mg/L) unless indicated otherwise.

ND = Not Detected

Na = Not analyzed / Particular test was not performed on the given date.

The April 1993 through February 2004 groundwater data is obtained from the following document:

Groundwater Report, Volume I, Site No. 12700056-01, Walpole Park, Walpole, MA, MassCoast, Inc., August 10, 2004 prepared by Carr Research Laboratory, Inc.

The April 2005 sampling was conducted as part of MRC site investigations.

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

Sample Date:	WELL 3												WELL 4											
	Apr-93	Jun-93	Dec-93	May-94	Mar-95	Apr-96	Apr-97	Apr-98	Apr-99	Apr-00	Apr-01	Apr-02	Mar-03	Feb-03	Sep-02	May-02	Mar-03	Apr-03	Mar-04	Apr-04	Apr-05			
pH (pH units)	7.19	7.15	7.1	6.15	6.03	NA	NA	6.14	6.08	6.14	4.9	4.6	NA	NA	5.0C	5.25	NA	6.0	5.8	6.22				
PIID field	NA	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	
Specific Conductance (µmho/cm)	1602	265.0	330.0	309.0	283.0	NA	NA	292.0	256.1	457.0	4.2	854.0	NA	NA	516.0C	560.0	NA	NA	NA	NA	NA	NA	NA	NA
Asenic	NA	NA	<0.005	<0.005	<0.005	NA	NA	NA	ND															
Antimony	NA	NA	<0.10	<0.01	0.14	0.01	NA	NA	NA	ND														
Barium	NA	NA	NA	ND																				
Beryllium	NA	NA	NA	ND																				
Chromium, Total	NA	NA	<0.02	NA	NA	NA	ND																	
Chromium (VI)	NA	NA	<0.02	NA	NA	NA	ND																	
Copper	NA	NA	<0.02	NA	NA	NA	ND																	
Lead	NA	NA	<0.05	NA	NA	NA	ND																	
Mercury	NA	NA	<0.001	NA	NA	NA	ND																	
Nickel	NA	NA	<0.005	NA	NA	NA	ND																	
Selenium	NA	NA	<0.005	NA	NA	NA	ND																	
Silver	NA	NA	<0.02	NA	NA	NA	ND																	
Sodium	26.4	NA	NA	NA	ND																			
Thallium	NA	NA	NA	ND																				
Zinc	NA	NA	NA	ND																				
Oil and Grease, Total	1.6	NA	72.0	NA	NA	NA	ND																	
Phenols, Total	NA	NA	<0.01	NA	0.15	NA	NA	NA	NA	NA	0.17	NA	NA	NA	NA	NA	NA	ND						
Basic Neutral, Total (ppm)	ND	NA	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA	ND									
Extractable Petroleum Hydrocarbons (ppb)	NA	NA	NA	ND																				
Total Petroleum Hydrocarbons (ppb)	NA	NA	NA	ND																				
Volatile Petroleum Hydrocarbons (ppb)	NA	NA	NA	ND																				
Volatile Organic Compounds, Total (ppb)	NA	NA	NA	ND																				
Nitrates/Nitrates	0.72	NA	1.3	1	1	1.39	NA	3.07	NA	NA	NA	NA	NA	NA	ND									
Fecal Coliform (CFU/100ml)	0	NA	0	NA	0	<100	NA	<7	NA	NA	NA	NA	NA	NA	ND									
Fecal Streptococcus (<CFU/100ml)	0	NA	0	NA	0	<100	NA	<2	NA	NA	NA	NA	NA	NA	ND									

Notes: All values have units of ppm (mg/l) unless indicated otherwise.

Well 3 was re-drilled (replicated) in early May 2003. The new MW 3 is proximate to the old.

The well was sampled during the April 2003 round of sampling because it was damaged.

ND = None detected.

NA = Not analyzed (particular test was not performed on the given date).

\* = Extractable analyzable limits

#L = Bulk benzene/ethane

The April 1994 on through February 2004 groundwater data obtained from the following document:

CDM, Inc. & CDM, Inc. (2004). Walpole Park South Groundwater Monitoring Program, Volume 1, Final Report, dated August 10, 2004, prepared by CDM Research Laboratory, Inc.

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

Sample Date:	WELL 4													
	Apr-93	Jun-93	Dec-93	May-94	Mar-95	Apr-96	Apr-97	Apr-98	Apr-99	Apr-01	Apr-02	Sept-02	Apr-04	Feb-05
pH (in pH units)	7.35	7.16	6.75	5.9	5.76	5.85	5.99	5.85	5.77	5.7	4.9	N.A.	N.A.	5.59
EC (µmho/cm)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.0
Specific Conductance (µmho/cm)	59.0	265.5	201.0	138.0	214.0	192.0	136.0	159.0	203.9	305.5	168.7	258.2	200.0	149.6
Antimony	N.A.	N.A.	<0.005	N.A.	N.A.	<0.0005	<0.005	<0.005	<0.005	N.A.	N.A.	N.A.	N.A.	ND
Boron	N.A.	N.A.	<0.01	N.A.	N.A.	0.02	0.01	0.01	0.01	C.G.	N.A.	N.A.	N.A.	ND
Boronium	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	ND
Cadmium	N.A.	N.A.	<0.01	N.A.	N.A.	<0.001	<0.001	<0.001	<0.001	N.A.	N.A.	N.A.	N.A.	ND
Chromium, Total	N.A.	N.A.	<0.02	N.A.	N.A.	<0.07	<0.07	<0.07	<0.07	N.A.	N.A.	N.A.	N.A.	ND
Chromite (VI)	N.A.	N.A.	<0.07	N.A.	N.A.	<0.02	<0.02	<0.02	<0.02	N.A.	N.A.	N.A.	N.A.	ND
Copper	N.A.	N.A.	N.A.	N.A.	N.A.	<0.01	<0.01	<0.01	<0.01	N.A.	N.A.	N.A.	N.A.	ND
Lead	N.A.	N.A.	<0.05	N.A.	N.A.	<0.001	<0.001	<0.001	<0.001	U.D.	<0.001	N.A.	N.A.	ND
Mercury	N.A.	N.A.	<0.001	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	ND
Nickel	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	ND
Selenium	N.A.	N.A.	<0.005	N.A.	N.A.	<0.005	<0.005	<0.005	<0.005	N.A.	N.A.	N.A.	N.A.	ND
Silver	N.A.	N.A.	<0.02	N.A.	N.A.	<0.007	<0.007	<0.007	<0.007	N.A.	N.A.	N.A.	N.A.	ND
Sodium	N.A.	N.A.	27.0	N.A.	N.A.	10.0	14.0	12.0	12.0	N.A.	N.A.	N.A.	N.A.	ND
Thallium	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	ND
Zinc	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	ND
Oil and Grease, Total	N.A.	N.A.	5.4	N.A.	N.A.	<3.0	<3.0	<3.0	<3.0	N.A.	N.A.	N.A.	N.A.	ND
Pheophytin, Total	N.A.	N.A.	<0.02	N.A.	N.A.	<0.005	<0.005	<0.005	<0.005	N.A.	N.A.	N.A.	N.A.	ND
Base Neutral, Total (ppb)	N.A.	N.A.	ND	N.A.	N.A.	25.0	ND	ND	ND	N.A.	N.A.	N.A.	N.A.	ND
Extractable Petroleum Hydrocarbons (ppb)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	ND
Total Petroleum Hydrocarbons (ppb)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	ND
Volatile Petroleum Hydrocarbons (ppb)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	ND
Volatile Organic Compounds, Total (ppb)	N.A.	N.A.	0.6	N.A.	N.A.	0.04	0.74	0.84	1.1	0.76	N.A.	N.A.	N.A.	ND
Neurotoxins	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	ND
Fecal Coliform (CFU/100ml)	N.A.	N.A.	N.A.	N.A.	N.A.	<2	<1	<1	<2	N.A.	N.A.	N.A.	N.A.	ND
Fecal Streptococcus (CFU/100ml)	N.A.	N.A.	N.A.	N.A.	N.A.	<2	<1	<1	<2	N.A.	N.A.	N.A.	N.A.	<2

Note: & signifies units of ppb (mg/l) unless indicated otherwise.

ND = Not detected.

N.A. = Not analyzed (Particular test was not performed on the given date).

< = Exceeds a detection limit.

= C.I.C.L. Aliphatics

The Apr 1993 through February 2004 groundwater data is obtained from the following document: Giannandrea, Sperling's Report, Winter-Spring 2004 Wellfair Park, Green Village, Massachusetts, August 10, 2004, prepared by Carr Research Laboratory, Inc.

**Historical Groundwater Data - Woburn Park South, Woburn, Massachusetts**

Sample Date:	WELL 5 Shallow															
	Apr-93	Jun-93	Dec-93	May-94	May-95	Apr-96	Apr-97	Apr-98	Apr-99	Apr-00	Apr-01	Apr-02	Sep-02	Apr-03	Feb-04	Apr-05
pH field (mH units)	7.25	7.46	7.35	6.05	5.94	6.06	5.15	5.88	5.92	5.73	5.6	5.2	NA	5.6	5.80	6.34
PID $\text{Fe}_{\text{red}}$	NA	ND	0.0	1.	NA	ND	ND	ND	ND							
<b>Specific Conductance <math>\mu\text{mho/cm}</math></b>	678.0	878	138.0	98.0	102.0	90.0	87.0	102.5	105.5	146.5	152	158	132.1	144.4	155.7	
Acetic Acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Ammonium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Boron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Baesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Lanthan	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Mercury	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Selenium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Titanium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.013
<b>C-1 and Greater, Total</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Fritoids, Total</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Boron Neutrons, Total (<math>\text{ppb}</math>)</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Extractable Petroleum Hydrocarbons (<math>\text{ppb}</math>)</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Volatile Petroleum Hydrocarbons (<math>\text{ppb}</math>)</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Volatile Organic Compounds, Total (<math>\text{ppb}</math>)</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Nitrates/Nitrites</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Fecal Coliform (CFU/100ml)</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Fecal Streptococcus (CFU/100ml)</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All values have units of ppm unless indicated otherwise.

ND = None detected

NA = Not analyzed (Particular test was not performed on the given date)

\* =  $\text{C}_6\text{-C}_{12}$  Aliphatic

The Apr 1 1999 through February 2004 groundwater data is obtained from the following document:

Groundwater Sampling Report: Woburn Park South, Woburn, Massachusetts - August 10, 2004 prepared by Carr Research Laboratory, Inc.

The Apr 1 2005 sampling was conducted as part of the CFS site investigation efforts.

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

Sample Date:	WELL 5 Deep																
	Apr-93	Jun-93	Dec-93	Mar-94	Apr-94	Apr-95	Apr-96	Apr-97	Apr-98	Apr-99	Apr-00	Apr-01	Apr-02	Sep-02	Apr-03	Feb-04	Apr-05
pH (in pH units)	7.42	7.22	7.45	6.87	7.06	7.01	7.01	6.86	6.81	5.21	5.2	4.6	N.A.	-	5.0	5.86	6.63
PH Test	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Specific Conductance (mho/cm)	215.0	105.9	88.0	106.0	114.0	110.0	116.0	160.0	160.0	131.6	149.8	23.0	-23.0	-47.9	143.1	153.4C	107.4
Arsenic	<0.005	N.A.	N.D.	N.A.	N.A.	N.A.	N.D.	N.D.	N.D.								
Antimony	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.	N.D.
Barium	<0.10	N.A.	1.07	N.A.	N.A.	N.D.	N.D.	N.A.									
Beryllium	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.	N.D.
Calcium	0.01	N.A.	N.D.	N.A.	N.A.	N.D.	N.D.	N.D.									
Chromium, Total	<0.02	N.A.	N.D.	N.D.	N.D.												
Chromium, (VI)	<0.02	N.A.															
Copper	<0.005	N.A.	N.D.	N.D.	N.D.												
Lead	<0.005	N.A.	N.C.	N.A.	N.A.	N.D.	N.D.	N.D.									
Mercury	<0.001	N.A.	N.D.	N.A.	N.A.	N.D.	N.D.	N.D.									
Nickel	<0.005	N.A.	N.D.	N.D.	N.D.												
Selenium	<0.002	N.A.	N.D.	N.A.	N.A.	N.D.	N.D.	N.D.									
Silver	<0.001	N.A.	N.D.	N.D.	N.D.												
Sodium	5.96	N.A.	7.21	N.A.	E25	N.D.	N.D.	N.D.									
Strontium	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.	N.D.
Zinc	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.	N.D.
Oil and Grease, Total	A	N.A.	N.A.	N.F.	N.A.	N.D.	N.A.	N.A.	N.D.	N.D.	N.D.						
Fremds, Total:	<0.01	N.A.	N.D.	N.D.	N.D.												
Barium Neutrons - total (ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Extraneous Petroleum Hydrocarbons (ppb)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.	N.D.
Volatile Petroleum Hydrocarbons (ppb)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.	N.D.
Volatile Organic Compounds, Total (ppb)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.	N.D.
Nitrate/Nitrites	0.15	N.A.	1.46	N.A.	N.A.	N.D.	N.D.	N.D.									
Fecal Coliform (CFU/100ml)	0	N.A.	N.F.	N.A.	N.A.	<1	N.A.	N.A.	N.D.	N.D.	N.D.						
Fecal Streptococcus (CFU/100ml)	0	N.A.	<1	N.A.	N.A.	N.D.	N.D.	N.D.									

Notes: A\* values have units ppm unless indicated otherwise.

ND = None detected

N.A. = Not analyzed / Particular test was not performed on the given date

The April 1993 through February 2004 groundwater data is obtained from the following document:

Geotechnical Sampling Report Winter 2004 "Vicksburg Canal, Souther Brookline, Massachusetts": August 14, 2004, prepared by Carr Research Laboratory, Inc.

The April 2005 sampling was conducted as part of MCP site investigations

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

Sample Date:	WELL #													Ap-03					Ap-04			Ap-05	
	Apr-93	Jun-93	Dec-93	May-94	Mar-94	Apr-94	Apr-95	Apr-96	Apr-97	Apr-98	Apr-99	Apr-00	Jun-00	Apr-01	Apr-02	Sep-02	Mar-03	Apr-03	May-03	Feb-04	May-04	Apr-05	
pH (H+ units)	7.24	7.23	7.44	5.42	5.43	5.55	5.57	5.38	5.25	5.05	4.9	N.A.	5.25	N.A.	6.00	5.9	5.8	6.30					
Ph Total	N.D.	7.6																					
Specific Conductance (µmho/cm)	252.6	259.4	279.0	308.0	262.0	438.0	303.0	249.0	299.4	353.5	<NA	475.0	562.0	51.0	577.0	N.D.	555.0C	488.0	795	445.7			
Acetate	N.D.	N.D.	N.D.	N.D.	N.D.	<0.001	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N.D.									
Aldosterone	N.D.																						
Boron	N.D.																						
Boron/Alkaline																							
Cadmium	N.D.																						
Chromium, Total	N.D.																						
Chromium, V(IV)	N.D.																						
Copper	N.D.																						
Lad	N.D.																						
Mercury	N.D.																						
Nickel	N.D.																						
Selenium	N.D.																						
Silver	N.D.																						
Sulfate	N.D.																						
Tellurium	N.D.																						
Zinc	N.D.																						
Oil and Grease, "o/w"	N.D.																						
Phenols, Total	N.D.																						
Bile Acids, Total (ppb)	N.D.																						
Extractable Petroleum Hydrocarbons (ppb)	N.D.																						
Volatile Petroleum Hydrocarbons (ppb)	N.D.																						
Yeast/Candida Concentr. Total (ppb)	N.D.																						
Nitrate/Nitrite	N.D.																						
Total Coliform (CFU/100ml)	N.D.																						
Fecal Escherichia (CFU/100ml)	N.D.																						

Notes: All values have units of ppm unless indicated otherwise.

N.D. = None detected

N.A. = Not analyzed

\* = Extent allowable limits

\*\* = C-C-19 Aliphatic

† = Chloroform, Cl, Bromodichloroethane, Br = Toluene

The April 1993 through April 2004 groundwater data is readings from the following document:

Granahan, Timothy, Report, Walpole Spring 2004, WERC, Walpole, Massachusetts, August 10, 2004, prepared by Carr Research Laboratory, Inc.

The April 2005 sampling was conducted as part of MCE site investigation

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

Sample Date:	WELL -8						
	Apr-01	Apr-02	Mar-03	Apr-03	May-03	Feb-04	Apr-05
pH field (pH units)	5.5	NA	NA	5.0	NA		NM
PID field	0.2	NA	NA	ND	NA		NM
Specific Conductance field (mho/cm)	671	780	NA	454	NA		NM
Arsenic	NA	NA	NA	NA	NA	ND	NA
Antimony	NA	NA	NA	NA	NA	ND	NA
Barium	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	ND	NA
Cadmium	NA	NA	NA	NA	NA	ND	NA
Chromium, Total	NA	NA	NA	NA	NA	ND	NA
Chromium (VI)	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	0.0166	NA
Lead	NA	NA	ND	NA	0.0264	ND	NA
Mercury	NA	NA	NA	NA	NA	ND	NA
Nickel	NA	NA	NA	NA	NA	ND	NA
Selenium	NA	NA	NA	NA	NA	ND	NA
Silver	NA	NA	NA	NA	NA	ND	NA
Sodium	NA	NA	NA	NA	33.6	82.2	NA
Thallium	NA	NA	NA	NA	NA	ND	NA
Zinc	NA	NA	NA	NA	NA	0.0302	NA
Oil and Grease, Total	NA	NA	NA	NA	NA	NA	NA
Phenols, Total	NA	NA	NA	NA	NA	NA	NA
Base Neutrals, Total (ppb)	NA	NA	NA	NA	NA	NA	NA
Extractable Petroleum Hydrocarbons (ppb)	NA	NA	NA	NA	NA		NA
Volatile Petroleum Hydrocarbons (ppb)	NA	NA	NA	NA	NA	ND	NA
Volatile Organic Compounds, Total (ppb)			NA	NA	NA	ND	NA
Nitrates/Nitrites	NA	NA	NA	NA	NA	NA	NA
Fecal Coliform (CFU/100ml)	NA	NA	NA	NA	NA	NA	NA
Fecal Streptococcus (CFU/100ml)	NA	NA	NA	NA	NA	NA	NA

Notes: All values have units of ppm unless indicated otherwise.

ND = Not detected

NA = Not analyzed (Particular test was not performed on the given date)

NM = Not measured due to insufficient volume of water in the well.

The April 2001 through February 2004 groundwater data is obtained from the following document:

Groundwater Sampling Report, Winter Spring 2004, Walpole Park South, Walpole, Massachusetts, August 10, 2004, prepared by Carr Research Laboratory, Inc.

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

Sample Date:	WELL -9								
	Apr-01	Apr-02	Sep-02	Feb-03	Mar-03	Apr-03	May-03	Feb-04	Apr-05
pH field (pH units)	5	4.9	NA	4.75	5	NA	6	6.1	6.58
PID field	0.4	1.4	NA	NA	NA	NA	NA	ND	ND
Specific Conductance field (umho cm)	284.8	269.6	212	246	298.7	NA	310.7	215	152.5
Arsenic	ND	NA	NA	NA	NA	NA	NA	ND	ND
Antimony	NA	NA	NA	NA	NA	NA	NA	ND	ND
Barium	0.02	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA	ND	ND
Cadmium	ND	NA	NA	NA	NA	NA	NA	ND	ND
Chromium, Total	ND	NA	NA	NA	NA	NA	NA	ND	ND
Chromium (VI)	0.04	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	ND	ND
Lead	ND	NA	ND	ND	ND	NA	0.0231*	ND	ND
Mercury	ND	NA	NA	NA	NA	NA	NA	ND	ND
Nickel	NA	NA	NA	NA	NA	NA	NA	ND	ND
Selenium	ND	NA	NA	NA	NA	NA	NA	ND	ND
Silver	ND	NA	NA	NA	NA	NA	NA	ND	ND
Sodium	22.8	NA	20.7	24.2	26.8	NA	28	18.9	NA
Thallium	NA	NA	NA	NA	NA	NA	NA	ND	ND
Zinc	NA	NA	NA	NA	NA	NA	NA	ND	0.032
Oil and Grease, Total	ND	NA	NA	NA	NA	NA	NA	NA	NA
Phenols, Total	ND	NA	NA	NA	NA	NA	NA	NA	NA
Base Neutrals, Total (ppb)	ND	NA	NA	NA	NA	NA	NA	NA	NA
Extractable Petroleum Hydrocarbons (ppb)	NA	NA	NA	NA	NA	NA	NA	95**	NA
Volatile Petroleum Hydrocarbons (ppb)	NA	NA	NA	NA	NA	NA	NA	ND	NA
Volatile Organic Compounds, Total (ppb)			NA	NA	NA	NA	NA	ND	NA
Nitrates/Nitrites	1.71	NA	NA	NA	NA	NA	NA	NA	NA
Fecal Coliform (CFU/100ml)	<2	NA	NA	NA	NA	NA	NA	NA	NA
Fecal Streptococcus (CFU/100ml)	<2	NA	NA	NA	NA	NA	NA	NA	NA

Notes: All values have units of ppm unless indicated otherwise.

ND = None detected

NA = Not analyzed ( Particular test was not performed on the given date)

\* = Exceeds allowable limits

\*\* = C<sub>1</sub>-C<sub>22</sub> Aromatics

The April 2001 through February 2004 groundwater data is obtained from the following document:

Groundwater Sampling Report, Winter-Spring 2004, Walpole Park South, Walpole, Massachusetts, August 10, 2004, prepared by Carr Research Laboratory, Inc.

The April 2005 sampling was conducted as part of MCP site investigations.

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

Sample Date:	GHC-2
	Apr-05
pH field (pH units)	6.8
PID field	0.4
Specific Conductance field (umho cm)	518
Arsenic	ND
Antimony	ND
Barium	NA
Beryllium	ND
Cadmium	ND
Chromium, Total	ND
Chromium (VI)	NA
Copper	ND
Lead	ND
Mercury	ND
Nickel	ND
Selenium	ND
Silver	ND
Sodium	151
Thallium	ND
Zinc	0.023
Oil and Grease, Total	ND
Phenols, Total	ND
Base Neutrals, Total (ppb)	ND
Extractable Petroleum Hydrocarbons (ppb)	NA
Total Petroleum Hydrocarbons (ppb)	ND
Volatile Petroleum Hydrocarbons (ppb)	NA
Volatile Organic Compounds, Total (ppb)	ND
Nitrates/Nitrites	0.93/ND
Fecal Coliform (CFU/100ml)	ND
Fecal Streptococcus (CFU/100ml)	ND

All values have units of ppm unless indicated otherwise.

ND = Not detected

NA = Not analyzed ( Particular test was not performed on the given date )

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

<b>GHC-5</b>	
<b>Sample Date:</b>	<b>Apr-05</b>
pH field (pH units)	5.86
PID field	ND
Specific Conductance field (umho cm)	416.7
Arsenic	ND
Antimony	ND
Barium	NA
Beryllium	ND
Cadmium	ND
Chromium, Total	ND
Chromium (VI)	NA
Copper	ND
Lead	ND
Mercury	ND
Nickel	0.008
Selenium	ND
Silver	ND
Sodium	NA
Thallium	ND
Zinc	0.053
Oil and Grease, Total	NA
Phenols, Total	NA
Base Neutrals, Total (ppb)	NA
Extractable Petroleum Hydrocarbons (ppb)	NA
Total Petroleum Hydrocarbons (ppb)	NA
Volatile Petroleum Hydrocarbons (ppb)	NA
Volatile Organic Compounds, Total (ppb)	NA
Nitrates/Nitrites	NA
Fecal Coliform (CFU/100ml)	NA
Fecal Streptococcus (CFU/100ml)	NA

All values have units of ppm unless indicated otherwise.

ND = Not detected

NA = Not analyzed ( Particular test was not performed on the given date )

The April 2005 sampling was conducted as part of MCP site investigations.

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

<b>Sample Date:</b>	<b>GHC-6</b>	
	<b>Feb-04</b>	<b>Apr-05</b>
pH field (pH units)	6.3	6.15
PID field	ND	ND
Specific Conductance field ( $\mu\text{mho cm}$ )	870	897.0
Arsenic	ND	ND
Antimony	ND	ND
Barium	NA	NA
Beryllium	ND	ND
Cadmium	ND	ND
Chromium, Total	0.00758	ND
Chromium (VI)	NA	NA
Copper	0.00557	ND
Lead	ND	ND
Mercury	ND	ND
Nickel	ND	ND
Selenium	ND	ND
Silver	ND	ND
Sodium	134	NA
Thallium	ND	ND
Zinc	ND	0.014
Oil and Grease, Total	NA	NA
Phenols, Total	NA	NA
Base Neutrals, Total (ppb)	NA	NA
Extractable Petroleum Hydrocarbons (ppb)	37.8**	NA
Volatile Petroleum Hydrocarbons (ppb)	ND	NA
Volatile Organic Compounds, Total (ppb)	ND	NA
Nitrates/Nitrites	NA	NA
Fecal Coliform (CFU/100ml)	NA	NA
Fecal Streptococcus (CFU/100ml)	NA	NA

All values have units of ppm unless indicated otherwise.

ND = None detected

NA = Not analyzed ( Particular test was not performed on the given date )

\*\* = C<sub>9</sub>-C<sub>18</sub> Aliphatics

The February 2004 groundwater data is obtained from the following document:

Groundwater Sampling Report, Winter-Spring 2004, Walpole Park South, Walpole, Massachusetts , August 10, 2004, prepared by Carr Research Laboratory, Inc.

The April 2005 sampling was conducted as part of MCP site investigations.

**Historical Groundwater Data - Walpole Park South, Walpole, Massachusetts**

Sample Date:	GHC-7		
	Feb-04	Apr-04	Apr-05
pH field (pH units)	6.1	6	NA
PID field	ND	NA	NA
Specific Conductance field (umho cm)	848	921	NA
Arsenic	ND	ND	NA
Antimony	0.0122*	ND	NA
Barium	NA	NA	NA
Beryllium	ND	ND	NA
Cadmium	ND	ND	NA
Chromium, Total	ND	ND	NA
Chromium (VI)	NA	NA	NA
Copper	0.00999	0.413	NA
Lead	ND	ND	NA
Mercury	ND	ND	NA
Nickel	ND	ND	NA
Selenium	ND	ND	NA
Silver	ND	ND	NA
Sodium	101	NA	NA
Thallium	ND	ND	NA
Zinc	ND	0.294	NA
Oil and Grease, Total	NA	NA	NA
Phenols, Total	NA	NA	NA
Base Neutrals, Total (ppb)	NA	NA	NA
Extractable Petroleum Hydrocarbons (ppb)	72.1**	NA	NA
Volatile Petroleum Hydrocarbons (ppb)	ND	NA	NA
Volatile Organic Compounds, Total (ppb)	ND	NA	NA
Nitrates/Nitrites	NA	NA	NA
Fecal Coliform (CFU/100ml)	NA	NA	NA
Fecal Streptococcus (CFU/100ml)	NA	NA	NA

All values have units ppm unless indicated otherwise.

ND = Not detected

NA = Not analyzed (Particular test was not performed on the given date)

\* = Exceeds allowable limit

\*\* = C<sub>12</sub>-C<sub>16</sub> Aliphatics

The 2004 groundwater data is obtained from the following document:

Groundwater Sampling Report, Winter-Spring 2004, Walpole Park South, Walpole, Massachusetts, August 10, 2004, prepared by Carr Research Laboratory, Inc.

GHC-7 was not sampled during the April 2005 round of sampling because it was destroyed.

**Appendix D**  
**Laboratory Certificates of Analysis**

**ALPHA ANALYTICAL LABORATORIES**

**Eight Walkup Drive  
Westborough, Massachusetts 01581-1019  
(508) 898-9220      www.alphalab.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:** L0504122

**Address:** 1 Grant Street

Framingham, MA 01701-9005

**Date Received:** 18-APR-2005

**Attn:** Mr. Ray Johnson

**Date Reported:** 25-APR-2005

**Project Number:** 12700058-001

**Delivery Method:** Alpha

**Site:** WALPOLE PARK SOUTH

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<b>ALPHA SAMPLE NUMBER</b>	<b>CLIENT IDENTIFICATION</b>	<b>SAMPLE LOCATION</b>
L0504122-01	MW-3-041805A	WALPOLE, MA
L0504122-02	MW-3-041805B	WALPOLE, MA
L0504122-03	MW-3-041805C	WALPOLE, MA
L0504122-04	MW-4-041805A	WALPOLE, MA
L0504122-05	MW-4-041805B	WALPOLE, MA
L0504122-06	MW-4-041805C	WALPOLE, MA
L0504122-07	GHC-2-041805A	WALPOLE, MA
L0504122-08	GHC-2-041805B	WALPOLE, MA
L0504122-09	GHC-2-041805C	WALPOLE, 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:Scott McLean

This document electronically signed

**ALPHA ANALYTICAL LABORATORIES**  
**NARRATIVE REPORT**

**Laboratory Job Number: L0504122**

---

Fecal Coliform

L0504122-01 through -03 have elevated limits of detection due to the dilutions required by the sediment in the samples.

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: L0504122-01  
MW-3-041805A

Sample Matrix: WATER

Date Collected: 18-APR-2005 10:45  
Date Received : 18-APR-2005  
Date Reported : 25-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 4-Bacteria

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Coliform, Fecal (MF)	ND	col/100ml	9.0	30 9222D			0418 15:25 JT
Coliform, Fecal Strep (MPN)	<2	MPN/10Cml	2	30 9230B			0418 15:25 JT

---

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: L0504122-02 Date Collected: 18-APR-2005 10:50  
MW-3-041805B

Sample Matrix: WATER Date Received : 18-APR-2005

Condition of Sample: Satisfactory Field Prep: None

Number & Type of Containers: 4-Bacteria

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Coliform, Fecal (MF)	ND	col/100ml	9.0	30 92220			0418 15:25 JT
Coliform, Fecal Strep (MPN)	<2	MPN/100ml	2	30 9230R			0418 15:25 JT

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: L0504122-03  
MW-3-041805C

Sample Matrix: WATER

Date Collected: 18-APR-2005 10:55  
Date Received : 18-APR-2005  
Date Reported : 25-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 4-Bacteria

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE	ID
					PREP	ANAL
Coliform, Fecal (MF)	ND	col/100ml	9.0	30 9222B	0418 15:25 CT	
Coliform, Fecal Strep (MPN)	<2	MPN/100ml	2	30 9230B	0418 15:25 CT	

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: L0504122-04 Date Collected: 18-APR-2005 11:25  
MW-4-041805A Date Received : 18-APR-2005  
Sample Matrix: WATER Date Reported : 25-APR-2005  
  
Condition of Sample: Satisfactory Field Prep: None  
  
Number & Type of Containers: 4-Bacteria

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE	ID
					PREP	ANAL
Coliform, Fecal (MF)	ND	col/100ml	2.0	3C 9222D	0418 15:25	JP
Coliform, Fecal Strep (MPN)	<2	MPN/100ml	2	3C 9230B	0418 15:25	JZ

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: L0504122-05 Date Collected: 18-APR-2005 11:30  
MW-4-041805B Date Received : 18-APR-2005  
Sample Matrix: WATER Date Reported : 25-APR-2005  
  
Condition of Sample: Satisfactory Field Prep: None  
  
Number & Type of Containers: 4-Bacteria

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Coliform, Fecal (MF)	ND	col/100ml	2.0	3C 9222D			0418 15:25 JT
Coliform, Fecal Strep (MPN)	<2	MPN/100ml	2	3C 9230B			0418 15:25 JT

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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: L0504122-06  
MW-4-041805C

Date Collected: 18-APR-2005 11:35  
Date Received : 18-APR-2005  
Date Reported : 25-APR-2005

Sample Matrix: WATER

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 4-Bacteria

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE	ID
					PREP	ANAL
Coliform, Fecal (MF)	ND	col/100ml	2.0	30 9222D	0418	15:25 JT
Coliform, Fecal Strep (MPN)	<2	MPN/100ml	2	30 9230B	0418	15:25 JT

---

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: L0504122-07  
GHC-2-041805A

Sample Matrix: WATER

Date Collected: 18-APR-2005 09:25  
Date Received : 18-APR-2005  
Date Reported : 25-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 4-Bacteria

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE	ID
					PREP	ANAL
Coliform, Fecal (MF)	ND	col/100ml	2.0	30 92223	0418 15:25 JP	
Coliform, Fecal Strep (MPN)	<2	MPN/100ml	2	30 92308	0418 15:25 JP	

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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: L0504122-08  
GHC-2-041805B

Date Collected: 18-APR-2005 09:30

Sample Matrix: WATER

Date Received : 18-APR-2005

Date Reported : 25-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 4-Bacteria

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Coliform, Fecal (MF)	ND	col/100ml	2.0	3C 9221D			0418 15:25 JT
Coliform, Fecal Strep (MPN)	<2	MPN/100ml	2	3C 9230B			0418 15:25 JT

---

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: L0504122-09  
GHC-2-041805C

Date Collected: 18-APR-2005 09:35

Sample Matrix: WATER

Date Received : 18-APR-2005

Date Reported : 25-APR-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 4-Bacteria

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Coliform, Fecal (MF)	ND	col/100ml	2.0	30 9222B			04/8 15:25 CR
Coliform, Fecal Strep (MPN)	<2	MPN/100ml	2	30 9230B			04/8 15:25 JR

---

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

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0504122

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE	ID
					PREP	ANAL

Blank Analysis for sample(s) 01-09 (WG199655-1)  
Coliform, Fecal (MF) ND col/100ml 1.0 30 9222D 0418 15:25 JR

Blank Analysis for sample(s) 01-09 (WG199659-1)  
Coliform, Fecal Strep (MPN) <2 MPN/100ml 2 30 9230S 0418 15:26 JT

**ALPHA ANALYTICAL LABORATORIES  
ADDENDUM I**

---

**REFERENCES**

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF.  
18th Edition. 1992.

**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.

**LIMITATION OF LIABILITIES**

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.



# CHAIN OF CUSTODY

PAGE

1

OF

1

4-18-05 Date Received in Lab:

ALPHA Job #: 0554122

## Project Information

Eight Walkup Drive Westborough, MA 01581  
TEL: 508-898-9220 FAX: 508-898-9193

## Client Information

Project Name: Walpole Park South  
Project Location: Walpole, MA  
Project #: 12700058 - 001  
Client: One Grant Street Associates, Inc.  
Address: Framingham, MA 01701  
Phone: (508) 903 - 2000  
Fax: (508) 903 - 2001  
Email: l.johnson@1220.com These samples have been previously analyzed by Alpha

## Other Project Specific Requirements/Comments/Detection Limits:

## Report Information - Data Deliverables

Billing Information

X Same as Client Info PO #:

 EMAIL FAX ADEX Add'l Deliverables

## Regulatory Requirements/Report Limits

## Criteria

## MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

- State/Fed Program: GW
- Project Manager: Ruy Johnson
- Project #: 12700058 - 001
- Alpha Quote #: MCP
- Turn-Around Time: 4-25-05
- Time: 10:45 AM
- Standard  RUSH (only confirmed if checked)
- Date Due: 4-25-05
- These samples have been previously analyzed by Alpha

## Comments/Detection Limits:

## SAMPLE HANDLING

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Sample Matrix	Sampler's Initials	Filtration	
					Done	Not needed
4122.1	MW-3-041805A	04/18/05	GW	HB	X	X
2	MW-3-041805B	10:50			X	X
3	MW-3-041805C	10:55			X	X
4	MW-4-041805A	11:25			X	X
5	MW-4-041805B	11:30			X	X
6	MW-4-041805C	11:35			X	X
7	GHC-2-041805A	9:35			X	X
8	GHC-2-041805B	9:30			X	X
9	GHC-2-041805C	9:35			X	X

## QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR  
PROJECT  
MCP?

Relinquished By:

Container Type

Preservative

Received By:

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.  
See reverse side.

4-18-05 10:45 AM  
J. Bergman  
4-18-05 10:45 AM



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

REPORT DATE 8/10/2005

RIZZO ASSOCIATES - FRAMINGHAM  
ONE GRANT STREET  
FRAMINGHAM, MA 01701  
ATTN: RAY JOHNSON

CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

**ANALYTICAL SUMMARY**

LIMS BAT #: LIMS-87726  
JOB NUMBER: 12700058-001

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: WALPOLE, MA

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	
GHC-2-041805	05B13973	GRND WATER	NOT SPECIFIED	624 - water	
GHC-2-041805	05B13973	GRND WATER	NOT SPECIFIED	625 base/neutral	
GHC-2-041805	05B13973	GRND WATER	NOT SPECIFIED	metals 13dis fur	
GHC-2-041805	05B13973	GRND WATER	NOT SPECIFIED	na (mg/l) icp	
GHC-2-041805	05B13973	GRND WATER	NOT SPECIFIED	nitrate	
GHC-2-041805	05B13973	GRND WATER	NOT SPECIFIED	nitrite manual	
GHC-2-041805	05B13973	GRND WATER	NOT SPECIFIED	phenols	
GHC-2-041805	05B13973	GRND WATER	NOT SPECIFIED	tph gc h2o 8100m	
GHC-2-041805	05B13977	GRND WATER	NOT SPECIFIED	sub special test	
GHC-2-041805	05B26718	GRND WATER		se (furn dissol)	SUBCONTRACTED
GHC-5-041605	05B13969	GRND WATER	NOT SPECIFIED	metals 13dis fur	
GHC-5-041605	05B26719	GRND WATER		se (furn dissol)	
GHC-6-041605	05B13970	GRND WATER	NOT SPECIFIED	624 - water	
GHC-6-041605	05B13970	GRND WATER	NOT SPECIFIED	metals 13dis fur	
GHC-6-041605	05B26720	GRND WATER		se (furn dissol)	
MW-1-041605	05B13963	GRND WATER	NOT SPECIFIED	624 - water	
MW-1-041605	05B13963	GRND WATER	NOT SPECIFIED	metals 13dis fur	
MW-1-041605	05B26721	GRND WATER		se (furn dissol)	
MW-2-041605	05B13964	GRND WATER	NOT SPECIFIED	metals 13dis fur	
MW-2-041605	05B26724	GRND WATER		se (furn dissol)	
MW-3-041805	05B13971	GRND WATER	NOT SPECIFIED	624 - water	
MW-3-041805	05B13971	GRND WATER	NOT SPECIFIED	625 base/neutral	
MW-3-041805	05B13971	GRND WATER	NOT SPECIFIED	metals 13dis fur	
MW-3-041805	05B13971	GRND WATER	NOT SPECIFIED	na (mg/l) icp	
MW-3-041805	05B13971	GRND WATER	NOT SPECIFIED	nitrate	
MW-3-041805	05B13971	GRND WATER	NOT SPECIFIED	nitrite manual	
MW-3-041805	05B13971	GRND WATER	NOT SPECIFIED	phenols	
MW-3-041805	05B13971	GRND WATER	NOT SPECIFIED	tph gc h2o 8100m	
MW-3-041805	05B13975	GRND WATER	NOT SPECIFIED	sub special test	SUBCONTRACTED
MW-3-041805	05B26727	GRND WATER		se (furn dissol)	
MW-4-041805	05B13972	GRND WATER	NOT SPECIFIED	624 - water	
MW-4-041805	05B13972	GRND WATER	NOT SPECIFIED	625 base/neutral	
MW-4-041805	05B13972	GRND WATER	NOT SPECIFIED	metals 13dis fur	
MW-4-041805	05B13972	GRND WATER	NOT SPECIFIED	na (mg/l) icp	
MW-4-041805	05B13972	GRND WATER	NOT SPECIFIED	nitrate	
MW-4-041805	05B13972	GRND WATER	NOT SPECIFIED	nitrite manual	
MW-4-041805	05B13972	GRND WATER	NOT SPECIFIED	phenols	



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REPORT DATE 8/10/2005

RIZZO ASSOCIATES - FRAMINGHAM  
ONE GRANT STREET  
FRAMINGHAM, MA 01701  
ATTN: RAY JOHNSON

CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

**ANALYTICAL SUMMARY**

LIMS BAT #: LIMS-87726  
JOB NUMBER: 12700058-001

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

MW-4-041805	05B13972	GRND WATER	NOT SPECIFIED	tph gc h2o 8100m	
MW-4-041805	05B13976	GRND WATER	NOT SPECIFIED	sub special test	SUBCONTRACTED
MW-5D-041605	05B13966	GRND WATER	NOT SPECIFIED	metals 13dis fur	
MW-5S-041605	05B13965	GRND WATER	NOT SPECIFIED	metals 13dis fur	
MW-6-041605	05B13967	GRND WATER	NOT SPECIFIED	metals 13dis fur	
MW-6-041605	05B26728	GRND WATER		se (furn dissol)	
MW-9-041605	05B13968	GRND WATER	NOT SPECIFIED	metals 13dis fur	
TRIP BLANK	05B13974	GRND WATER	NOT SPECIFIED	624 - water	



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REPORT DATE 8/10/2005

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FRAMINGHAM, MA 01701  
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CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

#### ANALYTICAL SUMMARY

LIMS BAT #: LIMS-87726  
JOB NUMBER: 12700058-001

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

Comments :

LIMS BATCH NO.: LIMS-87726

REVISED REPORT 8/10/05

#### CASE NARRATIVE SUMMARY

IN METHOD 7841, THE LABORATORY FORTIFIED BLANK AND LFB DUPLICATE RECOVERIES ARE OUTSIDE OF CONTROL LIMITS FOR TL. ANY REPORTED RESULT FOR THALLIUM IS LIKELY TO BE BIASED ON THE LOW SIDE.

IN METHOD 6010, 13 PRIORITY POLLUTANT LIST WAS ANALYZED AND REPORTED.

THERE ARE NO ANALYTICAL ISSUES AFFECTING THE USEABILITY OF THE DATA

#### DETAILED CASE NARRATIVE

##### METHOD SW846-7470A

RECOMMENDED SAMPLE HOLDING TIMES WERE NOT EXCEEDED FOR ALL SAMPLES ANALYZED BY METHOD 7470A UNLESS LISTED BELOW: NONE EXCEEDED

ALL SAMPLES FOR METHOD 7470A WERE RECEIVED PRESERVED PROPERLY IN THE PROPER CONTAINERS AS SPECIFIED ON THE CHAIN-OF-CUSTODY FORM UNLESS LISTED BELOW: ALL PROPERLY PRESERVED

INITIAL AND CONTINUING CALIBRATIONS MET ALL REQUIRED PERFORMANCE STANDARDS FOR METHOD 7470A EXCEPT AS LISTED BELOW: ALL STANDARDS MET

LABORATORY CONTROL SAMPLE AND LABORATORY CONTROL SAMPLE DUPLICATE RECOVERIES, AS WELL AS LCS RPD, FOR REQUIRED MCP DATA ENHANCEMENT MERCURY 7470A WERE ALL WITHIN REQUIRED CONTROL LIMITS EXCEPT AS LISTED BELOW: NONE OUTSIDE CONTROL LIMITS

THE 7470A METHOD BLANK WAS FOUND NOT TO BE CONTAMINATED AT LEVELS ABOVE THE REPORTING LIMIT EXCEPT WHERE LISTED BELOW: NO CONTAMINATION NOTED

ALL 7470A MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES, AND MSDRPD, IF REQUESTED IN THIS BATCH WERE WITHIN CONTROL LIMITS SPECIFIED BY THE METHOD UNLESS LISTED BELOW: MS PERFORMED ON SAMPLE 05B13963.

##### METHOD SW846-7041/7841 FURNACE AA

RECOMMENDED SAMPLE HOLDING TIMES WERE NOT EXCEEDED FOR ALL SAMPLES ANALYZED BY METHOD 7041/7841 UNLESS LISTED BELOW: NONE EXCEEDED

ALL SAMPLES FOR METHOD 7041/7841 WERE RECEIVED PRESERVED PROPERLY IN THE PROPER CONTAINERS AS SPECIFIED ON THE CHAIN-OF-CUSTODY FORM UNLESS LISTED BELOW: ALL PROPERLY PRESERVED



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REPORT DATE 8/10/2005

RIZZO ASSOCIATES - FRAMINGHAM  
ONE GRANT STREET  
FRAMINGHAM, MA 01701  
ATTN: RAY JOHNSON

CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

#### ANALYTICAL SUMMARY

LIMS BAT #: LIMS-87726  
JOB NUMBER: 12700058-001

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

INITIAL AND CONTINUING CALIBRATIONS MET ALL REQUIRED PERFORMANCE STANDARDS FOR METHOD 7041/7841  
EXCEPT AS LISTED BELOW: ALL STANDARDS MET

LABORATORY CONTROL SAMPLE RECOVERIES FOR REQUIRED MCP DATA ENHANCEMENT 7041/7841  
ELEMENTS WERE ALL WITHIN REQUIRED CONTROL LIMITS EXCEPT AS LISTED BELOW:  
THE LABORATORY FORTIFIED BLANK AND LFB DUPLICATE RECOVERIES ARE OUTSIDE OF  
CONTROL LIMITS FOR TL. ANY REPORTED RESULT FOR THALLIUM IS LIKELY TO BE BIASED ON THE LOW SIDE.

THE 7041/7841 METHOD BLANK WAS FOUND NOT TO BE CONTAMINATED WITH TARGET ANALYTES AT LEVELS  
ABOVE THE REPORTING LIMIT EXCEPT WHERE LISTED BELOW: NO CONTAMINATION NOTED

ALL 7041/7841 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES, SAMPLE DUPLICATE RPDs, MSDRPDs,  
IF REQUESTED AND DUPLICATE INJECTION RPDs IN THIS BATCH WERE WITHIN CONTROL LIMITS SPECIFIED BY  
THE METHOD UNLESS LISTED BELOW: NONE REQUESTED OR PERFORMED ON SAMPLES SPECIFIC TO THIS  
CHAIN-OF-CUSTODY.

#### METHOD SW846-6010

SE RUN BY METHOD 6010 ON ICP FOR THIS PROJECT. RESULT CONFIRMED ON FURNACE BY METHOD  
3113B SE ON 5/14/05, LIMS 88493. SE WAS ANALYZED ORIGINALLY BY ICP AND WE SUGGEST THAT THIS  
IS NOT A TRUE HIT DUE TO THE RESULTS OF THE CONFIRMATION RUN BY THE FURNACE METHOD LISTED  
ABOVE. THIS WAS RUN BY ICP, WHICH OFTEN HAS FALSE-POSITIVES FOR SE DUE TO INTERFERENCES.

RECOMMENDED SAMPLE HOLDING TIMES WERE NOT EXCEEDED FOR ALL SAMPLES ANALYZED BY METHOD  
6010 UNLESS LISTED BELOW: NONE EXCEEDED

ALL SAMPLES FOR METHOD 6010 WERE RECEIVED PRESERVED PROPERLY IN THE PROPER CONTAINERS AS  
SPECIFIED ON THE CHAIN-OF-CUSTODY FORM UNLESS LISTED BELOW: ALL PROPERLY PRESERVED

INITIAL AND CONTINUING CALIBRATIONS MET ALL REQUIRED PERFORMANCE STANDARDS FOR METHOD 6010  
EXCEPT AS LISTED BELOW: ALL STANDARDS MET

INTERFERENCE CHECK STANDARDS (ICSA & ICSAB) VERIFIED INTER-ELEMENT SPECTRAL INTERFERENCE  
CORRECTIONS, WITH CONTROL LIMITS OF 80-120% FOR ALL ANALYTES, EXCEPT AS LISTED BELOW:  
ALL STANDARDS MET

LABORATORY CONTROL SAMPLE AND LABORATORY CONTROL SAMPLE DUPLICATE RECOVERIES, AS WELL  
AS LCS RPD, FOR REQUIRED MCP DATA ENHANCEMENT 6010 ELEMENTS WERE ALL WITHIN REQUIRED  
CONTROL LIMITS EXCEPT AS LISTED BELOW: NONE OUTSIDE CONTROL LIMITS

THE 6010 METHOD BLANK WAS FOUND NOT TO BE CONTAMINATED WITH TARGET ANALYTES AT LEVELS  
ABOVE THE REPORTING LIMIT EXCEPT WHERE LISTED BELOW: NO CONTAMINATION NOTED

ALL 6010 MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RECOVERIES, SAMPLE DUPLICATE RPDs AND  
MSDRPD, IF REQUESTED IN THIS BATCH WERE WITHIN CONTROL LIMITS SPECIFIED BY THE METHOD UNLESS  
LISTED BELOW: NONE REQUESTED OR PERFORMED ON SAMPLES SPECIFIC TO THIS CHAIN-OF-CUSTODY.

ALL ANALYTE LIST COMPOUNDS WERE REPORTED FOR METHOD 6010 UNLESS NOTED BELOW:  
13 PRIORITY POLLUTANT LIST WAS ANALYZED AND REPORTED.

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations :



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REPORT DATE 8/10/2005

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FRAMINGHAM, MA 01701  
ATTN: RAY JOHNSON

CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

PROJECT NUMBER:

**ANALYTICAL SUMMARY**

LIMS BAT #: LIMS-87726  
JOB NUMBER: 12700058-001

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

AIHA 100033	AIHA ELLAP (LEAD) 100033	
MASSACHUSETTS MA0100	NEW HAMPSHIRE NELAP 2516	NEW JERSEY NELAP NJ MA007 (AIR)
CONNECTICUT PH-0567	VERMONT DOH (LEAD) No. LL015036	ARIZONA AZ0648
NEW YORK ELAP/NELAP 10899	RHODE ISLAND (LIC. No. 112)	ARIZONA AZ0654 (AIR)

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

*Edward Denson 8/10/05*

SIGNATURE

DATE

Tod Kopyscinski  
Director of Operations

Sondra S. Kocot  
Quality Control Coordinator

Edward Denson  
Technical Director

\* See end of data tabulation for notes and comments pertaining to this sample

RAY JOHNSON  
RIZZO ASSOCIATES - FRAMINGHAM  
ONE GRANT STREET  
FRAMINGHAM, MA 01701

8/10/2005  
Page 1 of 43

Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726

Date Received: 4/18/2005

Job Number: 12700058-001

Field Sample #: GHC-2-041805

Sample ID : 05B13973

Sampled : 4/18/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F	SPEC Limit Hi
Benzene	ug/l	ND	04/22/05	LBD	1.0			
Bromodichloromethane	ug/l	ND	04/22/05	LBD	2.0			
Bromoform	ug/l	ND	04/22/05	LBD	2.0			
Bromomethane	ug/l	ND	04/22/05	LBD	2.0			
Carbon Tetrachloride	ug/l	ND	04/22/05	LBD	2.0			
Chlorobenzene	ug/l	ND	04/22/05	LBD	2.0			
Chlorodibromomethane	ug/l	ND	04/22/05	LBD	2.0			
Chloroethane	ug/l	ND	04/22/05	LBD	2.0			
2-Chloroethylvinylether	ug/l	ND	04/22/05	LBD	10.0			
Chloroform	ug/l	ND	04/22/05	LBD	2.5			
Chloromethane	ug/l	ND	04/22/05	LBD	2.0			
1,2-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0			
1,3-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0			
1,4-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0			
1,1-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0			
1,2-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0			
1,1-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0			
trans-1,2-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0			
1,2-Dichloropropane	ug/l	ND	04/22/05	LBD	2.0			
cis-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0			
trans-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0			
Ethyl Benzene	ug/l	ND	04/22/05	LBD	1.0			
MTBE	ug/l	ND	04/22/05	LBD	1.0			
Methylene Chloride	ug/l	ND	04/22/05	LBD	5.0			
1,1,2,2-Tetrachloroethane	ug/l	ND	04/22/05	LBD	2.0			
Tetrachloroethylene	ug/l	ND	04/22/05	LBD	2.0			
Toluene	ug/l	ND	04/22/05	LBD	1.0			
1,1,1-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0			
1,1,2-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0			
Trichloroethylene	ug/l	ND	04/22/05	LBD	2.0			

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected

NM = Not Measured

\*= See end of report for comments and notes applying to this sample

RAY JOHNSON  
RIZZO ASSOCIATES - FRAMINGHAM  
ONE GRANT STREET  
FRAMINGHAM, MA 01701

8/10/2005  
Page 2 of 43

Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
Date Received: 4/18/2005 Job Number: 12700058-001

**Field Sample # : GHC-2-041805**

Sample ID : 05B13973      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F	SPEC Limit Hi
Trichlorofluoromethane	ug/l	ND	04/22/05	LBD	2.0			
Vinyl Chloride	ug/l	ND	04/22/05	LBD	2.0			
m + p Xylene	ug/l	ND	04/22/05	LBD	2.0			
o- Xylene	ug/l	ND	04/22/05	LBD	1.0			

Analytical Method:

EPA 624

SAMPLES ARE ANALYZED BY GAS CHROMATOGRAPHY/ MASS SPECTROMETRY (GC/MS) WITH CONCENTRATION BY PURGE AND TRAP.

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RAY JOHNSON  
RIZZO ASSOCIATES - FRAMINGHAM  
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FRAMINGHAM, MA 01701

8/10/2005  
Page 3 of 43

Purchase Order No.:

Project Location: WALPOLE, MA  
Date Received: 4/18/2005  
Field Sample #: GHC-6-041605

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Sample ID : 05B13970      Sampled : 4/16/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date	Analyst	RL	SPEC Limit		P/F
			Analyzed			Lo	Hi	
Benzene	ug/l	ND	04/22/05	LBD	1.0			
Bromodichloromethane	ug/l	ND	04/22/05	LBD	2.0			
Bromoform	ug/l	ND	04/22/05	LBD	2.0			
Bromomethane	ug/l	ND	04/22/05	LBD	2.0			
Carbon Tetrachloride	ug/l	ND	04/22/05	LBD	2.0			
Chlorobenzene	ug/l	ND	04/22/05	LBD	2.0			
Chlorodibromomethane	ug/l	ND	04/22/05	LBD	2.0			
Chloroethane	ug/l	ND	04/22/05	LBD	2.0			
2-Chloroethylvinylether	ug/l	ND	04/22/05	LBD	10.0			
Chloroform	ug/l	ND	04/22/05	LBD	2.5			
Chloromethane	ug/l	ND	04/22/05	LBD	2.0			
1,2-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0			
1,3-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0			
1,4-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0			
1,1-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0			
1,2-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0			
1,1-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0			
trans-1,2-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0			
1,2-Dichloropropane	ug/l	ND	04/22/05	LBD	2.0			
cis-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0			
trans-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0			
Ethyl Benzene	ug/l	ND	04/22/05	LBD	1.0			
MTBE	ug/l	ND	04/22/05	LBD	1.0			
Methylene Chloride	ug/l	ND	04/22/05	LBD	5.0			
1,1,2,2-Tetrachloroethane	ug/l	ND	04/22/05	LBD	2.0			
Tetrachloroethylene	ug/l	ND	04/22/05	LBD	2.0			
Toluene	ug/l	ND	04/22/05	LBD	1.0			
1,1,1-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0			
1,1,2-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0			
Trichloroethylene	ug/l	ND	04/22/05	LBD	2.0			

RL = Reporting Limit

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NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

RAY JOHNSON  
RIZZO ASSOCIATES - FRAMINGHAM  
ONE GRANT STREET  
FRAMINGHAM, MA 01701

8/10/2005  
Page 4 of 43

Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: GHC-6-041605

Sample ID : 05B13970

Sampled : 4/16/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date	Analyst	RL	SPEC Limit		P/F
			Analyzed			Lo	Hi	
Trichlorofluoromethane	ug/l	ND	04/22/05	LBD	2.0			
Vinyl Chloride	ug/l	ND	04/22/05	LBD	2.0			
m + p Xylene	ug/l	ND	04/22/05	LBD	2.0			
o- Xylene	ug/l	ND	04/22/05	LBD	1.0			

## Analytical Method:

EPA 624

SAMPLES ARE ANALYZED BY GAS CHROMATOGRAPHY/ MASS SPECTROMETRY (GC/MS) WITH CONCENTRATION BY PURGE AND TRAP.

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FRAMINGHAM, MA 01701

8/10/2005  
Page 5 of 43

Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
Date Received: 4/18/2005 Job Number: 12700058-001

Field Sample #: MW-1-041605

Sample ID : 05B13963 Sampled : 4/16/2005  
NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Benzene	ug/l	ND	04/22/05	LBD	1.0		
Bromodichloromethane	ug/l	ND	04/22/05	LBD	2.0		
Bromoform	ug/l	ND	04/22/05	LBD	2.0		
Bromomethane	ug/l	ND	04/22/05	LBD	2.0		
Carbon Tetrachloride	ug/l	ND	04/22/05	LBD	2.0		
Chlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
Chlorodibromomethane	ug/l	ND	04/22/05	LBD	2.0		
Chloroethane	ug/l	ND	04/22/05	LBD	2.0		
2-Chloroethylvinylether	ug/l	ND	04/22/05	LBD	10.0		
Chloroform	ug/l	ND	04/22/05	LBD	2.5		
Chloromethane	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,3-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,4-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,1-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0		
trans-1,2-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichloropropane	ug/l	ND	04/22/05	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0		
trans-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0		
Ethyl Benzene	ug/l	ND	04/22/05	LBD	1.0		
MTBE	ug/l	ND	04/22/05	LBD	1.0		
Methylene Chloride	ug/l	ND	04/22/05	LBD	5.0		
1,1,2,2-Tetrachloroethane	ug/l	ND	04/22/05	LBD	2.0		
Tetrachloroethylene	ug/l	ND	04/22/05	LBD	2.0		
Toluene	ug/l	ND	04/22/05	LBD	1.0		
1,1,1-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,1,2-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0		
Trichloroethylene	ug/l	ND	04/22/05	LBD	2.0		

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ONE GRANT STREET  
FRAMINGHAM, MA 01701

8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
Date Received: 4/18/2005 Job Number: 12700058-001  
**Field Sample #:** MW-1-041605  
**Sample ID :** 05B13963      Sampled : 4/16/2005  
    NOT SPECIFIED  
**Sample Matrix:** GRND WATER

	Units	Results	Date	Analyst	RL	SPEC Limit		P/F
			Analyzed			Lo	Hi	
Trichlorofluoromethane	ug/l	ND	04/22/05	LBD	2.0			
Vinyl Chloride	ug/l	ND	04/22/05	LBD	2.0			
m + p Xylene	ug/l	ND	04/22/05	LBD	2.0			
o- Xylene	ug/l	ND	04/22/05	LBD	1.0			

Analytical Method:

EPA 624

SAMPLES ARE ANALYZED BY GAS CHROMATOGRAPHY/ MASS SPECTROMETRY (GC/MS) WITH CONCENTRATION BY PURGE AND TRAP.

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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: MW-3-041805

Sample ID : 05B13971

Sampled : 4/18/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Benzene	ug/l	ND	04/22/05	LBD	1.0		
Bromodichloromethane	ug/l	ND	04/22/05	LBD	2.0		
Bromoform	ug/l	ND	04/22/05	LBD	2.0		
Bromomethane	ug/l	ND	04/22/05	LBD	2.0		
Carbon Tetrachloride	ug/l	ND	04/22/05	LBD	2.0		
Chlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
Chlorodibromomethane	ug/l	ND	04/22/05	LBD	2.0		
Chloroethane	ug/l	ND	04/22/05	LBD	2.0		
2-Chloroethylvinylether	ug/l	ND	04/22/05	LBD	10.0		
Chloroform	ug/l	ND	04/22/05	LBD	2.5		
Chloromethane	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,3-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,4-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,1-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0		
trans-1,2-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichloropropane	ug/l	ND	04/22/05	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0		
trans-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0		
Ethyl Benzene	ug/l	ND	04/22/05	LBD	1.0		
MTBE	ug/l	ND	04/22/05	LBD	1.0		
Methylene Chloride	ug/l	ND	04/22/05	LBD	5.0		
1,1,2,2-Tetrachloroethane	ug/l	ND	04/22/05	LBD	2.0		
Tetrachloroethylene	ug/l	ND	04/22/05	LBD	2.0		
Toluene	ug/l	ND	04/22/05	LBD	1.0		
1,1,1-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,1,2-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0		
Trichloroethylene	ug/l	ND	04/22/05	LBD	2.0		

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Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
Date Received: 4/18/2005 Job Number: 12700058-001

Field Sample # : MW-3-041805

Sample ID : 05B13971 Sampled : 4/18/2005  
NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date	Analyst	RL	SPEC Limit		P/F
			Analyzed			Lo	Hi	
Trichlorofluoromethane	ug/l	ND	04/22/05	LBD	2.0			
Vinyl Chloride	ug/l	ND	04/22/05	LBD	2.0			
m + p Xylene	ug/l	ND	04/22/05	LBD	2.0			
o- Xylene	ug/l	ND	04/22/05	LBD	1.0			

Analytical Method:

EPA 624

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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: MW-4-041805

Sample ID : 05B13972

Sampled : 4/18/2005  
NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Benzene	ug/l	ND	04/22/05	LBD	1.0		
Bromodichloromethane	ug/l	ND	04/22/05	LBD	2.0		
Bromoform	ug/l	ND	04/22/05	LBD	2.0		
Bromomethane	ug/l	ND	04/22/05	LBD	2.0		
Carbon Tetrachloride	ug/l	ND	04/22/05	LBD	2.0		
Chlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
Chlorodibromomethane	ug/l	ND	04/22/05	LBD	2.0		
Chloroethane	ug/l	ND	04/22/05	LBD	2.0		
2-Chloroethylvinylether	ug/l	ND	04/22/05	LBD	10.0		
Chloroform	ug/l	ND	04/22/05	LBD	2.5		
Chloromethane	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,3-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,4-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,1-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0		
trans-1,2-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichloropropane	ug/l	ND	04/22/05	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0		
trans-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0		
Ethyl Benzene	ug/l	ND	04/22/05	LBD	1.0		
MTBE	ug/l	ND	04/22/05	LBD	1.0		
Methylene Chloride	ug/l	ND	04/22/05	LBD	5.0		
1,1,2,2-Tetrachloroethane	ug/l	ND	04/22/05	LBD	2.0		
Tetrachloroethylene	ug/l	ND	04/22/05	LBD	2.0		
Toluene	ug/l	ND	04/22/05	LBD	1.0		
1,1,1-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,1,2-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0		
Trichloroethylene	ug/l	ND	04/22/05	LBD	2.0		

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Purchase Order No.:

Project Location: WALPOLE, MA

 LIMS-BAT #: LIMS-87726  
 Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: MW-4-041805

Sample ID : 05B13972

Sampled : 4/18/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Trichlorofluoromethane	ug/l	ND	04/22/05	LBD	2.0		
Vinyl Chloride	ug/l	ND	04/22/05	LBD	2.0		
m + p Xylene	ug/l	ND	04/22/05	LBD	2.0		
o- Xylene	ug/l	ND	04/22/05	LBD	1.0		

## Analytical Method:

EPA 624

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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: TRIP BLANK

Sample ID : 05B13974

Sampled : 4/18/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Benzene	ug/l	ND	04/22/05	LBD	1.0		
Bromodichloromethane	ug/l	ND	04/22/05	LBD	2.0		
Bromoform	ug/l	ND	04/22/05	LBD	2.0		
Bromomethane	ug/l	ND	04/22/05	LBD	2.0		
Carbon Tetrachloride	ug/l	ND	04/22/05	LBD	2.0		
Chlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
Chlorodibromomethane	ug/l	ND	04/22/05	LBD	2.0		
Chloroethane	ug/l	ND	04/22/05	LBD	2.0		
2-Chloroethylvinylether	ug/l	ND	04/22/05	LBD	10.0		
Chloroform	ug/l	ND	04/22/05	LBD	2.5		
Chloromethane	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,3-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,4-Dichlorobenzene	ug/l	ND	04/22/05	LBD	2.0		
1,1-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,1-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0		
trans-1,2-Dichloroethylene	ug/l	ND	04/22/05	LBD	2.0		
1,2-Dichloropropane	ug/l	ND	04/22/05	LBD	2.0		
cis-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0		
trans-1,3-Dichloropropene	ug/l	ND	04/22/05	LBD	2.0		
Ethyl Benzene	ug/l	ND	04/22/05	LBD	1.0		
MTBE	ug/l	ND	04/22/05	LBD	1.0		
Methylene Chloride	ug/l	ND	04/22/05	LBD	5.0		
1,1,2,2-Tetrachloroethane	ug/l	ND	04/22/05	LBD	2.0		
Tetrachloroethylene	ug/l	ND	04/22/05	LBD	2.0		
Toluene	ug/l	ND	04/22/05	LBD	1.0		
1,1,1-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0		
1,1,2-Trichloroethane	ug/l	ND	04/22/05	LBD	2.0		
Trichloroethylene	ug/l	ND	04/22/05	LBD	2.0		

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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: TRIP BLANK

Sample ID : 05B13974

Sampled : 4/18/2005  
NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Trichlorofluoromethane	ug/l	ND	04/22/05	LBD	2.0		
Vinyl Chloride	ug/l	ND	04/22/05	LBD	2.0		
m + p Xylene	ug/l	ND	04/22/05	LBD	2.0		
o- Xylene	ug/l	ND	04/22/05	LBD	1.0		

Analytical Method:

EPA 624

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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: GHC-2-041805

Sample ID : 05B13973

Sampled : 4/18/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acenaphthene	ug/l	ND	04/23/05	BGL	5.00		
Acenaphthylene	ug/l	ND	04/23/05	BGL	5.00		
Acetophenone	ug/l	ND	04/23/05	BGL	10.0		
Aniline	ug/l	ND	04/23/05	BGL	5.00		
Anthracene	ug/l	ND	04/23/05	BGL	5.00		
Benzidine	ug/l	ND	04/23/05	BGL	70.0		
Benzoic Acid	ug/l	ND	04/23/05	BGL	30.0		
Benzo(a)anthracene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(a)pyrene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(b)fluoranthene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(g,h,i)perylene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(k)fluoranthene	ug/l	ND	04/23/05	BGL	5.00		
Benzyl Alcohol	ug/l	ND	04/23/05	BGL	20.0		
1,1-Biphenyl	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-chloroethoxy)methane	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-chloroethyl)ether	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-chloroisopropyl)ether	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-ethylhexyl)phthalate	ug/l	ND	04/23/05	BGL	10.0		
4-Bromophenyl phenyl ether	ug/l	ND	04/23/05	BGL	10.0		
Butylbenzylphthalate	ug/l	ND	04/23/05	BGL	20.0		
4-Chloroaniline	ug/l	ND	04/23/05	BGL	20.0		
2-Chloronaphthalene	ug/l	ND	04/23/05	BGL	10.0		
4-Chlorophenylphenyl ether	ug/l	ND	04/23/05	BGL	10.0		
Chrysene	ug/l	ND	04/23/05	BGL	5.00		
Dibenzofuran	ug/l	ND	04/23/05	BGL	10.0		
Dibenzo(a,h)anthracene	ug/l	ND	04/23/05	BGL	5.00		
1,2-Dichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		
1,3-Dichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		
1,4-Dichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		
3,3-Dichlorobenzidine	ug/l	ND	04/23/05	BGL	10.0		

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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA  
Date Received: 4/18/2005  
Field Sample #: GHC-2-041805

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Sample ID : 05B13973      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Diethylphthalate	ug/l	ND	04/23/05	BGL	10.0		
Dimethylphthalate	ug/l	ND	04/23/05	BGL	20.0		
Di-n-butylphthalate	ug/l	ND	04/23/05	BGL	10.0		
Di-n-octylphthalate	ug/l	ND	04/23/05	BGL	20.0		
1,2-Dinitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
1,3-Dinitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
1,4-Dinitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
2,4-Dinitrotoluene	ug/l	ND	04/23/05	BGL	10.0		
2,6-Dinitrotoluene	ug/l	ND	04/23/05	BGL	10.0		
1,2-Diphenylhydrazine (as Azobenzene)	ug/l	ND	04/23/05	BGL	10.0		
Fluoranthene	ug/l	ND	04/23/05	BGL	5.00		
Fluorene	ug/l	ND	04/23/05	BGL	5.00		
Hexachlorobenzene	ug/l	ND	04/23/05	BGL	10.0		
Hexachlorobutadiene	ug/l	ND	04/23/05	BGL	10.0		
Hexachlorocyclopentadiene	ug/l	ND	04/23/05	BGL	10.0		
Hexachloroethane	ug/l	ND	04/23/05	BGL	10.0		
Indeno(1,2,3-cd)pyrene	ug/l	ND	04/23/05	BGL	5.00		
Isophorone	ug/l	ND	04/23/05	BGL	10.0		
2-Methylnaphthalene	ug/l	ND	04/23/05	BGL	5.00		
Naphthalene	ug/l	ND	04/23/05	BGL	5.00		
2-Nitroaniline	ug/l	ND	04/23/05	BGL	10.0		
3-Nitroaniline	ug/l	ND	04/23/05	BGL	10.0		
4-Nitroaniline	ug/l	ND	04/23/05	BGL	10.0		
Nitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
N-Nitrosodimethylamine	ug/l	ND	04/23/05	BGL	10.0		
N-Nitrosodiphenylamine	ug/l	ND	04/23/05	BGL	10.0		
N-Nitroso-di-n-propylamine	ug/l	ND	04/23/05	BGL	10.0		
Phenanthrene	ug/l	ND	04/23/05	BGL	5.00		
Pyrene	ug/l	ND	04/23/05	BGL	5.00		

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ONE GRANT STREET  
FRAMINGHAM, MA 01701

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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726

Date Received: 4/18/2005

Job Number: 12700058-001

Field Sample #: GHC-2-041805

Sample ID : 05B13973

Sampled : 4/18/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Pyridine	ug/l	ND	04/23/05	BGL	0.8		
1,2,4-Trichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		

Analytical Method:  
625/8270

SAMPLES ARE EXTRACTED INTO METHYLENE CHLORIDE, FOLLOWED BY KUDERNA-DANISH OR TURBOVAP EVAPORATIVE CONCENTRATION AND QUANTITATED BY GC/MS TARGET COMPOUND ANALYSIS

RL = Reporting Limit

ND = Not Detected

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample

RAY JOHNSON

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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: MW-3-041805

Sample ID : 05B13971

Sampled : 4/18/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Acenaphthene	ug/l	ND	04/23/05	BGL	5.00		
Acenaphthylene	ug/l	ND	04/23/05	BGL	5.00		
Acetophenone	ug/l	ND	04/23/05	BGL	10.0		
Aniline	ug/l	ND	04/23/05	BGL	5.00		
Anthracene	ug/l	ND	04/23/05	BGL	5.00		
Benzidine	ug/l	ND	04/23/05	BGL	70.0		
Benzoic Acid	ug/l	ND	04/23/05	BGL	30.0		
Benzo(a)anthracene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(a)pyrene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(b)fluoranthene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(g,h,i)perylene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(k)fluoranthene	ug/l	ND	04/23/05	BGL	5.00		
Benzyl Alcohol	ug/l	ND	04/23/05	BGL	20.0		
1,1-Biphenyl	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-chloroethoxy)methane	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-chloroethyl)ether	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-chloroisopropyl)ether	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-ethylhexyl)phthalate	ug/l	ND	04/23/05	BGL	10.0		
4-Bromophenyl phenyl ether	ug/l	ND	04/23/05	BGL	10.0		
Butylbenzylphthalate	ug/l	ND	04/23/05	BGL	20.0		
4-Chloroaniline	ug/l	ND	04/23/05	BGL	20.0		
2-Choronaphthalene	ug/l	ND	04/23/05	BGL	10.0		
4-Chlorophenylphenyl ether	ug/l	ND	04/23/05	BGL	10.0		
Chrysene	ug/l	ND	04/23/05	BGL	5.00		
Dibenzofuran	ug/l	ND	04/23/05	BGL	10.0		
Dibenz(a,h)anthracene	ug/l	ND	04/23/05	BGL	5.00		
1,2-Dichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		
1,3-Dichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		
1,4-Dichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		
3,3-Dichlorobenzidine	ug/l	ND	04/23/05	BGL	10.0		

RL = Reporting Limit

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NM = Not Measured

\* = See end of report for comments and notes applying to this sample

RAY JOHNSON

 RIZZO ASSOCIATES - FRAMINGHAM  
 ONE GRANT STREET  
 FRAMINGHAM, MA 01701

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Purchase Order No.:

Project Location: WALPOLE, MA

 LIMS-BAT #: LIMS-87726  
 Job Number: 12700068-001

Date Received: 4/18/2005

Field Sample #: MW-3-041805

Sample ID : 05B13971

 Sampled : 4/18/2005  
 NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Diethylphthalate	ug/l	ND	04/23/05	BGL	10.0		
Dimethylphthalate	ug/l	ND	04/23/05	BGL	20.0		
Di-n-butylphthalate	ug/l	ND	04/23/05	BGL	10.0		
Di-n-octylphthalate	ug/l	ND	04/23/05	BGL	20.0		
1,2-Dinitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
1,3-Dinitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
1,4-Dinitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
2,4-Dinitrotoluene	ug/l	ND	04/23/05	BGL	10.0		
2,6-Dinitrotoluene	ug/l	ND	04/23/05	BGL	10.0		
1,2-Diphenylhydrazine (as Azobenzene)	ug/l	ND	04/23/05	BGL	10.0		
Fluoranthene	ug/l	ND	04/23/05	BGL	5.00		
Fluorene	ug/l	ND	04/23/05	BGL	5.00		
Hexachlorobenzene	ug/l	ND	04/23/05	BGL	10.0		
Hexachlorobutadiene	ug/l	ND	04/23/05	BGL	10.0		
Hexachlorocyclopentadiene	ug/l	ND	04/23/05	BGL	10.0		
Hexachloroethane	ug/l	ND	04/23/05	BGL	10.0		
Indeno(1,2,3-cd)pyrene	ug/l	ND	04/23/05	BGL	5.00		
Isophorone	ug/l	ND	04/23/05	BGL	10.0		
2-Methylnaphthalene	ug/l	ND	04/23/05	BGL	5.00		
Naphthalene	ug/l	ND	04/23/05	BGL	5.00		
2-Nitroaniline	ug/l	ND	04/23/05	BGL	10.0		
3-Nitroaniline	ug/l	ND	04/23/05	BGL	10.0		
4-Nitroaniline	ug/l	ND	04/23/05	BGL	10.0		
Nitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
N-Nitrosodimethylamine	ug/l	ND	04/23/05	BGL	10.0		
N-Nitrosodiphenylamine	ug/l	ND	04/23/05	BGL	10.0		
N-Nitroso-di-n-propylamine	ug/l	ND	04/23/05	BGL	10.0		
Phenanthrene	ug/l	ND	04/23/05	BGL	5.00		
Pyrene	ug/l	ND	04/23/05	BGL	5.00		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

RAY JOHNSON  
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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: MW-3-041805

Sample ID : 05B13971

Sampled : 4/18/2005  
NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Pyridine	ug/l	ND	04/23/05	BGL	0.8		
1,2,4-Trichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		

Analytical Method:  
625/8270

SAMPLES ARE EXTRACTED INTO METHYLENE CHLORIDE, FOLLOWED BY KUDERNA-DANISH OR TURBOVAP EVAPORATIVE CONCENTRATION AND QUANTITATED BY GC/MS TARGET COMPOUND ANALYSIS

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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NM = Not Measured

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RAY JOHNSON  
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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: MW-4-041805

Sample ID : 05B13972

Sampled : 4/18/2005  
NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acenaphthene	ug/l	ND	04/23/05	BGL	5.00		
Acenaphthylene	ug/l	ND	04/23/05	BGL	5.00		
Acetophenone	ug/l	ND	04/23/05	BGL	10.0		
Aniline	ug/l	ND	04/23/05	BGL	5.00		
Anthracene	ug/l	ND	04/23/05	BGL	5.00		
Benzidine	ug/l	ND	04/23/05	BGL	70.0		
Benzoic Acid	ug/l	ND	04/23/05	BGL	30.0		
Benzo(a)anthracene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(a)pyrene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(b)fluoranthene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(g,h,i)perylene	ug/l	ND	04/23/05	BGL	5.00		
Benzo(k)fluoranthene	ug/l	ND	04/23/05	BGL	5.00		
Benzyl Alcohol	ug/l	ND	04/23/05	BGL	20.0		
1,1-Biphenyl	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-chloroethoxy)methane	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-chloroethyl)ether	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-chloroisopropyl)ether	ug/l	ND	04/23/05	BGL	10.0		
Bis(2-ethylhexyl)phthalate	ug/l	ND	04/23/05	BGL	10.0		
4-Bromophenyl phenyl ether	ug/l	ND	04/23/05	BGL	10.0		
Butylbenzylphthalate	ug/l	ND	04/23/05	BGL	20.0		
4-Chloroaniline	ug/l	ND	04/23/05	BGL	20.0		
2-Chloronaphthalene	ug/l	ND	04/23/05	BGL	10.0		
4-Chlorophenylphenyl ether	ug/l	ND	04/23/05	BGL	10.0		
Chrysene	ug/l	ND	04/23/05	BGL	5.00		
Dibenzofuran	ug/l	ND	04/23/05	BGL	10.0		
Dibenzo(a,h)anthracene	ug/l	ND	04/23/05	BGL	5.00		
1,2-Dichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		
1,3-Dichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		
1,4-Dichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		
3,3-Dichlorobenzidine	ug/l	ND	04/23/05	BGL	10.0		

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ND = Not Detected

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RAY JOHNSON  
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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
 Date Received: 4/18/2005 Job Number: 12700058-001

Field Sample # : MW-4-041B05

Sample ID : 05B13972      Sampled : 4/18/2005  
 NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Diethylphthalate	ug/l	ND	04/23/05	BGL	10.0		
Dimethylphthalate	ug/l	ND	04/23/05	BGL	20.0		
Di-n-butylphthalate	ug/l	ND	04/23/05	BGL	10.0		
Di-n-octylphthalate	ug/l	ND	04/23/05	BGL	20.0		
1,2-Dinitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
1,3-Dinitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
1,4-Dinitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
2,4-Dinitrotoluene	ug/l	ND	04/23/05	BGL	10.0		
2,6-Dinitrotoluene	ug/l	ND	04/23/05	BGL	10.0		
1,2-Diphenylhydrazine (as Azobenzene)	ug/l	ND	04/23/05	BGL	10.0		
Fluoranthene	ug/l	ND	04/23/05	BGL	5.00		
Fluorene	ug/l	ND	04/23/05	BGL	5.00		
Hexachlorobenzene	ug/l	ND	04/23/05	BGL	10.0		
Hexachlorobutadiene	ug/l	ND	04/23/05	BGL	10.0		
Hexachlorocyclopentadiene	ug/l	ND	04/23/05	BGL	10.0		
Hexachloroethane	ug/l	ND	04/23/05	BGL	10.0		
Indeno(1,2,3-cd)pyrene	ug/l	ND	04/23/05	BGL	5.00		
Isophorone	ug/l	ND	04/23/05	BGL	10.0		
2-Methylnaphthalene	ug/l	ND	04/23/05	BGL	5.00		
Naphthalene	ug/l	ND	04/23/05	BGL	5.00		
2-Nitroaniline	ug/l	ND	04/23/05	BGL	10.0		
3-Nitroaniline	ug/l	ND	04/23/05	BGL	10.0		
4-Nitroaniline	ug/l	ND	04/23/05	BGL	10.0		
Nitrobenzene	ug/l	ND	04/23/05	BGL	10.0		
N-Nitrosodimethylamine	ug/l	ND	04/23/05	BGL	10.0		
N-Nitrosodiphenylamine	ug/l	ND	04/23/05	BGL	10.0		
N-Nitroso-di-n-propylamine	ug/l	ND	04/23/05	BGL	10.0		
Phenanthrene	ug/l	ND	04/23/05	BGL	5.00		
Pyrene	ug/l	ND	04/23/05	BGL	5.00		

RL = Reporting Limit

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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
Date Received: 4/18/2005 Job Number: 12700058-001

Field Sample # : MW-4-041805

Sample ID : 05B13972 Sampled : 4/18/2005  
NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
Pyridine	ug/l	ND	04/23/05	BGL	0.8		
1,2,4-Trichlorobenzene	ug/l	ND	04/23/05	BGL	5.00		

Analytical Method:  
625/8270

SAMPLES ARE EXTRACTED INTO METHYLENE CHLORIDE, FOLLOWED BY KUDERNA-DANISH OR TURBOVAP  
EVAPORATIVE CONCENTRATION AND QUANTITATED BY GC/MS TARGET COMPOUND ANALYSIS

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\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

RAY JOHNSON

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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample # : GHC-2-041805

Sample ID : 05B13973

Sampled : 4/18/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
					Lo	Hi	
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	0.023	04/23/05	KRL	0.010		

RL = Reporting Limit

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\* = See end of report for comments and notes applying to this sample



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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample # : GHC-5-041605

Sample ID : 05B13969

Sampled : 4/16/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
						Lo	Hi
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	0.008	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	0.053	04/23/05	KRL	0.010		

RL = Reporting Limit

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NM = Not Measured

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\* = See end of report for comments and notes applying to this sample



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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample # : GHC-6-041605

Sample ID : 05B13970

Sampled : 4/16/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	0.014	04/23/05	KRL	0.010		

RL = Reporting Limit

ND = Not Detected

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: MW-1-041605

Sample ID : 05B13963

Sampled : 4/16/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/F
					Lo	Hi	
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	0.074	04/23/05	KRL	0.010		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected

NM = Not Measured

\*= See end of report for comments and notes applying to this sample

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ONE GRANT STREET  
FRAMINGHAM, MA 01701

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Purchase Order No.:

Project Location: WALPOLE, MA  
Date Received: 4/18/2005

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Field Sample #: MW-2-041605

Sample ID : 05B13964      Sampled : 4/16/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	ND	04/23/05	KRL	0.010		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected

NM = Not Measured

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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: MW-3-041805

Sample ID : 05B13971

Sampled : 4/18/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	0.0060	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	0.029	04/23/05	KRL	0.010		

RL = Reporting Limit

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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: MW-4-041805

Sample ID : 05B13972

Sampled : 4/18/2005  
NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	ND	04/23/05	KRL	0.010		

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NM = Not Measured

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Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
 Date Received: 4/18/2005 Job Number: 12700058-001

**Field Sample # :** MW-5D-041605

**Sample ID :** 05B13966      Sampled : 4/16/2005  
 NOT SPECIFIED

**Sample Matrix:** GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/F
					Lo	Hi	
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	ND	04/23/05	KRL	0.010		

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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample # : MW-5S-041605

Sample ID : 05B13965

Sampled : 4/16/2005  
NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
					Lo	Hi	
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	0.013	04/23/05	KRL	0.010		

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## Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
Date Received: 4/18/2005 Job Number: 12700058-001  
Field Sample #: MW-6-041605  
Sample ID : 05B13967 Sampled : 4/16/2005  
NOT SPECIFIED  
Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	0.032	04/23/05	KRL	0.010		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected

NM = Not Measured

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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
 Job Number: 12700058-001

Date Received: 4/18/2005

**Field Sample # :** MW-9-041605

**Sample ID :** 05B13968

Sampled : 4/16/2005

NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Dissolved Antimony	mg/l	ND	04/23/05	WHW	0.006		
Dissolved Arsenic	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Beryllium	mg/l	ND	04/23/05	KRL	0.0025		
Dissolved Cadmium	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Chromium	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Copper	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Lead	mg/l	ND	04/23/05	KRL	0.015		
Dissolved Mercury	mg/l	ND	04/21/05	JTB	0.00004		
Dissolved Nickel	mg/l	ND	04/23/05	KRL	0.005		
Dissolved Selenium	mg/l	ND	04/23/05	KRL	0.05		
Dissolved Silver	mg/l	ND	04/23/05	KRL	0.0050		
Dissolved Thallium	mg/l	ND	04/23/05	WHW	0.0020		
Dissolved Zinc	mg/l	0.015	04/23/05	KRL	0.010		

RL = Reporting Limit

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Purchase Order No.:

Project Location: WALPOLE, MA  
Date Received: 4/18/2005

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Analytical Method: Dissolved Antimony  
SM 3113 B SB/SW7041

SAMPLES ARE DIGESTED WITH NITRIC ACID AND ANALYZED BY GRAPHITE FURNACE  
ATOMIC ABSORPTION SPECTROPHOTOMETRY.

Analytical Method: Dissolved Arsenic  
EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY  
(ICP).

Analytical Method: Dissolved Beryllium  
EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY  
(ICP).

Analytical Method: Dissolved Cadmium  
EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY  
(ICP).

Analytical Method: Dissolved Chromium  
EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY  
(ICP).

Analytical Method: Dissolved Copper  
EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY  
(ICP).

Analytical Method: Dissolved Lead  
EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY  
(ICP).

Analytical Method: Dissolved Mercury  
EPA 245.1/SW846 7470

COLD VAPOR TECHNIQUE (FLAMELESS ABSORPTION AT 254 NM)

Analytical Method: Dissolved Nickel  
EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY  
(ICP).

Analytical Method: Dissolved Selenium  
EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY  
(ICP).

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regulatory level for comparison with data to  
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NM = Not Measured

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## Purchase Order No.:

Project Location: WALPOLE, MA  
Date Received: 4/18/2005

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Analytical Method: Dissolved Silver  
EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY  
(ICP).

Analytical Method: Dissolved Thallium  
EPA 200.9/SW846 7841  
GRAPHITE FURNACE ATOMIC ABSORPTION SPECTROSCOPY

Analytical Method: Dissolved Zinc  
EPA 200.7/SW846 6010  
SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY  
(ICP).

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or  
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ND = Not Detected

NM = Not Measured

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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample # : GHC-2-041805

Sample ID : 05B13973      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Sodium	mg/l	151.	04/28/05	KRL	1.00		

Field Sample # : MW-3-041805

Sample ID : 05B13971      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Sodium	mg/l	96.3	04/28/05	KRL	1.00		

Field Sample # : MW-4-041805

Sample ID : 05B13972      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Sodium	mg/l	20.3	04/28/05	KRL	1.00		

## Analytical Method:

EPA 200.7/SW846 6010

SAMPLES ARE ANALYZED BY INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETRY (ICP).

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

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NM = Not Measured

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8/10/2005  
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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: GHC-2-041805

Sample ID : 05B13973      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Nitrate	mg/l	0.93	04/22/05	VAK	0.05		

Field Sample #: MW-3-041805

Sample ID : 05B13971      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Nitrate	mg/l	1.91	04/22/05	VAK	0.05		

Field Sample #: MW-4-041805

Sample ID : 05B13972      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Nitrate	mg/l	3.14	04/22/05	VAK	0.05		

Analytical Method:

SM 4500-NO3 F

AUTOMATED-COLORIMETRIC ANALYSIS WITH SULFANILAMIDE, AMMONIUM CHLORIDE  
AND CADMIUM REDUCTION

RL = Reporting Limit

ND = Not Detected

NM = Not Measured

SPEC LIMIT = a client specified recommended or  
regulatory level for comparison with data to  
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\* = See end of report for comments and notes applying to this sample

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Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
 Date Received: 4/18/2005 Job Number: 12700058-001

**Field Sample #:** GHC-2-041805

**Sample ID :** 05B13973      Sampled : 4/18/2005  
 NOT SPECIFIED

**Sample Matrix:** GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Nitrite (as N)	mg/l	ND	04/19/05	VAK	0.03		

**Field Sample #:** MW-3-041805

**Sample ID :** 05B13971      Sampled : 4/18/2005  
 NOT SPECIFIED

**Sample Matrix:** GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Nitrite (as N)	mg/l	ND	04/19/05	VAK	0.03		

**Field Sample #:** MW-4-041805

**Sample ID :** 05B13972      Sampled : 4/18/2005  
 NOT SPECIFIED

**Sample Matrix:** GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Nitrite (as N)	mg/l	ND	04/19/05	VAK	0.03		

Analytical Method:

SM 4500 NO2 B

MANUAL DIAZOTIZATION COLORIMETRIC METHOD USING SULFANILAMIDE AND  
 N-(NAPHTHYL)-ETHYLENEDIAMINE DIHYDROCHLORIDE.

RL = Reporting Limit

ND = Not Detected

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or  
 regulatory level for comparison with data to  
 determine PASS (P) or FAIL (F) condition of results.

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Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
Date Received: 4/18/2005 Job Number: 12700058-001

Field Sample #: GHC-2-041805

Sample ID : 05B13973      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
Phenolics	mg/l	ND	04/25/05	SBP	0.0500	Lo Hi	

Field Sample #: MW-3-041805

Sample ID : 05B13971      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
Phenolics	mg/l	ND	04/25/05	SBP	0.0500	Lo Hi	

Field Sample #: MW-4-041805

Sample ID : 05B13972      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit	P/ F
Phenolics	mg/l	ND	04/25/05	SBP	0.0500	Lo Hi	

## Analytical Method:

EPA 420.1

SAMPLE DISTILLATION WITH ACID AND COPPER SULFATE. PHENOLICS REACT WITH 4-AAP IN THE PRESENCE OF POTASSIUM FERRICYANIDE UNDER BASIC CONDITIONS TO FORM ANITIPYRINE DYE WHICH IS ANALYZED BY COLORIMETRIC TECHNIQUES.

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

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Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
Date Received: 4/18/2005 Job Number: 12700058-001

**Field Sample #:** GHC-2-041805

**Sample ID :** 05B26718      Sampled : 4/18/2005

**Sample Matrix:** GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Dissolved Selenium	mg/l	ND	05/14/05 PM		0.0050		

**Field Sample #:** GHC-5-041605

**Sample ID :** 05B26719      Sampled : 4/16/2005

**Sample Matrix:** GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Dissolved Selenium	mg/l	ND	05/14/05 PM		0.0050		

**Field Sample #:** MW-1-041605

**Sample ID :** 05B26721      Sampled : 4/16/2005

**Sample Matrix:** GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Dissolved Selenium	mg/l	ND	05/14/05 PM		0.0050		

**Field Sample #:** MW-2-041605

**Sample ID :** 05B26724      Sampled : 4/16/2005

**Sample Matrix:** GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Dissolved Selenium	mg/l	ND	05/14/05 PM		0.0050		

**Field Sample #:** MW-3-041805

**Sample ID :** 05B26727      Sampled : 4/18/2005

**Sample Matrix:** GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Dissolved Selenium	mg/l	ND	05/14/05 PM		0.0050		

RL = Reporting Limit

ND = Not Detected

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



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RAY JOHNSON  
RIZZO ASSOCIATES - FRAMINGHAM  
ONE GRANT STREET  
FRAMINGHAM, MA 01701

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Purchase Order No.:

Project Location: WALPOLE, MA

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

Date Received: 4/18/2005

Field Sample #: MW-6-041605

Sample ID : 05B26728      Sampled : 4/18/2005

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/ F
Dissolved Selenium	mg/l	ND	05/14/05	PM	0.0050		

Analytical Method:

SM 3113 B SE

GRAPHITE FURNACE ATOMIC ABSORPTION SPECTROSCOPY

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\* = See end of report for comments and notes applying to this sample



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ONE GRANT STREET  
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Purchase Order No.:

Project Location: WALPOLE, MA LIMS-BAT #: LIMS-87726  
Date Received: 4/18/2005 Job Number: 12700058-001

Field Sample #: GHC-2-041805

Sample ID : 05B13977      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
SPECIAL TEST			04/21/05	PEL			

SUBCONTRACTED ANALYSIS FOR OIL AND GREASE BY METHOD EPA 1664.

RESULTS      RL      UNITS  
<1.4      1.4      MG/L

Field Sample #: MW-3-041805

Sample ID : 05B13975      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
SPECIAL TEST			04/21/05	PEL			

SUBCONTRACTED ANALYSIS FOR OIL AND GREASE BY METHOD EPA 1664.

RESULTS      RL      UNITS  
9.0      1.4      MG/L

Field Sample #: MW-4-041805

Sample ID : 05B13976      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
SPECIAL TEST			04/21/05	PEL			

SUBCONTRACTED ANALYSIS FOR OIL AND GREASE BY METHOD EPA 1664.

RESULTS      RL      UNITS  
<1.4      1.4      MG/L

RL = Reporting Limit

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\* = See end of report for comments and notes applying to this sample

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FRAMINGHAM, MA 01701

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Purchase Order No.:

Project Location: WALPOLE, MA  
Date Received: 4/18/2005

LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

**Field Sample #:** GHC-2-041805

**Sample ID :** 05B13973      Sampled : 4/18/2005  
    NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Unknown Hydrocarbons	MG/L	ND	04/25/05	CJM	0.20		

**Field Sample #:** MW-3-041805

**Sample ID :** 05B13971      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Unknown Hydrocarbons	MG/L	0.32	04/25/05	CJM	0.20		

**Field Sample #:** MW-4-041805

**Sample ID :** 05B13972      Sampled : 4/18/2005  
                                  NOT SPECIFIED

Sample Matrix: GRND WATER

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Unknown Hydrocarbons	MG/L	ND	04/25/05	CJM	0.20		

**Analytical Method:**

MODIFIED SW846 8100

SAMPLES ARE EXTRACTED INTO METHYLENE CHLORIDE AND ANALYZED BY GAS CHROMATOGRAPHY WITH FLAME IONIZATION DETECTION (FID). ALL PEAKS ELUTING IN THE PETROLEUM FUEL REGION ARE QUANTITATED AS #2 FUEL OIL.

RL = Reporting Limit

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FRAMINGHAM, MA 01701

Project Location: WALPOLE, MA  
Date Received: 4/18/2005

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8/10/2005  
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LIMS-BAT #: LIMS-87726  
Job Number: 12700058-001

\*\* END OF REPORT \*\*

RL = Reporting Limit

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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	8/10/2005	Lims Bat #:	LIMS-87726	Page 1 of 38
QC Batch Number:	GC/FID-13011			
Sample Id	Analysis	QC Analysis	Values	Units
BLANK-72719	Unknown Hydrocarbons	Blank	<0.20	MG/L



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### QC SUMMARY REPORT

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Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	8/10/2005	Lims Bat # :	LIMS-87726			Page 2 of 38
QC Batch Number:	GCMS/SEMI-6724					
Sample Id	Analysis	QC Analysis	Values	Units	Limits	
05B13971	Phenol-d6	Surrogate Recovery	22.7	%	15-110	
	2,4,6-Tribromophenol	Surrogate Recovery	71.7	%	15-110	
	2-Fluorophenol	Surrogate Recovery	38.6	%	15-110	
05B13972	Phenol-d6	Surrogate Recovery	19.6	%	15-110	
	2,4,6-Tribromophenol	Surrogate Recovery	60.6	%	15-110	
	2-Fluorophenol	Surrogate Recovery	36.7	%	15-110	
05B13973	Phenol-d6	Surrogate Recovery	0.0	%	15-110	
	2,4,6-Tribromophenol	Surrogate Recovery	3.2	%	15-110	
	2-Fluorophenol	Surrogate Recovery	0.8	%	15-110	
BLANK-72702	1,4-Dichlorobenzene	Blank	<5.00	ug/l		
	Naphthalene	Blank	<5.00	ug/l		
	1,2-Dichlorobenzene	Blank	<5.00	ug/l		
	1,3-Dichlorobenzene	Blank	<5.00	ug/l		
	Acenaphthene	Blank	<5.00	ug/l		
	Acenaphthylene	Blank	<5.00	ug/l		
	Aniline	Blank	<5.00	ug/l		
	Anthracene	Blank	<5.00	ug/l		
	Benzidine	Blank	<70.0	ug/l		
	Benzo(a)anthracene	Blank	<5.00	ug/l		
	Benzo(a)pyrene	Blank	<5.00	ug/l		
	Benzo(b)fluoranthene	Blank	<5.00	ug/l		
	Benzo(g,h,i)perylene	Blank	<5.00	ug/l		
	Benzoic Acid	Blank	<30.0	ug/l		
	Benzyl Alcohol	Blank	<20.0	ug/l		
	Bis(2-chloroethyl)ether	Blank	<10.0	ug/l		
	Bis(2-chloroethoxy)methane	Blank	<10.0	ug/l		
	Bis(2-chloroisopropyl)ether	Blank	<10.0	ug/l		
	Bis(2-ethylhexyl)phthalate	Blank	<10.0	ug/l		
	4-Bromophenyl phenyl ether	Blank	<10.0	ug/l		
	Butylbenzylphthalate	Blank	<20.0	ug/l		
	4-Chloroaniline	Blank	<20.0	ug/l		
	2-Chloronaphthalene	Blank	<10.0	ug/l		
	4-Chlorophenylphenyl ether	Blank	<10.0	ug/l		
	Chrysene	Blank	<5.00	ug/l		
	Dibenz(a,h)anthracene	Blank	<5.00	ug/l		
	Dibenzofuran	Blank	<10.0	ug/l		
	3,3-Dichlorobenzidine	Blank	<10.0	ug/l		
	Diethylphthalate	Blank	<10.0	ug/l		
	Dimethylphthalate	Blank	<20.0	ug/l		
	Di-n-butylphthalate	Blank	<10.0	ug/l		



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### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 3 of 38  
QC Batch Number: GCMS/SEMI-6724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-72702					
	2,4-Dinitrotoluene	Blank	<10.0	ug/l	
	2,6-Dinitrotoluene	Blank	<10.0	ug/l	
	1,2-Diphenylhydrazine (as Azobenzene)	Blank	<10.0	ug/l	
	Di-n-octylphthalate	Blank	<20.0	ug/l	
	Fluoranthene	Blank	<5.00	ug/l	
	Fluorene	Blank	<5.00	ug/l	
	Hexachlorobenzene	Blank	<10.0	ug/l	
	Hexachlorobutadiene	Blank	<10.0	ug/l	
	Hexachlorocyclopentadiene	Blank	<10.0	ug/l	
	Hexachloroethane	Blank	<10.0	ug/l	
	Indeno(1,2,3-cd)pyrene	Blank	<5.00	ug/l	
	Isophorone	Blank	<10.0	ug/l	
	2-Methylnaphthalene	Blank	<5.00	ug/l	
	2-Nitroaniline	Blank	<10.0	ug/l	
	3-Nitroaniline	Blank	<10.0	ug/l	
	Nitrobenzene	Blank	<10.0	ug/l	
	N-Nitrosodimethylamine	Blank	<10.0	ug/l	
	N-Nitroso-di-n-propylamine	Blank	<10.0	ug/l	
	N-Nitrosodiphenylamine	Blank	<10.0	ug/l	
	Phenanthrene	Blank	<5.00	ug/l	
	Pyrene	Blank	<5.00	ug/l	
	1,2,4-Trichlorobenzene	Blank	<5.00	ug/l	
	4-Chloro-3-methylphenol	Blank	<20.0	ug/l	
	2-Chlorophenol	Blank	<10.0	ug/l	
	2,4-Dichlorophenol	Blank	<10.0	ug/l	
	2,4-Dimethylphenol	Blank	<40.0	ug/l	
	4,6-Dinitro-2-methylphenol	Blank	<10.0	ug/l	
	2,4-Dinitrophenol	Blank	<20.0	ug/l	
	o-cresol	Blank	<10.0	ug/l	
	m & p-Cresol(s)	Blank	<20.0	ug/l	
	2-Nitrophenol	Blank	<10.0	ug/l	
	4-Nitrophenol	Blank	<20.0	ug/l	
	Phenol	Blank	<10.0	ug/l	
	2,4,5-Trichlorophenol	Blank	<10.0	ug/l	
	2,4,6-Trichlorophenol	Blank	<10.0	ug/l	
	Pentachlorophenol	Blank	<10.0	ug/l	
	Pyridine	Blank	<0.8	ug/l	
	Benzo(k)fluoranthene	Blank	<5.00	ug/l	
	4-Nitroaniline	Blank	<10.0	ug/l	
	1,1-Biphenyl	Blank	<10.0	ug/l	
	Acetophenone	Blank	<10.0	ug/l	
	1,2-Dinitrobenzene	Blank	<10.0	ug/l	
	1,3-Dinitrobenzene	Blank	<10.0	ug/l	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 4 of 38

QC Batch Number: GCMS/SEMI-6724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-72702	1,4-Dinitrobenzene	Blank	<10.0	ug/l	
LFBLANK-41002	1,4-Dichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	50.18	ug/l	
		Lab Fort Blk. % Rec.	50.18	%	30-130
	Naphthalene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	55.93	ug/l	
		Lab Fort Blk. % Rec.	55.93	%	30-130
	1,2-Dichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	52.39	ug/l	
		Lab Fort Blk. % Rec.	52.39	%	30-130
	1,3-Dichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	52.31	ug/l	
		Lab Fort Blk. % Rec.	52.31	%	30-130
	Acenaphthene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	66.68	ug/l	
		Lab Fort Blk. % Rec.	66.68	%	40-140
	Acenaphthylene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	67.18	ug/l	
		Lab Fort Blk. % Rec.	67.18	%	40-140
	Aniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	41.05	ug/l	
		Lab Fort Blk. % Rec.	41.05	%	
	Anthracene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	70.99	ug/l	
		Lab Fort Blk. % Rec.	70.99	%	40-140
	Benzidine	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	10.60	ug/l	
		Lab Fort Blk. % Rec.	10.60	%	
	Benzo(a)anthracene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	75.670	ug/l	
		Lab Fort Blk. % Rec.	75.670	%	40-140
	Benzo(a)pyrene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	88.880	ug/l	
		Lab Fort Blk. % Rec.	88.880	%	40-140
	Benzo(b)fluoranthene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	114.280	ug/l	
		Lab Fort Blk. % Rec.	114.280	%	40-140
	Benzo(g,h,i)perylene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	35.600	ug/l	
		Lab Fort Blk. % Rec.	35.600	%	30-130
	Benzoic Acid	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	19.03	ug/l	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 5 of 38

QC Batch Number: GCMS/SEMI-6724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41002					
	Benzoic Acid	Lab Fort Blk. % Rec.	19.03	%	
	Benzyl Alcohol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	25.65	ug/l	
		Lab Fort Blk. % Rec.	25.65	%	
	Bis(2-chloroethyl)ether	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	55.48	ug/l	
		Lab Fort Blk. % Rec.	55.48	%	30-130
	Bis(2-chloroethoxy)methane	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	65.34	ug/l	
		Lab Fort Blk. % Rec.	65.34	%	
	Bis(2-chloroisopropyl)ether	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	61.56	ug/l	
		Lab Fort Blk. % Rec.	61.56	%	30-130
	Bis(2-ethylhexyl)phthalate	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	101.27	ug/l	
		Lab Fort Blk. % Rec.	101.27	%	30-130
	4-Bromophenyl phenyl ether	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	67.94	ug/l	
		Lab Fort Blk. % Rec.	67.94	%	
	Butylbenzylphthalate	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	105.83	ug/l	
		Lab Fort Blk. % Rec.	105.83	%	
	4-Chloroaniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	60.15	ug/l	
		Lab Fort Blk. % Rec.	60.15	%	40-140
	2-Choronaphthalene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	65.42	ug/l	
		Lab Fort Blk. % Rec.	65.42	%	
	4-Chlorophenylphenyl ether	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	68.48	ug/l	
		Lab Fort Blk. % Rec.	68.48	%	
	Chrysene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	76.32	ug/l	
		Lab Fort Blk. % Rec.	76.32	%	40-140
	Dibenz(a,h)anthracene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	52.790	ug/l	
		Lab Fort Blk. % Rec.	52.790	%	30-130
	Dibenzofuran	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	68.74	ug/l	
		Lab Fort Blk. % Rec.	68.74	%	40-140
	3,3-Dichlorobenzidine	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	82.88	ug/l	
		Lab Fort Blk. % Rec.	82.88	%	40-140



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	8/10/2005	Lims Bat # :	LIMS-87726			Page 6 of 38
QC Batch Number:	GCMS/SEMI-6724					
Sample Id	Analysis	QC Analysis	Values	Units	Limits	
LFBLANK-41002						
	Diethylphthalate	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	56.49	ug/l		
		Lab Fort Blk. % Rec.	56.49	%	30-130	
	Dimethylphthalate	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	28.43	ug/l		
		Lab Fort Blk. % Rec.	28.43	%	10-130	
	Di-n-butylphthalate	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	74.32	ug/l		
		Lab Fort Blk. % Rec.	74.32	%	40-140	
	2,4-Dinitrotoluene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	83.92	ug/l		
		Lab Fort Blk. % Rec.	83.92	%	40-140	
	2,6-Dinitrotoluene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	77.14	ug/l		
		Lab Fort Blk. % Rec.	77.14	%	40-140	
	1,2-Diphenylhydrazine (as Azobenzene)	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	92.41	ug/l		
		Lab Fort Blk. % Rec.	92.41	%		
	Di-n-octylphthalate	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	226.29	ug/l		
		Lab Fort Blk. % Rec.	226.29	%		
	Fluoranthene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	71.49	ug/l		
		Lab Fort Blk. % Rec.	71.49	%	40-140	
	Fluorene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	70.47	ug/l		
		Lab Fort Blk. % Rec.	70.47	%	40-140	
	Hexachlorobenzene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	75.41	ug/l		
		Lab Fort Blk. % Rec.	75.41	%	40-140	
	Hexachlorobutadiene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	57.18	ug/l		
		Lab Fort Blk. % Rec.	57.18	%	20-130	
	Hexachlorocyclopentadiene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	4.09	ug/l		
		Lab Fort Blk. % Rec.	4.09	%		
	Hexachloroethane	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	45.83	ug/l		
		Lab Fort Blk. % Rec.	45.83	%	20-130	
	Indeno(1,2,3-cd)pyrene	Lab Fort Blank Amt.	100.000	ug/l		
		Lab Fort Blk. Found	55.080	ug/l		
		Lab Fort Blk. % Rec.	55.080	%	40-140	
	Isophorone	Lab Fort Blank Amt.	100.00	ug/l		



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 7 of 38  
QC Batch Number: GCMS/SEMI-6724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41002					
	Isophorone	Lab Fort Blk. Found	68.17	ug/l	
		Lab Fort Blk. % Rec.	68.17	%	40-140
	2-Methylnaphthalene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	60.74	ug/l	
		Lab Fort Blk. % Rec.	60.74	%	30-130
	2-Nitroaniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	91.63	ug/l	
		Lab Fort Blk. % Rec.	91.63	%	
	3-Nitroaniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	85.40	ug/l	
		Lab Fort Blk. % Rec.	85.40	%	
	Nitrobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	61.66	ug/l	
		Lab Fort Blk. % Rec.	61.66	%	30-130
	N-Nitrosodimethylamine	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	36.92	ug/l	
		Lab Fort Blk. % Rec.	36.92	%	
	N-Nitroso-di-n-propylamine	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	54.92	ug/l	
		Lab Fort Blk. % Rec.	54.92	%	30-108
	N-Nitrosodiphenylamine	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	80.23	ug/l	
		Lab Fort Blk. % Rec.	80.23	%	
	Phenanthrene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	71.75	ug/l	
		Lab Fort Blk. % Rec.	71.75	%	40-140
	Pyrene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	99.15	ug/l	
		Lab Fort Blk. % Rec.	99.15	%	40-140
	1,2,4-Trichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	55.32	ug/l	
		Lab Fort Blk. % Rec.	55.32	%	30-130
	4-Chloro-3-methylphenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	74.51	ug/l	
		Lab Fort Blk. % Rec.	74.51	%	32-120
	2-Chlorophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	49.21	ug/l	
		Lab Fort Blk. % Rec.	49.21	%	30-130
	2,4-Dichlorophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	64.54	ug/l	
		Lab Fort Blk. % Rec.	64.54	%	30-130
	2,4-Dimethylphenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	66.03	ug/l	



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### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

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Method Blanks

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QC Batch Number: GCMS/SEMI-6724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41002					
	2,4-Dimethylphenol	Lab Fort Blk. % Rec.	66.03	%	30-130
	4,6-Dinitro-2-methylphenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	35.31	ug/l	
		Lab Fort Blk. % Rec.	35.31	%	
	2,4-Dinitrophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	28.98	ug/l	
		Lab Fort Blk. % Rec.	28.98	%	10-130
	o-cresol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	56.31	ug/l	
		Lab Fort Blk. % Rec.	56.31	%	30-130
	m & p-Cresol(s)	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	47.04	ug/l	
		Lab Fort Blk. % Rec.	47.04	%	30-130
	2-Nitrophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	61.86	ug/l	
		Lab Fort Blk. % Rec.	61.86	%	30-130
	4-Nitrophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	25.02	ug/l	
		Lab Fort Blk. % Rec.	25.02	%	14-100
	Phenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	30.09	ug/l	
		Lab Fort Blk. % Rec.	30.09	%	20-130
	2,4,5-Trichlorophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	73.94	ug/l	
		Lab Fort Blk. % Rec.	73.94	%	30-130
	2,4,6-Trichlorophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	65.22	ug/l	
		Lab Fort Blk. % Rec.	65.22	%	30-130
	Pentachlorophenol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	100.44	ug/l	
		Lab Fort Blk. % Rec.	100.44	%	30-130
	Pyridine	Lab Fort Blank Amt.	100.0	ug/l	
		Lab Fort Blk. Found	30.0	ug/l	
		Lab Fort Blk. % Rec.	30.0	%	
	Benzo(k)fluoranthene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	109.970	ug/l	
		Lab Fort Blk. % Rec.	109.970	%	40-140
	4-Nitroaniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	85.47	ug/l	
		Lab Fort Blk. % Rec.	85.47	%	
	Acetophenone	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	52.61	ug/l	
		Lab Fort Blk. % Rec.	52.61	%	



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QC Batch Number: GCMS/SEMI-6724

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41002					
	1,2-Dinitrobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	66.95	ug/l	
		Lab Fort Blk. % Rec.	66.95	%	
	1,3-Dinitrobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	60.39	ug/l	
		Lab Fort Blk. % Rec.	60.39	%	
	1,4-Dinitrobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	36.90	ug/l	
		Lab Fort Blk. % Rec.	36.90	%	



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Report Date:	8/10/2005	Lims Bat # :	Page 10 of 38		
QC Batch Number:	GCMS/SEMI-6725				
Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B13971	Nitrobenzene-d5	Surrogate Recovery	57.5	%	30-130
	2-Fluorobiphenyl	Surrogate Recovery	61.6	%	30-130
	Terphenyl-d14	Surrogate Recovery	98.4	%	30-130
05B13972	Nitrobenzene-d5	Surrogate Recovery	55.8	%	30-130
	2-Fluorobiphenyl	Surrogate Recovery	55.0	%	30-130
	Terphenyl-d14	Surrogate Recovery	93.0	%	30-130
05B13973	Nitrobenzene-d5	Surrogate Recovery	53.2	%	30-130
	2-Fluorobiphenyl	Surrogate Recovery	52.6	%	30-130
	Terphenyl-d14	Surrogate Recovery	80.5	%	30-130
BLANK-72741	1,4-Dichlorobenzene	Blank	<5.00	ug/l	
	Naphthalene	Blank	<5.00	ug/l	
	1,2-Dichlorobenzene	Blank	<5.00	ug/l	
	1,3-Dichlorobenzene	Blank	<5.00	ug/l	
	Acenaphthene	Blank	<5.00	ug/l	
	Acenaphthylene	Blank	<5.00	ug/l	
	Aniline	Blank	<5.00	ug/l	
	Anthracene	Blank	<5.00	ug/l	
	Benzidine	Blank	<70.0	ug/l	
	Benzo(a)anthracene	Blank	<5.00	ug/l	
	Benzo(a)pyrene	Blank	<5.00	ug/l	
	Benzo(b)fluoranthene	Blank	<5.00	ug/l	
	Benzo(g,h,i)perylene	Blank	<5.00	ug/l	
	Benzoic Acid	Blank	<30.0	ug/l	
	Benzyl Alcohol	Blank	<20.0	ug/l	
	Bis(2-chloroethyl)ether	Blank	<10.0	ug/l	
	Bis(2-chloroethoxy)methane	Blank	<10.0	ug/l	
	Bis(2-chloroisopropyl)ether	Blank	<10.0	ug/l	
	Bis(2-ethylhexyl)phthalate	Blank	<10.0	ug/l	
	4-Bromophenyl phenyl ether	Blank	<10.0	ug/l	
	Butylbenzylphthalate	Blank	<20.0	ug/l	
	4-Chloroaniline	Blank	<20.0	ug/l	
	2-Chloronaphthalene	Blank	<10.0	ug/l	
	4-Chlorophenylphenyl ether	Blank	<10.0	ug/l	
	Chrysene	Blank	<5.00	ug/l	
	Dibenz(a,h)anthracene	Blank	<5.00	ug/l	
	Dibenzo-furan	Blank	<10.0	ug/l	
	3,3-Dichlorobenzidine	Blank	<10.0	ug/l	
	Diethylphthalate	Blank	<10.0	ug/l	
	Dimethylphthalate	Blank	<20.0	ug/l	
	Di-n-butylphthalate	Blank	<10.0	ug/l	



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BATCH QC: Lab fortified Blanks and Duplicates

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Method Blanks

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QC Batch Number: GCMS/SEMI-6725

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-72741	2,4-Dinitrotoluene	Blank	<10.0	ug/l	
	2,6-Dinitrotoluene	Blank	<10.0	ug/l	
	1,2-Diphenylhydrazine (as Azobenzene)	Blank	<10.0	ug/l	
	Di-n-octylphthalate	Blank	<20.0	ug/l	
	Fluoranthene	Blank	<5.00	ug/l	
	Fluorene	Blank	<5.00	ug/l	
	Hexachlorobenzene	Blank	<10.0	ug/l	
	Hexachlorobutadiene	Blank	<10.0	ug/l	
	Hexachlorocyclopentadiene	Blank	<10.0	ug/l	
	Hexachloroethane	Blank	<10.0	ug/l	
	Indeno(1,2,3-cd)pyrene	Blank	<5.00	ug/l	
	Isophorone	Blank	<10.0	ug/l	
	2-Methylnaphthalene	Blank	<5.00	ug/l	
	2-Nitroaniline	Blank	<10.0	ug/l	
	3-Nitroaniline	Blank	<10.0	ug/l	
	Nitrobenzene	Blank	<10.0	ug/l	
	N-Nitrosodimethylamine	Blank	<10.0	ug/l	
	N-Nitrosodi-n-propylamine	Blank	<10.0	ug/l	
	N-Nitrosodiphenylamine	Blank	<10.0	ug/l	
	Phenanthrene	Blank	<5.00	ug/l	
	Pyrene	Blank	<5.00	ug/l	
	1,2,4-Trichlorobenzene	Blank	<5.00	ug/l	
	Pyridine	Blank	<0.8	ug/l	
	Benzo(k)fluoranthene	Blank	<5.00	ug/l	
	4-Nitroaniline	Blank	<10.0	ug/l	
	1,1-Biphenyl	Blank	<10.0	ug/l	
	Acetophenone	Blank	<10.0	ug/l	
	1,2-Dinitrobenzene	Blank	<10.0	ug/l	
	1,3-Dinitrobenzene	Blank	<10.0	ug/l	
	1,4-Dinitrobenzene	Blank	<10.0	ug/l	
LFBLANK-41029	1,4-Dichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	50.18	ug/l	
		Lab Fort Blk. % Rec.	50.18	%	30-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	58.62	ug/l	
		Dup Lab Fort Bl %Rec	58.62	%	
		Lab Fort Blank Range	8.44	units	
		Lab Fort Bl. Av. Rec	54.40	%	
		LFB Duplicate RPD	15.51	%	
	Naphthalene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	55.93	ug/l	
		Lab Fort Blk. % Rec.	55.93	%	30-130



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QC Batch Number:	GCMS/SEMI-6725					
Sample Id	Analysis	QC Analysis	Values	Units	Limits	
LFBLANK-41029		Dup Lab Fort Bl Amt.	100.00	ug/l		
	Naphthalene	Dup Lab Fort Bl. Fnd	68.94	ug/l		
		Dup Lab Fort Bl %Rec	68.94	%		
		Lab Fort Blank Range	13.01	units		
		Lab Fort Bl. Av. Rec	62.44	%		
		LFB Duplicate RPD	20.84	%		
	1,2-Dichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	52.39	ug/l		
		Lab Fort Blk. % Rec.	52.39	%	30-130	
		Dup Lab Fort Bl Amt.	100.00	ug/l		
		Dup Lab Fort Bl. Fnd	62.30	ug/l		
		Dup Lab Fort Bl %Rec	62.30	%		
		Lab Fort Blank Range	9.91	units		
		Lab Fort Bl. Av. Rec	57.34	%		
		LFB Duplicate RPD	17.28	%		
	1,3-Dichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	52.31	ug/l		
		Lab Fort Blk. % Rec.	52.31	%	30-130	
		Dup Lab Fort Bl Amt.	100.00	ug/l		
		Dup Lab Fort Bl. Fnd	60.85	ug/l		
		Dup Lab Fort Bl %Rec	60.85	%		
		Lab Fort Blank Range	8.54	units		
		Lab Fort Bl. Av. Rec	56.58	%		
		LFB Duplicate RPD	15.09	%		
	Acenaphthene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	66.68	ug/l		
		Lab Fort Blk. % Rec.	66.68	%	40-140	
		Dup Lab Fort Bl Amt.	100.00	ug/l		
		Dup Lab Fort Bl. Fnd	85.26	ug/l		
		Dup Lab Fort Bl %Rec	85.26	%		
		Lab Fort Blank Range	18.58	units		
		Lab Fort Bl. Av. Rec	75.97	%		
		LFB Duplicate RPD	24.46	%		
	Acenaphthylene	Lab Fort Blank Amt.	100.00	ug/l		
		Lab Fort Blk. Found	67.18	ug/l		
		Lab Fort Blk. % Rec.	67.18	%	40-140	
		Dup Lab Fort Bl Amt.	100.00	ug/l		
		Dup Lab Fort Bl. Fnd	86.93	ug/l		
		Dup Lab Fort Bl %Rec	86.93	%		
		Lab Fort Blank Range	19.75	units		
		Lab Fort Bl. Av. Rec	77.06	%		
		LFB Duplicate RPD	25.63	%		
	Aniline	Lab Fort Blank Amt.	100.00	ug/l		



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Method Blanks

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QC Batch Number: GCMS/SEMI-6725

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029					
	Aniline	Lab Fort Blk. Found	41.05	ug/l	
		Lab Fort Blk. % Rec.	41.05	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	50.46	ug/l	
		Dup Lab Fort Bl %Rec	50.46	%	
		Lab Fort Blank Range	9.41	units	
		Lab Fort Bl. Av. Rec	45.76	%	
		LFB Duplicate RPD	20.57	%	
	Anthracene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	70.99	ug/l	
		Lab Fort Blk. % Rec.	70.99	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	94.62	ug/l	
		Dup Lab Fort Bl %Rec	94.62	%	
		Lab Fort Blank Range	23.63	units	
		Lab Fort Bl. Av. Rec	82.80	%	
		LFB Duplicate RPD	28.54	%	
	Benzidine	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	10.60	ug/l	
		Lab Fort Blk. % Rec.	10.60	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	14.80	ug/l	
		Dup Lab Fort Bl %Rec	14.80	%	
		Lab Fort Blank Range	4.20	units	
		Lab Fort Bl. Av. Rec	12.70	%	
		LFB Duplicate RPD	33.07	%	
	Benzo(a)anthracene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	75.670	ug/l	
		Lab Fort Blk. % Rec.	75.670	%	40-140
		Dup Lab Fort Bl Amt.	100.000	ug/l	
		Dup Lab Fort Bl. Fnd	102.270	ug/l	
		Dup Lab Fort Bl %Rec	102.270	%	
		Lab Fort Blank Range	26.600	units	
		Lab Fort Bl. Av. Rec	88.970	%	
		LFB Duplicate RPD	29.898	%	
	Benzo(a)pyrene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	88.880	ug/l	
		Lab Fort Blk. % Rec.	88.880	%	40-140
		Dup Lab Fort Bl Amt.	100.000	ug/l	
		Dup Lab Fort Bl. Fnd	122.770	ug/l	
		Dup Lab Fort Bl %Rec	122.770	%	
		Lab Fort Blank Range	33.890	units	
		Lab Fort Bl. Av. Rec	105.825	%	



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029		LFB Duplicate RPD	32.025	%	
	Benzo(a)pyrene	Lab Fort Blank Amt.	100.000	ug/l	
	Benzo(b)fluoranthene	Lab Fort Blk. Found	114.280	ug/l	
		Lab Fort Blk. % Rec.	114.280	%	40-140
		Dup Lab Fort Bl Amt.	100.000	ug/l	
		Dup Lab Fort Bl. Fnd	155.190	ug/l	
		Dup Lab Fort Bl %Rec	155.190	%	
		Lab Fort Blank Range	40.910	units	
		Lab Fort Bl. Av. Rec	134.735	%	
		LFB Duplicate RPD	30.363	%	
	Benzo(g,h,i)perylene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	35.600	ug/l	
		Lab Fort Blk. % Rec.	35.600	%	30-130
		Dup Lab Fort Bl Amt.	100.000	ug/l	
		Dup Lab Fort Bl. Fnd	47.910	ug/l	
		Dup Lab Fort Bl %Rec	47.910	%	
		Lab Fort Blank Range	12.310	units	
		Lab Fort Bl. Av. Rec	41.755	%	
		LFB Duplicate RPD	29.481	%	
	Benzoic Acid	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	19.03	ug/l	
		Lab Fort Blk. % Rec.	19.03	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	24.95	ug/l	
		Dup Lab Fort Bl %Rec	24.95	%	
		Lab Fort Blank Range	5.92	units	
		Lab Fort Bl. Av. Rec	21.99	%	
		LFB Duplicate RPD	26.92	%	
	Benzyl Alcohol	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	25.65	ug/l	
		Lab Fort Blk. % Rec.	25.65	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	30.49	ug/l	
		Dup Lab Fort Bl %Rec	30.49	%	
		Lab Fort Blank Range	4.84	units	
		Lab Fort Bl. Av. Rec	28.07	%	
		LFB Duplicate RPD	17.24	%	
	Bis(2-chloroethyl)ether	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	55.48	ug/l	
		Lab Fort Blk. % Rec.	55.48	%	30-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	68.38	ug/l	
		Dup Lab Fort Bl %Rec	68.38	%	



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Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029					
	Bis(2-chloroethyl)ether	Lab Fort Blank Range	12.90	units	
		Lab Fort Bl. Av. Rec	61.93	%	
		LFB Duplicate RPD	20.83	%	
	Bis(2-chloroethoxy)methane	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	65.34	ug/l	
		Lab Fort Blk. % Rec.	65.34	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	78.13	ug/l	
		Dup Lab Fort Bl %Rec	78.13	%	
		Lab Fort Blank Range	12.79	units	
		Lab Fort Bl. Av. Rec	71.74	%	
		LFB Duplicate RPD	17.83	%	
	Bis(2-chloroisopropyl)ether	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	61.56	ug/l	
		Lab Fort Blk. % Rec.	61.56	%	30-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	75.86	ug/l	
		Dup Lab Fort Bl %Rec	75.86	%	
		Lab Fort Blank Range	14.30	units	
		Lab Fort Bl. Av. Rec	68.71	%	
		LFB Duplicate RPD	20.81	%	
	Bis(2-ethylhexyl)phthalate	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	101.27	ug/l	
		Lab Fort Blk. % Rec.	101.27	%	30-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	132.81	ug/l	
		Dup Lab Fort Bl %Rec	132.81	%	
		Lab Fort Blank Range	31.54	units	
		Lab Fort Bl. Av. Rec	117.04	%	
		LFB Duplicate RPD	26.95	%	
	4-Bromophenyl phenyl ether	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	67.94	ug/l	
		Lab Fort Blk. % Rec.	67.94	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	90.60	ug/l	
		Dup Lab Fort Bl %Rec	90.60	%	
		Lab Fort Blank Range	22.66	units	
		Lab Fort Bl. Av. Rec	79.27	%	
		LFB Duplicate RPD	28.59	%	
	Butylbenzylphthalate	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	105.83	ug/l	
		Lab Fort Blk. % Rec.	105.83	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	



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### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 16 of 38  
QC Batch Number: GCMS/SEMI-6725

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029					
	Butylbenzylphthalate	Dup Lab Fort Bl. Fnd	140.17	ug/l	
		Dup Lab Fort Bl %Rec	140.17	%	
		Lab Fort Blank Range	34.34	units	
		Lab Fort Bl. Av. Rec	123.00	%	
		LFB Duplicate RPD	27.92	%	
	4-Chloroaniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	60.15	ug/l	
		Lab Fort Blk. % Rec.	60.15	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	74.14	ug/l	
		Dup Lab Fort Bl %Rec	74.14	%	
		Lab Fort Blank Range	13.99	units	
		Lab Fort Bl. Av. Rec	67.14	%	
		LFB Duplicate RPD	20.84	%	
	2-Chloronaphthalene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	65.42	ug/l	
		Lab Fort Blk. % Rec.	65.42	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	81.14	ug/l	
		Dup Lab Fort Bl %Rec	81.14	%	
		Lab Fort Blank Range	15.72	units	
		Lab Fort Bl. Av. Rec	73.28	%	
		LFB Duplicate RPD	21.45	%	
	4-Chlorophenylphenyl ether	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	68.48	ug/l	
		Lab Fort Blk. % Rec.	68.48	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	89.44	ug/l	
		Dup Lab Fort Bl %Rec	89.44	%	
		Lab Fort Blank Range	20.96	units	
		Lab Fort Bl. Av. Rec	78.96	%	
		LFB Duplicate RPD	26.55	%	
	Chrysene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	76.32	ug/l	
		Lab Fort Blk. % Rec.	76.32	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	103.36	ug/l	
		Dup Lab Fort Bl %Rec	103.36	%	
		Lab Fort Blank Range	27.04	units	
		Lab Fort Bl. Av. Rec	89.84	%	
		LFB Duplicate RPD	30.10	%	
	Dibenz(a,h)anthracene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	52.790	ug/l	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 17 of 38  
QC Batch Number: GCMS/SEMI-6725

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029	Dibenz(a,h)anthracene	Lab Fort Blk. % Rec.	52.790	%	30-130
		Dup Lab Fort Bl Amt.	100.000	ug/l	
		Dup Lab Fort Bl. Fnd	57.860	ug/l	
		Dup Lab Fort Bl %Rec	57.860	%	
		Lab Fort Blank Range	5.070	units	
		Lab Fort Bl. Av. Rec	55.325	%	
		LFB Duplicate RPD	9.164	%	
	Dibenzofuran	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	68.74	ug/l	
		Lab Fort Blk. % Rec.	68.74	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	89.57	ug/l	
		Dup Lab Fort Bl %Rec	89.57	%	
		Lab Fort Blank Range	20.83	units	
		Lab Fort Bl. Av. Rec	79.16	%	
		LFB Duplicate RPD	26.32	%	
	3,3-Dichlorobenzidine	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	82.88	ug/l	
		Lab Fort Blk. % Rec.	82.88	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	112.12	ug/l	
		Dup Lab Fort Bl %Rec	112.12	%	
		Lab Fort Blank Range	29.24	units	
		Lab Fort Bl. Av. Rec	97.50	%	
		LFB Duplicate RPD	29.99	%	
	Diethylphthalate	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	56.49	ug/l	
		Lab Fort Blk. % Rec.	56.49	%	30-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	72.60	ug/l	
		Dup Lab Fort Bl %Rec	72.60	%	
		Lab Fort Blank Range	16.11	units	
		Lab Fort Bl. Av. Rec	64.54	%	
		LFB Duplicate RPD	24.96	%	
	Dimethylphthalate	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	28.43	ug/l	
		Lab Fort Blk. % Rec.	28.43	%	10-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	34.61	ug/l	
		Dup Lab Fort Bl %Rec	34.61	%	
		Lab Fort Blank Range	6.18	units	
		Lab Fort Bl. Av. Rec	31.52	%	
		LFB Duplicate RPD	19.61	%	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 18 of 38  
QC Batch Number: GCMS/SEMI-8725

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029					
	Di-n-butylphthalate	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	74.32	ug/l	
		Lab Fort Blk. % Rec.	74.32	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	97.37	ug/l	
		Dup Lab Fort Bl %Rec	97.37	%	
		Lab Fort Blank Range	23.05	units	
		Lab Fort Bl. Av. Rec	85.84	%	
		LFB Duplicate RPD	26.85	%	
	2,4-Dinitrotoluene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	83.92	ug/l	
		Lab Fort Blk. % Rec.	83.92	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	111.73	ug/l	
		Dup Lab Fort Bl %Rec	111.73	%	
		Lab Fort Blank Range	27.81	units	
		Lab Fort Bl. Av. Rec	97.82	%	
		LFB Duplicate RPD	28.43	%	
	2,6-Dinitrotoluene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	77.14	ug/l	
		Lab Fort Blk. % Rec.	77.14	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	102.15	ug/l	
		Dup Lab Fort Bl %Rec	102.15	%	
		Lab Fort Blank Range	25.01	units	
		Lab Fort Bl. Av. Rec	89.64	%	
		LFB Duplicate RPD	27.90	%	
	1,2-Diphenylhydrazine (as Azobenzene)	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	92.41	ug/l	
		Lab Fort Blk. % Rec.	92.41	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	122.19	ug/l	
		Dup Lab Fort Bl %Rec	122.19	%	
		Lab Fort Blank Range	29.78	units	
		Lab Fort Bl. Av. Rec	107.30	%	
		LFB Duplicate RPD	27.75	%	
	Di-n-octylphthalate	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	226.29	ug/l	
		Lab Fort Blk. % Rec.	226.29	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	296.37	ug/l	
		Dup Lab Fort Bl %Rec	296.37	%	
		Lab Fort Blank Range	70.08	units	



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## QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	8/10/2005	Lims Bat #:	LIMS-87726	Page 19 of 38
QC Batch Number:	GCMS/SEMI-6725			

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029					
	Di-n-octylphthalate	Lab Fort Bl. Av. Rec	261.33	%	
		LFB Duplicate RPD	26.82	%	
	Fluoranthene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	71.49	ug/l	
		Lab Fort Blk. % Rec.	71.49	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	93.36	ug/l	
		Dup Lab Fort Bl %Rec	93.36	%	
		Lab Fort Blank Range	21.87	units	
		Lab Fort Bl. Av. Rec	82.42	%	
		LFB Duplicate RPD	26.53	%	
	Fluorene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	70.47	ug/l	
		Lab Fort Blk. % Rec.	70.47	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	91.75	ug/l	
		Dup Lab Fort Bl %Rec	91.75	%	
		Lab Fort Blank Range	21.28	units	
		Lab Fort Bl. Av. Rec	81.11	%	
		LFB Duplicate RPD	26.24	%	
	Hexachlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	75.41	ug/l	
		Lab Fort Blk. % Rec.	75.41	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	99.82	ug/l	
		Dup Lab Fort Bl %Rec	99.82	%	
		Lab Fort Blank Range	24.41	units	
		Lab Fort Bl. Av. Rec	87.62	%	
		LFB Duplicate RPD	27.86	%	
	Hexachlorobutadiene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	57.18	ug/l	
		Lab Fort Blk. % Rec.	57.18	%	20-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	67.72	ug/l	
		Dup Lab Fort Bl %Rec	67.72	%	
		Lab Fort Blank Range	10.54	units	
		Lab Fort Bl. Av. Rec	62.45	%	
		LFB Duplicate RPD	16.88	%	
	Hexachlorocyclopentadiene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	2.03	ug/l	
		Lab Fort Blk. % Rec.	2.03	%	
		Dup Lab Fort Bl Arnt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	4.09	ug/l	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 20 of 38  
QC Batch Number: GCMS/SEMI-6725

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029		Dup Lab Fort Bl %Rec	4.09	%	
	Hexachlorocyclopentadiene	Lab Fort Blank Range	2.06	units	
		Lab Fort Bl. Av. Rec	3.06	%	
		LFB Duplicate RPD	67.32	%	
	Hexachloroethane	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	45.83	ug/l	
		Lab Fort Blk. % Rec.	45.83	%	20-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	54.35	ug/l	
		Dup Lab Fort Bl %Rec	54.35	%	
		Lab Fort Blank Range	8.52	units	
		Lab Fort Bl. Av. Rec	50.09	%	
		LFB Duplicate RPD	17.01	%	
	Indeno(1,2,3-cd)pyrene	Lab Fort Blank Amt.	100.000	ug/l	
		Lab Fort Blk. Found	55.080	ug/l	
		Lab Fort Blk. % Rec.	55.080	%	40-140
		Dup Lab Fort Bl Amt.	100.000	ug/l	
		Dup Lab Fort Bl. Fnd	74.220	ug/l	
		Dup Lab Fort Bl %Rec	74.220	%	
		Lab Fort Blank Range	19.140	units	
		Lab Fort Bl. Av. Rec	64.650	%	
		LFB Duplicate RPD	29.606	%	
	Isophorone	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	68.17	ug/l	
		Lab Fort Blk. % Rec.	68.17	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	83.95	ug/l	
		Dup Lab Fort Bl %Rec	83.95	%	
		Lab Fort Blank Range	15.78	units	
		Lab Fort Bl. Av. Rec	76.06	%	
		LFB Duplicate RPD	20.75	%	
	2-Methylnaphthalene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	60.74	ug/l	
		Lab Fort Blk. % Rec.	60.74	%	30-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	73.99	ug/l	
		Dup Lab Fort Bl %Rec	73.99	%	
		Lab Fort Blank Range	13.25	units	
		Lab Fort Bl. Av. Rec	67.36	%	
		LFB Duplicate RPD	19.67	%	
	2-Nitroaniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	91.63	ug/l	
		Lab Fort Blk. % Rec.	91.63	%	



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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 21 of 38  
QC Batch Number: GCMS/SEMI-6725

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029		Dup Lab Fort Bl Amt.	100.00	ug/l	
	2-Nitroaniline	Dup Lab Fort Bl. Fnd	123.93	ug/l	
		Dup Lab Fort Bl %Rec	123.93	%	
		Lab Fort Blank Range	32.30	units	
		Lab Fort Bl. Av. Rec	107.78	%	
		LFB Duplicate RPD	29.97	%	
	3-Nitroaniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	85.40	ug/l	
		Lab Fort Blk. % Rec.	85.40	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	112.99	ug/l	
		Dup Lab Fort Bl %Rec	112.99	%	
		Lab Fort Blank Range	27.59	units	
		Lab Fort Bl. Av. Rec	99.20	%	
		LFB Duplicate RPD	27.81	%	
	Nitrobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	61.66	ug/l	
		Lab Fort Blk. % Rec.	61.66	%	30-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	74.75	ug/l	
		Dup Lab Fort Bl %Rec	74.75	%	
		Lab Fort Blank Range	13.09	units	
		Lab Fort Bl. Av. Rec	68.20	%	
		LFB Duplicate RPD	19.19	%	
	N-Nitrosodimethylamine	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	36.92	ug/l	
		Lab Fort Blk. % Rec.	36.92	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	42.91	ug/l	
		Dup Lab Fort Bl %Rec	42.91	%	
		Lab Fort Blank Range	5.99	units	
		Lab Fort Bl. Av. Rec	39.92	%	
		LFB Duplicate RPD	15.01	%	
	N-Nitroso-di-n-propylamine	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	54.92	ug/l	
		Lab Fort Blk. % Rec.	54.92	%	30-108
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	68.72	ug/l	
		Dup Lab Fort Bl %Rec	68.72	%	
		Lab Fort Blank Range	13.80	units	
		Lab Fort Bl. Av. Rec	61.82	%	
		LFB Duplicate RPD	22.32	%	
	N-Nitrosodiphenylamine	Lab Fort Blank Amt.	100.00	ug/l	



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### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

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BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 22 of 38  
QC Batch Number: GCMS/SEMI-6725

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029	N-Nitrosodiphenylamine	Lab Fort Blk. Found	80.23	ug/l	
		Lab Fort Blk. % Rec.	80.23	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	105.46	ug/l	
		Dup Lab Fort Bl %Rec	105.46	%	
		Lab Fort Blank Range	25.23	units	
		Lab Fort Bl. Av. Rec	92.84	%	
		LFB Duplicate RPD	27.17	%	
	Phenanthrene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	71.75	ug/l	
		Lab Fort Blk. % Rec.	71.75	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	94.99	ug/l	
		Dup Lab Fort Bl %Rec	94.99	%	
		Lab Fort Blank Range	23.24	units	
		Lab Fort Bl. Av. Rec	83.37	%	
		LFB Duplicate RPD	27.88	%	
	Pyrene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	99.15	ug/l	
		Lab Fort Blk. % Rec.	99.15	%	40-140
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	132.30	ug/l	
		Dup Lab Fort Bl %Rec	132.30	%	
		Lab Fort Blank Range	33.15	units	
		Lab Fort Bl. Av. Rec	115.72	%	
		LFB Duplicate RPD	28.65	%	
	1,2,4-Trichlorobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	55.32	ug/l	
		Lab Fort Blk. % Rec.	55.32	%	30-130
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	66.16	ug/l	
		Dup Lab Fort Bl %Rec	66.16	%	
		Lab Fort Blank Range	10.84	units	
		Lab Fort Bl. Av. Rec	60.74	%	
		LFB Duplicate RPD	17.85	%	
	Pyridine	Lab Fort Blank Amt.	100.0	ug/l	
		Lab Fort Blk. Found	30.0	ug/l	
		Lab Fort Blk. % Rec.	30.0	%	
		Dup Lab Fort Bl Amt.	100.0	ug/l	
		Dup Lab Fort Bl. Fnd	32.6	ug/l	
		Dup Lab Fort Bl %Rec	32.6	%	
		Lab Fort Blank Range	2.6	units	
		Lab Fort Bl. Av. Rec	31.3	%	



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**QC SUMMARY REPORT**

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 23 of 38  
QC Batch Number: GCMS/SEMI-6725

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029		LFB Duplicate RPD	8.2	%	
	Pyridine	Lab Fort Blank Amt.	100.000	ug/l	
	Benzo(k)fluoranthene	Lab Fort Blk. Found	109.970	ug/l	
		Lab Fort Blk. % Rec.	109.970	%	40-140
		Dup Lab Fort Bl Amt.	100.000	ug/l	
		Dup Lab Fort Bl. Fnd	146.540	ug/l	
		Dup Lab Fort Bl %Rec	146.540	%	
		Lab Fort Blank Range	36.570	units	
		Lab Fort Bl. Av. Rec	128.255	%	
		LFB Duplicate RPD	28.514	%	
	4-Nitroaniline	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	85.47	ug/l	
		Lab Fort Blk. % Rec.	85.47	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	112.72	ug/l	
		Dup Lab Fort Bl %Rec	112.72	%	
		Lab Fort Blank Range	27.25	units	
		Lab Fort Bl. Av. Rec	99.10	%	
		LFB Duplicate RPD	27.50	%	
	Acetophenone	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	52.61	ug/l	
		Lab Fort Blk. % Rec.	52.61	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	65.10	ug/l	
		Dup Lab Fort Bl %Rec	65.10	%	
		Lab Fort Blank Range	12.49	units	
		Lab Fort Bl. Av. Rec	58.86	%	
		LFB Duplicate RPD	21.22	%	
	1,2-Dinitrobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	66.95	ug/l	
		Lab Fort Blk. % Rec.	66.95	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	90.72	ug/l	
		Dup Lab Fort Bl %Rec	90.72	%	
		Lab Fort Blank Range	23.77	units	
		Lab Fort Bl. Av. Rec	78.84	%	
		LFB Duplicate RPD	30.15	%	
	1,3-Dinitrobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	60.39	ug/l	
		Lab Fort Blk. % Rec.	60.39	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	81.05	ug/l	
		Dup Lab Fort Bl %Rec	81.05	%	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 24 of 38  
QC Batch Number: GCMS/SEMI-6725

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-41029					
	1,3-Dinitrobenzene	Lab Fort Blank Range	20.66	units	
		Lab Fort Bl. Av. Rec	70.72	%	
		LFB Duplicate RPD	29.21	%	
	1,4-Dinitrobenzene	Lab Fort Blank Amt.	100.00	ug/l	
		Lab Fort Blk. Found	36.90	ug/l	
		Lab Fort Blk. % Rec.	36.90	%	
		Dup Lab Fort Bl Amt.	100.00	ug/l	
		Dup Lab Fort Bl. Fnd	49.08	ug/l	
		Dup Lab Fort Bl %Rec	49.08	%	
		Lab Fort Blank Range	12.18	units	
		Lab Fort Bl. Av. Rec	42.99	%	
		LFB Duplicate RPD	28.33	%	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	8/10/2005	Lims Bat #:	Page 25 of 38		
QC Batch Number:	GCMS/VOL-11911				
Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B13963	1,2-Dichloroethane-d4	Surrogate Recovery	106.0	%	70-130
	Toluene-d8	Surrogate Recovery	95.8	%	70-130
	Bromofluorobenzene Surr recovery	Surrogate Recovery	94.4	%	70-130
05B13970	1,2-Dichloroethane-d4	Surrogate Recovery	103.7	%	70-130
	Toluene-d8	Surrogate Recovery	96.0	%	70-130
	Bromofluorobenzene Surr recovery	Surrogate Recovery	92.6	%	70-130
05B13971	1,2-Dichloroethane-d4	Surrogate Recovery	108.4	%	70-130
	Toluene-d8	Surrogate Recovery	96.3	%	70-130
	Bromofluorobenzene Surr recovery	Surrogate Recovery	93.8	%	70-130
05B13972	1,2-Dichloroethane-d4	Surrogate Recovery	107.9	%	70-130
	Toluene-d8	Surrogate Recovery	95.2	%	70-130
	Bromofluorobenzene Surr recovery	Surrogate Recovery	92.4	%	70-130
05B13973	1,2-Dichloroethane-d4	Surrogate Recovery	107.7	%	70-130
	Toluene-d8	Surrogate Recovery	95.8	%	70-130
	Bromofluorobenzene Surr recovery	Surrogate Recovery	93.2	%	70-130
05B13974	1,2-Dichloroethane-d4	Surrogate Recovery	110.6	%	70-130
	Toluene-d8	Surrogate Recovery	96.3	%	70-130
	Bromofluorobenzene Surr recovery	Surrogate Recovery	91.8	%	70-130
BLANK-72666	Benzene	Blank	<1.0	ug/l	
	Carbon Tetrachloride	Blank	<2.0	ug/l	
	Chloroform	Blank	<2.5	ug/l	
	1,2-Dichloroethane	Blank	<2.0	ug/l	
	1,4-Dichlorobenzene	Blank	<2.0	ug/l	
	Ethyl Benzene	Blank	<1.0	ug/l	
	Tetrachloroethylene	Blank	<2.0	ug/l	
	Toluene	Blank	<1.0	ug/l	
	1,1,1-Trichloroethane	Blank	<2.0	ug/l	
	Trichloroethylene	Blank	<2.0	ug/l	
	Trichlorofluoromethane	Blank	<2.0	ug/l	
	o-Xylene	Blank	<1.0	ug/l	
	m + p Xylene	Blank	<2.0	ug/l	
	1,2-Dichlorobenzene	Blank	<2.0	ug/l	
	1,3-Dichlorobenzene	Blank	<2.0	ug/l	
	1,1-Dichloroethane	Blank	<2.0	ug/l	
	1,1-Dichloroethylene	Blank	<2.0	ug/l	
	MTBE	Blank	<1.0	ug/l	
	trans-1,2-Dichloroethylene	Blank	<2.0	ug/l	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 26 of 38  
QC Batch Number: GCMS/VOL-11911

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-72666					
	Vinyl Chloride	Blank	<2.0	ug/l	
	Methylene Chloride	Blank	<5.0	ug/l	
	Chlorobenzene	Blank	<2.0	ug/l	
	Chloromethane	Blank	<2.0	ug/l	
	Bromomethane	Blank	<2.0	ug/l	
	Chloroethane	Blank	<2.0	ug/l	
	cis-1,3-Dichloropropene	Blank	<2.0	ug/l	
	trans-1,3-Dichloropropene	Blank	<2.0	ug/l	
	Chlorodibromomethane	Blank	<2.0	ug/l	
	1,1,2-Trichloroethane	Blank	<2.0	ug/l	
	2-Chloroethylvinylether	Blank	<10.0	ug/l	
	Bromoform	Blank	<2.0	ug/l	
	1,1,2,2-Tetrachloroethane	Blank	<2.0	ug/l	
	1,2-Dichloropropane	Blank	<2.0	ug/l	
	Bromodichlormethane	Blank	<2.0	ug/l	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 27 of 38  
QC Batch Number: HG-5224

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B13963	Dissolved Mercury	Sample Amount	<0.00004	mg/l	
		Matrix Spk Amt Added	0.00200	mg/l	
		MS Amt Measured	0.00200	mg/l	
		Matrix Spike % Rec.	100.00000	%	75-125
BLANK-72516	Dissolved Mercury	Blank	<0.00004	mg/l	
LFBLANK-40878	Dissolved Mercury	Lab Fort Blank Amt.	0.00200	mg/l	
		Lab Fort Blk. Found	0.00210	mg/l	
		Lab Fort Blk. % Rec.	105.00000	%	85-115
		Dup Lab Fort Blk Amt.	0.00200	mg/l	
		Dup Lab Fort Blk. Fnd	0.00209	mg/l	
		Dup Lab Fort Blk %Rec	104.50000	%	
		Lab Fort Blank Range	0.50000	units	
		Lab Fort Blk. Av. Rec	104.75000	%	
		LFB Duplicate RPD	0.47733	%	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 28 of 38  
QC Batch Number: HGA/AA-4619

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-72814	Dissolved Antimony	Blank	<0.006	mg/l	
	Dissolved Thallium	Blank	<0.0020	mg/l	
LFBLANK-41075	Dissolved Antimony	Lab Fort Blank Amt.	2.000	mg/l	
		Lab Fort Blk. Found	1.935	mg/l	
		Lab Fort Blk. % Rec.	96.750	%	
		Dup Lab Fort Bl Amt.	2.000	mg/l	
		Dup Lab Fort Bl. Fnd	2.031	mg/l	
		Dup Lab Fort Bl %Rec	101.550	%	
		Lab Fort Blank Range	4.800	units	
		Lab Fort Bl. Av. Rec	99.150	%	
		LFB Duplicate RPD	4.841	%	
	Dissolved Thallium	Lab Fort Blank Amt.	2.0000	mg/l	
		Lab Fort Blk. Found	1.6900	mg/l	
		Lab Fort Blk. % Rec.	84.5000	%	
		Dup Lab Fort Bl Amt.	2.0000	mg/l	
		Dup Lab Fort Bl. Fnd	1.5560	mg/l	
		Dup Lab Fort Bl %Rec	77.8000	%	
		Lab Fort Blank Range	6.7000	units	
		Lab Fort Bl. Av. Rec	81.1500	%	
		LFB Duplicate RPD	8.2563	%	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 29 of 38  
QC Batch Number: HGA/AA-4669

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B26727	Dissolved Selenium	Sample Amount	<0.0050	mg/l	
		Matrix Spk Amt Added	2.0000	mg/l	
		MS Amt Measured	2.1030	mg/l	
		Matrix Spike % Rec.	105.1500	%	
BLANK-75660	Dissolved Selenium	Blank	<0.0050	mg/l	
LFBLANK-42855	Dissolved Selenium	Lab Fort Blank Amt.	0.0200	mg/l	
		Lab Fort Blk. Found	0.0213	mg/l	
		Lab Fort Blk. % Rec.	106.3500	%	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 30 of 38  
QC Batch Number: ICP-11697

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-72645	Dissolved Silver	Blank	<0.0050	mg/l	
	Dissolved Arsenic	Blank	<0.05	mg/l	
	Dissolved Cadmium	Blank	<0.0050	mg/l	
	Dissolved Chromium	Blank	<0.005	mg/l	
	Dissolved Copper	Blank	<0.0050	mg/l	
	Dissolved Nickel	Blank	<0.005	mg/l	
	Dissolved Lead	Blank	<0.015	mg/l	
	Dissolved Selenium	Blank	<0.05	mg/l	
	Dissolved Zinc	Blank	<0.010	mg/l	
LFBLANK-40970	Dissolved Silver	Lab Fort Blank Amt.	2.0000	mg/l	
		Lab Fort Blk. Found	2.1091	mg/l	
		Lab Fort Blk. % Rec.	105.4550	%	85-115
		Dup Lab Fort Bl Amt.	2.0000	mg/l	
		Dup Lab Fort Bl. Fnd	2.1443	mg/l	
		Dup Lab Fort Bl %Rec	107.2150	%	
		Lab Fort Blank Range	1.7600	units	
		Lab Fort Bl. Av. Rec	106.3350	%	
		LFB Duplicate RPD	1.6551	%	
	Dissolved Arsenic	Lab Fort Blank Amt.	2.00	mg/l	
		Lab Fort Blk. Found	2.28	mg/l	
		Lab Fort Blk. % Rec.	114.18	%	85-115
		Dup Lab Fort Bl Amt.	2.00	mg/l	
		Dup Lab Fort Bl. Fnd	2.36	mg/l	
		Dup Lab Fort Bl %Rec	117.86	%	
		Lab Fort Blank Range	3.68	units	
		Lab Fort Bl. Av. Rec	116.02	%	
		LFB Duplicate RPD	3.17	%	
	Dissolved Cadmium	Lab Fort Blank Amt.	2.0000	mg/l	
		Lab Fort Blk. Found	2.1898	mg/l	
		Lab Fort Blk. % Rec.	109.4900	%	85-115
		Dup Lab Fort Bl Amt.	2.0000	mg/l	
		Dup Lab Fort Bl. Fnd	2.2573	mg/l	
		Dup Lab Fort Bl %Rec	112.8650	%	
		Lab Fort Blank Range	3.3750	units	
		Lab Fort Bl. Av. Rec	111.1775	%	
		LFB Duplicate RPD	3.0357	%	
	Dissolved Chromium	Lab Fort Blank Amt.	2.000	mg/l	
		Lab Fort Blk. Found	2.153	mg/l	
		Lab Fort Blk. % Rec.	107.645	%	85-115
		Dup Lab Fort Bl Amt.	2.000	mg/l	
		Dup Lab Fort Bl. Fnd	2.214	mg/l	
		Dup Lab Fort Bl %Rec	110.725	%	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 31 of 38  
QC Batch Number: ICP-11697

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-40970	Dissolved Chromium	Lab Fort Blank Range	3.080	units	
		Lab Fort Bl. Av. Rec	109.185	%	
		LFB Duplicate RPD	2.821	%	
	Dissolved Copper	Lab Fort Blank Amt.	2.0000	mg/l	
		Lab Fort Blk. Found	2.1948	mg/l	
		Lab Fort Blk. % Rec.	109.7400	%	85-115
		Dup Lab Fort Bl Amt.	2.0000	mg/l	
		Dup Lab Fort Blk. Fnd	2.2580	mg/l	
		Dup Lab Fort Bl %Rec	112.9000	%	
		Lab Fort Blank Range	3.1600	units	
		Lab Fort Bl. Av. Rec	111.3200	%	
		LFB Duplicate RPD	2.8387	%	
	Dissolved Nickel	Lab Fort Blank Amt.	2.000	mg/l	
		Lab Fort Blk. Found	2.156	mg/l	
		Lab Fort Blk. % Rec.	107.775	%	85-115
		Dup Lab Fort Bl Amt.	2.000	mg/l	
		Dup Lab Fort Blk. Fnd	2.222	mg/l	
		Dup Lab Fort Bl %Rec	111.080	%	
		Lab Fort Blank Range	3.305	units	
		Lab Fort Bl. Av. Rec	109.428	%	
		LFB Duplicate RPD	3.020	%	
	Dissolved Lead	Lab Fort Blank Amt.	2.000	mg/l	
		Lab Fort Blk. Found	2.144	mg/l	
		Lab Fort Blk. % Rec.	107.210	%	85-115
		Dup Lab Fort Bl Amt.	2.000	mg/l	
		Dup Lab Fort Blk. Fnd	2.204	mg/l	
		Dup Lab Fort Bl %Rec	110.180	%	
		Lab Fort Blank Range	2.970	units	
		Lab Fort Bl. Av. Rec	108.695	%	
		LFB Duplicate RPD	2.732	%	
	Dissolved Selenium	Lab Fort Blank Amt.	2.00	mg/l	
		Lab Fort Blk. Found	2.23	mg/l	
		Lab Fort Blk. % Rec.	111.46	%	85-115
		Dup Lab Fort Bl Amt.	2.00	mg/l	
		Dup Lab Fort Blk. Fnd	2.27	mg/l	
		Dup Lab Fort Bl %Rec	113.66	%	
		Lab Fort Blank Range	2.21	units	
		Lab Fort Bl. Av. Rec	112.56	%	
		LFB Duplicate RPD	1.96	%	
	Dissolved Zinc	Lab Fort Blank Amt.	2.000	mg/l	
		Lab Fort Blk. Found	2.202	mg/l	
		Lab Fort Blk. % Rec.	110.105	%	85-115
		Dup Lab Fort Bl Amt.	2.000	mg/l	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 32 of 38  
QC Batch Number: ICP-11697

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-40970	Dissolved Zinc	Dup Lab Fort Bl. Fnd	2.280	mg/l	
		Dup Lab Fort Bl %Rec	114.005	%	
		Lab Fort Blank Range	3.900	units	
		Lab Fort Bl. Av. Rec	112.055	%	
		LFB Duplicate RPD	3.480	%	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 33 of 38  
QC Batch Number: ICP-11707

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-72850	Sodium	Blank	0.30	mg/l	
LFBLANK-41096	Sodium	Lab Fort Blank Amt.	2.00	mg/l	
		Lab Fort Blk. Found	2.82	mg/l	
		Lab Fort Blk. % Rec.	141.15	%	85-115
		Dup Lab Fort Bl Amt.	2.00	mg/l	
		Dup Lab Fort Bl. Fnd	2.15	mg/l	
		Dup Lab Fort Bl %Rec	107.50	%	
		Lab Fort Blank Range	33.65	units	
		Lab Fort Bl. Av. Rec	124.32	%	
		LFB Duplicate RPD	27.07	%	



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 34 of 38

QC Batch Number: WETCHEM-9744

Sample Id	Analysis	QC Analysis	Values	Units	Limits
05B13973	Nitrate	Sample Amount Duplicate Value Duplicate RPD Sample Amount Matrix Spk Amt Added MS Amt Measured Matrix Spike % Rec.	0.93 0.94 0.43 0.93 4.00 4.79 96.42	mg/l mg/l % mg/l mg/l mg/l %	74-122
LFBLANK-40913	Nitrate plus Nitrite (as N)	Lab Fort Blank Amt. Lab Fort Blk. Found Lab Fort Blk. % Rec.	4.000 3.700 92.500	mg/l mg/l %	
	Nitrate	Lab Fort Blank Amt. Lab Fort Blk. Found Lab Fort Blk. % Rec.	4.00 3.70 92.50	mg/l mg/l %	
STDADD-28802	Nitrate plus Nitrite (as N)	Standard Measured Standard Amt Added Standard % Recovery	30.100 31.600 95.253	mg/l mg/l %	85.8-113
	Nitrate	Standard Measured Standard Amt Added Standard % Recovery	30.10 31.60 95.25	mg/l mg/l %	85.8-113



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**QC SUMMARY REPORT**

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 35 of 38  
QC Batch Number: WETCHEM-9757

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-40906	Nitrite (as N)	Lab Fort Blank Amt.	0.10	mg/l	
		Lab Fort Blk. Found	0.10	mg/l	
		Lab Fort Blk. % Rec.	95.00	%	
STDADD-28798	Nitrite (as N)	Standard Measured	0.10	mg/l	
		Standard Amt Added	0.10	mg/l	
		Standard % Recovery	100.00	%	88-115



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005 Lims Bat #: LIMS-87726 Page 36 of 38  
QC Batch Number: WETCHEM-9772

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-40839	Phenolics	Lab Fort Blank Amt.	0.5000	mg/l	
		Lab Fort Blk. Found	0.5100	mg/l	
		Lab Fort Blk. % Rec.	102.0000	%	
STDADD-28811	Phenolics	Standard Measured	0.5050	mg/l	
		Standard Amt Added	0.5000	mg/l	
		Standard % Recovery	101.0000	%	80.8-110



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#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

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Method Blanks

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NOTES:

QC Batch No.: GCMS/SEMI-6724

Sample ID : LFBLANK-41002

Analysis : Di-n-octylphthalate

LABORATORY FORTIFIED BLANK RECOVERY OUTSIDE OF CONTROL LIMITS. DATA VALIDATION IS NOT AFFECTED SINCE ALL RESULTS ARE "NOT DETECTED" FOR ALL SAMPLES IN THIS BATCH FOR THIS COMPOUND AND BIAS IS ON THE HIGH SIDE.

QC Batch No.: GCMS/SEMI-6725

Sample ID : LFBLANK-41029

Analysis : Di-n-octylphthalate

LABORATORY FORTIFIED BLANK RECOVERY OUTSIDE OF CONTROL LIMITS. DATA VALIDATION IS NOT AFFECTED SINCE ALL RESULTS ARE "NOT DETECTED" FOR ALL SAMPLES IN THIS BATCH FOR THIS COMPOUND AND BIAS IS ON THE HIGH SIDE.

QC Batch No.: HGA/AA-4619

Sample ID : LFBLANK-41075

Analysis : Dissolved Thallium

THE LABORATORY FORTIFIED BLANK AND LFB DUPLICATE RECOVERIES ARE OUTSIDE OF CONTROL LIMITS. ANY REPORTED RESULT FOR THIS COMPOUND IS LIKELY TO BE BIASED ON THE LOW SIDE.

QC Batch No.: ICP-11707

Sample ID : LFBLANK-41096

Analysis : Sodium

THE LABORATORY FORTIFIED BLANK RECOVERY IS OUTSIDE OF CON-TEST CONTROL LIMITS. REPORTED RESULTS ARE LIKELY TO BE BIASED ON THE HIGH SIDE.



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### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

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BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 8/10/2005

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### QUALITY CONTROL DEFINITIONS AND ABBREVIATIONS

#### QC BATCH NUMBER

This is the number assigned to all samples analyzed together that would be subject to comparison with a particular set of Quality Control Data.

#### LIMITS

Upper and Lower Control Limits for the QC ANALYSIS Reported. All values normally would fall within these statistically determined limits, unless there is an unusual circumstance that would be documented in a NOTE appearing on the last page of the QC SUMMARY REPORT. Not all QC results will have limits defined.

#### Sample Amount

Amount of analyte found in a sample.

#### Blank

Method Blank that has been taken though all the steps of the analysis.

#### LFBLANK

Laboratory Fortified Blank (a control sample)

#### STDADD

Standard Added (a laboratory control sample)

#### Matrix Spk Amt Added

Amount of analyte spiked into a sample

#### MS Amt Measured

Amount of analyte found including amount that was spiked

#### Matrix Spike % Rec.

% Recovery of spiked amount in sample.

#### Duplicate Value

The result from the Duplicate analysis of the sample.

#### Duplicate RPD

The Relative Percent Difference between two Duplicate Analyses.

#### Surrogate Recovery

The % Recovery for non-environmental compounds (surrogates) spiked into samples to determine the performance of the analytical methods.

#### Sur. Recovery (ELCD)

Surrogate Recovery on the Electrolytic Conductivity Detector.

#### Sur. Recovery (PID)

Surrogate Recovery on the Photoionization Detector.

#### Standard Measured

Amount measured for a laboratory control sample

#### Standard Amt Added

Known value for a laboratory control sample

#### Standard % Recovery

% recovered for a laboratory control sample with a known value.

#### Lab Fort Blank Amt

Laboratory Fortified Blank Amount Added

#### Lab Fort Blk. Found

Laboratory Fortified Blank Amcunt Found

#### Lab Fort Blk % Rec

Laboratory Fortified Blank % Recovered

#### Dup Lab Fort Bl Amt

Duplicate Laboratory Fortified Blank Amount Added

#### Dup Lab Fort Bl fnd

Duplicate Laboratory Fortified Blank Amount Found

#### Dup Lab Fort Bl % Rec

Duplicate Laboratory Fortified Blank % Recovery

#### Lab Fort Blank Range

Laboratory Fortified Blank Range (Absolute value of difference between recoveries for Lab Fortified Blank and Lab Fortified Blank Duplicate).

#### Lab Fort Bl. Av. Rec.

Laboratory Fortified Blank Average Recovery

#### Duplicate Sample Amt

Sample Value for Duplicate used with Matrix Spike Duplicate

#### MSD Amount Added

Matrix Spike Duplicate Amount Added (Spiked)

#### MSD Amt Measured

Matrix Spike Duplicate Amount Measured

#### MSD % Recovery

Matrix Spike Duplicate % Recovery

#### MSD Range

Absolute difference between Matrix Spike and Matrix Spike Duplicate Recoveries

Company Name: One Grant Street  
Address: Framingham, MA 01701  
Attention: Ray Tolosa  
Object Location: Wolfeboro, NH  
Sampled By: Karen Berlman

proposal Provided? (For Billing purposes)

yes       proposal date       yes       no

State Form Required?							ANALYSIS REQUESTED	# of containers
Sample	Date/Time	Site/Time	Comp.	Grab	*Matrix Code			
MW - 1 - 041605	13475	04/16/05 12:30	X	X	GW	X	PP13 metals dissolved	
MW - 2 - 041605	13476	04/16/05 12:30	X	X	GW	X	624 - VOCs	
MW - 3 - 041605	13477	04/16/05 10:15	X	X	GW	X	625 - Basic Neutrals	
MW - 4 - 041605	13478	04/16/05 11:05	X	X	GW	X	553OC - Total Phenols	
MW - 5 - 041605	13479	04/16/05 13:30	X	X	GW	X	1664 - Oil & Grease	
MW - 6 - 041605	13480	04/16/05 13:40	X	X	GW	X	8100 - TPH	
MW - 9 - 041605	13481	04/16/05 13:40	X	X	GW	X	Sodium	
GHC - 5 - 041605	13482	04/16/05 14:30	X	X	GW	X	Nitrates	
GHC - 6 - 041605	13483	04/16/05 14:30	X	X	GW	X	Nitrites	

old ID	Sample Description	Date Sampled						Comments:
		Date	Time	Site	Time	Comp.	Grab	
MW - 1 - 041605	13473	04/16/05	12:30	X		X	X	All PP13
MW - 2 - 041605	13474	04/16/05	12:30	X		X	X	metals
MW - 3 - 041605	13475	04/16/05	10:15	X		X	X	Samples have been filtered in the field
MW - 4 - 041605	13476	04/16/05	11:05	X		X	X	
MW - 5 - 041605	13477	04/16/05	13:30	X		X	X	
MW - 6 - 041605	13478	04/16/05	13:40	X		X	X	
MW - 9 - 041605	13479	04/16/05	13:40	X		X	X	
GHC - 5 - 041605	13480	04/16/05	14:30	X		X	X	
GHC - 6 - 041605	13481	04/16/05	14:30	X		X	X	

**Detection Limit Requirements**

Regulations?  \*5-Day

7-Day

10-Day

RUSH\*

\*24-Hr  \*48-Hr

\*72-Hr  \*4-Day

**Turnaround \*\***

Regulations?  \*5-Day

7-Day

10-Day

RUSH\*

\*24-Hr  \*48-Hr

\*72-Hr  \*4-Day

Require lab approval

**\*Matrix Code:**

GW = groundwater

WW = wastewater

DW = drinking water

A = air

S = soil/solid

I = iced  
X = Na hydroxide  
H = HCl  
T = Na thiosulfate  
M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium bisulfate  
O = other

**con-test<sup>®</sup>**  
ANALYTICAL LABORATORYwww.contestlabs.com  
Email: info@contestlabs.comCompany Name: Rizzio Associates, Inc.  
Address: One Grant Street  
Project # 12700058 - 001  
Client PO # \_\_\_\_\_Attention: Ruf Johnson  
Project Location: Framingham, MA 01701  
Sampled By: Hurricane BesthawProposal Provided? (For Billing purposes)  yes  proposal date  yes  no State Form Required?

**DATA DELIVERY (check one):**  
 FAX  EMAIL  WEBSITE CLIENT  
 Fax #: \_\_\_\_\_  
 Email: rjohnson@rizzio.com  
 Format:  EXCEL  PDF  GIS KEY

1	4	2	1	1	1	1	1	1	1	# of containers
N	I	V	I	S	I	I	N	I	I	*Preservation

**ANALYSIS REQUESTED**

P	V	A	A	A	P	P	P	P	P	*Cont. Code
---	---	---	---	---	---	---	---	---	---	-------------

**Comments:**

PP13 dissolved metals  
624 - VOCs  
625 - Base, Neutrals  
533DC - Total Phenols  
1664 - Oil & Grease  
8100 - TPH  
Sodium  
Nitrates  
Nitrites  
0=Other

PP13 metals  
Sample has been filtered on the field

Field ID	Sample Description	Lab #	Date Sampled	Comp-	Matrix Code
GHC-2-041805	13975, 13973	0513	04/18/05 9:00	GW	X X X X X
Trip Blank		041405		X	

**Turnaround \*\***

Date/Time: <u>4/18/05 10:10</u>	<b>Turnaround **</b>	<b>Detection Limit Requirements</b>	<b>Matrix Code:</b>	<b>**Preservation Codes:</b>
Date/Time: <u>4/18/05 10:10</u>	<input checked="" type="checkbox"/> 5-Day	Regulations? <u>MA MCP</u>	GW = groundwater	I = Iced X = Na hydroxide
Date/Time: <u>4/18/05 10:10</u>	<input type="checkbox"/> 7-Day	WW = wastewater	H = HCL	T = Na thiosulfate
Date/Time: <u>4/18/05 10:10</u>	<input type="checkbox"/> 10-Day	Data Enhancement Project? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	DW = drinking water	M = Methanol
Date/Time: <u>4/18/05 10:10</u>	<input checked="" type="checkbox"/> RUSH*	(MA MCP sites only)	A = air	N = Nitric Acid
Date/Time: <u>4/18/05 10:10</u>	<input type="checkbox"/> 24-Hr <input type="checkbox"/> 48-Hr	Special Requirements or DL's: _____	S = soil/solid	S = Sulfuric Acid
Date/Time: <u>4/18/05 10:10</u>	<input type="checkbox"/> 72-Hr <input type="checkbox"/> 4-Day		SL = sludge	B = Sodium bisulfate
			O = other	O = Other

\*Require lab approval

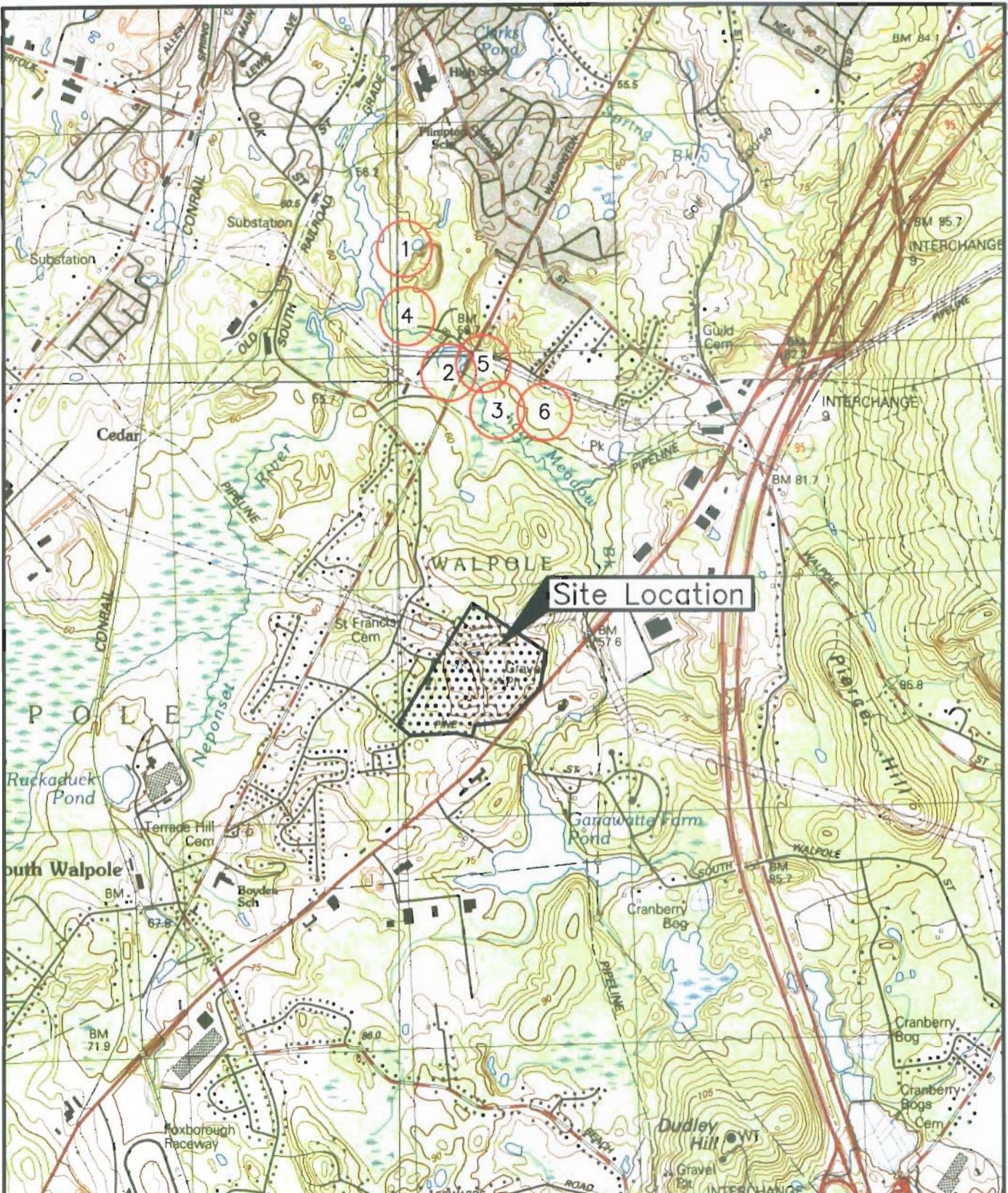
**\*\*Turnaround time begins at 9:00 a.m. the day after sample receipt (unless received before 2:00 p.m.)**

MCP DATA ENHANCEMENT  
SW846-7000 FURNACE AA CHECKLIST

LIMS/BAT:	87726	SAMPLE IDs:	13903-973
DATE/ANALYST:	WTFW/4/23-24/b5-		
QC REQUIREMENT	CRITERIA	YES	NO
INITIAL CALIBRATION	R>0.995	✓	
ICV	90-110 %R	✓	
ICB	< RL		
LOW LEVEL CAL CHECK STD (can be in cal curve)	Conc must be @ RL	✓	in curve
CCV	90-110 %R	✓	
CCB	< RL	✓	
METHOD (PREP) BLANK	< RL	✓	out for Tel(7841)
LFB/LCS	waters = 85-115 %R soils= 80-120 %R		
MS	waters = 85-115 %R soils = 75-125 %R		N/A
DUPPLICATE RPD	If result >5x DL: waters $\pm$ 20 % soils $\pm$ 35 % Narrate low-level duties		N/A
MS RPD	waters = $\pm$ 20 % soils = $\pm$ 35 %		N/A
Duplicate injections	RPD < 20% for all detected results	✓	

ADDITIONAL NOTES:

**Appendix E**  
**Town of Walpole Water Supply Wells Plan**



### 1 WATER SUPPLY WELL

Project No. 12700058

Walpole Park South  
Walpole, Massachusetts



0 2,000 Feet

**RIZZO**  
**ASSOCIATES**  
A TETRA TECH COMPANY

Information obtained from  
USGS Map of Mansfield, Massachusetts  
Quadrangle dated 1987 and  
USGS Map of Norwood, Massachusetts  
Quadrangle dated 1982-1985

**Walpole Water Supply  
Wells Plan**