TETRA TECH EM INC.

January 29, 2007

Mr. Romuald Roman (3HS22)
Work Assignment Manager (WAM)
U.S. Environmental Protection Agency Region 3
1650 Arch Street
Philadelphia, PA 19103

Subject: **Validated Analytical Data for McAdoo Associates Blaine Street OU-2 Site**
Contract No. EP- S3-05-02
TDD No. E13-010-06-09-001
DTN No. 254

Dear Mr. Roman:

Under the above-referenced contract and technical direction document number (TDD), Tetra Tech EM Inc. (Tetra Tech), is submitting this letter and validated analytical data for the groundwater sampling event conducted at the McAdoo Associates Blaine Street OU-2 site located in McAdoo Borough, Schuylkill County, Pennsylvania.

During the November 15, 2006 groundwater sampling event, six of the seven monitoring wells (MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7) were sampled by Tetra Tech. Figure 1 – Site Location Map, Figure 2 - Site Layout Map, and Figure 3 – Proposed Sampling Location Map are provided as a an attachment to this letter. Monitoring well MW-1 was dry and therefore not sampled during the sampling event. Based upon a review of the validated analytical data for the groundwater samples collected during the groundwater sampling event, benzene was detected above the EPA Maximum Contaminant Level (MCL) (5 µg/L) in groundwater samples collected from monitoring wells MW-3 (330 µg/L), MW-4 (190 µg/L), MW-5 (160 µg/L), and MW-7 (200 µg/L). Benzene was not detected in the groundwater sample collected from MW-6. Ethylbenzene was detected above its MCL (700 µg/L) in the groundwater sample collected from monitoring wells MW-4 (790 µg/L) and naphthalene was detected above its MCL (100 µg/L) in the groundwater samples collected from monitoring wells MW-4 (130 µg/L) and MW-5 (110 µg/L). Ethylbenzene was not detected in the groundwater samples collected from monitoring wells MW-2, MW-3, MW-5, MW-6 and MW-7 and naphthalene was not detected in groundwater samples collected from monitoring wells MW-2, MW-3, MW-6, and MW-7. Additional volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were detected within the wells; however, the VOCs and SVOCs were detected at concentrations below EPA MCLs.

It should be noted that during the groundwater sampling event, approximately five feet of product was present in monitoring well MW-5. Based on the analytical results of the groundwater sampling event, the presence of free product in monitoring well MW-5, and the close proximity of the site to occupied residences; vapor intrusion, requiring vapor monitoring activities, may become a concern for the residences along Blaine Street.

If you have any questions or comments, please contact me at (610) 364-2148.

Sincerely,

Beth Williams

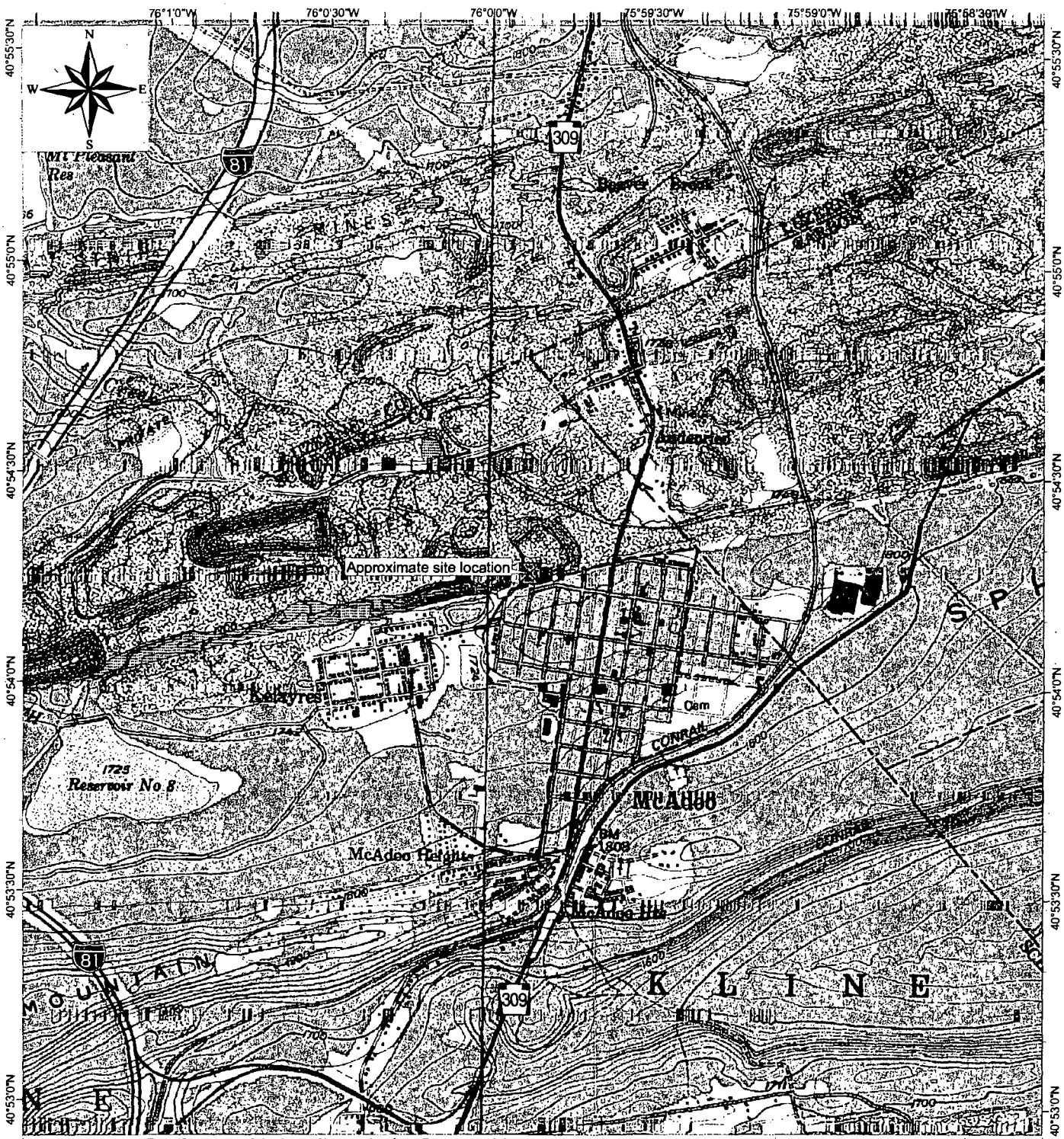
Beth Williams
Environmental Scientist

Enclosure

cc: File

FIGURES

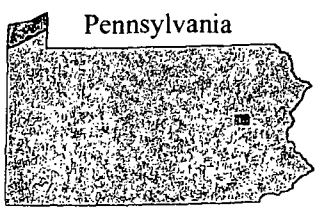
(Three pages)



Source: Modified from USGS 7.5-Minute Series Topographic Quadrangles,
Conyngham, Pennsylvania, 1955, Photorevised 1989
Hazleton, Pennsylvania, 1947, Photorevised 1969, 1978, Photoinspected 1980

0 0.25 0.5 Miles

Quadrangle Location =



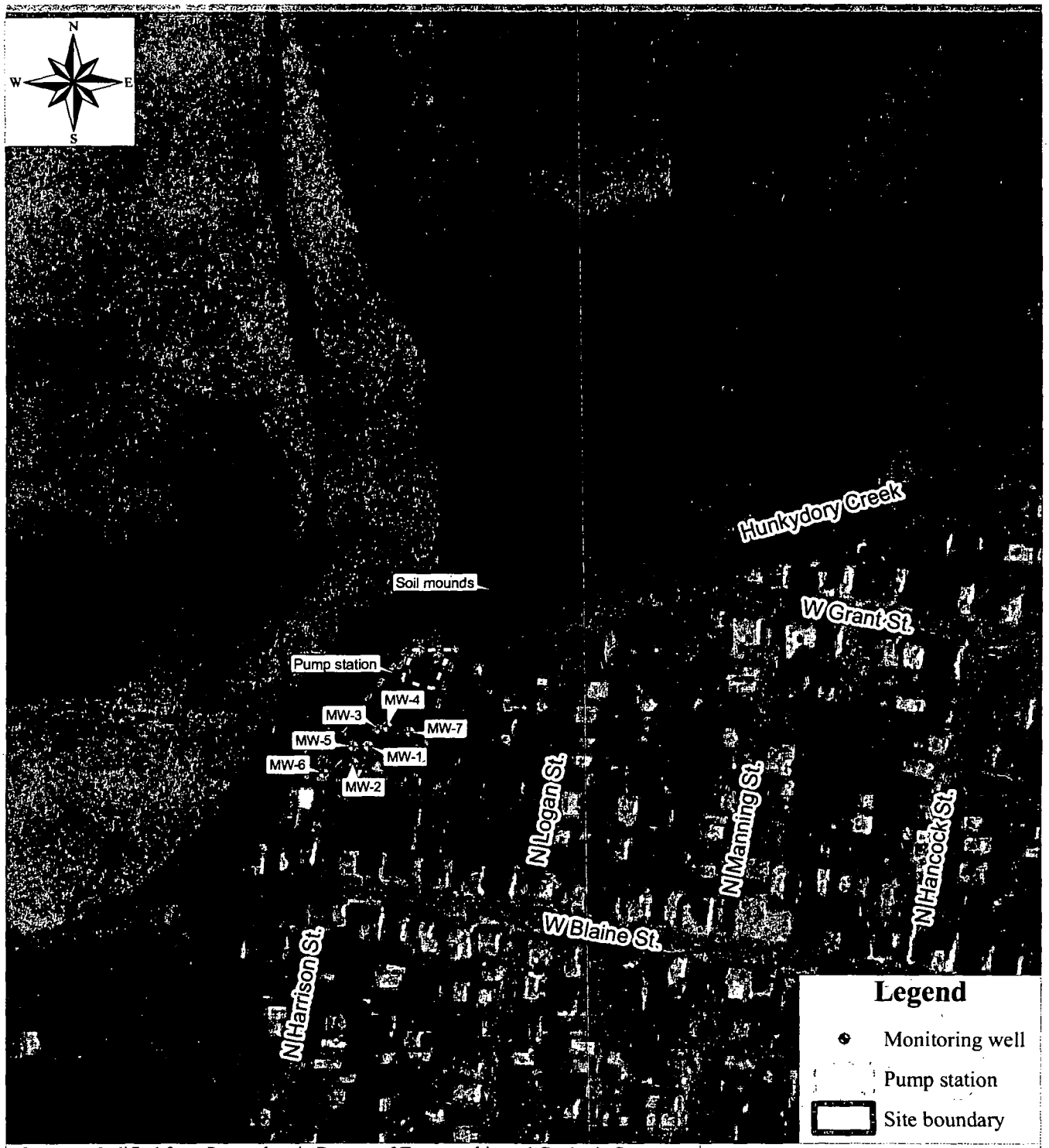
McAdoo Associates Blaine Street OU-2 Site
McAdoo, Schuylkill County, Pennsylvania

Figure 1
Site Location Map

TDD No. E13-010-06-09-001
EPA Contract No. EP-S3-05-02

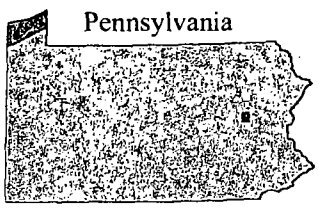
Map created on October 21, 2006
by D. Call, Tetra Tech EMI

TETRA TECH EM INC.



Source: Modified from Pennsylvania Bureau of Topographic and Geologic Survey Digital Orthophoto (DOQQ) for Hazleton Quadrangle, Pennsylvania, 1995

Quadrangle Location =



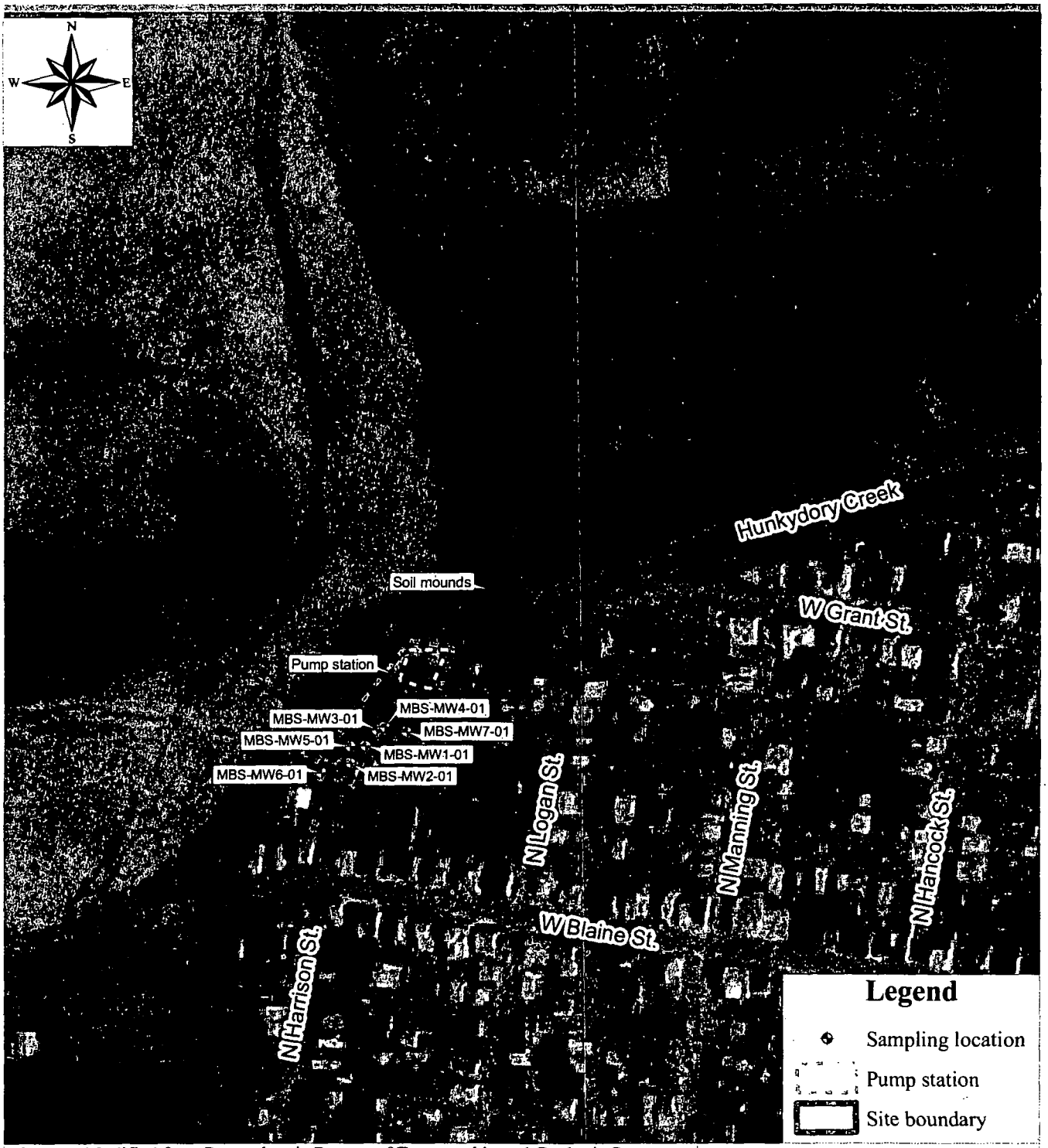
McAdoo Associates Blaine Street OU-2 Site
McAdoo, Schuylkill County, Pennsylvania

Figure 2
Site Layout Map

TDD No. E13-010-06-09-001
EPA Contract No. EP-S3-05-02

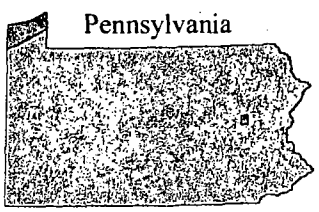
Map created on October 21, 2006
by D. Call, Tetra Tech EMI

TETRA TECH EM INC.



Source: Modified from Pennsylvania Bureau of Topographic and Geologic Survey Digital Orthophoto (DOQQ) for Hazleton Quadrangle, Pennsylvania, 1995

Quadrangle Location =



McAdoo Associates Blaine Street OU-2 Site
McAdoo, Schuylkill County, Pennsylvania

Figure 3
Proposed Sampling Location Map

TDD No. E13-010-06-09-001
EPA Contract No. EP-S3-05-02

Map created on October 21, 2006
by D. Call, Tetra Tech EMI

TETRA TECH EM INC.

TETRA TECH EM INC.

VALIDATED ANALYTICAL REPORTS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
ENVIRONMENTAL SCIENCE CENTER
701 MAPES ROAD
FORT MEADE, MARYLAND 20755-5350

DATE : December 12, 2006

SUBJECT: Region III Data QA Review

FROM : Khin-Cho Thaung KCT
Region III ESAT RPO (3EA20)

TO : Romuald Roman
Regional Project Manager (3HS22)

Attached is the organic data validation report for the McAdoo Assocates site (Case # 35961; SDG #C01P3) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2743.

Attachments

cc: Marian Murphy (TTEMI)

TO File #: 0001 TDF#: 1205

ANALYTICAL SERVICES AND QUALITY ASSURANCE BRANCH

Lockheed Martin Information Technology
ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350
Telephone 410-305-3037 Facsimile 410-305-3597

LOCKHEED MARTIN
We never forget who we're working for™

DATE: December 12, 2006

SUBJECT: Level M2 Organic Data Validation for Case 35961
SDG: C01P3
Site: McAdoo Associates

FROM: Shilpa Udani
Organic Data Reviewer

Mahboobeh Mecanic
Senior Oversight Chemist

TO: Khin-Cho Thaung
ESAT Region 3 Project Officer

OVERVIEW

Case 35961, Sample Delivery Group (SDG) C01P3, consisted of nine (9) aqueous analyzed for volatile, semivolatile, pesticide and aroclor compounds and one (1) aqueous trip blank analyzed for volatile only. All samples were submitted to Liberty Analytical Corporation (LIBRTY) for analyses. The samples set included one (1) rinsate blank, one (1) field blank and one (1) field duplicate pair. Samples were analyzed according to Contract Laboratory Program (CLP) Statement of Work (SOW) SOM01.1 through Routine Analytical Services (RAS) program.

SUMMARY

Data were validated according to Region 3 Innovative Approaches for Validation of Organic Data, Level M2. This level of review includes assessment of all Quality Assurance/Quality Control (QA/QC) data and review of chromatograms, but excludes review of raw data and sample spectra. Areas that may impact data usability are listed below.

MAJOR PROBLEM

- Relative Response Factor (RRF) in the volatile initial and continuing calibrations were less than 0.005 for 1,4-dioxane. Quantitation limit for this compound in all samples was rejected and qualified "R" on the Data Summary Forms (DSFs).

MINOR PROBLEMS

- Several compounds failed precision criteria [Percent Relative Standard Deviation (%RSD) and/or Percent Difference (%D)] in the volatile and semivolatile initial and/or continuing calibration. Positive results reported for methylcyclohexane in sample volatile sample C01P4 was qualified "J" on the DSFs. Imprecision did not exceed 50% criteria; therefore, quantitation limits were not qualified.

- The following samples had recoveries of Deuterated Monitoring Compounds (DMCs) outside the lower (Quality Control) QC limits. No positive results were associated with these DMCs. Quantitation limits for compounds associated with these DMCs were qualified "UL" on the DSFs.

Fraction	Sample	DMCs
VOC	C01Q1	1,2-Dichloroethane-d4
	C01Q2	Chloroform-d, 1,2-Dichloroethane-d4
SVOC	C01P3	Benzo(a)pyrene-d12

- Positive results for pesticide compounds with percent differences (%Ds) greater than twenty-five percent (>25%) between the two analytical columns were qualified "J" on the DSFs.

NOTES

- Concentrations of target compounds found in the analysis of trip, field, rinsate, method and storage blanks are listed below. Only compounds used to qualify data are listed. Samples with concentrations of common laboratory contaminants less than ten times (<10X) blank concentration or with concentration of other contaminants less than five times (<5X)blank concentration have been qualified "B" on the DSFs.

Fraction	Blanks	Compound	Concentration	Samples
VOC	Storage (VHBLKZX)	Methylene chloride*	1.9 J ug/L	C01Q0
	Rinsate (C01Q1)	Toluene	1.3 J ug/L	C01P3, C01P4, C01P5, C01P6, C01P7, C01P9

- The concentrations of several compounds in samples listed below exceeded the calibration range in the initial analyses. These samples were diluted and re-analyzed to bring the concentrations of these compounds within the calibration range. Results for these compounds are reported from the diluted analyses and annotated with a (+) symbol on the DSFs by the reviewer.

Fraction	Samples	Dilution Factor	Compound
VOC	C01P4	2.5 X	Benzene
SVOC	C01P5, C01P7	5.0 X	Naphthalene, 2-Methylnaphthalene
	C01P6	10 X	Naphthalene, 2-Methylnaphthalene

- Semivolatile samples C01P5, C01P6, C01P7 and C01P7DL had DMC nitrobenzene-d5 recoveries outside the upper QC limit. The sample results associated with this DMC were non-detects; therefore, no data qualifying action was taken by reviewer.

- Storage blank (VHBLKZX) had a recovery of DMC 1,1,2,2-tetrachloroethane-d2 outside the lower control limit. No data were qualified based on this QC outlier.

- Matrix Spike / Matrix Spike duplicate (MS/MSD) analyses of aroclor sample C01Q3 reported Realtive Percent Differences (RPDs) outside control limit for Aroclor-1016 and Aroclor-1260 on both columns. No data were qualified based on these QC outliers.

- Based on screening, the following samples were initially analyzed diluted due to high concentration of target compounds. Contract Required Quantitation Limits (CRQLs) are elevated due to these dilution.

Fraction	Sample	Dilution Factor
VOC	C01P5, C01P6, C01P7	10 X
	C01P9	5.0 X

- Tentatively Identified Compounds (TICs) were reviewed during data validation. Compounds identified as blank contaminants or compounds from other fraction were crossed off TIC Form Is by the reviewer. Several TICs were identified as the same target compounds at different retention time. Identification for these TICs was changed to "unknown" by the reviewer. TIC Form Is for samples in which TICs were identified are included in Appendix C.

- Results for volatile, semivolatile and pesticide/PCB field duplicate pairs, samples C01P5/C01P6 were comparable for all compounds in each fraction.

- Sample volumes other than 1000 ml in semivolatile, pesticide and aroclor aqueous analyses were used for samples associated with this case. Dilution factors reported on the DSFs reflect actual sample volumes used.

- Compounds detected below Contract Required Quantitation Limits (CRQLs) were qualified "J" unless superseded by "B" on the DSFs.

All data for Case 35961, SDG C01P3, were reviewed in accordance with Region III Modifications to the National Functional Guidelines for Organic Data Review, September 1994.

ATTACHMENTS

1) Appendix A Glossary of Data Qualifier Terms
2) Appendix B Data Summary Forms
3) Appendix C Tentatively Identified Compounds (TICs)
4) Appendix D Chain-of-Custody Records
5) Appendix E Laboratory Case Narrative

DCN: 35961 – C01P3

Appendix A

Glossary of Data Qualifier Codes

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION
(confidence concerning presence or absence of compounds)

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

NO CODE = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION
(can be used for both positive results and sample quantitation limits):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

NJ = Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.

Q = No analytical result.

Appendix B

Data Summary Forms

Case #: 35961 SDG : C01P3 Number of Soil Samples : 0
Site : MCADOO ASSOCIATES Number of Water Samples : 10
Lab. :, LIBRTY

Sample Number :		C01P3		C01P4		C01P5		C01P6		C01P7	
Sampling Location :		MBS-MW2-01		MBS-MW3-01		MBS-MW4-01		MBS-MW4-02		MBS-MW5-01	
Field QC :						Dup. of C01P6		Dup. of C01P5			
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006		11/15/2006	
Time Sampled :		16:20		18:15		17:10		18:00		18:55	
pH :		1		1		1		1		1	
Dilution Factor :		1.0		1.0 / 2.5		10.0		10.0		10.0	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane											
Chloromethane	5.0										
*Vinyl chloride											
Bromomethane	5.0										
Chloroethane											
Trichlorofluoromethane	5.0										
1,1-Dichloroethene											
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0										
Acetone											
Carbon disulfide	5.0										
Methyl acetate											
*Methylene chloride	5.0										
trans-1,2-Dichloroethene											
Methyl tert-butyl ether	5.0										
1,1-Dichloroethane											
cis-1,2-Dichloroethene	5.0										
2-Butanone											
Bromochloromethane	5.0										
Chloroform											
*1,1,1-Trichloroethane	5.0										
Cyclohexane						60					
*Carbon tetrachloride	5.0										
Benzene						90					
*1,2-Dichloroethane	5.0										
1,4-Dioxane											
Trichloroethene	5.0										
Methylcyclohexane											
*1,2-Dichloropropane	5.0										
Bromodichloromethane											
cis-1,3-Dichloropropene	5.0										
4-Methyl-2-pentanone											
*Toluene	5.0	2.0	B	5.6	B	18	B	19	B	29	B
trans-1,3-Dichloropropene											

"+" = Result is reported from dilution analysis.

Case #: 35961 SDG : C01P3
Site : MCADOO ASSOCIATES
Lab. : LIBRTY

Sample Number :		C01P3		C01P4		C01P5		C01P6		C01P7	
Sampling Location :		MBS-MW2-01		MBS-MW3-01		MBS-MW4-01		MBS-MW4-02		MBS-MW5-01	
Field QC :						Dup. of C01P6		Dup. of C01P5			
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006		11/15/2006	
Time Sampled :		16:20		18:15		17:10		18:00		18:55	
pH :		1		1		1		1		1	
Dilution Factor :		1.0		1.0 / 2.5		10.0		10.0		10.0	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1,2-Trichloroethane	5.0										
Tetrachloroethene	5.0										
2-Hexanone	10					53	J				
Dibromochloromethane	5.0										
1,2-Dibromoethane	5.0										
Chlorobenzene	5.0										
*Ethylbenzene	5.0			38		790		840		460	
o-Xylene	5.0			4		60		60		40	
m,p-Xylene	5.0			12		970		1100		1100	
Styrene	5.0										
Bromoform	5.0										
Isopropylbenzene	5.0					69		72		45	
1,1,2,2-Tetrachloroethane	5.0										
1,3-Dichlorobenzene	5.0										
*1,4-Dichlorobenzene	5.0										
1,2-Dichlorobenzene	5.0										
1,2-Dibromo-3-chloropropane	5.0										
1,2,4-Trichlorobenzene	5.0										
1,2,3-Trichlorobenzene	5.0										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Case #: 35981
Site :
Lab. :

SDG : C01P3
MCADOO ASSOCIATES
LIBRTY

Sample Number :		C01P9		C01Q0		C01Q1		C01Q2		C01Q3	
Sampling Location :		MBS-MW7-01		MBS-FB-01		MBS-RB-01		MBS-TB-01		MBS-MW6-01	
Field QC :				Field Blank		Rinsate Blank		Trip Blank			
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006		11/15/2006	
Time Sampled :		15:30		15:30		14:24		15:35		13:35	
pH :		1		1		1		1		1	
Dilution Factor :		5.0		1.0		1.0		1.0		1.0	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5.0										
Chloromethane	5.0										
*Vinyl chloride	5.0										
Bromomethane	5.0										
Chloroethane	5.0										
Trichlorofluoromethane	5.0						UL		UL		
1,1-Dichloroethene	5.0										
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0						UL		UL		
Acetone	10										
Carbon disulfide	5.0										
Methyl acetate	5.0										
*Methylene chloride	5.0			1.4	B		UL		UL		
trans-1,2-Dichloroethene	5.0										
Methyl tert-butyl ether	5.0						UL		UL		
1,1-Dichloroethane	5.0										
cis-1,2-Dichloroethene	5.0										
2-Butanone	10										
Bromochloromethane	5.0								UL		
Chloroform	5.0										
*1,1,1-Trichloroethane	5.0						UL		UL		
Cyclohexane	5.0	2.2	J								
*Carbon tetrachloride	5.0						UL		UL		
*Benzene	5.0	200									
*1,2-Dichloroethane	5.0						UL		UL		
Bromodichloromethane	5.0						R		R		
Trichloroethene	5.0										
Methylcyclohexane	5.0										
*1,2-Dichloropropane	5.0										
Bromodichloromethane	5.0										
cis-1,3-Dichloropropene	5.0										
4-Methyl-2-pentanone	10										
*Toluene	5.0	8.9	B			1.3	J	1.1	J		
trans-1,3-Dichloropropene	5.0										

Case #: 35961 SDG : C01P3
Site : MCADOO ASSOCIATES
Lab. : LIBRTY

Sample Number :		C01P9		C01Q0		C01Q1		C01Q2		C01Q3	
Sampling Location :		MBS-MW7-01		MBS-FB-01		MBS-RB-01		MBS-TB-01		MBS-MW6-01	
Field QC :				Field Blank		Rinsate Blank		Trip Blank			
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006		11/15/2006	
Time Sampled :		15:30		15:30		14:24		15:35		13:35	
pH :		1		1		1		1		1	
Dilution Factor :		5.0		1.0		1.0		1.0		1.0	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1,2-Trichloroethane	5.0										
Tetrachloroethene	5.0										
2-Hexanone	10										
Dibromochloromethane	5.0										
1,2-Dibromoethane	5.0						UL		UL		
*Chlorobenzene	5.0										
*Ethylbenzene	5.0	480									
o-Xylene	5.0										
m,p-Xylene	5.0	620				1.8	J	2.1	J		
Styrene	5.0										
Bromoform	5.0								UL		
Isopropylbenzene	5.0	47									
1,1,2,2-Tetrachloroethane	5.0										
*1,3-Dichlorobenzene	5.0										
*1,4-Dichlorobenzene	5.0										
*1,2-Dichlorobenzene	5.0										
1,2-Dibromo-3-chloropropane	5.0										
1,2,4-Trichlorobenzene	5.0										
1,2,3-Trichlorobenzene	5.0										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Case #: 35961
Site :
Lab. :

SDG : C01P3
MCADOO ASSOCIATES
LIBRTY

Number of Soil Samples : 0
Number of Water Samples : 9

Sample Number :		C01P3		C01P4		C01P5		C01P6		C01P7	
Sampling Location :		MBS-MW2-01		MBS-MW3-01		MBS-MW4-01		MBS-MW4-02		MBS-MW5-01	
Field QC :						Dup. of C01P6		Dup. of C01P5			
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006		11/15/2006	
Time Sampled :		16:20		18:15		17:10		18:00		18:55	
Dilution Factor :		1.03		0.98		1.0 / 5.0		1.0 / 10		0.98 / 4.98	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzyl Alcohol	5.0										
Phenol	5.0										
Bis(2-Chloroethyl)ether	5.0										
2-Chlorophenol	5.0										
2-Methylphenol	5.0										
2,2'-Oxybis(1-chloropropane)	5.0										
Acetophenone	5.0										
4-Methylphenol	5.0										
N-Nitroso-di-n-propylamine	5.0										
Hexachloroethane	5.0										
Nitrobenzene	5.0										
Isophorone	5.0										
2-Nitrophenol	5.0										
2,4-Dimethylphenol	5.0										
Bis(2-Chloroethoxy)methane	5.0										
2,4-Dichlorophenol	5.0										
Naphthalene	5.0					50 +					
4-Chloroaniline	5.0										
Hexachlorobutadiene	5.0										
Caprolactam	5.0	13		25							
4-Chloro-3-methylphenol	5.0										
2-Methylnaphthalene	5.0			32		81 +		100 +		130 +	
Hexachlorocyclopentadiene	5.0										
2,4,6-Trichlorophenol	5.0										
2,4,5-Trichlorophenol	5.0										
1,1'-Biphenyl	5.0			1.9	J	2.9	J	4.0	J	6.9	
2-Chloronaphthalene	5.0										
2-Nitroaniline	10										
Dimethylphthalate	5.0										
2,6-Dinitrotoluene	5.0										
Acenaphthylene	5.0										
3-Nitroaniline	10										
Acenaphthene	5.0										

"+" = Results are reported from diluted analyses

Case #: 35961 SDG : C01P3
Site : MCADOO ASSOCIATES
Lab. : LIBRTY

Sample Number :		C01P3		C01P4		C01P5		C01P6		C01P7	
Sampling Location :		MBS-MW2-01		MBS-MW3-01		MBS-MW4-01		MBS-MW4-02		MBS-MW5-01	
Field QC :						Dup. of C01P6		Dup. of C01P5			
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006		11/15/2006	
Time Sampled :		16:20		18:15		17:10		18:00		18:55	
Dilution Factor :		1.03		0.98		1.0 / 5.0		1.0 / 10		0.98 / 4.98	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2,4-Dinitrophenol	10										
4-Nitrophenol	10										
Dibenzofuran	5.0										
2,6-Dinitrotoluene	5.0										
Diethylphthalate	5.0										
Fluorene	5.0										
4-Chlorophenyl-phenylether	5.0										
4-Nitroaniline	10										
4,6-Dinitro-2-methylphenol	10										
N-Nitrosodiphenylamine	5.0										
1,2,4,5-Tetrachlorobenzene	5.0										
4-Bromophenyl-phenylether	5.0										
*Hexachlorobenzene	5.0										
Atrazine	5.0										
*Pentachlorophenol	10										
Phenanthrene	5.0										
Anthracene	5.0										
Carbazole	5.0										
Di-n-butylphthalate	5.0										
Fluoranthene	5.0										
Pyrene	5.0										
Butylbenzylphthalate	5.0										
3,3'-Dichlorobenzidine	5.0										
Benzo(a)anthracene	5.0										
Chrysene	5.0										
Bis(2-ethylhexyl)phthalate	5.0										
Di-n-octylphthalate	5.0										
Benzo(b)fluoranthene	5.0										
Benzo(k)fluoranthene	5.0		UL								
Benzo(a)pyrene	5.0										
Indeno(1,2,3-cd)pyrene	5.0		UL								
Dibenz(a,h)anthracene	5.0										
Benzo(g,h,i)perylene	5.0		UL								
Hexachlorocyclopentadiene	5.0										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Case #: 35961
Site :
Lab. :

SDG : C01P3
MCADOO ASSOCIATES
LIBRTY

Sample Number :		C01P9		C01Q0		C01Q1		C01Q3			
Sampling Location :		MBS-MW7-01		MBS-FB-01		MBS-RB-01		MBS-MW6-01			
Field QC :				Field Blank		Rinsate Blank					
Matrix :		Water		Water		Water		Water			
Units :		ug/L		ug/L		ug/L		ug/L			
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006			
Time Sampled :		15:30		15:30		14:24		13:35			
Dilution Factor :		1.0		1.11		1.05		0.98			
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	5.0										
Phenol	5.0										
Bis(2-chloroethyl)ether	5.0										
2-Chlorophenol	5.0										
2-Methylphenol	5.0										
2,2'-Oxybis(1-chloropropane)	5.0										
Acetophenone	5.0										
4-Methylphenol	5.0										
N-Nitroso-di-n-propylamine	5.0										
Hexachloroethane	5.0										
Nitrobenzene	5.0										
Isophorone	5.0										
2-Nitrophenol	5.0										
2,4-Dimethylphenol	5.0										
Bis(2-chloroethoxy)methane	5.0										
2,4-Dichlorophenol	5.0										
Naphthalene	5.0	70									
4-Chloroaniline	5.0										
Hexachlorobutadiene	5.0										
Caprolactam	5.0										
4-Chloro-3-methylphenol	5.0										
2-Methylnaphthalene	5.0	66									
Hexachlorocyclopentadiene	5.0										
2,4,6-Trichlorophenol	5.0										
2,4,5-Trichlorophenol	5.0										
1,1-Biphenyl	5.0	25									
2-Chloronaphthalene	5.0										
2-Nitroaniline	10										
Dimethylphthalate	5.0										
2,6-Dinitrotoluene	5.0										
Acenaphthylene	5.0										
3-Nitroaniline	10										
Acenaphthene	5.0										

Case #: 35961 SDG : C01P3
Site : MCADOO ASSOCIATES
Lab. : LIBRTY

Sample Number :		C01P9		C01Q0		C01Q1		C01Q3			
Sampling Location :		MBS-MW7-01		MBS-FB-01		MBS-RB-01		MBS-MW6-01			
Field QC :				Field Blank		Rinsate Blank					
Matrix :		Water		Water		Water		Water			
Units :		ug/L		ug/L		ug/L		ug/L			
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006			
Time Sampled :		15:30		15:30		14:24		13:35			
Dilution Factor :		1.0		1.11		1.05		0.98			
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2,4-Dinitrophenol	10										
4-Nitrophenol	10										
Dibenzofuran	5.0										
2,4-Dinitrotoluene	5.0										
Diethylphthalate	5.0										
Fluorene	5.0										
4-Chlorophenyl-phenylether	5.0										
4-Nitroaniline	10										
4,6-Dinitro-2-methylphenol	10										
N-Nitrosodiphenylamine	5.0										
1,2,4,5-Tetrachlorobenzene	5.0										
4-Bromophenyl-phenylether	5.0										
Hexachlorobenzene	5.0										
Atrazine	5.0										
Pentachlorophenol	10										
Phenanthrene	5.0	1.5	J								
Anthracene	5.0										
Carbazole	5.0										
Di-n-butylphthalate	5.0										
Fluoranthene	5.0										
Benzidine	5.0										
Butylbenzylphthalate	5.0										
3,3'-Dichlorobenzidine	5.0										
Benzo(a)anthracene	5.0										
Chrysene	5.0										
Bis(2-ethylhexyl)phthalate	5.0	5.2									
Di-n-octylphthalate	5.0										
Benzo(b)fluoranthene	5.0										
Benzo(k)fluoranthene	5.0										
Benzo(a)pyrene	5.0										
Indeno(1,2,3-cd)pyrene	5.0										
Dibenzo(a,h)anthracene	5.0										
Benzo(g,h,i)perylene	5.0										
2,3,4,6-Tetrachlorophenol	5.0										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Case #: 35961 SDG : C01P3 Number of Soil Samples : 0
Site : MCADOO ASSOCIATES Number of Water Samples : 9
Lab. : LIBRTY

Sample Number :		C01P3		C01P4		C01P5		C01P6		C01P7	
Sampling Location :		MBS-MW2-01		MBS-MW3-01		MBS-MW4-01		MBS-MW4-02		MBS-MW5-01	
Field QC :						Dup. of C01P6		Dup. of C01P5			
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006		11/15/2006	
Time Sampled :		16:20		18:15		17:10		18:00		18:55	
Dilution Factor :		1.0		1.0		1.05		1.0		2.0	
Pesticide Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	0.050										
beta-BHC	0.050			0.025	J	0.029	J	0.011	J		
delta-BHC	0.050			0.021	J						
*gamma-BHC (Lindane)	0.050										
*Heptachlor	0.050			0.012	J						
Aldrin	0.050										
Heptachlor epoxide	0.050										
Endosulfan I	0.050									0.013	J
Dieldrin	0.10										
4,4'-DDE	0.10										
Endrin	0.10										
Endosulfan II	0.10										
4,4'-DDD	0.10										
Endosulfan sulfate	0.10										
4,4'-DDT	0.10										
*Methoxychlor	0.50										
Endrin ketone	0.10										
Endrin aldehyde	0.10										
alpha-Chlordane	0.050										
gamma-Chlordane	0.050										
*Toxaphene	1.0										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Case #: 35961 SDG : C01P3
Site : MCADOO ASSOCIATES
Lab. : LIBRTY

Sample Number :		C01P9		C01Q0		C01Q1		C01Q3			
Sampling Location :		MBS-MW7-01		MBS-FB-01		MBS-RB-01		MBS-MW6-01			
Field QC :				Field Blank		Rinsate Blank					
Matrix :		Water		Water		Water		Water			
Units :		ug/L		ug/L		ug/L		ug/L			
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006			
Time Sampled :		15:30		15:30		14:24		13:35			
Dilution Factor :		1.0		1.11		1.0		1.08			
Pesticide Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	0.050										
beta-BHC	0.050										
delta-BHC	0.050										
gamma-BHC (Lindane)	0.050										
*Heptachlor	0.050	0.016	J								
Aldrin	0.050										
Heptachlor epoxide	0.050										
Endosulfan I	0.050										
Dieldrin	0.10										
4,4'-DDE	0.10										
*Endrin	0.10										
Endosulfan II	0.10										
4,4'-DDD	0.10										
Endosulfan sulfate	0.10										
4,4'-DDT	0.10										
Methoxychlor	0.50										
Endrin ketone	0.10										
Endrin aldehyde	0.10										
alpha-Chlordane	0.050										
gamma-Chlordane	0.050										
*Toxaphene	5.0										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Case #: 35961 SDG : C01P3 Number of Soil Samples : 0
Site : MCADOO ASSOCIATES Number of Water Samples : 9
Lab. : LIBRTY

Sample Number :		C01P3		C01P4		C01P5		C01P6		C01P7	
Sampling Location :		MBS-MW2-01		MBS-MW3-01		MBS-MW4-01		MBS-MW4-02		MBS-MW5-01	
Field QC :						Dup. of C01P6		Dup. of C01P5			
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006		11/15/2006	
Time Sampled :		16:20		18:15		17:10		18:00		18:55	
Dilution Factor :		1.03		1.05		0.95		1.0		1.0	
Aroclor Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
*Aroclor-1016	1.0										
*Aroclor-1221	1.0										
*Aroclor-1232	1.0										
*Aroclor-1242	1.0										
*Aroclor-1248	1.0										
*Aroclor-1254	1.0										
*Aroclor-1260	1.0										
*Aroclor-1262	1.0										
*Aroclor-1268	1.0										

Sample Number :		C01P9		C01Q0		C01Q1		C01Q3			
Sampling Location :		MBS-MW7-01		MBS-FB-01		MBS-RB-01		MBS-MW6-01			
Field QC :				Field Blank		Rinsate Blank					
Matrix :		Water		Water		Water		Water			
Units :		ug/L		ug/L		ug/L		ug/L			
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006			
Time Sampled :		15:30		15:30		14:24		13:35			
Dilution Factor :		1.05		1.08		1.0		1.0			
Aroclor Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
*Aroclor-1016	1.0										
*Aroclor-1221	1.0										
*Aroclor-1232	1.0										
*Aroclor-1242	1.0										
*Aroclor-1248	1.0										
*Aroclor-1254	1.0										
*Aroclor-1260	1.0										
*Aroclor-1262	1.0										
*Aroclor-1268	1.0										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Appendix C

Tentatively Identified Compounds (TICs)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P4

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix (SOIL/SED/WATER): Water Lab Sample ID: 1158102

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1158102B90

Level: (TRACE or LOW/MED) LOW Date Received: 11/20/2006

% Moisture: not dec. _____ Date Analyzed: 11/28/2006

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	10.66	16	J
02	103-65-1	Benzene, propyl-	13.43	26	NJ
03	~~526-73-8~~ Unknown	Benzene, ~~1,2,3-trimethyl-~~	13.54	14	NJ
04	611-14-3	Benzene, 1-ethyl-2-methyl-	13.74	43	NJ
05	~~526-73-8~~ Unknown	Benzene, ~~1,2,3-trimethyl-~~	13.86	130	NJ
06	93-53-8	Benzeneacetaldehyde, .alpha.-meth	14.00	5.7	NJ
07		Unknown	14.19	8.5	J
08	105-05-5	Benzene, 1,4-diethyl-	14.32	12	NJ
09		Substituted Benzene	14.39	11	J
10		Substituted Benzene	14.44	48	J
11	2199-69-1	Benzene-1,2,3,4-d4-, 5,6-dichlor	14.56	25	NJ
12	~~2870-04-4~~ Unknown	Benzene, ~~2-ethyl-1,3-dimethyl-~~	14.63	16	NJ
13	~~99-87-6~~ Unknown	Benzene, ~~1-methyl-4-(1-methyleth~~	14.66	14	NJ
14	~~2870-04-4~~ Unknown	Benzene, ~~2-ethyl-1,3-dimethyl-~~	14.72	24	NJ
15	2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	14.84	11	NJ
16	824-90-8	1-Phenyl-1-butene	14.91	19	NJ
17	~~99-87-6~~ Unknown	Benzene, 1-~~methyl-4-(1-methyleth~~	15.03	6.3	NJ
18	~~527-84-4~~ Unknown	Benzene, ~~1-methyl-2-(1-methyleth~~	15.09	18	NJ
19	~~527-84-4~~ Unknown	Benzene, 1-methyl-2-(1-methyleth	15.14	25	NJ
20	~~767-58-8~~ Unknown	Indan, ~~1-methyl-~~	15.46	19	NJ
21	934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	15.58	15	NJ
22	~~767-58-8~~ Unknown	Indan, ~~1-methyl-~~	15.64	24	NJ
23		Unknown	15.85	10	J
24	~~56253-64-6~~ Unknown	Benzene, ~~(2-methyl-1-butenyl)-~~	15.91	13	NJ
25		Substituted Benzene	15.99	8.7	J
26	~~56253-64-6~~ Unknown	Benzene, ~~(2-methyl-1-butenyl)-~~	16.10	9.7	NJ
27	275-51-4	Azulene	16.41	22	NJ
28	6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimeth	16.71	5.6	NJ
29	264-09-5	Benzocycloheptatriene	17.84	14	NJ
30					
	E866796 [1]	Total Alkanes	N/A	500	J

[1] EPA-designated Registry Number.

Su 12/05106

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P4DL

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix (SOIL/SED/WATER): Water Lab Sample ID: 1158102

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1158102D90

Level: (TRACE or LOW/MED) LOW Date Received: 11/20/2006

% Moisture: not dec. _____ Date Analyzed: 11/29/2006

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 2.5

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	8.50	16	JD
02		Unknown	8.63	70	JD
03		Unknown	9.73	14	JD
04		Unknown	10.77	17	JD
05	103-65-1	Benzene, propyl-	13.44	31	NJD
06	526-73-8	Benzene, 1,2,3-trimethyl-	13.55	17	NJD
07	108-67-8	Benzene, 1,3,5-trimethyl-	13.74	58	NJD
08	105-05-5	Benzene, 1,4-diethyl-	14.32	13	NJD
09		Unknown	14.44	62	JD
10	2870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	14.63	33	NJD
11	874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	14.72	30	NJD
12	1005-64-7	(E)-1-Phenyl-1-butene	14.91	23	NJD
13	527-53-7	Benzene, 1,2,3,5-tetramethyl-	15.09	21	NJD
14	527-84-4	Benzene, 1-methyl-2-(1-methyleth	15.14	31	NJD
15	824-90-8	1-Phenyl-1-butene	15.46	23	NJD
16	933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	15.58	18	NJD
17	767-58-8	Indan, 1-methyl-	15.64	31	NJD
18	53172-84-2	Benzene, (1-methyl-1-butenyl)-	15.91	15	NJD
19	275-51-4	Azulene	16.41	31	NJD
20	264-09-5	Benzocycloheptatriene	17.85	17	NJD
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 [1]	Total Alkanes	N/A	250	J

[1] EPA-designated Registry Number.

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P5

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix (SOIL/SED/WATER): Water Lab Sample ID: 1158103

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1158103DB90

Level: (TRACE or LOW/MED) LOW Date Received: 11/20/2006

% Moisture: not dec. _____ Date Analyzed: 11/29/2006

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 10.0

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	5.60	270	J
02	109-67-1	1-Pentene	7.39	72	NJ
03	103-65-1	Benzene, propyl-	13.44	120	NJ
04	611-14-3	Benzene, 1-ethyl-2-methyl-	13.49	610	NJ
05	622-96-8	Benzene, 1-ethyl-4-methyl-	13.74	180	NJ
06	526-73-8	Benzene, 1,2,3-trimethyl-	13.86	680	NJ
07	934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	14.38	160	NJ
08	496-11-7	Indane	14.44	120	NJ
09	874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	14.63	87	NJ
10	933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	14.72	75	NJ
11	527-53-7	Benzene, 1,2,3,5-tetramethyl-	15.14	80	NJ
12	767-58-8	Indan, 1-methyl-	15.64	67	NJ
13	~~91-20-3~~	~~Naphthalene~~	16.41	94	NJ
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 [1]	Total Alkanes	N/A	210	J

[1] EPA-designated Registry Number.

Ju 12105106

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P6

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix (SOIL/SED/WATER): Water Lab Sample ID: 1158104

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1158104DB90

Level: (TRACE or LOW/MED) LOW Date Received: 11/20/2006

% Moisture: not dec. _____ Date Analyzed: 11/29/2006

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 10.0

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	109-67-1	1-Pentene	7.39	77	NJ
02		Substituted Benzene	13.44	130	J
03	622-96-8	Benzene, 1-ethyl-4-methyl-	13.49	650	NJ
04	611-14-3	Benzene, 1-ethyl-2-methyl-	13.74	190	NJ
05	526-73-8	Benzene, 1,2,3-trimethyl-	13.86	720	NJ
06		Unknown	13.95	65	J
07	1758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	14.38	170	NJ
08		Substituted Benzene	14.44	130	J
09	~~874-41-9~~ Unknown	Benzene, ~~1-ethyl-2,4-dimethyl-~~	14.63	95	NJ
10	~~874-41-9~~ Unknown	Benzene, ~~1-ethyl-2,4-dimethyl-~~	14.72	82	NJ
11	95-93-2	Benzene, 1,2,4,5-tetramethyl-	15.14	87	NJ
12	824-90-8	1-Phenyl-1-butene	15.64	73	NJ
13	~~91-20-3~~	~~Naphthalene~~	~~16.41~~	~~98~~	~~NJ~~
14	264-09-5	Benzocycloheptatriene	17.85	54	NJ
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966798 [1]	Total Alkanes	N/A	800	J

[1] EPA-designated Registry Number.

SU 12105106

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P7

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix (SOIL/SED/WATER): Water Lab Sample ID: 1158105

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1158105DB90

Level: (TRACE or LOW/MED) LOW Date Received: 11/20/2006

% Moisture: not dec. _____ Date Analyzed: 11/29/2006

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 10.0

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	103-65-1	Benzene, propyl-	13.44	100	NJ
02	~~622-96-8~~ Unknown	Benzene, ~~1-ethyl-4-methyl-~~	13.49	440	NJ
03	108-67-8	Benzene, 1,3,5-trimethyl-	13.54	180	NJ
04	~~622-96-8~~ Unknown.	Benzene, ~~1-ethyl-4-methyl-~~	13.74	160	NJ
05	526-73-8	Benzene, 1,2,3-trimethyl-	13.86	660	NJ
06		Substituted Benzene	14.35	130	J
07	99-87-6	Benzene, 1-methyl-4-(1-methyleth	14.38	110	NJ
08	100-80-1	Benzene, 1-ethenyl-3-methyl-	14.44	88	NJ
09	934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	14.63	59	NJ
10	527-84-4	Benzene, 1-methyl-2-(1-methyleth	14.66	57	NJ
11	2870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	14.72	88	NJ
12	874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	15.09	54	NJ
13	527-53-7	Benzene, 1,2,3,5-tetramethyl-	15.14	99	NJ
14	824-90-8	1-Phenyl-1-butene	15.46	53	NJ
15	767-58-8	Indan, 1-methyl-	15.64	65	NJ
16	~~91-57-6~~	~~Naphthalene, 2-methyl~~	~~17.85~~	~~61~~	~~NJ~~
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 [1]	Total Alkanes	N/A	1100	J

[1] EPA-designated Registry Number.

SU 12105106.

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P9

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix (SOIL/SED/WATER): Water Lab Sample ID: 1158106

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1158106DB90

Level: (TRACE or LOW/MED) LOW Date Received: 11/20/2006

% Moisture: not dec. _____ Date Analyzed: 11/29/2006

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 5.0

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	103-65-1	Benzene, propyl-	13.44	72	NJ
02	622-96-8	Benzene, 1-ethyl-4-methyl-	13.49	310	NJ
03	108-67-8	Benzene, 1,3,5-trimethyl-	13.74	110	NJ
04	526-73-8	Benzene, 1,2,3-trimethyl-	13.86	390	NJ
05	934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	14.37	100	NJ
06		Substituted Benzene	14.44	67	J
07	934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	14.63	59	NJ
08	933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	14.72	48	NJ
09	95-93-2	Benzene, 1,2,4,5-tetramethyl-	15.08	30	NJ
10	527-84-4	Benzene, 1-methyl-2-(1-methyleth	15.14	50	NJ
11	1587-04-8	Benzene, 1-methyl-2-(2-propenyl)	15.46	26	NJ
12	767-58-8	Indan, 1-methyl-	15.64	41	NJ
13	91-20-3	Naphthalene	16.41	42	NJ
14	91-57-6	Naphthalene, 2-methyl-	17.85	29	NJ
15					
16					
17					
18					
19					
20					
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22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 [1]	Total Alkanes	N/A	870	J

[1] EPA-designated Registry Number.

54 12105106

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01Q0

Lab Name: COMPUCHEM Contract: EPW05028 Field Blank.

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix (SOIL/SED/WATER): Water Lab Sample ID: 1158107

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1158107RB90

Level: (TRACE or LOW/MED) LOW Date Received: 11/20/2006

% Moisture: not dec. _____ Date Analyzed: 11/29/2006

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	8.49	8.7	J
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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25					
26					
27					
28					
29					
30					
	E966798 [1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01Q3

Lab Name: COMPUCHEM Contract: EPW05028 Rinsate Blank

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix (SOIL/SED/WATER): Water Lab Sample ID: 1158110

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1158110RB90

Level: (TRACE or LOW/MED) LOW Date Received: 11/20/2006

% Moisture: not dec. _____ Date Analyzed: 11/29/2006

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	8.49	5.8	J
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
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24					
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26					
27					
28					
29					
30					
	E966798 [1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P3

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158101

Sample wt/vol: 975 (g/mL) mL Lab File ID: 1158101A66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) ___ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/27/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	13116-57-9	1-Propene, 1,2,3-trichloro-, (Z)-	7.21	8.5	NJ
02		Unknown	7.82	3.4	J
03	~~Unknown~~	~~13.73~~	~~3.4~~	~~J~~	
04		Unknown	19.82	3.4	J
05		Unknown	22.03	2.4	J
06		Unknown	23.70	3.9	J
07	~~Unknown~~	~~28.27~~	~~1.3~~	~~JB~~	
08		Unknown	29.01	1.8	J
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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21					
22					
23					
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26					
27					
28					
29					
30					
	E968796[2]	Total Alkanes	N/A		

JB-

[2] EPA-designated Registry Number.

SU 12/06/06.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P4

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158102

Sample wt/vol: 1025 (g/mL) mL Lab File ID: 1158102A66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) ____ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/27/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	~~526-73-8~~ Unknown	Benzene, ~~1,2,3-trimethyl-~~	7.65	15	NJ
02	622-96-8	Benzene, 1-ethyl-4-methyl-	7.87	53	NJ
03	~~526-73-8~~ Unknown	Benzene, ~~1,2,3-trimethyl-~~	8.14	200	NJ
04		Unknown	8.27	8.5	J
05	95-63-6	Benzene, 1,2,4-trimethyl-	8.66	38	NJ
06	496-11-7	Indane	8.89	66	NJ
07		Unknown	9.23	16	J
08	135-98-8	Benzene, (1-methylpropyl)-	9.41	11	NJ
09	767-58-8	Indan, 1-methyl-	9.65	8.8	NJ
10	934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	10.06	11	NJ
11	933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	10.20	18	NJ
12	527-84-4	Benzene, 1-methyl-2-(1-methylethyl	10.27	24	NJ
13	824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	10.56	16	NJ
14	934-10-1	3-Phenylbut-1-ene	10.72	41	NJ
15	119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	10.90	6.6	NJ
16		Unknown	11.28	5.9	J
17	56253-64-6	Benzene, (2-methyl-1-butenyl)-	11.36	7.9	NJ
18	53172-84-2	Benzene, (1-methyl-1-butenyl)-	11.41	15	NJ
19		Unknown	11.92	7.3	J
20	6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethy	12.12	6.2	NJ
21	17059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethy	12.31	8.2	NJ
22		Unknown	12.34	7.1	J
23	90-12-0	Naphthalene, 1-methyl-	12.95	25	NJ
24		Unknown	13.42	11	J
25		Unknown	14.00	6.3	J
26	575-41-7	Naphthalene, 1,3-dimethyl-	14.09	14	NJ
27	~~582-16-1~~ Unknown	Naphthalene, ~~2,7-dimethyl-~~	14.26	17	NJ
28	~~582-16-1~~ Unknown	Naphthalene, ~~2,7-dimethyl-~~	14.30	8.4	NJ
29	581-40-8	Naphthalene, 2,3-dimethyl-	14.50	6.7	NJ
30		Unknown	15.45	8.2	J
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

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1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P5

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158103

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 1158103A66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) ___ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/27/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	~~622-96-8~~ Unknown	Benzene, ~~1-ethyl-4-methyl-~~	7.55	240	NJ
02	~~95-63-6~~ Unknown	Benzene, ~~1,2,4-trimethyl-~~	7.67	97	NJ
03	~~622-96-8~~ Unknown	Benzene, ~~1-ethyl-4-methyl-~~	7.88	86	NJ
04	~~95-63-6~~ Unknown.	Benzene, ~~1,2,4-trimethyl-~~	8.17	320	NJ
05		Unknown	8.66	51	J
06	496-11-7	Indane	8.90	68	NJ
07	99-87-6	Benzene, 1-methyl-4-(1-methylethyl	9.14	21	NJ
08	1074-43-7	Benzene, 1-methyl-3-propyl-	9.16	29	NJ
09	~~135-98-8~~ Unknown	Benzene, ~~(1-methylpropyl)-~~	9.22	17	NJ
10	~~135-98-8~~ Unknown	Benzene, ~~(1-methylpropyl)-~~	9.42	15	NJ
11	933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	9.74	87	NJ
12	~~934-80-5~~ Unknown	Benzene, ~~4-ethyl-1,2-dimethyl-~~	10.05	10	NJ
13	~~934-80-5~~ Unknown	Benzene, ~~4-ethyl-1,2-dimethyl-~~	10.21	30	NJ
14	527-53-7	Benzene, 1,2,3,5-tetramethyl-	10.28	43	NJ
15	934-10-1	3-Phenylbut-1-ene	10.56	26	NJ
16	90-00-6	Phenol, 2-ethyl-	10.60	19	NJ
17	767-58-8	Indan, 1-methyl-	10.74	73	NJ
18	119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	10.90	9.9	NJ
19		Unknown	11.36	8.7	J
20		Unknown	11.41	16	J
21	27129-87-9	Benzenemethanol, 3,5-dimethyl-	12.26	7.9	NJ
22	83-33-0	1H-Inden-1-one, 2,3-dihydro-	12.57	18	NJ
23	2471-83-2	1H-Indene, 1-ethylidene-	12.97	41	NJ
24	571-61-9	Naphthalene, 1,5-dimethyl-	14.09	16	NJ
25		Unknown	14.19	11	J
26	582-16-1	Naphthalene, 2,7-dimethyl-	14.27	13	NJ
27	581-42-0	Naphthalene, 2,6-dimethyl-	14.31	7.9	NJ
28		Unknown	15.50	8.3	J
29		Unknown	15.56	17	J
30	10544-50-0	Cyclic octaatomic sulfur	20.59	100	NJ
	E966796[2]	Total Alkanes	N/A	7.4	J

[2] EPA-designated Registry Number.

Su 12106106

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P5DL

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158103

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 1158103D66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) ____ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/28/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 5.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	~~611-14-3~~ Unknown	Benzene, ~~1-ethyl-2-methyl~~-	7.52	400	NJD
02	~~611-14-3~~ Unknown	Benzene, ~~1-ethyl-2-methyl~~-	7.87	150	NJD
03	526-73-8	Benzene, 1,2,3-trimethyl-	8.13	500	NJD
04	98-82-8	Benzene, (1-methylethyl)-	8.65	91	NJD
05	496-11-7	Indane	8.88	120	NJD
06		Unknown	8.94	10	JD
07		Unknown	9.22	31	JD
08	933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	9.28	57	NJD
09	0-00-0	Benzene,-(1-formylethyl)-	9.41	26	NJD
10	1587-04-8	Benzene, 1-methyl-2-(2-propenyl)-	9.65	14	NJD
11	874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	9.72	150	NJD
12	2870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	9.82	10	NJD
13	~~527-84-4~~ Unknown	Benzene, ~~1-methyl-2-(1-methylethyl)~~-	10.05	20	NJD
14	95-93-2	Benzene, 1,2,4,5-tetramethyl-	10.20	43	NJD
15	~~527-84-4~~ Unknown	Benzene, ~~1-methyl-2-(1-methylethyl~~	10.26	60	NJD
16		Dihydromethylindene	10.55	33	JD
17	824-90-8	1-Phenyl-1-butene	10.72	66	NJD
18	934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	10.74	45	NJD
19	91-21-4	Isoquinoline, 1,2,3,4-tetrahydro-	10.90	14	NJD
20		Benzothiophene	11.36	16	JD
21	56253-64-6	Benzene, (2-methyl-1-butenyl)-	11.41	23	NJD
22		Unknown	12.33	16	JD
23	4453-90-1	1,4-Methanonaphthalene, 1,4-dihydr	12.95	60	NJD
24		Unknown	13.22	11	JD
25		Unknown	13.39	36	JD
26	610-72-0	Benzoic acid, 2,5-dimethyl-	14.01	29	NJD
27	582-16-1	Naphthalene, 2,7-dimethyl-	14.08	18	NJD
28	575-43-9	Naphthalene, 1,6-dimethyl-	14.26	21	NJD
29	575-41-7	Naphthalene, 1,3-dimethyl-	14.30	15	NJD
30	10544-50-0	Cyclic octaatomic sulfur	20.53	81	NJD
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

SU 12106106-

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P6

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158104

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 1158104A66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) ____ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/27/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	103-65-1	Benzene, propyl-	7.36	40	NJ
02	611-14-3	Benzene, 1-ethyl-2-methyl-	7.55	330	NJ
03	~~95-63-6~~ Unknown	Benzene, ~~1,2,4-trimethyl-~~	7.67	130	NJ
04	622-96-8	Benzene, 1-ethyl-4-methyl-	7.89	110	NJ
05	~~95-63-6~~ Unknown	Benzene, ~~1,2,4-trimethyl-~~	8.17	480	NJ
06	~~95-63-6~~ Unknown	Benzene, ~~1,2,4-trimethyl-~~	8.67	65	NJ
07	496-11-7	Indane	8.90	85	NJ
08	~~934-80-5~~ Unknown	Benzene, ~~4-ethyl-1,2-dimethyl-~~	9.14	21	NJ
09	~~135-98-8~~ Unknown	Benzene, (1-methylpropyl)-	9.17	41	NJ
10	93-53-8	Benzeneacetaldehyde, .alpha.-methy	9.23	25	NJ
11	527-84-4	Benzene, 1-methyl-2-(1-methylethyl	9.29	40	NJ
12	~~135-98-8~~ Unknown	Benzene, (1-methylpropyl)-	9.42	16	NJ
13	~~934-80-5~~ Unknown	Benzene, ~~4-ethyl-1,2-dimethyl-~~	9.60	88	NJ
14	824-63-5	1H-Indene, 2,3-dihydro-2-methyl-	9.66	10	NJ
15	~~934-80-5~~ Unknown	Benzene, ~~4-ethyl-1,2-dimethyl-~~	9.74	110	NJ
16	~~934-80-5~~ Unknown	Benzene, ~~4-ethyl-1,2-dimethyl-~~	10.06	14	NJ
17	488-23-3	Benzene, 1,2,3,4-tetramethyl-	10.21	38	NJ
18	95-93-2	Benzene, 1,2,4,5-tetramethyl-	10.28	55	NJ
19	934-10-1	3-Phenylbut-1-ene	10.56	30	NJ
20	13632-94-5	Benzene, 1,4-diethyl-2-methyl-	10.62	14	NJ
21	767-58-8	Indan, 1-methyl-	10.73	90	NJ
22		Unknown	11.41	20	J
23		Unknown	11.92	14	J
24	99-04-7	Benzoic acid, 3-methyl-	12.50	15	NJ
25		Unknown	12.56	15	J
26	90-12-0	Naphthalene, 1-methyl-	12.96	53	NJ
27	582-16-1	Naphthalene, 2,7-dimethyl-	14.09	20	NJ
28	575-41-7	Naphthalene, 1,3-dimethyl-	14.27	16	NJ
29		Unknown	15.56	16	J
30	10544-50-0	Cyclic octaatomic sulfur	20.56	60	NJ
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

SU 12106106

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P6DL

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158104

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 1158104D66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) ____ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/28/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 10.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	103-65-1	Benzene, propyl-	7.35	70	NJD
02	~~611-14-3~~ Unknown	Benzene, ~~1-ethyl-2-methyl-~~	7.51	510	NJD
03	108-67-8	Benzene, 1,3,5-trimethyl-	7.65	210	NJD
04	~~611-14-3~~ Unknown	Benzene, ~~1-ethyl-2-methyl-~~	7.87	180	NJD
05	95-63-6	Benzene, 1,2,4-trimethyl-	8.13	700	NJD
06		Unknown	8.65	110	JD
07	496-11-7	Indane	8.88	140	NJD
08		Unknown	9.13	42	JD
09	1074-43-7	Benzene, 1-methyl-3-propyl-	9.16	70	NJD
10		Unknown	9.21	46	JD
11	535-77-3	Benzene, 1-methyl-3-(1-methylethyl	9.28	71	NJD
12	824-90-8	1-Phenyl-1-butene	9.65	25	NJD
13	874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	9.71	190	NJD
14	933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	10.05	22	NJD
15	95-93-2	Benzene, 1,2,4,5-tetramethyl-	10.19	53	NJD
16	527-84-4	Benzene, 1-methyl-2-(1-methylethyl	10.26	79	NJD
17	824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	10.55	46	NJD
18	2039-90-9	Benzene, 2-ethenyl-1,3-dimethyl-	10.71	130	NJD
19		Unknown	11.40	28	JD
20		Unknown	12.33	27	JD
21	90-12-0	Naphthalene, 1-methyl-	12.94	76	NJD
22		Unknown	13.35	29	JD
23	499-06-9	Benzoic acid, 3,5-dimethyl-	13.99	37	NJD
24	582-16-1	Naphthalene, 2,7-dimethyl-	14.08	22	NJD
25	571-61-9	Naphthalene, 1,5-dimethyl-	14.25	23	NJD
26	10544-50-0	Cyclic octaatomic sulfur	20.51	51	NJD
27					
28					
29					
30					
	E986796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Su 12/06/06

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P7

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158105

Sample wt/vol: 1025 (g/mL) mL Lab File ID: 1158105A66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) ____ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/27/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	103-65-1	Benzene, propyl-	7.36	65	NJ
02	~~95-63-6~~ Unknown	Benzene, ~~1,2,4-trimethyl-~~	7.68	130	NJ
03	~~622-96-8~~ Unknown	Benzene, ~~1-ethyl-4-methyl-~~	7.89	110	NJ
04	~~95-63-6~~ Unknown	Benzene, ~~1,2,4-trimethyl-~~	8.18	580	NJ
05	~~622-96-8~~ Unknown	Benzene, ~~1-ethyl-4-methyl-~~	8.67	130	NJ
06	496-11-7	Indane	8.89	70	NJ
07	1074-43-7	Benzene, 1-methyl-3-propyl-	9.17	96	NJ
08		Unknown	9.24	56	J
09	874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	9.29	64	NJ
10	135-98-8	Benzene, (1-methylpropyl)-	9.42	25	NJ
11	934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	9.74	140	NJ
12	933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	10.21	40	NJ
13	95-93-2	Benzene, 1,2,4,5-tetramethyl-	10.28	49	NJ
14	934-10-1	3-Phenylbut-1-ene	10.57	25	NJ
15		Unknown	10.64	23	J
16	767-58-8	Indan, 1-methyl-	10.73	82	NJ
17		Unknown	11.57	18	J
18		Unknown	11.93	21	J
19	6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethy	12.12	19	NJ
20		Unknown	12.32	17	J
21	2443-46-1	Bicyclo[4.4.1]undeca-1,3,5,7,9-per	12.97	45	NJ
22		Unknown	13.95	25	J
23	571-61-9	Naphthalene, 1,5-dimethyl-	14.11	46	NJ
24	~~581-42-0~~ Unknown	Naphthalene, ~~2,6-dimethyl-~~	14.29	51	NJ
25	582-16-1	Naphthalene, 2,7-dimethyl-	14.32	40	NJ
26	~~581-42-0~~ Unknown	Naphthalene, ~~2,6-dimethyl-~~	14.51	24	NJ
27	~~829-26-5~~ Unknown	Naphthalene, ~~2,3,6-trimethyl-~~	15.53	32	NJ
28	2131-42-2	Naphthalene, 1,4,6-trimethyl-	15.71	22	NJ
29	~~829-26-5~~ Unknown	Naphthalene, ~~2,3,6-trimethyl-~~	15.74	20	NJ
30	~~829-26-5~~	Naphthalene, ~~2,3,6-trimethyl-~~	15.90	20	NJ
	E966798[2]	Total Alkanes	N/A	720	J

[2] EPA-designated Registry Number.

SU 12106108

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P7DL

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158105

Sample wt/vol: 1025 (g/mL) mL Lab File ID: 1158105D66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) ____ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/28/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 5.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	103-65-1	Benzene, propyl-	7.35	86	NJD
02	622-96-8	Benzene, 1-ethyl-4-methyl-	7.52	490	NJD
03	611-14-3	Benzene, 1-ethyl-2-methyl-	7.86	150	NJD
04	95-63-6	Benzene, 1,2,4-trimethyl-	8.13	680	NJD
05	620-14-4	Benzene, 1-ethyl-3-methyl-	8.65	160	NJD
06	496-11-7	Indane	8.88	90	NJD
07	1074-43-7	Benzene, 1-methyl-3-propyl-	9.15	130	NJD
08		Unknown	9.21	73	JD
09	527-84-4	Benzene, 1-methyl-2-(1-methylethyl	9.27	84	NJD
10	933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	9.58	170	NJD
11	2870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	9.71	190	NJD
12	934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	10.19	65	NJD
13	95-93-2	Benzene, 1,2,4,5-tetramethyl-	10.27	79	NJD
14	934-10-1	3-Phenylbut-1-ene	10.55	44	NJD
15	1595-16-0	Benzene, 1-methyl-4-(1-methylprop	10.63	40	NJD
16	767-58-8	Indan, 1-methyl-	10.72	93	NJD
17	62338-57-2	1,4-Cyclohexadiene, 3-ethenyl-1,2-	10.75	57	NJD
18		Unknown	11.40	49	JD
19		Unknown	11.91	35	JD
20	6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimeth	12.12	37	NJD
21	90-12-0	Naphthalene, 1-methyl-	12.95	77	NJD
22	581-40-8	Naphthalene, 2,3-dimethyl-	13.95	38	NJD
23	~~582-16-1~~ Unknown	Naphthalene, ~~2,7-dimethyl~~-	14.08	58	NJD
24	581-42-0	Naphthalene, 2,6-dimethyl-	14.26	68	NJD
25	~~582-16-1~~ Unknown	Naphthalene, ~~2,7-dimethyl~~-	14.30	46	NJD
26	571-58-4	Naphthalene, 1,4-dimethyl-	14.49	37	NJD
27	829-26-5	Naphthalene, 2,3,6-trimethyl-	15.51	48	NJD
28	2245-38-7	Naphthalene, 1,6,7-trimethyl-	15.69	36	NJD
29	2131-42-2	Naphthalene, 1,4,6-trimethyl-	15.72	27	NJD
30		Unknown	16.24	28	JD
	E966796[2]	Total Alkanes	N/A	770	J

[2] EPA-designated Registry Number.

SU 12/06/06

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01P9

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158106

Sample wt/vol: 500 (g/mL) mL Lab File ID: 1158106A66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) ____ Date Received: 11/20/2006

Concentrated Extract Volume: 500 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/27/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	~~Unknown~~	~~Unknown~~	~~7.22~~	~~12~~	~~JB~~
02	103-65-1	Benzene, propyl-	7.35	50	NJ
03	611-14-3	Benzene, 1-ethyl-2-methyl-	7.56	180	NJ
04	~~95-63-6~~ Unknown	Benzene, ~~1,2,4-trimethyl-~~	7.66	86	NJ
05	622-96-8	Benzene, 1-ethyl-4-methyl-	7.87	83	NJ
06	~~95-63-6~~ Unknown	Benzene, ~~1,2,4-trimethyl-~~	8.16	370	NJ
07	526-73-8	Benzene, 1,2,3-trimethyl-	8.66	79	NJ
08	496-11-7	Indane	8.89	59	NJ
09	99-87-6	Benzene, 1-methyl-4-(1-methylethyl	9.13	17	NJ
10	~~135-98-8~~ Unknown	Benzene, ~~(1-methylpropyl)-~~	9.16	34	NJ
11	1074-43-7	Benzene, 1-methyl-3-propyl-	9.22	24	NJ
12	874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	9.28	37	NJ
13	~~135-98-8~~ Unknown	Benzene, ~~(1-methylpropyl)-~~	9.42	18	NJ
14	~~933-98-2~~ Unknown	Benzene, ~~1-ethyl-2,3-dimethyl-~~	9.61	84	NJ
15	~~934-80-5~~ Unknown	Benzene, ~~4-ethyl-1,2-dimethyl-~~	9.73	95	NJ
16	~~934-80-5~~ Unknown	Benzene, ~~4-ethyl-1,2-dimethyl-~~	10.05	12	NJ
17	~~95-93-2~~ Unknown.	Benzene, ~~1,2,4,5-tetramethyl-~~	10.20	26	NJ
18	~~95-93-2~~ Unknown.	Benzene, ~~1,2,4,5-tetramethyl-~~	10.28	35	NJ
19	934-10-1	3-Phenylbut-1-ene	10.55	20	NJ
20	25550-13-4	Benzene, diethylmethyl-	10.61	11	NJ
21	767-58-8	Indan, 1-methyl-	10.73	46	NJ
22	~~933-98-2~~ Unknown.	Benzene, ~~1-ethyl-2,3-dimethyl-~~	10.76	22	NJ
23		Unknown	11.40	13	J
24		Unknown	11.91	12	J
25	264-09-5	Benzocycloheptatriene	12.96	36	NJ
26		Unknown	13.45	16	J
27	575-43-9	Naphthalene, 1,6-dimethyl-	14.08	19	NJ
28	571-61-9	Naphthalene, 1,5-dimethyl-	14.27	15	NJ
29		Unknown	15.46	9.6	J
30	10544-50-0	Cyclic octaatomic sulfur	20.52	9.5	NJ
	E966798[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

SU 12106106.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01Q0

Field Blank.

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158107

Sample wt/vol: 900 (g/mL) mL Lab File ID: 1158107A66

Level: (TRACE or LOW/MED) LOW Extraction; (Type) CONT

% Moisture: _____ Decanted: (Y/N) ____ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/27/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		~~Unknown~~	~~7.21~~	~~6.6~~	~~JB~~
02		Unknown	10.49	2.5	J
03		Unknown	12.74	5.9	J
04	96-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)	15.23	38	NJ
05	0-00-0	7,9-Di-tert-butyl-1-oxaspiro(4,5)c	19.26	6.1	NJ
06					
07					
08					
09					
10					
11					
12					
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24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01Q1

Lab Name: COMPUCHEM Contract: EPW05028 Rinsate Blank.

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: ____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158108

Sample wt/vol: 950 (g/mL) mL Lab File ID: 1158108A66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: ____ Decanted: (Y/N) ____ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/27/2006

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.02	2.2	J
02	~~——~~	~~Unknown~~	~~7.31~~	~~7.0~~	~~JB~~
03	96-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)	15.23	60	NJ
04	0-00-0	7,9-Di-tert-butyl-1-oxaspiro(4,5)c	19.26	8.8	NJ
05		Unknown	22.45	4.0	J
06					
07					
08					
09					
10					
11					
12					
13					
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21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E986796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C01Q3

Lab Name: COMPUCHEM Contract: EPW05028

Lab Code: LIBRTY Case No.: 35961 Mod. Ref No.: _____ SDG No.: C01P3

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 1158110

Sample wt/vol: 1025 (g/mL) mL Lab File ID: 1158110A66

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) ____ Date Received: 11/20/2006

Concentrated Extract Volume: 1000 (uL) Date Extracted: 11/21/2006

Injection Volume: 2.0 (uL) GPC Factor: 1.0 Date Analyzed: 11/28/2006

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	16.30	2.5	J
02		Unknown	21.90	4.0	J
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
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14					
15					
16					
17					
18					
19					
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21					
22					
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24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Appendix D

Chain-of-Custody Records

U.S. EPA Region III Analytical Request Form

Revision 10.06

ASQAR USE ONLY		
RAS#	CT3816	Analytical TAT
TAS#		14
SSE#		

35961

Date: 11/16/2006	Site Activity: Technical Assistance		
Site Name: Mc Adoo Associates		Street Address: Blayne Street	
City: McAdoo	State: PA	Latitude: 40.9642 North	Longitude: 76.2389 West
Program: Superfund	Acct. #: 2007 T03N302DD2C0312TA02	CERCLIS #: PAD980712616	
Site ID:	Spill ID: 0312	Operable Unit: 02	
Site Specific QA Plan Submitted: ☐ No ☒ Yes	Title: Draft Groundwater SAP McAdoo Associates Blaine Street		Date Approved: 11/2/06
EPA Project Leader: Romuld Roman 3HS22	Phone#: 215-814-3212	Cell Phone #: 267-481-1990	E-mail: roman.romuald@epa.gov
Request Preparer: Marian Murphy	Phone#: 610-364-2129	Cell Phone #: 267-446-2839	E-mail: marian.murphy@ttemi.com
Site Leader: Beth Williams	Phone#: 610-364-2148	Cell Phone #: 856-981-8476	E-mail: beth.williams@ttemi.com

Contractor: Tetra Tech EM Inc.		EPA CO/PO: Lorrie Murray/Karen Wodarczyk	
#Samples 11	Matrix: Water non-potable	Parameter: TCL Organics	Method: SOM01.1
#Samples 11	Matrix: water-non potable	Parameter: TAL Metlas & Hg & CN	Method: ILM05.3 ICPAES & Hg & CN
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:

Ship Date From: 11/16/2006	Ship Date To: 11/17/2006	Org. Validation Level M2	Inorg. Validation Level IM2

Unvalidated Data Requested: ☐ No ☒ Yes If Yes, TAT Needed: ☒ 14days ☐ 7days ☐ 72hrs ☐ 48hrs ☐ 24hrs ☐ Other (Specify)

Validated Data Package Due: ☐ 42 days ☒ 30 days ☐ 21days ☐ 14 days ☐ Other (Specify)

Electronic Data Deliverables Required: ☐ No ☒ Yes (EDDs will be provided in Region 3 EDD Format)

Special Instructions:See attached for detection limits needed

CLP SOW SOM01.1 TARGET COMPOUND LIST VOLATILE ORGANICS FOR WATER SAMPLES (ug/L)					
Volatile Compound	**CAS Number**	**CRQL**	**Volatile Compound**	**CAS Number**	**CRQL**
Dichlorodifluoromethane	75718	5	Toluene	108883	5
Chloromethane	74873	5	trans-1,3-Dichloropropene	10061026	5
Vinyl Chloride	75014	5	1,1,2-Trichloroethane	79005	5
Bromomethane	74839	5	Tetrachloroethene	127184	5
Chloroethane	75003	5	2-Hexanone	591786	5
Trichlorofluoromethane	75694	5	Dibromochloromethane	124481	5
1,1-Dichloroethene	75354	5	1,2-Dibromoethane	106934	5
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	5	Chlorobenzene	108907	5
Acetone	67641	10	Ethylbenzene	100414	5
Carbon Disulfide	75150	5	Xylenes (total)	1330207	5
Methyl Acetate	79209	5	Styrene	100425	5
Methylene Chloride	75092	5	Bromoform	75252	5
trans-1,2-Dichloroethene	156605	5	Isopropylbenzene	98828	5
tert-Butyl Methyl Ether	1634044	5	1,1,2,2-Tetrachloroethane	79345	5
1,1-Dichloroethane	75343	5	1,3-Dichlorobenzene	541731	5
cis-1,2-Dichloroethene	107062	5	1,4-Dichlorobenzene	106467	5
2-Butanone	78933	10	1,2-Dichlorobenzene	95501	5
Chloroform	67663	5	1,2-Dibromo-3-chloropropane	96128	5
1,1,1-Trichloroethane	71556	5	1,2,4-Trichlorobenzene	120821	5
Cyclohexane	110827	5			
Carbon Tetrachloride	56235	5			
Benzene	71432	5			
1,2-Dichloroethane	75343	5			
1,4-Dioxane	123911	100			
Trichloroethene	79016	5			
Methylcyclohexane	108872	5			
1,2-Dichloropropane	78875	5			
Bromodichloromethane	74975	5			
cis-1,3-Dichloropropene	10061015	5			
4-Methyl-2-pentanone	108101	10			

CLP SOW SOM01.1 TARGET COMPOUND LIST SEMIVOLATILE ORGANICS FOR WATER SAMPLES (ug/L)					
Semivolatile Compound	CAS Number	CRQL	Semivolatile Compound	CAS Number	CRQL
Benzaldehyde	100527	5	2,4-Dinitrotoluene	121142	10
Phenol	108952	5	Diethylphthalate	84662	5
bis-(2-Chloroethyl) ether	111444	5	Fluorene	86737	5
2-Chlorophenol	95578	5	4-Chlorophenyl-phenyl ether	7005723	5
2-Methylphenol	95487	5	4-Nitroaniline	100016	10
2,2'-Oxybis(1-Chloropropane)	108601	5	4,6-Dinitro-2-methylphenol	534521	10
Acetophenone	98862	5	N-Nitrosodiphenylamine	86306	5
4-Methylphenol	106445	5	1,2,4,5-Tetrachlorobenzene	95943	10
N-Nitroso-di-n-propylamine	621647	5	4-Bromophenyl-phenylether	101553	5
Hexachloroethane	67721	5	Hexachlorobenzene	118741	5
Nitrobenzene	98953	5	Atrazine	1912249	5
Isophorone	78591	5	Pentachlorophenol	87865	10
2-Nitrophenol	88755	5	Phenanthrene	85018	5
2,4-Dimethylphenol	105679	5	Anthracene	120127	5
bis(2-Chloroethoxy)methane	111911	5	Carbazole	86748	5
2,4-Dichlorophenol	120832	5	Di-n-butylphthalate	84742	5
Naphthalene	91203	5	Fluoranthene	206440	5
4-Chloroaniline	106478	5	Pyrene	129000	5
Hexachlorobutadiene	87683	5	Butylbenzylphthalate	85687	5
Caprolactam	105602	5	3,3'-Dichlorobenzidine	91941	5
4-Chloro-3-methylphenol	59507	5	Benzo(a)anthracene	56553	5
2-Methylnaphthalene	91576	5	Chrysene	218019	5
Hexachlorocyclopentadiene	77474	5	bis(2-Ethylhexyl)phthalate	117817	5
2,4,5-Trichlorophenol	95954	5	Di-n-octylphthalate	117840	5
2,4,6-Trichlorophenol	88062	5	Benzo(b)fluoranthene	205992	5
1,1'-Biphenyl	92524	5	Benzo(k)fluoranthene	207089	5
2-Chloronaphthalene	91587	5	Benzo(a)pyrene	50328	5
2-Nitroaniline	88744	10	Indeno(1,2,3-cd)pyrene	193395	5
Dimethylphthalate	131113	5	Dibenzo(a,h)anthracene	53703	5
2,6-Dinitrotoluene	606202	5	Benzo(g,h,i)perylene	191242	5
Acenaphthylene	208968	5	2,3,4,6-Tetrachlorophenol	58902	5
3-Nitroaniline	99092	10			
Acenaphthene	83329	5			
2,4-Dinitrophenol	51285	10			
4-Nitrophenol	100027	10			
Dibenzofuran	132649	5			

CLP SOW SOM01.1 PESTICIDE/PCB FOR WATER SAMPLES (ug/L)		
Pesticide Compound	**CAS Number**	**CRQL**
alpha-BHC	319846	0.05
beta-BHC	319857	0.05
delta-BHC	319868	0.05
gamma-BHC (Lindane)	58899	0.05
Heptachlor	76448	0.05
Aldrin	309002	0.05
Heptachlor epoxide	1024573	0.05
Endosulfan I	959988	0.05
Dieldrin	60571	0.1
4,4'-DDE	72559	0.1
Endrin	72208	0.1
Endosulfan II	33213659	0.1
4,4'-DDD	72548	0.1
Endosulfan sulfate	1031078	0.1
4,4'-DDT	50293	0.1
Methoxychlor	72435	0.5
Endrin ketone	53494705	0.1
Endrin aldehyde	7421934	0.1
alpha-Chlordane	5103719	0.05
gamma-Chlordane	5103742	0.05
Toxaphene	8001352	5
Aroclor-1016	12674112	1.0
Aroclor-1221	11104282	1.0
Aroclor-1232	11141165	1.0
Aroclor-1242	53469219	1.0
Aroclor-1248	12672296	1.0
Aroclor-1254	11097691	1.0
Aroclor-1260	11096825	1.0

EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 35961 **R**
DAS No:

Region:	3	**Date Shipped:**	11/17/2006	**Chain of Custody Record**	**Sampler Signature:** Beth Williams
Project Code:	CT3816	**Carrier Name:**	FedEx	**Relinquished By (Date / Time)**	**Received By (Date / Time)**
Account Code:		**Airbill:**	640799432159	Beth Williams 11/17/06 1210	
CERCLIS ID:	PAD980712616	**Shipped to:**	Liberty Analytical Corporation 501 Madison Avenue Cary NC 27513 (919) 379-4100	2	
Spill ID:	12			3	
Site Name/State:	McAdoo - Blaine Street/PA			4	
Project Leader:	Beth Williams				
Action:	Remedial Investigation				
Sampling Co:	Tetra Tech EM Inc				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
C01P3	Monitor Well/ Beth Williams	H/G	BNA (14), PEST (14), WVOA (14)	1253 (Ice Only), 1254 (Ice Only), 1255 (Ice Only), 1256 (Ice Only), 1257 (HCL), 1258 (HCL), 1259 (HCL) (7)	MBS-MW2-01	S: 11/15/2006 16:20	MC01P3	–
C01P4	Monitor Well/ Beth Williams	H/G	BNA (14), PEST (14), WVOA (14)	1261 (Ice Only), 1262 (Ice Only), 1263 (Ice Only), 1264 (Ice Only), 1265 (HCL), 1266 (HCL), 1267 (HCL) (7)	MBS-MW3-01	S: 11/15/2006 18:15	MC01P4	–
C01P5	Monitor Well/ Beth Williams	H/G	BNA (14), PEST (14), WVOA (14)	1269 (Ice Only), 1270 (Ice Only), 1271 (Ice Only), 1272 (Ice Only), 1273 (HCL), 1274 (HCL), 1275 (HCL) (7)	MBS-MW4-01	S: 11/15/2006 17:10	MC01P5	–
C01P6	Monitor Well/ Beth Williams	H/G	WVOA (14)	1281 (HCL), 1282 (HCL), 1283 (HCL) (3)	MBS-MW4-02	S: 11/15/2006 18:00	MC01P6	Field Dupe of MC01P5
C01P7	Monitor Well/ Beth Williams	H/G	WVOA (14)	1289 (HCL), 1290 (HCL), 1291 (HCL) (3)	MBS-MW5-01	S: 11/15/2006 18:55	MC01P7	–
C01P9	Monitor Well/ Beth Williams	H/G	WVOA (14)	1305 (HCL), 1306 (HCL), 1307 (HCL) (3)	MBS-MW7-01	S: 11/15/2006 15:30	MC01P9	–
C01Q0	Ground Water/ Beth Williams	L/G	BNA (14), PEST (14), WVOA (14)	1235 (Ice Only), 1236 (Ice Only), 1237 (Ice Only), 1238 (Ice Only), 1239 (HCL), 1240 (HCL), 1241 (HCL) (7)	MBS-FB-01	S: 11/15/2006 15:30	MC01Q0	Field Blank
C01Q1	Ground Water/ Beth Williams	L/G	BNA (14), PEST (14), WVOA (14)	1242 (Ice Only), 1243 (Ice Only), 1244 (Ice Only), 1245 (Ice Only), 1246 (HCL), 1247 (HCL), 1248 (HCL) (7)	MBS-RB-01	S: 11/15/2006 14:24	MC01Q1	Rinsate

Shipment for Case Complete? Y	**Sample(s) to be used for laboratory QC:** C01Q3	**Additional Sampler Signature(s):**	**Chain of Custody Seal Number:**
Analysis Key:	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?** _____

BNA = CLP TCL Semivolatiles, PEST = CLP TCL Pesticide/PCBs, WVOA = CLP TCL VOA-Water

TR Number: 3-305832908-111706-0003

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 35961 **R**
DAS No:

Region:	3	**Date Shipped:**	11/17/2006	**Chain of Custody Record**	**Sampler Signature:** Beth Williams
Project Code: / **Account Code:**	CT3816	**Carrier Name:**	FedEx	**Relinquished By (Date / Time)**	**Received By (Date / Time)**
CERCLIS ID:	PAD980712616	**Airbill:**	640799432159	1 Beth Williams 11/17/06 1210	
Spill ID:	12	**Shipped to:**	Liberty Analytical Corporation 501 Madison Avenue Cary NC 27513 (919) 379-4100	2	
Site Name/State:	McAdoo - Blaine Street/PA			3	
Project Leader:	Beth Williams			4	
Action:	Remedial Investigation				
Sampling Co:	Tetra Tech EM Inc				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C01Q2	Ground Water/ Beth Williams	L/G	WVOA (14)	1250 (HCL), 1251 (HCL), 1252 (HCL) (3)	MBS-TB-01	S: 11/15/2006	15:35		Trip Blank
C01Q3	Monitor Well/ Beth Williams	H/G	WVOA (14)	1323 (HCL), 1324 (HCL), 1325 (HCL), 1326 (HCL), 1327 (HCL), 1328 (HCL), 1329 (HCL), 1330 (HCL), 1331 (HCL) (9)	MBS-MW6-01	S: 11/15/2006	13:35	MC01Q3	--

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
	C01Q3		
Analysis Key:	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?** _____

BNA = CLP TCL Semivolatiles, PEST = CLP TCL Pesticide/PCBs, WVOA = CLP TCL VOA-Water

TR Number: 3-305832908-111706-0003

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

Appendix E

Laboratory Case Narrative

CompuChem

a division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
CASE # 35961
SDG # C01P3
CONTRACT # EPW05028

SAMPLE IDENTIFICATIONS: C01P3, C01P4, C01P4DL, C01P5, C01P6, C01P7, C01P9, C01Q0, C01Q1, C01Q2, C01Q3, C01Q3MS, and C01Q3MSD

The 12 aqueous samples listed above (not including the dilution) were received intact, properly refrigerated at a temperature of 5.1°C, with proper documentation, in sealed shipping containers, on November 20, 2006. Sample C01Q2 was scheduled for the requested analysis of the volatile fraction, samples C01Q3MS and C01Q3MSD were scheduled for the requested analysis of the PEST/AROCLOR fraction, and the remaining samples were scheduled for the requested analyses of the volatile, semivolatile, and PEST/AROCLOR fractions. The samples were prepared and analyzed following the current EPA Contract Laboratory Program (CLP) Multi-Media, Multi-Concentration Statement of Work (SOW), Document SOM01.1. All pertinent Quality Assurance Notices are included in the narrative section and all pertinent Laboratory Notices for this case are included in the sample data sections. This narrative pertains to the volatile fraction only.

Volatiles

Analysis holding time requirements were met for all of these samples.

The pH value was one (1) for C01P3, C01P4, C01P4DL, C01P5, C01P6, C01P7, C01P9, C01Q0, C01Q1, C01Q2, and C01Q3.

There were various volatile Target Compound List (TCL) analytes identified above the Contract Required Quantitation Limit (CRQL) in samples C01P4, C01P4DL, C01P5, C01P6, C01P7, and C01P9.

Based on the screen data, samples C01P5, C01P6, and C01P7 were all run at 10.0x dilutions and sample C01P9 was run at a 5.0x dilution. The screen Reconstructed Ion Chromatograms (RICs) are found immediately following the reportable runs RICs.

In the initial analysis of sample C01P4, the response of Benzene volatile target compound exceeded the response of this compound in the high standard of the initial calibration. This sample was re-analyzed at a 2.5x dilution, in order to bring the response of this compound into the initial calibration range. We have reported and billed for both analyses of this sample.

Manual quantitations were performed on one or more of the process files associated with this SDG. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

One or more Tentatively Identified Compounds (TICs) were found in C01P4, C01P4DL, C01P5, C01P6, C01P7, C01P9, C01Q0, C01Q3, and VHBLKZX storage blank.

In a response to a Statement of Work Interpretation, the Organic Contract Laboratory Program Office stated that if the mass spectral interpretation specialist determines a TIC to be a laboratory artifact (including artifacts from the DMC solution), there is no need to report it. However, all TICs not reported due to a mass spectral interpretation specialist's assessment should be noted in the SDG Narrative. There are laboratory artifacts (including artifacts from the DMC solution) not reported on the Form I LCFs. Their approximate retention times are as follows:

5.074 min.	Laboratory artifact
10.936 min.	Laboratory artifact
13.871 min.	Laboratory artifact
13.950 min.	Laboratory artifact
14.215 min.	Laboratory artifact

These peaks are present in the standards, blanks, and samples.

All bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG.

Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG. The closing Continuing Calibration Verifications (CCVs) GY0601127A90 and GZ061128A90 were used as opening CCVs for the next 12-hour periods as they met all acceptance criteria for the opening CCVs and therefore samples were analyzed without analyzing BFB. The closing Continuing Calibration Verification (CCV) GY0601127A90, included in this data package, is not used for this SDG.

All of the deuterated monitoring compounds (DMCs) met recovery criteria in the analyses of these samples, with the exception of Chloroform-d DMC in C01Q2, 1,2-Dichloroethane-d4 DMC in C01Q1 and C01Q2, and 1,1,2,2-Tetrachloroethane-d2 DMC in VHBLKZX storage blank. 1,1,2,2-Tetrachloroethane-d2 DMC in VHBLKZX storage blank was recovered below the QC limit at 64%, with the QC limit of 80-131%. The VHBLKZX storage blank was inadvertently double spiked with the DMCs. No target compounds are detected above the CRQL in the VHBLKZX storage blank and the results are being reported without any further action.

All of the internal standards met response and retention time criteria in the analyses of these samples.

The associated method blanks met all quality control criteria. Method blanks VBLKDJ and VBLKNM contained one or more target compound at acceptable levels below the CRQLs. Any positive identification of those compounds in the samples and/or QC samples associated with these blanks has been flagged with a "B".

No matrix spike/matrix spike duplicate (MS/MSD) samples were requested with this SDG.

As per the SOW, an example calculation is attached. The example given is for Vinyl Chloride-d3 in sample C01P3.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted electronically has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

S.A. Parikh

Saroj A. Parikh
GC/MS Case Reviewer
December 01, 2006

CASE: 35961
SDG: C01P3

Example Calculation for the Volatile Fraction

RRF Calculation

RRF=(Ax*Cis)/(Ais*Cx)

Where: Ax=Area of the characteristic ion (EICP) for the compound to be measured
Ais=Area of the characteristic ion (EICP) for the specific internal standard
Cis=Concentration of the internal standard
Cx=Concentration of the compound to be measured

Example: Vinyl Chloride-d3 from GZ061128A90

Ax=	61753
Ais=	176489
Cis=	250
Cx=	250
RRF=	0.350

Mean RRF from ICAL **0.346**

Concentration Calculation

Concentration(ug/L)=(Ax*Is*Df)/(Ais*RRF*Vo)

Where: Ax=Area of the characteristic ion (EICP) for the compound to be measured
Ais=Area of the characteristic ion (EICP) for the specific internal standard
Is=Amount of the internal standard added, in nanograms
Mean RRF=Relative response factor from the initial calibration standard
Vo=Total volume of water purged, in milliliters
Df=Dilution factor

Example: Vinyl Chloride-d3 from C01P3

Ax=	75792
Ais=	179230
Is=	250
Mean RRF=	0.346
Vo=	5
Df=	1
Concentration(ug/L)=	61

CompuChem

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SDG NARRATIVE

CASE # 35961
SDG # C01P3
CONTRACT # EPW05028

SAMPLE IDENTIFICATIONS: C01P3, C01P4, C01P5, C01P5DL, C01P6, C01P6DL, C01P7, C01P7DL, C01P9, C01Q0, C01Q1, C01Q3

The nine aqueous samples listed above (not including the dilutions) were scheduled for the requested analysis of the semivolatile fraction. For receiving information associated with these samples, please refer to the GC/MS volatile narrative. The samples were prepared and analyzed following the current EPA Contract Laboratory Program (CLP) Multi-Media, Multi-Concentration Statement of Work (SOW), Document SOM01.1. All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices for this SDG are included in the sample data sections. This narrative pertains to the semivolatile fraction only.

GC/MS Semivolatiles

Extraction and analysis holding time requirements were met for all of these samples.

Sample C01P9 was extracted using 500 mL of raw sample, rather than the method-specified amount of 1000 mL. The lower volume was used to allow the aliquot of raw sample to be reserved for further extraction, if it became necessary. The extract was concentrated to a final volume half that of the method-specified volume, and therefore no effective dilution was performed during the extraction procedure for this sample.

One or more semivolatile target compound list (TCL) analytes were identified above the Contract Required Quantitation Limit (CRQL) in samples C01P3, C01P4, C01P5, C01P5DL, C01P6, C01P6DL, C01P7, C01P7DL, and C01P9.

In the initial analyses of samples C01P5, C01P6, and C01P7, the responses of Naphthalene and 2-Methylnaphthalene semivolatile target compounds exceeded the responses of these compounds in the high standard of the initial calibration. Samples C01P5 and C01P7 were both re-analyzed at 5.0x dilutions and sample C01P6 was re-analyzed at a 10.0x dilution, in order to bring the responses of these compounds into the initial calibration range. We have reported and billed for both analyses of these samples.

Manual quantitations were performed on one or more of the process files associated with this SDG. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

Tentatively Identified Compounds (TICs) were identified in all of these samples.

All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated to this SDG. Overall, QC criteria were met for all initial and continuing calibration standards associated to this SDG, with the exception of the Continuing Calibration Verification (CCV) HB061127A66. The CCV HB061127A66, which is being used as a closing and an opening CCV, has 4-Nitroaniline percent difference (%D) failing at 47.9%D, with the QC limit of 40%D.

The closing Continuing Calibration Verifications (CCVs) HA061127A66 and HB061127A66 were used as opening CCVs for the next 12-hour periods as they met all acceptance criteria for the opening CCVs, except for 4- Nitroaniline percent difference (%D) for the HB061127A66 CCV as mention above, and therefore samples were analyzed without analyzing DFTPP.

All of the deuterated monitoring compounds (DMCs) met recovery criteria in the analyses of these samples, with the exception of Nitrobenzene-d5 DMC in samples C01P5, C01P6, C01P7, and C01P7DL and Benzo(a)pyrene-d12 DMC in sample C01P3.

All of the internal standards met response and retention time criteria in the analyses of these samples.

The associated method blank met all quality control criteria. Method blank SBLKYH contained three TICs, each identified as an Unknown. Any positive detection for these TICs in the samples associated with this blank has been flagged with a "B".

No matrix spike/matrix spike duplicate (MS/MSD) samples were requested with this SDG.

As per the SOW, an example calculation is attached. The example given is for Phenol-d5 in sample C01P3.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted electronically has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

S-A Parikh

Saroj A. Parikh
GC/MS Case Reviewer
November 30, 2006

Case: 35961
SDG: C01P3

Example Calculation for the Semivolatile Fraction

RRF Calculation

RRF=(Ax*Cis)/(Ais*Cx)

Where: Ax=Area of the characteristic ion (EICP) for the compound to be measured
Ais=Area of the characteristic ion (EICP) for the specific internal standard
Cis=Concentration of the internal standard
Cx=Concentration of the compound to be measured

Example: Phenol-d5 from SSTD020GI (HA061127A66)

Ax=	165341
Ais=	105114
Cis=	40
Cx=	40

RRF= 1.573

Mean RRF from ICAL 1.705

Concentration Calculation

Concentration(µg/L)=(Ax*Is*Df*Vf)/(Ais*RRF*Vi*Vt)

Where: Ax=Area of the characteristic ion (EICP) for the compound to be measured
Ais=Area of the characteristic ion (EICP) for the specific internal standard
Is=Amount of the internal standard added, in nanograms
Mean RRF= Mean response factor from the initial calibration
Vt=Total volume of water extracted (in liters)
Vf=Extract Volume (in uL)
Vi=Volume injected (uL)
Df=Dilution factor

Example: Phenol-d5 from C01P3

Ax=	302734
Ais=	110904
Is=	40
Mean RRF=	1.705
Vt=	0.975
Vf=	1.0
Vi=	2
Df=	1

Concentration(µg/L)= 33

CompuChem

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Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
CASE # 35961
SDG # C01P3
CONTRACT # EPW05028

SAMPLE IDENTIFICATIONS: C01P3, C01P4, C01P5, C01P6, C01P7, C01P9, C01Q0, C01Q1, C01Q3

The nine water samples listed above were scheduled for the requested analysis of the Pesticide fraction. The samples were prepared and analyzed following the current EPA Contract Laboratory Program (CLP) Statement of Work (SOW), Document SOM01.1 for Pesticides. Please see the volatile section for receiving information. All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices for SDG #C01P3 are included in the sample data sections.

Pesticides

Extraction and analysis holding time requirements were met for the samples.

No target analytes confirmed above the CRQL in the samples.

Manual quantitations were performed on one or more of the process files associated with this SDG, including each of the sample analysis files. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

All QC criteria were met for the initial and continuing calibration standards associated to this SDG.

The associated method blank met all quality control criteria.

All of the surrogate recoveries were within the method limits.

Duplicate matrix spikes were performed with sample C01Q3 and met recovery criteria. The laboratory control samples met all recovery criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Katrina L. Travis
Director, Laboratory Operations
November 30, 2006

Concentration = (Ax*Vt*Df)/(AvgCF*Vi*Vx)

Ax = Response (peak area or height) of the compound to be measured
AvgCF = Average calibration factor from the initial calibration
Vt = Volume of concentrated extract
Vi = Volume of extract injected (1 ul)
Vx = Volume of water extracted
Df = Dilution Factor

AvgCF = Average of the calibration factors from the initial calibration standards
(Total of (Peak area of each standard)/(mass injected (ng))/number of Stds (5)
MI = Mass injected (ng)

Example: EPA Sample No. C01P3. Analyte is Tetrachloro-m-xylene. CLPEST Column.

AvgCF = 426081

Ax	18714		
AvgCF	426081		
Vt	10000		
Vi	1		
Vx	1000	Concentration =	0.439212 ug/l
Df	1	Concentration =	0.439 ug/l

CompuChem

a division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
CASE # 35961
SDG # C01P3
CONTRACT # EPW05028

SAMPLE IDENTIFICATIONS: C01P3, C01P4, C01P5, C01P6, C01P7, C01P9, C01Q0, C01Q1, C01Q3

The nine water samples listed above were scheduled for the requested analysis of the Aroclor fraction. The samples were prepared and analyzed following the current EPA Contract Laboratory Program (CLP) Statement of Work (SOW), Document SOM01.1 for Aroclor. Please see the volatile section for receiving information. All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices for SDG #C01P3 are included in the sample data sections.

Aroclors

Extraction and analysis holding time requirements were met for the samples.

No target analytes confirmed above the CRQL in the samples.

Manual quantitations were performed on one or more of the process files associated with this SDG, including each of the sample analysis files. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

All QC criteria were met for the initial and continuing calibration standards associated to this SDG.

The associated method blank met all quality control criteria.

All of the surrogate recoveries were within the method limits.

Duplicate matrix spikes were performed with sample C01Q3 and met recovery criteria, however, the %RPD was high on each column. The laboratory control samples met all recovery criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Katrina L. Travis
Director, Laboratory Operations
November 30, 2006

VI

Concentration = (Ax*Vt*Df)/(AvgCF*Vi*Vx)

Ax = Response (peak area or height) of the compound to be measured
AvgCF = Average calibration factor from the initial calibration
Vt = Volume of concentrated extract
Vi = Volume of extract injected (1 ul)
Vx = Volume of water extracted
Df = Dilution Factor

AvgCF = Average of the calibration factors from the initial calibration standards
(Total of (Peak area of each standard)/(mass injected (ng))/number of Stds (5)
MI = Mass injected (ng)

Example: EPA Sample No. C01P3. Analyte is Tetrachloro-m-xylene. CLPEST Column.

AvgCF = 162075

Ax	5696		
AvgCF	162075		
Vt	10000		
Vi	1		
Vx	975	Concentration =	0.360454 ug/l
Df	1	Concentration =	0.36 ug/l

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
ENVIRONMENTAL SCIENCE CENTER
701 MAPES ROAD
FORT MEADE, MARYLAND 20755-5350

DATE : December 11, 2006

SUBJECT: Region III Data QA Review

FROM : Khin-Cho Thaung KCT
Region III ESAT RPO (3EA20)

TO : Romuald Roman
Regional Project Manager (3HS22)

Attached is the inorganic data validation report for the McAdoo Assocates site (Case # 35961; SDG #MC01P3) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2743.

Attachments

cc: Marian Murphy (TTEMI)

TO File #: 0001 TDF#: 1211

ANALYTICAL SERVICES AND QUALITY ASSURANCE BRANCH

LOCKHEED MARTIN
We never forget who we're working for™

Lockheed Martin Information Technology
ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350
Telephone 410-305-3037 Facsimile 410-305-3597

DATE: December 7, 2006

SUBJECT: Inorganic Data Validation (IM2 Level)
Case: 35961
SDG: MC01P3
Site: McAdoo Associates

FROM: Donald M. Brown DMB
Inorganic Data Reviewer

Mahboobeh Mecanic MM
Senior Oversight Chemist

TO: Khin-Cho Thaung
ESAT Region 3 Project Officer

OVERVIEW

Case 35961, Sample Delivery Group (SDG) MC01P3, consisted of nine (9) aqueous samples analyzed for total metals and cyanide (CN^-) by DataChem Laboratories, Inc. (DATAC). The sample set contained one (1) field blank, one (1) rinsate blank and one (1) field duplicate pair. Samples were analyzed in accordance with Contract Laboratory Program (CLP) Statement of Work (SOW) ILM05.3 through Routine Analytical Services (RAS) program.

SUMMARY

Data were validated according to Region III Modifications to the National Functional Guidelines for Inorganic Data Review, Level IM2. Areas of concern with respect to data usability are listed below.

Data in this case have been impacted by outliers present in the technical holding time and laboratory, field and rinsate blanks as well as the ICP serial dilution analysis. Details of these outliers are discussed under "Minor Problems", specific samples affected are outlined in "Table 1A" and qualified analytical results for all samples are summarized on the Data Summary Forms (DSFs).

MINOR PROBLEMS

The aqueous technical holding time of fourteen (14) days from time of sample collection to sample analysis for CN^- has been exceeded by one (1) day for all samples. Quantitation limits for CN^- in all samples may be biased low and have been qualified "UL" on the DSFs.

Continuing Calibration (CCB), Preparation (PB), Field (FB) and/or Rinsate (RB) Blanks had reported results greater than the Method Detection Limits (MDLs) for the analytes listed below. Positive results in affected samples which are less than or equal to five times ($\leq$5X) the blank concentrations may be biased high and have been qualified "B" on the DSFs.

Blank	Affected Analytes
CCB	calcium (Ca), chromium (Cr), manganese (Mn), mercury (Hg), vanadium (V)
PB	Hg, selenium (Se), thallium (Tl)
FB	lead (Pb), Se, zinc (Zn)
RB	Tl

CCBs and/or PBs had negative results greater than the absolute values of the MDLs regarding the analytes listed below. Quantitation limits in affected samples may be biased low and have been qualified "UL" on the DSFs.

Blank	Affected Analytes
CCB	potassium (K), CN^-
PB	aluminum (Al), arsenic (As), beryllium (Be)

The percent difference (%D) in the ICP serial dilution analysis was outside control limits (>10%) for Al. Positive results for this analyte in affected samples are estimated due to possible matrix interferences and have been qualified "J" on the DSFs.

NOTES

Reported results between MDLs and Contract Required Quantitation Limits (CRQLs) were qualified "J" on the DSFs unless superseded by "B".

Samples in this SDG were prepared using the SOW MW1 method for the ICP analytes. This preparation method results in a dilution factor of 1.11 for the final digestates. The dilution factor of 1.11 is reported on the DSFs by the reviewer to adjust the CRQLs for all analytes except Hg and CN^-.

The laboratory failed to include Form X (ICP-AES Interelement Correction Factors) with the data package. However, the Cover Page noted that ICP-AES interelement correction factors were applied for this case. No data were qualified based on this finding.

Reported results for field duplicate pair MC01P5/MC01P6 were within 20% RPD, ±CRQL for all analytes.

Data for Case 35961, SDG MC01P3, were reviewed in accordance with National Functional Guidelines for Evaluating Inorganic Analyses with Modification for use within Region III.

ATTACHMENTS

INFORMATION REGARDING REPORT CONTENT

Table 1A is a summary of qualifiers applied to the laboratory-generated results during data validation.

TABLE 1A	SUMMARY OF QUALIFIERS ON DATA SUMMARY FORMS AFTER DATA VALIDATION
TABLE 1B	CODES USED IN COMMENTS COLUMN OF TABLE 1A
APPENDIX A	GLOSSARY OF DATA QUALIFIER CODES
APPENDIX B	DATA SUMMARY FORMS
APPENDIX C	CHAIN OF CUSTODY RECORDS
APPENDIX D	LABORATORY CASE NARRATIVE

DCN: 35961.MC01P3IM2.doc

TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY FORM AFTER DATA VALIDATION

Case 35961, SDG MC01P3

ANALYTE	SAMPLES AFFECTED	POSITIVE VALUES	NON-DETECTED VALUES	BIAS	COMMENTS*
Al	MC01P3, MC01Q3	J			ISD (23%)
	All Samples Except MC01P3, MC01Q3		UL	Low	PBN (-86.400 J µg/L)
As	All Samples		UL	Low	PBN (-2.810 J µg/L)
Be	All Samples		UL	Low	PBN (-0.246 J µg/L)
Ca	MC01Q1	B		High	CCB (61.991 J µg/L)
Cr	MC01Q3	B		High	CCB (4.357 J µg/L)
Pb	All Samples Except MC01Q0, MC01Q1	B		High	FB (3.8 J µg/L)
Mn	MC01Q0	B		High	CCB (2.146 J µg/L)
Hg	MC01P3, MC01P6, MC01P7, MC01Q0, MC01Q1	B		High	CCB (0.028 J µg/L)
	MC01Q3	B		High	PB (0.026 J µg/L)
K	MC01Q0, MC01Q1		UL	Low	CBN (-391.407 J µg/L)
Se	MC01P5, MC01P6, MC01P9, MC01Q3	B		High	FB (1.7 J µg/L)
	MC01Q0	B		High	PB (1.209 J µg/L)
Tl	MC01Q0, MC01Q1	B		High	PB (1.376 J µg/L)

* See explanation of comments in Table 1B

TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY FORM AFTER DATA VALIDATION

Case 35961, SDG MC01P3

ANALYTE	SAMPLES AFFECTED	POSITIVE VALUES	NON-DETECTED VALUES	BIAS	COMMENTS*
Tl	MC01Q3	B		High	RB (2.9 J µg/L)
V	MC01P6	B		High	CCB (3.666 J µg/L)
	MC01Q3	B		High	CCB (3.880 J µg/L)
Zn	MC01P3, MC01P4, MC01P5, MC01P6, MC01P7, MC01P9	B		High	FB (3.3 J µg/L)
CN^-	All Samples		UL	Low	HT (1 Day) CBN (-3.673 J µg/L)

* See explanation of comments in Table 1B

TABLE 1B
CODES USED IN COMMENTS COLUMN

ISD	=	The percent difference (%D) in the ICP serial dilution analysis was outside control limits (>10%) [%D is in parenthesis]. Positive results are estimated.
PBN	=	The preparation blank had negative results with absolute values >MDLs [results are in parenthesis]. Quantitation limits may be biased low.
CCB	=	Continuing calibration blanks had results >MDLs [results are in parenthesis]. Positive results which are ≤5X the blank concentrations may be biased high.
FB	=	The field blank had results >MDLs [results are in parenthesis]. Positive results which are ≤5X the blank concentrations may be biased high.
PB	=	The preparation blank had results >MDLs [results are in parenthesis]. Positive results which are ≤5X the blank concentrations may be biased high.
CBN	=	Continuing calibration blanks had negative results with absolute values >MDLs [results are in parenthesis]. Quantitation limits may be biased low.
RB	=	The rinsate blank had a result >MDL [result is in parenthesis]. The positive result which is <5X the blank concentration may be biased high.
HT	=	Holding time was exceeded [# of days exceeded are in parenthesis]. Quantitation limits may be biased low.

Appendix A

Glossary of Data Qualifier Codes

GLOSSARY OF DATA QUALIFIER CODES (INORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of analytes):

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

(NO CODE) = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

J = Analyte Present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

Q = No analytical result.

Appendix B

Data Summary Forms

Case #: 35981 SDG : MC01P3
Site : MCADOO ASSOCIATES
Lab. : DATAC

Sample Number :		MC01P9		MC01Q0		MC01Q1		MC01Q3			
Sampling Location :		MBS-MW7-01		MBS-FB-01		MBS-RB-01		MBS-MW6-01			
Field QC :				Field Blank		Rinsate Blank					
Matrix :		Water		Water		Water		Water			
Units :		ug/L		ug/L		ug/L		ug/L			
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006			
Time Sampled :		15:30		15:30		14:24		13:35			
Dilution Factor :		1.11		1.11		1.11		1.11			
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200		UL		UL		UL	1260	J		
ANTIMONY	60		UL		UL		UL		UL		
*ARSENIC	10		UL		UL		UL		UL		
BARIUM	200	113	J								
BERYLLIUM	5		UL		UL		UL		UL		
CADMIUM	5		UL		UL		UL		UL		
CALCIUM	5000	17800				18.4	B	40800			
CHROMIUM	10		UL		UL		UL	2.7	B		
COBALT	50		UL		UL		UL	7.2	J		
COPPER	25		UL		UL		UL		UL		
IRON	100	42700						1440			
LEAD	10	2.7	B		UL		UL	7.5	B		
MAGNESIUM	5000	5400	J					3170	J		
MANGANESE	15	17000		0.70	B		UL	1100			
MERCURY	0.2		UL	0.024	B	0.022	B	0.024	B		
NICKEL	40	51			UL		UL		UL		
POTASSIUM	5000	5500	J		UL		UL	4660	J		
SELENIUM	5	1.7	B	1.7	B		UL		UL		
SILVER	10	3.6	J		UL		UL		UL		
SODIUM	5000	15900			UL		UL	2170			
THALLIUM	25		UL	2.0	B	2.9	B	1.2	B		
VANADIUM	50		UL		UL		UL	3.2	B		
ZINC	60	3.7	B	3.3	J		UL	19.5	J		
CYANIDE	10		UL		UL		UL		UL		

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

DATA SUMMARY FORM: INORGANIC

Case #: 35961 SDG : MC01P3 Number of Soil Samples : 0

Site : MCADOO ASSOCIATES Number of Water Samples : 9

Lab. : DATAC

Sample Number :		MC01P3		MC01P4		MC01P5		MC01P6		MC01P7	
Sampling Location :		MBS-MW2-01		MBS-MW3-01		MBS-MW4-01		MBS-MW4-02		MBS-MW5-01	
Field QC :						Dup of MC01P6		Dup of MC01P5			
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		11/15/2006		11/15/2006		11/15/2006		11/15/2006		11/15/2006	
Time Sampled :		16:20		18:15		17:10		18:00		18:55	
Dilution Factor :		1.11		1.11		1.11		1.11		1.11	
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200	1480	J		UL		UL		UL		UL
ANTIMONY	60										
*ARSENIC	10		UL		UL		UL		UL		UL
BARIUM	200	27.8	J	[illegible]	J	56.3	J	64.3	J	[illegible]	[illegible]
BERYLLIUM	5		UL		UL		UL		UL		UL
*CADMIUM	5										
CALCIUM	5000	12800		10200		19000		18700		6580	
*CHROMIUM	10										
COBALT	50	24.0	J			4.8	J	6.8	J	9.4	J
*COPPER	25										
IRON	100	4790		30600		61200		60700		7890	
*LEAD	10	3.9	B	2.5	B	2.4	B	2.5	B	[illegible]	B
MAGNESIUM	5000	3390	J	3660	J	7130		7070		2310	J
MANGANESE	15	1880		[illegible]		2950		[illegible]		[illegible]	
MERCURY	0.2	0.031	B					0.037	B	0.020	B
*NICKEL	40										
POTASSIUM	5000	12200		1730	J	3670	J	3450	J	1330	J
SELENIUM	35					6.7	B	4.4	B		
SILVER	10			4.3	J			3.5	J		
SODIUM	5000	[illegible]		[illegible]		[illegible]		16900		25700	
THALLIUM	25										
VANADIUM	50										
ZINC	60	12.9	B	4.7	B	6.8	B	5.6	B	5.5	B
*CYANIDE	10		[illegible]		UL		[illegible]		[illegible]		UL

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Appendix C

Chain-of-Custody Records

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 35961 **R**
DAS No:

Region:	3	**Date Shipped:**	11/17/2006	**Chain of Custody Record**	**Sampler Signature** Beth Williams
Project Code:	CT3816	**Carrier Name:**	FedEx	**Relinquished By** (Date / Time)	**Received By** (Date / Time)
Account Code:		**Airbill:**	640799432137	Beth Williams 1210 11/17/06	
CERCLIS ID:	PAD980712616	**Shipped to:**	Datachem Laboratories, Inc. 960 West LeVoy Drive Salt Lake City UT 84123 (801) 266-7700	2	
Spill ID:	12			3	
Site Name/State:	McAdoo - Blaine Street/PA			4	
Project Leader:	Beth Williams				
Action:	Remedial Investigation				
Sampling Co:	Tetra Tech EM Inc				

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MC01P3	Monitor Well/ Beth Williams	H/G	CN (14), TM/Hg (14)	1213 (HNO3), 1260 (NaOH) (2)	MBS-MW2-01	S: 11/15/2006 16:20	C01P3	--
MC01P4	Monitor Well/ Beth Williams	H/G	CN (14), TM/Hg (14)	1214 (HNO3), 1268 (NaOH) (2)	MBS-MW3-01	S: 11/15/2006 18:15	C01P4	--
MC01P5	Monitor Well/ Beth Williams	H/G	CN (14), TM/Hg (14)	1215 (HNO3), 1276 (NaOH) (2)	MBS-MW4-01	S: 11/15/2006 17:10	C01P5	--
MC01P6	Monitor Well/ Beth Williams	H/G	CN (14), TM/Hg (14)	1216 (HNO3), 1284 (NaOH) (2)	MBS-MW4-02	S: 11/15/2006 18:00	C01P6	Field Dupe of MC01P5
MC01P7	Monitor Well/ Beth Williams	H/G	CN (14), TM/Hg (14)	1217 (HNO3), 1292 (NaOH) (2)	MBS-MW5-01	S: 11/15/2006 18:55	C01P7	--
MC01P9	Monitor Well/ Beth Williams	H/G	CN (14), TM/Hg (14)	1219 (HNO3), 1308 (NaOH) (2)	MBS-MW7-01	S: 11/15/2006 15:30	C01P9	--
MC01Q0	Ground Water/ Beth Williams	L/G	CN (14), TM/Hg (14)	1220 (HNO3), 1334 (NaOH) (2)	MBS-FB-01	S: 11/15/2006 15:30	C01Q0	Field Blank
MC01Q1	Ground Water/ Beth Williams	L/G	CN (14), TM/Hg (14)	1221 (HNO3), 1249 (NaOH) (2)	MBS-RB-01	S: 11/15/2006 14:24	C01Q1	Rinsate
MC01Q3	Monitor Well/ Beth Williams	H/G	CN (14), TM/Hg (14)	1309 (HNO3), 1310 (HNO3), 1332 (NaOH), 1333 (NaOH) (4)	MBS-MW6-01	S: 11/15/2006 13:35	C01Q3	--

Shipment for Case Complete? N Y	**Sample(s) to be used for laboratory QC:** MC01Q3	**Additional Sampler Signature(s):**	**Chain of Custody Seal Number:**
Analysis Key:	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?** _____
CN = Cyanide, TM/Hg = CLP TAL Total Metals/Hg			

TR Number: 3-305832908-111706-0001

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

GTS 11-16-06

ASCAR USE ONLY		
RAS	STARS	Standard TAT
24S		14

U.S. EPA Region III Analytical Request Form

Revision 10.06

35961 2007T03N302DD2C0312TA02 per Ron Roman 11-16-06 1:15pm

Date: 11/16/2006	Site Activity: Technical Assistance		
Site Name: Mc Adoo Associates ~~Blayne Street~~		Street Address: Blayne Street	
City: McAdoo	State: PA	Latitude: 40.9642 North	Longitude: 76.2389 West
Program: Superfund	Acct. #: ~~2007T03N302DD3C0312TA02~~	CERCLIS #: PAD980712816	
Site ID:	Spill ID: 0312	Operable Unit: 02	
Site Specific QA Plan Submitted: ☐ No ☒ Yes	Title: Draft Groundwater SAP McAdoo Associates Blaine Street		Date Approved: 11/2/06
EPA Project Leader: Romuld Roman 3HS22	Phone#: 215-814-3212	Cell Phone #: 267-481-1990	E-mail: roman.romuald@epa.gov
Request Preparer: Marian Murphy	Phone#: 610-364-2129	Cell Phone #: 267-446-2839	E-mail: marian.murphy@ttemi.com
Site Leader: Beth Williams	Phone#: 610-364-2148	Cell Phone #: 856-981-8476	E-mail: beth.williams@ttemi.com

Contractor: Tetra Tech EM Inc.		EPA CO/PO: Lorrie Murray/Karen Wodarczyk 25648,49 25650,51,52	
#Samples 11	Matrix: Water non-potable, LIBERTY	Parameter: TCL Organics QL's present	Method: SOM01.1 LOW: 5.0 ug/L
#Samples 11	Matrix: water-non potable DATAC	Parameter: TAL Metlas & Hg & CN " "	Method: ILM05.3 ICPAES & Hg & CN
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:
#Samples	Matrix:	Parameter:	Method:

Ship Date From: 11/16/2006	Ship Date To: 11/17/2006	Org. Validation Level M2	Inorg. Validation Level IM2

Unvalidated Data Requested: ☐ No ☒ Yes If Yes, TAT Needed: ☒ 14days ☐ 7days ☐ 72hrs ☐ 48hrs ☐ 24hrs ☐ Other (Specify) PR's by ESAT

Validated Data Package Due: ☐ 42 days ☒ 30 days ☐ 21days ☐ 14 days ☐ Other (Specify) 14/16

Electronic Data Deliverables Required: ☐ No ☒ Yes (EDDs will be provided in Region 3 EDD Format)

Special Instructions:See attached for detection limits needed

FORM ARF- 10/06 Revision 1.1

CLP SOW ILM05.3 TAL METALS AND CYANIDE FOR WATER SAMPLES (µg/L)					
ANALYTE	CAS Number	CRDL	ANALYTE	CAS Number	CRDL
ALUMINUM	7429905	200	MERCURY	7439976	0.2
ANTIMONY	7440360	60	NICKEL	7440020	40
ARSENIC	7440382	10	POTASSIUM	7440097	5000
BARIUM	7440393	200	SELENIUM	7782492	35
BERYLLIUM	7440417	5	SILVER	7440224	10
CADMIUM	7440439	5	SODIUM	7440235	5000
CALCIUM	7440702	5000	THALLIUM	7440280	25
CHROMIUM	7440473	10	VANADIUM	7440622	50
COBALT	7440484	50	ZINC	7440666	60
COPPER	7440508	25	CYANIDE	57125	10
IRON	7439896	100			
LEAD	7439921	10			
MAGNESIUM	7439954	5000			
MANGANESE	7439965	15			

Appendix D

Laboratory Case Narrative

USEPA - CLP

COVER PAGE

Lab Name: DataChem Laboratories Contract: EP-W-06-054

Lab Code: DATAC Case No.: 35961 NRAS No.: _____ SDG No.: MC01P3

SOW No.: ILM05.3

EPA Sample No.	Lab Sample ID
MC01P3	6324001001
MC01P4	6324001002
MC01P5	6324001003
MC01P6	6324001004
MC01P7	6324001005
MC01P9	6324001006
MC01Q0	6324001007
MC01Q1	6324001008
MC01Q3	6324001009
MC01Q3D	6324001011
MC01Q3S	6324001010

		ICP-AES	ICP-MS
Were ICP-AES and ICP-MS Interelement corrctions applied?	(Yes/No)	YES	NO
Were ICP-AES and ICP-MS background corrections applied?	(Yes/No)	YES	NO
If yes - were raw data generated before application of background corrections?	(Yes/No)	NO	NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA) has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Neil Edwards

Date: 12/01/2006 Title: Chemist

DATA CHEM LABORATORIES, INC
30 Years Strong

SDG NARRATIVE

Case #: 35961
SDG#: MC01P3
Contract #: EP-W-06-054
DCL Set ID#: 6324001
December 4, 2006

General Information

The nine samples in this SDG were analyzed by methodologies contained in ILM05.3. All concentration, analytical, and method qualifiers are defined in the SOW.

Holding Times

All samples were prepared and analyzed within method required holding times.

Initial and Continuing Calibration

All initial and continuing calibration verification and blank analyses were performed within the designated frequency and recoveries of the verifications and concentrations of the blanks met method acceptance criteria.

ICP Interference Check Sample Analysis

Results for the interference check samples met method acceptance criteria.

Preparation Blanks

The absolute values of all analyte concentrations in the preparation blanks were lower than the Contract Required Quantitation Limits.

Laboratory Control Sample Analysis

Results for the analysis of the water LCS met method acceptance criteria.

Matrix Spike Analysis

All matrix spike recoveries were within the limits of 75-125%.

Matrix Duplicate Analysis

All matrix duplicate results met method criteria.

ICP Serial Dilution

ICP Serial Dilution results met method acceptance criteria with the exception of aluminum.

Miscellaneous Comments

All calibration data is linear, please see raw data.
Cooler Temps were at 4°C at time of receipt.

Example Equations

Method HW3: $C \times \frac{Vf}{Vi} \times DF = Concentration(\mu g/L)$

Method CW1: $C \times DF = Concentration(\mu g/L)$

Method DW2: $C \times DF = Concentration(\mu g/L)$

Where,
C = Instrument value in µg/L (The average of all replicate integrations).
Vf = Final digestion volume (mL)
Vi = Initial digestion volume (mL)
DF = Dilution Factor