P E M Environmental Planning & Management, Inc.
1983 Marcus Ave., Suite 109
Lake Success, New York 11042
(516) 328-1194
Fax (516) 328-1381

LETTER OF TRANSMITTAL

Date: 02/17/04	Job No. 23001
Attention: Mr. George Momberger	
Re: *Katonah Quarterly Water Monitoring*	

TO:

NYSDEC
625 Broadway
Albany, NY 12233

WE ARE SENDING YOU: ■ Included ☐ Under separate cover via _____ the following items:

☐ Shop Drawings ☐ Prints ☐ Plans ☐ Qualifications ☐ Specifications

☐ Copy of Letter ■ Report ☐ _____

COPIES	DATE	NO.	
1	2/17/04		*Katonah Quarterly Water Monitoring Report - 4th Quarter*

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☐ For review & comment

REMARKS

RECEIVED
FEB 19 2004
BUREAU OF EASTERN REMEDIAL ACTION

If there are any questions, please call me.

COPY TO *File*

SIGNED

James Hahn
James J. Hahn Engineering
Millbrook Office Center
Route 22 & Milltown Road
Brewster, NY 10509

February 3, 2004

Dear Mr. Hahn:

Enclosed please find the quarterly monitoring report for the fourth quarter of 2003 for the Katonah Municipal Well, Town of Bedford, Westchester County, New York (NYSDEC Site ID # 3-60-007).

Please call me with any questions.

Sincerely,

Aphrodite Socrates
Vice President

cc: Kenneth Caffrey, PE, NYSDOH
George Momberger, NYSDEC
William Nixon, Town of Bedford
Paul Kutzy, Westchester County DOH
Damian Duda, USEPA region 2

GROUNDWATER QUALITY MONITORING
QUARTERLY REPORT
DECEMBER 2003
KATONAH MUNICIPAL WELL
TOWN OF BEDFORD
WESTCHESTER, NEW YORK
NYSDEC Site ID # 3-60-007

February 3rd, 2004

PREPARED FOR:

James J. Hahn Engineering
Millbrook Office Center
Route 22 & Milltown Road
Brewster, New York 10509

PREPARED BY:

Environmental Planning & Management, Inc.
1983 Marcus Avenue, Suite 109
Lake Success, New York 11042

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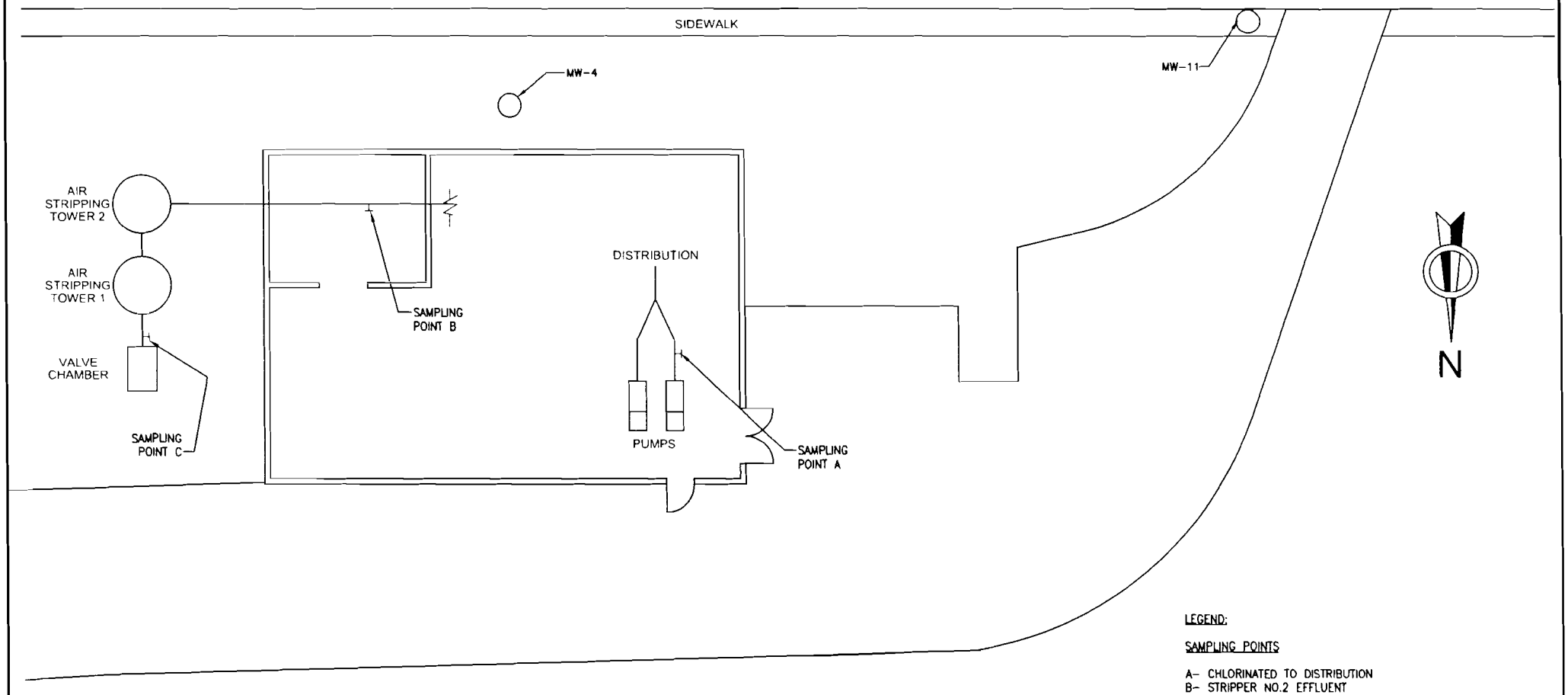
1.0 INTRODUCTION

This quarterly groundwater sampling and analysis report has been prepared for the Katonah Municipal Well Site in Katonah, Town of Bedford, New York. This submittal is in accordance with the groundwater monitoring requirements of the New York State Department of Health (NYSDOH) and the U.S. Environmental Protection Agency (USEPA). This report includes the data collection and analysis results of the remedial system operation, for the quarter of October of 2003 to December of 2003. Sampling of the remedial system was conducted on December 16th, 2003.

2.0 SAMPLE COLLECTION

Environmental Planning & Management, Inc., collected samples on December 16th, 2003. Three samples were collected from sampling taps; the raw water sampling tap (RW), the stripper number two effluent sampling tap (STEF) and the distribution sampling tap (DIST). One field duplicate sample (DUP) of the Distribution Water was collected on December 16th, 2003. Sample locations are shown on Figure 1 - Sampling Tap Location Schematic. Sampling was conducted in accordance with the approved Project Operation Plan.

Samples were labeled at the field location and placed into transport coolers containing ice. A trip blank and chain-of-custody documentation accompanied the samples to the laboratory for analysis. The samples were analyzed by SciLab Boston, in accordance with CLP methods, for volatile organics (Principal Organic Contaminants), by method 524.2, revision number 3.



PEM ENVIRONMENTAL PLANNING & MANAGEMENT, INC.
1983 MARCUS AVENUE
SUITE 109
LAKE SUCCESS, NEW YORK 11042

DRAWN BY: AMR	DATE: 12/16/03	CLIENT: KATONAH MUNICIPAL WATER SYSTEM	TITLE: SIMPLIFIED SAMPLING LOCATION SCHEMATIC
CHECKED BY: EW	FILENAME: KATONAH		PROJECT LOCATION: KATONAH MUNICPAL WATER SYSTEM KATONAH, NEW YORK
APPR'VD BY: ASG	SCALE: NOT TO SCALE		DRAWING NO: FIG. 1
PATH: C:\AMR\BEDFORD\KATONAH\22D01DWGS			SHEET 1 OF 1

3.0 FINDINGS

Table 1 provides a summary of the analytical results for the quarterly water quality monitoring, as well as the applicable NYSDOH Drinking Water Standards and the U.S. EPA clean-up requirement for Tetrachloroethene. As indicated by the laboratory analysis, the treatment system effluent meets the NYSDOH drinking water standards and the USEPA clean-up level of less than one part per billion (ppb) (or non-detectable) for Tetrachloroethene and meets the levels of less than 100 parts per billion for Trihalomethanes.

Tetrachloroethene was detected in the raw water sample, RW, at a concentration of **27.0** ug/l (ppb), exceeding the NYSDOH drinking water standard for that compound. Three additional VOC's, cis-1,2-Dichloroethene, Trichloroethene and Methylene Chloride, were detected in RW at concentrations of 1.0 ppb and 1.1 ppb and 3.2 ppb, respectively. These values are below the NYSDOH drinking water standards.

No VOC's were detected in the treated (stripper number 2) water sample, STEFF.

Two VOC's, dibromochlorethane and bromodichlormethane were found in the distribution water sample, DIST, at concentrations of 9.6 ppb and 4.4 ppb respectively. These values are well below the NYSDOH drinking water standards.

One VOC, Methylene Chloride was found in the storage blank, STORAGE BLANK , at a concentration of 1.4 ppb. This is due to laboratory contamination.

One VOC, Methylene Chloride, was found in the trip blank, TRIP BLANK, at a concentration of 1.4 ppb. Qualifiers have been added to two other samples that Methylene Chloride was found in; RW and DUP.

Refer to Table 1 for a summary of the groundwater analysis results for volatile organic compounds (VOC's). Table 1 reflects the detectable concentration values which have been qualified as a result of data validation. Refer to Appendix A for the data validation report which details the changes in the detectable concentration values discussed above.

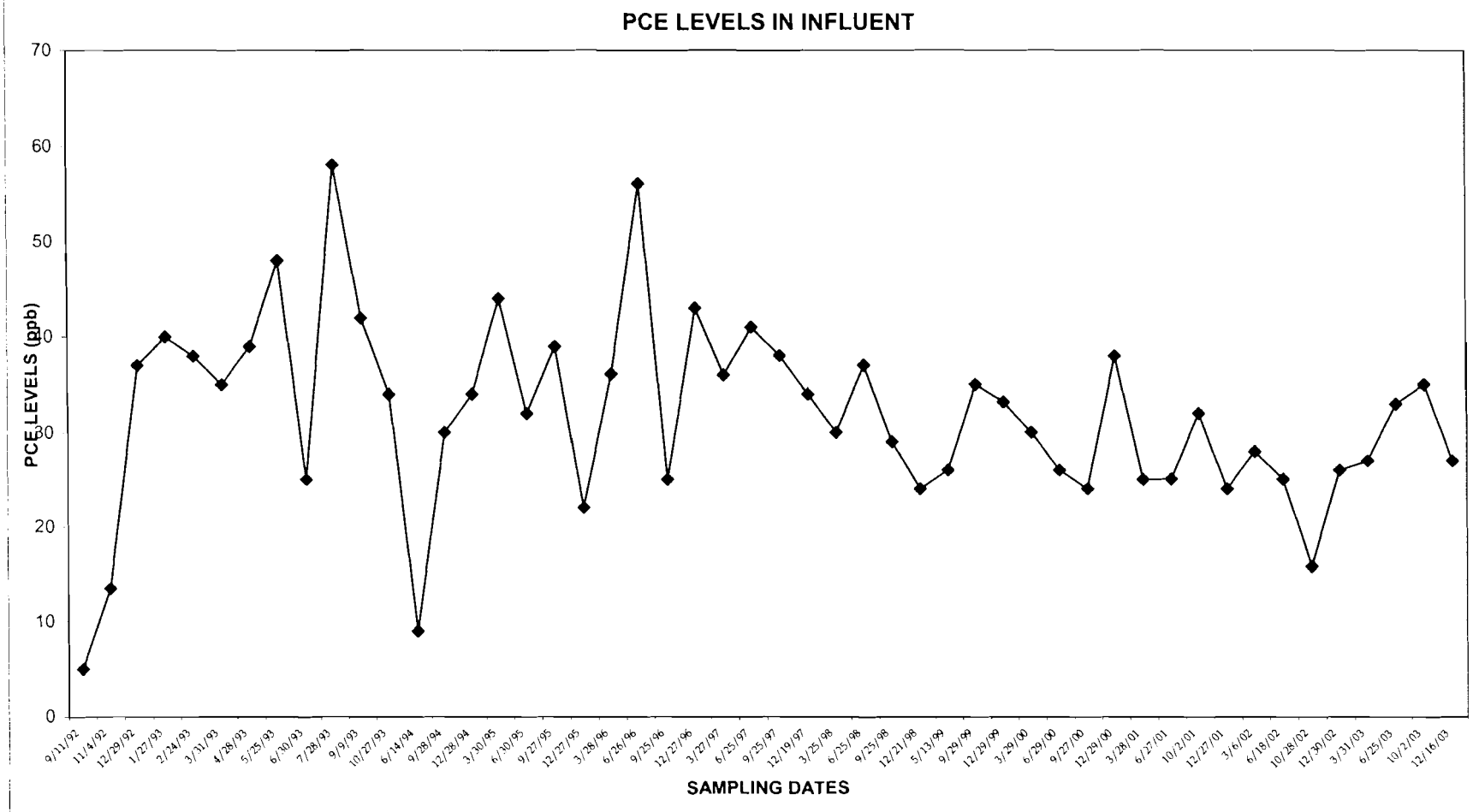
The PCE concentration in the Influent (raw water) has decreased over the last sampling event (see Figure 2). To date, the PCE level in the raw water samples is not of significant concern, since the treated water and distribution water samples continue to exhibit non-detectable or insignificant concentrations of PCE. However, changes in PCE levels will continue to be closely monitored.

Table 1 - SUMMARY OF QUARTERLY ANALYTICAL RESULTS
KATONAH MUNICIPAL WELL
December 2003

Date Collected	12/16/03						
Sample Location	RW (Influent)	STEFF (Treated Water)	DUP (DIST)	DIST (Distribution Water)	FB (Field Blank)	TB (Trip Blank)	NYSDOH\ USEPA Standard
Volatile Organic Compounds (ppb)							
Tetrachloroethene	**27.00**	0.5U	0.5U	0.5U	0.5U	0.5U	**5/1***
Trichloroethene	1.10	0.5U	0.5U	0.5U	0.5U	0.5U	**5**
cis-1,2-Dichloroethene	1.00	0.5U	0.5U	0.5U	0.5U	0.5U	**5**
Methylene Chloride	3.2B	1U	2.2B	1U	1.4	1.4	**5**
Dibromochloromethane	1U	0.5U	3.30	9.60	0.5U	0.5U	**50**
Bromodichloromethane	1U	0.5U	1.40	4.40	0.5U	0.5U	**50**

* 1 ppb is the USEPA cleanup standard for the site
1 - Determined undetect following data validation
[ ] Level exceeds the USEPA/NYSDOH standard
U Denotes detection limit/not detected
J Denotes an estimated value
N Presumptive evidence of a compound
R Determined unusable following data validation
NS No standard
B Denotes Detection in the Field Blank, Storage Blank and Trip Blank as well.

KATONAH MUNICIPAL WELL - PCE LEVELS



ENVIRONMENTAL PLANNING AND MANAGEMENT, INC.

FIGURE 2

4.0 FUTURE ACTIONS

Water quality monitoring will continue to be conducted quarterly at the treatment system influent, stripper number 2 effluent, and distribution entry point. Groundwater monitoring well samples will be collected bi-annually.

The next sampling event, the first quarterly event for year thirteen, is scheduled for March 24th, 2004.

APPENDIX A

Katonah Municipal Well Site
Data Validation
Groundwater Quality Monitoring
Quarterly Report - December 2003

Samples Collected by Environmental Planning & Management, Inc.
Samples Analyzed by SciLab Boston

Data Validation Performed by:

_____

Julie Smith
Environmental Chemist

PROJECT DESCRIPTION

Report Prepared by: Julie Smith, Environmental Chemist

Date of Validation Report: February 9, 2004

EPM Project Name/No. 23001-Katonah

Laboratory: SCILAB Boston, Inc.

Laboratory Project Name: SCILAB Work Order 0312-00328

Laboratory Report Date: January 15, 2004

Deliverable Format: Full Data Package

Sample Date: December 16, 2003

Samples Validated:

EPM Sample ID	Laboratory Sample ID
RW	0312-00328-001
RWMS	0312-00328-001M
RWMSD	0312-00328-001P
STEFF	0312-00328-002
DIST	0312-00328-003
TB	0312-00328-004
DUP	0312-00328-005

Validation Protocols/ References:

U.S. Environmental Protection Agency (USEPA) Standard Operating Procedure for the Validation of Organic Data Acquired Using Method 524.2 (Revision 4.1, 1995), Revision 1, October 2001.

U.S. Environmental Protection Agency (USEPA) Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry, Method 524.2, Methods for Chemical Analysis of Water and Wastes, 1995.

U.S. Environmental Protection Agency (USEPA) National Functional Guidelines for Organic Data Review, 1999.

INTRODUCTION

Data qualification provides guidance regarding data usability. As part of the environmental laboratory analytical reporting process under most environmental methods of analysis, the laboratory is required to append data qualifiers to reported analytical observations to account for minor, acceptable QC deficiencies that arise during the course of standard operations. As part of the analytical data validation process, additional data qualifiers may be applied. These qualifiers are applied for other QC deficiencies that impact data quality but that may not have been identified by the laboratory or that may not be part of the reporting requirement of the applied analytical method. In many cases, the laboratory may be compliant with the requirements of the applied analytical methods but may not be compliant with the data validation review protocols.

In general, the data qualifiers are intended to assist the data user with the overall data interpretation by serving as descriptive indicators of the data quality of the associated analytical observations. There are a number of other data qualifiers that describe the representativeness of the associated data and also serve to provide information about the quality of the associated control data.

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. When data are qualified as estimated (qualified "J"), there generally is no information on the quantitative impact on the associated result although there may be useful information on the direction of bias of the result

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed. In some cases, sample data are qualified as unusable and rejected (qualified "R") due to major method non-compliance or extreme deficiencies in associated QC data. In these cases, there is no information as to the presence or absence of the rejected analyte in the affected sample.

VALIDATION SUMMARY

The analytical data has been reviewed in accordance with the appropriate regulatory guidelines and/or associated analytical methodology. If required, the data has been qualified, negated, or rejected according to applicable validation protocols and professional judgment. The analytical validation was performed based upon the following parameters:

* Completeness of data package
  Blank Contamination
* Hold Times
* GC/MS Performance Check (Tuning) Summaries
* System Monitoring Compound (Surrogate) Recoveries
* Internal Standard Area Performance
* Initial and Continuing Calibration Results
* Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Summaries
* Laboratory Control Sample
* Target Compound Identification and Quantitation

  * All criteria were met for this parameter

OVERALL DATA ASSESSMENT

The volatile organics data was validated for compliance with the requirements set forth in Method 524.2 and as described by the National Functional Guidelines for Organic Data Review. With regard to the data package deliverables, most of the data deliverable requirements were met, with the exception of some minor correctable deficiencies. Please note that these deficiencies do not impact data usability. The laboratory was contacted and this report may be amended upon the receipt of the lab corrections. Overall, Scilab Boston has submitted analytical data of acceptable completeness and known quality.

VOLATILE ORGANIC RESULTS

General Comments

Transcription errors were identified during review of the Volatile Organics Analysis Data Sheets for sample DUP (pages 86 and 87 of the report). The target compounds, trichloroethene (1.4 µg/L) and tetrachloroethene (3.3 µg/L), reported by the laboratory on the summary results pages are incorrect. Based on a review of the sample quantitation report (raw data) for sample DUP, the compounds should have been reported as bromodichloromethane (1.4 µg/L) and dibromochloromethane (3.3 µg/L). The laboratory was contacted and the corrected data will be submitted to EPM. No further action is required from the laboratory.

The VOA target compound, vinyl chloride, was omitted from the quantitation report (raw data) for the 0.5 ppb standard of the initial calibration associated with the project samples. The laboratory was contacted and the required data will be submitted to EPM. No further action is required from the laboratory.

Blank Contamination

Laboratory method blanks are clean liquid matrix samples prepared by the laboratory and analyzed in the same manner as the investigative samples. Laboratory method blanks are used to identify whether investigative samples have been contaminated during the sample preparation, sample analysis or from a previous sample (instrument carry-over).

Field-blanks consist of deionized water poured over or through decontaminated sampling equipment and collected into the sample bottles. Field-blanks measure contamination potentially caused by improper decontamination of sampling equipment. Trip-blanks are carbon-free deionized water samples that accompany volatile investigative samples during all stages of shipment, storage and analysis. The trip-blanks are used to assess the potential for artificial introduction of volatile compounds into the investigative samples during the transportation and sample handling processes.

- The VOA target compound, methylene chloride, was detected in the method blank (2.5 µg/L), storage blank (1.4 µg/L), and trip blank sample (1.4 µg/L) associated with Scilab Report 0312-00328. The positive methylene chloride results in the associated project samples (RW and DUP) are less than 5 times the concentration found in the aforementioned blanks. Therefore the positive methylene chloride results for project samples RW and DUP are qualitatively questionable and negated due to laboratory contamination.

- The VOA target compound, chloroform, was also detected in the trip blank (0.7 µg/L) and storage blank (0.7 µg/L). The positive chloroform result in project samples DIST and DUP is therefore regarded as an estimated value and flagged (J) on the laboratory summary sheets.

Hold Times

Technical hold times were assessed by comparing the sample dates with that of the preparation dates and/or analysis dates.

- The sample cooler temperature upon verified time of sample receipt (VTSR) in the laboratory fell within the 4°C (+2°C) requirement. All volatile analyses performed on associated project samples were within the required hold times. No qualifier is required.

Internal Standard Area Performance

Internal standards are analytes that are added to the investigative samples prior to analysis to ensure that GC/MS sensitivity and responses remain stable. Internal standards are reported with the volatile analyses.

- The volatile internal standard area counts and retention times fell within control limits for the associated project samples. No qualifier is required.

Matrix Spike/Matrix Spike Duplicate

Matrix spikes are samples spiked with known concentrations of analytes of interest. The MS/MSD percent recoveries and duplicate results are used to assess extraction efficiencies, possible matrix effects, and overall analytical accuracy and precision.

- A matrix spike/matrix spike duplicate was performed on EPM Sample RW. The volatile percent recoveries (%R) and relative percent differences (RPD) fell within control limits (with the exception of bromomethane, 1,1-dichloroethene and 1,2-dibromo-3-chloropropane), providing a positive indication of the overall accuracy associated with these analyses.

- The %R of target compound, bromomethane, fell outside control limits (low) in the MSD. No qualifier is required since the %R of bromomethane fell within control limits in both the MS and LCS samples.

- The RPD of target compounds, 1,1-dichloroethene and 1,2-dibromo-3-chloropropane, fell outside control limits. No qualifier is required since the recoveries of both the MS and MSD fell within control limits.

Laboratory Control Sample

The laboratory control sample (LCS) and/or blank spike (BS) are blank samples fortified (spiked) with known concentrations of analytes of interest. The percent recoveries of the LCS and/or BS are used to assess overall analytical accuracy and precision.

- The volatile LCS/BS results fell within acceptable control limits with the exception of chloroethane and trichlorofluoromethane (low). No qualifier is required since the recoveries of the aforementioned compounds fell within control limits in both the MS and MSD samples.

System Monitoring Compounds (Surrogates)

System monitoring compounds are those compounds that are not expected to be detected in the investigative samples but that are chemically similar to analytes of interest. Surrogate compound percent recoveries are used to assess extraction efficiencies, possible matrix effects and overall analytical accuracy.

- The recoveries of the volatile surrogates, 4-bromofluorobenzene (BFB) and 1,2-dichlorobenzene-d4 (DCB), fell within control limits for the reviewed project samples associated with Scilab Report 0312-00328. No qualifier is required.

Initial Calibration and Continuing Calibration Results

Control limits for initial and continuing instrument calibrations are established to ensure that the instrument is capable of producing accurate quantitative data at the beginning and throughout each of the analyses.

- The volatile initial and continuing calibration response factors (RRF), percent relative standard deviations (%RSD) and percent differences (%D) fell within acceptable control limits with the exception of MTBE (44% RSD), 1,1,2,2-tetrachloroethane (25% RSD) and hexachlorobutadiene (22% RSD). No qualifier is required since MTBE, 1,1,2,2-tetrachloroethane and hexachlorobutadiene were calibrated using linear regression ($r > 0.990$) as indicated in the case narrative.

- The RRF of target compound, 1,2-dibromo-3-chloropropane, fell outside control limits ($RRF \leq 0.05$) in the initial and continuing calibration. No qualifier is required since the

method specifies that up to any two volatile target compounds may fail to meet minimum RRF or maximum % RSD as long as they have RRFs that are greater than or equal to 0.010, and % RSD of less than or equal to 40 percent.

- In the volatile five-point initial calibration, the RRFs for the lowest calibration standard (0.5 ppb) were omitted for the calculation of the %RSD for target compounds methylene chloride, 1,2,3-trichloropropane, 1,2,3-trichlorobenzene and 1,2-dibromo-3-chloropropane. There is minimal impact on the data quality since Method 524.2 allows for a minimum of a three-point calibration. Accordingly, the CRDL for the aforementioned compounds reflect the lowest concentration of the standard used in the initial calibration (1.0 µg/L). No qualifier is required.

GC/MS Performance Check (Tuning) Summaries

Gas chromatograph/mass spectrometer (GC/MS) instrument tuning and performance checks are performed to ensure the instrument's ability to provide appropriate mass-resolution, identification and sensitivity.

- The bromofluorobenzene (BFB) tuning compound mass-ion abundance criteria for the volatile organic compound analyses were reported within control limits. All samples were analyzed within eight hours of BFB injection. No qualifier is required.

Compound Identification and Quantitation

The laboratory calculations are verified and compound identifications are reviewed and assessed by the data reviewer.

In the course of the analytical procedures, it is sometimes necessary to dilute or reanalyze a sample. Frequently, the original analysis and dilution and/or reanalysis are reported by the laboratory and included in the report.

- Sample RW was analyzed at a 1:2 dilution resulting in elevated detection limits, due to the target compound, tetrachloroethene, concentration exceeding the linear calibration range requirements. No qualifier is required.

Tentatively Identified Compound

Area not examined, validation not requested.

Laboratory Chronicle

EPM Sample ID	Scilab Sample ID	Sample Matrix	Date Collected	Date Received	Date Extracted	Date Analyzed	Analysis
RW	0312-00328-001	water	12/16/2003	12/17/2003	n/a	12/19/2003	Volatiles +10
RW MS	0312-00328-001M	water	12/16/2003	12/17/2003	n/a	12/19/2003	Volatiles +10
RW MSD	0312-00328-001P	water	12/16/2003	12/17/2003	n/a	12/19/2003	Volatiles +10
STEFF	0312-00328-002	water	12/16/2003	12/17/2003	n/a	12/19/2003	Volatiles +10
DIST	0312-00328-003	water	12/16/2003	12/17/2003	n/a	12/19/2003	Volatiles +10
TB	0312-00328-004	water	12/16/2003	12/17/2003	n/a	12/19/2003	Volatiles +10
DUP	0312-00328-005	water	12/16/2003	12/17/2003	n/a	12/19/2003	Volatiles +10

Instrument Performance Check (BFB)

10/9/2003	meets QC requirements	initial calibraiton
12/19/2003	meets QC requirements	project samples

Initial Calibration 9-Oct-03

Compound	0.5 RRF		1 RRF		10 RRF		15 RRF		25 RRF		Mean	STDEV	%RSD
Fluorobenzene (IS)	6835821		5740245		7675895		7626138		7355501				
Vinyl Chloride	106375	0.311	178415	0.311	2182809	0.284	3427838	0.300	5732498	0.312	0.304	0.012	3.90
1,1-dichloroethene	104130	0.305	147019	0.256	1533627	0.200	2583178	0.226	4372838	0.238	0.245	0.039	16.01
tetrachloroethene	115042	0.337	152727	0.266	2193777	0.286	3389815	0.296	5245949	0.285	0.294	0.026	8.91
Carbon tetrachloride	126648	0.371	188913	0.329	2368462	0.309	4117304	0.360	6573393	0.357	0.345	0.026	7.40
Bromoform	17832	0.052	18087		514899	0.067	787407	0.069	1208588	0.066	0.067	0.008	11.35
Trichloroethene	112659	0.330	147090	0.256	2072537	0.270	3280873	0.287	4983400	0.271	0.283	0.028	10.03
BFB	1847915	0.270	1459495	0.254	2191486	0.286	2188253	0.287	2108700	0.287	0.277	0.014	5.19

All %RSD's <20%

Continuing Calibration VSTD010 12/19/2003

Compound	10 RRF		% D	Status
Fluorobenzene (IS)	6632091			
Vinyl Chloride	2069838	0.3121	-2.8	ok
1,1-dichloroethene	1983517	0.2991	-22.2	ok
tetrachloroethene	2217661	0.3344	-13.7	ok
Carbon tetrachloride	2716325	0.4096	-18.7	ok
Bromoform	336195	0.0507	24.6	ok
Trichloroethene	1935461	0.2918	-3.2	ok
BFB	1452558	0.2190	20.9	ok

All %D's <30%

Surrogate Recovery

	BFB	Status	1,2-dichlorobenzene-d4	Status	Limits
VBLK01	86	ok	80	ok	80-120
RW	101	ok	86	ok	80-120
RWMS	102	ok	104	ok	80-120
RWMSD	101	ok	100	ok	80-120
STEFF	109	ok	93	ok	80-120
DIST	95	ok	85	ok	80-120
DUP	105	ok	93	ok	80-120
TB	100	ok	89	ok	80-120
MSB01	100	ok	99	ok	80-120

Internal Standard Summary

All project samples were analyzed within the internal standard area and retention time control limits.

Blanks

	Result	
Method Blank VBLK01	2.5 ug/L methylene chloride	The positive methylene chloride results in sample RW and DUP are less than 5x the
Storage Blank	1.4 ug/L methylene chloride	concentration in the associated blanks, therefore the results are negated due to
	0.7 ug/L chloroform	laboratory contamination as indicated in the blanks.
Trip Blank	1.4 ug/L methylene chloride	The positive chloroform result found in project samples DIST and DUP is therefore
	0.7 ug/L chloroform	regarded as an estimated value and qualified (J).

QC

	Amt in Sample	Matrix Spike	%R	MSD	%R	MSB01	%R	RPD	%R	RPD
Vinyl Chloride	ND	17	85	17	85	8.5	85	0	70-130	15
Methylene Chloride	3.2	23	99	23	99	11.5	115	0	70-130	15
Chloroform	ND	22	110	20	100	9.2	92	-10	70-130	15
Bromochloromethane	ND	22	110	20	100	9.5	95	-10	70-130	15
Trichloroethene	1.1	22	105	21	100	9.0	90	-5	70-130	15
Tetrachloroethene	27	50	115	47	100	9.4	94	-14	70-130	15
Dibromochloromethane	ND	24	120	21	105	9.7	97	-13	70-130	15
Bromodichloromethane	ND	21	105	19	95	8.4	84	-10	70-130	15

Outside QC limits

Sample Results

$$ug/L = \frac{(\text{area of compound})(\text{amt of IS in nanograms}) \times df}{(\text{area of IS})(RRT)}$$

Sample ID RW Lab ID 0312-00328-001

						Result	Reported
Trichloroethene	128654	10	2	2573080			
	8384616	0.283	=	2372846.33	=	1.08 ug/L	1.1 ug/L
Tetrachloroetnene	3326720	10	2	66534400			
	8384616	0.2940	=	2465077.10	=	26.99 ug/L	27 ug/L
cis-1,2-dichloroethene	105455	10	2	2109100			
	8384616	0.2590	=	2171615.54	=	0.97 ug/L	1.0 J ug/L

Sample ID DUP Lab ID 0312-00328-005

						Result	Reported
Chloroform	145412	10	1	1454120			
	8074578	0.371	=	2995668.44	=	0.49 ug/L	0.5 J ug/L
Bromoform	143524	10	1	1435240			
	8074578	0.0640	=	516772.99	=	2.78 ug/L	2.8 ug/L

Bromodichloromethane	256650	10	1	2566500				
	8074578	0.2210		= 1784481.74	=	1.44 ug/L	0.5 U ug/L	*****
Dibromochloromethane	307970	10	1	3079700				
	8074578	0.1170		= 944725.63	=	3.26 ug/L	0.5 U ug/L	*****

*******The results reported for project sample DUP (Scilab ID 0312-00328-005) on the VOA Organics Data Sheet (pages 85 and 86) of the report differ from the raw data. The laboratory was contacted and the corrected results will be forwarded to EPM.

APPENDIX B
LABORATORY ANALYSIS SUMMARY REPORT

SCILAB

Eight School Street
Weymouth, MA 02189
781-337-9334

Laboratory Report

Report Date 12/31/2003
Workorder No. 0312-00328

Customer: Environmental Planning & Mgmt.
1983 Marcus Avenue
Suite 109
Lake Success, NY 11042

Attention: Francesco Portelos

Subject: KATONAH

Sample: 001 RW (MS/MSD)
Date: 12/16/2003 Time: 2:30:00PM
Matrix: WATER

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
Drinking Water Volatiles			ug/L		NAC	12/19/2003	
Dichlorodifluoromethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Chloromethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Vinyl Chloride	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Bromomethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Chloroethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Trichlorofluoromethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,1-Dichloroethene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Methylene Chloride	EPA 524.2	3.2	ug/L	2.0	NAC	12/19/2003	B
Methyl-Tert-Butyl-Ether	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Trans-1,2-Dichloroethene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,1-Dichloroethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
2,2-Dichloropropane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
cis-1,2-Dichloroethene	EPA 524.2	1.0	ug/L	1.0	NAC	12/19/2003	J
Chloroform	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Bromochloromethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,1,1-Trichloroethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,1-Dichloropropene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Carbon Tetrachloride	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2-Dichloroethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Benzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Trichloroethene	EPA 524.2	1.1	ug/L	1.0	NAC	12/19/2003	
1,2-Dichloropropane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Bromodichloromethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Dibromomethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
cis-1,3-Dichloropropene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Toluene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	

Certifications: MA: MA069 NY:10982 CT: PH0119 RI:A45 CA:2050 NJ: 59744

SCILAB

Customer: Environmental Planning & Mgmt.

Workorder No. 0312-00328

Sample: 001 RW (MS/MSD)
(Continued)

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
trans-1,3-Dichloropropene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,1,2-Trichloroethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,3-Dichloropropane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Tetrachloroethene	EPA 524.2	27	ug/L	1.0	NAC	12/19/2003	
Dibromochloromethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2-Dibromoethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Chlorobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,1,1,2-Tetrachloroethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Ethylbenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
m & p-Xylene	EPA 524.2	ND	ug/L	2.0	NAC	12/19/2003	
o-Xylene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Styrene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Bromoform	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Isopropylbenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,1,2,2-Tetrachloroethane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2,3-Trichloropropane	EPA 524.2	ND	ug/L	2.0	NAC	12/19/2003	
n-Propylbenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Bromobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,3,5-Trimethylbenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
2-Chlorotoluene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
4-Chlorotoluene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
tert-Butylbenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2,4-Trimethlybenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
sec-Butylbenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
4-Isopropyltoluene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,3-Dichlorobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,4-Dichlorobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
n-Butylbenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2-Dichlorobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2-Dibromo-3-Chloropropan	EPA 524.2	ND	ug/L	2.0	NAC	12/19/2003	
1,2,4-Trichlorobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Hexachlorobutadiene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Naphthalene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2,3-Trichlorobenzene	EPA 524.2	ND	ug/L	2.0	NAC	12/19/2003	
4-BROMOFLUOROBENZEN		100.7	%		NAC	12/19/2003	
1,2-DICHLOROBENZENE-D		86.0	%		NAC	12/19/2003	

Certifications: MA: MA069 NY:10982 CT: PH0119 RI:A45 CA:2050 NJ: 59744

SCILAB

Customer: Environmental Planning & Mgmt.

Workorder No. 0312-00328

Sample: 002 STEFF
Date: 12/16/2003 **Time:** 2:30:00PM
Matrix: WATER

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
Drinking Water Volatiles			ug/L		NAC	12/19/2003	
Dichlorodifluoromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Vinyl Chloride	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromomethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trichlorofluoromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Methylene Chloride	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Methyl-Tert-Butyl-Ether	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trans-1,2-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
2,2-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
cis-1,2-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloroform	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromochloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,1-Trichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Carbon Tetrachloride	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Benzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromodichloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Dibromomethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
cis-1,3-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Toluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
trans-1,3-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,2-Trichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Tetrachloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Dibromochloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dibromoethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	

Certifications: MA: MA069 NY:10982 CT: PH0119 RI:A45 CA:2050 NJ: 59744

SCILAB

Customer: Environmental Planning & Mgmt.

Workorder No. 0312-00328

Sample: 002 STEFF
(Continued)

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
1,1,1,2-Tetrachloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Ethylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
m & p-Xylene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
o-Xylene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Styrene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromoform	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Isopropylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,2,2-Tetrachloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,3-Trichloropropane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
n-Propylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3,5-Trimethylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
2-Chlorotoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
4-Chlorotoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
tert-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,4-Trimethlybenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
sec-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
4-Isopropyltoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,4-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
n-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dibromo-3-Chloropropan	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2,4-Trichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Hexachlorobutadiene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Naphthalene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,3-Trichlorobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
4-BROMOFLUOROBENZEN		109.4	%		NAC	12/19/2003	
1,2-DICHLOROBENZENE-D		93.0	%		NAC	12/19/2003	

Sample: 003 DIST
Date: 12/16/2003 Time: 2:30:00PM
Matrix: WATER

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
Drinking Water Volatiles			ug/L		NAC	12/19/2003	

Certifications: MA: MA069 NY:10982 CT: PH0119 RI:A45 CA:2050 NJ: 59744

SCILAB

Customer: Environmental Planning & Mgmt.

Workorder No. 0312-00328

Sample: 003 DIST
(Continued)

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
Dichlorodifluoromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Vinyl Chloride	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromomethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trichlorofluoromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Methylene Chloride	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
Methyl-Tert-Butyl-Ether	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trans-1,2-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
2,2-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
cis-1,2-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloroform	EPA 524.2	1.4	ug/L	0.5	NAC	12/19/2003	
Bromochloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,1-Trichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Carbon Tetrachloride	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Benzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromodichloromethane	EPA 524.2	4.4	ug/L	0.5	NAC	12/19/2003	
Dibromomethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
cis-1,3-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Toluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
trans-1,3-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,2-Trichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Tetrachloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Dibromochloromethane	EPA 524.2	9.6	ug/L	0.5	NAC	12/19/2003	
1,2-Dibromoethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,1,2-Tetrachloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Ethylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
m & p-Xylene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
o-Xylene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	

Certifications: MA: MA069 NY:10982 CT: PH0119 RI:A45 CA:2050 NJ: 59744

SCILAB

Customer: Environmental Planning & Mgmt.

Workorder No. 0312-00328

Sample: 003 DIST
(Continued)

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
Styrene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromoform	EPA 524.2	5.5	ug/L	0.5	NAC	12/19/2003	
Isopropylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,2,2-Tetrachloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,3-Trichloropropane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
n-Propylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3,5-Trimethylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
2-Chlorotoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
4-Chlorotoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
tert-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,4-Trimethlybenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
sec-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
4-Isopropyltoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,4-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
n-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dibromo-3-Chloropropan	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2,4-Trichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Hexachlorobutadiene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Naphthalene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,3-Trichlorobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
4-BROMOFLUOROBENZEN		95.4	%		NAC	12/19/2003	
1,2-DICHLOROBENZENE-D		84.5	%		NAC	12/19/2003	

Sample: 004 TB
Date: 12/16/2003 Time: 2:30:00PM
Matrix: WATER

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
Drinking Water Volatiles			ug/L		NAC	12/19/2003	
Dichlorodifluoromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Vinyl Chloride	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromomethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	

Certifications: MA: MA069 NY:10982 CT: PH0119 RI:A45 CA:2050 NJ: 59744

SCILAB

Customer: Environmental Planning & Mgmt.

Workorder No. 0312-00328

Sample: 004 TB
(Continued)

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
Chloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trichlorofluoromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Methylene Chloride	EPA 524.2	1.4	ug/L	1.0	NAC	12/19/2003	B
Methyl-Tert-Butyl-Ether	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trans-1,2-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
2,2-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
cis-1,2-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloroform	EPA 524.2	0.7	ug/L	0.5	NAC	12/19/2003	
Bromochloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,1-Trichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Carbon Tetrachloride	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Benzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromodichloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Dibromomethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
cis-1,3-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Toluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
trans-1,3-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,2-Trichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Tetrachloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Dibromochloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dibromoethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,1,2-Tetrachloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Ethylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
m & p-Xylene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
o-Xylene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Styrene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromoform	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Isopropylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,2,2-Tetrachloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	

Certifications: MA: MA069 NY:10982 CT: PH0119 RI:A45 CA:2050 NJ: 59744

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Customer: Environmental Planning & Mgmt.

Workorder No. 0312-00328

Sample: 004 TB
(Continued)

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
1,2,3-Trichloropropane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
n-Propylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3,5-Trimethylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
2-Chlorotoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
4-Chlorotoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
tert-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,4-Trimethlybenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
sec-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
4-Isopropyltoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,4-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
n-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dibromo-3-Chloropropan	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2,4-Trichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Hexachlorobutadiene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Naphthalene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,3-Trichlorobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
4-BROMOFLUOROBENZEN		100.0	%		NAC	12/19/2003	
1,2-DICHLOROBENZENE-D		89.5	%		NAC	12/19/2003	

Sample: 005 DUP
Date: 12/16/2003 Time: 2:30:00PM
Matrix: WATER

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
Drinking Water Volatiles			ug/L		NAC	12/19/2003	
Dichlorodifluoromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Vinyl Chloride	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromomethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trichlorofluoromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Methylene Chloride	EPA 524.2	2.2	ug/L	1.0	NAC	12/19/2003	B

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Customer: Environmental Planning & Mgmt.

Workorder No. 0312-00328

Sample: 005 DUP
(Continued)

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
Methyl-Tert-Butyl-Ether	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trans-1,2-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
2,2-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
cis-1,2-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloroform	EPA 524.2	0.5	ug/L	0.5	NAC	12/19/2003	J
Bromochloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,1-Trichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Carbon Tetrachloride	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Benzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromodichloromethane	EPA 524.2	1.4	ug/L	0.5	NAC	12/19/2003	
Dibromomethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
cis-1,3-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Toluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
trans-1,3-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,2-Trichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Tetrachloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Dibromochloromethane	EPA 524.2	3.3	ug/L	0.5	NAC	12/19/2003	
1,2-Dibromoethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,1,2-Tetrachloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Ethylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
m & p-Xylene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
o-Xylene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Styrene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromoform	EPA 524.2	2.8	ug/L	0.5	NAC	12/19/2003	
Isopropylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,2,2-Tetrachloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,3-Trichloropropane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
n-Propylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3,5-Trimethylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	

Certifications: MA: MA069 NY:10982 CT: PH0119 RI:A45 CA:2050 NJ: 59744

SCILAB

Customer: Environmental Planning & Mgmt.

Workorder No. 0312-00328

Sample: 005 DUP
(Continued)

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
2-Chlorotoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
4-Chlorotoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
tert-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,4-Trimethlybenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
sec-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
4-Isopropyltoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,4-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
n-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dibromo-3-Chloropropan	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2,4-Trichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Hexachlorobutadiene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Naphthalene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,3-Trichlorobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
4-BROMOFLUOROBENZEN		104.6	%		NAC	12/19/2003	
1,2-DICHLOROBENZENE-D		93.0	%		NAC	12/19/2003	

Sample: 006 STORAGE BLANK
Date: 12/17/2003 Time: 1:00:00PM
Matrix: WATER

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
Drinking Water Volatiles			ug/L		NAC	12/19/2003	
Dichlorodifluoromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Vinyl Chloride	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromomethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trichlorofluoromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Methylene Chloride	EPA 524.2	1.4	ug/L	1.0	NAC	12/19/2003	B
Methyl-Tert-Butyl-Ether	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trans-1,2-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
2,2-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	

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Customer: Environmental Planning & Mgmt.

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Sample: 006 STORAGE BLANK
(Continued)

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
cis-1,2-Dichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chloroform	EPA 524.2	0.7	ug/L	0.5	NAC	12/19/2003	
Bromochloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,1-Trichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Carbon Tetrachloride	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Benzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Trichloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromodichloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Dibromomethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
cis-1,3-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Toluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
trans-1,3-Dichloropropene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,2-Trichloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3-Dichloropropane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Tetrachloroethene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Dibromochloromethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dibromoethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Chlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,1,2-Tetrachloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Ethylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
m & p-Xylene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
o-Xylene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Styrene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromoform	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Isopropylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,1,2,2-Tetrachloroethane	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,3-Trichloropropane	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
n-Propylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Bromobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3,5-Trimethylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
2-Chlorotoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
4-Chlorotoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
tert-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,4-Trimethlybenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	

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Customer: Environmental Planning & Mgmt.

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Sample: 006 STORAGE BLANK
(Continued)

Parameter	Method	Results	Units	PQL	Analyst	Analysis Date	Qual
sec-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
4-Isopropyltoluene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,3-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,4-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
n-Butylbenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2-Dibromo-3-Chloropropan	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
1,2,4-Trichlorobenzene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Hexachlorobutadiene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
Naphthalene	EPA 524.2	ND	ug/L	0.5	NAC	12/19/2003	
1,2,3-Trichlorobenzene	EPA 524.2	ND	ug/L	1.0	NAC	12/19/2003	
4-BROMOFLUOROBENZEN		101.9	%		NAC	12/19/2003	
1,2-DICHLOROBENZENE-D		90.6	%		NAC	12/19/2003	

To the best of my knowledge this report is true and accurate.

Authorized By: _____

Nicole Ingersoll, Technical Director

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CHAIN OF CUSTODY RECORD

SCILAB BOSTON, INC.
8 SCHOOL STREET
WEYMOUTH, MA 02189
781.337.9334 PH 781.337.7642 FAX

SCILAB JOB NO: 0312-328 | PAGE 1 OF 1

DUE DATE: | TEMP UPON RECEIPT: 3.2°C

☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☐ 5 DAY ☐ 7 DAY ☒ 10 DAY

DATA PACKAGE: ASP B NYS | P.O.#

COMPANY: EPM Inc.
ADDRESS: 1483 Marcus Ave.
PHONE: 516-328-1194 | FAX 1: 516-328-1381 | FAX 2:
CLIENT CONTACT: Francesco Portelos | EMAIL: fportelos@epmcorp.com
PROJECT NAME: Katonah Sampling | PROJECT NUMBER: 23001 | PROJECT STATE: NY

MATRIX: A-WATER S-SOIL/SOLIDS SL-SLUDGE OIL-OIL CH-CHIPS WI-WIPES C-CASSETTES W-WASTE O-OTHER
CONTAINER: P-PLASTIC G-GLASS V-VOA

LAB ID	CLIENT SAMPLE IDENTIFICATION	MATRIX	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING INFORMATION DATE	TIME	TECH	GRAB (G) OR COMPOSITE (C)	PRESERVATIVES	SAMPLE PH AT LOGIN	Notes:
1	RW	A	V	V	2	12/16/03	2:30pm	F.P	G	HCL		VOCs 504.2 Req 3
2	STEFF				2							
3	DIST				2							
4	TB				1							
5	DUP				1							
1	RW MS/MSD				2							

SAMPLED BY: (PRINT) Francesco Portelos
(SIGN)
RELINQUISHED BY: (PRINT) F. Portelos
(SIGN)
RELINQUISHED BY: (PRINT)
(SIGN)

DATE: 12/16/03
TIME: 2:30 pm
DATE: 12/16/03
TIME: 4:30
DATE:
TIME:

RECEIVED BY: (PRINT)
(SIGN)
RECEIVED BY: (PRINT)
(SIGN)
RECEIVED FOR LABORATORY BY: MARK PORTA
(SIGN)

DATE:
TIME:
DATE:
TIME:
DATE: 12/17/03
TIME: 10:20