DATA REVIEW FOR

MCKESSON - BEAR STREET SITE

SDG# Z788

VOLATILE AND
SEMIVOLATILE ANALYSES

Analyses performed by:

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Review performed by:

BBL
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Summary

The following is an assessment of the data package for SDG# Z788 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	Analyses Requested		
				VOC 1	Misc 2	SVOC 3
MW-34	639855	water	6/06/05	x	x	x
TW-02RR	639856	water	6/06/05	x	x	x
Trip Blank	639857	water	6/06/05	x		

1 VOC analyses include methylene chloride, acetone, trichloroethene, benzene, toluene, ethylbenzene and xylene
2 Miscellaneous analyses include methanol
3 SVOC analyses include aniline and N,N'-dimethylaniline

VOLATILE ANALYSES

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, the technical holding time is 14 days.

All samples were analyzed within the technical 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.

No target compounds were detected in the method or trip 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 above the control for acetone. Data for acetone were qualified as estimate based on the deviations.

4.2 Continuing Calibration

All continuing calibration standards were within 25% difference (%D) of the initial calibration with the exception of acetone. Data for acetone were qualified as estimated based on the deviation.

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 MS/MSD recoveries and relative percent differences between recoveries were within control limits. All MSB recoveries were also within control limits.

9. Field Duplicates

No field duplicates were included with the samples 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

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 10			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits? 0 out of 5			
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	FBZ	DCB	CBZ
MW-34							
TW-02RR							
Trip Blank							

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

Internal Standards:
DCB 1,4-Dichlorobenzene-d4
FBZ Fluorobenzene
CBZ Chlorobenzene-d5

Qualifiers:
↑ Recovery high
↓ Recovery low

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

Volatile Calibration Outliers

Instrument: VOAMS3
Matrix: water
Level: low

Date/time										
	Initial Cal									
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
Methylene chloride										
Acetone		42.2		28.0						
Trichloroethene										
Benzene										
Toluene										
Ethylbenzene										
m,p-xylene										
o-xylene										
Affected Samples:	All		All							

SEMIVOLATILE ANALYSES

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.

The MS/MSD recoveries and the relative percent difference between recoveries were within control limits. The MSB recoveries were also within control limits.

9. Field Duplicates

No field duplicates were included with the samples 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? 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 GCP 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		

Semivolatile Organics Data Validation Checklist - Page 4

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

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

Sample	Holding Time	Surrogates			Internal Standards					
		NBZ	FBP	TPH	DCB	NPT	ANT	PHN	CRY	PRY
MW-34										
TW-02RR										

Surrogates:
NBZ Nitrobenzene-d5
FBP 2-Fluorobiphenyl
TPH Terphenyl-d14

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
↓↓ Recovery below 10%

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

Semivolatile Calibration Outliers

Instrument: BNAMS3
Level: low

Analyte	Cal Date		Cal Date		Cal Date		Cal Date		Cal Date	
	Cont Cal		Cont Cal		Cont Cal		Cont Cal		Cont Cal	
	RF	%D	RF	%D	RF	%D	RF	%D	RF	%D
aniline										
n,n'-dimethylaniline										

Affected Samples:					

SUPPLEMENTAL PARAMETERS

Introduction

Analyses were performed according to USEPA method 8015 for Methanol 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.

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.

No target compounds were detected in the method blank.

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.

No target compounds were identified in the samples.

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.

All MS/MSD recoveries and the relative percent difference between recoveries were within control limits.

6. Field Duplicates

No field duplicates were included with the samples in this data set.

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	

Corrected Sample Analysis Data Sheets

Client ID: **MW-34**
Site: McKesson-Bear

Lab Sample No: **639855**
Lab Job No: Z788

Date Sampled: 06/06/05
Date Received: 06/07/05
Date Analyzed: 06/13/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04360.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	5.6 J	5.0
Trichloroethene	0.4J	1.0
Benzene	0.7J	1.0
Toluene	0.9J	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	1.2J	5.0

Client ID: **TW-02RR**
Site: McKesson-Bear

Lab Sample No: **639856**
Lab Job No: Z788

Date Sampled: 06/06/05
Date Received: 06/07/05
Date Analyzed: 06/14/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04361.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	7.2 J	5.0
Trichloroethene	0.3J	1.0
Benzene	3.6	1.0
Toluene	2.1J	5.0
Ethylbenzene	3.6J	4.0
Xylene (Total)	9.6	5.0

Client ID: **Trip-Blank**
Site: McKesson-Bear

Lab Sample No: **639857**
Lab Job No: Z788

Date Sampled: 06/06/05
Date Received: 06/07/05
Date Analyzed: 06/14/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04362.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methylene Chloride	ND	3.0
Acetone	ND J	5.0
Trichloroethene	ND	1.0
Benzene	ND	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: **MW-34**
Site: McKesson-Bear

Lab Sample No: **639855**
Lab Job No: Z788

Date Sampled: 06/06/05
Date Received: 06/07/05
Date Extracted: 06/08/05
Date Analyzed: 06/17/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20439.d

Matrix: WATER
Level: LOW
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	16	1.0
N,N-Dimethylaniline	2.5	1.0

Client ID: TW-02RR
Site: McKesson-Bear

Lab Sample No: 639856
Lab Job No: Z788

Date Sampled: 06/06/05
Date Received: 06/07/05
Date Extracted: 06/08/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20492.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 50.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aniline	8400	50
N,N-Dimethylaniline	ND	50

Client ID: **MW-34**
Site: McKesson-Bear

Lab Sample No: **639855**
Lab Job No: Z788

Date Sampled: 06/06/05
Date Received: 06/07/05
Date Analyzed: 06/09/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6710.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	1000

Client ID: **TW-02RR**
Site: McKesson-Bear

Lab Sample No: **639856**
Lab Job No: Z788

Date Sampled: 06/06/05
Date Received: 06/07/05
Date Analyzed: 06/09/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6711.d

Matrix: WATER
Level: LOW
Injection Volume: 1.0 ul
Final Volume: 0.0 mL
Dilution Factor: 1.0

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methanol	ND	1000

Chain of Custody

Z788

STL Edison

40

S EDISON

777 ...ew Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

PAGE 1 OF 1

Name (for report and invoice): Christie Sobol	Samplers Name (Printed): Joseph Lis	Site/Project Identification: Mckesson- Bear St
Company: Blasland, Bouck & Lee	P.O. #: 260.03.190	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 6723 Towpath Road	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: Syracuse State: NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 315-446-2570 x325 Fax: 315-446-8053		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 2788

Sample Identification	Date	Time	Matrix	No. of Cont.	VOCs	SVOCs	Alcohols	Sample Numbers
MW-34	6/6/05	1525	W	7	X	X	X	639855
TW-02RR	6/6/05	17:30	W	7	X	X	X	639856
Trip Blank	6/6/05	—	W	2	X		X	639857
				6				

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other _____, 7 = Other _____

Soil:			
Water:	2	1	1

Special Instructions _____ Water Metals Filtered (Yes/No)? _____

	Relinquished by	Company	Date / Time	Received by	Company
1)	Sorakimek	BBL	6-6-05 18:10	R. English	STL
2)	R. English	STL, Seal 10357	06/06/05 18:45		
3)	Fed Ex	—	6/7/05 10:30		STL Edison AC
4)					

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

STL-6003