

DATA REVIEW FOR
MCKESSON - BEAR STREET SITE

SDG# A103

VOLATILE AND
SEMIVOLATILE ANALYSES

Analyses performed by:

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Summary

The following is an assessment of the data package for SDG# A103 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.

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

Results for duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-27 / DUP-1	acetone	31	35	12.1%
	benzene	6.1	6.6	7.8%
	toluene	15	16	6.4%
	ethylbenzene	5.8	6.4	9.8%
	xylene (total)	15	17	12.5%
MW-28 / DUP-2	acetone	5.2	4.3J	18.9%
	benzene	4.5	4.5	0.0%
	toluene	1.2J	1.2J	AC
	ethylbenzene	4.6	4.4	4.4%
	xylene (total)	3.9J	3.8J	AC

ND not detected.

AC The field duplicate relative percent difference (RPD) is acceptable when the RPD between parent sample and field duplicate sample is less than one times the reporting limit (RL) and where the parent sample and/or duplicate concentration is less than five times RL.

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
<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> 20 </u>			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
<u> 0 </u> out of <u> 10 </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>X</u>	<u> </u>	<u> </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> X </u>	<u> </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	5/13/16		5/17/05/09		5/17/09/2		5/18/09/3		5/18/09/4	
	Initial		Cal. Cal.		Cal.		Cal. Cal.		Cal. Cal.	
	RF	%SD	RF	%SD	RF	%SD	RF	%SD	RF	%SD
Methylene chloride										
Acetone		42.2								
Trichloroethene										
Benzene										
Toluene										
Ethylbenzene										
m,p-xylene										
o-xylene										
Affected Samples:	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.

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.

Surrogates were diluted in sample DUP-1. No data were qualified based on the 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 compound'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

Results for duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-27 / DUP-1	aniline	5200	6800	26.6%
MW-28 / DUP-2	aniline	630	650	3.1%

ND not detected.

AC The field duplicate relative percent difference (RPD) is acceptable when the RPD between parent sample and field duplicate sample is less than one times the reporting limit (RL) and where the parent sample and/or duplicate concentration is less than five times RL.

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

1

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> 8 </u>			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
<u> 0 </u> out of <u> 4 </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> X </u>	<u> </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
↓	Recovery low
↑	Recovery high
↓↓	Recovery below 10%

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

Semivolatile Calibration Outliers

Instrument: BNAMS3

Level: low

Date/Time	P4105-REF		P4105-CONC		P4200-REF		P4200-CONC		P4305-REF		P4305-CONC	
	Initial Cal		Sub Cal		Con Cal		Sub Cal		Sub Cal		Con Cal	
	REF	%SD	REF	%SD	REF	%SD	REF	%SD	REF	%SD	REF	%SD
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

Results for duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-27 / DUP-1	methanol	ND	ND	AC
MW-28 / DUP-2	methanol	ND	ND	AC

ND not detected.

AC The field duplicate relative percent difference (RPD) is acceptable when the RPD between parent sample and field duplicate sample is less than one times the reporting limit (RL) and where the parent sample and/or duplicate concentration is less than five times RL.

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
<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>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 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> </u>	<u> X </u>	<u> </u>
Do any trip/field/rinse blanks have positive results?	<u> </u>	<u> </u>	<u> X </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>

	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> X </u>	<u> </u>	<u> </u>

Corrected Sample Analysis Data Sheets

Client ID: PZ-4S
Site: McKesson Bear St

Lab Sample No: 641250
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/18/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04544.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-4D
Site: McKesson Bear St

Lab Sample No: 641251
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04501.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-30
Site: McKesson Bear St

Lab Sample No: 641252
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04502.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	0.3J	1.0
Toluene	ND	5.0
Ethylbenzene	ND	4.0
Xylene (Total)	ND	5.0

Client ID: MW-27
Site: McKesson Bear St

Lab Sample No: 641254
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/17/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04503.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	31 J	5.0
Trichloroethene	ND	1.0
Benzene	6.1	1.0
Toluene	15	5.0
Ethylbenzene	5.8	4.0
Xylene (Total)	15	5.0

Client ID: MW-19
Site: McKesson Bear St

Lab Sample No: 641255
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/18/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04515.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-29
Site: McKesson Bear St

Lab Sample No: 641256
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/18/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04516.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>Quantitation</u>
	<u>Units: ug/l</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-28
Site: McKesson Bear St

Lab Sample No: 641258
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/18/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04517.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	5.2 J	5.0
Trichloroethene	ND	1.0
Benzene	4.5	1.0
Toluene	1.2J	5.0
Ethylbenzene	4.6	4.0
Xylene (Total)	3.9J	5.0

Client ID: DUP-1
Site: McKesson Bear St

Lab Sample No: 641260
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/18/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04518.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	35 J	5.0
Trichloroethene	ND	1.0
Benzene	6.6	1.0
Toluene	16	5.0
Ethylbenzene	6.4	4.0
Xylene (Total)	17	5.0

Client ID: DUP-2
Site: McKesson Bear St

Lab Sample No: 641261
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/18/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04519.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	4.3J	5.0
Trichloroethene	ND	1.0
Benzene	4.5	1.0
Toluene	1.2J	5.0
Ethylbenzene	4.4	4.0
Xylene (Total)	3.8J	5.0

Client ID: Trip-Blank
Site: McKesson Bear St

Lab Sample No: 641262
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/20/05
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: ca04564.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-4S
Site: McKesson Bear St

Lab Sample No: 641250
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Extracted: 06/12/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20490.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-4D
Site: McKesson Bear St

Lab Sample No: 641251
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Extracted: 06/12/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20491.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-30
Site: McKesson Bear St

Lab Sample No: 641252
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Extracted: 06/12/05
Date Analyzed: 06/24/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20565.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-27
Site: McKesson Bear St

Lab Sample No: 641254
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Extracted: 06/12/05
Date Analyzed: 06/20/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20495.d

Matrix: WATER
Level: LOW
Sample Volume: 880 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 20.0

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	5200	23
N,N-Dimethylaniline	ND	23

Client ID: MW-19
Site: McKesson Bear St

Lab Sample No: 641255
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Extracted: 06/12/05
Date Analyzed: 06/21/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20501.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-29
Site: McKesson Bear St

Lab Sample No: 641256
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Extracted: 06/12/05
Date Analyzed: 06/21/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20502.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-28
Site: McKesson Bear St

Lab Sample No: 641258
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Extracted: 06/13/05
Date Analyzed: 06/17/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20466.d

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 5.0

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	630	5.0
N,N-Dimethylaniline	ND	5.0

Client ID: MW-32
Site: McKesson Bear St

Lab Sample No: 641259
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Extracted: 06/12/05
Date Analyzed: 06/21/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20503.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	0.4J	1.0
N,N-Dimethylaniline	ND	1.0

Client ID: DUP-1
Site: McKesson Bear St

Lab Sample No: 641260
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Extracted: 06/12/05
Date Analyzed: 06/22/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20515.d

Matrix: WATER
Level: LOW
Sample Volume: 900 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 50.0

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	6800	56
N,N-Dimethylaniline	ND	56

Client ID: DUP-2
Site: McKesson Bear St

Lab Sample No: 641261
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Extracted: 06/12/05
Date Analyzed: 06/22/05
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t20514.d

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 5.0

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	650	5.0
N,N-Dimethylaniline	ND	5.0

Client ID: PZ-4S
Site: McKesson Bear St

Lab Sample No: 641250
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/15/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6799.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-4D
Site: McKesson Bear St

Lab Sample No: 641251
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/15/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6800.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-30
Site: McKesson Bear St

Lab Sample No: 641252
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/15/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6801.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-27
Site: McKesson Bear St

Lab Sample No: 641254
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/15/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6802.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-19
Site: McKesson Bear St

Lab Sample No: 641255
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/15/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6803.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-29
Site: McKesson Bear St

Lab Sample No: 641256
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/15/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6804.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-28
Site: McKesson Bear St

Lab Sample No: 641258
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/15/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6805.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: DUP-1
Site: McKesson Bear St

Lab Sample No: 641260
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/15/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6807.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: DUP-2
Site: McKesson Bear St

Lab Sample No: 641261
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/15/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6808.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: 641262
Lab Job No: A103

Date Sampled: 06/09/05
Date Received: 06/10/05
Date Analyzed: 06/15/05
GC Column: DB624
Instrument ID: BNAGC5.i
Lab File ID: gc5f6809.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

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

CHAIN OF CUSTODY / ANALYSIS REQUEST

PAGE 1 OF 2

Name (for report and invoice) Christie Sobol		Samplers Name (Printed) Joseph Lisi		Site/Project Identification McLesson Bear St													
Company Blasland Bock & Lee		P.O. # 26003.190		State (Location of site): NJ: <input type="checkbox"/> NY: <input checked="" type="checkbox"/> Other: <input type="checkbox"/>													
Address 6723 township		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													
Phone 315-446-2800		Fax 416-8053		Project No: Job No: A103													
Sample Identification		Date	Time	Matrix	No. of Cont.	VOCS	SVOCs	Alcohol									Sample Numbers
PZ-4S	6-9-05	8:45	W	7	X	X	X										641250
PZ-4D		8:20		7	X	X	X										641251
MW-30		11:20		7	X	X	X										641252
MW-27		14:25		7	X	X	X										641253 T.S.
MW-27 MS/MSD		14:25		14	X	X	X										641254
MW-19		9:40		7	X	X	X										641255
MW-29		11:15		7	X	X	X										641256
MW-28		14:15		7	X	X	X										641257 T.S.
MW-28 MS/MSD		14:15		14	X	X	X										641258
MW-32	✓	16:45	✓	1		X											641259
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

Water Metals Filtered (Yes/No)?

Relinquished by 1) Jana James	Company BBL	Date / Time 6-9-05 17:15	Received by 1) Brenda J. J.	Company STL Syracuse
Relinquished by 2) Brenda J. J.	Company STL	Date / Time 6/9/05 18:30	Received by 2) Brenda J. J. FedEx	Company STL @ FedEx
Relinquished by 3) Fedex	Company STL	Date / Time 6/10/05 10:30	Received by 3) Don J.	Company STL Edison 3C
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

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice)		Company		Address		City		State		Zip		Phone		Fax	
Christie Sobel		Glasland Band & Co		6723 Trumpet Rd		Syacuse		NY		14408-853		315-446-5570		446-853	
P.O. #		a6003 190		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"/>	
Sample Name (Printed)		Joseph Lisi		Analysis Requested (ENTER "X" BELOW TO INDICATE REQUEST)		VOCs		SVOCs		Alcohol		Sample Numbers		Job No: 4103	
Site/Project Identification		McKesson		Regulatory Program:		LAB USE ONLY		Project No:		Job No:		Sample Numbers		Job No: 4103	
State (Location of site): NJ: <input type="checkbox"/> NY: <input checked="" type="checkbox"/> Other: <input type="checkbox"/>		Regulatory Program:		LAB USE ONLY		Project No:		Job No:		Sample Numbers		Job No: 4103		Sample Numbers	

Special Instructions		Water Metals Filtered (Yes/No)?	
Relinquished by	Company	Date / Time	Received by
1) Dave Syman	BBL	6/05/17:15	1) Dave Syman
Relinquished by	Company	Date / Time	Received by
2) Dave Syman	SIL Syman	6/05/18:30	2) Dave Syman
Relinquished by	Company	Date / Time	Received by
3) Dave Syman	SIL Syman	6/05/18:30	3) Dave Syman
Relinquished by	Company	Date / Time	Received by
4) Dave Syman	SIL Syman	6/05/18:30	4) Dave Syman