BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Transmittal

Transmitted via Federal Express

Blasland Bouck & Lee, Inc.
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To: Mr. Thomas Reamon, P.E.
Bureau of Hazardous Site Control
New York State Department of
Environmental Conservation
625 Broadway, 11th Floor
Albany, NY 12233-7014

Date: March 29, 2002

File: 0260.26003 #2

Re: McKesson Envirosystems
Bear Street Facility
Syracuse, New York

We are sending you: ☒ herewith ☐ under separate cover ☒ other _____
☐ drawings ☐ letters

If material received is not as listed, please notify us at once.

Quantity	Title
1	Validated Analytical Laboratory Reports

Remarks:

Please find enclosed a copy of the validated analytical laboratory reports listed below for groundwater samples collected at the McKesson, Bear Street facility. These reports are associated with the anaerobic bioremediation treatment activities conducted at the site during July 2001 through December 2001.

- Validated analytical laboratory reports for groundwater samples collected by Blasland, Bouck & Lee, Inc. (BBL) during the biannual process control monitoring event conducted during September 2001.

- Validated analytical laboratory report for the groundwater sample collected from monitoring well MW-3S during the November 2001 resampling event. As presented in the *Biannual Process Control Monitoring Report, July 2001 through December 2001*, monitoring well MW-3S was resampled for aniline on November 8, 2001 due to detection of 690 parts per billion of aniline in the groundwater sample collected from this well during the September 2001 sampling event. The *Biannual Process Control Monitoring Report* has been transmitted to you under separate cover.

If you have any questions or require additional information, please do not hesitate to call me at (315) 446-2570, ext. 210.

Sincerely,

BLASLAND, BOUCK & LEE, INC.

David J. Ulm
Senior Vice President

MS/mbg
Enclosure

cc: Mr. Reginald Parker, P.E., New York State Department of Environmental Conservation (w/o enclosure)
Ms. Henriette Hamel, R.S., New York State Department of Health (w/o enclosure)
Ms. Jean A. Mescher, McKesson Corporation (w/o enclosure)
Ms. Susan Anton-Switka, Bristol-Myers Squibb Company (w/o enclosure)
Mr. Christopher R. Young, P.G., de maximis, inc. (w/o enclosure)

DATA REVIEW FOR

MCKESSON - BEAR STREET SITE

SDG# L74986

VOLATILE AND
SEMIVOLATILE ANALYSES

Analyses performed by:

Galson Laboratories
East Syracuse, New York

Review performed by:

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Blasland, Bouck & Lee, Inc.
Syracuse, New York

Summary

The following is an assessment of the data package for SDG # L74986 for sampling at the McKesson - Bear Street Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analysis Method		
				8260[1]	8015[2,3]	8270[4]
MW-1	L74986-1	water	9/24/01	x	x	x
MW-3S	L74986-2	water	9/24/01	x	x	x
TRIP BLANK 1	L74986-3	water	--		x	
TRIP BLANK 2	L74986-4	water	--	x		
TW-01	L75034-1	water	9/25/01	x	x	x
MW-9S	L75034-2	water	9/25/01	x	x	x
MW-31[5]	L75034-3	water	9/25/01	x	x	x
MW-32	L75034-6	water	9/25/01	x	x	x
DUP-1	L75034-7	water	9/25/01	x	x	x
MW-33	L75034-8	water	9/25/01	x	x	x
TW-02R	L75034-9	water	9/25/01	x	x	x
MW-18	L75106-1	water	9/27/01	x	x	x
MW-19	L75106-2	water	9/27/01	x	x	x
MW-23S	L75106-3	water	9/27/01	x	x	x
MW-23I	L75106-4	water	9/27/01	x	x	x
MW-25S	L75106-5	water	9/27/01	x	x	x
MW-34	L75106-6	water	9/26/01	x	x	x
MW-35	L75106-7	water	9/26/01	x	x	x
MW-36	L75106-8	water	9/26/01	x	x	x
MW-8S	L75106-9	water	9/26/01	x	x	x
MW-27	L75106-10	water	9/26/01	x	x	x
MW-28	L75106-11	water	9/26/01	x	x	x
TRIP BLANK (CLR1)	L75106-12	water	--	x	x	
TRIP BLANK (CLR3)	L75106-13	water	--	x	x	

1 compounds include: methylene chloride, acetone, trichloroethene, benzene, toluene, ethylbenzene, and xylenes
2 compounds include: methanol
3 Subcontracted to Columbia Analytical Services, Inc. of Rochester, New York.
4 compounds include: aniline and N,N'-dimethylaniline
5 MS/MSD analyses performed on sample

VOLATILE ANALYSES

METHOD 8260

Introduction

Analyses were performed according to USEPA method 8260 as referenced in the NYSDEC ASP.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC test, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The specified holding time for volatile analyses under the Quality Assurance Project Plan (QAPP) is 7 days from sample receipt.

All samples were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance blanks (i.e., method, trip, field, or rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment. Field and rinse blanks measure contamination of samples during field operations.

Methylene chloride was detected in the method and trip blanks. Data for methylene chloride have been qualified as undetected in samples MW-1, MW-32, MW-33 and MW-3S based on the blank content. Since the levels of methylene chloride present in samples MW-28, MW-8S and TW-02R were greater than ten times that in the blanks, its presence is deemed site-related and no further action has been taken.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies various percent relative standard deviation (%RSD) limits for select compounds and allows two outliers. A technical review of the data applies a RSD limit of 30% to all compounds with no exceptions.

The %RSD were less than 30% and the response factors were greater than 0.05 for all compounds.

4.2 Continuing Calibration

All continuing calibration standards were within 25% difference (%D) of the initial calibration, with the following exceptions:

Instrument MSC	9/25/01 10:35
Acetone	28.6%
Instrument MSC	9/28/01 10:10
Acetone	32.7%

Since no acetone was detected in the associated samples and since the compound response was increasing, no data have been qualified based on the %D.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every experimental run.

All internal standard areas and retention times were within established limits.

7. Compound Identification

Target compounds are identified on the GC/MS by using the analyte's relative retention time and ion spectra.

All identified compounds met the specified criteria.

8. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix and matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method relative to the sample matrix. Matrix spike blank (MSB) data is used to assess the precision and accuracy of the analytical method independent of matrix interferences.

All matrix spike and matrix spike duplicate recoveries and relative percent differences between recoveries were within control limits. All matrix spike blank recoveries were also within control limits.

9. Field Duplicates

Results for duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-32 / DUP-1	benzene	9J	10	10.5%

The duplicate results are acceptable.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

Data Validation Checklist

Volatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?		X	
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are surrogate recovery forms present?	X		
Are all the samples listed on the appropriate surrogate recovery form?	X		
Was one or more surrogate recoveries outside of specified limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Matrix Spikes			
Is there a matrix spike recovery form present?	X		
Were matrix spikes analyzed at the required frequency?	X		
How many spike recoveries were outside of QC limits? 0 out of 6			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits? 0 out of 3			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed at least once every twelve hours for each system used?	X		
Do any method/reagent/instrument blanks have positive results?	X		
Are there trip/field/rinse/equipment blanks associated with every sample?	X		
Do any trip/field/rinse blanks have positive results?	X		

Volatile Organics Data Validation Checklist - Page 2

	YES	NO	NA
Tuning and Mass Calibration			
Are the GC/MS tuning forms present for BFB?	X		
Are the bar graph spectrum and mass/charge listing provided for each BFB?	X		
Has a BFB been analyzed for each twelve hours of analysis per instrument?	X		
Have the ion abundance criteria been met for each instrument used?	X		
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?	X		
Is the RRT of each reported compound within 0.06 RRT units of the continuing calibration standard?	X		
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	X		
Do the samples and standard relative ion intensities agree within 20%?	X		
Tentatively Identified Compounds			
Are all the TIC summary forms present?		X	
Are the mass spectra for the tentatively identified compounds and there associated "best match" spectra present?			X
Are any target compounds listed as TICs?			X
Are all ion present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X

Volatile Organics Data Validation Checklist - Page 3

	YES	NO	NA
Do the TIC and "best match" spectrum agree within 20%?			X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X		
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs within specified limits?	X		
Are the average RRF equal to or greater than minimum requirements?	X		
Are there any transcription/calculation errors in reporting the RRF or RSD?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each twelve hours of analysis per instrument?	X		
All %D within acceptable limits?		X	
Are all RF equal to or greater than minimum requirements?	X		
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Internal Standards			
Are internal standard areas of every sample and blank within the upper and lower limits for each continuing calibration?	X		
Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		
Field Duplicates			
Were field duplicates submitted with the samples?	X		

Volatile Qualifier Summary
Holding Time, Surrogates, Internal Standards

Sample ID	Holding Time*	Surrogates*			Internal Standards*		
		TOL	BFB	DCE	DFB	DCB	CBZ
MW-1							
MW-3S							
TRIP BLANK 2							
TW-01							
MW-9S							
MW-31							
MW-31 MS							
MW-31 MSD							
MW-32							
DUP-1							
MW-33							
TW-02R							
MW-18							
MW-19							
MW-23S							
MW-23I							
MW-25S							
MW-34							
MW-35							
MW-36							
MW-8S							
MW-8S DL							
MW-27							
MW-28							
TRIP BLANK (CLR1)							
TRIP BLANK (CLR3)							

Surrogates:
TOL Toluene-d8
BFB Bromofluorobenzene
DCE 1,4-Dichloroethane-d4

Internal Standards:
DCB 1,4-Difluorobenzene
DFB 1,4-Dichlorobenzene-d4
CBZ Chlorobenzene-d5

Qualifiers:
↑ Recovery high
↓ Recovery low

* Unless otherwise specified, all parameters are within acceptable limits.

Volatile Calibration Outliers

Instrument: MSC
Matrix: water
Level: low

Date/Time	9/17/01		9/25/01 1035		9/26/01 0921		9/27/01 0937		9/28/01 1010	
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
Methylene chloride										
Acetone				28.6						32.7
Trichloroethene										
Benzene										
Toluene										
Ethylbenzene										
Xylene (total)										

Affected Samples:					
	MW1			MW8S	
	MW3S			MW28	
	TRIP BLANK 2			TRIPBLANKC1	

Volatile Calibration Outliers - Page 2

Instrument: MSC
Matrix: water
Level: low

Date/Time			9/28/01 1953		10/1/01 1012					
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
Methylene chloride										
Acetone										
Trichloroethene										
Benzene										
Toluene										
Ethylbenzene										
Xylene (total)										

Affected Samples:				

Corrected Sample Analysis Data Sheets

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

DUP-1

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75034-7

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092609

Level: (low/med) LOW Date Received: 09/26/01

%Moisture: not dec. Date Analyzed: 09/26/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	9	J
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-1

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L74986-1

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092508

Level: (low/med) LOW Date Received: 09/24/01

%Moisture: not dec. Date Analyzed: 09/25/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	UB
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-18

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-1

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092819

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/28/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-19

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-2

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092820

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/28/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-23I

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-4

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092822

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/29/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	4	J
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	2	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-23S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-3

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092821

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/29/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-25S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-5

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092823

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/29/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-27

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-10

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE100106

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 10/01/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	**Benzene**	5	J
108-88-3	Toluene	10	U
100-41-4	**Ethylbenzene**	2	J
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-28

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-11

Sample wt/vol: 0.125 (g/mL) mL Lab File ID: CE092810

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/28/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 40

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	4700	B
67-64-1	Acetone	400	U
79-01-6	Trichloroethene	400	U
71-43-2	Benzene	400	U
108-88-3	Toluene	400	U
100-41-4	Ethylbenzene	400	U
1330-20-7	Xylene (total)	400	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-31

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75034-3

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092606

Level: (low/med) LOW Date Received: 09/26/01

%Moisture: not dec. Date Analyzed: 09/26/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	**Benzene**	**14**	
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-32

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75034-6

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092705

Level: (low/med) LOW Date Received: 09/26/01

%Moisture: not dec. Date Analyzed: 09/27/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	~~U~~ B U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-33

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75034-8

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092613

Level: (low/med) LOW Date Received: 09/26/01

%Moisture: not dec. Date Analyzed: 09/26/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	18	~~B~~ U
67-64-1	Acetone	21	
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	5	J
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-34

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-6

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092824

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/29/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	7	J
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	2	J
108-88-3	Toluene	2	J
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	2	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-35

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-7

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092825

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/29/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-36

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-8

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092826

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/29/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	**Acetone**	54	
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-3S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L74986-2

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092507

Level: (low/med) LOW Date Received: 09/24/01

%Moisture: not dec. Date Analyzed: 09/25/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	5	~~U~~B U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	3	J
108-88-3	Toluene	8	J
100-41-4	Ethylbenzene	1	J
1330-20-7	Xylene (total)	2	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-8S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-9

Sample wt/vol: 0.125 (g/mL) mL Lab File ID: CE092807

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/28/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 40

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	~~200000~~ 440000	~~E~~ DB
67-64-1	Acetone	400	U
79-01-6	Trichloroethene	~~9900~~ 18000	~~E~~ D
71-43-2	Benzene	400	U
108-88-3	Toluene	430	
100-41-4	Ethylbenzene	170	J
1330-20-7	Xylene (total)	680	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-8S DL

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-9DL

Sample wt/vol: .001 (g/mL) mL Lab File ID: CE092811

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/28/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 5000

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	440000	DB
67-64-1	Acetone	50000	U D
79-01-6	Trichloroethene	18000	JD
71-43-2	Benzene	50000	U D
108-88-3	Toluene	50000	U D
100-41-4	Ethylbenzene	50000	U D
1330-20-7	Xylene (total)	50000	U D

FORM I CLP VOA

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-9S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75034-2

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092608

Level: (low/med) LOW Date Received: 09/26/01

%Moisture: not dec. Date Analyzed: 09/26/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	
108-88-3	Toluene	3	J
100-41-4	Ethylbenzene	7	J
1330-20-7	Xylene (total)	35	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK (CLR 1)

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-12

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092812

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/28/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK (CLR 3)

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75106-13

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092818

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/28/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK-2

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L74986-4

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092506

Level: (low/med) LOW Date Received: 09/24/01

%Moisture: not dec. Date Analyzed: 09/25/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	4	JB
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TW-01

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75034-1

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092607

Level: (low/med) LOW Date Received: 09/26/01

%Moisture: not dec. Date Analyzed: 09/26/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TW-02R

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) Water Lab Sample ID: L75034-9

Sample wt/vol: 2.5 (g/mL) mL Lab File ID: CE092614

Level: (low/med) LOW Date Received: 09/26/01

%Moisture: not dec. Date Analyzed: 09/26/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 2

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	48	B
67-64-1	Acetone	57	
79-01-6	Trichloroethene	20	U
71-43-2	Benzene	25	
108-88-3	Toluene	70	
100-41-4	Ethylbenzene	31	
1330-20-7	Xylene (total)	140	

VOLATILE ANALYSES

METHOD 8015

Introduction

Analyses were performed according to USEPA method 8015 as referenced in the NYSDEC ASP.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC test, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The specified holding time for volatile analyses under the Quality Assurance Project Plan (QAPP) is 7 days from sample receipt. The technical holding time is 14 days from sample collection to analysis.

Samples MW-1, MW-3S, TRIP BLANK, TW-01, MW-9S, MW-31, DUP-1, MW-33, TW-02R, MW-32, MW-34, MW-35, MW-36, MW-8S, MW-27 and MW-28 were analyzed over the specified holding time. All methanol data for the listed samples have been qualified as estimated based on the holding time violation. All other samples were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance blanks (i.e., method, trip, field, or rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment.

No target compounds were detected in the method or trip blanks.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The method specifies a percent relative standard deviation (%RSD) limit of 20% or, alternately, a correlation coefficient of 0.99 or greater.

The initial calibration was acceptable.

3.2 Continuing Calibration

All continuing calibration standards were within 15%D of the initial calibration.

4. Compound Identification

Target compounds are identified by using the analyte's retention time.

All identified compounds fell within the established retention time windows.

5. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix and matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method relative to the sample matrix. Matrix spike blank (MSB) data is used to assess the precision and accuracy of the analytical method independent of matrix interferences.

All matrix spike and matrix spike duplicate recoveries and the relative percent difference between recoveries were within control limits. The matrix spike blank recovery was also within control limits.

6. Field Duplicates

Results for duplicate samples are summarized below:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-32 / DUP-1	methanol	ND	ND	NA

ND Not detected.
NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The duplicate results are acceptable.

7. System Performance and Overall Assessment

Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

Data Validation Checklist

Organic Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?		X	
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?	X		
Matrix Spikes			
Is there a matrix spike recovery form present?	X		
Were matrix spikes analyzed at the required frequency?	X		
How many spike recoveries were outside of QC limits?			
0 out of 2			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
0 out of 1			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed at least once every twelve hours for each system used?	X		
Do any method/reagent/instrument blanks have positive results?		X	
Are there trip/field/rinse/equipment blanks associated with every sample?	X		
Do any trip/field/rinse blanks have positive results?		X	
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		

Organic Data Validation Checklist - Page 2

	YES	NO	NA
Are the chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and chromatograms present for the initial and continuing calibration standards?	X		
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs or correlation coefficients within acceptable limits?	X		
Are there any transcription/calculation errors in reporting the RRF or RSD?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each twelve hours of analysis per instrument?	X		
All %D within acceptable limits?		X	
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Field Duplicates			
Were field duplicates submitted with the samples?	X		

Calibration Outliers

Instrument: V2-Varian 3300
Matrix: water

Date	10/11/01	10/11/01	10/16/01	10/16/01	10/17/01	10/17/01
Time		1644	1008	1534	1107	1607
	Initial Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
	RSD	%D	%D	%D	%D	%D
methanol	ok	ok	ok	ok	ok	ok
Affected Samples:						

Corrected Sample Analysis Data Sheets

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L74986
Client Sample ID : MW-1

Date Sampled : 09/24/01 **Order #:** 496456 **Sample Matrix:** WATER
Date Received: 09/26/01 **Submission #:** R2108803 **Analytical Run** 70232

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/16/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 ~~U~~ J	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		117	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L74986
Client Sample ID : MW-3S

Date Sampled : 09/24/01 **Order #:** 496457 **Sample Matrix:** WATER
Date Received: 09/26/01 **Submission #:** R2108803 **Analytical Run** 70232

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/16/01			
ANALYTICAL DILUTION: 1.00			
METHANOL	1000	1000 Ø UJ	UG/L
SURROGATE RECOVERIES	QC LIMITS		
ISOPROPYL ETHER	(50 - 150 %)	113	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L74986-3
Client Sample ID : TRIP BLANK-1

Date Sampled : 09/24/01 **Order #:** 496458 **Sample Matrix:** WATER
Date Received: 09/26/01 **Submission #:** R2108803 **Analytical Run** 70232

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 10/16/01			
ANALYTICAL DILUTION:	1.00			
METHANOL		1000	1000 U LJ	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		109	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-8S

Date Sampled : 09/26/01 **Order #:** 497380 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/17/01			
ANALYTICAL DILUTION: 1.00			
METHANOL	1000	8900 J	UG/L
SURROGATE RECOVERIES	QC LIMITS		
ISOPROPYL ETHER	(50 - 150 %)	122	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75034
Client Sample ID : MW-9S

Date Sampled : 09/25/01 **Order #:** 496460 **Sample Matrix:** WATER
Date Received: 09/26/01 **Submission #:** R2108803 **Analytical Run** 70232

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/16/01			
ANALYTICAL DILUTION: 1.00			
METHANOL	1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS		
ISOPROPYL ETHER	(50 - 150 %)	125	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-18

Date Sampled : 09/27/01 **Order #:** 497372 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70223

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/11/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		95	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-19

Date Sampled : 09/27/01 **Order #:** 497373 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70223

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/11/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		102	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-23S

Date Sampled : 09/27/01 **Order #:** 497374 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70223

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/11/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		74	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-23I

Date Sampled : 09/27/01 **Order #:** 497375 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70223

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/11/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		103	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-25S

Date Sampled : 09/27/01 **Order #:** 497376 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70223

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/11/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		113	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-27

Date Sampled : 09/26/01 **Order #:** 497381 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/17/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 ~~U~~ UJ	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		121	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-28

Date Sampled : 09/26/01 **Order #:** 497382 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 10/17/01			
ANALYTICAL DILUTION:	1.00			
METHANOL		1000	1000 U UJ	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		115	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75034
Client Sample ID : MW-31

Date Sampled : 09/25/01 **Order #:** 496461 **Sample Matrix:** WATER
Date Received: 09/26/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/17/01			
ANALYTICAL DILUTION: 1.00			
METHANOL	1000	1000 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
ISOPROPYL ETHER	(50 - 150 %)	108	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75034
Client Sample ID : MW-32

Date Sampled : 09/25/01 **Order #:** 496469 **Sample Matrix:** WATER
Date Received: 09/26/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/17/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		75	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75034
Client Sample ID : MW-33

Date Sampled : 09/25/01 **Order #:** 496463 **Sample Matrix:** WATER
Date Received: 09/26/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/17/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 Ø U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		120	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-34

Date Sampled : 09/26/01 **Order #:** 497377 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/17/01			
ANALYTICAL DILUTION: 1.00			
METHANOL	1000	1000 U UJ	UG/L
SURROGATE RECOVERIES	QC LIMITS		
ISOPROPYL ETHER	(50 - 150 %)	118	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-35

Date Sampled : 09/26/01 **Order #:** 497378 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/17/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 ~~U~~ VJ	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		113	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106
Client Sample ID : MW-36

Date Sampled : 09/26/01 **Order #:** 497379 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/17/01			
ANALYTICAL DILUTION: 1.00			
METHANOL	1000	1000 U UJ	UG/L
SURROGATE RECOVERIES QC LIMITS			
ISOPROPYL ETHER (50 - 150 %)		116	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75034
Client Sample ID : TW-01

Date Sampled : 09/25/01 **Order #:** 496459 **Sample Matrix:** WATER
Date Received: 09/26/01 **Submission #:** R2108803 **Analytical Run** 70232

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 10/16/01			
ANALYTICAL DILUTION:	1.00			
METHANOL		1000	1000 Ø U,J	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		128	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75034
Client Sample ID : TW-02R

Date Sampled : 09/25/01 **Order #:** 496464 **Sample Matrix:** WATER
Date Received: 09/26/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/17/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U VJ	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		126	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75034
Client Sample ID : DUP-1

Date Sampled : 09/25/01 **Order #:** 496462 **Sample Matrix:** WATER
Date Received: 09/26/01 **Submission #:** R2108803 **Analytical Run** 70331

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/17/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 J UJ	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		115	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106-12
Client Sample ID : TRIP BLANK (CCR2-1)

Date Sampled : 09/27/01 **Order #:** 497383 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70223

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/11/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		107	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75106-13
Client Sample ID : TRIP BLANK (CLR3)

Date Sampled : 09/27/01 **Order #:** 497384 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108803 **Analytical Run** 70223

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/11/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		103	%

SEMIVOLATILE ANALYSES

METHOD 8270

Introduction

Analyses were performed according to USEPA SW-846 Method 8270 as referenced in NYSDEC ASP.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC test, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The specified holding times for semi-volatile analyses under the Quality Assurance Project Plan (QAPP) are 5 days from sample receipt to extraction and 40 days to analysis. The technical holding times are 7 days from sample collection to extraction and 40 days to analysis.

All samples were extracted and analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks (i.e., method, field, or rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

No target compounds were detected in the method blanks.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies various percent relative standard deviation (%RSD) limits for select compounds and allows two outliers. A technical review of the data applies a RSD limit of 30% to all compounds with no exceptions.

The %RSD was less than 30% for all compounds.

4.2 Continuing Calibration

All continuing calibration standards were within 25% difference (%D) of the initial calibration.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

Surrogates were diluted beyond the range of quantitation in samples TW-02DL and MW-8S. No data have been qualified based on diluted surrogates. All other surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every experimental run.

All internal standard areas and retention times were within established limits.

7. Compound Identification

Target compounds are identified on the GC/MS by using the analyte's relative retention time and ion spectra.

All identified compounds met the specified criteria.

8. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix and matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method relative to the sample matrix. Matrix spike blank (MSB) data is used to assess the precision and accuracy of the analytical method independent of matrix interferences.

The matrix spike recoveries were within control limits. The matrix spike duplicate recovery was, however, above control limits for aniline. Since all matrix spike and matrix spike blank recoveries were within control limits, no data have been qualified based on the deviation. The end-user should be aware that the difference in spiked results may indicate a lack of precision in the data.

9. Field Duplicates

Results for duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-32 / DUP-1	aniline	1100	1200	8.7%
	N,N-dimethylaniline	2J	2J	0.0%

ND Not detected.
NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The duplicate results are acceptable.

10. System Performance and Overall Assessment

The laboratory used a reporting limit of 5 µg/l for aniline in this report; however, the lowest calibration standard analyzed was the equivalent of 10 µg/l. Based on the lowest calibration standard analyzed, the reporting limit for aniline has been raised to 10 µg/L for all samples.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?		X	
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are the surrogate recovery forms present?	X		
Are all the samples listed on the appropriate surrogate recovery form?	X		
Were two or more surrogate recoveries outside of specified limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Matrix Spikes			
Is there a matrix spike recovery form present?	X		
Were matrix spikes analyzed at the required frequency	X		
How many spike recoveries were outside of QC limits? 1 out of 4			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits? 1 out of 2			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed for each GC/MS system used?	X		
Do any method/reagent/instrument blanks have positive results?		X	
Are there field/rinse/equipment blanks associated with every sample?		X	

Semivolatile Organics Data Validation Checklist - Page 2

	YES	NO	NA
Do any field/rinse blanks have positive results?			X
Tuning and Mass Calibration			
Are the GC/MS tuning forms present for DFTPP?	X		
Are the bar graph spectrum and mass/charge listing provided for each DFTPP?	X		
Has a DFTPP been analyzed for each twelve hours of analysis per instrument?	X		
Have the ion abundance criteria been met for each instrument used?	X		
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Has GPC cleanup been performed on all soil/sediment sample extracts?			X
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?	X		
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	X		
Do the samples and standard relative ion intensities agree within 20%?	X		
Tentatively Identified Compounds			
Are all the TIC summary forms present?		X	
Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present?			X
Are any target compounds listed as TICs?			X

	YES	NO	NA
Field Duplicates			
Were field duplicates submitted with the samples?	X		

Semi-Volatile Qualifier Summary
Holding Time, Surrogates, Internal Standards

Sample ID	Holding Time*	Surrogates*				Internal Standards*					
		NBZ	FBP	TPH	DCB	DCB	NPT	ANT	PHN	CRY	PRY
MW-1S											
MW-3S											
MW-3SDL											
TW-01											
MW-9S											
MW-31											
MW-31 MS											
MW-31 MSD											
MW-31DL											
MW-32											
MW-32DL											
DUP-1											
DUP-1DL											
MW-33											
MW-33DL											
TW-02R											
TW-02RDL											
MW-18											
MW-19											
MW-23S											
MW-23I											
MW-25S											
MW-34											
MW-35											
MW-36											
MW-36DL											
MW-8S											
MW-27											
MW-28											
MW-28DL											

Surrogates:		Internal Standards:		Qualifiers:	
NBZ	Nitrobenzene-d5	DCB	1,4-Dichlorobenzene-d4	D	Diluted
FBP	2-Fluorobiphenyl	NPT	Naphthalene-d8	↓	Recovery low
TPH	Terphenyl-d14	ANT	Acenaphthene-d10	↑	Recovery high
DCB	1,2-Dichlorobenzene-d4	PHN	Phenanthrene-d10		
		CRY	Chrysene-d12		
		PRY	Perylene-d12		

* Unless otherwise specified, all parameters are within acceptable limits.

Semivolatile Calibration Outliers

Instrument: MSE
Level: low

Date/Time	9/28/01		10/1/01 0744		10/2/01 0809		10/3/01 0729		10/4/01 0844	
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
aniline										
n,n'-dimethylaniline										

Affected Samples:

vlj2645

Corrected Sample Analysis Data Sheets

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

DUP-1

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-7

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100208

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted:10/01/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	~~850~~ 100	~~E~~ D
121-69-7	N,N-Dimethylaniline	2	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

DUP-1 DL

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-7DL

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100218

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted:10/01/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	1200	D
121-69-7	N,N-Dimethylaniline	190	U D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-1

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L74986-1

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100113

Level: (low/med) LOW Date Received: 09/24/01

% Moisture: decanted: (Y/N) N Date Extracted: 09/28/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/01/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10	U
121-69-7	N,N-Dimethylaniline	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-18

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-1

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100311

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10 5	U
121-69-7	N,N-Dimethylaniline	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-19

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-2

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100312

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10	U
121-69-7	N,N-Dimethylaniline	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-23I

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-4

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100314

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10	U
121-69-7	N,N-Dimethylaniline	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-23S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-3

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100313

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10 5	U
121-69-7	N,N-Dimethylaniline	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-25S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-5

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100315

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10	U
121-69-7	N,N-Dimethylaniline	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-27

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-10

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100319

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	26	
121-69-7	N,N-Dimethylaniline	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-28

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-11

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100320

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	~~570~~ 1000	~~U~~ D
121-69-7	N,N-Dimethylaniline	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-28 DL

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-11DL

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100414

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/04/01

Injection Volume: 2.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	1000	D
121-69-7	N,N-Dimethylaniline	190	U D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-31

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-3

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100210

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted:10/01/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	~~8~~ 31	~~E~~ D
121-69-7	N,N-Dimethylaniline	3	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-31 DL

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-3DL

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100219

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted: 10/01/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	91	D
121-69-7	N,N-Dimethylaniline	3	JD

FORM I SV-I

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-32

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-6

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100213

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted: 10/01/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	~~770~~ 1100	E D
121-69-7	N,N-Dimethylaniline	2	J

FORM I SV-I

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-32 DL

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-6DL

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100220

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted:10/01/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	1100	D
121-69-7	N,N-Dimethylaniline	190	U D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-33

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-8

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100206

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted:10/01/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	~~1300~~ 1900	E D
121-69-7	N,N-Dimethylaniline	12	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-33 DL

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-8DL

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100217

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted:10/01/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	1900	D
121-69-7	N,N-Dimethylaniline	240	U D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-34

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-6

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100316

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	76	
121-69-7	N,N-Dimethylaniline	3	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-35

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-7

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100317

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	~~5~~	U
121-69-7	N,N-Dimethylaniline	2	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-36

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-8

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100318

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	~~270~~ 350	ED
121-69-7	N,N-Dimethylaniline	5	J

FORM I SV-I

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-36 DL

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-8DL

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100415

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/04/01

Injection Volume: 2.0 (uL) Dilution Factor: 8.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	350	D
121-69-7	N,N-Dimethylaniline	76	U D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-3S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L74986-2

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100116

Level: (low/med) LOW Date Received: 09/24/01

% Moisture: decanted: (Y/N) N Date Extracted:09/28/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/01/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	~~480~~ 490	~~E~~ J
121-69-7	N,N-Dimethylaniline	4	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-3S DL

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L74986-2DL

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100205

Level: (low/med) LOW Date Received: 09/24/01

% Moisture: decanted: (Y/N) N Date Extracted:09/28/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	690	D
121-69-7	N,N-Dimethylaniline	95	U D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-8S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75106-9

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100321

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1000.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	21000	
121-69-7	N,N-Dimethylaniline	29000	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-9S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-2

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100209

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted:10/01/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	5	U
121-69-7	N,N-Dimethylaniline	10	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TW-01

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-1

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100207

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted:10/01/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10 5	U
121-69-7	N,N-Dimethylaniline	2	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TW-02R

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-9

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100214

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted:10/01/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	~~56000~~ (3000)	ED
121-69-7	N,N-Dimethylaniline	32	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TW-02R DL

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L74986

Matrix: (soil/water) WATER Lab Sample ID: L75034-9DL

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100221

Level: (low/med) LOW Date Received: 09/26/01

% Moisture: decanted: (Y/N) N Date Extracted: 10/01/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 1000.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	63000	D
121-69-7	N,N-Dimethylaniline	9500	U D

Chain of Custody

Galson Laboratories

6601 Kirkville Road East
E. Syracuse, New York 13057
315 437-7252 • 888-577-5227

BBL

Project Name / Number: McKesson 26003.190

Turn-Around Time
☑ - Standard Service
☐ - * Rush Service
Date requested by:
Ph # (315)-446-2570 x 517
Fax # (315)-449-4111

Page ____ of ____

Send Report to: Margaret Swarnicka
BBL
6723 Towpath Road
Syracuse NY 13214-0066

Send Invoice to: SAME

P.O. #

Chain of Custody Record

SAMPLE ID	Date	Time	Comp.	Grab	Aqueous	Soil	Other	Laboratory ID Number	VOCs EPA 8260	SVOCs EPA 8270	Alcohols EPA 8015	Nitrate	Total Fe/Mn	Dissolved Fe/Mn	Sulfate	Sulphide	# bottles 17
MW-1	09/24/01	1420		✓	✓				2	1	2	1	1	1	1	1	=10
MW-3S	" "	1610		✓	✓				2	1	2	1	1	1	1	1	=10
Trip Blank-1	09/24/01				✓						2						
" " -2	↓				✓				2								

L74986 L74987

REMARKS:
* Category B deliverables for VOCs, SVOCs and alcohols
* Results only for Nitrates, Total Fe/Mn, Dissolved Fe/Mn, Sulfate, Sulphide
* Dissolved Fe/Mn samples filtered in field.

Total Containers - 22

SAMPLER'S NAME: Karl Reimer / Jerry Shi SIGNATURE: [signature]

SAMPLES RELINQUISHED BY:	SAMPLES RECEIVED BY:
NAME: Jerry Shi DATE: 9/24/01 SIGNATURE: [signature] TIME:	NAME: DATE: SIGNATURE: TIME:
NAME: DATE: SIGNATURE: TIME:	Received For Laboratory By: (Signature) [signature] DATE: 9/24 TIME: @5:53pm
NAME: DATE: SIGNATURE: TIME:	Received For Laboratory By: (Signature) DATE: TIME:

VOC Pres U P AU NA
Custody Seal Intact? ☐ Yes ☐ No ☐ N.A.
Shipment Complete? ☐ Yes ☐ No
Temp 7.9 °C TS TB TM (TG)
Airbill #

Galson Laboratories
6601 Kirkville Road East
E. Syracuse, New York 13057
315 437-7252 • 888-577-5227

BBL

Project Name / Number: McKesson 26003.190

☑ - Standard Service
☐ - * Rush Service
Date requested by:
Ph # (315) - 446- 2570
Fax # (315) 449-

Send Report to: Margaret Swarnicka
BBL
6723 Towpath Road
Syracuse NY 13214-0066
315

Send Invoice to: SAME

P.O. #

Chain of Custody Record

SAMPLE ID	Date	Time	Comp.	Grab	Aqueous	Soil	Other	Laboratory ID Number	VOCs EPA 8260	SVOCs EPA 8270	Alcohols EPA 8015	Nitrate	Sulfate	Sulfide	Total Fe/Mn	Dissolved Fe/Mn			
TW-01	[illegible]	900		✓	✓				2	1	2	1	1	1	1	1			10
MW-9S	" "	1035		✓	✓				2	1	2	1	1	1	1	1			10
MW-31	" "	1220		✓	✓				2	1	2	1	1	1	1	1			10
MW-31 MS/MSD	" "	1220		✓	✓				4	2	4								10
MW-32	" "	1405		✓	✓				2	1	2	1	1	1	1	1			10
DUP-1	" "	1530		✓	✓				2	1	2								5
MW-33	" "	1710		✓	✓				2	1	2	1	1	1	1	1			10
TW-02R	" "	1900		✓	✓				2	1	2	1	1	1	1	1			10
									L75034			L75038							

18

* NO TRIP Blanks enclosed (SK)

REMARKS:
* Cat B deliverables for VOCs, SVOCs, Alcohols
* Results only for Nitrates, Total Fe/Mn Dissolved Fe/Mn Sulphate, Sulphides
* Dissolved Fe/Mn field filtered

Total Containers -

SAMPLER'S NAME: Karl Reimer SIGNATURE: Karl Reimer

VOC Pres U P AU NA

SAMPLES RELINQUISHED BY:	SAMPLES RECEIVED BY:
NAME: SIGNATURE: Karl Reimer DATE: 09/26/01 TIME: 745	NAME: SIGNATURE: DATE: TIME:
NAME: SIGNATURE: DATE: TIME:	Received For Laboratory By: (Signature) DATE: TIME:
NAME: SIGNATURE: DATE: TIME:	Received For Laboratory By: (Signature) M. Krause DATE: 9/26/01 TIME: 7:45

Custody Seal Intact? ☐ Yes ☐ No ☐ N.A.
Shipment Complete? ☐ Yes ☐ No

Temp _____ °C TS TB TM

Airbill #

Cooler #1 4.7 Cooler #2 -0.9

Laboratories

6601 Kirkville Road East
E. Syracuse, New York 13057
315 437-7252 • 888-577-5227

BBL

Project Name / Number: McKesson 26003.190

[X] - Standard Service
[ ] - * Rush Service
Date requested by:
Ph # (315)-446-2570 ext 517
Fax # (315)-449-

Page 1 of

Send Report to: Margaret Swarnicka BBL

Send Invoice to: SAME

P.O. #

Chain of Custody Record

SAMPLE ID	Date	Time	Comp.	Grab	Aqueous	Soil	Other	Laboratory ID Number	VOCs EPA 8260	SVOC EPA 8270	Alcohols EPA 8015	Nitrates	Total Fe/Mn	Dissolved Fe/Mn	Sulfate	Sulfide			
MW-34	09/26/01	955		✓	✓				2	1	2	1	1	1	1	1			10
MW-35	" "	1110		✓	✓				2	1	2	1	1	1	1	1			10
MW-36	" "	1220		✓	✓				2	1	2	1	1	1	1	1			10
MW-85		1400		✓	✓				2	1	2	1	1	1	1	1			10
MW-27		1600		✓	✓				2	1	2	1	1	1	1	1			10
MW-28		1725		✓	✓				2	1	2	1	1	1	1	1			10
MW-29	" "			✓	✓				2	1	2	1	1	1	1	1			10
MW-30	09/27/01	850		✓	✓				2	1	2	1	1	1	1	1			10
MW-30MS	" "	" "		✓	✓				2	1	2								5
MW-30MSD	" "	" "		✓	✓				2	1	2								5
DUP-2	" "	950		✓	✓				2	1	2								5
MW-17R	" "			✓	✓				2	1	2								5

L75106 (MW-34 to MW-28); L75107 (MW-29 to MW-17R); 3 coolers

19

REMARKS:
* Category B deliverables for VOCs, SVOCs, Alcohols
* Results only for Nitrates, Total + Dissolved Fe/Mn, Sulfate, Sulphides
* Dissolved Fe/Mn field filtered
* #Nitrates (some) will be analyzed past hold time - Client delivered late. 9/28/01

Total Containers -

SAMPLER'S NAME: Karl Reimer / Roger Elliott SIGNATURE: Karl Reimer

SAMPLES RELINQUISHED BY:		SAMPLES RECEIVED BY:	
NAME: Karl Reimer SIGNATURE: Karl Reimer	DATE: 09/27/01 TIME: 2000	NAME: SIGNATURE:	DATE: TIME:
NAME: Cara Tabaczyk SIGNATURE: Cara Tabaczyk	DATE: 9/27/01 TIME: 20:00	Received For Laboratory By: (Signature) Cara Tabaczyk	DATE: 9/27/01 TIME: 20:00
NAME: SIGNATURE:	DATE: TIME:	Received For Laboratory By: (Signature)	DATE: TIME:

VOC Pres U P AU NA

Custody Seal Intact? [ ] Yes [ ] No [ ] N.A.
Shipment Complete? [ ] Yes [ ] No

Cooler #1 Temp 3.0 °C TS TB TM (TG)

Airbill # walk-IN

Galson Laboratories

6601 Kirkville Road East
E. Syracuse, New York 13057
315 437-7252 • 888-577-5227

BBL

Project Name / Number: McKesson 26603.190

☑ - Standard Service
☐ - * Rush Service
Date requested by:
Ph # (315)-446-2570 ext. 517
Fax # (315)-449-4111

Send Report to: Margaret Swarnicka, BBL, Syracuse

Send Invoice to: SAME ←

P.O. #

Chain of Custody Record

PARAMETERS FOR ANALYSIS: EPA 8260 VOCs; EPA 8270 SVOCs; EPA 8015 Alcohols

SAMPLE ID	Date	Time	Comp.	Grab	Aqueous	Soil	Other	Laboratory ID Number	EPA 8260 VOCs	EPA 8270 SVOCs	EPA 8015 Alcohols
MW-18	09/26/01	1235		✓	✓				1	2	1
MW-19	" "	1355		✓	✓				1	2	1
MW-23S	" "	1605		✓	✓				1	2	1
MW-23I	" "	1630		✓	✓				1	2	1
MW-25S	" "			✓	✓				1	2	1
TRIP Blank (cooler 1)									1		1
TRIP Blank (cooler 2)									1		1
TRIP BLANK (cooler 3)									1		1

L75106 ← (MW-18 to TRIP Blank cooler 1)
L75107 (TRIP Blank cooler 2)
L75108 (TRIP BLANK cooler 3)
3

20
5 5 5 5 5

REMARKS: * Category B deliverables for VOCs, SVOCs and Alcohols!
Time written on label for MW-23I says 1530, should be 1630

Total Containers -

SAMPLER'S NAME: Karl Reimer / Roger Elliott   SIGNATURE: Karl Reimer

SAMPLES RELINQUISHED BY:		SAMPLES RECEIVED BY:	
NAME: KARL REIMER SIGNATURE: Karl Reimer	DATE: 09/27/01 TIME: 2000	NAME: SIGNATURE:	DATE: TIME:
NAME: Cara Tuboaczyk SIGNATURE: Cara Tuboaczyk	DATE: 9/27/01 TIME: 20:00	Received For Laboratory By: (Signature) Cara Tuboaczyk	DATE: 9/27/01 TIME: 20:00
NAME: SIGNATURE:	DATE: TIME:	Received For Laboratory By: (Signature)	DATE: TIME:

VOC Pres: U P AU NA
Custody Seal Intact? ☐ Yes ☐ No ☐ N.A.
Shipment Complete? ☐ Yes ☐ No
Cooler #2 Temp 4.0 °C TS TB TM (TB) Packed ice
Airbill # Walk-IN

cooler #3 - 5.1

DATA REVIEW FOR

MCKESSON - BEAR STREET SITE

SDG# L76429

SEMIVOLATILE ANALYSES

Analyses performed by:

Galson Laboratories
East Syracuse, New York

Review performed by:

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Blasland, Bouck & Lee, Inc.
Syracuse, New York

Summary

The following is an assessment of the data package for SDG # L76429 for sampling at the McKesson - Bear Street Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analysis Method		
				8260	8015	8270[1]
MW-3S	L76429-1	water	11/8/01			x

1 compounds include: aniline

SEMIVOLATILE ANALYSES

METHOD 8270

Introduction

Analyses were performed according to USEPA SW-846 Method 8270 as referenced in NYSDEC ASP.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC test, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The specified holding times for semi-volatile analyses under the Quality Assurance Project Plan (QAPP) are 5 days from sample receipt to extraction and 40 days to analysis. The technical holding times are 7 days from sample collection to extraction and 40 days to analysis.

The sample was extracted and analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks (i.e., method, field, or rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

No target compounds were detected in the method blank.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies various percent relative standard deviation (%RSD) limits for select compounds and allows two outliers. A technical review of the data applies a RSD limit of 30% to all compounds with no exceptions.

The %RSD was less than 30% for all compounds.

4.2 Continuing Calibration

All continuing calibration standards were within 25% difference (%D) of the initial calibration.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every experimental run.

All internal standard areas and retention times were within established limits.

7. Compound Identification

Target compounds are identified on the GC/MS by using the analyte's relative retention time and ion spectra.

All identified compounds met the specified criteria.

8. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix and matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method relative to the sample matrix. Matrix spike blank (MSB) data is used to assess the precision and accuracy of the analytical method independent of matrix interferences.

No matrix spike/matrix spike duplicate analysis was performed on the sample in this data set. All matrix spike blank recoveries were, however, within control limits.

9. Field Duplicates

No field duplicates were included in this data set.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?		X	
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are the surrogate recovery forms present?	X		
Are all the samples listed on the appropriate surrogate recovery form?	X		
Were two or more surrogate recoveries outside of specified limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Matrix Spikes			
Is there a matrix spike recovery form present?		X	
Were matrix spikes analyzed at the required frequency		X	
How many spike recoveries were outside of QC limits? NA out of NA			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits? NA out of NA			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed for each GC/MS system used?	X		
Do any method/reagent/instrument blanks have positive results?		X	
Are there field/rinse/equipment blanks associated with every sample?		X	

Semivolatile Organics Data Validation Checklist - Page 2

	YES	NO	NA
Do any field/rinse blanks have positive results?			X
Tuning and Mass Calibration			
Are the GC/MS tuning forms present for DFTPP?	X		
Are the bar graph spectrum and mass/charge listing provided for each DFTPP?	X		
Has a DFTPP been analyzed for each twelve hours of analysis per instrument?	X		
Have the ion abundance criteria been met for each instrument used?	X		
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Has GPC cleanup been performed on all soil/sediment sample extracts?			X
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?	X		
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	X		
Do the samples and standard relative ion intensities agree within 20%?	X		
Tentatively Identified Compounds			
Are all the TIC summary forms present?		X	
Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present?			X
Are any target compounds listed as TICs?			X

	YES	NO	NA
Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X
Do the TIC and "best match" spectrum agree within 20%?			X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X		
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs within acceptable limits?	X		
Are the average RRF equal to or greater than minimum requirements?	X		
Are there any transcription/calculation errors in reporting the RRF or RSD?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each twelve hours of analysis per instrument?	X		
All %D within acceptable limits?	X		
Are all RF equal to or greater than minimum requirements?	X		
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Internal Standards			
Are internal standard areas of the samples and blanks within the upper and lower limits for each continuing calibration?	X		
Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		

	YES	NO	NA
Field Duplicates			
Were field duplicates submitted with the samples?		X	

Semi-Volatile Qualifier Summary
Holding Time, Surrogates, Internal Standards

Sample ID	Holding Time*	Surrogates*				Internal Standards*					
		NBZ	FBP	TPH	DCB	DCB	NPT	ANT	PHN	CRY	PRY
MW-3S											

Surrogates:
NBZ Nitrobenzene-d5
FBP 2-Fluorobiphenyl
TPH Terphenyl-d14
DCB 1,2-Dichlorobenzene-d4

Internal Standards:
DCB 1,4-Dichlorobenzene-d4
NPT Naphthalene-d8
ANT Acenaphthene-d10
PHN Phenanthrene-d10
CRY Chrysene-d12
PRY Perylene-d12

Qualifiers:
D Diluted
↓ Recovery low
↑ Recovery high

* Unless otherwise specified, all parameters are within acceptable limits.

Semivolatile Calibration Outliers

Instrument: MSE
Level: low

Date/Time	11/12/01		11/14/01 0723							
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
aniline										

Affected Samples:

Corrected Sample Analysis Data Sheets

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-3S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L76429

Matrix: (soil/water) WATER Lab Sample ID: L76429-1

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF111408

Level: (low/med) LOW Date Received: 11/08/01

% Moisture: decanted: (Y/N) N Date Extracted: 11/13/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/14/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	69	

Chain of Custody

Galson Laboratories

6601 Kirkville Road East
E. Syracuse, New York 13057
315 437-7252 • 888-577-5227

Company Name: Blasland, Bouck & Lee

Project Name / Number: Mckesson/26003.190

Turn-Around Time
[X] - Standard Service
[ ] - * Rush Service
Date requested by:
Ph # (315) - 446 2570
Fax # ( ) - -

Page 1 of 1

Send Report to: Margret SKwarnicka
BBL
6723 Towpath Road
E. Syracuse, NY 13214.0066
(315) 446-2570 ext. 517

Send Invoice to: SAME AS
P.O. #

Chain of Custody Record

SAMPLE ID	Date	Time	TYPE: Comp.	Grab	Aqueous	Soil	Other	Laboratory ID Number	PARAMETERS FOR ANALYSIS: Aniline (EPA 8270)	7
MW-35	11/8/01			✓	✓				1	

REMARKS:
* Cat B deliverables for Aniline
* Need MATR. batch QC

Total Containers - 1

SAMPLER'S NAME: Jerry Shi / Katherine Murray SIGNATURE:

SAMPLES RELINQUISHED BY:		SAMPLES RECEIVED BY:	
NAME: SIGNATURE:	DATE: 11/8/01 TIME: 1425	NAME: SIGNATURE:	DATE: TIME:
NAME: SIGNATURE:	DATE: TIME:	Received For Laboratory By: (Signature) M. Krause	DATE: 11/8/01 TIME: 2:25 pm
NAME: SIGNATURE:	DATE: TIME:	Received For Laboratory By: (Signature)	DATE: TIME:

VOC Pres U P AU NA

Custody Seal Intact? ☐ Yes ☐ No ☐ N.A.
Shipment Complete? ☐ Yes ☐ No

Temp 6.9 °C TS TB TM (TG)

Airbill # walk-in

DATA REVIEW FOR

MCKESSON - BEAR STREET SITE

SDG# L75107

VOLATILE AND
SEMIVOLATILE ANALYSES

Analyses performed by:

Galson Laboratories
East Syracuse, New York

Review performed by:

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Blasland, Bouck & Lee, Inc.
Syracuse, New York

Summary

The following is an assessment of the data package for SDG # L75107 for sampling at the McKesson - Bear Street Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analysis Method		
				8260[1]	8015[2,3]	8270[4]
MW-29	L75107-1	water	9/26/01	x	x	x
MW-30[5]	L75107-2	water	9/27/01	x	x	x
DUP-2	L75107-5	water	8/27/01	x	x	x
MW-17R	L75107-6	water	9/27/01	x	x	x
TRIP BLANK (C2)	L75107-7	water	--	x	x	
MW-24SR	L75149-1	water	9/28/01	x	x	x
MW-24DR	L75149-2	water	9/28/01	x	x	x
PZ-5S	L75149-3	water	9/28/01	x	x	x
PZ-5D	L75149-4	water	9/28/01	x	x	x
TRIP BLANK 1	L75149-5	water	--	x	x	

1 compounds include: methylene chloride, acetone, trichloroethene, benzene, toluene, ethylbenzene, and xylenes
2 compounds include: methanol
3 Subcontracted to Columbia Analytical Services, Inc. of Rochester, New York.
4 compounds include: aniline and N,N -dimethylaniline
5 MS/MSD analyses performed on sample

VOLATILE ANALYSES

METHOD 8260

Introduction

Analyses were performed according to USEPA method 8260 as referenced in the NYSDEC ASP.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC test, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The specified holding time for volatile analyses under the Quality Assurance Project Plan (QAPP) is 7 days from sample receipt.

All samples were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance blanks (i.e., method, trip, field, or rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment. Field and rinse blanks measure contamination of samples during field operations.

Methylene chloride was detected in the method and trip blanks. Since no methylene chloride was detected in the samples, no data have been qualified based on the blank content.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies various percent relative standard deviation (%RSD) limits for select compounds and allows two outliers. A technical review of the data applies a RSD limit of 30% to all compounds with no exceptions.

The %RSD were less than 30% and the response factors were greater than 0.05 for all compounds.

4.2 Continuing Calibration

All continuing calibration standards were within 25% difference (%D) of the initial calibration, with the following exceptions:

Instrument MSC 9/28/01 10:10

Acetone 32.7%

Data for acetone has been qualified as estimated in the associated sample MW-30. Since no acetone was detected in the remaining associated samples and since the compound response was increasing, no additional data have been qualified based on the %D.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every experimental run.

All internal standard areas and retention times were within established limits.

7. Compound Identification

Target compounds are identified on the GC/MS by using the analyte's relative retention time and ion spectra.

All identified compounds met the specified criteria.

8. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix and matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method relative to the sample matrix. Matrix spike blank (MSB) data is used to assess the precision and accuracy of the analytical method independent of matrix interferences.

All matrix spike and matrix spike duplicate recoveries and relative percent differences between recoveries were within control limits. All matrix spike blank recoveries were also within control limits.

9. Field Duplicates

Results for duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-30 / DUP-2	acetone	4J	ND	NA
	benzene	2J	1J	66.7%

ND Not detected.
NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The duplicate results are acceptable.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

Data Validation Checklist

Volatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?		X	
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are surrogate recovery forms present?	X		
Are all the samples listed on the appropriate surrogate recovery form?	X		
Was one or more surrogate recoveries outside of specified limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Matrix Spikes			
Is there a matrix spike recovery form present?	X		
Were matrix spikes analyzed at the required frequency?	X		
How many spike recoveries were outside of QC limits? 0 out of 6			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits? 0 out of 3			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed at least once every twelve hours for each system used?	X		
Do any method/reagent/instrument blanks have positive results?	X		
Are there trip/field/rinse/equipment blanks associated with every sample?	X		
Do any trip/field/rinse blanks have positive results?	X		

	YES	NO	NA
Tuning and Mass Calibration			
Are the GC/MS tuning forms present for BFB?	X		
Are the bar graph spectrum and mass/charge listing provided for each BFB?	X		
Has a BFB been analyzed for each twelve hours of analysis per instrument?	X		
Have the ion abundance criteria been met for each instrument used?	X		
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?	X		
Is the RRT of each reported compound within 0.06 RRT units of the continuing calibration standard?	X		
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	X		
Do the samples and standard relative ion intensities agree within 20%?	X		
Tentatively Identified Compounds			
Are all the TIC summary forms present?		X	
Are the mass spectra for the tentatively identified compounds and there associated "best match" spectra present?			X
Are any target compounds listed as TICs?			X
Are all ion present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X

Volatile Organics Data Validation Checklist - Page 3

	YES	NO	NA
Do the TIC and "best match" spectrum agree within 20%?	____	____	X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?	____	X	____
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	X	____	____
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X	____	____
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X	____	____
Are the response factor RSDs within specified limits?	X	____	____
Are the average RRF equal to or greater than minimum requirements?	X	____	____
Are there any transcription/calculation errors in reporting the RRF or RSD?	____	X	____
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X	____	____
Has a continuing calibration standard been analyzed for each twelve hours of analysis per instrument?	X	____	____
All %D within acceptable limits?	____	X	____
Are all RF equal to or greater than minimum requirements?	X	____	____
Are there any transcription/calculation errors in reporting of RF or %D?	____	X	____
Internal Standards			
Are internal standard areas of every sample and blank within the upper and lower limits for each continuing calibration?	X	____	____
Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X	____	____
Field Duplicates			
Were field duplicates submitted with the samples?	X	____	____

Volatile Qualifier Summary
Holding Time, Surrogates, Internal Standards

Sample ID	Holding Time*	Surrogates*			Internal Standards*		
		TOL	BFB	DCE	DFB	DCB	CBZ
MW-29							
MW-30MS							
MW-30MSD							
DUP-2							
MW-17R							
TRIP BLANK (C2)							
MW-24SR							
MW-24DR							
PZ-5S							
PZ-5D							
TRIP BLANK 1							

Surrogates:
TOL Toluene-d8
BFB Bromofluorobenzene
DCE 1,4-Dichloroethane-d4

Internal Standards:
DCB 1,4-Difluorobenzene
DFB 1,4-Dichlorobenzene-d4
CBZ Chlorobenzene-d5

Qualifiers:
↑ Recovery high
↓ Recovery low

* Unless otherwise specified, all parameters are within acceptable limits.

Volatile Calibration Outliers

Instrument: MSC
Matrix: water
Level: low

Date/Time	9/17/01		9/28/01 1010		10/1/01 1012		10/2/01 1115			
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
Methylene chloride										
Acetone				32.7						
Trichloroethene										
Benzene										
Toluene										
Ethylbenzene										
Xylene (total)										

Affected Samples:				
	dup2			
	mw30			

Corrected Sample Analysis Data Sheets

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

DUP-2

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) Water Lab Sample ID: L75107-5

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092809

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/28/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	1	J
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-17R

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) Water Lab Sample ID: L75107-6

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE100110

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 10/01/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	5	J
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-24DR

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) Water Lab Sample ID: L75149-2

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE100113

Level: (low/med) LOW Date Received: 09/28/01

%Moisture: not dec. Date Analyzed: 10/01/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-24SR

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) Water Lab Sample ID: L75149-1

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE100112

Level: (low/med) LOW Date Received: 09/28/01

%Moisture: not dec. Date Analyzed: 10/01/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-29

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) Water Lab Sample ID: L75107-1

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE100107

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 10/01/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-30

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) Water Lab Sample ID: L75107-2

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE092806

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 09/28/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	4	J
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	2	J
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

PZ-5D

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) Water Lab Sample ID: L75149-4

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE100115

Level: (low/med) LOW Date Received: 09/28/01

%Moisture: not dec. Date Analyzed: 10/01/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

PZ-5S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) Water Lab Sample ID: L75149-3

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE100114

Level: (low/med) LOW Date Received: 09/28/01

%Moisture: not dec. Date Analyzed: 10/01/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	7	J
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK (CLR 2)

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) Water Lab Sample ID: L75107-7

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE100111

Level: (low/med) LOW Date Received: 09/27/01

%Moisture: not dec. Date Analyzed: 10/01/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK 1

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) Water Lab Sample ID: L75149-5

Sample wt/vol: 5 (g/mL) mL Lab File ID: CE100209

Level: (low/med) LOW Date Received: 09/28/01

%Moisture: not dec. Date Analyzed: 10/02/01

GC Column: DB-624 ID: .25 (mm) Dilution Factor: 1

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
79-01-6	Trichloroethene	10	U
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (total)	10	U

VOLATILE ANALYSES

METHOD 8015

Introduction

Analyses were performed according to USEPA method 8015 as referenced in the NYSDEC ASP.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC test, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The specified holding time for volatile analyses under the Quality Assurance Project Plan (QAPP) is 7 days from sample receipt. The technical holding time is 14 days from sample collection to analysis.

Samples MW-30 and TRIP BLANK(C2) were analyzed over the specified holding time. All methanol data for the listed samples have been qualified as estimated based on the holding time violation. All other samples were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance blanks (i.e., method, trip, field, or rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment.

No target compounds were detected in the method or trip blanks.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The method specifies a percent relative standard deviation (%RSD) limit of 20% or, alternately, a correlation coefficient of 0.99 or greater.

The initial calibration was acceptable.

3.2 Continuing Calibration

All continuing calibration standards were within 15%D of the initial calibration.

4. Compound Identification

Target compounds are identified by using the analyte's retention time.

All identified compounds fell within the established retention time windows.

5. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix and matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method relative to the sample matrix. Matrix spike blank (MSB) data is used to assess the precision and accuracy of the analytical method independent of matrix interferences.

All matrix spike and matrix spike duplicate recoveries and the relative percent difference between recoveries were within control limits. The matrix spike blank recovery was also within control limits.

6. Field Duplicates

Results for duplicate samples are summarized below:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-30 / DUP-2	methanol	ND	ND	NA

ND Not detected.
NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The duplicate results are acceptable.

7. System Performance and Overall Assessment

Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

Data Validation Checklist

Organic Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?		X	
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?	X		
Matrix Spikes			
Is there a matrix spike recovery form present?	X		
Were matrix spikes analyzed at the required frequency?	X		
How many spike recoveries were outside of QC limits?			
0 out of 2			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
0 out of 1			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed at least once every twelve hours for each system used?	X		
Do any method/reagent/instrument blanks have positive results?		X	
Are there trip/field/rinse/equipment blanks associated with every sample?	X		
Do any trip/field/rinse blanks have positive results?		X	
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		

Organic Data Validation Checklist - Page 2

	YES	NO	NA
Are the chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and chromatograms present for the initial and continuing calibration standards?	X		
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs or correlation coefficients within acceptable limits?	X		
Are there any transcription/calculation errors in reporting the RRF or RSD?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each twelve hours of analysis per instrument?	X		
All %D within acceptable limits?		X	
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Field Duplicates			
Were field duplicates submitted with the samples?	X		

Calibration Outliers

Instrument: V2-Varian 3300
Matrix: water

Date	10/11/01	10/11/01	10/12/01	10/16/01		
Time		1644	0944	1534		
	Initial Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
	RSD	%D	%D	%D	%D	%D
methanol	ok	ok	ok	ok		
Affected Samples:						

Corrected Sample Analysis Data Sheets

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75107
Client Sample ID : MW-29

Date Sampled : 09/27/01 **Order #:** 497385 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108850 **Analytical Run** 70223

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/11/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		101	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75107
Client Sample ID : MW-30

Date Sampled : 09/27/01 **Order #:** 497386 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108850 **Analytical Run** 70232

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/16/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U J	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		100	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75107
Client Sample ID : DUP-2

Date Sampled : 09/27/01 **Order #:** 497387 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108850 **Analytical Run** 70223

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/11/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		99	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75107
Client Sample ID : MW-17R

Date Sampled : 09/27/01 **Order #:** 497388 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108850 **Analytical Run** 70223

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/11/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		81	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75107
Client Sample ID : TRIP BLANK (CLR2)

Date Sampled : 09/27/01 **Order #:** 497389 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108850 **Analytical Run** 70232

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/16/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 Ø U J	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		134	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75107
Client Sample ID : MW-24SR

Date Sampled : 09/28/01 **Order #:** 497390 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108850 **Analytical Run** 70099

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/12/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		114	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75107
Client Sample ID : MW-24DR

Date Sampled : 09/28/01 **Order #:** 497391 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108850 **Analytical Run** 70099

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/12/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		120	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75107
Client Sample ID : PZ-5S

Date Sampled : 09/28/01 **Order #:** 497392 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108850 **Analytical Run** 70099

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/12/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		113	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75107
Client Sample ID : TRIP BLANK 1

Date Sampled : 09/28/01 **Order #:** 497393 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108850 **Analytical Run** 70099

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/12/01			
ANALYTICAL DILUTION: 1.00			
METHANOL	1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS		
ISOPROPYL ETHER	(50 - 150 %)	117	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8015B METHANOL
Reported: 10/22/01

Galson Laboratories
Project Reference: L75107
Client Sample ID : PZ-5D

Date Sampled : 09/28/01 **Order #:** 497394 **Sample Matrix:** WATER
Date Received: 10/02/01 **Submission #:** R2108850 **Analytical Run** 70099

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/12/01				
ANALYTICAL DILUTION: 1.00				
METHANOL		1000	1000 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
ISOPROPYL ETHER	(50 - 150 %)		104	%

SEMIVOLATILE ANALYSES

METHOD 8270

Introduction

Analyses were performed according to USEPA SW-846 Method 8270 as referenced in NYSDEC ASP.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC test, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The specified holding times for semi-volatile analyses under the Quality Assurance Project Plan (QAPP) are 5 days from sample receipt to extraction and 40 days to analysis. The technical holding times are 7 days from sample collection to extraction and 40 days to analysis.

All samples were extracted and analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks (i.e., method, field, or rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

No target compounds were detected in the method blanks.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies various percent relative standard deviation (%RSD) limits for select compounds and allows two outliers. A technical review of the data applies a RSD limit of 30% to all compounds with no exceptions.

The %RSD was less than 30% for all compounds.

4.2 Continuing Calibration

All continuing calibration standards were within 25% difference (%D) of the initial calibration.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every experimental run.

All internal standard areas and retention times were within established limits.

7. Compound Identification

Target compounds are identified on the GC/MS by using the analyte's relative retention time and ion spectra.

All identified compounds met the specified criteria.

8. Matrix Spike/Matrix Spike Duplicate/Matrix Spike Blank

Matrix and matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method relative to the sample matrix. Matrix spike blank (MSB) data is used to assess the precision and accuracy of the analytical method independent of matrix interferences.

All matrix spike and matrix spike duplicate recoveries and relative percent differences between recoveries were within control limits. All matrix spike blank recoveries were also within control limits.

9. Field Duplicates

Results for duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-30 / DUP-2	aniline	8J	10	22.2%
	N,N-dimethylaniline	1J	2J	66.7%

The duplicate results are acceptable.

10. System Performance and Overall Assessment

The laboratory used a reporting limit of 5 µg/l for aniline in this report; however, the lowest calibration standard analyzed was the equivalent of 10 µg/l. Based on the lowest calibration standard analyzed, the reporting limit for aniline has been raised to 10 µg/L for all samples.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?		X	
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are the surrogate recovery forms present?	X		
Are all the samples listed on the appropriate surrogate recovery form?	X		
Were two or more surrogate recoveries outside of specified limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Matrix Spikes			
Is there a matrix spike recovery form present?	X		
Were matrix spikes analyzed at the required frequency	X		
How many spike recoveries were outside of QC limits?			
0 out of 4			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
0 out of 2			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed for each GC/MS system used?	X		
Do any method/reagent/instrument blanks have positive results?		X	
Are there field/rinse/equipment blanks associated with every sample?		X	

Semivolatile Organics Data Validation Checklist - Page 2

	YES	NO	NA
Do any field/rinse blanks have positive results?			X
Tuning and Mass Calibration			
Are the GC/MS tuning forms present for DFTPP?	X		
Are the bar graph spectrum and mass/charge listing provided for each DFTPP?	X		
Has a DFTPP been analyzed for each twelve hours of analysis per instrument?	X		
Have the ion abundance criteria been met for each instrument used?	X		
Target Analytes			
Is an organics analysis data sheet present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Has GPC cleanup been performed on all soil/sediment sample extracts?			X
Are the reconstructed ion chromatograms present for each of the following:			
Samples	X		
Matrix spikes	X		
Blanks	X		
Is the chromatographic performance acceptable?	X		
Are the mass spectra of the identified compounds present?	X		
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	X		
Do the samples and standard relative ion intensities agree within 20%?	X		
Tentatively Identified Compounds			
Are all the TIC summary forms present?		X	
Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present?			X
Are any target compounds listed as TICs?			X

Semivolatile Organics Data Validation Checklist - Page 3

	YES	NO	NA
Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?			X
Do the TIC and "best match" spectrum agree within 20%?			X
Quantitation and Detection Limits			
Are there any transcription/calculation errors in the Form 1 results?		X	
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	X		
Standard Data			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	X		
Initial Calibration			
Are the initial calibration forms present for each instrument used?	X		
Are the response factor RSDs within acceptable limits?	X		
Are the average RRF equal to or greater than minimum requirements?	X		
Are there any transcription/calculation errors in reporting the RRF or RSD?		X	
Continuing Calibration			
Are the continuing calibration forms present for each day and each instrument?	X		
Has a continuing calibration standard been analyzed for each twelve hours of analysis per instrument?	X		
All %D within acceptable limits?	X		
Are all RF equal to or greater than minimum requirements?	X		
Are there any transcription/calculation errors in reporting of RF or %D?		X	
Internal Standards			
Are internal standard areas of the samples and blanks within the upper and lower limits for each continuing calibration?	X		
Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	X		

	YES	NO	NA
Field Duplicates			
Were field duplicates submitted with the samples?	X		

Semi-Volatile Qualifier Summary
Holding Time, Surrogates, Internal Standards

Sample ID	Holding Time*	Surrogates*				Internal Standards*					
		NBZ	FBP	TPH	DCB	DCB	NPT	ANT	PHN	CRY	PRY
MW-29											
MW-30											
MW-30MS											
MW-30MSD											
DUP-2											
MW-17R											
MW-24SR											
MW-24DR											
PZ-5S											
PZ-5D											

Surrogates:
NBZ Nitrobenzene-d5
FBP 2-Fluorobiphenyl
TPH Terphenyl-d14
DCB 1,2-Dichlorobenzene-d4

Internal Standards:
DCB 1,4-Dichlorobenzene-d4
NPT Naphthalene-d8
ANT Acenaphthene-d10
PHN Phenanthrene-d10
CRY Chrysene-d12
PRY Perylene-d12

Qualifiers:
D Diluted
↓ Recovery low
↑ Recovery high

* Unless otherwise specified, all parameters are within acceptable limits.

vlj2646

Corrected Sample Analysis Data Sheets

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

DUP-2

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) WATER Lab Sample ID: L75107-5

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100309

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10	
121-69-7	N,N-Dimethylaniline	2	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-17R

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) WATER Lab Sample ID: L75107-6

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100310

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10	U
121-69-7	N,N-Dimethylaniline	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-24DR

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) WATER Lab Sample ID: L75149-2

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100406

Level: (low/med) LOW Date Received: 09/28/01

% Moisture: decanted: (Y/N) N Date Extracted:10/03/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/04/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10	U
121-69-7	N,N-Dimethylaniline	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-24SR

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) WATER Lab Sample ID: L75149-1

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100405

Level: (low/med) LOW Date Received: 09/28/01

% Moisture: decanted: (Y/N) N Date Extracted:10/03/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/04/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10 B	U
121-69-7	N,N-Dimethylaniline	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-29

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) WATER Lab Sample ID: L75107-1

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100305

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	7	J
121-69-7	N,N-Dimethylaniline	2	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-30

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) WATER Lab Sample ID: L75107-2

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100306

Level: (low/med) LOW Date Received: 09/27/01

% Moisture: decanted: (Y/N) N Date Extracted:10/02/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/03/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	8	U
121-69-7	N,N-Dimethylaniline	1	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

PZ-5D

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) WATER Lab Sample ID: L75149-4

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100408

Level: (low/med) LOW Date Received: 09/28/01

% Moisture: decanted: (Y/N) N Date Extracted:10/03/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/04/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10	U
121-69-7	N,N-Dimethylaniline	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

PZ-5S

Lab Name: GALSON LABORATORIES Contract: Blasland, B

Lab Code: Case No.: 1 SAS No.: SDG No.: L75107

Matrix: (soil/water) WATER Lab Sample ID: L75149-3

Sample wt/vol: 1050 (g/mL) mL Lab File ID: EF100407

Level: (low/med) LOW Date Received: 09/28/01

% Moisture: decanted: (Y/N) N Date Extracted:10/03/01

Concentrated Extract Volume:1000 (uL) Date Analyzed: 10/04/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
62-53-3	Aniline	10	U
121-69-7	N,N-Dimethylaniline	10	U

Chain of Custody

Laboratories
6601 Kirkville Road East
E. Syracuse, New York 13057
315 437-7252 • 888-577-5227

BBL

Project Name / Number: McKesson 26003.190

☒ - Standard Service
☐ - * Rush Service
Date requested by: _____
Ph # (315) -446- 2570 ext 517
Fax # (315) -449-

Send Report to: Margaret Swanicka BBL
Send Invoice to: Same
P.O. # _____

Page 1 of _____

Chain of Custody Record

SAMPLE ID	Date	Time	TYPE: Comp.	TYPE: Grab	Aqueous	Soil	Other	Laboratory ID Number	PARAMETERS FOR ANALYSIS: VOCs EPA 8260	SVOCs EPA 8270	Alcohols EPA 8015	Nitrates	Total Fe/Mn	Dissolved Fe/Mn	Sulfate	Sulfide			
MW-34	09/26/01	955		✓	✓				2	1	2	1	1	1	1	1			10
MW-35	" "	1110		✓	✓				2	1	2	1	1	1	1	1			10
MW-36	" "	1220		✓	✓				2	1	2	1	1	1	1	1			10
MW-8S		1400		✓	✓				2	1	2	1	1	1	1	1			10
MW-27		1600		✓	✓				2	1	2	1	1	1	1	1			10
MW-28		1725		✓	✓				2	1	2	1	1	1	1	1			10
MW-29	" "			✓	✓				2	1	2	1	1	1	1	1			10
MW-30	09/27/01	850		✓	✓				2	1	2	1	1	1	1	1			10
MW-30MS	" "	" "		✓	✓				2	1	2								5
MW-30MSD	" "	" "		✓	✓				2	1	2								5
DUP-2	" "	950		✓	✓				2	1	2								5
MW-17R	" "			✓	✓				2	1	2								5

3 coolers
L75106
L75107

REMARKS:
* Category B deliverables for VOCs, SVOCs, Alcohols
* Results only for Nitrates, Total + Dissolved Fe/Mn, Sulfate, Sulphides
* Dissolved Fe/Mn field filtered

Total Containers: 112

SAMPLER'S NAME: Karl Reimer / Roger Elliott SIGNATURE: Karl Reimer

SAMPLES RELINQUISHED BY:		SAMPLES RECEIVED BY:	
NAME: Karl Reimer	DATE: 09/27/01	NAME:	DATE:
SIGNATURE: Karl Reimer	TIME: 2000	SIGNATURE:	TIME:
NAME: Carla Tabaczyk	DATE: 9/27/01	Received For Laboratory By: (Signature) Carla Tabaczyk	DATE: 9/27/01
SIGNATURE: Carla Tabaczyk	TIME: 20:00		TIME: 20:00
NAME:	DATE:	Received For Laboratory By: (Signature)	DATE:
SIGNATURE:	TIME:		TIME:

VOC Pres U P AU NA

Custody Seal Intact? ☐ Yes ☐ No ☐ N.A.
Shipment Complete? ☐ Yes ☐ No

Cooler #1 Temp 3.0 °C TS TB TM TO

Airbill # WALK-IN

Galson Laboratories
6601 Kirkville Road East
E. Syracuse, New York 13057
315 437-7252 • 888-577-5227

Company Name: BBL

Project Name / Number: McKesson 26003.190

Turn-Around Time
- [x] Standard Service
- [ ] * Rush Service

Date requested by:
Ph # (315)-446-2570 x1r 517
Fax # (315)-449-4111

Send Report to: Margaret Swarnicka, BBL, Syracuse

Send Invoice to: SAME

P.O. #

Chain of Custody Record

SAMPLE ID	Date	Time	Comp.	Grab	Aqueous	Soil	Other	Laboratory ID Number	EPA 8260 VOCs	EPA 8270 SVOCs	EPA 8015 Alcohols
MW-18	09/24/01	1235		✓	✓				1	2	1
MW-19	" "	1355		✓	✓				1	2	1
MW-23S	" "	1605		✓	✓				1	2	1
MW-22I	" "	1630		✓	✓				1	2	1
MW-25S	" "			✓	✓				1	2	1
TRIP Blank (cooler 1)									1		1
TRIP BLANK (cooler 2)									1		1
TRIP BLANK (cooler 3)									1		1

L75106 / 75107 / 75108 (3)

REMARKS: * Category B deliverables for VOCs, SVOCs and Alcohols!
Time written on label for MW-22I says 1530, should be 1630

Total Containers -

SAMPLER'S NAME: Karl Reimer / Roger Elliott SIGNATURE: Karl Reimer

SAMPLES RELINQUISHED BY:	SAMPLES RECEIVED BY:
NAME: KARL REIMER DATE: 09/27/01 SIGNATURE: Karl Reimer TIME: 2000	NAME: DATE: SIGNATURE: TIME:
NAME: Cara Tabaczyk DATE: 9/27/01 SIGNATURE: Cara Tabaczyk TIME: 20:00	Received For Laboratory By: (Signature) Cara Tabaczyk DATE: 9/27/01 TIME: 20:00
NAME: DATE: SIGNATURE: TIME:	Received For Laboratory By: (Signature) DATE: TIME:

VOC Pres U P AU NA

Custody Seal Intact? ☐ Yes ☐ No ☐ N.A.
Shipment Complete? ☐ Yes ☐ No

Cooler #2 Temp 4.0 °C TS TB TM (TR) Primed ice

Airbill # walk-IN

Gaison Laboratories

6601 Kirkville Road East
E. Syracuse, New York 13057
315 437-7252 • 888-577-5227

BBL

Project Name / Number: McKesson 26003.190

☑ - Standard Service
☐ - * Rush Service

Date requested by:

Ph # (315) -446- 2570

Fax # (315) -449- 4111

Page 1 of 1

Send Report to: Margaret Swarnicka
BBL Syracuse

Send Invoice to: SAME

P.O. #

Chain of Custody Record

SAMPLE ID	Date	Time	TYPE: Comp.	Grab	Aqueous	Soil	Other	Laboratory ID Number	PARAMETERS FOR ANALYSIS: EPA 8260 VOCs	EPA 8270 SVOCs	EPA 8015 Alcohols
MW 24SR	9/28/01	1008		✓	✓				2	1	2
MW 24DR	" "	950		✓	✓				2	1	2
PZ 5S	" "	1155		✓	✓				2	1	2
PZ 5D	" "	1200		✓	✓				2	1	2
TRIP BLANK 1	" "	150							1		1

REMARKS:
* Category B deliverables for VOCs, SVOCs and alcohols
* all samples preserved on ice

Total Containers: 22

SAMPLER'S NAME: KARL REIMER SIGNATURE:

SAMPLES RELINQUISHED BY:		SAMPLES RECEIVED BY:	
NAME: Jan for Sam Gist	DATE: 9/28/01
SIGNATURE:	TIME: 1500	NAME: SIGNATURE:	DATE: TIME:
NAME: SIGNATURE:	DATE: TIME:	Received For Laboratory By: (Signature)	DATE: TIME:
NAME: SIGNATURE:	DATE: TIME:	Received For Laboratory By: (Signature) M. Brang	DATE: 9/28/01 TIME: 1520

VOC Pres U P AU NA

Custody Seal Intact? ☐ Yes ☐ No ☐ N.A.
Shipment Complete? ☐ Yes ☐ No

Temp 3.6 °C TS TB TM

Airbill # walk-in

1.1

5555