

DATA REVIEW FOR
MCKESSON - BEAR STREET SITE

SDG# A019

VOLATILE AND
SEMIVOLATILE ANALYSES

Analyses performed by:

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Review performed by:



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Summary

The following is an assessment of the data package for SDG# A019 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:

[illegible]

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, 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. 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.

All compounds associated with the initial calibration exhibited a %RSDs within control limit with the exception of acetone. Data for acetone were qualified as estimated based on the deviation.

4.2 Continuing Calibration

All compounds associated with the continuing calibration standards exhibited a percent difference (%D) less than the control limit with the exception of acetone. Data associated with acetone were qualified as estimated in sample MW-25S, MW-23S, MW-18, MW-23I, MW-25D, PZ-5S, MW-24DR, PZ-5D, MW-24SR and Trip Blank.

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.

No target compounds were identified in the samples.

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
<u>Data Completeness and Deliverables</u>			
Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are surrogate recovery forms present?	<u> X </u>	<u> </u>	<u> </u>
Are all the samples listed on the appropriate surrogate recovery form?	<u> X </u>	<u> </u>	<u> </u>
Was one or more surrogate recoveries outside of specified limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> </u>	<u> X </u>
<u>Matrix Spikes</u>			
Is there a matrix spike recovery form present?	<u> X </u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency?	<u> X </u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?	<u> 0 </u> out of <u> 10 </u>		
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?	<u> 0 </u> out of <u> 5 </u>		
<u>Blanks</u>			
Is the method blank summary form present?	<u> X </u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Has a blank been analyzed at least once every twelve hours for each system used?	<u> X </u>	<u> </u>	<u> </u>
Do any method/reagent/instrument blanks have positive results?	<u> </u>	<u> X </u>	<u> </u>
Are there trip/field/rinse/equipment blanks associated with every sample?	<u> X </u>	<u> </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> </u>	<u> X </u>	<u> </u>
<u>Tuning and Mass Calibration</u>			
Are the GC/MS tuning forms present for BFB?	<u> X </u>	<u> </u>	<u> </u>

	YES	NO	NA
Are the bar graph spectrum and mass/charge listing provided for each BFB?	<u>X</u>	<u> </u>	<u> </u>
Has a BFB been analyzed for each twelve hours of analysis per instrument?	<u>X</u>	<u> </u>	<u> </u>
Have the ion abundance criteria been met for each instrument used?	<u>X</u>	<u> </u>	<u> </u>
<u>Target Analytes</u>			
Is an organics analysis data sheet present for each of the following:			
Samples	<u>X</u>	<u> </u>	<u> </u>
Matrix spikes	<u>X</u>	<u> </u>	<u> </u>
Blanks	<u>X</u>	<u> </u>	<u> </u>
Are the reconstructed ion chromatograms present for each of the following:			
Samples	<u>X</u>	<u> </u>	<u> </u>
Matrix spikes	<u>X</u>	<u> </u>	<u> </u>
Blanks	<u>X</u>	<u> </u>	<u> </u>
Is the chromatographic performance acceptable?	<u>X</u>	<u> </u>	<u> </u>
Are the mass spectra of the identified compounds present?	<u> </u>	<u> </u>	<u>X</u>
Is the RRT of each reported compound within 0.06 RRT units of the continuing calibration standard?	<u>X</u>	<u> </u>	<u> </u>
Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum?	<u>X</u>	<u> </u>	<u> </u>
Do the samples and standard relative ion intensities agree within 20%?	<u>X</u>	<u> </u>	<u> </u>
<u>Tentatively Identified Compounds</u>			
Are all the TIC summary forms present?	<u> </u>	<u>X</u>	<u> </u>
Are the mass spectra for the tentatively identified compounds and there associated "best match" spectra present?	<u> </u>	<u> </u>	<u>X</u>
Are any target compounds listed as TICs?	<u> </u>	<u> </u>	<u>X</u>
Are all ion present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	<u> </u>	<u> </u>	<u>X</u>
Do the TIC and "best match" spectrum agree within 20%?	<u> </u>	<u> </u>	<u>X</u>
<u>Quantitation and Detection Limits</u>			
Are there any transcription/calculation errors in the Form 1 results?	<u> </u>	<u>X</u>	<u> </u>
Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture?	<u> </u>	<u> </u>	<u>X</u>
<u>Standard Data</u>			
Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards?	<u>X</u>	<u> </u>	<u> </u>
<u>Initial Calibration</u>			
Are the initial calibration forms present for each instrument used?	<u>X</u>	<u> </u>	<u> </u>

	YES	NO	NA
Are the response factor RSDs within specified limits?	<u> </u>	<u> X </u>	<u> </u>
Are the average RRF equal to or greater than minimum requirements?	<u> X </u>	<u> </u>	<u> </u>
Are there any transcription/calculation errors in reporting the RRF or RSD?	<u> </u>	<u> X </u>	<u> </u>
<u>Continuing Calibration</u>			
Are the continuing calibration forms present for each day and each instrument?	<u> X </u>	<u> </u>	<u> </u>
Has a continuing calibration standard been analyzed for each twelve hours of analysis per instrument?	<u> X </u>	<u> </u>	<u> </u>
All %D within acceptable limits?	<u> X </u>	<u> </u>	<u> </u>
Are all RF equal to or greater than minimum requirements?	<u> X </u>	<u> </u>	<u> </u>
Are there any transcription/calculation errors in reporting of RF or %D?	<u> </u>	<u> X </u>	<u> </u>
<u>Internal Standards</u>			
Are internal standard areas of every sample and blank within the upper and lower limits for each continuing calibration?	<u> X </u>	<u> </u>	<u> </u>
Are the retention times of the internal standards within 30 seconds of the associated calibration standard?	<u> X </u>	<u> </u>	<u> </u>
<u>Field Duplicates</u>			
Were field duplicates submitted with the samples?	<u> </u>	<u> X </u>	<u> </u>

Volatile Qualifier Summary **Holding Time, Surrogates, Internal Standards**

[illegible]

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	5/23/05		5/24/05 22:00		6/1/05 13:00					
	Initial Cal		MW-18 Cal		20/1/05 Cal		2/1/05 Cal		Cal 1/05	
	REF	%D	REF	%D	REF	%D	REF	%D	REF	%D
Methylene chloride										
Acetone		42.2		30.1						
Trichloroethene										
Benzene										
Toluene										
Ethylbenzene										
m,p-xylene										
o-xylene										
Affected Samples:	All		MW-25S							
			MW-23S							
			MW-18							
			MW-23I							
			MW-25D							
			PZ-5S							
			MW-24DR							
			MW-24SR							
			Trip Blank							

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 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. 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.

All compounds associated with the initial calibration exhibited a %RSDs within control limit.

4.2 Continuing Calibration

All compounds associated with the continuing calibration standards exhibited a percent difference (%D) less than the control limit.

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 compound's relative retention time and ion spectra.

No target compounds were identified in the samples.

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
<u>Data Completeness and Deliverables</u>			
Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
Is there a narrative or cover letter present?	<u> X </u>	<u> </u>	<u> </u>
Are the sample numbers included in the narrative?	<u> X </u>	<u> </u>	<u> </u>
Are the sample chain-of-custodies present?	<u> X </u>	<u> </u>	<u> </u>
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?	<u> </u>	<u> X </u>	<u> </u>
<u>Holding Times</u>			
Have any holding times been exceeded?	<u> </u>	<u> X </u>	<u> </u>
<u>Surrogate Recovery</u>			
Are the surrogate recovery forms present?	<u> X </u>	<u> </u>	<u> </u>
Are all the samples listed on the appropriate surrogate recovery form?	<u> X </u>	<u> </u>	<u> </u>
Were two or more surrogate recoveries outside of specified limits for any sample or blank?	<u> </u>	<u> X </u>	<u> </u>
If yes, were the samples reanalyzed?	<u> </u>	<u> </u>	<u> X </u>
<u>Matrix Spikes</u>			
Is there a matrix spike recovery form present?	<u> X </u>	<u> </u>	<u> </u>
Were matrix spikes analyzed at the required frequency	<u> X </u>	<u> </u>	<u> </u>
How many spike recoveries were outside of QC limits?			
<u> 0 </u> out of <u> 4 </u>			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
<u> 0 </u> out of <u> 2 </u>			
<u>Blanks</u>			
Is the method blank summary form present?	<u> X </u>	<u> </u>	<u> </u>
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	<u> X </u>	<u> </u>	<u> </u>
Has a blank been analyzed for each GC/MS system used?	<u> X </u>	<u> </u>	<u> </u>
Do any method/reagent/instrument blanks have positive results?	<u> </u>	<u> X </u>	<u> </u>
Are there field/rinse/equipment blanks associated with every sample?	<u> </u>	<u> X </u>	<u> </u>

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

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

Semi-Volatile Qualifier Summary

Holding Time, Surrogates, Internal Standards

[illegible]

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
I	Recovery low
I	Recovery high
II	Recovery below 10%

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

Semivolatile Calibration Outliers

Instrument: BNAMS3
Level: low

Sample Name	Standard		Sample		Calibration		Control		Control		Control	
	Initial Cal		Control Cal		Control Cal		Control Cal		Control Cal		Control Cal	
	REF	%RSD	REF	%D	REF	%D	REF	%D	REF	%D	REF	%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, 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
<u>Data Completeness and Deliverables</u>			
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	_____
<u>Holding Times</u>			
Have any holding times been exceeded?	_____	X	_____
<u>Matrix Spikes</u>			
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?			
<u>0</u> out of <u>2</u>			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
<u>0</u> out of <u>1</u>			
<u>Blanks</u>			
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
<u>Target Analytes</u>			
Is an organics analysis data sheet present for each of the following:			
Samples	X	_____	_____
Matrix spikes	X	_____	_____
Blanks	X	_____	_____

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

Corrected Sample Analysis Data Sheets

Client ID: MW-25S
Site: Mckesson-Bear St

Lab Sample No: 640849
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04460.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u>
		<u>Limit</u> <u>Units: ug/l</u>
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-23S
Site: Mckesson-Bear St

Lab Sample No: 640850
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04461.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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-18
Site: Mckesson-Bear St

Lab Sample No: 640851
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04462.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u>
		<u>Limit</u> <u>Units: ug/l</u>
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-23I
Site: Mckesson-Bear St

Lab Sample No: 640852
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04463.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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-25D
Site: Mckesson-Bear St

Lab Sample No: 640853
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04464.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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: PZ-5S
Site: Mckesson-Bear St

Lab Sample No: 640854
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04465.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
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-24DR
Site: Mckesson-Bear St

Lab Sample No: 640855
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04466.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	ND	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: PZ-5D
Site: Mckesson-Bear St

Lab Sample No: 640856
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04467.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u>
		<u>Limit</u> <u>Units: ug/l</u>
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-24SR
Site: Mckesson-Bear St

Lab Sample No: 640857
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04468.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Quantitation
		Limit <u>Units: ug/l</u>
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: trip-blank
Site: Mckesson-Bear St

Lab Sample No: 640858
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04469.d

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

VOLATILE ORGANICS - GC/MS
METHOD 8260B

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Methylene Chloride	ND	3.0
Acetone	ND 5	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-25S
Site: Mckesson-Bear St

Lab Sample No: 640849
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Extracted: 06/12/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20483.d

Matrix: WATER
Level: LOW
Sample Volume: 920 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	1.1
N,N-Dimethylaniline	ND	1.1

Client ID: MW-23S
Site: Mckesson-Bear St

Lab Sample No: 640850
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Extracted: 06/12/05
Date Analyzed: 06/18/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20478.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: MW-18
Site: Mckesson-Bear St

Lab Sample No: 640851
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Extracted: 06/12/05
Date Analyzed: 06/18/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20479.d

Matrix: WATER
Level: LOW
Sample Volume: 980 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: MW-23I
Site: Mckesson-Bear St

Lab Sample No: 640852
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Extracted: 06/12/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20484.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: MW-25D
Site: Mckesson-Bear St

Lab Sample No: 640853
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Extracted: 06/12/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20485.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: PZ-5S
Site: Mckesson-Bear St

Lab Sample No: 640854
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Extracted: 06/12/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20486.d

Matrix: WATER
Level: LOW
Sample Volume: 920 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	1.1
N,N-Dimethylaniline	ND	1.1

Client ID: MW-24DR
Site: Mckesson-Bear St

Lab Sample No: 640855
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Extracted: 06/12/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20487.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

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: PZ-5D
Site: Mckesson-Bear St

Lab Sample No: 640856
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Extracted: 06/12/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20488.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: MW-24SR
Site: Mckesson-Bear St

Lab Sample No: 640857
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Extracted: 06/12/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20489.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

<u>Parameter</u>	<u>Analytical Result</u> <u>Units: ug/l</u>	<u>Quantitation</u> <u>Limit</u> <u>Units: ug/l</u>
Aniline	ND	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: MW-25S
Site: Mckesson-Bear St

Lab Sample No: 640849
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/10/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6718.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-235
Site: Mckesson-Bear St

Lab Sample No: 640850
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/10/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6719.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-18
Site: Mckesson-Bear St

Lab Sample No: 640851
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/10/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6720.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-23I
Site: Mckesson-Bear St

Lab Sample No: 640852
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/10/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6721.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-25D
Site: Mckesson-Bear St

Lab Sample No: 640853
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/10/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6722.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: PZ-5S
Site: Mckesson-Bear St

Lab Sample No: 640854
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/10/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6723.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-24DR
Site: Mckesson-Bear St

Lab Sample No: 640855
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/10/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6724.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: PZ-5D
Site: Mckesson-Bear St

Lab Sample No: 640856
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/10/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6725.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: MW-24SR
Site: Mckesson-Bear St

Lab Sample No: 640857
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/10/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6727.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Client ID: trip-blank
Site: Mckesson-Bear St

Lab Sample No: 640858
Lab Job No: A019

Date Sampled: 06/08/05
Date Received: 06/09/05
Date Analyzed: 06/10/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6728.d

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

NONHALOGENATED ORGANICS - GC/FID
ALCOHOLS

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

Chain of Custody

STL EDISON

777 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 Lisi		Site/Project Identification McCrossin - Bear St	
Company Basland Bark & Lee		P.O. # 26003190		State (Location of site): NJ: <input type="checkbox"/> NY: <input checked="" type="checkbox"/> Other: <input type="checkbox"/>	
Address 6723 Taupath Rd		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>		ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)	
City Syracuse		State NY		LAB USE ONLY Project No: Job No: A019	
Phone 315-4462570		Fax 446-8053		Sample Numbers	
Sample Identification	Date	Time	Matrix	No. of Cont.	
MW-25S	6-8-05	9:05	W	7	X X X
MW-23S		11:00		7	X X X
MW-18		12:05		7	X X X
MW-23T		10:50		7	X X X
MW-25D		9:00		7	X X X
PZ-5S		15:15		7	X X X
MW-24DR		16:15		7	X X X
PZ-5D	✓	14:35	✓	7	X X X
MW-248R	✓	16:30	✓	7	X X X
trip blank	✓	-	✓	4	X X
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH 6 = Other _____, 7 = Other _____					
Soil: _____ Water: 2 1 1					

Special Instructions **2 COULERS**

Water Metals Filtered (Yes/No)?

Relinquished by 1) Brenda Lisi	Company BBL	Date / Time 6/8/05 1210	Received by 1) Brenda Lisi	Company STL Syracuse
Relinquished by 2) Brenda Lisi	Company STL Syracuse	Date / Time 6/8/05 1830	Received by 2) Fed EX	Company
Relinquished by 3) Fed EX	Company	Date / Time 6/9/05 11030	Received by 3) John Murs	Company STL Edison A.C.
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

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

STL-6003

A019

STL Edison

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