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

Transmittal

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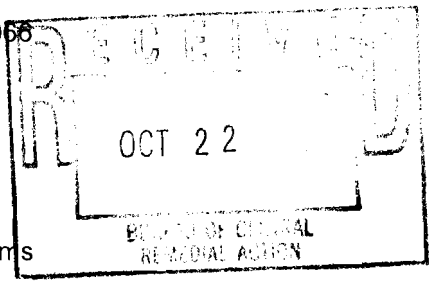

To: Mr. Thomas Reamon, P.E.
Bureau of Hazardous Site Control
New York State Department of
Environmental Conservation
625 Broadway, 11th Floor
Albany, NY 12233-7014

Date: October 21, 2003

File: 0260.26003 #5

Re: McKesson Envirosystems
Bear Street Facility
Syracuse, New York

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

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

Quantity	Identifying Number	Title	Action*
1		Validated Analytical Laboratory Reports	I

*Action letter code: R – for your review N - reviewed and noted I - for your information
S - resubmit J - rejected Y - for your approval

Remarks:

Please find enclosed a copy of the validated analytical laboratory reports for groundwater samples collected by Blasland, Bouck & Lee, Inc. (BBL) and analyzed for the chemicals of concern during the May 2003 biannual process control monitoring event at the McKesson Bear Street facility. The reports are provided in two sample delivery groups: SDG # BEL0308 and SDG # BEL0309. These validated analytical laboratory reports are associated with the October 2003 biannual report submitted to the New York State Department of Environmental Conservation under separate cover, covering the anaerobic bioremediation treatment activities conducted at the site during January 2003 through June 2003.

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

Sincerely,

BLASLAND, BOUCK & LEE, INC.

David J. Ulm
Senior Vice President

CWS/jlc
Enclosure

cc: Mr. Jim Burke, P.E., New York State Department of Environmental Conservation (w/o enclosure)
Ms. Cynthia Whitfield, New York State Department of Environmental Conservation (w/o enclosure)
Ms. Henriette Hamel, R.S., New York State Department of Health (w/o enclosure)
Ms. Jean A. Mescher, McKesson Corporation (w/o enclosure)
Mr. Christopher R. Young, P.G., de maximis, inc. (w/o enclosure)

10/21/03
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DATA REVIEW FOR

MCKESSON - BEAR STREET SITE

SDG# BEL0308

VOLATILE AND
SEMIVOLATILE ANALYSES

Analyses performed by:

Buck Environmental Laboratories, Inc.
Cortland, New York

Review performed by:

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

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

Summary

The following is an assessment of the data package for SDG # BEL0308 for sampling at the McKesson - Bear Street Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analysis Method		
				8260[1]	8015[2]	8270[3]
MW-1	0305065-01A	water	5/05/03	x	x	x
MW-3S	0305065-02A	water	5/05/03	x	x	x
TRIP BLANK	0305065-03A	water	--	x	x	
MW-31	0305076-01A	water	5/06/03	x	x	x
MW-9S	0305076-02A	water	5/06/03	x	x	x
MW-32	0305076-03A	water	5/06/03	x	x	x
TW-01	0305076-04A	water	5/06/03	x	x	x
MW-33[4]	0305076-05A	water	5/06/03	x	x	x
TW-02R	0305076-08A	water	5/06/03	x	x	x
MW-35	0305079-09A	water	5/06/03	x	x	x
DUP-1	0305076-10A	water	5/06/03	x	x	x
TRIP BLANK	0305076-11A	water	--	x		
MW-34	0305076-12A	water	5/06/03	x	x	x

1 compounds include: methylene chloride, acetone, trichloroethene, benzene, toluene, ethylbenzene, and xylenes
2 compounds include: methanol
3 compounds include: aniline and N,N'-dimethylaniline
4 MS/MSD analyses performed on sample

VOLATILE ANALYSES

METHOD 8260

Introduction

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

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

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

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

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

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

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

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

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

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

R The sample results are rejected.

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

Data Assessment

1. Holding Time

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

All samples were analyzed within the technical holding time.

2. Blank Contamination

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

No compounds were detected in the method or trip blanks.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

4. Calibration

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

4.1 Initial Calibration

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

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

4.2 Continuing Calibration

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

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.

Samples MW-33 and DUP-1 contained methylene chloride above the linear range. Data for methylene chloride in these samples have been replaced with data from the dilution analyses. All other identified compounds met the specified criteria.

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

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

The matrix spike and matrix spike duplicate recoveries and the matrix spike blank recoveries were 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-33 / DUP-1	Acetone	88	80	9.5%
	Benzene	13	13	0.0%
	Methylene Chloride	2800	2600	7.4%

The duplicate results are acceptable.

10. System Performance and Overall Assessment

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

Data Validation Checklist

Volatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are surrogate recovery forms present?	X		
Are all the samples listed on the appropriate surrogate recovery form?	X		
Was one or more surrogate recoveries outside of specified limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Matrix Spikes			
Is there a matrix spike recovery form present?	X		
Were matrix spikes analyzed at the required frequency?	X		
How many spike recoveries were outside of QC limits?			
0 out of 10			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
0 out of 5			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed at least once every twelve hours for each system used?	X		
Do any method/reagent/instrument blanks have positive results?		X	
Are there trip/field/rinse/equipment blanks associated with every sample?	X		
Do any trip/field/rinse blanks have positive results?		X	

Volatile Organics Data Validation Checklist - Page 2

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

Volatile Organics Data Validation Checklist - Page 3

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

Volatile Qualifier Summary
Holding Time, Surrogates, Internal Standards

Sample ID	Holding Time*	Surrogates*			Internal Standards*		
		TOL	BFB	DBF	PFB	DFB	CBZ
MW-1							
MW-3S							
TRIP BLANK							
MW-31							
MW-9S							
MW-32							
TW-01							
MW-33							
MW-33 MS							
MW-33 MSD							
TW-02R							
MW-35							
DUP-1							
TRIP BLANK							
MW-34							

Surrogates:
TOL Toluene-d8
BFB Bromofluorobenzene
DBF Dibromofluoromethane

Internal Standards:
PFB Pentafluorobenzene
DFB 1,4-Difluorobenzene
CBZ Chlorobenzene-d5

Qualifiers:
↑ Recovery high
↓ Recovery low

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

vmc3209

Volatile Calibration Outliers

Instrument: MSD3
Matrix: water
Level: low

Date/Time	5/16/03		5/16/03 1318							
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
Methylene chloride										
Acetone										
Trichloroethene										
Benzene										
Toluene										
Ethylbenzene										
Xylene (total)										

Affected Samples:					

Volatile Calibration Outliers - Page 2

Instrument: MSD4
Matrix: water
Level: low

Date/Time	5/16/03		5/16/03 1408							
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
Methylene chloride										
Acetone										
Trichloroethene										
Benzene										
Toluene										
Ethylbenzene										
Xylene (total)										

Affected Samples:				

Corrected Sample Analysis Data Sheets

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305065-01A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 05/06/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3S

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305065-02A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 05/06/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305065-03A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 05/06/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-31

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-01A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	9	
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9S

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-02A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	11	
100-41-4	Ethylbenzene	7	
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	12	
95-47-6	o-Xylene	6	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-32

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-03A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-01

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-04A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1201012.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	7	
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-33

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-05A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1901019.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	UG/L	Q
67-64-1	Acetone		88	
71-43-2	Benzene		13	
100-41-4	Ethylbenzene		5	U
75-09-2	Methylene chloride		~~1600~~ 2500	~~B~~ D
108-88-3	Toluene		5	U
79-01-6	Trichloroethene		5	U
1330-20-7	m,p-Xylene		10	U
95-47-6	o-Xylene		5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-33DL

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-05A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 0701007.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/20/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 100.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	1200	U
71-43-2	Benzene	500	U
100-41-4	Ethylbenzene	500	U
75-09-2	Methylene chloride	2800	
108-88-3	Toluene	500	U
79-01-6	Trichloroethene	500	U
1330-20-7	m,p-Xylene	1000	U
95-47-6	o-Xylene	500	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TW-02R

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-08A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	240	
71-43-2	Benzene	30	
100-41-4	Ethylbenzene	49	
75-09-2	Methylene chloride	97	
108-88-3	Toluene	130	
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	150	
95-47-6	o-Xylene	76	

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TW-02RDL

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-08A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 0801008.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/20/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 100.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	420	J
71-43-2	Benzene	500	U
100-41-4	Ethylbenzene	500	U
75-09-2	Methylene chloride	230	J
108-88-3	Toluene	220	J
79-01-6	Trichloroethene	500	U
1330-20-7	m,p-Xylene	190	J
95-47-6	o-Xylene	110	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-35

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-09A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-10A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	80	
71-43-2	Benzene	13	
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	~~1600~~ 2600	ED
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1DL

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-10A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/20/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 100.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	1200	U
71-43-2	Benzene	500	U
100-41-4	Ethylbenzene	500	U
75-09-2	Methylene chloride	2600	
108-88-3	Toluene	500	U
79-01-6	Trichloroethene	500	U
1330-20-7	m,p-Xylene	1000	U
95-47-6	o-Xylene	500	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-11A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1601016.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-34

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-12A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1701017.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	16	
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

VOLATILE ANALYSES

METHOD 8015

Introduction

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

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

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

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

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

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

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

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

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

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

R The sample results are rejected.

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

Data Assessment

1. Holding Time

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

All samples were analyzed within the technical holding time.

2. Blank Contamination

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

No compounds were detected in the method or trip blanks.

3. Calibration

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

3.1 Initial Calibration

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

The initial calibration was acceptable.

3.2 Continuing Calibration

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

4. Compound Identification

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

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. Matrix spike blank (MSB) data is used to assess the precision and accuracy of the analytical method independent of matrix interferences.

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

6. Field Duplicates

Results for duplicate samples are summarized below:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-33 / DUP-1	methanol	ND	ND	NA

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

The duplicate results are acceptable.

7. System Performance and Overall Assessment

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

Data Validation Checklist

Organic Data Validation Checklist

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

Organic Data Validation Checklist - Page 2

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

Calibration Outliers

Instrument: GC-03
Matrix: water

Date	5/16/03	5/16/03	5/16/03			
Time		1400	1449			
	Initial Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
	RSD	%D	%D	%D	%D	%D
methanol						
Affected Samples:						

Corrected Sample Analysis Data Sheets

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-10C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 2501025.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305065-01C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 0701007.D

Level: (low/med) LOW Date Received: 05/06/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3S

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305065-02C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 0801008.D

Level: (low/med) LOW Date Received: 05/06/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9S

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-02C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-31

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-01C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-32

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-03C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 1201012.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-33

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-05C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 2201022.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-34

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-12C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 2601026.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-35

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-09C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 2401024.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305065-03B

Sample wt/vol: 5 (g/mL) uL Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 05/06/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-01

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-04C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-02R

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-08C

Sample wt/vol: 5 (g/mL) uL Lab File ID: 2301023.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	MG/L	Q
67-56-1	Methanol		1	U

SEMIVOLATILE ANALYSES

METHOD 8270

Introduction

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

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

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

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

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

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

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

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

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

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

R The sample results are rejected.

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

Data Assessment

1. Holding Time

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

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

2. Blank Contamination

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

No target compounds were detected in the method blanks.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

4. Calibration

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

4.1 Initial Calibration

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

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

4.2 Continuing Calibration

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

5. Surrogates / System Monitoring Compounds

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

Surrogates were diluted beyond the range of quantitation in samples MW-35 and TW-02R. No data have been qualified based on diluted surrogates. All other surrogate recoveries were within control limits.

6. Internal Standard Performance

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

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

7. Compound Identification

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

Samples DUP-1 and TW-02R contained aniline above the linear range. Data for aniline in these samples have been replaced with data from the dilution analyses. All other identified compounds met the specified criteria.

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

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

The matrix spike recoveries and relative percent difference between recoveries for aniline were above control limits due to dilution of the unspiked sample. The matrix spike blank was, however, within control limits for aniline. Since the matrix spike blank recovery was within control limits, no data have been qualified based on the deviation.

9. Field Duplicates

Results for duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-33 / DUP-1	Aniline	2000	2500	22.2%
	N,N-Dimethylaniline	35J	31	12.1%

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

The duplicate results are acceptable.

10. System Performance and Overall Assessment

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

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are the surrogate recovery forms present?	X		
Are all the samples listed on the appropriate surrogate recovery form?	X		
Were two or more surrogate recoveries outside of specified limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Matrix Spikes			
Is there a matrix spike recovery form present?	X		
Were matrix spikes analyzed at the required frequency	X		
How many spike recoveries were outside of QC limits? 0 out of 4			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits? 0 out of 2			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed for each GC/MS system used?	X		
Do any method/reagent/instrument blanks have positive results?		X	
Are there field/rinse/equipment blanks associated with every sample?		X	

Semivolatile Organics Data Validation Checklist - Page 2

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

Semivolatile Organics Data Validation Checklist - Page 3

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

Field Duplicates

Were field duplicates submitted with the samples? X _____ _____

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

Sample ID	Holding Time*	Surrogates*			Internal Standards*					
		NBZ	FBP	TPH	DCB	NPT	ANT	PHN	CRY	PRY
MW-1										
MW-3S										
MW-31										
MW-9S										
MW-32										
TW-01										
MW-33										
MW-33 MS										
MW-33 MSD										
TW-02R		D								
MW-35		D	D	D						
DUP-1										
MW-34										

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

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

Semivolatile Calibration Outliers

Instrument: MSD2
Level: low

Date/Time	6/03/03		6/04/03 1040		6/05/03 1523		6/06/03 1044			
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
aniline										
n,n'-dimethylaniline										

Affected Samples:				

Corrected Sample Analysis Data Sheets

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-10B

Sample wt/vol: 980 (g/mL) mL Lab File ID: 0401004.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/04/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	10000	E
121-69-7	N,N-Dimethylaniline	31	

1C

EPA SAMPLE NO.

DUP-1DL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-10B

Sample wt/vol: 980 (g/mL) BL 06/9/03 Lab File ID: 0401004.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/05/03

Injection Volume: 1 (µL) Dilution Factor: 200.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	2500	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305065-01B

Sample wt/vol: 945 (g/mL) G_ml 06/4/03 (aw) Lab File ID: A0401004.

Level: (low/med) LOW Date Received: 05/06/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/03/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3S

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305065-02B

Sample wt/vol: 990 (g/mL) Lab File ID: A0501005.

Level. (low/med) LOW Date Received: 05/06/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/03/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-9S

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-02B

Sample wt/vol: 960 (g/mL) Lab File ID: A0701007.

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/03/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	0.9	J
121-69-7	N,N-Dimethylaniline	3	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-31

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-01B

Sample wt/vol: 990 (g/mL) Lab File ID: A0601006.

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/03/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	0.9	J
121-69-7	N,N-Dimethylaniline	3	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-32

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-03B

Sample wt/vol: 985 (g/mL) 2nd 06/10/03 Lab File ID: A0801008.

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/03/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	0.5	J
121-69-7	N,N-Dimethylaniline	0.7	J

1C

EPA SAMPLE NO.

MW-33

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-05B

Sample wt/vol: 970 (g/mL) mL 06/18/03 Lab File ID: A1001010.

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/03/03

Injection Volume: 1 (µL) Dilution Factor: 20.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	2000	
121-69-7	N,N-Dimethylaniline	35	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-34

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-12B

Sample wt/vol: 985 (g/mL) Lab File ID: 0501005.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/04/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	140	
121-69-7	N,N-Dimethylaniline	3	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-35 (DL)

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-09B

Sample wt/vol: 980 (g/mL) DL 06/18/03 Lab File ID: 0301003.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/04/03

Injection Volume: 1 (µL) Dilution Factor: 20.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	1000	
121-69-7	N,N-Dimethylaniline	100	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TW-01

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-04B

Sample wt/vol: 990 (g/mL) mL Lab File ID: A0901009.

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/03/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	5	U
121-69-7	N,N-Dimethylaniline	1	U

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TW-02R

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-08B

Sample wt/vol: 960 (g/mL) Lab File ID: 0201002.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/04/03

Injection Volume: 1 (µL) Dilution Factor: 20.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	150000	E
121-69-7	N,N-Dimethylaniline	230	

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TW-02R DL

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0308

Matrix: (soil/water) WATER Lab Sample ID: 0305076-08B

Sample wt/vol: 960 (g/mL) Lab File ID: 0201002.D

Level: (low/med) LOW Date Received: 05/07/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/09/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 2,000.00

GPC Cleanup: (Y/N) N pH: ___ Extraction. (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	160000	
121-69-7	N,N-Dimethylaniline	10000	U

Chain of Custody

0305065-CLP.
0305069 - Non-CLP

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

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

BEL0308

PROJ. NO. 26003 | PROJECT NAME: McKesson Bear Street

SAMPLERS: (Signature) Christie M Sobol

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	NO3/SO4	Total Metals	Diss. Metals	VOCs	SVOCs	Alcohols	Sulfide	REMARKS
							0305069	0305065	0305069					
1	5/5/03			✓	MW-1		1	1	1	2	2	2	1	Total 10
2	5/5/03	1457		✓	MW-3S		1	1	1	2	2	2	1	Total 10
					Temp Blank									Total 1
					Trip Blank					2		2		Total 4

Please contact:
Christie Sobol
with Questions
(315) 446-2570

(15)

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Christie M Sobol	5/5/03	1700					
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE	TIME	Remarks:	
			Shirley E Tourne	5-6-03	11 45	Temp = 3.1°C pH - NP - N6 pH of preserved all OK	

Distribution: Original Accompanies Shipment: Copy to Coordinator Field Files

10/23/95
5951188L.CDR

BEL 0308

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists
6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
26003	McKesson Bear Street

SAMPLERS: (Signature) Christie Sobol

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	NO3/SO4	Total Metals+K	Diss. metals	VOCs	SVOCs	Alcohols	Sulfide	Total orthophosphate	Ammonia	REMARKS
1	5/6/03	0920		✓	MW-31		1	1	1	3	2	2	1	1	1	Total 13
2	5/6/03	0910		✓	MW-9S		1	1	1	3	2	2	1	1	1	Total 13
3	5/6/03	1220		✓	MW-32		1	1	1	3	2	2	1	1	1	Total 13
4	5/6/03	1130		✓	TW-01		1	1	1	3	2	2	1	1	1	Total 13
5	5/6/03	1430		✓	MW-33		1	1	1	3	2	2	1	1	1	Total 13
5	5/6/03	1430		✓	MW-33 MS		1	1	1	3	2	2	1	1	1	Total 13
5	5/6/03	1430		✓	MW-33 MSD		1	1	1	3	2	2	1	1	1	Total 13
6	5/6/03	1810		✓	TW-02R		1	1	1	3	2	2	1	1	1	Total 13
7	5/6/03	1855		✓	MW-35		1	1	1	3	2	2	1	1	1	Total 13
	5/6/03			✓	Dup-1		1	1	1	3	2	2	1	1	1	Total 13
	5/6/03				Trip Blanks					2	~~2~~					Total ~~3~~ 4
	5/6/03				Temp Blank											Total 1
8	5/6/03	1610		✓	MW-34		1	1	1	3	2	2	1	1	1	Total 13
																~~135~~ 148

0305075
0305076
0305077

Please contact Christie Sobol at Questions with 315 446 2576 ext 325

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Christie M Sobol	5/7/03	0811					
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE	TIME	Remarks:	
			Shirley Truax	5-7-03	8.10		

10/23/95
5951188L.CDR

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

DATA REVIEW FOR

MCKESSON - BEAR STREET SITE

SDG# BEL0309

VOLATILE AND
SEMIVOLATILE ANALYSES

Analyses performed by:

Buck Environmental Laboratories, Inc.
Cortland, New York

Review performed by:

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

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

Summary

The following is an assessment of the data package for SDG # BEL0309 for sampling at the McKesson - Bear Street Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analysis Method		
				8260[1]	8015[2]	8270[3]
MW-36	0305101-01A	water	5/07/03	x	x	x
MW-8S	0305101-02A	water	5/07/03	x	x	x
MW-27[4]	0305101-03A	water	5/07/03	x	x	x
MW-28	0305101-06A	water	5/07/03	x	x	x
DUP-2	0305101-07A	water	5/07/03	x	x	x
Trip Blank	0305101-08A	water	5/07/03	x	x	
MW-29	0305101-09A	water	5/07/03	x	x	x
MW-30	0305120-01A	water	5/08/03	x	x	x
MW-17R	0305120-02A	water	5/08/03	x	x	x
MW-25S	0305120-03A	water	5/08/03	x	x	x
MW-25D	0305120-04A	water	5/08/03	x	x	x
MW-23I	0305120-05A	water	5/08/03	x	x	x
MW-23S	0305120-06A	water	5/08/03	x	x	x
MW-18	0305120-07A	water	5/08/03	x	x	x
Trip Blank	0305120-08A	water	5/08/03	x	x	
MW-19	0305124-01A	water	5/09/03	x	x	x
PZ-4D	0305124-02A	water	5/09/03	x	x	x
PZ-4S	0305124-03A	water	5/09/03	x	x	x
Trip Blank	0305124-04A	water	5/09/03	x	x	

1 compounds include: methylene chloride, acetone, trichloroethene, benzene, toluene, ethylbenzene, and xylenes
2 compounds include: methanol
3 compounds include: aniline and N,N'-dimethylaniline
4 MS/MSD analyses performed on sample

Chain of Custody

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

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

0305065-CLP.
0305069 - Non-CLP

BEL0308

PROJ. NO.	PROJECT NAME
26003	McKesson Bear Street

SAMPLERS: (Signature)
Christie M Sobol

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	0305069	0305065	0305069	Number of Containers	NO3/SO4	Total Metals	Diss. Metals	VOCs	SVOCs	Alcohols	Sulfide	REMARKS
1	5/5/03			✓	MW-1				1	1	1	2	2	2	1		Total 10
2	5/5/03	1457		✓	MW-3S				1	1	1	2	2	2	1		Total 10
					Temp Blank												Total 1
					Trip Blank							2		2			Total 4
																	Please contact: Christie Sobol with Questions (315) 446-2570
																	(15)

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Christie M Sobol	5/5/03	1700					
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE	TIME	Remarks:	
			Shirley E Tourne	5-6-03	11 45	Temp = 3.1°C pH - NP - ~6 pH of preserved all OK	

0/23/95
951188L.CDR

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

BEL0308

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists
6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

030507S 030507G 030507S

PROJ. NO. 26003 | PROJECT NAME McKesson Bear Street

SAMPLERS: (Signature) Christie Sobol

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	NO3/SO4	Total Metals+K	Diss. Metals	VOCs	SVOCs	Alcohols	Sulfide	Total orthophosphate	Ammonia	REMARKS
1	5/6/03	0920		✓	MW-31		1	1	1	3	2	2	1	1	1	Total 13
2	5/6/03	0910		✓	MW-9S		1	1	1	3	2	2	1	1	1	Total 13
3	5/6/03	1220		✓	MW-32		1	1	1	3	2	2	1	1	1	Total 13
4	5/6/03	1130		✓	TW-01		1	1	1	3	2	2	1	1	1	Total 13
5	5/6/03	1430		✓	MW-33		1	1	1	3	2	2	1	1	1	Total 13
5	5/6/03	1430		✓	MW-33 MS		1	1	1	3	2	2	1	1	1	Total 13
5	5/6/03	1430		✓	MW-33 MSD		1	1	1	3	2	2	1	1	1	Total 13
6	5/6/03	1810		✓	TW-02R		1	1	1	3	2	2	1	1	1	Total 13
7	5/6/03	1855		✓	MW-35		1	1	1	3	2	2	1	1	1	Total 13
	5/6/03			✓	Dup-1		1	1	1	3	2	2	1	1	1	Total 13
	5/6/03				Trip Blanks					2	2					Total ~~3~~ 4
	5/6/03				Temp Blank											Total 1
8	5/6/03	1610		✓	MW-34		1	1	1	3	2	2	1	1	1	Total 13
																~~135~~ 148

Please contact Christie Sobol at 446 2570 ext 325 with Questions

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Christie Sobol	5/7/03	0811					
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE	TIME	Remarks:	
			Shirley Trusen	5-7-03	8:10		

10/23/95
5951188L.CDR

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

DATA REVIEW FOR

MCKESSON - BEAR STREET SITE

SDG# BEL0309

VOLATILE AND
SEMIVOLATILE ANALYSES

Analyses performed by:

Buck Environmental Laboratories, Inc.
Cortland, New York

Review performed by:

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

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

Summary

The following is an assessment of the data package for SDG # BEL0309 for sampling at the McKesson - Bear Street Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Date	Analysis Method		
				8260[1]	8015[2]	8270[3]
MW-36	0305101-01A	water	5/07/03	x	x	x
MW-8S	0305101-02A	water	5/07/03	x	x	x
MW-27[4]	0305101-03A	water	5/07/03	x	x	x
MW-28	0305101-06A	water	5/07/03	x	x	x
DUP-2	0305101-07A	water	5/07/03	x	x	x
Trip Blank	0305101-08A	water	5/07/03	x	x	
MW-29	0305101-09A	water	5/07/03	x	x	x
MW-30	0305120-01A	water	5/08/03	x	x	x
MW-17R	0305120-02A	water	5/08/03	x	x	x
MW-25S	0305120-03A	water	5/08/03	x	x	x
MW-25D	0305120-04A	water	5/08/03	x	x	x
MW-23I	0305120-05A	water	5/08/03	x	x	x
MW-23S	0305120-06A	water	5/08/03	x	x	x
MW-18	0305120-07A	water	5/08/03	x	x	x
Trip Blank	0305120-08A	water	5/08/03	x	x	
MW-19	0305124-01A	water	5/09/03	x	x	x
PZ-4D	0305124-02A	water	5/09/03	x	x	x
PZ-4S	0305124-03A	water	5/09/03	x	x	x
Trip Blank	0305124-04A	water	5/09/03	x	x	

1 compounds include: methylene chloride, acetone, trichloroethene, benzene, toluene, ethylbenzene, and xylenes
2 compounds include: methanol
3 compounds include: aniline and N,N'-dimethylaniline
4 MS/MSD analyses performed on sample

VOLATILE ANALYSES

METHOD 8260

Introduction

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

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

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

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

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

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

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

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

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

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

R The sample results are rejected.

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

Data Assessment

1. Holding Time

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

All samples were analyzed within the technical holding time.

2. Blank Contamination

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

No compounds were detected in the method blanks. Methylene chloride was, however, detected in one of the trip blanks. Based on the blank content, data for methylene chloride have been qualified as undetected in samples Dup-2 and MW-29.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

4. Calibration

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

4.1 Initial Calibration

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

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

4.2 Continuing Calibration

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

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.

The response for one internal standard was above control limits in sample MW-8S. Positive compounds quantitated under the deviant internal standard have been qualified as estimated based on the deviation. All other 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.

Sample MW-8S contained methylene chloride above the linear range. Data for methylene chloride has been replaced with data from the dilution analyses. All other identified compounds met the specified criteria.

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

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

The matrix spike recoveries were within control limits. The matrix spike duplicate recoveries, however, were above control limits for benzene, chlorobenzene, 1,1-dichloroethene and toluene. Since the matrix spike recoveries and the matrix spike blank recoveries were within control limits, no data have been qualified based on the deviations.

9. Field Duplicates

Results for duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-27 / DUP-2	Acetone	ND	7J	NA
	Benzene	8	6	28.6%

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-27 / DUP-2	Ethylbenzene	23	20	14.0%
	Methylene Chloride	43	ND	NA
	Toluene	11	7	44.4%
	m,p-Xylene	26	21	21.3%
	o-Xylene	25	22	12.8%

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

The duplicate results are acceptable.

10. System Performance and Overall Assessment

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

Data Validation Checklist

Volatile Organics Data Validation Checklist

	YES	NO	NA
Data Completeness and Deliverables			
Have any missing deliverables been received and added to the data package?		X	
Is there a narrative or cover letter present?	X		
Are the sample numbers included in the narrative?	X		
Are the sample chain-of-custodies present?	X		
Do the chain-of-custodies indicate any problems with sample receipt or sample condition?		X	
Holding Times			
Have any holding times been exceeded?		X	
Surrogate Recovery			
Are surrogate recovery forms present?	X		
Are all the samples listed on the appropriate surrogate recovery form?	X		
Was one or more surrogate recoveries outside of specified limits for any sample or blank?		X	
If yes, were the samples reanalyzed?			X
Matrix Spikes			
Is there a matrix spike recovery form present?	X		
Were matrix spikes analyzed at the required frequency?	X		
How many spike recoveries were outside of QC limits?			
4 out of 10			
How many RPDs for matrix spike and matrix spike duplicate were outside of QC limits?			
1 out of 5			
Blanks			
Is the method blank summary form present?	X		
Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent?	X		
Has a blank been analyzed at least once every twelve hours for each system used?	X		
Do any method/reagent/instrument blanks have positive results?		X	
Are there trip/field/rinse/equipment blanks associated with every sample?	X		
Do any trip/field/rinse blanks have positive results?	X		

Volatile Organics Data Validation Checklist - Page 2

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

Volatile Organics Data Validation Checklist - Page 3

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

Volatile Qualifier Summary
Holding Time, Surrogates, Internal Standards

Sample ID	Holding Time*	Surrogates*			Internal Standards*		
		TOL	BFB	DBF	PFB	DFB	CBZ
MW-36							
MW-8S							
MW-27					↑		
MW-27 MS							
MW-27 MSD							
MW-28							
DUP-2							
Trip Blank							
MW-29							
MW-30							
MW-17R							
MW-25S							
MW-25D							
MW-23I							
MW-23S							
MW-18							
Trip Blank							
MW-19							
PZ-4D							
PZ-4S							
Trip Blank							

Surrogates:
TOL Toluene-d8
BFB Bromofluorobenzene
DBF Dibromofluoromethane

Internal Standards:
PFB Pentafluorobenzene
DFB 1,4-Difluorobenzene
CBZ Chlorobenzene-d5

Qualifiers:
↑ Recovery high
↓ Recovery low

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

Volatile Calibration Outliers

Instrument: MSD3
Matrix: water
Level: low

Date/Time	5/16/03		5/16/03 1318		5/19/03 0911		5/20/03 1649			
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
Methylene chloride										
Acetone										
Trichloroethene										
Benzene										
Toluene										
Ethylbenzene										
Xylene (total)										

Affected Samples:				

Volatile Calibration Outliers - Page 2

Instrument: MSD4
Matrix: water
Level: low

Date/Time	5/16/03		5/16/03 1408							
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
Methylene chloride										
Acetone										
Trichloroethene										
Benzene										
Toluene										
Ethylbenzene										
Xylene (total)										

Affected Samples:

Corrected Sample Analysis Data Sheets

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-36

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-01A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1201012.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	9	J
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8S

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-02A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	20	J
100-41-4	Ethylbenzene	81	
75-09-2	Methylene chloride	~~820000~~ 910000	ED
108-88-3	Toluene	~~230~~ 600	ED
79-01-6	Trichloroethene	~~2400~~ 1700	ED
1330-20-7	m,p-Xylene	210	
95-47-6	o-Xylene	90	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8SDL

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: ____ ____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-02A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1801018.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 100.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	1200	U
71-43-2	Benzene	500	U
100-41-4	Ethylbenzene	500	U
75-09-2	Methylene chloride	660000	E
108-88-3	Toluene	600	
79-01-6	Trichloroethene	6700	
1330-20-7	m,p-Xylene	500	U
95-47-6	o-Xylene	500	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8SDL

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-02A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/20/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 10,000.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	120000	U
71-43-2	Benzene	50000	U
100-41-4	Ethylbenzene	50000	U
75-09-2	Methylene chloride	910000	
108-88-3	Toluene	50000	U
79-01-6	Trichloroethene	50000	U
1330-20-7	m,p-Xylene	100000	U
95-47-6	o-Xylene	50000	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8SDL

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) Lab Sample ID: 0305101-02A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/20/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1,000.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12000	U
71-43-2	Benzene	5000	U
100-41-4	Ethylbenzene	5000	U
75-09-2	Methylene chloride	950000	E
108-88-3	Toluene	5000	U
79-01-6	Trichloroethene	5600	
1330-20-7	m,p-Xylene	10000	U
95-47-6	o-Xylene	5000	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-03A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1901019.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	8	
100-41-4	Ethylbenzene	23	
75-09-2	Methylene chloride	43	
108-88-3	Toluene	11	
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	26	
95-47-6	o-Xylene	25	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-28

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-06A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	13	
71-43-2	Benzene	4	J
100-41-4	Ethylbenzene	2	J
75-09-2	Methylene chloride	52	
108-88-3	Toluene	2	J
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	4	J
95-47-6	o-Xylene	4	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-2

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-07A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	7	J
71-43-2	Benzene	6	
100-41-4	Ethylbenzene	20	
75-09-2	Methylene chloride	34	U
108-88-3	Toluene	7	
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	21	
95-47-6	o-Xylene	22	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-08A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1601016.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-29

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-09A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1701017.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	3	J U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	10	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-30

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-01A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1201012.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/20/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 5.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	62	U
71-43-2	Benzene	25	U
100-41-4	Ethylbenzene	25	U
75-09-2	Methylene chloride	8	J
108-88-3	Toluene	25	U
79-01-6	Trichloroethene	25	U
1330-20-7	m,p-Xylene	50	U
95-47-6	o-Xylene	25	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-17R

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-02A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	8	
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-25S

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-03A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 0701007.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg)	UG/L	Q
67-64-1	Acetone		12	U
71-43-2	Benzene		5	U
100-41-4	Ethylbenzene		5	U
75-09-2	Methylene chloride		5	U
108-88-3	Toluene		5	U
79-01-6	Trichloroethene		5	U
1330-20-7	m,p-Xylene		5	U
95-47-6	o-Xylene		5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-25D

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-04A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 0601006.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-23I

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL-McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-05A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-23S

Lab Name: Buck Environmental Labs, Inc. Contract: ~~BBL McKesson~~

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-06A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/21/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 5.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	62	U
71-43-2	Benzene	25	U
100-41-4	Ethylbenzene	25	U
75-09-2	Methylene chloride	25	U
108-88-3	Toluene	25	U
79-01-6	Trichloroethene	25	U
1330-20-7	m,p-Xylene	50	U
95-47-6	o-Xylene	25	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-18

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-07A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 0801008.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-08A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 0501005.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-19

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-01A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PZ-4D

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-02A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PZ-4S

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-03A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1201012.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: Buck Environmental Labs, Inc. Contract: BBL-McKesson

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-04A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/19/03

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	5	U
100-41-4	Ethylbenzene	5	U
75-09-2	Methylene chloride	5	U
108-88-3	Toluene	5	U
79-01-6	Trichloroethene	5	U
1330-20-7	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

VOLATILE ANALYSES

METHOD 8015

Introduction

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

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

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

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

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

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

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

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

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

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

R The sample results are rejected.

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

Data Assessment

1. Holding Time

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

All samples were analyzed within the technical holding time.

2. Blank Contamination

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

No compounds were detected in the method or trip blanks.

3. Calibration

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

3.1 Initial Calibration

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

The initial calibration was acceptable.

3.2 Continuing Calibration

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

4. Compound Identification

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

All identified compounds met the specified criteria.

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

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

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

6. Field Duplicates

Results for duplicate samples are summarized below:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-27 / DUP-2	methanol	ND	ND	NA

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

The duplicate results are acceptable.

7. The sample result units were originally reported as ug/l. The units have been corrected to mg/l.

8. System Performance and Overall Assessment

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

Data Validation Checklist

Organic Data Validation Checklist

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

Organic Data Validation Checklist - Page 2

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

Calibration Outliers

Instrument: GC-03
Matrix: water

Date	5/16/03	5/16/03	5/16/03	5/16/03	5/16/03	
Time		1400	1449	1529	1550	
	Initial Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
	RSD	%D	%D	%D	%D	%D
methanol						

Affected Samples:

Corrected Sample Analysis Data Sheets

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-2

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-07C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3101031.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ MG/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8S

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-02C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 2801028.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ mg/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-17R

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-02C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 4201042.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ mg/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-18

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-07C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 4701047.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) ~~UG/L~~ mg/L	Q
67-56-1	Methanol	0.28	J

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-19

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-01C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 5301053.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ ug/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-23I

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-05C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 4501045.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ ug/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-23S

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-06C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 4601046.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L ug/L	Q
67-56-1	Methanol	0.38	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-25D

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-04C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 4401044.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ ug/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-25S

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-03C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 4301043.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L mg/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-03C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 2901029.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ ug/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-28

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-06C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3001030.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-29

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-09C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 4001040.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-30

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-01C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 4101041.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L ug/L	Q
67-56-1	Methanol	1	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-36

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-01C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 2701027.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ ug/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PZ-4D

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-02C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 5401054.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L ug/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PZ-4S

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-03C

Sample wt/vol: 5 (g/mL) ML Lab File ID: 5501055.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ ug/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-08B

Sample wt/vol: 5 (g/mL) ML Lab File ID: 3901039.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ UG/KG	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-08B

Sample wt/vol: 5 (g/mL) ML Lab File ID: 4801048.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) ~~UG/L~~ ug/L	Q
67-56-1	Methanol	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-04B

Sample wt/vol: 5 (g/mL) ML Lab File ID: 5601056.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: not dec. Date Analyzed: 05/16/03

GC Column: J&W, DB-VRX ID: .45 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
67-56-1	Methanol	1	U

SEMIVOLATILE ANALYSES

METHOD 8270

Introduction

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

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

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

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

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

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

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

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

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

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

R The sample results are rejected.

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

Data Assessment

1. Holding Time

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

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

2. Blank Contamination

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

No target compounds were detected in the method blanks.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

4. Calibration

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

4.1 Initial Calibration

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

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

4.2 Continuing Calibration

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

5. Surrogates / System Monitoring Compounds

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

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

6. Internal Standard Performance

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

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

7. Compound Identification

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

Samples MW8S, MW-27, DUP-2 and MW-28 contained aniline above the linear range. Data for aniline in these samples have been replaced with data from the dilution analyses. All other identified compounds met the specified criteria.

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

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

The matrix spike and matrix spike duplicate recoveries and relative percent difference between recoveries for aniline were outside control limits. The matrix spike blank was, however, within control limits for aniline. No data have been qualified based on the deviations.

9. Field Duplicates

Results for duplicate samples are summarized as follows:

Sample ID/ Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-27 / DUP-2	Aniline	15000	11000	30.8%
	N,N-Dimethylaniline	11	3J	NA

The duplicate results are acceptable.

10. System Performance and Overall Assessment

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

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

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

Semivolatile Organics Data Validation Checklist - Page 2

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

Semivolatile Organics Data Validation Checklist - Page 3

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

Field Duplicates

Were field duplicates submitted with the samples? X _____ _____

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

Sample ID	Holding Time*	Surrogates*			Internal Standards*					
		NBZ	FBP	TPH	DCB	NPT	ANT	PHN	CRY	PRY
MW-36										
MW-8S		D								
MW-27										
MW-27 MS										
MW-27 MSD										
MW-28										
DUP-2										
MW-29										
MW-30										
MW-17R										
MW-25S										
MW-25D										
MW-23I										
MW-23S										
MW-18										
MW-19										
PZ-4D										
PZ-4S										

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

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

Semivolatile Calibration Outliers

Instrument: MSD2
Level: low

Date/Time	6/03/03		6/04/03 1040		6/05/03 1523		6/06/03 1044			
	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
	RF	%RSD	RF	%D	RF	%D	RF	%D	RF	%D
aniline										
n,n'-dimethylaniline										

Affected Samples:				

Corrected Sample Analysis Data Sheets

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-2

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-07B

Sample wt/vol: 935 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/12/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/04/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	66000	E
121-69-7	N,N-Dimethylaniline	3	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP-2DL

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-07B

Sample wt/vol: 935 (g/mL) ML Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/12/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/05/03

Injection Volume: 1 (µL) Dilution Factor: 200.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	11000	

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-8S

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-02B

Sample wt/vol: 995 (g/mL) ML Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/12/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/04/03

Injection Volume: 1 (µL) Dilution Factor: 20.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	220000	E
121-69-7	N,N-Dimethylaniline	29	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-8S

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-02B

Sample wt/vol: 995 (g/mL) ML Lab File ID: 0301003.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/12/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 2,000.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	79000	
121-69-7	N,N-Dimethylaniline	23000	

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-17R

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-02B

Sample wt/vol: 960 (g/mL) ML Lab File ID: 0601006.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/13/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-18

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-07B

Sample wt/vol: 980 (g/mL) ML Lab File ID: 1101011.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/13/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-19

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-01B

Sample wt/vol: 985 (g/mL) ML Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/14/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-23I

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-05B

Sample wt/vol: 970 (g/mL) ML Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/13/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-23S

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-06B

Sample wt/vol: 975 (g/mL) ML Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/13/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-25D

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-04B

Sample wt/vol: 990 (g/mL) ML Lab File ID: 0801008.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/13/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-25S

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-03B

Sample wt/vol: 990 (g/mL) ML Lab File ID: 0701007.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/13/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-03B

Sample wt/vol: 990 (g/mL) ML Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/12/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/04/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	63000	E
121-69-7	N,N-Dimethylaniline	11	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27DL

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-03B

Sample wt/vol: 990 (g/mL) ML Lab File ID: 0601006.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/12/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/05/03

Injection Volume: 1 (µL) Dilution Factor: 200.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	15000	
121-69-7	N,N-Dimethylaniline	1000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-28

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-06B

Sample wt/vol: 985 (g/mL) ML Lab File ID: 1301013.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/12/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/04/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	~~21000~~	E
121-69-7	N,N-Dimethylaniline	3	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-28DL

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-06B

Sample wt/vol: 985 (g/mL) ML Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/12/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/05/03

Injection Volume: 1 (µL) Dilution Factor: 200.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	1000	J
121-69-7	N,N-Dimethylaniline	1000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-29

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-09B

Sample wt/vol: 990 (g/mL) ML Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/12/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/04/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	19	
121-69-7	N,N-Dimethylaniline	1	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-30

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305120-01B

Sample wt/vol: 980 (g/mL) ML Lab File ID: 0501005.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/13/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	18	
121-69-7	N,N-Dimethylaniline	0.6	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-36

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305101-01B

Sample wt/vol: 990 (g/mL) ML Lab File ID: 0801008.D

Level: (low/med) LOW Date Received: 05/08/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/12/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/04/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
62-53-3	Aniline	67	
121-69-7	N,N-Dimethylaniline	4	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PZ-4D

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-02B

Sample wt/vol: 955 (g/mL) ML Lab File ID: 1401014.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/14/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PZ-4S

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0309

Matrix: (soil/water) WATER Lab Sample ID: 0305124-03B

Sample wt/vol: 965 (g/mL) ML Lab File ID: 1501015.D

Level: (low/med) LOW Date Received: 05/09/03

% Moisture: Decanted: (Y/N) N Date Extracted: 05/14/03

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/06/03

Injection Volume: 1 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type)

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

Chain of Custody

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

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO. 26003 | PROJECT NAME McKesson Bear St.

SAMPLERS: (Signature) Christie M Sobol

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	NO3 / SO4	Total Metals + K	Diss. Metals	VOCs	SVOCs	Alcohols	Sulfide	Total orthophosphate	Ammonia	REMARKS
							0305100			0305101					0305100	
1	5/7/03	1030		✓	MW-36		1	1	1	3	2	2	1	1	1	Total 13
2	5/7/03	1300		✓	MW-[redacted]85		1	1	1	3	2	2	1	1	1	Total 13
3	5/7/03	1025		✓	MW-27		1	1	1	3	2	2	1	1	1	Total 13
	5/7/03	1025		✓	MW-27 MS		1	1	1	3	2	2	1	1	1	Total 13
	5/7/03	1025		✓	MW-27 MSD		1	1	1	3	2	2	1	1	1	Total 13
4	5/7/03	1430		✓	MW-28		1	1	1	3	2	2	1	1	1	Total 13
	5/7/03				Dup-2		1	1	1	3	2	2	1	1	1	Total 13
	5/7/03				Trip Blanks					2	[redacted]	2				Total 4
					Temp Blank											Total 1
5	5/7/03	1550		✓	MW-29		1	1	1	3	2	2	1	1	1	Total 13

Contact Christie Sobol with Questions at (315) 446-2570 ext 325

109

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Christie M Sobol	5/7/03	1745					
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE	TIME	Remarks:	
			Shirley E Tarr	5-8-03	10:30		

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

10/23/95
5951188L.CDR

012

0305119
0305120

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engineers & scientists

6723 Towpath Road, P.O. Box 66
Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO. 26003 | PROJECT NAME McKesson Bear St

SAMPLERS: (Signature) Christie Sobol

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers	NO3/SO4	Total Metals + K	Diss. Metals	VOCs	SVOCs	Alcohols	Sulfide	Total Orthophosphate	Ammonia	REMARKS
							0305119					0305120			0305119	
1	5/8/03	0850		✓	MW-30		1	1	1	3	2	2	1	1	1	Total 13
2	5/8/03	0850		✓	MW-7R					3	2	2				Total 7
3	5/8/03	1125		✓	MW-25S					3	2	2				Total 7
4	5/8/03	1145		✓	MW-25D					3	2	2				Total 7
5	5/8/03	1520		✓	MW-23I					3	2	2				Total 7
6	5/8/03	1340		✓	MW-23S					3	2	2				Total 7
7	5/8/03	1625		✓	MW-18					3	2	2				Total 7
	5/6/03				Trip Blanks					2		2				Total 4
	5/8/03				Temp. Blank											Total 1

Please contact with Questions: Christie Sobol at (315) 446-2510 ext 325

Total 60

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Christie Sobol	5/8/03	1758					

Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE	TIME	Remarks:
			Shirley E. Jones	5-9-03	10 30	packed ice pH OK 0-90

Alcohol MW-23S sample labeled as MW-25S. time was 13:40.

10/23/95
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Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

0305124

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Syracuse, New York 13214-0066
TEL: (315) 446-9120

CHAIN OF CUSTODY RECORD

PROJ. NO. 26003 | PROJECT NAME McKesson Bear Street

SAMPLERS: (Signature) Christie M Sobol

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	Number of Containers: VOCs	SVOCs	Alcohols	REMARKS
1	5/9/03	1100		✓	MW-19	3	2	2	7 total
2	5/9/03	1035		✓	PZ-4D	3	2	2	7 total
3	5/9/03	1150		✓	PZ-4S	3	2	2	7 total
	5/9/03				Trip Blanks	2		2	4 total
					Temp. Blanks				1 total

Please contact with Questions:

Christie Sobol
(315)(446)-2570 ext 325

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Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Christie M Sobol	5/9/03	1520					
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Relinquished by: (Signature)	DATE	TIME	Relinquished by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received for Laboratory by: (Signature)	DATE	TIME	Remarks:	
			Pamela Davis	5/9/03	15:28		

10/23/95
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