Site Team Evaluation Prioritization

EPA Region 5 Records Ctr
350977

L0971900001 Lake Co
Waukegan Municipal #1 Landfill
ILD980902175
SF/HRS
(Volume 2 of 2)

CERCLA

Analytical Results

Illinois Environmental Protection Agency

2200 Churchill Road
P O Box 19276
Springfield, IL 62794-9276

Printed on Recycled Paper

Appendix D

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE

SUBJECT Review of Data
Received for Review on May 12, 1998

FROM Stephen L Ostrodka, Chief (HSRL 5J) for Steve Ostrodka
Superfund Technical Support Section Richard L Byrd
5/19/98

TO Data User IEPA

We have reviewed the data for the following case

SITE NAME Waukegan Mun. LF (IL)

CASE NUMBER 26147 SDG NUMBER ECCQ0

Number and Type of Samples 12 (water)

Sample Numbers ECCQ0, 3-9 ECCR0-1 ECCS2-3

Laboratory Mitkem Hrs for Review 10.5+1 wk

Following are our findings

the data are usable and acceptable with the qualifications described in the attached narrative
Richard L Byrd,

RECEIVED
MAY 26 1998
IEPA/BOL

CC Cecilia Moore
~~Acting~~ Region 5 TPO
Mail Code SM 5J

Laboratory	**MITKEM**	Case	**26147**
Site	**WAUKEGAN MUNICIPAL LANDFILL (IL)**	SDG	**ECCQ0**

Below is a summary of the out-of-control audits and the possible effects on the data for this case

Twelve (12) preserved groundwater samples, numbered ECCQ0, ECCQ3 through ECCQ9, ECCR0, ECCR1, ECCS2 and ECCS3 were collected April 21, 1998 The lab received the samples April 23, 1998 Nine (9) samples were analyzed for the full list of organic analytes One (1) sample ECCR1, was analyzed for only the volatile list of organic analytes Two (2) samples, ECCS2 and ECCS3, were analyzed for both the volatile and semivolatile list of organic analytes All samples were analyzed according to CLP SOW OLC02 1 (10/92)

All laboratory control spike recoveries were acceptable No Performance Evaluation (PE) sample was included with this SDG package

Based on the recorded sampling dates and times, sample ECCQ9 is a duplicate of sample ECCQ8 and samples ECCQ0, ECCQ3 and ECCQ4 are duplicate samples of each other

The VOA analyses were performed within the technical holding time of fourteen (14) days after sample collection therefore the results are acceptable All semivolatile and pesticide sample extractions were performed within seven (7) days from collection and all analyses were performed within forty (40) days after extraction, therefore, the results are acceptable

Reviewed by A C Harvey/Lockheed-Martin ESAT
Date May 13, 1998

Laboratory **MITKEM** Case **26147**
Site **WAUKEGAN MUNICIPAL LANDFILL (IL)** SDG **ECCQ0**

1 HOLDING TIME

Twelve (12) preserved groundwater samples, numbered ECCQ0, ECCQ3 through ECCQ9, ECCR0 ECCR1, ECCS2 and ECCS3 were collected April 21, 1998 The lab received the samples April 23, 1998 Nine (9) samples were analyzed for the full list of organic analytes One (1) sample, ECCR1, was analyzed for only the volatile list of organic analytes Two (2) samples, ECCS2 and ECCS3, were analyzed for both the volatile and semivolatile list of organic analytes All samples were analyzed according to CLP SOW OLC02 1 (10/92)

The VOA analyses were performed within the technical holding time of fourteen (14) days after sample collection, therefore, the results are acceptable All semivolatile and pesticide sample extractions were performed within seven (7) days from collection and all analyses were performed within forty (40) days after extraction, therefore, the results are acceptable

2 GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

VOA All GC/MS tuning complied with the mass list and ion abundance criteria for BFB, and all samples were analyzed within the twelve (12) hour periods for instrument performance checks therefore, the results are acceptable

SV All GC/MS tuning complied with the mass list and ion abundance criteria for DFTPP, and all samples were analyzed within the twelve (12) hour periods for instrument performance checks, therefore, the results are acceptable

P/P GC Resolution Check Mixtures met the 60% resolution criteria Endrin and DDT degradation checks using PEM Mix on the DB-1701 and DB 608 columns were <20%, therefore the results are acceptable

The Florisil Cartridge Check met the QC criteria, therefore, the results are acceptable

3 CALIBRATION

Initial and continuing calibrations of the Volatile, Semivolatile and Pest/PCB standards were evaluated for the target compound lists and outliers are recorded on the forms included as part of this narrative

Reviewed by A C Harvey/Lockheed-Martin ESAT
Date May 13, 1998

Laboratory **MITKEM** Case **26147**
Site **WAUKEGAN MUNICIPAL LANDFILL (IL)** SDG **ECCQ0**

4 BLANKS

VOA VBLK5V, VBLK5W and VBLK5X are the three (3) low concentration water volatile method blanks VBLK5V contained 1,2-Dibromo 3-chloropropane at 0 6 μg/L and no TICs VBLK5W contained the common laboratory contaminant Methylene Chloride at 0 7 μg/L and no TICs VBLK5X contained the common laboratory contaminant Methylene Chloride at 0 8 μg/L and no TICs VHBLK5X was the volatile storage blank VHBLK5X contained no target compounds and no TICs The presence of Methylene Chloride in the samples associated with VBLK5W and VBLK5X is flagged as undetected "U", when the sample result is less than ten (10) times the blank result The presence of 1 2-Dibromo-3 chloropropane in the samples associated with VBLK5V is flagged as undetected "U", when the sample result is less than five (5) times the blank result The volatile method blank summaries (FORM IV LCV) list the samples associated with each blank

SV SBLK01 is the low concentration water semivolatile method blank SBLK01 contained no target compounds and no TICs, therefore, the results are acceptable The semivolatile method blank summary (FORM IV LCSV) lists the samples associated with the blank

P/P PBLK02 and PBLK03 are the two (2) low concentration water pesticide method blanks Both method blanks contained no target compounds, therefore, the results are acceptable The pesticide method blank summaries (FORM IV LCP) list the samples associated with each blank

There were two (2) pesticide instrument method blanks, none of which contained any target compounds No samples were associated with the instrument blanks

5 SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

VOA The volatile system monitoring compound was within the QC limits for all samples, therefore, the results are acceptable

SV The semivolatile surrogates were within the QC limits for all samples, therefore, the results are acceptable

P/P The pesticide surrogates were within the QC limits for all samples, therefore, the results are acceptable

Reviewed by A C Harvey/Lockheed-Martin ESAT
Date May 13, 1998

Laboratory **MITKEM** Case **26147**
Site **WAUKEGAN MUNICIPAL LANDFILL (IL)** SDG **ECCQ0**

6 LABORATORY CONTROL SAMPLES

VOA The sample ID for the VOA lab control spike is VLCS5V All compound recoveries were within the QC limits, therefore, the results are acceptable

SV The sample ID for the SV lab control spike is SLCS01 All compound recoveries were within the QC limits, therefore, the results are acceptable

P/P The sample ID for the Pesticide/PCB lab control spike is PLCS03 All compound recoveries were within the QC limits, therefore, the results are acceptable

7 FIELD BLANK AND FIELD DUPLICATE

Based on the recorded sampling dates and times, sample ECCQ9 is a duplicate of sample ECCQ8 and samples ECCQ0, ECCQ3 and ECCQ4 are duplicate samples of each other

Sample ECCQ8 contained Acetone at 3 μg/L and no volatile TICs, bis(2-Ethylhexyl)phthalate at 1 μg/L and no semivolatile TICs and no pesticide target compounds Sample ECCQ9 contained Acetone at 3 μg/L and no volatile TICs, bis(2-Ethylhexyl)phthalate at 15 μg/L and no semivolatile TICs and no pesticide target compounds

Sample ECCQ0 contained Acetone at 3 μg/L and no volatile TICs, bis(2-Ethylhexyl)phthalate at 1 μg/L and no semivolatile TICs and no pesticide target compounds Sample ECCQ3 contained Acetone at 2 μg/L and no volatile TICs, no semivolatile target compounds or semivolatile TICs and no pesticide target compounds Sample ECCQ4 contained Acetone at 3 μg/L and no volatile TICs, no semivolatile target compounds or semivolatile TICs and no pesticide target compounds

8 INTERNAL STANDARDS

VOA The internal standards retention times and area counts for the VOA fraction were within the required QC limits, therefore, the results are acceptable

SV The internal standards retention times and area counts for the SV fraction were within the required QC limits, therefore the results are acceptable

Laboratory	**MITKEM**	Case	**26147**
Site	**WAUKEGAN MUNICIPAL LANDFILL (IL)**	SDG	**ECCQ0**

9 COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA, SV and Pesticide/PCB compounds were properly identified

10 COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

All samples were waters and dilutions were run, therefore, all VOA, SV and Pesticide target CRQLs were properly reported All target compound quantitation was properly reported

11 SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance The GC baseline for the pesticide analysis was acceptable

12 ADDITIONAL INFORMATION

VOA Acetone, 2-Butanone, 4-Methyl-2-Pentanone and 2-Hexanone exceeded the instrument's calibration range in volatile sample ECCS2, the results from ECCS2DL should be considered the final concentration for these analytes

Toluene exceeded the instrument's calibration range in volatile sample ECCS3, the results from ECCS3DL should be considered the final concentration for this analyte

~~SV: The laboratory control spiking mixture did not contain 1,2,4-Trichlorobenzene~~ RQB 5/19/98

Reviewed by A C Harvey/Lockheed-Martin ESAT
Date May 13, 1998

CALIBRATION OUTLIERS
LOW CONCENTRATION WATER VOLATILE TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS# 26147
COLUMN DB 624
ATED PURGE (Y/N) _____

LABORATORY MITKEM CORP
SITENAME WAUKEGAN MUNLF (IL)

Instrument#	V5		Initial Cal.			Contin Cal			Contin Cal			Contin Cal			Contin Cal		
Date/Time			04/29/98			4/29/98 1458											
		#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Chloromethane		0.01															
Bromomethane		0.10															
Vinyl chloride		0.10															
Chloroethane		0.01															
Methylene chloride		0.01															
Acetone		0.01	0.026	87	J/R	0.026	0.0	J/R									
Carbon disulfide		0.01															
1,1 Dichloroethene		0.10															
1,1 Dichloroethane		0.20															
cis 1,2 Dichloroethene		0.10															
trans 1,2 Dichloroethene		0.10															
Chloroform		0.20															
1,2 Dichloroethane		0.10															
2 Butanone		0.01	0.046	27	J/R	0.046	0.0	J/R									
Bromochloromethane		0.10															
1,1,1 Trichloroethane		0.10															
Carbon tetrachloride		0.10															
Bromodichloromethane		0.20															
1,2 Dichloropropane		0.01															
cis 1,3 Dichloropropene		0.20															
Trichloroethene		0.30															
Dibromochloromethane		0.10															
1,1,2 Trichloroethane		0.10															
ızene		0.50															
ı 1,3 Dichloropropene		0.10															
Bromoform		0.10															
4-Methyl 2 pentanone		0.01															
2 Hexanone		0.01															
Tetrachloroethene		0.20															
1,1,2,2 Tetrachloroethane		0.50															
1,2 Dibromoethane		0.10															
Toluene		0.40															
Chlorobenzene		0.50															
Ethylbenzene		0.10															
Styrene		0.30															
Xylene (total)		0.30															
1,2 Dibromo 3-chloropropane		0.10	0.050	47	J/R	0.047	6.0	J/R									
1,3 Dichlorobenzene		0.60															
1,4-Dichlorobenzene		0.50															
1,2 Dichlorobenzene		0.40															
Bromofluorobenzene		0.40															

Samples affected
VBLK5V
VLCS5V
ECCRQ.1
ECCS2
ECCQ3-9

ıewer s Init/Date ACH / 5-12-98

J/R = All positive results are estimated J and non-detected results are unusable R

* = These flags should be applied to the analytes on the sample data sheets

= Minimum Relative Response Factor

CALIBRATION OUTLIERS
LOW CONCENTRATION WATER VOLATILE TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS# 26147
COLUMN DB-624
HEATED PURGE (Y/N) _____

LABORATORY MITKEM CORP
SITENAME WAUKEGAN MUNI LF (IL)

Instrument# V5		Initial Cal			Contin Cal			Contin Cal			Contin Cal			Contin Cal		
Date/Time		04/30/98			04/30/98 1655			5/2/98 1610								
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Chloromethane	0 01															
Bromomethane	0 10															
Vinyl chloride	0 10															
Chloroethane	0 01															
Methylene chloride	0 01															
Acetone	0 01	0 025	8 7	J/R	0 024	4 0	J/R	0 023	8 0	J/R						
Carbon disulfide	0 01															
1,1 Dichloroethene	0 10															
1,1 Dichloroethane	0 20															
cis 1,2 Dichloroethene	0 10															
trans 1,2 Dichloroethene	0 10															
Chloroform	0 20															
1,2 Dichloroethane	0 10															
2 Butanone	0 01	0043	2 7	J/R	0 042	2 3	J/R	0 040	7 0	J/R						
Bromochloromethane	0 10															
1,1,1 Trichloroethane	0 10															
Carbon tetrachloride	0 10															
Bromodichloromethane	0 20															
1,2 Dichloropropane	0 01															
cis 1,3 Dichloropropene	0 20															
Trichloroethene	0 30															
Dibromochloromethane	0 10															
1,1,2 Trichloroethane	0 10															
Benzene	0 50															
tran 1,3 Dichloropropene	0 10															
Bromoform	0 10															
4-Methyl 2 pentanone	0 01															
2 Hexanone	0 01															
Tetrachloroethene	0 20															
1,1,2,2 Tetrachloroethane	0 50															
1,2 Dibromoethane	0 10															
Toluene	0 40															
Chlorobenzene	0 50															
Ethylbenzene	0 10															
Styrene	0 30															
Xylene (total)	0 30															
1,2 Dibromo 3-chloropropane	0 10	0048	1 8	J/R	0047	2 1	J/R	0 042	12 5	J/R						
1,3 Dichlorobenzene	0 60															
1,4-Dichlorobenzene	0 50															
1,2 Dichlorobenzene	0 40															
Bromofluorobenzene	0 40															

Samples affected		
	VBLK5W	VBLK5X
	ECCQ0	ECCS3DL
	ECCS3	ECCS2DL
		VHBLK5X

Reviewer s Init/Date ack / 5-12-98

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= Minimum Relative Response Factor

CALIBRATION OUTLIER
LOW CONCENTRATION WATER SEMIVOLATILE TCL COMPOUNDS
(Page 1 of 2)

CASE\SAS# 26147
COLUMN

LABORATORY MITKEM CORP
SITE NAME WAUKEGAN MUNI LF (IL)

Instrument# S2		Initial Cal			Contin Cal			Contin Cal			Contin Cal			Contin Cal		
Date/Time		04/28/98 1403			04/28/98 1754			04/29/98 1321								
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Phenol	0 80															
bis(2-chloroethyl) Ether	0 70															
2 Chlorophenol	0 70															
2 Methylphenol	0 70															
2,2 -Oxybis(1-chl propane)	0 01															
4-Methylphenol	0 60															
N nitroso-di n propylamine	0 50															
Hexachloroethane	0 30															
Nitrobenzene	0 20															
Isophorone	0 40															
2 Nitrophenol	0 10															
2,4-Dimethylphenol	0 20															
bis (2-chloroethoxyl)methane	0.30															
2,4-Dichlorophenol	0 20															
1,2,4-Trichlorobenzene	0 20															
Naphthalene	0 70															
4-Chloroaniline	0 01	0374			0.383			0174	535	J/UJ						
Hexachlorobutadiene	0 01															
4-Chloro 3 methylphenol	0 20															
2 Methylnaphthalene	0 40															
xachlorocyclopentadiene	0 01															
2,4,6-Trichlorophenol	0 20															
2,4,5 Trichlorophenol	0 20															
2 Chloronaphthalene	0 80															
2 Nitroaniline	0 01															
Dimethyl phthlate	0 01															
Acenaphthylene	1 30															
2,6-Dinitrotoluene	0 20															
3 Nitroaniline	0 01															
Acenaphthene	0 30															
2,4-Dinitrophenol	0 01															
4-Nitrophenol	0 01															
Dibenzofuran	0 80															
2,4-Dinitrotoluene	0 20															

Affected samples					
		SBLK01	ECCQ0		
		SLCS01	ECCQ3-9		
		ECCR0	ECCS2		
		ECCS3			

Reviewer s Init/Date AH/5 12-98

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CALIBRATION OUTLIER
LOW CONCENTRATION WATER SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE\SAS# 26147
COLUMN _____

LABORATORY MITKEM CORP
SITE NAME WAUKEGAN MUNI LF (IL)

Instrument# S2		Initial Cal			Contin Cal			Contin Cal			Contin Cal			Contin Cal		
Date/Time		04/28/98 1403			04/28/98 1754			04/29/98 1321								
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Diethylphthalate	0.01															
4-Chlorophenyl phenylether	0.40															
Fluorene	0.90															
4-Nitroaniline	0.01	0.202			0.213			0.271	34.2	J/UJ						
4,6-Dinitro 2 methylphenol	0.01															
N nitrosodiphenylamine	0.01	0.464			0.477			0.330	28.9	J/UJ						
4-Bromophenyl phenylether	0.10															
Hexachlorobenzene	0.10															
Pentachlorophenol	0.05															
Phenanthrene	0.70															
Anthracene	0.70															
Di n-butylphthalate	0.01															
Fluoranthene	0.60															
Pyrene	0.60															
Butylbenzylphthalate	0.01															
3,3 Dichlorobenzidine	0.01	0.129	30.4	J/UJ	0.104			0.178	38.0	J/UJ						
Benzo(a)anthracene	0.80															
Chrysene	0.70															
bis(2 Ethylhexyl)phthalate	0.01															
Di n-octyl phthalate	0.01															
Benzo(b)fluoranthene	0.70															
Benzo(k)fluoranthene	0.70															
Benzo(a)pyrene	0.70															
Indeno(1,2,3-cd)pyrene	0.50															
Dibenz(a,h)anthrancene	0.40															
Benzo(g,h,i)perylene	0.50															
Nitrobenzene-d5	0.01															
2 Fluorobiphenyl	0.70															
Terphenyl-d14	0.50															
Phenol-d5	0.80															
2 Fluorophenol	0.60															
2,4,6-Tribromophenol	0.01															

Reviewer s Init/Date ACH / 5-12 98

J/R = All positive results are estimated **J** and non-detected results are unusable **R**

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\# = Minimum Relative Response Factor

PESTICIDE/PCB TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS# 26147
COLUMN DB-1701

LABORATORY MITKEM CORP
SITE NAME WAUKEGAN MUNI LF (IL)

Instrument# E2		Initial Cal			Contin Cal			Contin Cal			Contin Cal			Contin Cal		
Date/Time		05/05/98			05/06/98 0022											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha BHC	0.01															
beta BHC	0.40															
delta BHC	0.90															
gamma BHC	0.01															
Heptachlor	0.01															
Aldrin	0.01															
Heptachlor epoxide	0.10															
Endosulfan I	0.10															
Dieldrin	0.05															
4, 4 DDE	0.70															
Endrin	0.70															
Endosulfan II	0.01															
4, 4 DDD	0.60															
Endosulfan sulfate	0.60															
4, 4 DDT	0.01															
Methoxychlor	0.01															
Endrin ketone	0.80															
Endrin aldehyde	0.70															
alpha chlordane	0.01															
gamma chlordane	0.01															
Arochlor 1016																
Arochlor 1221																
Arochlor 1232																
Arochlor 1242																
Arochlor 1248																
Arochlor 1254																
Arochlor 1260																

Affected samples

PBLK03			
PLCS03			
ECCR0			
ECCQ0			
ECCQ3-6			
PBLK02			
ECCQ7-9			

Reviewer's Init/Date ACH / 5 12-98

* These flags should be applied to the analytes on the sample data sheets
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
PESTICIDE/PCB TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS# 26147
COLUMN DB-608

LABORATORY MITKEM CORP
SITE NAME WAUKEGAN MUNI LF (IL)

Instrument# E2		Initial Cal			Contin Cal			Contin Cal			Contin Cal			Contin Cal.		
Date/Time		05/05/98			05/06/98 0022											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha BHC	0.01															
beta BHC	0.40															
delta BHC	0.90															
gamma BHC	0.01															
Heptachlor	0.01															
Aldrin	0.01															
Heptachlor epoxide	0.10															
Endosulfan I	0.10															
Dieldrin	0.05															
4, 4 DDE	0.70															
Endrin	0.70															
Endosulfan II	0.01															
4, 4 DDD	0.60															
Endosulfan sulfate	0.60															
4, 4 DDT	0.01															
Methoxychlor	0.01															
Endrin ketone	0.80															
Endrin aldehyde	0.70															
alpha chlordane	0.01															
gamma chlordane	0.01															
Arochlor 1016																
Arochlor 1221																
Arochlor 1232																
Arochlor 1242																
Arochlor 1248																
Arochlor 1254																
Arochlor 1260																

Affected samples

	PBLK03			
	PLCS03			
	ECCR0			
	ECCQ0			
	ECCQ3-6			
	PBLK02			
	ECCQ7-9			

Reviewer s Init/Date acH / 5 12-98

* These flags should be applied to the analytes on the sample data sheets
\# Minimum Relative Response Factor

ORGANIC DATA QUALIFIER DEFINITIONS

For the purpose of defining the flagging nomenclature used in this document, the following code letters and associated definitions are provided

VALUE - when/if the result of a value is greater than or equal to the Contract Required Quantitation Limit (CRQL)

U Indicates that the compound was analyzed for, but not detected The sample quantitation limit corrected for dilution and percent moisture is reported

J Indicates an estimated value This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of a compound where the result is less than the sample quantitation limit, but greater than zero The flag is also used to indicate a reported result having an associated QC problem

R Indicates the data are unusable (NOTE The analyte may or may not be present)

N Indicates presumptive evidence of a compound This flag is only used for a tentatively identified compound, where the identification is based on a mass spectral library search

P Indicates a pesticide/Aroclor target analyte when there is greater than 25% difference for the detected concentrations between the two GC columns The lower of the two results is reported

C Indicates pesticide results that have been confirmed by GC/MS

B Indicates the analyte is detected in the associated blank as well as in the sample

E Indicates compounds whose concentrations exceed the calibration range of the instrument

D Indicates an identified compound in an analysis has been diluted This flag alerts the data user to any differences between the concentrations reported in the two analysis

A Indicates tentatively identified compounds that are suspected to be aldol condensation products

G Indicates the TCLP Matrix Spike Recovery was greater than the upper limit of the analytical method

L Indicates the TCLP Matrix Spike Recovery was less than the lower limit of the analytical method

T Indicates the analyte is found in the associated TCLP extraction blank as well as in the sample

X,Y,Z are reserved for laboratory defined flags

EPA United States Enviromental Protection Agency Contract Laboratory Program

Special Analytical Services Packing List/Chain of Custody

SAS No:

Case No: 26147

1 Matrix (Enter in Column A): 1 Surface Water, 2 Ground Water, 3 Leachate, 4 Field QC, 5 Soil/Sediment, 6 Oil, 7 Waste, 8 Other (Specify in Column A)

2 Preservative (Enter in Column D): 1 HCl, 2 HNO3, 3 NAHSO4, 4 H2SO4, 5 NAOH, 6 Ice Only, 7 Other (Specify in Column D), N Not Preserved

2 Region No: V

Sampling Co: IEPA

4 Date Shipped: 4/22/98

Carrier: FED EX

6 Date Received–Received by: 4/23/98 Amy Stockhouse

Sampler (Name): Bruce Everetts

Airbill Number: 8668592365

Laboratory Contract Number: 68-D6-0063

Unit Price: 498.75

Sampler Signature: Bruce Everetts

5 Ship To: MITKEM CORPORATION, 175 METRO CENTER BLVD., WARWICK, RI 02886, ATTN KIN CHIU

7 Transfer to:

Date Received:

Received by:

Contract Number:

Price:

3 Purpose: Lead: SF, PRP, ST, FED; Early Action: CLEM, PA, REM; SL, ESI, RI, OIL, UST; Long Term Action: FS, RD, RA, O&M, NPLD

	Sample Numbers (From Labels)	A Matrix (from Box 6) Other	B Conc Low Med High	C Sample Type Comp./Grab	D Preservative (from Box 7) Other	E Analysis	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J High Phases: Solids	Water Miscible Liq	Water Immis Liq
05	ECCQØ	2	L	G	1	VOA	5-078204-7	G201	4/21/98/0915	BE			
	ECCQØ	2	L	G	6	ABN	5-078218	G201	4/21/98/0915	BE			
	ECCQØ	2	L	G	6	PEST/PCB	5-078219	G201	4/21/98/0915	BE			
06	ECCQ3	2	L	G	1	VOA	5-078208-12	G201 MS	4/21/98/0915	BE			
	ECCQ3	2	L	G	6	ABN	5-078220	G201 MS	4/21/98/0915	BE			
	ECCQ3	2	L	G	6	PEST/PCB	5-078221	G201 MS	4/21/98/0915	BE			

SDG # ECCQØ KC

Shipment for SAS Complete? (Y) N

Page 3 of 3

Sample(s) to be Used for Laboratory QC: ECCQ3

Additional Sampler Signatures:

Chain of Custody Seal Number(s): 181903

CHAIN OF CUSTODY RECORD

Relinquished by (Signature)	Date/Time	Received by (Signature)	Relinquished by (Signature)	Date/Time	Received by (Signature)
Bruce Everetts	4/22/98 1300				
Relinquished by (Signature)	Date/Time	Received by (Signature)	Relinquished by (Signature)	Date/Time	Received by (Signature)
Relinquished by (Signature)	Date/Time	Received for Laboratory by (Signature)	Date/Time	Remarks Is custody seal intact? Y / N / none	
			4/23/98 1300	CSA 181903	5°C

A21 0127 REV 3/94

DISTRIBUTION: White – Region Copy; Gold – Lab Copy for Return to Region; Yellow – Data User; Pink – Lab Copy for Return to Data User

EPA Form 9110-3

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
SEE REVERSE FOR PURPOSE CODE DEFINITIONS

Data User means the organization which contracted the laboratory services

EPA United States Enviromental Protection Agency
Contract Laboratory Program

Sp[illegible]al Analytical Services Packing List/Chain of Custody

SAS No

Case N 26147

1 Matrix (Enter in Column A)
1 Surface Water
2 Ground Water
3 Leachate
4 Field QC
5 Soil/Sediment
6 Oil
7 Waste
8 Other (Specify in Column A)

2 Preservative (Enter in Column D)
1 HCl
2 HNO3
3 NAHSO4
4 H2SO4
5 NAOH
6 Ice Only
7 Other (Specify in Column D)
N Not Preserved

2 Region No: V
Sampling Co: IEPA
Sampler (Name): Bruce Everetts
Sampler Signature: Bruce Everetts

3 Purpose
Lead: SF, PRP, ST, FED
Early Action: CLEM, PA, REM
Long Term Action: SI, ESI, RI, OIL, UST, FS, RD, RA, O&M, NPLD

4 Date Shipped: 4/22/98
Carrier: FED EX
Airbill Number: 8668592365

5 Ship To
MITKEM CORPORATION
175 METRO CENTER BLVD
WARWICK, RI 02886
ATTN KIN CHIU

6 Date Received--Received by: 4/23/98 Amy Stackhouse
Laboratory Contract Number: 68-D6-0063
Unit Price: 49875

7 Transfer to
Date Received
Received by
Contract Number
Price

Sample Numbers (From Labels)	A Matrix (from Box 6) Other	B Conc Low Med High	C Sample Type Comp./Grab	D Preservative (from Box 7) Other	E Analysis	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J High Phases: Solids	Water Miscible Liq	Water Imm s Liq
07 ECCQ4	2	L	G	1	VOA	5-078213-17	G201MSD	4/21/98/0915	BE			
ECCQ4	2	L	G	6	ABN	5-078222	G201MSD	4/21/98/0915	BE			
ECCQ4	2	L	G	6	PEST/PCB	5-078223	G201MSD	4/21/98/0915	BE			
08 ECCQ5	2	L	G	1	VOA	5-078224-28	G202	4/21/98/0935	BE			
ECCQ5	2	L	G	6	ABN	5-078229	G202	4/21/98/0935	BE			
ECCQ5	2	L	G	6	PEST/PCB.	5-078230	G202	4/21/98/0935	BE			

SDG # ECCQ0

Shipment for SAS Complete? (Y) N)
Page 5 2 of 5 BE 4/24/98
Sample(s) to be Used for Laboratory QC: ECCQ4
Additional Sampler Signatures
Chain of Custody Seal Number(s): 131913

CHAIN OF CUSTODY RECORD

Relinquished by (Signature)	Date/Time	Received by (Signature)	Relinquished by (Signature)	Date/Time	Received by (Signature)
Bruce Everetts	4/22/98 1300				
Relinquished by (Signature)	Date/Time	Received by (Signature)	Relinquished by (Signature)	Date/Time	Received by (Signature)
Relinquished by (Signature)	Date/Time	Received for Laboratory by (Signature)	Date/Time	Remarks Is custody seal intact? (Y) N / none	
		[signature]	4/23/98 1300	SS# 181913	4°C

572

A21 012 7 REV 3/94

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EPA Form 9110-3

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
SEE REVERSE FOR PURPOSE CODE DEFINITIONS

Data User means the organization which contracted the laboratory services

50792

EPA United States Environmental Protection Agency Contract Laboratory Program

Special Analytical Services Packing List/Chain of Custody

SAS No:

Case No: 26147

1 Matrix (Enter in Column A): 1 Surface Water, 2 Ground Water, 3 Leachate, 4 Field QC, 5 Soil/Sediment, 6 Oil, 7 Waste, 8 Other (Specify in Column A)

2 Preservative (Enter in Column D): 1 HCl, 2 HNO3, 3 NAHSO4, 4 H2SO4, 5 NAOH, 6 Ice Only, 7 Other (Specify in Column D), N Not Preserved

2 Region No: V

Sampling Co: IEPA

4 Date Shipped: 4/22/98

Carrier: FED EX

6 Date Received--Received by: 4/23/98 Amy Stockhouse

Sampler (Name): BRUCE EVERETTS

Airbill Number: 8668592365

Laboratory Contract Number: 68-D6-0063

Unit Price: 498 IS

Sampler Signature: Bruce Everetts

5 Ship To: MITKEM CORPORATION, 175 METRO CENTER BLVD, WARWICK, RI 02886, ATTN KIN CHIU

7 Transfer to:

Date Received:

Received by:

Contract Number:

Price:

3 Purpose: Lead [ ] SF [ ] PRP [ ] ST [ ] FED; Early Action [ ] CLEM [ ] PA [ ] REM; [X] CI [ ] ESI [ ] RI [ ] OIL [ ] UST; Long Term Action [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

	Sample Numbers (From Labels)	A Matrix (from Box 6) / Other	B Conc Low Med High	C Sample Type Comp / Grab	D Preservative (from Box 7) / Other	E Analysis	F Regional Specific Tracking Number or Tag Numbers (KWC 4/22/98 5)	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J High Phases: Solids	Water Miscible Liq	Water Immis Liq
09	ECCQ6	2	L	G	1	VOA	5-078231 - 36	G203	4/21/98/1015	BE			
	ECCQ6	2	L	G	6	ABN	5-078236	G203	4/21/98/1015	BE			
	ECCQ6	2	L	G	6	PEST/RB	5-078237	G203	4/21/98/1015	BE			
10	ECCQ7	2	L	G	1	VOA	5-078238-42	G204	4/21/98/1045	BE			
	ECCQ7	2	L	G	6	ABN	5-078243	G204	4/21/98/1045	BE			
	ECCQ7	2	L	G	6	PEST/RB	5-078244	G204	4/21/98/1045	BE			

SDG # ECCQ0

Shipment for SAS Complete? (Y) N

Page 5 of 5 BE 4/22/98

Sample(s) to be Used for Laboratory QC:

Additional Sampler Signatures:

Chain of Custody Seal Number(s): 131701

CHAIN OF CUSTODY RECORD

Relinquished by (Signature)	Date/Time	Received by (Signature)	Relinquished by (Signature)	Date/Time	Received by (Signature)
Bruce Everetts	4/22/98 1300				
Relinquished by (Signature)	Date/Time	Received by (Signature)	Relinquished by (Signature)	Date/Time	Received by (Signature)
Relinquished by (Signature)	Date/Time	Received for Laboratory by (Signature)	Date/Time	Remarks Is custody seal intact? (Y) N / none	
			4/23/98 1300	Airbill 8668592365	6°C Seal 131701

A21 0127 REV 3/94

DISTRIBUTION: White – Region Copy; Gold – Lab Copy for Return to Region; Yellow – Data User; Pink – Lab Copy for Return to Data

EPA Form 9110-3

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
SEE REVERSE FOR PURPOSE CODE DEFINITION

Data User means the organization which contracted the laboratory services

50794

EPA United States Enviromental Protection Agency
Contract Laboratory Program

Sp[illegible]al Analytical Services
Packing List/Chain of Custody

SAS No

Case N 26147

1 Matrix (Enter in Column A)
1 Surface Water
2 Ground Water
3 Leachate
4 Field QC
5 Soil/Sediment
6 Oil
7 Waste
8 Other (Specify in Column A)

2 Preservative (Enter in Column D)
1 HCl
2 HNO3
3 NAHSO4
4 H2SO4
5 NAOH
6 Ice Only
7 Other (Specify in Column D)
N Not Preserved

2 Region No: V
Sampling Co: IEPA
Sampler (Name): Bruce Everetts
Sampler Signature: Bruce Everetts

3 Purpose
Lead: SF, PRP, ST, FED
Early Action: CLEM, PA, REM
Long-Term Action: ☒ SI, ESI, RI, OIL, UST, FS, RD, RA, O&M, NPLD

4 Date Shipped: 4/22/98
Carrier: FED EX
Airbill Number: 8668592365

5 Ship To: MITKEM CORPORATION
175 METRO CENTER BLVD
WARWICK, RI 02886
ATTN KIM CHIU

6 Date Received--Received by: 4/23/98 Amy Stackhouse
Laboratory Contract Number: 68-D6-0063
Unit Price: 49875

7 Transfer to
Date Received
Received by
Contract Number
Price

	Sample Numbers (From Labels)	A Matrix (from Box 6) Other	B Conc Low Med High	C Sample Type Comp./Grab	D Preservative (from Box 7) Other	E Analysis	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J High Phases: Solids	Water Miscible Liq	Water Immis Liq
11	ECCQ8	2	L	G	1	VOA	5-078245-49	G205	4/21/98/1115	BE			
	ECCQ8	2	L	G	6	ABN	5-078250	G205	4/21/98/1115	BE			
	ECCQ8	2	L	G	6	PEST/PCB	5-078251	G205	4/21/98/1115	BE			
12	ECCQ9	2	L	G	1	VOA	5-078252-56	G206	4/21/98/1115	BE			
	ECCQ9	2	L	G	6	ABN	5-078257	G206	4/21/98/1115	BE			
	ECCQ9	2	L	G	6	PEST/PCB	5-078258	G206	4/21/98/1115	BE			

SDG # ECCQ8

Shipment for SAS Complete? (Y / N)
Page 5 of 8 4/24/98
Sample(s) to be Used for Laboratory QC
Additional Sampler Signatures
Chain of Custody Seal Number(s): 181902

CHAIN OF CUSTODY RECORD

Relinquished by (Signature)	Date/Time	Received by (Signature)	Relinquished by (Signature)	Date/Time	Received by (Signature)
Bruce Everetts	4/22/98 1300				
Relinquished by (Signature)	Date/Time	Received by (Signature)	Relinquished by (Signature)	Date/Time	Received by (Signature)
Relinquished by (Signature)	Date/Time	Received for Laboratory by (Signature)	Date/Time	Remarks Is custody seal intact? (Y) / N / none	
		[signature]	4/23/98 1300	CS# 181902	5°C

A21 012 7 REV 3/94

DISTRIBUTION White – Region Copy
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Yellow – Data User
Pink – Lab Copy for Return to Data User

EPA Form 9110-3

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
SEE REVERSE FOR PURPOSE CODE DEFINITIONS

Data User means the organization which contracted the laboratory services

50798

EPA United States Enviromental Protection Agency
Contract Laboratory Program

Special Analytical Services Packing List/Chain of Custody

SAS No:

Case No: 26147

1 Matrix (Enter in Column A): 1 Surface Water, 2 Ground Water, 3 Leachate, 4 Field QC, 5 Soil/Sediment, 6 Oil, 7 Waste, 8 Other (Specify in Column A)

2 Preservative (Enter in Column D): 1 HCl, 2 HNO3, 3 NAHSO4, 4 H2SO4, 5 NAOH, 6 Ice Only, 7 Other (Specify in Column D), N Not Preserved

2 Region No: V

Sampling Co: IEPA

Sampler (Name): Bruce Everson

Sampler Signature: Bruce Everson

3 Purpose: Lead [ ] SF [ ] PRP [ ] ST [ ] FED; Early Action [ ] CLEM [ ] PA [ ] REM; [X] SI [ ] ESI [ ] RI [ ] OIL [ ] UST; Long Term Action [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

4 Date Shipped: 4/22/98

Carrier: FED EX

Airbill Number: 8668592365

5 Ship To: MITKEM CORPORATION, 175 METRO CENTER BLVD, WARWICK, RI 02886, ATTN KIN CHIU

6 Date Received–Received by: 4/23/98 Amy Stackhouse

Laboratory Contract Number: 68-D6-0063

Unit Price: 49875

7 Transfer to:

Date Received:

Received by:

Contract Number:

Price:

Sample Numbers (From Labels)	A Matrix (from Box 6) / Other	B Conc Low Med High	C Sample Type Comp./ Grab	D Preservative (from Box 7) / Other	E Analysis	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J High Phases: Solids	Water Miscible Liq	Water Immis Liq
01 ECLR0	2	L	G	1	VOA	5-078259-63	G207	4/21/98 1245	BE			
ECLR0	2	L	G	6	ABN	5-078264	G207	4/21/98 1245	BE			
ECLR0	2	L	G	6	PEST/PCB	5-078265	G207	4/21/98 1245	BE			
02 ECCR1	2	L	G	1	VOA	5-078266-67	TB.	4/21/98 1220	BE			
03 ECC 2	2	L	G	1	VOA	5 073324-30	G101	[illegible]	BE			
ECC 2	2	L	G	6	ABN	5 073331	G101	[illegible]	BE			
04 ECC 3	2	L	G	1	VOA	5 078[illegible]-84	G102	[illegible]	BE			
ECC 3	2	L	G	6	ABN	5 07[illegible]	G102	[illegible]	BE			

Shipment for SAS Complete? (Y/N):

Page 5 of 5

Sample(s) to be Used for Laboratory QC:

Additional Sampler Signatures:

Chain of Custody Seal Number(s): 181904

Case # 26147 SDG ECCR0 KC

CHAIN OF CUSTODY RECORD

Relinquished by (Signature)	Date/Time	Received by (Signature)	Relinquished by (Signature)	Date/Time	Received by (Signature)
Bruce Everson	4/22/98 1300				
Relinquished by (Signature)	Date/Time	Received by (Signature)	Relinquished by (Signature)	Date/Time	Received by (Signature)
Relinquished by (Signature)	Date/Time	Received for Laboratory by (Signature)	Date/Time	Remarks Is custody seal intact? (Y) N / none	
			4/23/98 1300	CH# 181904	6°C

DISTRIBUTION: White – Region Copy; Gold – Lab Copy for Return to Region; Yellow – Data User; Pink – Lab Copy for Return to Data

EPA Form 9110 3

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
SEE REVERSE FOR PURPOSE CODE DEFINITION

A21 012 7 REV 3/94

Data User means the organization which contracted the laboratory services

SDG Narrative

Mitkem Corporation submits the enclosed data package in response to USEPA Case # 26147 and SDG# ECCQ0 Analyses were performed for twelve aqueous samples that were received on April 23, 1998 The analysis was performed under USEPA Contract # 68-D6-0063

The following samples are submitted in this data package

Client ID	Analysis	VOA pH
ECCR0	V, S P	< 2
ECCR1	V	< 2
ECCS2	V, S	3
ECCS2DL	V	3
ECCS3	V, S	3
ECCS3DL	V	3
ECCQ0	V, S	< 2
ECCQ3	V, S, P	< 2
ECCQ4	V, S, P	< 2
ECCQ5	V, S, P	< 2
ECCQ6	V, S, P	< 2
ECCQ7	V, S, P	< 2
ECCQ8	V, S P	< 2
ECCQ9	V, S, P	< 2

V = Volatile Organics
S = Semivolatile Organics
P = Pesticides/PCB

The analyses were performed using USEPA CLP Low Concentration Water (OLC02 1) protocols The analyses were performed with strict adherence to the SOW with the following exceptions and observations

1 Overall Observation

Where needed, manual integrations were performed to improve data quality The corrections were reviewed and associated hardcopies generated and reported as required

2 Volatile Analysis

ECCS2 was analyzed at dilution (25x) due to the high concentration of target analytes ECCS3 and ECCS2 were re-analyzed at dilution to ensure that all of the target analytes were determined within the instrument calibration range No other unusual observation was observed for the analysis

3 Semivolatile Analysis

ECCS2 was analyzed at dilution (10x) due to the co eluting interferences from the high concentration of non-target analytes in the sample Due to these co-eluting interferences the tentatively identified compounds were quantitated using acenaphthene-d10 (the closest eluting non-interfered internal standard as per SOW)

4 Pesticides/PCB Analysis

No unusual observation was made for the analysis

Where possible, all of the submittals to the region are original copies Laboratory bench sheets, instrument tunes and calibration standards are true copies of the originals as these documents are shared by many other cases

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 has been authorized by the laboratory manager or his designee as verified by the following signature

Kin S Chiu, 5/7/98
Technical Director

2LCA
LOW CONC WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

	EPA SAMPLE NO	BFB %REC #	OTHER	TOT OUT
01	VBLK5V	92		0
02	VLCS5V	94		0
03	ECCR0	82		0
04	ECCR1	91		0
05	ECCS2	96		0
06	ECCQ3	94		0
07	ECCQ4	92		0
08	ECCQ5	94		0
09	ECCQ6	93		0
10	ECCQ7	92		0
11	ECCQ8	91		0
12	ECCQ9	94		0
13	VBLK5W	102		0
14	ECCQ0	102		0
15	ECCS3	101		0
16	VBLK5X	98		0
17	ECCS3DL	99		0
18	ECCS2DL	102		0
19	VHBLK5X	81		0
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

QC LIMITS
%REC
BFB = Bromofluorobenzene (80-120)

Column to be used to flag recovery values
* Values outside of contract required QC limits

009

3LCA

LOW CONC WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO

VLCS5V

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5L0429A LCS Lot No

Lab File ID V5A3984 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

LCS Aliquot 10 (ul)

COMPOUND	CONC ADDED (ng)	CONC RECOVERED (ng)	%REC #	QC LIMITS
Vinyl chloride	125	165	132	60-140
1,2-Dichloroethane	125	110	88	60-140
Carbon tetrachloride	125	119	95	60-140
1 2-Dichloropropane	125	114	91	60-140
Trichloroethene	125	111	89	60-140
1 1,2-Trichloroethane	125	104	83	60-140
Benzene	125	117	94	60-140
cis-1,3-Dichloropropene	125	106	85	60-140
Bromoform	125	105	84	60-140
Tetrachloroethene	125	114	91	60-140
1 2-Dibromoethane	125	108	86	60-140
1,4-Dichlorobenzene	125	114	91	60-140

Column to be used to flag LCS recovery with an asterisk
* Values outside of QC limits

LCS Recovery 0 outside limits out of 12 total

010

COMMENTS

4LCA

LOW CONC WATER VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO

VBLK5V

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0429A Date Analyzed 04/29/98

Lab File ID V5A3983 Time Analyzed 1811

Instrument ID V5

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VLCS5V	V5L0429A	V5A3984	1849
02	ECCR0	E0609-01	V5A3985	1932
03	ECCR1	E0609-02	V5A3986	2000
04	ECCS2	E0609-03	V5A3987	2028
05	ECCQ3	E0609-06	V5A3990	2152
06	ECCQ4	E0609-07	V5A3991	2220
07	ECCQ5	E0609-08	V5A3992	2247
08	ECCQ6	E0609-09	V5A3993	2315
09	ECCQ7	E0609-10	V5A3994	2343
10	ECCQ8	E0609-11	V5A3995	0010
11	ECCQ9	E0609-12	V5A3996	0037
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS

4LCA

LOW CONC WATER VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO

VBLK5W

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0430A Date Analyzed 04/30/98

Lab File ID V5A4006 Time Analyzed 1919

Instrument ID V5

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ECCQ0	E0609-05	V5A4008	2017
02	ECCS3	E0609-04	V5A4009	2045
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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25				
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28				
29				
30				

COMMENTS

4LCA

LOW CONC WATER VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO

VBLK5X

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0502A Date Analyzed 05/02/98

Lab File ID V5A4022 Time Analyzed 1729

Instrument ID V5

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ECCS3DL	E0609-04DL	V5A4023	1806
02	ECCS2DL	E0609-03DL2	V5A4024	1834
03	VHBLK5X	V5B0502C	V5A4026	1956
04				
05				
06				
07				
08				
09				
10				
11				
12				
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14				
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27				
28				
29				
30				

COMMENTS

1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

VBLK5V

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0429A Date Received _____

Lab File ID V5A3983 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	1	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1 3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1 2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1 2-Dichlorobenzene	1	U
96-12-8	1 2-Dibromo-3-chloropropane	0 6	J
120-82-1	1 2,4-Trichlorobenzene	1	U

FORM I LCV

OLC02 0

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

VBLK5V

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0429A Date Received _____

Lab File ID V5A3983 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
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1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

VBLK5W

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0430A Date Received _____

Lab File ID V5A4006 Date Analyzed 04/30/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	0 7	J
67-64-1	Acetone	1	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1 1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1 2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1 1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1 1 2 2-Tetrachloroethane	1	U
106-93-4	1 2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

VBLK5W

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0430A Date Received _____

Lab File ID V5A4006 Date Analyzed 04/30/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
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1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

VBLK5X

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0502A Date Received _____

Lab File ID V5A4022 Date Analyzed 05/02/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	0 8	J
67-64-1	Acetone	1	U
75-15-0	Carbon disulfide	1	U
75-35-4	1 1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1 2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1 1 1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1 1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	202 1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

VBLK5X

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0502A Date Received _____

Lab File ID V5A4022 Date Analyzed 05/02/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
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1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

VHBLK5X

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0502C Date Received 04/23/98

Lab File ID V5A4026 Date Analyzed 05/02/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	B
67-64-1	Acetone	1	U
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1 3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1 2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1 4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	208	U
120-82-1	1 2,4-Trichlorobenzene	1	U

ACH 5 12 98

FORM I LCV

OLC02 0

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

VHBLK5X

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5B0502C Date Received 04/23/98

Lab File ID V5A4026 Date Analyzed 05/02/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
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1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

VLCS5V

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID V5L0429A Date Received _____

Lab File ID V5A3984 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ng)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	7	
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	2	
75-15-0	Carbon disulfide	1	U
75-35-4	1 1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	4	
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1 1 1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	5	
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	4	
10061-01-5	cis-1 3-Dichloropropene	4	
79-01-6	Trichloroethene	4	
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	4	
71-43-2	Benzene	5	
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	4	
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	4	
79-34-5	1,1 2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	4	
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	4	
95-50-1	1 2-Dichlorobenzene	1	U
96-12-8	1 2-Dibromo-3-chloropropane	214 1	U
120-82-1	1 2,4-Trichlorobenzene	1	U

1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ0
G201

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-05 Date Received 04/23/98

Lab File ID V5A4008 Date Analyzed 04/30/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	3	
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1 4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

020

FORM I LCV

OLC02 0

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ0

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-05 Date Received 04/23/98

Lab File ID V5A4008 Date Analyzed 04/30/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
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1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ3
G201 MS

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-06 Date Received 04/23/98

Lab File ID V5A3990 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	2	
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1 1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1 3-Dichlorobenzene	1	U
106-46-7	1 4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1 2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ3

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-06 Date Received 04/23/98

Lab File ID V5A3990 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
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1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ4
G201MSD

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-07 Date Received 04/23/98

Lab File ID V5A3991 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	3	
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1 1 2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1 2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1 2 4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ4

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-07 Date Received 04/23/98

Lab File ID V5A3991 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
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LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ5
G202

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-08 Date Received 04/23/98

Lab File ID V5A3992 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	2	
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1 1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1 2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1 1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1 2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1 2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1 3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1 2-Dibromo-3-chloropropane	1	U
120-82-1	1 2 4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ5

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-08 Date Received 04/23/98

Lab File ID V5A3992 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
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LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ6
G-203

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-09 Date Received 04/23/98

Lab File ID V5A3993 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	3	
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1 3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1 2,2-Tetrachloroethane	1	U
106-93-4	1 2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1 2,4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ6

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-09 Date Received 04/23/98

Lab File ID V5A3993 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
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LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ7
G204

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-10 Date Received 04/23/98

Lab File ID V5A3994 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	3	
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1 1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1 2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1 1 1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1 3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1 2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2 4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ7

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-10 Date Received 04/23/98

Lab File ID V5A3994 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
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LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ8
G-205

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-11 Date Received 04/23/98

Lab File ID V5A3995 Date Analyzed 04/30/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	3	
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1 3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1 4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1 2 4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ8

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-11 Date Received 04/23/98

Lab File ID V5A3995 Date Analyzed 04/30/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
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LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ9
G20

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-12 Date Received 04/23/98

Lab File ID V5A3996 Date Analyzed 04/30/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	3	
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1 2-Dibromo-3-chloropropane	1	U
120-82-1	1 2,4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ9

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-12 Date Received 04/23/98

Lab File ID V5A3996 Date Analyzed 04/30/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
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2					
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LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR0
G207

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-01 Date Received 04/23/98

Lab File ID V5A3985 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	11	
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	0 7	J
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1 3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1 1 2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1 3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1 2-Dibromo-3-chloropropane	1	U
120-82-1	1 2 4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR0

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-01 Date Received 04/23/98

Lab File ID V5A3985 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 1

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1	71-23-8	1-PROPANOL	4 54	3	NJ
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
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30					

1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR1
TB

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-02 Date Received 04/23/98

Lab File ID V5A3986 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	1	U
67-64-1	Acetone	5	
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	1	U
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1 3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1 4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1 2-Dibromo-3-chloropropane	1	U
120-82-1	1 2,4-Trichlorobenzene	1	U

076

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR1

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-02 Date Received 04/23/98

Lab File ID V5A3986 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
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1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS2
G101

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-03 Date Received 04/23/98

Lab File ID V5A3987 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	0 5	J
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	6	
67-64-1	Acetone	6100	E
75-15-0	Carbon disulfide	1	
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	6800	E
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	0 6	J
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	1200	E
591-78-6	2-Hexanone	43	E
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	10	
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2 4-Trichlorobenzene	1	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCS2

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-03 Date Received 04/23/98

Lab File ID V5A3987 Date Analyzed 04/29/98

Purge Volume 25 (mL) Dilution Factor 1 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 10

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1	60-29-7	ETHER	3 02	2	NJ
2	67-63-0	ISOPROPYL ALCOHOL	3 44	16	NJ
3	75-65-0	2-PROPANOL 2-METHYL-	3 86	3	NJ
4	14898-79-4	2-BUTANOL, (R)-	5 23	96	NJ
5	109-99-9	FURAN, TETRAHYDRO-	5 34	10	NJ
6		C5 ALCOHOL	6 24	3	J
7		C5 ALCOHOL	6 80	18	J
8	123-91-1	1 4-DIOXANE	7 03	2	NJ
9		C6 ALCOHOL	8 26	6	J
10		UNKNOWN	13 94	2	J
11					
12					
13					
14					
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1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS2DL
G-101 DL

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-03DL2 Date Received 04/23/98

Lab File ID V5A4024 Date Analyzed 05/02/98

Purge Volume 25 (mL) Dilution Factor 500 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	500	U
74-83-9	Bromomethane	500	U
75-01-4	Vinyl chloride	500	U
75-00-3	Chloroethane	500	U
75-09-2	Methylene chloride	930	DB
67-64-1	Acetone	8000	D
75-15-0	Carbon disulfide	500	U
75-35-4	1,1-Dichloroethene	500	U
75-34-3	1 1-Dichloroethane	500	U
156-59-2	cis-1,2-Dichloroethene	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
67-66-3	Chloroform	500	U
107-06-2	1,2-Dichloroethane	500	U
78-93-3	2-Butanone	36000	DE
74-97-5	Bromochloromethane	500	U
71-55-6	1 1,1-Trichloroethane	500	U
56-23-5	Carbon tetrachloride	500	U
75-27-4	Bromodichloromethane	500	U
78-87-5	1,2-Dichloropropane	500	U
10061-01-5	cis-1 3-Dichloropropene	500	U
79-01-6	Trichloroethene	500	U
124-48-1	Dibromochloromethane	500	U
79-00-5	1,1,2-Trichloroethane	500	U
71-43-2	Benzene	500	U
10061-02-6	trans-1,3-Dichloropropene	500	U
75-25-2	Bromoform	500	U
108-10-1	4-Methyl-2-pentanone	1500	D
591-78-6	2-Hexanone	500	U
127-18-4	Tetrachloroethene	500	U
79-34-5	1 1,2 2-Tetrachloroethane	500	U
106-93-4	1,2-Dibromoethane	500	U
108-88-3	Toluene	500	U
108-90-7	Chlorobenzene	500	U
100-41-4	Ethylbenzene	500	U
100-42-5	Styrene	500	U
1330-20-7	Xylenes (total)	500	U
541-73-1	1,3-Dichlorobenzene	500	U
106-46-7	1 4-Dichlorobenzene	500	U
95-50-1	1 2-Dichlorobenzene	500	U
96-12-8	1,2-Dibromo-3-chloropropane	500	U
120-82-1	1,2 4-Trichlorobenzene	500	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCS2DL

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-03DL2 Date Received 04/23/98

Lab File ID V5A4024 Date Analyzed 05/02/98

Purge Volume 25 (mL) Dilution Factor 500 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
4					
5					
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1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS3
G102

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-04 Date Received 04/23/98

Lab File ID V5A4009 Date Analyzed 04/30/98

Purge Volume 25 (mL) Dilution Factor 25 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	25	U
74-83-9	Bromomethane	25	U
75-01-4	Vinyl chloride	25	U
75-00-3	Chloroethane	25	U
75-09-2	Methylene chloride	100	B u
67-64-1	Acetone	35	
75-15-0	Carbon disulfide	25	U
75-35-4	1,1-Dichloroethene	25	U
75-34-3	1,1-Dichloroethane	100	
156-59-2	cis-1 2-Dichloroethene	25	U
156-60-5	trans-1,2-Dichloroethene	25	U
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	25	U
74-97-5	Bromochloromethane	25	U
71-55-6	1,1,1-Trichloroethane	25	U
56-23-5	Carbon tetrachloride	25	U
75-27-4	Bromodichloromethane	25	U
78-87-5	1 2-Dichloropropane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
79-01-6	Trichloroethene	25	U
124-48-1	Dibromochloromethane	25	U
79-00-5	1 1 2-Trichloroethane	25	U
71-43-2	Benzene	110	
10061-02-6	trans-1,3-Dichloropropene	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-pentanone	230	
591-78-6	2-Hexanone	25	U
127-18-4	Tetrachloroethene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
106-93-4	1,2-Dibromoethane	25	U
108-88-3	Toluene	2600	E
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
100-42-5	Styrene	25	U
1330-20-7	Xylenes (total)	28	
541-73-1	1,3-Dichlorobenzene	25	U
106-46-7	1,4-Dichlorobenzene	25	U
95-50-1	1 2-Dichlorobenzene	25	U
96-12-8	1,2-Dibromo-3-chloropropane	25	U
120-82-1	1,2 4-Trichlorobenzene	25	U

OCH 5 12-98

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1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCS3

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-04 Date Received 04/23/98

Lab File ID V5A4009 Date Analyzed 04/30/98

Purge Volume 25 (mL) Dilution Factor 25 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
4					
5					
6					
7					
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1LCA

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS3DL
G102 DL

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-04DL Date Received 04/23/98

Lab File ID V5A4023 Date Analyzed 05/02/98

Purge Volume 25 (mL) Dilution Factor 250 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
74-87-3	Chloromethane	250	U
74-83-9	Bromomethane	250	U
75-01-4	Vinyl chloride	250	U
75-00-3	Chloroethane	250	U
75-09-2	Methylene chloride	440	DB
67-64-1	Acetone	370	D
75-15-0	Carbon disulfide	250	U
75-35-4	1 1-Dichloroethene	250	U
75-34-3	1,1-Dichloroethane	250	U
156-59-2	cis-1,2-Dichloroethene	250	U
156-60-5	trans-1,2-Dichloroethene	250	U
67-66-3	Chloroform	250	U
107-06-2	1 2-Dichloroethane	250	U
78-93-3	2-Butanone	250	U
74-97-5	Bromochloromethane	250	U
71-55-6	1 1,1-Trichloroethane	250	U
56-23-5	Carbon tetrachloride	250	U
75-27-4	Bromodichloromethane	250	U
78-87-5	1 2-Dichloropropane	250	U
10061-01-5	cis-1 3-Dichloropropene	250	U
79-01-6	Trichloroethene	250	U
124-48-1	Dibromochloromethane	250	U
79-00-5	1,1,2-Trichloroethane	250	U
71-43-2	Benzene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
75-25-2	Bromoform	250	U
108-10-1	4-Methyl-2-pentanone	250	U
591-78-6	2-Hexanone	250	U
127-18-4	Tetrachloroethene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-88-3	Toluene	4400	D
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	250	U
100-42-5	Styrene	250	U
1330-20-7	Xylenes (total)	250	U
541-73-1	1 3-Dichlorobenzene	250	U
106-46-7	1 4-Dichlorobenzene	250	U
95-50-1	1 2-Dichlorobenzene	250	U
96-12-8	1 2-Dibromo-3-chloropropane	250	U
120-82-1	1 2 4-Trichlorobenzene	250	U

1LCE

LOW CONC WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCS3DL

Lab Name MITKEM CORP Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-04DL Date Received 04/23/98

Lab File ID V5A4023 Date Analyzed 05/02/98

Purge Volume 25 (mL) Dilution Factor 250 0

GC Column DB-624 ID 0 25 (mm) Length 30 (m)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
4					
5					
6					
7					
8					
9					
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2LCB
LOW CONC WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

	EPA SAMPLE NO	NBZ %REC #	FBP %REC #	TPH %REC #	PHL %REC #	2FP %REC #	TBP %REC #	OTHER	TOT OUT
01	SBLK01	80	85	98	75	78	90		0
02	SLCS01	86	90	100	83	85	87		0
03	ECCR0	76	78	98	44	60	77		0
04	ECCS3	92	81	39	94	92	102		0
05	ECCQ0	80	77	84	82	78	86		0
06	ECCQ3	69	75	90	76	70	90		0
07	ECCQ4	68	74	93	81	73	95		0
08	ECCQ5	70	75	87	76	70	89		0
09	ECCQ6	82	86	89	87	83	90		0
10	ECCQ7	78	83	86	86	76	89		0
11	ECCQ8	58	64	76	59	52	79		0
12	ECCQ9	79	83	88	82	75	90		0
13	ECCS2	88	77	61	92	50	24		0
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

		QC LIMITS %REC
NBZ	= Nitrobenzene-d5	(23-120)
FBP	= 2-Fluorobiphenyl	(30-115)
TPH	= Terphenyl-d14	(18-140)
PHL	= Phenol-d5	(15-115)
2FP	= 2-Fluorophenol	(15-121)
TBP	= 2,4 6-Tribromophenol	(15-130)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

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3LCB

LOW CONC WATER SEMIVOLATILE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO

SLCS01

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID S0423-LCS3 LCS Lot No

Lab File ID S2A3112 Date Extracted 04/23/98

LCS Aliquot 1000 (ul) Date Analyzed 04/28/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%REC #	QC LIMITS
Phenol	40	35	88	40-120
bis(-2-Chloroethyl)Ether	20	18	90	50-110
2-Chlorophenol	40	34	85	50-110
N-Nitroso-di-n-propylamine	20	15	75	30-110
Hexachloroethane	20	14	70	20-110
Isophorone	20	18	90	50-110
Naphthalene	20	16	80	30-110
4-Chloroaniline	40	21	52	10-120
2 4,6-Trichlorophenol	40	31	78	40-120
2 4-Dinitrotoluene	20	18	90	30-120
Diethylphthalate	20	20	100	50-120
N-nitrosodiphenylamine (1)	20	14	70	30-110
Hexachlorobenzene	20	20	100	40-120
Benzo(a)pyrene	20	17	85	50-120

Column to be used to flag LCS recovery with an asterisk
* Values outside of QC limits

LCS Recovery 0 outside limits out of 14 total

219

COMMENTS

4LCB

LOW CONC WATER SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO

SBLK01

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID S0423-B3 Date Extracted 04/23/98

Lab File ID S2A3111 Date Analyzed 04/28/98

Instrument ID S2 Time Analyzed 2002

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES and LCS

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SLCS01	S0423-LCS3	S2A3112	04/28/98
02	ECCR0	E0609-01	S2A3122	04/29/98
03	ECCS3	E0609-04	S2A3124	04/29/98
04	ECCQ0	E0609-05	S2A3128	04/29/98
05	ECCQ3	E0609-06	S2A3129	04/29/98
06	ECCQ4	E0609-07	S2A3130	04/29/98
07	ECCQ5	E0609-08	S2A3131	04/29/98
08	ECCQ6	E0609-09	S2A3132	04/29/98
09	ECCQ7	E0609-10	S2A3133	04/29/98
10	ECCQ8	E0609-11	S2A3134	04/29/98
11	ECCQ9	E0609-12	S2A3135	04/29/98
12	ECCS2	E0609-03	S2A3137	04/29/98
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COMMENTS

1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

SBLK01

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID S0423-B3 Date Received _____

Lab File ID S2A3111 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/28/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2 4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2 4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2 4 5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

SBLK01

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID S0423-B3 Date Received _____

Lab File ID S2A3111 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/28/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2 4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2 4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4 6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1 2 3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

SBLK01

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID S0423-B3 Date Received _____

Lab File ID S2A3111 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/28/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
4					
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1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

SLCS01

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID S0423-LCS3 Date Received _____

Lab File ID S2A3112 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/28/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	35	
111-44-4	bis(-2-Chloroethyl)Ether	18	
95-57-8	2-Chlorophenol	34	
95-48-7	2-Methylphenol	5	U
108-60-1	2 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	15	
67-72-1	Hexachloroethane	14	
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorore	18	
88-75-5	2-Nitrophenol	5	U
105-67-9	2 4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2 4-Dichlorophenol	5	U
91-20-3	Naphthalene	16	
106-47-8	4-Chloroaniline	21	
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2 4 6-Trichlorophenol	31	
95-95-4	2,4 5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

SLCS01

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID S0423-LCS3 Date Received _____

Lab File ID S2A3112 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/28/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2 4-Dinitrotoluene	18	
84-66-2	Diethylphthalate	20	
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4 6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	14	
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	20	
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	17	
193-39-5	Indeno(1 2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g h i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ0
S201

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-05 Date Received 04/23/98

Lab File ID S2A3128 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2 4 6-Trichlorophenol	5	U
95-95-4	2 4,5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ0

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-05 Date Received 04/23/98

Lab File ID S2A3128 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2 4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4 6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ0

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-05 Date Received 04/23/98

Lab File ID S2A3128 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
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LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ3
G201 MS

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-06 Date Received 04/23/98

Lab File ID S2A3129 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2 4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2 4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ3

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-06 Date Received 04/23/98

Lab File ID S2A3129 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2 4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2 4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3 3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1 2 3-cd)pyrene	5	U
53-70-3	Dibenzo(a h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ3

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-06 Date Received 04/23/98

Lab File ID S2A3129 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
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1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ4
G201MSD

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-07 Date Received 04/23/98

Lab File ID S2A3130 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2 4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2 4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2 4 6-Trichlorophenol	5	U
95-95-4	2 4 5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ4

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-07 Date Received 04/23/98

Lab File ID S2A3130 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2 4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2 4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4 6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3 3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1 2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a h)anthracene	5	U
191-24-2	Benzo(g h i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ4

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-07 Date Received 04/23/98

Lab File ID S2A3130 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
4					
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1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ5
G202

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-08 Date Received 04/23/98

Lab File ID S2A3131 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2 4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2 4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2 4,5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ5

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-08 Date Received 04/23/98

Lab File ID S2A3131 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2 4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4 6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3 3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1 2 3-cd)pyrene	5	U
53-70-3	Dibenzo(a h)anthracene	5	U
191-24-2	Benzo(g,h i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

EPA SAMPLE NO

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ECCQ5

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-08 Date Received 04/23/98

Lab File ID S2A3131 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
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1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ6
G203

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-09 Date Received 04/23/98

Lab File ID S2A3132 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2 4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4 6-Trichlorophenol	5	U
95-95-4	2 4 5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ6

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-09 Date Received 04/23/98

Lab File ID S2A3132 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2 4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2 4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4 6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	8	
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1 2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a h)anthracene	5	U
191-24-2	Benzo(g h i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ6

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-09 Date Received 04/23/98

Lab File ID S2A3132 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
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1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ7
G-204

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-10 Date Received 04/23/98

Lab File ID S2A3133 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2 4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4 6-Trichlorophenol	5	U
95-95-4	2 4,5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ7

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-10 Date Received 04/23/98

Lab File ID S2A3133 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2 4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3 3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2 3-cd)pyrene	5	U
53-70-3	Dibenzo(a h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ7

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-10 Date Received 04/23/98

Lab File ID S2A3133 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
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1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ8
G205

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-11 Date Received 04/23/98

Lab File ID S2A3134 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2 4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ8

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-11 Date Received 04/23/98

Lab File ID S2A3134 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2 4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2 4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4 6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3 3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a h)anthracene	5	U
191-24-2	Benzo(g h i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ8

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-11 Date Received 04/23/98

Lab File ID S2A3134 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
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1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ9
G206

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-12 Date Received 04/23/98

Lab File ID S2A3135 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2 4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2 4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2 4 6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ9

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-12 Date Received 04/23/98

Lab File ID S2A3135 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2 4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2 4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4 6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3 3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	15	
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCQ9

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-12 Date Received 04/23/98

Lab File ID S2A3135 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
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1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR0
G-207

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-01 Date Received 04/23/98

Lab File ID S2A3122 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2 4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2 4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2 4 6-Trichlorophenol	5	U
95-95-4	2 4 5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR0

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-01 Date Received 04/23/98

Lab File ID S2A3122 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000 (uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2 4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2 4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4 6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3 3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2 3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g h i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR0

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No. ECCQ0

Lab Sample ID E0609-01 Date Received 04/23/98

Lab File ID S2A3122 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 0

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1					
2					
3					
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1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS2
6101

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-03 Date Received 04/23/98

Lab File ID S2A3137 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 10 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	50	U
111-44-4	bis(-2-Chloroethyl)Ether	50	U
95-57-8	2-Chlorophenol	50	U
95-48-7	2-Methylphenol	50	U
108-60-1	2 2'-oxybis(1-Chloropropane)	50	U
106-44-5	4-Methylphenol	42	J
621-64-7	N-Nitroso-di-n-propylamine	50	U
67-72-1	Hexachloroethane	50	U
98-95-3	Nitrobenzene	50	U
78-59-1	Isophorone	50	U
88-75-5	2-Nitrophenol	50	U
105-67-9	2,4-Dimethyphenol	50	U
111-91-1	bis(-2-Chloroethoxy)methane	50	U
120-83-2	2 4-Dichlorophenol	50	U
91-20-3	Naphthalene	50	U
106-47-8	4-Chloroaniline	50	U
87-68-3	Hexachlorobutadiene	50	U
59-50-7	4-Chloro-3-Methylphenol	50	U
91-57-6	2-Methylnaphthalene	50	U
77-47-4	Hexachlorocyclopentadiene	50	U
88-06-2	2,4,6-Trichlorophenol	50	U
95-95-4	2 4 5-Trichlorphenol	200	U
91-58-7	2-Chloronaphthalene	50	U
88-74-4	2-Nitroaniline	200	U
131-11-3	Dimethylphthalate	50	U
208-96-8	Acenaphthylene	50	U
606-20-2	2 6-Dinitrotoluene	50	U
99-09-2	3-Nitroaniline	200	U
83-32-9	Acenaphthene	50	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS2

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-03 Date Received 04/23/98

Lab File ID S2A3137 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 10 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2 4-Dinitrophenol	200	U
100-02-7	4-Nitrophenol	200	U
132-64-9	Dibenzofuran	50	U
121-14-2	2 4-Dinitrotoluene	50	U
84-66-2	Diethylphthalate	50	U
7005-72-3	4-Chlorophenyl-phenylether	50	U
86-73-7	Fluorene	50	U
100-01-6	4-Nitroaniline	200	U
534-52-1	4 6-Dinitro-2-methylphenol	200	U
86-30-6	N-nitrosodiphenylamine (1)	50	U
101-55-3	4-Bromophenyl-phenylether	50	U
118-74-1	Hexachlorobenzene	50	U
87-86-5	Pentachlorophenol	200	U
85-01-8	Phenanthrene	50	U
120-12-7	Anthracene	50	U
84-74-2	Di-n-butylphthalate	50	U
206-44-0	Fluoranthene	50	U
129-00-0	Pyrene	50	U
85-68-7	Butylbenzylphthalate	50	U
91-94-1	3,3'-Dichlorobenzidine	50	U
56-55-3	Benzo(a)anthracene	50	U
218-01-9	Chrysene	50	U
117-81-7	bis(2-Ethylhexyl)phthalate	50	U
117-84-0	Di-n-octylphthalate	50	U
205-99-2	Benzo(b)fluoranthene	50	U
207-08-9	Benzo(k)fluoranthene	50	U
50-32-8	Benzo(a)pyrene	50	U
193-39-5	Indeno(1 2 3-cd)pyrene	50	U
53-70-3	Dibenzo(a h)anthracene	50	U
191-24-2	Benzo(g h i)perylene	50	U

(1) - Cannot be separated from Diphenylamine

1LCF

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCS2

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-03 Date Received 04/23/98

Lab File ID S2A3137 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 10 0

Injection Volume 1 (uL)

Number TICs found 11

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1		BUTANOIC ACID METHYL ISOME	7 97	3800	J
2	109-52-4	PENTANOIC ACID	8 32	14000	JN
3		UNKNOWN	8 63	4500	J
4		PENTANOIC ACID METHYL ISOM	8 69	1300	J
5	142-62-1	HEXANOIC ACID	9 01	4000	JN
6		UNKNOWN	9 44	1900	J
7		UNKNOWN	9 99	2400	J
8		UNKNOWN	10 68	2900	J
9	65-85-0	BENZOIC ACID	11 13	2000	JN
10	103-82-2	BENZENEACETIC ACID	12 22	5700	JN
11	501-52-0	BENZENEPROPANOIC ACID	13 17	3700	JN
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1LCB

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS3
G102

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-04 Date Received 04/23/98

Lab File ID S2A3124 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
108-95-2	Phenol	5	U
111-44-4	bis(-2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	4	J
108-60-1	2 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	7	
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2 4-Dimethyphenol	5	U
111-91-1	bis(-2-Chloroethoxy)methane	5	U
120-83-2	2 4-Dichlorophenol	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2 4,6-Trichlorophenol	5	U
95-95-4	2 4,5-Trichlorphenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U

1LCC

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS3

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-04 Date Received 04/23/98

Lab File ID S2A3124 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	10	
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	U
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1 2 3-cd)pyrene	5	U
53-70-3	Dibenzo(a h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

(1) - Cannot be separated from Diphenylamine

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JUN 25 1998

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1LCF

EPA SAMPLE NO

LOW CONC WATER SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ECCS3

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-04 Date Received 04/23/98

Lab File ID S2A3124 Date Extracted 04/23/98

Sample Volume 1000 00 (mL) Date Analyzed 04/29/98

Concentrated Extract Volume 1000(uL) Dilution Factor 1 0

Injection Volume 1 (uL)

Number TICs found 1

	CAS NUMBER	COMPOUND NAME	RT	EST CONC (ug/L)	Q
1	86-35-1	ETHOTOIN	18 42	72	NJ
2					
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2LCC
LOW CONC WATER PESTICIDE SURROGATE RECOVERY

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

GC Column(1) DB-1701 ID 0 53 (mm) GC Column(2) DB-608 ID 0 53 (mm)

	EPA SAMPLE NO	TCX(1) %REC #	TCX(2) %REC #	DCB(1) %REC #	DCB(2) %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK03	101	74	147	96			0
02	PLCS03	88	44	87	83			0
03	ECCR0	108	80	111	106			0
04	ECCQ0	115	84	109	107			0
05	ECCQ3	112	78	107	104			0
06	ECCQ4	116	82	110	108			0
07	ECCQ5	125	98	104	101			0
08	ECCQ6	117	85	112	109			0
09	ECCQ7	74	50	104	101			0
10	ECCQ8	145	93	106	107			0
11	ECCQ9	97	71	100	96			0
12	PBLK02	97	66	88	85			0
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

QC LIMITS

%REC

S1 TCX = Tetrachloro-m-xylene (30-150)
S2 DCB = Decachlorobiphenyl (30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

3LCC

LOW CONC WATER PESTICIDE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO

PLCS03

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID P0430-LCS1 LCS Lot No

LCS Aliquot 0 (uL) Date Extracted 04/30/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N

Instrument ID(1) E2 GC Column(1) DB-1701 ID 0 53 (mm)

COMPOUND	CONC ADDED (ng)	CONC RECOVERED (ng)	%REC #	QC LIMITS
gamma-BHC (Lindane)	0 100	0 0624	62	50-120
Heptachlor epoxide	0 100	0 0725	72	50-150
Dieldrin	0 200	0 174	87	30-130
4 4'-DDE	0 200	0 163	82	50-150
Endrin	0 200	0 182	91	50-120
Endosulfan sulfate	0 200	0 164	82	50-120
gamma-Chlordane	0 100	0 0772	77	30-130

Instrument ID(2) E2 GC Column(2) DB-608 ID 0 53 (mm)

COMPOUND	CONC ADDED (ng)	CONC RECOVERED (ng)	%REC #	QC LIMITS
gamma-BHC (Lindane)	0 100	0 0580	58	50-120
Heptachlor epoxide	0 100	0 0707	71	50-150
Dieldrin	0 200	0 162	81	30-130
4 4'-DDE	0 200	0 154	77	50-150
Endrin	0 200	0 170	85	50-120
Endosulfan sulfate	0 200	0 165	82	50-120
gamma-Chlordane	0 100	0 0784	78	30-130

Column to be used to flag LCS recovery with an asterisk
* Values outside of QC limits
LCS Recovery 0 outside limits out of 14 total

COMMENTS

4LCC

LOW CONC WATER PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO

PBLK02

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Date Extracted 04/28/98 Lab Sample ID P0428-B1

Date Analyzed (1) 05/06/98 Date Analyzed (2) 05/06/98

Time Analyzed (1) 0952 Time Analyzed (2) 0952

Instrument ID (1) E2 Instrument ID (2) E2

GC Column (1) DB-1701 ID 0 53(mm) GC Column (2) DB-608 ID 0 53(mm)

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS

	EPA SAMPLE NO	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ECCR0	E0609-01	05/06/98	05/06/98
02	ECCQ0	E0609-05	05/06/98	05/06/98
03	ECCQ3	E0609-06	05/06/98	05/06/98
04	ECCQ4	E0609-07	05/06/98	05/06/98
05	ECCQ5	E0609-08	05/06/98	05/06/98
06	ECCQ6	E0609-09	05/06/98	05/06/98
07	ECCQ7	E0609-10	05/06/98	05/06/98
08	ECCQ8	E0609-11	05/06/98	05/06/98
09	ECCQ9	E0609-12	05/06/98	05/06/98
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COMMENTS

4LCC

LOW CONC WATER PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO

PBLK03

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Date Extracted 04/30/98 Lab Sample ID P0430-B1

Date Analyzed (1) 05/06/98 Date Analyzed (2) 05/06/98

Time Analyzed (1) 0245 Time Analyzed (2) 0245

Instrument ID (1) E2 Instrument ID (2) E2

GC Column (1) DB-1701 ID 0.53(mm) GC Column (2) DB-608 ID 0.53(mm)

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND LCS

	EPA SAMPLE NO	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PLCS03	P0430-LCS1	05/06/98	05/06/98
02				
03				
04				
05				
06				
07				
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COMMENTS

FORM IV LCP

OLC02 0

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

PBLK02

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID P0428-B1 Date Received _____

Sample Volume 1000 00 (mL) Date Extracted 04/28/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4 4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4 4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4,4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

PBLK03

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID P0430-B1 Date Received _____

Sample Volume 1000 00 (mL) Date Extracted 04/30/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4 4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4 4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4 4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

PLCS03(1)

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID P0430-LCS1 Date Received _____

Sample Volume 1000 00 (mL) Date Extracted 04/30/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 06	
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 07	
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 17	
72-55-9	4 4'-DDE	0 16	
72-20-8	Endrin	0 18	
33213-65-9	Endosulfan II	0 02	U
72-54-8	4 4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 16	
50-29-3	4,4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 07	
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

PLCS03(2)

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID P0430-LCS1 Date Received _____

Sample Volume 1000 00 (mL) Date Extracted 04/30/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 05	
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 07	
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 16	
72-55-9	4 4'-DDE	0 15	
72-20-8	Endrin	0 17	
33213-65-9	Endosulfan II	0 02	U
72-54-8	4 4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 16	
50-29-3	4,4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 07	
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ0
G201

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-05 Date Received 04/23/98

Sample Volume 1000 00 (mL) Date Extracted 04/28/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4 4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4 4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4,4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ3
G201MS

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-06 Date Received 04/23/98

Sample Volume 1000 00 (mL) Date Extracted 04/28/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4 4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4 4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4 4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ4
G201MSD

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-07 Date Received 04/23/98

Sample Volume 1000 00 (mL) Date Extracted 04/28/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4 4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4 4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4,4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ5
G-202

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-08 Date Received 04/23/98

Sample Volume 1000 00 (mL) Date Extracted 04/28/98

Concentrated Extract Volume 2000 (uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4 4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4,4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4 4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ6
G203

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-09 Date Received 04/23/98

Sample Volume 1000 00 (mL) Date Extracted 04/28/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4 4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4 4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4 4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ7
6204

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-10 Date Received 04/23/98

Sample Volume 1000 00 (mL) Date Extracted 04/28/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4,4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4,4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4,4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ8
6205

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-11 Date Received 04/23/98

Sample Volume 1000 00 (mL) Date Extracted 04/28/98

Concentrated Extract Volume 2000 (uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4 4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4,4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4 4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCQ9
G206

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-12 Date Received 04/23/98

Sample Volume 1000 00 (mL) Date Extracted 04/28/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4,4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4 4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4 4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

1LCD

LOW CONC WATER PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR0
G207

Lab Name MITKEM CORPORATION Contract 68-D6-0063

Lab Code MITKEM Case No 26147 SAS No SDG No ECCQ0

Lab Sample ID E0609-01 Date Received 04/23/98

Sample Volume 1000 00 (mL) Date Extracted 04/28/98

Concentrated Extract Volume 2000(uL) Date Analyzed 05/06/98

Injection Volume 1 (uL) Dilution Factor 1 0

Sulfur Cleanup (Y/N) N Extraction (SepF/Cont) SEPF

CAS NO	COMPOUND	CONCENTRATION (ug/L)	Q
319-84-6	alpha-BHC	0 01	U
319-85-7	beta-BHC	0 01	U
319-86-8	delta-BHC	0 01	U
58-89-9	gamma-BHC (Lindane)	0 01	U
76-44-8	Heptachlor	0 01	U
309-00-2	Aldrin	0 01	U
1024-57-3	Heptachlor epoxide	0 01	U
959-98-8	Endosulfan I	0 01	U
60-57-1	Dieldrin	0 02	U
72-55-9	4,4'-DDE	0 02	U
72-20-8	Endrin	0 02	U
33213-65-9	Endosulfan II	0 02	U
72-54-8	4 4'-DDD	0 02	U
1031-07-8	Endosulfan sulfate	0 02	U
50-29-3	4 4'-DDT	0 02	U
72-43-5	Methoxychlor	0 10	U
53494-70-5	Endrin ketone	0 02	U
7421-36-3	Endrin aldehyde	0 02	U
5103-71-9	alpha-Chlordane	0 01	U
5103-74-2	gamma-Chlordane	0 01	U
8001-35-2	Toxaphene	1 0	U
12674-11-2	Aroclor-1016	0 20	U
11104-28-2	Aroclor-1221	0 40	U
1114-16-5	Aroclor-1232	0 20	U
53469-21-9	Aroclor-1242	0 20	U
12672-29-6	Aroclor-1248	0 20	U
11097-69-1	Aroclor-1254	0 20	U
11096-82-5	Aroclor-1260	0 20	U

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No _____ CERCLIS No (IL) 05123

Case No 26147 Site Name Location Waukegan Mun. Lf

Contractor or EPA Lab Mitkem Data User IEPA

No of Samples 12 Date Sampled or Data Received 5-12-98

Have Chain-of-Custody records been received? Yes ✓ No ___
Have traffic reports or packing lists been received? Yes ✓ No ___
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No ___
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No ___
No of samples claimed ___ No of samples received _____

Received by Lynette Burnett Date 5-12-98

Received by LSSS Lynette Burnett Date 5-12-98

Review started 5-12-98 Reviewer Signature Allison C Harvey

Total time spent on review 10.5 hrs Date review completed 5-13-98

Copied by Lynette Burnett Date 5-22-98

Mailed to user by Lynette Burnett Date 5-22-98

DATA USER
Please fill in the blanks below and return this form to
Sylvia Griffen, Data mgmt Coordinator, Region V, 5SCRL

Data received by _____ Date _____

Data review received by _____ Date _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS Please indicate reasons why data are not suitable for your uses

_____

_____

Received by Data Mgmt Coordinator for Files Data _____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date JUN 1 0 1998

Subject Review of Region 5 Data for Waukegan Municipal Landfill

From Charles T Elly Director Chuck Elly
Region 5 Central Regional Laboratory

RECEIVED
JUN 1 1 1998
IEPA/BOL

To

Attached are the results for Waukegan Municipal Landfill
CRL request number 980180
for analyses for ICP
Results are reported for sample designations 98IE05S01 98IE05D01 98IE05S02 98IE05S03 98IE05S04 98IE05S05 98IE05S06 98IE05S07 and 98IE05R01

Results Status
(x) Acceptable for Use
( ) Data Qualified but Acceptable for use
( ) Data Unacceptable for Use

Comments on Data Quality by Reviewer

The field duplicate 98IE05D01 appears to be a duplicate of sample 98IE05S05 although the field designations differ (G206 versus G205) Samples 98IE05S06 and 98IE05S07 arrived with pH > 2 so 3 mL of concentrated nitric acid was added to each They were allowed to stand 24 hours before subsampling for digestion Some elements from these two samples were reported from 10 fold dilutions All QC measures were met

Comments by Laboratory Director or Quality Control Coordinator

Review Record for Waukegan Municipal Landfill

John V Moore 9 June 98

Peer/Task Monitor Review and Date (✓) Reviewed ( ) Unreviewed

John V. Moore 9 June 98

Team Leader and Date (✓) Reviewed ( ) Unreviewed

Chuck Elly 6/10/98

QC Coordinator and Date ( ) Reviewed (✓) Unreviewed
(position vacant)

Sylvia Griffin JUN 10 1998

Data Management Coordinator and Date Received

Date Transmitted JUN 10 1998

Please sign and date this form below and return it with any comments to

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML 10C

Received by and Date

Comments

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON 1 MAY 98

SAMPLE OGANIZATION IEPA SAMPLE BATCH ID 980180
SAMPLE REQUESTOR BRUCE EVERETTE ACCOUNT NO TFA301
LABORATORY ESAT SAMPLE FACILITY WAUKEGAN MUNICIPAL LANDFILL

SAMPLE 98IE05S01 FIELD 98IE05S01
G201

COLLECTED RECEIVED 23 APRIL 98 ANALYZED 30 APRIL 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	56	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	77000	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	1410	(ug/L)
Magnesium	71600	(ug/L)
Manganese	11	(ug/L)
Nickel	20 U	(ug/L)
Potassium	1730	(ug/L)
Silver	6 U	(ug/L)
Sodium	49600	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	46 3	(ug/L)

ANALYZED BY RK 1-MAY 98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON 1 MAY 98

SAMPLE OGANIZATION IEPA SAMPLE BATCH ID 980180
SAMPLE REQUESTOR BRUCE EVERETTE ACCOUNT NO TFA301
LABORATORY ESAT SAMPLE FACILITY WAUKEGAN MUNICIPAL LANDFILL

SAMPLE 98IE05S02 FIELD 98IE05S02
G202

COLLECTED RECEIVED 23 APRIL 98 ANALYZED 30 APRIL 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	6 U	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	703	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 4	(ug/L)
Iron	87 9	(ug/L)
Magnesium	553	(ug/L)
Manganese	5 U	(ug/L)
Nickel	20 U	(ug/L)
Potassium	500 U	(ug/L)
Silver	6 U	(ug/L)
Sodium	213000	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY RD 1-MAY-98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON 1 MAY 98

SAMPLE OGANIZATION IEPA SAMPLE BATCH ID 980180
SAMPLE REQUESTOR BRUCE EVERETTE ACCOUNT NO TFA301
LABORATORY ESAT SAMPLE FACILITY WAUKEGAN MUNICIPAL LANDFILL

SAMPLE 98IE05S03 FIELD 98IE05S03
G203

COLLECTED RECEIVED 23 APRIL 98 ANALYZED 30 APRIL 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	64 6	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	46800	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	732	(ug/L)
Magnesium	35400	(ug/L)
Manganese	9 5	(ug/L)
Nickel	20 U	(ug/L)
Potassium	1480	(ug/L)
Silver	6 U	(ug/L)
Sodium	47200	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	52	(ug/L)

ANALYZED BY RD 1-MAY-98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON 1 MAY 98

SAMPLE OGANIZATION IEPA SAMPLE BATCH ID 980180
SAMPLE REQUESTOR BRUCE EVERETTE ACCOUNT NO TFA301
LABORATORY ESAT SAMPLE FACILITY WAUKEGAN MUNICIPAL LANDFILL

SAMPLE 98IE05S04 FIELD 98IE05S04
G204

COLLECTED RECEIVED 23 APRIL 98 ANALYZED 30 APRIL 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	76 1	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	82200	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	13 1	(ug/L)
Iron	1310	(ug/L)
Magnesium	75300	(ug/L)
Manganese	20 9	(ug/L)
Nickel	20 U	(ug/L)
Potassium	1990	(ug/L)
Silver	6 U	(ug/L)
Sodium	37900	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	129	(ug/L)

ANALYZED BY 1-MAY-98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON 1 MAY 98

SAMPLE OGANIZATION IEPA SAMPLE BATCH ID 980180
SAMPLE REQUESTOR BRUCE EVERETTE ACCOUNT NO TFA301
LABORATORY ESAT SAMPLE FACILITY WAUKEGAN MUNICIPAL LANDFILL

SAMPLE 98IE05S05 FIELD 98IE05S05
G205

COLLECTED RECEIVED 23 APRIL 98 ANALYZED 30 APRIL 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	6 U	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	500 U	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	80 U	(ug/L)
Magnesium	106	(ug/L)
Manganese	5 U	(ug/L)
Nickel	20 U	(ug/L)
Potassium	500 U	(ug/L)
Silver	6 U	(ug/L)
Sodium	144000	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY 1-May-98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON 1 MAY 98

SAMPLE OGANIZATION IEPA SAMPLE BATCH ID 980180
SAMPLE REQUESTOR BRUCE EVERETTE ACCOUNT NO TFA301
LABORATORY ESAT SAMPLE FACILITY WAUKEGAN MUNICIPAL LANDFILL

SAMPLE 98IE05D01 FIELD 98IE05D01

COLLECTED G206 (DUP OF G 05) RECEIVED 23 APRIL 98 ANALYZED 30 APRIL 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	6 U	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	500 U	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	80 U	(ug/L)
Magnesium	100 U	(ug/L)
Manganese	5 U	(ug/L)
Nickel	20 U	(ug/L)
Potassium	535	(ug/L)
Silver	6 U	(ug/L)
Sodium	148000	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY RD 1-May-98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON 1 MAY 98

SAMPLE OGANIZATION IEPA SAMPLE BATCH ID 980180
SAMPLE REQUESTOR BRUCE EVERETTE ACCOUNT NO TFA301
LABORATORY ESAT SAMPLE FACILITY WAUKEGAN MUNICIPAL LANDFILL

SAMPLE 98IE05R01 FIELD 98IE05R01

COLLECTED G207 FB RECEIVED 23 APRIL 98 ANALYZED 30 APRIL 98

COMPOUND	AMOUNT	(Units)
Aluminum	80 U	(ug/L)
Barium	6 U	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	500 U	(ug/L)
Chromium	10 U	(ug/L)
Cobalt	6 U	(ug/L)
Copper	6 U	(ug/L)
Iron	80 U	(ug/L)
Magnesium	100 U	(ug/L)
Manganese	5 U	(ug/L)
Nickel	20 U	(ug/L)
Potassium	500 U	(ug/L)
Silver	6 U	(ug/L)
Sodium	1000 U	(ug/L)
Vanadium	5 U	(ug/L)
Zinc	40 U	(ug/L)

ANALYZED BY 1-MAY-98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON 1 MAY 98

SAMPLE OGANIZATION IEPA SAMPLE BATCH ID 980180
SAMPLE REQUESTOR BRUCE EVERETTE ACCOUNT NO TFA301
LABORATORY ESAT SAMPLE FACILITY WAUKEGAN MUNICIPAL LANDFILL

SAMPLE 98IE05S06 FIELD 98IE05S06
G101

COLLECTED RECEIVED 23 APRIL 98 ANALYZED 30 APRIL 98

COMPOUND	AMOUNT	(Units)
Aluminum	13300	(ug/L)
Barium	2790	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	553000	(ug/L)
Chromium	44 3	(ug/L)
Cobalt	32 9	(ug/L)
Copper	55 6	(ug/L)
Iron	80000	(ug/L)
Magnesium	352000	(ug/L)
Manganese	1520	(ug/L)
Nickel	138	(ug/L)
Potassium	15700	(ug/L)
Silver	6 U	(ug/L)
Sodium	711000	(ug/L)
Vanadium	33 9	(ug/L)
Zinc	109	(ug/L)

ANALYZED BY RB 1-MAY-98

EPA CRL - REGION V
FINAL RESULTS REPORT
REPORT PRODUCED ON 1 MAY 98

SAMPLE OGANIZATION IEPA SAMPLE BATCH ID 980180
SAMPLE REQUESTOR BRUCE EVERETTE ACCOUNT NO TFA301
LABORATORY ESAT SAMPLE FACILITY WAUKEGAN MUNICIPAL LANDFILL

SAMPLE 98IE05S07 FIELD 98IE05S07
G102

COLLECTED RECEIVED 23 APRIL 98 ANALYZED 30 APRIL 98

COMPOUND	AMOUNT	(Units)
Aluminum	42000	(ug/L)
Barium	1300	(ug/L)
Beryllium	2 U	(ug/L)
Calcium	596000	(ug/L)
Chromium	173	(ug/L)
Cobalt	68 2	(ug/L)
Copper	146	(ug/L)
Iron	131000	(ug/L)
Magnesium	397000	(ug/L)
Manganese	3100	(ug/L)
Nickel	196	(ug/L)
Potassium	96100	(ug/L)
Silver	6 U	(ug/L)
Sodium	213000	(ug/L)
Vanadium	96 1	(ug/L)
Zinc	571	(ug/L)

ANALYZED BY RD 1-MAY-98

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date JUN 1 0 1998

Subject Review of Region 5 Data for Waukegan Municipal Landfill

From Charles T Elly Director Chuck Elly
Region 5 Central Regional Laboratory

RECEIVED
JUN 1 1 1998
IEPA/BOL

To

Attached are the results for Waukegan Municipal Landfill
CRL request number 980180
for analyses for Antimony Arsenic Cadmium Lead Selenium and Thallium
Results are reported for sample designations 98IE05S01 98IE05D01 98IE05S02 98IE05S03 98IE05S04 98IE05S05 98IE05S06 98IE05S07 and 98IE05R01

Results Status
(x) Acceptable for Use
( ) Data Qualified but Acceptable for use
( ) Data Unacceptable for Use

Comments on Data Quality by Reviewer

Selenium for samples 98IE05S06 and 98IE05S07 required dilution to obtain valid analytical spike recoveries That is why the detection limits are elevated for selenium for those two samples

Comments by Laboratory Director or Quality Control Coordinator

Review Record for Waukegan Municipal Landfill

John A Moore 9 Jun 98

Peer/Task Monitor Review and Date (✓) Reviewed ( ) Unreviewed

John Moore 9 Jun 98

Team Leader and Date (✓) Reviewed ( ) Unreviewed

Chuck Elby 6/10/98

QC Coordinator and Date ( ) Reviewed (✓) Unreviewed
(position vacant)

Sylvia Griffin JUN 10 1998

Data Management Coordinator and Date Received

Date Transmitted JUN 10 1998

Please sign and date this form below and return it with any comments to

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML 10C

Received by and Date

Comments

Method Number GFAA Metals
Date Generated May 22, 1998
Author Bai Yuen

Site Name Waukegan Muni. LF.
Charge Number(s) ESE51058
TDF Number 5104-166
WAD Number 05-98-2-04

GFAA NARRATIVE for Data Set 980180

Nine water samples, 98IE05S01-S07, D01 and R01 were collected from the Waukegan Municipal Landfill All samples were submitted for the analysis of total arsenic, cadmium, lead, selenium and thallium by GFAA The samples were collected on 04/21/98 and were received properly preserved by the CRL on 04/23/98 All samples were part of data set 980180

All samples were digested following standard CRL GFAA digestion protocols The samples were digested on 04/30/98 All analyses were performed within the six month holding time

Analytical results were stored in DAT files CDBY507 DAT, CDBY507A DAT, CDBY513 DAT PBBY507 DAT PBBY508 DAT, TLBY506 DAT, TLBY506A DAT and SEBY508 DAT, SEBY513 DAT and database files ASSE50698 and ASSE50798

Arsenic

Data Files ASSE50698 and ASSE50798

Arsenic was analyzed without incident

All QC was within the specified control limits

Cadmium

Data Files CDBY507.DAT, CDBY507A.DAT and CDBY513.DAT

Cadmium was analyzed without incident

All QC was within the specified control limits

Lead

Data Files PBBY507.DAT and PBBY508.DAT

Lead was analyzed without incident

All QC was within the specified control limits

Narrative by B Yuen ESAT
Date 6 2 98

Thallium

Data Files TLBY506.DAT and TLBY506A.DAT

Thallium was analyzed without incident

All other QC was within the specified control limits

Selenium

Data Files SEBY508.DAT and SEBY513.DAT

Selenium was analyzed without incident

All QC was within the specified control limits

Acceptable results for arsenic, cadmium, lead, selenium and thallium were obtained for the samples

Narrative by B Yu ESAT
Date 6-2-98

Method Number 3114B
Date Generated 05-22-98
TDF Number 5104-166

SiteName WAUKEGAN MUNICIPAL LANDFILL
Charge Number ESE-51-058
Work Assignment Number 05-98-2-04

FIAS NARRATIVE for Data Set 980180

Nine water samples from data set 980180 (98IE05S01-S07,R01 and D01) were submitted for the analysis of total antimony by hydride AA

All samples, QC checks and standards were digested following standard CRL FIAS digestion protocols for waters on 05-20-98 and analyzed on 05-21-98 The data for all samples and all required QC were acceptable

A spiked blank, used as a laboratory control sample (LFM), was digested and analyzed with the set of samples Analytical results for 980180 were stored in DAT file SBLL0521 DAT

Narrative by L Leonard ESAT
Date 5/22/98

SAMPLE RESULTS (ug/L) FOR DATA SET 980180(WATER)

Sample # 98IE05	As	Sb	Cd	Pb	Se	Tl
S01 G201	0 8U	1U	0 2U	2U	2U	2U
D01 G206	0 8U	1U	0 2U	2U	2U	2U
S02 -202	0 8U	1U	0 2U	2U	2U	2U
S03 -203	0 8U	1U	0 2U	2U	2U	2U
S04 204	0 8U	1U	0 2U	4	2U	2U
S05 G205	0 8U	1U	0 2U	2U	2U	2U
S06	70	1 3	0 7	29	30U	2U
S07 - 1 2	55	1 4	1 0	110	30U	2U
R01 G201 FB	0 8U	1U	0 2U	2U	2U	2U
Date of Analysis	05-07-98	05 21-98	05-07-98	05-07 98	05-08-98	05-06-98
Analyst	B Yuen	Z Li	B Yuen	B Yuen	B Yuen	B Yuen
Date	6 5 98	6-5-98	6-5-98	6-5-98	6-5-98	6-5 98

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO ILLINOIS 60605

Date MAY 20 1998

Subject Review of Region 5 Data for **WAUKEGAN MUNICIPAL LANDFILL**

From Charles T Elly Director For 5/18/98
Region 5 Central Regional Laboratory

To

Attached are the results for **WAUKEGAN MUNICIPAL LANDFILL**
CRL request number **980180**
for analyses for **Cyanide** and **Mercury**
Results are reported for sample designations Cyanide and Mercury samples 98IE05S01 98IE05D01 98IE05S02 98IE05S03 98IE05S04 98IE05S05 and 98IE05R01 Mercury samples 98IE05S06 and 98IE05S07

Results Status

(**X**) Acceptable for Use
( ) Data Qualified but Acceptable for use
( ) Data Unacceptable for Use

( ) Sewer Disposal Criteria Met

Comments on Data Quality by Reviewer

All the water samples submitted for cyanide and mercury analyses were assayed and the results are attached Required quality control criteria for the laboratory method and system performance audits were evaluated and determined to be within the limits with the following exceptions

Cyanide The matrix spike recovery reported as 75 7% was found to be out of the limit The limit is 100 ± 20% All the cyanide results could be biased low

RECEIVED
JUL 23 1998
IEPA-BOL

Comments on Sample Results

All the sample results are acceptable for use

Comments by Laboratory Director or Quality Control Coordinator

Frann A. Awanga 5/15/98
Review and Date (X) Reviewed ( ) Unreviewed

18 May 98
Team Leader and Date (X) Reviewed ( ) Unreviewed

5/18/98
QC Coordinator and Date ( ) Reviewed (X) Unreviewed

Sylvia Griffin MAY 20 1998
Data Management Coordinator and Date Received

Date Transmitted MAY 20 1998

Please sign and date this form below and return it with any comments to

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML 10C

Received by and Date

Comments

FINAL SAMPLE REPORT FOR Hg
DATA SET 980180
(ug/L)

SAMPLE	DATE	ANALYST	Hg RESULT REPORTED
98IE05S01	05/05/98	[illegible]	0 1 U
98IE05D01	05/05/98	[illegible]	0 1 U
98IE05S02	05/05/98	[illegible]	0 1 U
98IE05S03	05/05/98	[illegible]	0 1 U
98IE05S04	05/05/98	[illegible]	0 1 U
98IE05S05	05/05/98	[illegible]	0 1 U
98IE05S06	05/05/98	[illegible]	0 1 U
98IE05S07	05/05/98	[illegible]	0 1 U
98IE05R01	05/05/98	[illegible]	0 1 U

FOA 5/15/98

CYANIDE RESULTS (UG/L) FOR DATA SET 980180

Sample #	Analysis Date	Concentration	Analyst	Date
98IE05S01	5-5-98	8U	J. Gary	5-7-98
98IE05S02	5 5-98	8U	J. Gary	5-7-98
98IE05S03	5 5 98	8U	J. Gary	5-7-98
98IE05S04	5 5-98	8U	J. Gary	5-7-98
98IE05S05	5-5 98	8U	J. Gary	5-7-98
98IE05D01	5-5-98	8U	J. Gary	5-7-98
98IE05R01	5-5-98	8U	J. Gary	5-7-98

FAX 5/5/98

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE

SUBJECT Review of Data
Received for Review on May 29, 1998

FROM Stephen L Ostrodka, Chief (HSRL-5J)
Superfund Technical Support Section
for Steve Ostrodka
Richard L Byrnd
6/16/98

TO Data User IEPA

We have reviewed the data for the following case

SITE NAME Waukegan Mun. LF (IL)

CASE NUMBER 26147 SDG NUMBER ECCR2

Number and Type of Samples 10 (Soil)

Sample Numbers ECCR2-9 ECCS0-1

Laboratory Compuchem Hrs for Review 200

Following are our findings

The data are acceptable and usable with the qualifications discussed in the attached narrative
Richard L Byrnd

RECEIVED
JUL 01 1998
IEPA/BOL

CC Cecilia Moore
Region 5 TPO
Mail Code SM-5J

NARRATIVE

Laboratory COMPUCHEM
Site Waukegan Mun LF (IL)

Case 26147
SDG ECCR2

9 COMPOUND IDENTIFICATION

Target compounds (TCLs) and Tentatively Identified Compounds (TICs) were identified using a "best fit" library search method

10 COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

All CRQLs were properly adjusted for percent moisture All VOAs SVOAs and Pesticides target CRQLs were properly reported All target compound quantitation was properly reported

11 SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance The GC baseline for pesticide analysis was acceptable

12 ADDITIONAL INFORMATION

The lab identified and quantitated the same peak as benzo(b)fluoranthene and benzo(k)fluoranthene in all the samples, but in the standards the lab manually integrated that same grouping as two peaks The results listed in each sample for benzo(b)fluoranthene and benzo(k)fluoranthene should be considered as only benzo(b)fluoranthene Because the lab generated different response factors for the individual compounds, only the results for benzo(b)fluoranthene can be considered valid

In the volatile fraction the value for Toluene in ECCR6 exceeded the calibration range The value for Toluene from ECCR6DL should be used

In the volatile fraction the lab identified and reported CO_2 as a TIC in all samples and blanks run That compound is an artifact of the purge and trap method and sample analysis used for VOAs, as such it should not be included as a TIC for any of the samples

Reviewed by Tom Sedlacek Lockheed Martin/ESAT
Date June 17 1998

FORM 100

ESAT PROGRAM

REGION 5

PWO ESE52115

TITLE WAUKEGAN MUNY #2/ADELPHI LF

WAD NO 05-98-2-07 TDF NO 7512 TASK AREA 203 WAD TYPE G
SITE NAME WAUKEGAN MUNY #2/ADELPHI LF SITE CODE 05Z3 LA00
CITY WAUKEGAN STATE IL
START DATE 02-JUN-98 EST COMPLETION DATE 09-JUN-98 EST HOURS 12 00

DESCRIPTION OF TASK(S)

PERFORM ORGANIC CADRE REVIEW OF CASE #26147, SDG #ECCR2 FOR 10 SOIL SAMPLES FOR VOA, ABN, PEST-PCB FOR 14-DAY TURNAROUND

APPROVED BY	DATE
For D Miller	6-2-98

FORM LESC 100-3

NARRATIVE

Laboratory COMPUCHEM
Site Waukegan Mun LF (IL)

Case 26147
SDG ECCR2

Below is a summary of the out-of-control audits and possible effects on the data for this Case/SDG

Ten (10) soil samples, numbered ECCR2 through ECCR9, ECCS0, and ECCS1 were collected on April 21 and 22, 1998 The lab received the samples on April 23, 1998 in good condition All samples were analyzed for the full list of organic analytes All were analyzed according to CLP SOW OLMO3 2

The VOA analyses were performed within the technical holding times of 14 days after sample collection, therefore the results are acceptable All semivolatile sample extractions were performed within fourteen days of sampling and all analyses were performed within forty (40) days after extraction, therefore the results are acceptable All pesticide sample extractions were performed outside the fourteen days of sampling window Actual time after sampling is 23 days All pesticide analyses were performed within forty (40) days after extraction, therefore All semivolatile sample extraction were performed within fourteen days of sampling and all analyses were performed within forty (40) days after extraction, therefore for all pesticide fraction results hits are qualified estimated "J" and non-detects are flagged "UJ"

Reviewed by Tom Sedlacek Lockheed Martin/ESAT
Date June 17, 1998

NARRATIVE

Laboratory COMPUCHEM Case 26147
Site Waukegan Mun LF (IL) SDG ECCR2

1 HOLDING TIME

Ten (10) soil samples, numbered ECCR2 through ECCR9, ECCS0, and ECCS1 were collected on April 21 and 22, 1998 The lab received the samples on April 23, 1998 in good condition All samples were analyzed for the full list of organic analytes All were analyzed according to CLP SOW OLMO3 2

The VOA analyses were performed within the technical holding times of 14 days after sample collection, therefore the results are acceptable All semivolatile sample extractions were performed within fourteen days of sampling and'all analyses were performed within forty (40) days after extraction, therefore the results are acceptable All pesticide sample extractions were performed outside the fourteen days of sampling window Actual time after sampling is 23 days All pesticide analyses were performed within forty (40) days after extraction, therefore All semivolatile sample extraction were performed within fourteen days of sampling and all analyses were performed within forty (40) days after extraction therefore for all pesticide fraction results hits are qualified estimated J' and non-detects are flagged UJ"

2 GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

All GC/MS tuning complied with mass list and ion abundance criteria for BFB, and all samples were analyzed within the twelve (12) hour periods for instrument performance checks

All GC/MS tuning complied with mass list and ion abundance criteria for DFTPP, and all samples were analyzed within the twelve (12) hour periods for instrument performance checks

GC resolution Check Mixtures met the 60% resolution criteria Endrin and DDT degradation checks using the PEM Mix on DB-608 and DB-1701 columns were <20% and the combined total <30%, Therefore the results are acceptable

The Florisil Cartridge Check and the GPC calibration check met the QC criteria, therefore the results are acceptable

3 CALIBRATION

Initial and continuing calibrations of the Volatile, Semivolatile and Pest/PCB standards were evaluated for target

compound list and outliers are recorded on the forms included as part of this narrative

4 BLANKS

VOA VBLKX1 and VBLKG4 are the soil matrix volatile method blanks VBLKX1 contained Methylene Chloride at 1 µg/Kg and 1 TIC Methylene Chloride is a common laboratory contaminant and it's presence in any samples associated with VBLKX1 is flagged as non-detected (U), when the sample result is less than (<) ten (10) times the blank results The presence of the TIC in the samples associated with VBLKX1 is flagged non-detected (U) when the concentration is less than (<) five (5) times the blank result VBLKG4 contained no TCLs or TICs The Volatile method blank summary (FORM IV VOA) lists the samples associated with each blank

SVOA SBLKUP is the soil matrix semivolatile method blanks SBLKUP contained bis(2-ethylhexyl)phthalate at 35 µg/Kg, and 6 TICs bis(2-ethylhexyl)phthalate is a common laboratory contaminant and it's presence in any samples associated with SBLKUP is flagged as non-detected (U), when the sample result is less than (<) ten (10) times the blank results The presence of any of the TICs in the samples associated with SBLKUP is flagged non-detected (U) when the concentration is less than (<) five (5) times the blank result The semivolatile method blank summary (FORM IV SVOA) lists the samples associated with each blank

Pesticide\PCB
PBLKBT is the low level pesticide soil matrix method blank PBLKBT contained no contaminants The pesticide method blank summary (FORM IV PEST) lists the samples associated with each blank There are 6 Pesticide instrument blanks, none of which contained any target compounds No samples are associated with the instrument blanks

5 SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

VOA The volatile system monitoring compounds were within QC required limits for recovery, therefore the results are acceptable

SVOA The semivolatile surrogate compounds were within QC required

limits for recovery with the exception of the recovery of S6 (2,4,6-Tribromophenol) in sample ECCS1, therefore since only one surrogate was out of recovery range, the results are acceptable

Pesticide\PCB

The pesticide surrogate compounds were within QC required limits for recovery and retention time with the exception of

In sample ECCR2 recovery of TCMX was below the lower limits on the DB-608 column 0%R and on the DB-1701 column 16%R Therefore for sample ECCR2 hits are qualified "J" and non-detects are qualified R"

On the DB-608 column the recovery for DCB was outside the limits high in samples ECCR8, ECCR4 and ECCR5

On the DB-1701 column the recovery for DCB was outside the limits high in samples ECCR8, ECCR3, ECCR4 and ECCR5

Therefore in samples ECCR8, ECCR3, ECCR4 and ECCR5 hits are qualified J" and non-detects are not flagged

6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

VOA All spike recoveries and RPDs were within QC limits therefore the results for the unspiked sample are acceptable

SVOA All spike recoveries and RPDs were within QC limits, therefore the results for the unspiked sample are acceptable

Pest All spike recoveries and RPDs were within QC limits, therefore the results for the unspiked sample are acceptable

7 FIELD BLANK AND FIELD DUPLICATE

There is no field blank or field duplicate sample pair in this data set

8 INTERNAL STANDARDS

VOA The internal standards retention times and area counts for the VOA fraction were all within the required QC limits therefore the results are acceptable

SVOA The internal standards retention times and area counts for the SVOA fraction were all within the required QC limits therefore the results are acceptable

Reviewed by Tom Sedlacek Lockheed Martin/ESAT
Date June 17, 1998

CALIBRATION OUTLIER
Volatile TCL
(Page 1 of 1)

CASE/SAS # 26147
COLUMN
HEATED PURGE (Y/N) Y

LABORATORY Compuchem
SITE NAME. Waukegan LF (IL)

nstrument ID F50055		Initial Cal			Cont Cal			Cont Cal			Cont Cal			Cont Cal		
ate		04/24/98			4/30/98			5/01/98								
ime		1813			1755			0705								
	#	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane	0 010															
Bromomethane	0 100															
Vinyl Chloride	0 100															
Chloroethane	0 010															
Methylene Chloride	0 010															
Acetone	0 010															
Carbon Disulfide	0 010	4.147			2.378	-432										
1,1 Dichloroethene	0 100															
1,1 Dichloroethane	0 200															
1,2 Dichloroethene (total)	0 010															
Chloroform	0 200															
1,2 Dichloroethane	0 100															
2 Butanone	0 010															
1,1,1 Trichloroethane	0 100															
Carbon Tetrachloride	0 100															
Bromodichloromethane	0 200															
1,2 Dichloropropane	0 010															
cis 1,3 Dichloropropene	0 200															
Trichloroethene	0 300															
Dibromochloromethane	0 100															
1,1,2 Trichloroethane	0 100															
Benzene	0 500															
trans 1,3 Dichloropropene	0 100															
Bromoform	0 100															
4 Methyl 2 Pentanone	0 010															
2 Hexanone	0 010															
Tetrachloroethene	0 200															
1,1 2 2 Tetrachloroethane	0 300															
Toluene	0 400															
Chlorobenzene	0 500															
Ethylbenzene	0 100															
Styrene	0 300															
Xylene (total)	0 300															
Toluene d_8	0 010															
Bromofluorobenzene	0 200															
1 2 Dichloroethane d_4	0 010															

fected Samples.

	VBLKX1	VBLKG4		
	ECCR2 ECCR7	ECCS1MS ECCR8		
	ECCR3 ECCR9	ECCS1MSD		
	ECCR4 ECCS0	ECCR6DL		
	ECCR6 ECCS1	ECCR5		

* Minimum Relative Response Factor
* These flags should be applied to the analytes on the sample data sheets
J/R = All positive results are estimated, "J" and non detected results are unusable

Reviewer's Init/Date [signature] 6/10/98

CALIBRATION OUTLIER
Semivolatile TCL
(Page 1 of 2)

CASE/SAS # 26147
CO[illegible]N

LABORATORY: COMPUCHEM
SITE NAME: Waukegan LF (IL)

Instrument ID: 5972HP04		Initial Cal.			Cont Cal.			Cont Cal.			Cont Cal.			Cont Cal.		
Date		4/24/88			4/30/88			5/06/88			5/20/88					
Time:		1524			1044			0002			1324					
	#	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol	0 800															
bis(2 Chloroethyl)ether	0 700															
2 Chlorophenol	0 800															
1,3 Dichlorobenzene	0 600															
1,4 Dichlorobenzene	0 500															
1,2 Dichlorobenzene	0 400															
2 Methylphenol	0 700															
2,2 oxybis(1 Chloropropane)	0 010															
4 Methylphenol	0 600															
N Nitroso di n propylamine	0 500															
Hexachloroethane	0 300															
Nitrobenzene	0 200															
Isophorone	0 400															
2 Nitrophenol	0 100															
2,4 Dimethylphenol	0 200															
bis(2 Chloroethoxy)methane	0 300															
2,4 Dichlorophenol	0 200															
1,2,4 T[illegible]ichlorobenzene	0 200															
Nap[illegible]ne	0 700															
4 Chloroaniline	0 010															
Hexa hlorobutadiene	0 010															
4 Chloro 3 methylphenol	0 200															
2 Methylnaphthalene	0 400															
Hexachlorocyclopentadiene	0 010															
2,4,6 Trichlorophenol	0 200															
2,4,5 Trichlorophenol	0 200															
2 Chloronaphthalene	0 800															
2 Nitroaniline	0 010															
Dimethylphthalate	0 010															
Acenaphthylene	0 900															
2,6 Dinitrotoluene	0 200															
3 Nitroaniline	0 010															
Acenaphthene	0 900															
2 4 Dinitrophenol	0 010															

fected Samples:

	SBLKUP	ECCS1MS		
	ECCR3	ECCS1MSD		
	ECCR4	ECCR5 ECCR9		
	ECCS1	ECCS0 ECCR7		
		ECCR2 ECCR6		
		ECCR8		

Minimum Relative Response Factor
* These flags should be applied to the analytes on the sample data sheets
J/R = All positive results are estimated "J" and non detected results are unusable "R".

Reviewer's Init/Date JRS 6/10/88

CALIBRATION OUTLIER
Semivolatile TCL
(Page 2 of 2)

CASE SAS # 26147
COLUMN

LABORATORY Compuchem
SITE NAME Waukegan LF (IL)

Instrument ID:		Initial Cal			Cont Cal			Cont Cal			Cont Cal			Cont Cal		
Date		4/24/88			4/30/88			5/01/88								
Time		1524			1046			0002								
	#	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
4 Nitrophenol	0 010															
Dibenzofuran	0 800															
2,4 Dinitrotoluene	0 200															
Diethylphthalate	0 010															
4 Chlorophenyl phenylether	0 400															
Fluorene	0 900															
4 Nitroaniline	0 010															
4,6 Dinitro 2 methylphenol	0 010															
N nitrosodiphenylamine	0 010															
4 Bromophenyl phenylether	0 100															
Hexachlorobenzene	0 100															
Pentachlorophenol	0 050															
Phenanthrene	0 700															
Anthracene	0 700															
Carbazole	0 010															
Di n butylphthalate	0 010															
Fluoranthene	0 600															
Pyrene	0 600															
Butylbenzylphthalate	0 0 0															
3 3' Dichlorobenzidine	010	0303						0.374	25.1							
Benzo(a)anthracene	0 800															
Chrysene	0 700															
bis(2 Ethylhexyl)phthalate	0 010															
Di n octylphthalate	0 010															
Benzo(b)fluoranthene	0 700															
Benzo(k)fluoranthene	0 700															
Benzo(a)pyrene	0 700															
Indeno(1,2,3 cd)pyrene	0 500															
Dibenz(a,h)anthracene	0 400															
Benzo(g h i)perylene	0 500															
Nitrobenzene d_5	0 200															
2 Fluorobiphenyl	0 700															
Terphenyl-d_{14}	0 500															
Phenol d_5	0 800															
2 Fluorophenol	0 600															
2 4,6 Tribromophenol	0 010															
2 Chlorophenol-d_4	0 800															
1 2 Dichlorobenzene d_4	0 400															

Minimum Relative Response Factor
These flags should be applied to the analytes on the sample data sheets
* All positive results are estimated "J" and non detected results are unusable "R"

Reviewer's Init/Date JRS 6/10/89

Pesticide PCB TCL
(Page 1 of 1)

CASE/SAS # 26147
COLUMN DB608

LABORATORY Compuchen
SITE NAME Welvagen LF (IL)

Instrument Number	Initial Cal		Cont Cal		Cont Cal		Cont Cal		Cont Cal	
Date VARIAN34	5/20/98		5/20/98							
Time	0006		2046							
	%RSD	*	%D	*	%D	*	%D	*	%D	*
alpha BHC										
beta BHC										
delta BHC										
gamma BHC										
Hepachlor										
Aldrin										
Heptachlor Epoxide										
Endosulfan I										
Dieldrin										
4,4' DDE										
Endrin										
Endosulfan II										
4,4' DDD										
Endosulfan Sulfate										
4,4' DDT										
Methoxychlor										
End in Ketone										
End in Aldehyde										
alpha Chlordane										
gamma Chlordane										
Aroicor 1016										
Aroclor 1221										
Aroclor 1232										
Aroicor 1242										
Aroclor 1248										
Aroclor 1254										
Aroclor 1260										

Affected Samples

	PBLKBT			

* These flags should be applied to the analytes on the sample data sheets
J/R = All positive results are estimated "J" and non detected results are unusable "R"

Reviewer s Init/Date RS 6/10/98

ASL/SAS # 26147
OLUMN DB608

LABORATORY Compu Chem
SITE NAME Waukegan LF (IL)

Instrument Number	Initial Cal		Cont Cal		Cont Cal		Cont Cal		Cont Cal	
Date VARIAN 39	5/21/08									
Time	2304									
	%RSD	*	%D	*	%D	*	%D	*	%D	*
alpha BHC										
beta BHC										
delta BHC										
gamma BHC										
Hepachlor										
Aldrin										
Heptachlor Epoxide										
Endosulfan I										
Dieldrin										
4,4' DDE										
Endrin										
Endosulfan II										
4,4' DDD										
Endosulfan Sulfate										
4,4' DDT										
Methoxychlor										
End in Ketone										
End in Aldehyde										
alpha Chlordane										
gamma Chlordane										
Arolcor 1016										
Aroclor 1221										
Aroclor 1232										
Arolcor 12 2										
Aroclor 1248										
Aroclor 1254										
Aroclor 1260										

Affected Samples

ECCSIMS				
ECCSIMSD				
ECCR2 ECCR6				
ECCR8 ECCR7				
ECCR9 ECCS1				
ECCS0				
ECCR3				
ECCR4				
ECCR5				

* These flags should be applied to the analytes on the sample data sheets
J/R = All positive results are estimated "J" and non detected results are unusable "R"

Reviewer s Init/Date DRS 6/10/08

Pesticide/PCB TCL
(Page 1 of 1)

ASE/SAS # 26147.
OLUMN DB 1701

LABORATORY Compuchem
SITE NAME Waukegan LF (EL)

Instrument Number	Initial Cal		Cont Cal		Cont Cal		Cont Cal		Cont Cal	
Date VARIAN 41	5/14/88		5/20/88							
Time	2332		2011							
	%RSD	*	%D	*	%D	*	%D	*	%D	*
alpha BHC										
beta BHC										
delta BHC										
gamma BHC										
Heptachlor										
Aldrin										
Heptachlor Epoxide										
Endosulfan I										
Dieldrin										
4,4' DDE										
Endrin										
Endosulfan II										
4,4' DDD										
Endosulfan Sulfate										
4,4' DDT										
Methoxychlor										
End in Ketone										
End in Aldehyde										
alpha Chlordane										
gamma Chlordane										
Aroicor 1016										
Aroclor 1221										
Aroclor 1232										
Aroicor 1242										
Aroclor 1248										
Aroclor 1254										
Aroclor 1260										

Affected Samples

	BBLK-BT			

* These flags should be applied to the analytes on the sample data sheets
J/R = All positive results are estimated "J" and non detected results are unusable "R"

Reviewer s Init/Date JAI 6/10/89

Pesticide PCB TCL
(Page 1 of 1)

ASE/SAS # 26147
OLUMN DB1701

LABORATORY Compuchem
SITE NAME Wookifen LF (EC)

Instrument Number	Initial Cal		Cont Cal		Cont Cal		Cont Cal		Cont Cal	
Date VARIAN41	5/21/98									
Time	2304									
	%RSD	*	%D	*	%D	*	%D	*	%D	*
alpha BHC										
beta BHC										
delta BHC										
gamma BHC										
Hepachlor										
Aldrin										
Heptachlor Epoxide										
Endosulfan I										
Dieldrin										
4,4' DDE										
Endrin										
Endosulfan II										
4,4' DDD										
Endosulfan Sulfate										
4,4' DDT										
Methoxychlor										
End in Ketone										
End in Aldehyde										
alpha Chlordane										
gamma Chlordane										
Aroicor 1016										
Aroclor 1221										
Aroclor 1232										
Aroicor 12 2										
Aroclor 1248										
Aroclor 1254										
Aroclor 1260										

Affected Samples

ECCS1MS				
ECCS1MSD				
ECCR2 ECCR9				
ECCR8 ECCS0				
ECCR3 ECCR4				
ECCR5 ECCR6				
ECCR7 ECCS1				

* These flags should be applied to the analytes on the sample data sheets
J/R = All positive results are estimated "J" and non detected results are unusable "R"

Reviewer s Init/Date DSG/10/98

ORGANIC DATA QUALIFIER DEFINITIONS

For the purpose of defining the flagging nomenclature used in this document the following code letters and associated definitions are provided

VALUE - when/if the result of a value is greater than or equal to the Contract Required Quantitation Limit (CRQL)

U Indicates that the compound was analyzed for, but not detected The sample quantitation limit corrected for dilution and percent moisture is reported

J Indicates an estimated value This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of a compound where the result is less than the sample quantitation limit but greater than zero The flag is also used to indicate a reported result having an associated QC problem

R Indicates the data are unusable (NOTE The analyte may or may not be present)

N Indicates presumptive evidence of a compound This flag is only used for a tentatively identified compound, where the identification is based on a mass spectral library search

P Indicates a pesticide/Aroclor target analyte when there is greater than 25% difference for the detected concentrations between the two GC columns The lower of the two results is reported

C Indicates pesticide results that have been confirmed by GC/MS

B Indicates the analyte is detected in the associated blank as well as in the sample

E Indicates compounds whose concentrations exceed the calibration range of the instrument

D Indicates an identified compound in an analysis has been diluted This flag alerts the data user to any differences between the concentrations reported in the two analysis

A Indicates tentatively identified compounds that are suspected to be aldol condensation products

G Indicates the TCLP Matrix Spike Recovery was greater than the upper limit of the analytical method

L Indicates the TCLP Matrix Spike Recovery was less than the lower limit of the analytical method

T Indicates the analyte is found in the associated TCLP extraction blank as well as in the sample

X,Y,Z are reserved for laboratory defined flags

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No: 26147

1 Matrix (Enter in Column A)
1 Surface Water
2 Ground Water
3 Leachate
4 Field QC
5 Soil/Sediment
6 Oil (High only)
7 Waste (High only)
8 Other (Specify in Column A)

2 Preservative (Enter in Column D)
1 HCl
2 HNO3
3 NaHSO4
4 H2SO4
5 Ice only
6 Other (Specify in Column D)
N Not preserved

2. Region No: V
Sampling Co: IEPA
4 Date Shipped: 4/22/98
Carrier: FED EX
6 Date Received: 4/23/98 Received by: M. Stewart
Sampler (Name): Bruce Everetts
Airbill Number: 8668592391
Laboratory Contract Number: 68D50004
Unit Price: 547.00
Sampler Signature: Bruce Everetts
5 Ship To: COMPUCHEM ENVIRONMENTAL CORP. 501 MADISON AVE CARY, NC 27513 ATTN ALICE EVANS
7 Transfer to:
Date Received:
Received by:
Contract Number:
Price:

3 Purpose
Lead: SF, PRP, ST, FED
Early Action: CLEM, PA, REM, RI, SI, ESI
Long-Term Action: FS, RD, RA, O&M, NPLD

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other	B Conc Low Med High	C Sample Type Comp Grab	D Preservative (from Box 2) Other	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No	J Sampler Initials	K High Phases Solids	Water Miscible Liq	Water Immis Liq
ECCR2	5	L	G	5	X				5-078268, 89	X201	4/21/98/1700	MEBGS0	BE			
ECCR2	5	L	G	5		X	X		5-078290	X201	4/21/98/1700	MEBGS0	BE			
ECCR3	5	L	G	5	X				5-078292-93	X202	4/21/98/1640	MEBGS1	BE			
ECCR3	5	L	G	5		X	X		5-078294	X202	4/21/98/1640	MEBGS1	BE			
ECCR4	5	L	G	5	X				5-078295-96	X203	4/21/98/1500	MEBGS2	BE			
ECCR4	5	L	G	5		X	X		5-078297	X203	4/21/98/1500	MEBGS2	BE			
ECCR5	5	L	G	5	X				5-078298-99	X204	4/21/98/1430	MEBGS3	BE			
ECCR5	5	L	G	5		X	X		5-078300	X204	4/21/98/1430	MEBGS3	BE			
ECCR6	5	L	G	5	X				5-078301-02	X205	4/21/98/1400	MEBGS4	BE			
ECCR6	5	L	G	5		X	X		5-078303	X205	4/21/98/1400	MEBGS4	BE			

Shipment for Case Complete? (Y/N): Y
Page: 1 of 2
Sample(s) to be Used for Laboratory QC: ECCS1
Additional Sampler Signatures:
Chain of Custody Seal Number(s): 18/906

890016
027
028
029
030

CHAIN OF CUSTODY RECORD

Relinquished by (Signature)	Date / Time	Received by (Signature)	Relinquished by (Signature)	Date / Time	Received by (Signature)
Bruce Everetts	4/22/98 1300				
Relinquished by (Signature)	Date / Time	Received by (Signature)	Relinquished by (Signature)	Date / Time	Received by (Signature)
Relinquished by (Signature)	Date / Time	Received for Laboratory by (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	
		Melissa Stewart	4/23/98 10:35	4°C SDG ECCR2	

A21-012 16 REV

DISTRIBUTION: Blue Region Copy; White Lab Copy for Return to Region; Pink CLASS Copy; Yellow Lab Copy for Return to CLAS

EPA Form 9110 2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
SEE REVERSE FOR PURPOSE CODE DEFINITIONS

371154

United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No: 26147

1 Matrix (Enter in Column A)
1 Surface Water
2 Ground Water
3 Leachate
4 Field QC
5 Soil/Sediment
6 Oil (High only)
7 Waste (High only)
8 Other (Specify in Column A)

2 Preservative (Enter in Column D)
1 HCl
2 HNO3
3 NaHSO4
4 H2SO4
5 Ice only
6 Other (Specify in Column D)
N Not preserved

2 Region No: IV
Sampling Co: IEPA
4 Date Shipped: 4/22/98
Carrier: FED EX
6 Date Received -- Received by: 4/23/98 M. Steu
Sampler (Name): Bruce Everetts
Airbill Number: 3668592391
Laboratory Contract Number: 68D50004
Unit Price: 547.00
Sampler Signature: Bruce Everetts
5 Ship To: CompuCHEM ENVIRONMENTAL CORP. 501 MADISON AVE CARY, NC 27513 ATTN ALICE EVANS
7 Transfer to:
Date Received:
Received by:
Contract Number:
Price:

3 Purpose
Lead: SF, PRP, ST, FED
Early Action: CLEM, PA, REM, RI, SI, ESI
Long-Term Action: FS, RD, RA, O&M, NPLD

CLP Sample Numbers (from labels)	A Matrix (from Box 1)	B Conc Low Med High	C Sample Type Comp/Grab	D Preservative (from Box 2)	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No	J Sampler Initials	K High Phases Solids	Water Miscible Liq	Water Immis Liq
ECCR7	5	L	G	5	X				5-078304-05	X206	4/21/98/1530	MEBGS5	BE			
ECCR7	5	L	G	5		X	X		5-078306	X206	4/21/98/1530	MEBGS5	BE			
ECCR8	5	L	G	5	X				5-078307-08	X207	4/22/98/0900	MEBGS6	BE			
ECCR8	5	L	G	5		X	X		5-078309	X207	4/22/98/0900	MEBGS6	BE			
ECCR9	5	L	G	5	X				5-078310-11	X208	4/22/98/0930	MEBGS7	BE			
ECCR9	5	L	C	5		X	X		5-078312	X208	4/22/98/0930	MEBGS7	BE			
ECCS0	5	L	G	5	X				5-078313-14	X209	4/22/98/0930	MEBGS8	BE			
ECCS0	5	L	C	5		X	X		5-078315	X209	4/22/98/0930	MEBGS8	BE			
ECCS1	5	L	G	5	X				5-078316-17	X210	4/22/98/1000	MEBGS9	BE	Final		
ECCS1	5	L	G	5		X	X		5-078318	X210	4/22/98/1000	MEBGS9	BE	Sample		

Shipment for Case Complete? (Y/N): Y
Page: 2 of 2
Sample(s) to be Used for Laboratory QC: ECCS1
Additional Sampler Signatures:
Chain of Custody Seal Number(s): 181906

CHAIN OF CUSTODY RECORD

Relinquished by (Signature)	Date / Time	Received by (Signature)	Relinquished by (Signature)	Date / Time	Received by (Signature)
Bruce Everetts	4/22/98 1300				
Relinquished by (Signature)	Date / Time	Received by (Signature)	Relinquished by (Signature)	Date / Time	Received by (Signature)
Relinquished by (Signature)	Date / Time	Received for Laboratory by (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	
		Melissa Steu	4/23/98 10:35	4°C SDG ECCR2	

DISTRIBUTION: Blue Region Copy; White Lab Copy for Return to Region; Pink CLASS Copy; Yellow Lab Copy for Return to CLASS

EPA Form 9110-2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21-012 16 REV

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371195

Compuchem Environmental
a Division of Liberty Analytical
501 N Madison Avenue
Cary, NC 27513

SDG NARRATIVE
CASE 26147
SDG ECCR2
CONTRACT 68D50004

SAMPLE IDENTIFICATIONS ECCR2 ECCR3 ECCR4 ECCR5 ECCR6 ECCR7 ECCR8 ECCR9 ECCS0 ECCS1

The ten(10) soil samples listed above were received ,intact, with proper chain of custody(COC) documentation on April 23, 1998 All of these samples were submitted for volatile, semivolatile, and pesticide analysis
The samples were received at 4 degrees C, and were prepared and analyzed following Contract Laboratory Protocol (CLP) Statement of Work(SOW), document OLM03 2 protocol

VOLATILES
Percent moisture ranged from 30 to 62
Analysis holding time requirements were met for all these samples
Acetone and/or methylene chloride were identified in the majority of samples, mostly below the Contract Required Quantitation Limit(CRQL) Ethylbenzene and xylene were also identified in several samples
Sample ECCR6 was initially analyzed neat and gave results for toluene outside of the range of the initial calibtation An appropriate dilution and subsequent analysis based on the neat run did not yield reults in the upper half of the initial calibration We have attributed this to sample inhomogenetity, and have reported and billed for both analyses

Other than CO2 Tentatively Identified Compounds(TIC) were only present in ECCR3 (3-peaks)

ll of the system monitoring compounds(SMC) met recovery criteria and 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 and did not contain any TCL analytes above the Contract Required Quantitation Limit(CRQL)

The associated storage blank met QC acceptance criteria, and no reportable TCL analytes were present

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

ECCS1 was used to prepare the matrix spikes as requested
The associated duplicate matrix spikes met all advisory accuracy and precision criteria without exception

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 listed above Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee,as verified by the following signature

Roy Sutton

oy M Sutton
Development Chemist
May 15, 1998

COMPUCHEM
A division of Liberty Analytical Corporation
501 Madison Ave
Cary NC 27513

SDG NARRATIVE

CASE # 26147
SDG #ECCR2
CONTRACT #68D50004

SAMPLES ECCR2, ECCR3, ECCR4, ECCR5, ECCR6
ECCR7, ECCR8, ECCR9, ECCS0, ECCS1

This portion of the SDG narrative deals with the semivolatile fractions for the ten samples above only For the receiving information associated with these samples please refer to the volatile SDG narrative

All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices for Case #26147 SDG #ECCR2 are included in the sample data sections

SEMIVOLATILE
The semivolatile fractions were extracted and analyzed within the required holding time The percent moisture values for the samples ranged from 30% to 62% and the pH values ranged from 6 8 to 7 6

One to two Target Compound List (TCL) analytes were detected with concentrations above the Contract Required Quantitation Limit (CRQL) in two of the samples These analytes were bis(2-ethylhexyl)phthalate 4-methylphenol and fluoranthene

Benzo(b)fluoranthene and benzo(k)fluoranthene were detected in some of the samples at levels below the CRQL These analytes were determined to be indistinguishable coeluting isomers in the samples The 'X flags that appear on the sample Form 1s denote this

Twenty-two to thirty three Tentatively Identified Compounds (TIC) were detected in the samples These TICs were assessed as unknowns, unknown aldehydes, unknown ketones, unknown alcohols, cyclohexanol, cyclohexenone, PCBs PAHs, unknown carboxylic acids, cholesterol, unknown alkenes, unknown acid esters and sulfur Other TICs were detected and assessed as unknown alkanes in some of the samples The TICs that were characterized as alkanes have been summarized on the Form 1FAs that are located in the narrative section of the data package The TIC spectra for the alkanes are located in the data section for the individual samples

QC SUMMARY
The surrogates met recovery criteria for the semivolatile fractions, with one exception The recovery of 2,4,6 tribromophenol failed acceptance criteria in sample ECCS1 The internal standards met area response and retention time criteria The duplicate matrix spikes met recovery

and relative percent difference criteria The associated blanks, Initial Calibrations and Continuing Calibrations met Quality Control criteria

In the analyses of the Initial and Continuing Calibration standards and samples ECCR2, ECCR5, ECCR6, ECCR7, ECCR9, ECCS0 and ECCS1, the operator performed manual integrations and/or manual edits of one or more of the TCL analytes These manual integrations or edits are indicated by the "M" "H" or the "MH" flag present on the quantitation report An Extracted Ion Current Profile (EICP) has been provided for each analyte requiring a manual integration or manual edit As noted on the quantitation reports by number, the manual edits and/or manual integrations were required for the following reasons 1) TCL analytes were initially not found by the automatic integration routine, 2) TCL analytes were incorrectly integrated by the automatic integration routine, 3) the operator selected an alternate peak within the retention time window for a particular TCL analyte than that chosen by the computer software The explanations for the manual integrations and/or manual edits are summarized in a Quality Assurance notice which is located in the narrative section of the data package

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 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 designee, as verified by the following signature

Patricia B Hopkins

Patricia B Hopkins
Final Technical Review
13 May 1998

Note This report is paginated for reference and accountability in numerical sequence

CompuChem
a division of Liberty Analytical Corp
501 Madison Avenue
Cary, North Carolina 27513

SDG NARRATIVE

CASE 26147
SDG ECCR2
CONTRACT 68D50004

SAMPLE IDENTIFICATIONS ECCR2, ECCR3, ECCR4, ECCR5, ECCR6, ECCR7, ECCR8, ECCR9, ECCS0, ECCS1

This portion of the SDG narrative covers only the pesticide fraction of the ten (10) samples listed above For receiving information pertaining to this sample please refer to the portion of the SDG narrative that covers the volatile fractions

PESTICIDES

These samples were initially extracted within holding times The method blank associated with the first extraction failed contamination criteria The samples were re extracted outside of holding time The method blank associated with the second extraction met all quality control criteria We have reported the data from the second extraction The data for the analyses of the first extracts is provided in the Complete SDG File (CSF) Analysis holding time requirements were met for all of these samples

The pesticide Target Compound List (TCL) analyte heptachlor epoxide was confirmed by dual column analysis at a concentration above the Contract Required Quantitation Limit (CRQL) in ECCR2 ECCR4 and ECCR8 ECCR2 also contained concentrations of the pesticide TCL analytes heptachlor endrin methoxychlor and endrin ketone above the CRQL The PCB TCL analyte Aroclor 1248 was confirmed by dual column analysis at a concentration above the CRQL in ECCR3 ECCR4 ECCR5 ECCR7 ECCR8 ECCR9 and ECCS0

Due to the concentrations of PCBs in the samples GC/MS confirmation analyses were performed for Aroclor 1248 in ECCR4 ECCR5 and ECCR8 The Y flag is used to denote compounds that were unsuccessfully confirmed by GC/MS The same raw data that is required for successful confirmations is reported for Y flagged compounds

Manual quantitations were performed on several 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

Due to the results of screens of the samples ECCR4 ECCR5 and ECCR8 were initially analyzed at a 5 1 dilution In each analysis the amount of organic material present as demonstrated by the TCL analyte results and the chromatograms precluded reanalysis at a greater concentration Therefore we have reported the data without further analysis

All of the surrogates met recovery criteria with a few exceptions The recovery of decachloro biphenyl (DCB) fell above the quality control criteria limit on one or both columns in the analyses of ECCR8 ECCR3 ECCR4 and ECCR5 due to matrix interference The recovery of tetrachloro m xylene (TCX) fell below the quality control criteria limit on both columns in the analysis of ECCR2 All of the surrogates met retention time criteria in the analyses of these samples

The associated method blank met all quality control criteria No pesticide or PCB TCL analytes were confirmed in the method blank

ECCS1 was used as the original to prepare the duplicate matrix spikes as requested The associated duplicate matrix spikes met all advisory accuracy and precision 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 conditions listed above Release of the data contained in the hardcopy data package and in the computer readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee as verified by the following signature

Stephanie W Winfield 5 27-98
Stephanie W Winfield
Technical Reviewer
May 27 1998

5A

1FA

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO

ECCR2

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890016

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090016B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 40 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 2

Number TICs found 13

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN ALKANE	5 38	490	J
2		UNKNOWN ALKANE	9 66	340	J
3		UNKNOWN ALKANE	10 79	440	J
4		UNKNOWN ALKANE	11 84	480	J
5		UNKNOWN ALKANE	12 83	500	J
6		UNKNOWN ALKANE	13 78	560	J
7		UNKNOWN ALKANE	13 83	690	J
8		UNKNOWN ALKANE	14 77	320	J
9		UNKNOWN ALKANE	15 54	300	J
10		UNKNOWN ALKANE	16 35	440	J
11		UNKNOWN ALKANE	17 13	290	J
12		UNKNOWN ALKANE	23 47	610	J
13		UNKNOWN ALKANE	24 49	360	J
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29					
30					

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO

ECCR3

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890027

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090027A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 59 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

Number TICs found 4

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN ALKANE	19 93	1400	J
2		UNKNOWN ALKANE	21 20	480	J
3		UNKNOWN ALKANE	23 45	620	J
4		UNKNOWN ALKANE	24 49	290	J
5					
6					
7					
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9					
10					
11					
12					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO

ECCR4

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890028

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090028A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 41 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 1

Number TICs found 3

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN ALKANE	21 20	1100	J
2		UNKNOWN ALKANE	22 36	3900	J
3		UNKNOWN ALKANE	23 45	1300	J
4					
5					
6					
7					
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12					
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27					
28					
29					
30					

1FA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO

ECCR5

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890029

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090029B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 62 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 4

Number TICs found 4

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN ALKANE	18 61	640	J
2		UNKNOWN ALKANE	19 29	1200	J
3		UNKNOWN ALKANE	21 21	1900	J
4		UNKNOWN ALKANE	23 47	1800	J
5					
6					
7					
8					
9					
10					
11					
12					
13					
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29					
30					

1FA

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO

ECCR6

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890030

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090030B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 6

Number TICs found 14

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN ALKANE	9 66	380	J
2		UNKNOWN ALKANE	10 79	410	J
3		UNKNOWN ALKANE	11 46	310	J
4		UNKNOWN ALKANE	11 84	430	J
5		UNKNOWN ALKANE	12 83	350	J
6		UNKNOWN ALKANE	13 78	1100	J
7		UNKNOWN ALKANE	13 83	510	J
8		UNKNOWN ALKANE	14 68	320	J
9		UNKNOWN ALKANE	14 77	320	J
10		UNKNOWN ALKANE	19 94	1600	J
11		UNKNOWN ALKANE	21 21	6400	J
12		UNKNOWN ALKANE	21 79	720	J
13		UNKNOWN ALKANE	22 39	9000	J
14		UNKNOWN ALKANE	23 47	1800	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO

ECCR7

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890031

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090031B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 42 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

Number TICs found 2

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN ALKANE	21 19	540	J
2		UNKNOWN ALKANE	23 47	480	J
3					
4					
5					
6					
7					
8					
9					
10					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO

ECCR8

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890032

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090032B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 44 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

Number TICs found 4

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN ALKANE	19 94	200	J
2		UNKNOWN ALKANE	21 20	330	J
3		UNKNOWN ALKANE	23 47	420	J
4		UNKNOWN ALKANE	24 49	220	J
5					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO

ECCR9

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890033

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090033B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 35 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 9

Number TICs found 3

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	UNKNOWN ALKANE	21 19	180	J
2	UNKNOWN ALKANE	23 47	440	J
3	UNKNOWN ALKANE	24 49	310	J
4				
5				
6				
7				
8				
9				
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO

ECCS0

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890034

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090034B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 36 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 4

Number TICs found 3

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN ALKANE	21 20	140	J
2		UNKNOWN ALKANE	23 45	320	J
3		UNKNOWN ALKANE	24 49	200	J
4					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO

ECCS1

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU - Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890035

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090035A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500 (uL) Date Analyzed 04/30/98

Injection Volume 2 0 (uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 8

Number TICs found 4

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	UNKNOWN ALKANE	18 59	320	J
2	UNKNOWN ALKANE	23 45	530	J
3	UNKNOWN ALKANE	24 47	170	J
4	UNKNOWN ALKANE	25 46	210	J
5				
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Notification Regarding Manual Editing/Integration Flags

In some instances manual adjustments to the software output are necessary to provide accurate data These adjustments are performed by the data reviewer GC/MS operator or GC chemist An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration of each compound to demonstrate the accuracy of that process Adjustments are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis and in the Flags column for GC analysis The manual editing/integration flags are

M Denotes that a manual integration has been performed for this compound The manual integration was performed in order to provide the most accurate area count as possible for the peak

H Denotes that the data reviewer GC/MS operator or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound No manual integration is performed in choosing an alternate peak The software still performs the integration

MH Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed The manual integration was performed in order to provide the most accurate area count possible for the peak

L Denotes that the data reviewer or GC MS operator has selected an alternate library search This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched No manual integration is performed in choosing an alternate peak The software still performs the integration

ML Denotes that an alternate library search has been selected and a manual integration has also been performed This is typically done when an additional TIC has been added and the TIC peak also required a manual integration

With the introduction of the current EPA CLP SOW (Document Number OLM03 0 plus revisions) additional explanations for manual editing/integration are required In the accompanying raw data packages additional codes have been applied to the M flag and carry the following meanings

M1 The compound was not found by the automatic integration routine

M2 The compound was incorrectly integrated by the automatic integration routine

M3 The co eluting compounds were incorrectly integrated by the automatic integration routine

These codes will appear in the GC/MS and GC data packages

Robert E. Meierer

Robert E Meierer
Vice President

DATA REPORTING QUALIFIERS (continued)

B This flag is used when the analyte is found in the associated blank as well as in the sample It indicates probable blank contamination and warns the data user to take appropriate action This flag is used for a TIC as well as for a positively identified target compound The combination of flags BU or UB is not an allowable policy Blank contaminants are flagged B only when they are detected in the sample

E This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis If one or more compounds have a response greater than the upper level of the calibration range the sample or extract will be diluted and reanalyzed All such compounds with a response greater than the upper level of the calibration range will have the concentration flagged with an E on Form I for the original analysis

D If a sample or extract is reanalyzed at a higher dilution factor for example when the concentration of an analyte exceeds the upper calibration range the DL suffix is appended to the sample number on Form I for the more diluted sample and **all** reported concentrations on that Form I are flagged with the D flag This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract

NOTE 1 The D flag is not applied to compounds which are not detected in the sample analysis i e compounds reported with the CRQL and the U flag

NOTE 2 Separate Form Is are used for reporting the original analysis (Client Sample No XXXXX) and the more diluted sample analysis (Client Sample No XXXXXDL) i e the results from both analyses <u>are not combined</u> on a single Form I

A This flag indicates that a TIC is a suspected aldol condensation product

X/Y/Z Other specific flags may be required to properly define the results If used the flags will be fully described in the SDG Narrative The laboratory defined flags are limited to X Y and Z

DATA REPORTING QUALIFIERS

On the Form I under the column labeled Q for qualifier each result is flagged with the specific data reporting qualifiers listed below as appropriate Up to five qualifiers may be reported on Form I for each compound The qualifiers used are

U This flag indicates the compound was analyzed for but not detected The Contract Required Quantitation Limit (CRQL) or reporting limit will be adjusted to reflect any dilution and for soils the percent moisture

J This flag indicates an estimated value The flag is used as detailed below

1 When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1 0 is assumed for the TIC analyte

2 When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria and the result is less than the CRQL but greater than zero and

3 When the retention time data indicate the presence of a compound that mee s the pesticide/Aroclor or other GC or HPLC identification criteria and the result is less than the CRQL but greater than zero For example if the sample quantitation limit is 10 µg/L but a concentration of 3 µg/L is calculated it is reported as 3J

N This flag indicates presumptive evidence of a compound This flag is only used for TICs where the identification is based on a mass spectral library search For generic characterization of a TIC such as chlorinated hydrocarbon the N flag is not used

P This flag is used for a pesticide/Aroclor target analyte and other GC or HPLC analytes when there is greater than 25% difference for detected concentrations between the two GC or HPLC columns The lower of the two values is reported on Form I and flagged with a P

C This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS If GC/MS confirmation was attempted but was unsuccessful this flag is not applied a laboratory defined flag is used instead (see the X/Y/Z qualifier)

CompuChem
a division of Liberty Analytical Corporation

Quality Assurance Notice

The EPA CLP SOW (Document Number OLM03 0 plus revisions) requires for tentatively identified compound (TIC) assessment that certain items should not be reported These include for volatile organics carbon dioxide and semivolatile TCL analytes and for semivolatile organics, volatile organics listed in Exhibit C

In order to assist the data review/validation process by our clients if we detect carbon dioxide or semivolatile TCL analytes at or above 10% of the closest internal standard we will report them on the Form I VOA-TIC but not include them as part of the thirty (30) TICs required Similarly if we detect volatile TCL analytes from Exhibit C at or above 10% of the closest internal standard during the TIC assessment of the semivolatile analysis we will report them on the Form I SV TIC but not include them as part of the thirty (30) TICs required The library search raw data for these TICs are also included The total number of TICs listed on the Form I in the Number of TICs field will include these items

We feel this approach will aid the data review/validation process by our clients since we will be accounting for all peaks required to be searched as well as any other comparably sized peaks present on the reconstructed ion chromatogram (RIC)

Robert E. Meierer
Vice President

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Level (low/med) LOW

	EPA SAMPLE NO	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLKX1	101	103	96		0
02	ECCR2	103	97	98		0
03	ECCR3	108	106	101		0
04	ECCR4	105	93	96		0
05	ECCR6	111	104	99		0
06	VIBLKLA	98	103	106		0
07	ECCR7	106	97	102		0
08	ECCR9	108	101	100		0
09	ECCS0	116	94	100		0
10	ECCS1	107	99	107		0
11	VBLKG4	99	97	94		0
12	ECCS1MS	98	92	97		0
13	ECCS1MSD	103	96	97		0
14	ECCR6DL	106	103	97		0
15	ECCR5	108	100	98		0
16	ECCR8	107	96	96		0
17	VHBLKW8	103	102	96		0
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		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(84-138)
SMC2 (BFB)	= Bromofluorobenzene	(59-113)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix Spike - EPA Sample No ECCS1 Level (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
1,1-Dichloroethene	71 43	0 000	80 07	112	59-172
Trichloroethene	71 43	0 000	74 45	104	62-137
Benzene	71 43	0 000	74 89	105	66-142
Toluene	71 43	0 000	73 54	103	59-139
Chlorobenzene	71 43	0 000	74 79	105	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
1,1-Dichloroethene	71 43	80 42	112	0	22	59-172
Trichloroethene	71 43	75 80	106	2	24	62-137
Benzene	71 43	77 58	109	4	21	66-142
Toluene	71 43	78 51	110	6	21	59-139
Chlorobenzene	71 43	77 64	109	4	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD 0 out of 5 outside limits
Spike Recovery 0 out of 10 outside limits

COMMENTS

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO

VBLKX1

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Lab File ID GH090304B55 Lab Sample ID 890304

Date Analyzed 04/30/98 Time Analyzed 1837

GC Column DB624 ID 0 53 (mm) Heated Purge (Y/N) Y

Instrument ID F50055

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ECCR2	890016	GH090016B55	2140
02	ECCR3	890027	GH090027B55	2211
03	ECCR4	890028	GH090028B55	2242
04	ECCR6	890030	GH090030B55	2311
05	VIBLKLA	VIBLKLA	GC980430B55	0012
06	ECCR7	890031	GH090031B55	0058
07	ECCR9	890033	GH090033B55	0135
08	ECCS0	890034	GH090034B55	0212
09	ECCS1	890035	GH090035B55	0249
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COMMENTS

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO

VBLKG4

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Lab File ID GH091345A55 Lab Sample ID 891345

Date Analyzed 05/01/98 Time Analyzed 0805

GC Column DB624 ID 0 53 (mm) Heated Purge (Y/N) Y

Instrument ID F50055

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ECCS1MS	890018	GR090018A55	0852
02	ECCS1MSD	890019	GR090019A55	0934
03	ECCR6DL	890030	GR090030A55	1436
04	ECCR5	890029	G2R90029A55	1621
05	ECCR8	890032	G2R90032A55	1704
06	VHBLKW8	890020	GH090020A55	1734
07				
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COMMENTS

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

VBLKX1

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890304

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090304B55

Level (low/med) LOW Date Received _____

% Moisture not dec _____ Date Analyzed 04/30/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

EPA SAMPLE NO

VBLKX1

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890304

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090304B55

Level (low/med) LOW Date Received _____

% Moisture not dec _____ Date Analyzed 04/30/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 91	314	J
2					
3					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

VBLKG4

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 891345

Sample wt/vol 5 0 (g/mL) g Lab File ID GH091345A55

Level (low/med) LOW Date Received _____

% Moisture not dec _____ Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E

EPA SAMPLE NO

VBLKG4

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 891345

Sample wt/vol 5 0 (g/mL) g Lab File ID GH091345A55

Level (low/med) LOW Date Received _____

% Moisture not dec _____ Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 91	177	J
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
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23					
24					
25					
26					
27					
28					
29					
30					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR2
X201

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890016

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090016B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 40 Date Analyzed 04/30/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	17	U
74-83-9	Bromomethane	17	U
75-01-4	Vinyl Chloride	17	U
75-00-3	Chloroethane	17	U
75-09-2	Methylene Chloride	17 ~~11~~	JBU
67-64-1	Acetone	17	U
75-15-0	Carbon Disulfide	17	U
75-35-4	1,1-Dichloroethene	17	U
75-34-3	1,1-Dichloroethane	17	U
540-59-0	1,2-Dichloroethene (total)	17	U
67-66-3	Chloroform	17	U
107-06-2	1,2-Dichloroethane	17	U
78-93-3	2-Butanone	17	U
71-55-6	1,1,1-Trichloroethane	17	U
56-23-5	Carbon Tetrachloride	17	U
75-27-4	Bromodichloromethane	17	U
78-87-5	1,2-Dichloropropane	17	U
10061-01-5	cis-1,3-Dichloropropene	17	U
79-01-6	Trichloroethene	17	U
124-48-1	Dibromochloromethane	17	U
79-00-5	1,1,2-Trichloroethane	17	U
71-43-2	Benzene	17	U
10061-02-6	trans-1,3-Dichloropropene	17	U
75-25-2	Bromoform	17	U
108-10-1	4-Methyl-2-Pentanone	17	U
591-78-6	2-Hexanone	17	U
127-18-4	Tetrachloroethene	17	U
79-34-5	1,1,2,2-Tetrachloroethane	17	U
108-88-3	Toluene	17	U
108-90-7	Chlorobenzene	17	U
100-41-4	Ethylbenzene	17	U
100-42-5	Styrene	17	U
1330-20-7	Xylene (Total)	17	U

JBS 6/10/98

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ECCR2
X201

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890016

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090016B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 40 Date Analyzed 04/30/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 84	1710	JB
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR3
X202

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890027

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090027B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 59 Date Analyzed 04/30/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	24	U
74-83-9	Bromomethane	24	U
75-01-4	Vinyl Chloride	24	U
75-00-3	Chloroethane	24	U
75-09-2	Methylene Chloride	24 ~~16~~	JBK
67-64-1	Acetone	36	
75-15-0	Carbon Disulfide	24	U
75-35-4	1,1-Dichloroethene	24	U
75-34-3	1,1-Dichloroethane	24	U
540-59-0	1,2-Dichloroethene (total)	24	U
67-66-3	Chloroform	24	U
107-06-2	1,2-Dichloroethane	24	U
78-93-3	2-Butanone	24	U
71-55-6	1,1,1-Trichloroethane	24	U
56-23-5	Carbon Tetrachloride	24	U
75-27-4	Bromodichloromethane	24	U
78-87-5	1,2-Dichloropropane	24	U
10061-01-5	cis-1,3-Dichloropropene	24	U
79-01-6	Trichloroethene	24	U
124-48-1	Dibromochloromethane	24	U
79-00-5	1,1,2-Trichloroethane	24	U
71-43-2	Benzene	24	U
10061-02-6	trans-1,3-Dichloropropene	24	U
75-25-2	Bromoform	24	U
108-10-1	4-Methyl-2-Pentanone	19	J
591-78-6	2-Hexanone	24	U
127-18-4	Tetrachloroethene	24	U
79-34-5	1,1,2,2-Tetrachloroethane	24	U
108-88-3	Toluene	16	J
108-90-7	Chlorobenzene	3	J
100-41-4	Ethylbenzene	28	
100-42-5	Styrene	24	U
1330-20-7	Xylene (Total)	95	

JBK 6/10/98

1E

EPA SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ECCR3
X202

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890027

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090027B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 59 Date Analyzed 04/30/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 4

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 77	5100	J
2	75-65-0	2-PROPANOL, 2-METHYL-	4 40	24	NJ
3		DIMETHYLHEPTANONE	15 93	19	J
4		SEMI TCL (NOT IN TIC TOTAL)	17 29	20	J
5					
6					
7					
8					
9					
10					
11					
12					
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14					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR4
X203

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890028

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090028B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 41 Date Analyzed 04/30/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	17	U
74-83-9	Bromomethane	17	U
75-01-4	Vinyl Chloride	17	U
75-00-3	Chloroethane	17	U
75-09-2	Methylene Chloride	17 ~~9~~ ~~UB~~ u	D 25 6/10/98
67-64-1	Acetone	10	J
75-15-0	Carbon Disulfide	17	U
75-35-4	1,1-Dichloroethene	17	U
75-34-3	1,1-Dichloroethane	17	U
540-59-0	1,2-Dichloroethene (total)	17	U
67-66-3	Chloroform	17	U
107-06-2	1,2-Dichloroethane	17	U
78-93-3	2-Butanone	17	U
71-55-6	1,1,1-Trichloroethane	17	U
56-23-5	Carbon Tetrachloride	17	U
75-27-4	Bromodichloromethane	17	U
78-87-5	1,2-Dichloropropane	17	U
10061-01-5	cis-1,3-Dichloropropene	17	U
79-01-6	Trichloroethene	17	U
124-48-1	Dibromochloromethane	17	U
79-00-5	1,1,2-Trichloroethane	17	U
71-43-2	Benzene	17	U
10061-02-6	trans-1,3-Dichloropropene	17	U
75-25-2	Bromoform	17	U
108-10-1	4-Methyl-2-Pentanone	17	U
591-78-6	2-Hexanone	17	U
127-18-4	Tetrachloroethene	17	U
79-34-5	1,1,2,2-Tetrachloroethane	17	U
108-88-3	Toluene	17	U
108-90-7	Chlorobenzene	17	U
100-41-4	Ethylbenzene	2	J
100-42-5	Styrene	17	U
1330-20-7	Xylene (Total)	6	J

1E

EPA SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ECCR4
X203

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890028

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090028B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 41 Date Analyzed 04/30/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	CO2 (NOT IN TIC TOTAL)	0 77	2774	J
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR5
X204

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890029

Sample wt/vol 5 0 (g/mL) g Lab File ID G2R90029A55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 62 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	26	U
74-83-9	Bromomethane	26	U
75-01-4	Vinyl Chloride	26	U
75-00-3	Chloroethane	26	U
75-09-2	Methylene Chloride	5	J
67-64-1	Acetone	26	U
75-15-0	Carbon Disulfide	26	U
75-35-4	1,1-Dichloroethene	26	U
75-34-3	1,1-Dichloroethane	26	U
540-59-0	1,2-Dichloroethene (total)	26	U
67-66-3	Chloroform	26	U
107-06-2	1,2-Dichloroethane	26	U
78-93-3	2-Butanone	26	U
71-55-6	1,1,1-Trichloroethane	26	U
56-23-5	Carbon Tetrachloride	26	U
75-27-4	Bromodichloromethane	26	U
78-87-5	1,2-Dichloropropane	26	U
10061-01-5	cis-1,3-Dichloropropene	26	U
79-01-6	Trichloroethene	26	U
124-48-1	Dibromochloromethane	26	U
79-00-5	1,1,2-Trichloroethane	26	U
71-43-2	Benzene	26	U
10061-02-6	trans-1,3-Dichloropropene	26	U
75-25-2	Bromoform	26	U
108-10-1	4-Methyl-2-Pentanone	26	U
591-78-6	2-Hexanone	26	U
127-18-4	Tetrachloroethene	26	U
79-34-5	1,1,2,2-Tetrachloroethane	26	U
108-88-3	Toluene	26	U
108-90-7	Chlorobenzene	26	U
100-41-4	Ethylbenzene	26	U
100-42-5	Styrene	26	U
1330-20-7	Xylene (Total)	5	J

1E

EPA SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ECCR5
X204

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890029

Sample wt/vol 5 0 (g/mL) g Lab File ID G2R90029A55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 62 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 84	4545	JB
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
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28					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR6
X205

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890030

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090030B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 30 Date Analyzed 04/30/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	14 ~~10~~	~~JB~~ U
67-64-1	Acetone	50	
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	750	E
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (Total)	14	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR6
X205

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890030

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090030B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 30 Date Analyzed 04/30/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 75	2709	J
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
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EPA SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET

ECCR6DL
X205DL

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890030

Sample wt/vol 1 0 (g/mL) g Lab File ID GR090030A55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 30 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	71	U
74-83-9	Bromomethane	71	U
75-01-4	Vinyl Chloride	71	U
75-00-3	Chloroethane	71	U
75-09-2	Methylene Chloride	10	DJ
67-64-1	Acetone	23	DJ
75-15-0	Carbon Disulfide	71	U
75-35-4	1,1-Dichloroethene	71	U
75-34-3	1,1-Dichloroethane	71	U
540-59-0	1,2-Dichloroethene (total)	71	U
67-66-3	Chloroform	71	U
107-06-2	1,2-Dichloroethane	71	U
78-93-3	2-Butanone	71	U
71-55-6	1,1,1-Trichloroethane	71	U
56-23-5	Carbon Tetrachloride	71	U
75-27-4	Bromodichloromethane	71	U
78-87-5	1,2-Dichloropropane	71	U
10061-01-5	cis-1,3-Dichloropropene	71	U
79-01-6	Trichloroethene	71	U
124-48-1	Dibromochloromethane	71	U
79-00-5	1,1,2-Trichloroethane	71	U
71-43-2	Benzene	71	U
10061-02-6	trans-1,3-Dichloropropene	71	U
75-25-2	Bromoform	71	U
108-10-1	4-Methyl-2-Pentanone	71	U
591-78-6	2-Hexanone	71	U
127-18-4	Tetrachloroethene	71	U
79-34-5	1,1,2,2-Tetrachloroethane	71	U
108-88-3	Toluene	150	D
108-90-7	Chlorobenzene	71	U
100-41-4	Ethylbenzene	71	U
100-42-5	Styrene	71	U
1330-20-7	Xylene (Total)	71	U

1E

EPA SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ECCR6DL
X205 DL

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890030

Sample wt/vol 1 0 (g/mL) g Lab File ID GR090030A55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 30 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 88	2397	JBD
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR7
X206

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890031

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090031B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 42 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	17	U
74-83-9	Bromomethane	17	U
75-01-4	Vinyl Chloride	17	U
75-00-3	Chloroethane	17	U
75-09-2	Methylene Chloride	(17) ~~11~~	JBL
67-64-1	Acetone	17	U
75-15-0	Carbon Disulfide	17	U
75-35-4	1,1-Dichloroethene	17	U
75-34-3	1,1-Dichloroethane	17	U
540-59-0	1,2-Dichloroethene (total)	17	U
67-66-3	Chloroform	17	U
107-06-2	1,2-Dichloroethane	17	U
78-93-3	2-Butanone	17	U
71-55-6	1,1,1-Trichloroethane	17	U
56-23-5	Carbon Tetrachloride	17	U
75-27-4	Bromodichloromethane	17	U
78-87-5	1,2-Dichloropropane	17	U
10061-01-5	cis-1,3-Dichloropropene	17	U
79-01-6	Trichloroethene	17	U
124-48-1	Dibromochloromethane	17	U
79-00-5	1,1,2-Trichloroethane	17	U
71-43-2	Benzene	17	U
10061-02-6	trans-1,3-Dichloropropene	17	U
75-25-2	Bromoform	17	U
108-10-1	4-Methyl-2-Pentanone	17	U
591-78-6	2-Hexanone	17	U
127-18-4	Tetrachloroethene	17	U
79-34-5	1,1,2,2-Tetrachloroethane	17	U
108-88-3	Toluene	17	U
108-90-7	Chlorobenzene	17	U
100-41-4	Ethylbenzene	17	U
100-42-5	Styrene	17	U
1330-20-7	Xylene (Total)	17	U

DLS 6/1/98

1E

EPA SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ECCR7
X206

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890031

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090031B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 42 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 82	2156	JB
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
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23					
24					
25					
26					
27					
28					
29					
30					

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO
ECCR8
X207

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890032

Sample wt/vol 5 0 (g/mL) g Lab File ID G2R90032A55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 44 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	18	U
74-83-9	Bromomethane	18	U
75-01-4	Vinyl Chloride	18	U
75-00-3	Chloroethane	18	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	18	U
75-35-4	1 1-Dichloroethene	18	U
75-34-3	1,1-Dichloroethane	18	U
540-59-0	1,2-Dichloroethene (total)	18	U
67-66-3	Chloroform	18	U
107-06-2	1,2-Dichloroethane	18	U
78-93-3	2-Butanone	18	U
71-55-6	1,1,1-Trichloroethane	18	U
56-23-5	Carbon Tetrachloride	18	U
75-27-4	Bromodichloromethane	18	U
78-87-5	1 2-Dichloropropane	18	U
10061-01-5	cis-1,3-Dichloropropene	18	U
79-01-6	Trichloroethene	18	U
124-48-1	Dibromochloromethane	18	U
79-00-5	1,1,2-Trichloroethane	18	U
71-43-2	Benzene	18	U
10061-02-6	trans-1,3-Dichloropropene	18	U
75-25-2	Bromoform	18	U
108-10-1	4-Methyl-2-Pentanone	18	U
591-78-6	2-Hexanone	18	U
127-18-4	Tetrachloroethene	18	U
79-34-5	1,1,2 2-Tetrachloroethane	18	U
108-88-3	Toluene	18	U
108-90-7	Chlorobenzene	18	U
100-41-4	Ethylbenzene	18	U
100-42-5	Styrene	18	U
1330-20-7	Xylene (Total)	18	U

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO
ECCR8
X207

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890032

Sample wt/vol 5 0 (g/mL) g Lab File ID G2R90032A55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 44 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1 CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 81	2167	J
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR9
X208

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890033

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090033B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 35 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	15	U
74-83-9	Bromomethane	15	U
75-01-4	Vinyl Chloride	15	U
75-00-3	Chloroethane	15	U
75-09-2	Methylene Chloride	15 ~~11~~	JB U
67-64-1	Acetone	15	U
75-15-0	Carbon Disulfide	15	U
75-35-4	1,1-Dichloroethene	15	U
75-34-3	1,1-Dichloroethane	15	U
540-59-0	1,2-Dichloroethene (total)	15	U
67-66-3	Chloroform	15	U
107-06-2	1 2-Dichloroethane	15	U
78-93-3	2-Butanone	15	U
71-55-6	1,1,1-Trichloroethane	15	U
56-23-5	Carbon Tetrachloride	15	U
75-27-4	Bromodichloromethane	15	U
78-87-5	1,2-Dichloropropane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
79-01-6	Trichloroethene	15	U
124-48-1	Dibromochloromethane	15	U
79-00-5	1,1,2-Trichloroethane	15	U
71-43-2	Benzene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
75-25-2	Bromoform	15	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
108-88-3	Toluene	15	U
108-90-7	Chlorobenzene	15	U
100-41-4	Ethylbenzene	15	U
100-42-5	Styrene	15	U
1330-20-7	Xylene (Total)	15	U

DMS 6/11/98

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EPA SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ECCR9
X208

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890033

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090033B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 35 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 85	1557	JB
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS0
X209

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890034

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090034B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 36 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	16	U
74-83-9	Bromomethane	16	U
75-01-4	Vinyl Chloride	16	U
75-00-3	Chloroethane	16	U
75-09-2	Methylene Chloride	16 ~~11~~	JBU
67-64-1	Acetone	16	U
75-15-0	Carbon Disulfide	16	U
75-35-4	1,1-Dichloroethene	16	U
75-34-3	1,1-Dichloroethane	16	U
540-59-0	1,2-Dichloroethene (total)	16	U
67-66-3	Chloroform	16	U
107-06-2	1,2-Dichloroethane	16	U
78-93-3	2-Butanone	16	U
71-55-6	1,1,1-Trichloroethane	16	U
56-23-5	Carbon Tetrachloride	16	U
75-27-4	Bromodichloromethane	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
79-01-6	Trichloroethene	16	U
124-48-1	Dibromochloromethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
71-43-2	Benzene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
75-25-2	Bromoform	16	U
108-10-1	4-Methyl-2-Pentanone	16	U
591-78-6	2-Hexanone	16	U
127-18-4	Tetrachloroethene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
108-88-3	Toluene	16	U
108-90-7	Chlorobenzene	16	U
100-41-4	Ethylbenzene	16	U
100-42-5	Styrene	16	U
1330-20-7	Xylene (Total)	16	U

DLS 6/1/98

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCS0
X209

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890034

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090034B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 36 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 82	2268	JB
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS1
X210

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890035

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090035B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 30 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	14 ~~5~~ ~~JB~~ u	SAS 6/10/98
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (Total)	14	U

1E

EPA SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ECCS1
X210

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890035

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090035B55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 30 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	CO2 (NOT IN TIC TOTAL)	0 79	1521	J
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

VHBLKW8

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890020

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090020A55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec _____ Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E

EPA SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VHBLKW8

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890020

Sample wt/vol 5 0 (g/mL) g Lab File ID GH090020A55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec _____ Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

Number TICs found 1

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		CO2 (NOT IN TIC TOTAL)	0 92	272	JB
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

EPA SAMPLE NO

VOLATILE ORGANICS ANALYSIS DATA SHEET

ECCS1MS

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890018

Sample wt/vol 5 0 (g/mL) g Lab File ID GR090018A55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 30 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	80	
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	74	
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	75	
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	74	
108-90-7	Chlorobenzene	75	
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (Total)	14	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS1MSD

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890019

Sample wt/vol 5 0 (g/mL) g Lab File ID GR090019A55

Level (low/med) LOW Date Received 04/23/98

% Moisture not dec 30 Date Analyzed 05/01/98

GC Column DB624 ID 0 53 (mm) Dilution Factor 1 0

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

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	80	
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	76	
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	78	
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	78	
108-90-7	Chlorobenzene	78	
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (Total)	14	U

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Level (low/med) LOW

	EPA SAMPLE NO	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	SBLKUP	105	96	124	111	106	110	84	100	0
02	ECCR3	97	103	131	107	83	118	91	68	0
03	ECCR4	99	94	126	87	95	102	106	91	0
04	ECCS1	101	101	130	96	85	123*	106	93	1
05	ECCS1MS	79	73	94	76	77	95	76	72	0
06	ECCS1MSD	72	72	102	74	66	100	73	65	0
07	ECCR5	75	81	108	75	75	122	85	72	0
08	ECCS0	76	75	85	75	67	92	68	68	0
09	ECCR2	106	91	104	104	114	104	97	95	0
10	ECCR8	72	81	108	69	91	94	82	73	0
11	ECCR9	78	73	89	65	67	84	86	80	0
12	ECCR7	93	84	96	87	84	97	86	81	0
13	ECCR6	94	97	114	77	86	106	77	78	0
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		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(23-120)	
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)	
S3 (TPH)	= Terphenyl-d14	(18-137)	
S4 (PHL)	= Phenol-d5	(24-113)	
S5 (2FP)	= 2-Fluorophenol	(25-121)	
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)	
S7 (2CP)	= 2-Chlorophenol-d4	(20-130)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(20-130)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix Spike - EPA Sample No ECCS1 Level (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
Phenol	3571	0 000	2942	82	26- 90
2-Chlorophenol	3571	0 000	2380	67	25-102
1,4-Dichlorobenzene	2381	0 000	1622	68	28-104
N-Nitroso-di-n-prop (1)	2381	0 000	1983	83	41-126
1,2,4-Trichlorobenzene	2381	0 000	1720	72	38-107
4-Chloro-3-methylphenol	3571	0 000	2780	78	26-103
Acenaphthene	2381	0 000	1836	77	31-137
4-Nitrophenol	3571	0 000	3838	107	11-114
2,4-Dinitrotoluene	2381	0 000	2117	89	28- 89
Pentachlorophenol	3571	0 000	3340	94	17-109
Pyrene	2381	0 000	2613	110	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
Phenol	3571	3156	88	7	35	26- 90
2-Chlorophenol	3571	2949	82	20	50	25-102
1,4-Dichlorobenzene	2381	1727	72	6	27	28-104
N-Nitroso-di-n-prop (1)	2381	1942	82	1	38	41-126
1,2,4-Trichlorobenzene	2381	1613	68	6	23	38-107
4-Chloro-3-methylphenol	3571	2715	76	2	33	26-103
Acenaphthene	2381	1775	74	4	19	31-137
4-Nitrophenol	3571	3733	104	3	50	11-114
2,4-Dinitrotoluene	2381	2087	88	1	47	28- 89
Pentachlorophenol	3571	3204	90	4	47	17-109
Pyrene	2381	2532	106	4	36	35-142

(1) N-Nitroso-di-n-propylamine
Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD 0 out of 11 outside limits
Spike Recovery 0 out of 22 outside limits

COMMENTS

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO

SBLKUP

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Lab File ID GH090291A64 Lab Sample ID 890291

Instrument ID 5972HP64 Date Extracted 04/27/98

Matrix (soil/water) SOIL Date Analyzed 04/30/98

Level (low/med) LOW Time Analyzed 1623

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	ECCR3	890027	GH090027A64	04/30/98
02	ECCR4	890028	GH090028A64	04/30/98
03	ECCS1	890035	GH090035A64	04/30/98
04	ECCS1MS	890022	GH090022B64	05/01/98
05	ECCS1MSD	890022	GH090023B64	05/01/98
06	ECCR5	890029	GH090029B64	05/01/98
07	ECCS0	890034	GH090034B64	05/01/98
08	ECCR2	890016	GH090016B64	05/01/98
09	ECCR8	890032	GH090032B64	05/01/98
10	ECCR9	890033	GH090033B64	05/01/98
11	ECCR7	890031	GH090031B64	05/01/98
12	ECCR6	890030	GH090030B64	05/01/98
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COMMENTS

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

SBLKUP

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890291

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090291A64

Level (low/med) LOW Date Received _____

% Moisture _____ decanted (Y/N)___ Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH ____

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

SBLKUP

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890291

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090291A64

Level (low/med) LOW Date Received _____

% Moisture _____ decanted (Y/N)___ Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH ____

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	35	J
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

SBLKUP

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890291

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090291A64

Level (low/med) LOW Date Received _____

% Moisture _____ decanted (Y/N)___ Date Extracted 04/27/98

Concentrated Extract Volume 0 (uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH ____

Number TICs found 6

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	UNKNOWN (BC)	5 88	120	J
2	UNKNOWN (BC)	6 03	180	J
3	UNKNOWN CARBOXYLIC ACID (BC)	16 02	270	J
4	UNKNOWN CARBOXYLIC ACID (BC)	17 59	73	J
5	UNKNOWN CARBOXYLIC ACID (BC)	19 91	160	J
6	UNKNOWN (BC)	21 99	160	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR2
X201

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890016

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090016B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 40 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 2

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	550	U
111-44-4	bis(2-Chloroethyl)ether	550	U
95-57-8	2-Chlorophenol	550	U
541-73-1	1,3-Dichlorobenzene	550	U
106-46-7	1,4-Dichlorobenzene	550	U
95-50-1	1,2-Dichlorobenzene	550	U
95-48-7	2-Methylphenol	550	U
108-60-1	2,2'-oxybis(1-Chloropropane)	550	U
106-44-5	4-Methylphenol	550	U
621-64-7	N-Nitroso-di-n-propylamine	550	U
67-72-1	Hexachloroethane	550	U
98-95-3	Nitrobenzene	550	U
78-59-1	Isophorone	550	U
88-75-5	2-Nitrophenol	550	U
105-67-9	2,4-Dimethylphenol	550	U
111-91-1	bis(2-Chloroethoxy)methane	550	U
120-83-2	2,4-Dichlorophenol	550	U
120-82-1	1,2,4-Trichlorobenzene	550	U
91-20-3	Naphthalene	550	U
106-47-8	4-Chloroaniline	550	U
87-68-3	Hexachlorobutadiene	550	U
59-50-7	4-Chloro-3-methylphenol	550	U
91-57-6	2-Methylnaphthalene	550	U
77-47-4	Hexachlorocyclopentadiene	550	U
88-06-2	2,4,6-Trichlorophenol	550	U
95-95-4	2,4,5-Trichlorophenol	1400	U
91-58-7	2-Chloronaphthalene	550	U
88-74-4	2-Nitroaniline	1400	U
131-11-3	Dimethylphthalate	550	U
208-96-8	Acenaphthylene	550	U
606-20-2	2,6-Dinitrotoluene	550	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	550	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR2
X201

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890016

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090016B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 40 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 2

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1400	U
100-02-7	4-Nitrophenol	1400	U
132-64-9	Dibenzofuran	550	U
121-14-2	2,4-Dinitrotoluene	550	U
84-66-2	Diethylphthalate	98	J
7005-72-3	4-Chlorophenyl-phenylether	550	U
86-73-7	Fluorene	550	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1400	U
86-30-6	N-nitrosodiphenylamine (1)	550	U
101-55-3	4-Bromophenyl-phenylether	550	U
118-74-1	Hexachlorobenzene	550	U
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	96	J
120-12-7	Anthracene	550	U
86-74-8	Carbazole	550	U
84-74-2	Di-n-butylphthalate	550	U
206-44-0	Fluoranthene	160	J
129-00-0	Pyrene	120	J
85-68-7	Butylbenzylphthalate	550	U
91-94-1	3,3'-Dichlorobenzidine	550	U
56-55-3	Benzo(a)anthracene	62	J
218-01-9	Chrysene	92	J
117-81-7	bis(2-Ethylhexyl)phthalate	550 ~~120~~ ~~JB~~ u	DAS 6/24/98
117-84-0	Di-n-octylphthalate	550	U
205-99-2	Benzo(b)fluoranthene	85	J
207-08-9	Benzo(k)fluoranthene	75	J
50-32-8	Benzo(a)pyrene	69	J
193-39-5	Indeno(1,2,3-cd)pyrene	550	U
53-70-3	Dibenzo(a,h)anthracene	550	U
191-24-2	Benzo(g,h,i)perylene	550	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR2
X201

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890016

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090016B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 40 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 2

Number TICs found 33

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	UNKNOWN	11 44	430	J
2	UNKNOWN CARBOXYLIC ACID	15 91	470	J
3	UNKNOWN CARBOXYLIC ACID	15 98	550	J
4	UNKNOWN CARBOXYLIC ACID (BC)	16 07	890	JB u
5	UNKNOWN	17 48	700	J
6	UNKNOWN CARBOXYLIC ACID (BC)	17 58	890	JB
7	UNKNOWN ALDEHYDE	18 08	310	J
8	UNKNOWN	18 52	370	J
9	UNKNOWN CARBOXYLIC ACID (BC)	19 91	780	JB u
10	UNKNOWN	21 19	380	J
11	UNKNOWN	22 00	250	J
12	UNKNOWN	24 28	290	J
13 83-48-7	STIGMASTEROL	24 43	360	NJ
14	UNKNOWN	24 54	350	J
15	UNKNOWN	24 63	290	J
16 83-47-6	GAMMA -SITOSTEROL	24 73	1200	NJ
17	UNKNOWN	24 80	560	J
18	UNKNOWN	24 89	260	J
19	UNKNOWN	24 94	420	J
20	UNKNOWN	25 00	330	J
21	UNKNOWN	25 05	300	J
22	UNKNOWN	25 12	380	J
23	UNKNOWN	25 17	270	J
24	UNKNOWN	25 23	280	J
25	UNKNOWN	25 35	340	J
26 1058-61-3	STIGMAST-4-EN-3-ONE	25 42	770	NJ
27	UNKNOWN	25 58	420	J
28	UNKNOWN	25 63	260	J
29	UNKNOWN	25 74	950	J
30	UNKNOWN	25 88	520	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR2
X201

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890016

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090016B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 40 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 2

Number TICs found 33

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	UNKNOWN	25 93	320	J
2	UNKNOWN	26 05	270	J
3	UNKNOWN	26 28	230	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR3
X202

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890027

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090027A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 59 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	800	U
111-44-4	bis(2-Chloroethyl)ether	800	U
95-57-8	2-Chlorophenol	800	U
541-73-1	1,3-Dichlorobenzene	800	U
106-46-7	1,4-Dichlorobenzene	800	U
95-50-1	1,2-Dichlorobenzene	800	U
95-48-7	2-Methylphenol	800	U
108-60-1	2,2'-oxybis(1-Chloropropane)	800	U
106-44-5	4-Methylphenol	120	J
621-64-7	N-Nitroso-di-n-propylamine	800	U
67-72-1	Hexachloroethane	800	U
98-95-3	Nitrobenzene	800	U
78-59-1	Isophorone	800	U
88-75-5	2-Nitrophenol	800	U
105-67-9	2,4-Dimethylphenol	800	U
111-91-1	bis(2-Chloroethoxy)methane	800	U
120-83-2	2,4-Dichlorophenol	800	U
120-82-1	1,2,4-Trichlorobenzene	800	U
91-20-3	Naphthalene	200	J
106-47-8	4-Chloroaniline	800	U
87-68-3	Hexachlorobutadiene	800	U
59-50-7	4-Chloro-3-methylphenol	800	U
91-57-6	2-Methylnaphthalene	800	U
77-47-4	Hexachlorocyclopentadiene	800	U
88-06-2	2,4,6-Trichlorophenol	800	U
95-95-4	2,4,5-Trichlorophenol	2000	U
91-58-7	2-Chloronaphthalene	800	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethylphthalate	800	U
208-96-8	Acenaphthylene	800	U
606-20-2	2,6-Dinitrotoluene	800	U
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	800	U

1C -

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR3
X202

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU - Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890027

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090027A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 59 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
132-64-9	Dibenzofuran	800	U
121-14-2	2,4-Dinitrotoluene	800	U
84-66-2	Diethylphthalate	800	U
7005-72-3	4-Chlorophenyl-phenylether	800	U
86-73-7	Fluorene	800	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-nitrosodiphenylamine (1)	800	U
101-55-3	4-Bromophenyl-phenylether	800	U
118-74-1	Hexachlorobenzene	800	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	800	U
120-12-7	Anthracene	800	U
86-74-8	Carbazole	800	U
84-74-2	Di-n-butylphthalate	800	U
206-44-0	Fluoranthene	93	J
129-00-0	Pyrene	800	U
85-68-7	Butylbenzylphthalate	800	U
91-94-1	3,3'-Dichlorobenzidine	800	U
56-55-3	Benzo(a)anthracene	800	U
218-01-9	Chrysene	800	U
117-81-7	bis(2-Ethylhexyl)phthalate	400 ~~530~~	~~JB~~ U
117-84-0	Di-n-octylphthalate	800	U
205-99-2	Benzo(b)fluoranthene	100	XJ
207-08-9	Benzo(k)fluoranthene	99	XJ
50-32-8	Benzo(a)pyrene	800	U
193-39-5	Indeno(1,2,3-cd)pyrene	800	U
53-70-3	Dibenzo(a,h)anthracene	800	U
191-24-2	Benzo(g,h,i)perylene	800	U

JAS 4/10/98

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR3
X202

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890027

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090027A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 59 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

Number TICs found 32

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	CYCLOHEXANOL	4 10	290	J
2	UNKNOWN KETONE	5 37	360	J
3	UNKNOWN	6 53	440	J
4	UNKNOWN	7 78	400	J
5	UNKNOWN	8 13	350	J
6	CYCLOOCTADIENE	13 48	440	J
7 934-34-9	2(3H)-BENZOTHIAZOLONE	13 56	660	NJ
8 125-40-6	BUTABARBITAL	14 37	960	NJ
9	UNKNOWN CARBOXYLIC ACID	14 89	570	J
10	UNKNOWN	14 96	330	J
11	UNKNOWN CARBOXYLIC ACID	15 90	2000	J
12	UNKNOWN	15 97	820	J
13	UNKNOWN CARBOXYLIC ACID (BC)	16 06	1700	JB
14	UNKNOWN	16 39	670	J
15 10544-50-0	SULFUR, MOL (S8)	16 72	440	NJ
16	UNKNOWN	17 20	990	J
17	UNKNOWN CARBOXYLIC ACID	17 46	920	J
18	UNKNOWN	17 59	3800	J
19	UNKNOWN	20 37	860	J
20	TRICHLOROTERPHENYL	20 55	560	J
21	UNKNOWN	21 99	340	J
22	UNKNOWN	24 26	650	J
23	UNKNOWN	24 42	430	J
24	UNKNOWN	24 74	2600	J
25	UNKNOWN	24 79	560	J
26	UNKNOWN	24 93	330	J
27	UNKNOWN	24 98	270	J
28	UNKNOWN	25 16	300	J
29	UNKNOWN	25 37	820	J
30	UNKNOWN	25 40	580	J

JB 6/1/98

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR3
X202

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890027

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090027A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 59 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

Number TICs found 32

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN	25 74	1400	J
2		UNKNOWN	25 86	1500	J
3					
4					
5					
6					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR4
X203

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890028

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090028A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 41 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 1

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	560	U
111-44-4	bis(2-Chloroethyl)ether	560	U
95-57-8	2-Chlorophenol	560	U
541-73-1	1,3-Dichlorobenzene	560	U
106-46-7	1,4-Dichlorobenzene	560	U
95-50-1	1,2-Dichlorobenzene	560	U
95-48-7	2-Methylphenol	560	U
108-60-1	2,2'-oxybis(1-Chloropropane)	560	U
106-44-5	4-Methylphenol	560	U
621-64-7	N-Nitroso-di-n-propylamine	560	U
67-72-1	Hexachloroethane	560	U
98-95-3	Nitrobenzene	560	U
78-59-1	Isophorone	560	U
88-75-5	2-Nitrophenol	560	U
105-67-9	2,4-Dimethylphenol	560	U
111-91-1	bis(2-Chloroethoxy)methane	560	U
120-83-2	2,4-Dichlorophenol	560	U
120-82-1	1,2,4-Trichlorobenzene	560	U
91-20-3	Naphthalene	560	U
106-47-8	4-Chloroaniline	560	U
87-68-3	Hexachlorobutadiene	560	U
59-50-7	4-Chloro-3-methylphenol	560	U
91-57-6	2-Methylnaphthalene	560	U
77-47-4	Hexachlorocyclopentadiene	560	U
88-06-2	2,4,6-Trichlorophenol	560	U
95-95-4	2,4,5-Trichlorophenol	1400	U
91-58-7	2-Chloronaphthalene	560	U
88-74-4	2-Nitroaniline	1400	U
131-11-3	Dimethylphthalate	560	U
208-96-8	Acenaphthylene	560	U
606-20-2	2,6-Dinitrotoluene	560	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	560	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR4
X203

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890028

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090028A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 41 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume ~~5~~500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 1

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1400	U
100-02-7	4-Nitrophenol	1400	U
132-64-9	Dibenzofuran	560	U
121-14-2	2,4-Dinitrotoluene	560	U
84-66-2	Diethylphthalate	560	U
7005-72-3	4-Chlorophenyl-phenylether	560	U
86-73-7	Fluorene	560	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1400	U
86-30-6	N-nitrosodiphenylamine (1)	560	U
101-55-3	4-Bromophenyl-phenylether	560	U
118-74-1	Hexachlorobenzene	560	U
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	560	U
120-12-7	Anthracene	560	U
86-74-8	Carbazole	560	U
84-74-2	Di-n-butylphthalate	560	U
206-44-0	Fluoranthene	560	U
129-00-0	Pyrene	560	U
85-68-7	Butylbenzylphthalate	560	U
91-94-1	3,3'-Dichlorobenzidine	560	U
56-55-3	Benzo(a)anthracene	560	U
218-01-9	Chrysene	560	U
117-81-7	bis(2-Ethylhexyl)phthalate	560 ~~200~~ ~~JB~~	~~U~~
117-84-0	Di-n-octylphthalate	560	U
205-99-2	Benzo(b)fluoranthene	560	U
207-08-9	Benzo(k)fluoranthene	560	U
50-32-8	Benzo(a)pyrene	560	U
193-39-5	Indeno(1,2,3-cd)pyrene	560	U
53-70-3	Dibenzo(a,h)anthracene	560	U
191-24-2	Benzo(g,h,i)perylene	560	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR4
X203

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890028

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090028A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 41 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 1

Number TICs found 32

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	PCB	14 59	450	J
2	UNKNOWN CARBOXYLIC ACID	14 89	370	J
3	UNKNOWN	15 05	250	J
4	UNKNOWN KETONE	15 92	2600	J
5	UNKNOWN	15 99	1500	J
6	UNKNOWN CARBOXYLIC ACID (BC)	16 07	1700	JB
7	PCB	17 01	410	J
8	PCB	17 38	630	J
9	UNKNOWN KETONE	17 46	1100	J
10	UNKNOWN CARBOXYLIC ACID (BC)	17 61	620	JB
11	UNKNOWN ALCOHOL	19 89	870	J
12	UNKNOWN	20 00	460	J
13	UNKNOWN CARBOXYLIC ACID	20 37	530	J
14	UNKNOWN	21 62	570	J
15	UNKNOWN	21 78	460	J
16	UNKNOWN ALDEHYDE	22 01	710	J
17 57-88-5	CHOLESTEROL	23 68	1300	NJ
18 474-67-9	ERGOSTA-5,22-DIEN-3-OL, (3 B	23 94	450	NJ
19	UNKNOWN	24 26	1200	J
20	UNKNOWN ALKENE	24 54	480	J
21 83-47-6	GAMMA -SITOSTEROL	24 74	5600	NJ
22	UNKNOWN	24 81	720	J
23	UNKNOWN	24 93	840	J
24	UNKNOWN	25 16	720	J
25	UNKNOWN	25 21	460	J
26	UNKNOWN	25 37	1400	J
27	UNKNOWN	25 41	1000	J
28	UNKNOWN	25 74	3500	J
29	UNKNOWN	25 86	2100	J
30	UNKNOWN	26 04	850	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR4
X203

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890028

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090028A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 41 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 1

Number TICs found 32

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	UNKNOWN	26 27	660	J
2	UNKNOWN	26 46	430	J
3				
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR5
X204

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890029

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090029B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 62 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 4

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	870	U
111-44-4	bis(2-Chloroethyl)ether	870	U
95-57-8	2-Chlorophenol	870	U
541-73-1	1,3-Dichlorobenzene	870	U
106-46-7	1,4-Dichlorobenzene	870	U
95-50-1	1,2-Dichlorobenzene	870	U
95-48-7	2-Methylphenol	870	U
108-60-1	2,2'-oxybis(1-Chloropropane)	870	U
106-44-5	4-Methylphenol	870	U
621-64-7	N-Nitroso-di-n-propylamine	870	U
67-72-1	Hexachloroethane	870	U
98-95-3	Nitrobenzene	870	U
78-59-1	Isophorone	870	U
88-75-5	2-Nitrophenol	870	U
105-67-9	2,4-Dimethylphenol	870	U
111-91-1	bis(2-Chloroethoxy)methane	870	U
120-83-2	2,4-Dichlorophenol	870	U
120-82-1	1,2,4-Trichlorobenzene	870	U
91-20-3	Naphthalene	870	U
106-47-8	4-Chloroaniline	870	U
87-68-3	Hexachlorobutadiene	870	U
59-50-7	4-Chloro-3-methylphenol	870	U
91-57-6	2-Methylnaphthalene	870	U
77-47-4	Hexachlorocyclopentadiene	870	U
88-06-2	2,4,6-Trichlorophenol	870	U
95-95-4	2,4,5-Trichlorophenol	2200	U
91-58-7	2-Chloronaphthalene	870	U
88-74-4	2-Nitroaniline	2200	U
131-11-3	Dimethylphthalate	870	U
208-96-8	Acenaphthylene	870	U
606-20-2	2,6-Dinitrotoluene	870	U
99-09-2	3-Nitroaniline	2200	U
83-32-9	Acenaphthene	870	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR5
X204

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890029

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090029B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 62 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 4

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	2200	U
100-02-7	4-Nitrophenol	2200	U
132-64-9	Dibenzofuran	870	U
121-14-2	2,4-Dinitrotoluene	870	U
84-66-2	Diethylphthalate	870	U
7005-72-3	4-Chlorophenyl-phenylether	870	U
86-73-7	Fluorene	870	U
100-01-6	4-Nitroaniline	2200	U
534-52-1	4,6-Dinitro-2-methylphenol	2200	U
86-30-6	N-nitrosodiphenylamine (1)	870	U
101-55-3	4-Bromophenyl-phenylether	870	U
118-74-1	Hexachlorobenzene	870	U
87-86-5	Pentachlorophenol	2200	U
85-01-8	Phenanthrene	870	U
120-12-7	Anthracene	870	U
86-74-8	Carbazole	870	U
84-74-2	Di-n-butylphthalate	870	U
206-44-0	Fluoranthene	130	J
129-00-0	Pyrene	100	J
85-68-7	Butylbenzylphthalate	870	U
91-94-1	3,3'-Dichlorobenzidine	870	U
56-55-3	Benzo(a)anthracene	870	U
218-01-9	Chrysene	99	J
117-81-7	bis(2-Ethylhexyl)phthalate	400 ~~800~~	JB
117-84-0	Di-n-octylphthalate	870	U
205-99-2	Benzo(b)fluoranthene	110	XJ
207-08-9	Benzo(k)fluoranthene	130	XJ
50-32-8	Benzo(a)pyrene	870	U
193-39-5	Indeno(1,2,3-cd)pyrene	870	U
53-70-3	Dibenzo(a,h)anthracene	870	U
191-24-2	Benzo(g,h,i)perylene	870	U

(1) - Cannot be separated from Diphenylamine

DKS 6/10/98

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR5
X204

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890029

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090029B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 62 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 4

Number TICs found 30

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	UNKNOWN	5 42	640	J
2	UNKNOWN CARBOXYLIC ACID	14 91	620	J
3	UNKNOWN CARBOXYLIC ACID	15 93	3000	J
4	UNKNOWN	16 00	1400	J
5	UNKNOWN CARBOXYLIC ACID	16 09	2000	J
6	UNKNOWN	17 21	660	J
7	UNKNOWN	17 48	780	J
8	UNKNOWN CARBOXYLIC ACID	17 62	1500	J
9	UNKNOWN	18 69	660	J
10	UNKNOWN CARBOXYLIC ACID	19 06	910	J
11	UNKNOWN	19 50	730	J
12	UNKNOWN ALKENE	19 91	900	J
13	TRICHLOROTERPHENYL	20 01	730	J
14	UNKNOWN	21 02	1200	J
15	TRICHLOROTERPHEYL	21 48	640	J
16	UNKNOWN	21 63	1300	J
17	UNKNOWN	21 79	1200	J
18	UNKNOWN	22 00	2600	J
19	BENZOFLUORANTHENE	22 22	1000	J
20	UNKNOWN	22 50	640	J
21	UNKNOWN	23 10	630	J
22	UNKNOWN	23 69	1300	J
23	UNKNOWN	24 45	860	J
24	UNKNOWN	24 75	4300	J
25	UNKNOWN	25 17	690	J
26	UNKNOWN	25 42	1600	J
27	UNKNOWN	25 75	3600	J
28	UNKNOWN	25 88	2900	J
29	UNKNOWN	26 28	1500	J
30	UNKNOWN	26 62	1100	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR6
X205

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890030

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090030B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 6

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	470	U
111-44-4	bis(2-Chloroethyl)ether	470	U
95-57-8	2-Chlorophenol	470	U
541-73-1	1,3-Dichlorobenzene	470	U
106-46-7	1,4-Dichlorobenzene	470	U
95-50-1	1,2-Dichlorobenzene	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470	U
106-44-5	4-Methylphenol	1000	
621-64-7	N-Nitroso-di-n-propylamine	470	U
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
111-91-1	bis(2-Chloroethoxy)methane	470	U
120-83-2	2,4-Dichlorophenol	470	U
120-82-1	1,2,4-Trichlorobenzene	470	U
91-20-3	Naphthalene	470	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	470	U
59-50-7	4-Chloro-3-methylphenol	470	U
91-57-6	2-Methylnaphthalene	470	U
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	1200	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	470	U
208-96-8	Acenaphthylene	470	U
606-20-2	2,6-Dinitrotoluene	470	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	470	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR6
X205

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890030

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090030B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 6

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1200	U
100-02-7	4-Nitrophenol	1200	U
132-64-9	Dibenzofuran	470	U
121-14-2	2,4-Dinitrotoluene	470	U
84-66-2	Diethylphthalate	470	U
7005-72-3	4-Chlorophenyl-phenylether	470	U
86-73-7	Fluorene	470	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-nitrosodiphenylamine (1)	470	U
101-55-3	4-Bromophenyl-phenylether	470	U
118-74-1	Hexachlorobenzene	470	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	120	J
120-12-7	Anthracene	470	U
86-74-8	Carbazole	470	U
84-74-2	Di-n-butylphthalate	470	U
206-44-0	Fluoranthene	150	J
129-00-0	Pyrene	140	J
85-68-7	Butylbenzylphthalate	470	U
91-94-1	3,3'-Dichlorobenzidine	470	U
56-55-3	Benzo(a)anthracene	52	J
218-01-9	Chrysene	78	J
117-81-7	bis(2-Ethylhexyl)phthalate	1800	B
117-84-0	Di-n-octylphthalate	470	U
205-99-2	Benzo(b)fluoranthene	100	XJ
207-08-9	Benzo(k)fluoranthene	120	XJ
50-32-8	Benzo(a)pyrene	470	U
193-39-5	Indeno(1,2,3-cd)pyrene	470	U
53-70-3	Dibenzo(a,h)anthracene	470	U
191-24-2	Benzo(g,h,i)perylene	470	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR6
X205

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890030

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090030B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 6

Number TICs found 28

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN	5 38	390	J
2		UNKNOWN	13 45	290	J
3		UNKNOWN ALKENE	13 60	1000	J
4		UNKNOWN CARBOXYLIC ACID	14 40	840	J
5		UNKNOWN CARBOXYLIC ACID	15 24	530	J
6		UNKNOWN	15 93	1000	J
7		UNKNOWN CARBOXYLIC ACID (BC)	16 02	530	JB u
8		UNKNOWN CARBOXYLIC ACID	16 12	2700	J
9	10544-50-0	SULFUR, MOL (S8)	16 76	1200	NJ
10		UNKNOWN	17 00	510	J
11		UNKNOWN	17 48	1600	J
12		UNKNOWN ACID ESTER	17 53	1700	J
13		UNKNOWN CARBOXYLIC ACID	17 64	700	J
14		UNKNOWN	18 69	690	J
15		UNKNOWN	20 38	2400	J
16		UNKNOWN	20 58	690	J
17		UNKNOWN ALDEHYDE	20 81	570	J
18		UNKNOWN CARBOXYLIC ACID	21 63	580	J
19		UNKNOWN ALDEHYDE	22 04	1900	J
20		UNKNOWN ALDEHYDE	23 17	560	J
21	57-88-5	CHOLESTEROL	23 69	1900	NJ
22		UNKNOWN	24 24	910	J
23		UNKNOWN	24 77	6400	J
24		UNKNOWN	25 19	1600	J
25		UNKNOWN	25 42	1700	J
26		UNKNOWN	25 75	2700	J
27		UNKNOWN	25 88	1400	J
28		UNKNOWN	26 30	1200	J
29					
30					

u -> 4/8/99

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR7
X206

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890031

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090031B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 42 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	570	U
111-44-4	bis(2-Chloroethyl)ether	570	U
95-57-8	2-Chlorophenol	570	U
541-73-1	1,3-Dichlorobenzene	570	U
106-46-7	1,4-Dichlorobenzene	570	U
95-50-1	1,2-Dichlorobenzene	570	U
95-48-7	2-Methylphenol	570	U
108-60-1	2,2'-oxybis(1-Chloropropane)	570	U
106-44-5	4-Methylphenol	570	U
621-64-7	N-Nitroso-di-n-propylamine	570	U
67-72-1	Hexachloroethane	570	U
98-95-3	Nitrobenzene	570	U
78-59-1	Isophorone	570	U
88-75-5	2-Nitrophenol	570	U
105-67-9	2,4-Dimethylphenol	570	U
111-91-1	bis(2-Chloroethoxy)methane	570	U
120-83-2	2,4-Dichlorophenol	570	U
120-82-1	1,2,4-Trichlorobenzene	570	U
91-20-3	Naphthalene	570	U
106-47-8	4-Chloroaniline	570	U
87-68-3	Hexachlorobutadiene	570	U
59-50-7	4-Chloro-3-methylphenol	570	U
91-57-6	2-Methylnaphthalene	570	U
77-47-4	Hexachlorocyclopentadiene	570	U
88-06-2	2,4,6-Trichlorophenol	570	U
95-95-4	2,4,5-Trichlorophenol	1400	U
91-58-7	2-Chloronaphthalene	570	U
88-74-4	2-Nitroaniline	1400	U
131-11-3	Dimethylphthalate	570	U
208-96-8	Acenaphthylene	570	U
606-20-2	2,6-Dinitrotoluene	570	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	570	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR7
X206

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890031

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090031B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 42 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500 (uL) Date Analyzed 05/01/98

Injection Volume 2 0 (uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1400	U
100-02-7	4-Nitrophenol	1400	U
132-64-9	Dibenzofuran	570	U
121-14-2	2,4-Dinitrotoluene	570	U
84-66-2	Diethylphthalate	570	U
7005-72-3	4-Chlorophenyl-phenylether	570	U
86-73-7	Fluorene	570	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1400	U
86-30-6	N-nitrosodiphenylamine (1)	570	U
101-55-3	4-Bromophenyl-phenylether	570	U
118-74-1	Hexachlorobenzene	570	U
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	280	J
120-12-7	Anthracene	570	U
86-74-8	Carbazole	570	U
84-74-2	Di-n-butylphthalate	570	U
206-44-0	Fluoranthene	350	J
129-00-0	Pyrene	340	J
85-68-7	Butylbenzylphthalate	570	U
91-94-1	3,3'-Dichlorobenzidine	570	U
56-55-3	Benzo(a)anthracene	110	J
218-01-9	Chrysene	150	J
117-81-7	bis(2-Ethylhexyl)phthalate	150 ~~120~~	JBa
117-84-0	Di-n-octylphthalate	570	U
205-99-2	Benzo(b)fluoranthene	270	XJ
207-08-9	Benzo(k)fluoranthene	310	XJ
50-32-8	Benzo(a)pyrene	130	J
193-39-5	Indeno(1,2,3-cd)pyrene	78	J
53-70-3	Dibenzo(a,h)anthracene	570	U
191-24-2	Benzo(g,h,i)perylene	100	J

DRS 6/10/98

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR7
X206

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890031

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090031B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 42 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

Number TICs found 30

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	UNKNOWN	5 42	390	J
2	DIMETHYLOCTADIENOL	10 61	420	J
3	UNKNOWN CARBOXYLIC ACID	14 38	610	J
4	UNKNOWN ACID ESTER	15 97	4200	J
5	UNKNOWN	16 02	860	J
6	UNKNOWN CARBOXYLIC ACID	16 11	1700	J
7	PHYTOL	17 27	540	J
8	UNKNOWN	17 41	790	J
9	UNKNOWN CARBOXYLIC ACID	17 50	1800	J
10	UNKNOWN CARBOXYLIC ACID	17 62	680	J
11	UNKNOWN	18 73	3800	J
12	UNKNOWN	18 87	460	J
13	UNKNOWN ALKENE	19 91	540	J
14	UNKNOWN	23 70	2200	J
15	UNKNOWN	23 96	730	J
16	UNKNOWN	24 29	2400	J
17	UNKNOWN	24 42	740	J
18	UNKNOWN	24 56	400	J
19	UNKNOWN	24 75	4800	J
20	UNKNOWN	24 82	1200	J
21	UNKNOWN	24 96	1000	J
22	UNKNOWN	25 02	710	J
23	UNKNOWN	25 05	680	J
24	UNKNOWN	25 19	640	J
25	UNKNOWN	25 24	660	J
26	UNKNOWN	25 39	3600	J
27	UNKNOWN	25 51	670	J
28	UNKNOWN	25 77	5400	J
29	UNKNOWN	25 91	6500	J
30	UNKNOWN	26 83	380	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR8
X207

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890032

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090032B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 44 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	590	U
111-44-4	bis(2-Chloroethyl)ether	590	U
95-57-8	2-Chlorophenol	590	U
541-73-1	1,3-Dichlorobenzene	590	U
106-46-7	1,4-Dichlorobenzene	590	U
95-50-1	1,2-Dichlorobenzene	590	U
95-48-7	2-Methylphenol	590	U
108-60-1	2,2'-oxybis(1-Chloropropane)	590	U
106-44-5	4-Methylphenol	590	U
621-64-7	N-Nitroso-di-n-propylamine	590	U
67-72-1	Hexachloroethane	590	U
98-95-3	Nitrobenzene	590	U
78-59-1	Isophorone	590	U
88-75-5	2-Nitrophenol	590	U
105-67-9	2,4-Dimethylphenol	590	U
111-91-1	bis(2-Chloroethoxy)methane	590	U
120-83-2	2,4-Dichlorophenol	590	U
120-82-1	1,2,4-Trichlorobenzene	590	U
91-20-3	Naphthalene	590	U
106-47-8	4-Chloroaniline	590	U
87-68-3	Hexachlorobutadiene	590	U
59-50-7	4-Chloro-3-methylphenol	590	U
91-57-6	2-Methylnaphthalene	590	U
77-47-4	Hexachlorocyclopentadiene	590	U
88-06-2	2,4,6-Trichlorophenol	590	U
95-95-4	2,4,5-Trichlorophenol	1500	U
91-58-7	2-Chloronaphthalene	590	U
88-74-4	2-Nitroaniline	1500	U
131-11-3	Dimethylphthalate	590	U
208-96-8	Acenaphthylene	590	U
606-20-2	2,6-Dinitrotoluene	590	U
99-09-2	3-Nitroaniline	1500	U
83-32-9	Acenaphthene	590	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR8
X207

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890032

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090032B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 44 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1500	U
100-02-7	4-Nitrophenol	1500	U
132-64-9	Dibenzofuran	590	U
121-14-2	2,4-Dinitrotoluene	590	U
84-66-2	Diethylphthalate	590	U
7005-72-3	4-Chlorophenyl-phenylether	590	U
86-73-7	Fluorene	590	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	1500	U
86-30-6	N-nitrosodiphenylamine (1)	590	U
101-55-3	4-Bromophenyl-phenylether	590	U
118-74-1	Hexachlorobenzene	590	U
87-86-5	Pentachlorophenol	1500	U
85-01-8	Phenanthrene	500	J
120-12-7	Anthracene	98	J
86-74-8	Carbazole	590	U
84-74-2	Di-n-butylphthalate	590	U
206-44-0	Fluoranthene	690	
129-00-0	Pyrene	560	J
85-68-7	Butylbenzylphthalate	590	U
91-94-1	3,3'-Dichlorobenzidine	590	U
56-55-3	Benzo(a)anthracene	280	J
218-01-9	Chrysene	290	J
117-81-7	bis(2-Ethylhexyl)phthalate	590 ~~140~~	JBU
117-84-0	Di-n-octylphthalate	590	U
205-99-2	Benzo(b)fluoranthene	480	XJ
207-08-9	Benzo(k)fluoranthene	560	XJ
50-32-8	Benzo(a)pyrene	250	J
193-39-5	Indeno(1,2,3-cd)pyrene	160	J
53-70-3	Dibenzo(a,h)anthracene	590	U
191-24-2	Benzo(g,h,i)perylene	160	J

DMS 6/10/98

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR8
X207

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890032

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090032B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 44 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3

Number TICs found 29

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN	5 37	430	J
2		UNKNOWN CARBOXYLIC ACID	14 35	430	J
3		UNKNOWN CARBOXYLIC ACID	15 91	1400	J
4		UNKNOWN	15 98	510	J
5		UNKNOWN CARBOXYLIC ACID	16 07	1000	J
6		UNKNOWN	17 00	260	J
7		UNKNOWN	17 39	290	J
8		UNKNOWN	17 48	640	J
9		UNKNOWN CARBOXYLIC ACID	17 62	390	J
10		UNKNOWN	18 08	220	J
11		UNKNOWN	18 69	780	J
12		UNKNOWN	21 00	210	J
13		UNKNOWN	21 64	200	J
14		UNKNOWN	22 01	440	J
15		BENZOPYRENE	22 22	190	J
16		UNKNOWN	22 60	130	J
17		UNKNOWN	23 70	590	J
18		UNKNOWN	23 94	170	J
19		UNKNOWN	24 26	280	J
20		UNKNOWN	24 35	410	J
21		UNKNOWN	24 43	230	J
22		UNKNOWN	24 73	730	J
23		UNKNOWN	24 82	310	J
24		UNKNOWN	24 95	290	J
25		UNKNOWN	25 17	200	J
26		UNKNOWN	25 42	430	J
27		UNKNOWN	25 61	460	J
28		UNKNOWN	25 74	240	J
29		UNKNOWN	26 05	170	J
30					

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR9
X208

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890033

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090033B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 35 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 9

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	510	U
111-44-4	bis(2-Chloroethyl)ether	510	U
95-57-8	2-Chlorophenol	510	U
541-73-1	1,3-Dichlorobenzene	510	U
106-46-7	1,4-Dichlorobenzene	510	U
95-50-1	1,2-Dichlorobenzene	510	U
95-48-7	2-Methylphenol	510	U
108-60-1	2,2'-oxybis(1-Chloropropane)	510	U
106-44-5	4-Methylphenol	510	U
621-64-7	N-Nitroso-di-n-propylamine	510	U
67-72-1	Hexachloroethane	510	U
98-95-3	Nitrobenzene	510	U
78-59-1	Isophorone	510	U
88-75-5	2-Nitrophenol	510	U
105-67-9	2,4-Dimethylphenol	510	U
111-91-1	bis(2-Chloroethoxy)methane	510	U
120-83-2	2,4-Dichlorophenol	510	U
120-82-1	1,2,4-Trichlorobenzene	510	U
91-20-3	Naphthalene	510	U
106-47-8	4-Chloroaniline	510	U
87-68-3	Hexachlorobutadiene	510	U
59-50-7	4-Chloro-3-methylphenol	510	U
91-57-6	2-Methylnaphthalene	510	U
77-47-4	Hexachlorocyclopentadiene	510	U
88-06-2	2,4,6-Trichlorophenol	510	U
95-95-4	2,4,5-Trichlorophenol	1300	U
91-58-7	2-Chloronaphthalene	510	U
88-74-4	2-Nitroaniline	1300	U
131-11-3	Dimethylphthalate	510	U
208-96-8	Acenaphthylene	510	U
606-20-2	2,6-Dinitrotoluene	510	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	510	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR9
X208

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890033

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090033B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 35 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 9

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1300	U
100-02-7	4-Nitrophenol	1300	U
132-64-9	Dibenzofuran	510	U
121-14-2	2,4-Dinitrotoluene	510	U
84-66-2	Diethylphthalate	510	U
7005-72-3	4-Chlorophenyl-phenylether	510	U
86-73-7	Fluorene	510	U
100-01-6	4-Nitroariline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-nitrosodiphenylamine (1)	510	U
101-55-3	4-Bromophenyl-phenylether	510	U
118-74-1	Hexachlorobenzene	510	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	100	J
120-12-7	Anthracene	510	U
86-74-8	Carbazole	510	U
84-74-2	Di-n-butylphthalate	510	U
206-44-0	Fluoranthene	170	J
129-00-0	Pyrene	130	J
85-68-7	Butylbenzylphthalate	510	U
91-94-1	3,3'-Dichlorobenzidine	510	U
56-55-3	Benzo(a)anthracene	63	J
218-01-9	Chrysene	81	J
117-81-7	bis(2-Ethylhexyl)phthalate	510 ~~78~~	JBU
117-84-0	Di-n-octylphthalate	510	U
205-99-2	Benzo(b)fluoranthene	120	XJ
207-08-9	Benzo(k)fluoranthene	140	XJ
50-32-8	Benzo(a)pyrene	65	J
193-39-5	Indeno(1,2,3-cd)pyrene	510	U
53-70-3	Dibenzo(a,h)anthracene	510	U
191-24-2	Benzo(g,h,i)perylene	510	U

DMS 6/10/98

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCR9
X208

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890033

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090033B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 35 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500 (uL) Date Analyzed 05/01/98

Injection Volume 2 0 (uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 9

Number TICs found 25

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	UNKNOWN (BC)	5 38	400	J
2	UNKNOWN	15 89	140	J
3	UNKNOWN CARBOXYLIC ACID (BC)	16 05	400	JBU
4	UNKNOWN	17 44	230	J
5	UNKNOWN ALKENE	19 91	290	J
6	UNKNOWN ALDEHYDE	22 02	190	J
7	UNKNOWN	23 38	120	J
8	UNKNOWN	23 69	170	J
9	UNKNOWN	23 84	180	J
10	UNKNOWN	24 28	340	J
11	UNKNOWN	24 36	620	J
12	UNKNOWN	24 43	330	J
13	UNKNOWN	24 73	780	J
14	UNKNOWN	24 86	340	J
15	UNKNOWN	24 94	330	J
16	UNKNOWN	25 05	240	J
17	UNKNOWN	25 17	230	J
18	UNKNOWN	25 35	370	J
19	UNKNOWN	25 42	640	J
20	UNKNOWN	25 63	540	J
21	UNKNOWN	25 88	200	J
22	UNKNOWN	25 93	330	J
23	UNKNOWN	26 07	390	J
24	UNKNOWN	26 28	410	J
25	UNKNOWN	26 56	150	J
26				
27				
28				
29				
30				

DA 4/1/98

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS0
X209

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890034

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090034B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 36 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500 (uL) Date Analyzed 05/01/98

Injection Volume 2 0 (uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 4

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	520	U
111-44-4	bis(2-Chloroethyl)ether	520	U
95-57-8	2-Chlorophenol	520	U
541-73-1	1,3-Dichlorobenzene	520	U
106-46-7	1,4-Dichlorobenzene	520	U
95-50-1	1,2-Dichlorobenzene	520	U
95-48-7	2-Methylphenol	520	U
108-60-1	2,2'-oxybis(1-Chloropropane)	520	U
106-44-5	4-Methylphenol	520	U
621-64-7	N-Nitroso-di-n-propylamine	520	U
67-72-1	Hexachloroethane	520	U
98-95-3	Nitrobenzene	520	U
78-59-1	Isophorone	520	U
88-75-5	2-Nitrophenol	520	U
105-67-9	2,4-Dimethylphenol	520	U
111-91-1	bis(2-Chloroethoxy)methane	520	U
120-83-2	2,4-Dichlorophenol	520	U
120-82-1	1,2,4-Trichlorobenzene	520	U
91-20-3	Naphthalene	520	U
106-47-8	4-Chloroaniline	520	U
87-68-3	Hexachlorobutadiene	520	U
59-50-7	4-Chloro-3-methylphenol	520	U
91-57-6	2-Methylnaphthalene	520	U
77-47-4	Hexachlorocyclopentadiene	520	U
88-06-2	2,4,6-Trichlorophenol	520	U
95-95-4	2,4,5-Trichlorophenol	1300	U
91-58-7	2-Chloronaphthalene	520	U
88-74-4	2-Nitroaniline	1300	U
131-11-3	Dimethylphthalate	520	U
208-96-8	Acenaphthylene	520	U
606-20-2	2,6-Dinitrotoluene	520	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	520	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS0
X209

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890034

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090034B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 36 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 4

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1300	U
100-02-7	4-Nitrophenol	1300	U
132-64-9	Dibenzofuran	520	U
121-14-2	2,4-Dinitrotoluene	520	U
84-66-2	Diethylphthalate	520	U
7005-72-3	4-Chlorophenyl-phenylether	520	U
86-73-7	Fluorene	520	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-nitrosodiphenylamine (1)	520	U
101-55-3	4-Bromophenyl-phenylether	520	U
118-74-1	Hexachlorobenzene	520	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	62	J
120-12-7	Anthracene	520	U
86-74-8	Carbazole	520	U
84-74-2	Di-n-butylphthalate	520	U
206-44-0	Fluoranthene	110	J
129-00-0	Pyrene	120	J
85-68-7	Butylbenzylphthalate	520	U
91-94-1	3,3'-Dichlorobenzidine	520	U
56-55-3	Benzo(a)anthracene	520	U
218-01-9	Chrysene	68	J
117-81-7	bis(2-Ethylhexyl)phthalate	520 ~~40~~	JBu
117-84-0	Di-n-octylphthalate	520	U
205-99-2	Benzo(b)fluoranthene	100	XJ
207-08-9	Benzo(k)fluoranthene	120	XJ
50-32-8	Benzo(a)pyrene	53	J
193-39-5	Indeno(1,2,3-cd)pyrene	520	U
53-70-3	Dibenzo(a,h)anthracene	520	U
191-24-2	Benzo(g,h,i)perylene	520	U

PAS 6/10/98

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCS0
X209

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU - Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890034

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090034B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 36 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500 (uL) Date Analyzed 05/01/98

Injection Volume 2 0 (uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 4

Number TICs found 22

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN	5 68	120	J
2		UNKNOWN (BC)	6 04	190	JB
3		UNKNOWN	6 13	160	J
4		UNKNOWN	15 88	170	J
5		UNKNOWN CARBOXYLIC ACID (BC)	16 06	520	JB
6		UNKNOWN	17 43	170	J
7		UNKNOWN CARBOXYLIC ACID (BC)	17 61	130	JB
8		UNKNOWN	19 89	280	J
9		UNKNOWN ALDEHYDE	22 02	150	J
10		UNKNOWN	24 26	180	J
11		UNKNOWN	24 35	370	J
12		UNKNOWN	24 44	110	J
13	83-47-6	GAMMA -SITOSTEROL	24 74	440	NJ
14		UNKNOWN	24 81	150	J
15		UNKNOWN	24 93	160	J
16		UNKNOWN	25 00	120	J
17	1058-61-3	STIGMAST-4-EN-3-ONE	25 41	170	NJ
18		UNKNOWN	25 63	240	J
19		UNKNOWN	25 72	180	J
20		UNKNOWN	25 86	190	J
21		UNKNOWN	26 06	240	J
22		UNKNOWN	26 20	120	J
23					
24					
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26					
27					
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29					
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DAS 6/1/98

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS1
X210

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890035

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090035A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 8

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	470	U
111-44-4	bis(2-Chloroethyl)ether	470	U
95-57-8	2-Chlorophenol	470	U
541-73-1	1,3-Dichlorobenzene	470	U
106-46-7	1,4-Dichlorobenzene	470	U
95-50-1	1,2-Dichlorobenzene	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470	U
106-44-5	4-Methylphenol	470	U
621-64-7	N-Nitroso-di-n-propylamine	470	U
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
111-91-1	bis(2-Chloroethoxy)methane	470	U
120-83-2	2,4-Dichlorophenol	470	U
120-82-1	1,2,4-Trichlorobenzene	470	U
91-20-3	Naphthalene	470	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	470	U
59-50-7	4-Chloro-3-methylphenol	470	U
91-57-6	2-Methylnaphthalene	470	U
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	1200	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	470	U
208-96-8	Acenaphthylene	470	U
606-20-2	2,6-Dinitrotoluene	470	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	470	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS1
X210

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890035

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090035A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 8

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1200	U
100-02-7	4-Nitrophenol	1200	U
132-64-9	Dibenzofuran	470	U
121-14-2	2,4-Dinitrotoluene	470	U
84-66-2	Diethylphthalate	470	U
7005-72-3	4-Chlorophenyl-phenylether	470	U
86-73-7	Fluorene	470	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-nitrosodiphenylamine (1)	470	U
101-55-3	4-Bromophenyl-phenylether	470	U
118-74-1	Hexachlorobenzene	470	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	470	U
120-12-7	Anthracene	470	U
86-74-8	Carbazole	470	U
84-74-2	Di-n-butylphthalate	470	U
206-44-0	Fluoranthene	55	J
129-00-0	Pyrene	470	U
85-68-7	Butylbenzylphthalate	470	U
91-94-1	3,3'-Dichlorobenzidine	470	U
56-55-3	Benzo(a)anthracene	470	U
218-01-9	Chrysene	470	U
117-81-7	bis(2-Ethylhexyl)phthalate	470	U
117-84-0	Di-n-octylphthalate	470	U
205-99-2	Benzo(b)fluoranthene	48	XJ
207-08-9	Benzo(k)fluoranthene	46	XJ
50-32-8	Benzo(a)pyrene	470	U
193-39-5	Indeno(1,2,3-cd)pyrene	470	U
53-70-3	Dibenzo(a,h)anthracene	470	U
191-24-2	Benzo(g,h,i)perylene	470	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCS1
X210

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890035

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090035A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 04/30/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 8

Number TICs found 33

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1	CYCLOHEXENONE	4 80	150	J
2	UNKNOWN	5 37	140	J
3	UNKNOWN (BC)	6 03	150	JBU
4 119-36-8	METHYL SALICYLATE	8 43	170	NJ
5	UNKNOWN	10 82	310	J
6	UNKNOWN	12 07	2600	J
7	UNKNOWN CARBOXYLIC ACID	14 89	380	J
8	UNKNOWN CARBOXYLIC ACID	14 96	330	J
9	UNKNOWN CARBOXYLIC ACID	15 74	160	J
10	UNKNOWN CARBOXYLIC ACID	15 89	500	J
11	UNKNOWN	15 97	290	J
12	UNKNOWN CARBOXYLIC ACID (BC)	16 05	840	JBU
13	UNKNOWN	16 41	470	J
14	UNKNOWN CARBOXYLIC ACID	17 46	1200	J
15	UNKNOWN CARBOXYLIC ACID (BC)	17 60	260	JBU
16	UNKNOWN	19 03	230	J
17	UNKNOWN	19 89	360	J
18	UNKNOWN	20 37	270	J
19	UNKNOWN ALCOHOL	21 18	190	J
20	UNKNOWN ALDEHYDE	22 00	250	J
21	UNKNOWN	23 94	100	J
22	UNKNOWN	24 26	150	J
23	UNKNOWN	24 42	120	J
24	UNKNOWN	24 52	120	J
25	UNKNOWN	24 72	710	J
26	UNKNOWN	24 82	120	J
27	UNKNOWN	24 93	140	J
28	UNKNOWN	25 16	190	J
29	UNKNOWN	25 33	350	J
30	UNKNOWN	25 40	200	J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

ECCS1
X210

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU_ Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890035

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090035A64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500 (uL) Date Analyzed 04/30/98

Injection Volume 2 0 (uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 8

Number TICs found 33

CONCENTRATION UNITS
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST CONC	Q
1		UNKNOWN	25 60	350	J
2		UNKNOWN	25 72	140	J
3		UNKNOWN	25 86	120	J
4					
5					
6					
7					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS1MS

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU - Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890022

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090022B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 8

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	2900	
111-44-4	bis(2-Chloroethyl)ether	470	U
95-57-8	2-Chlorophenol	2400	
541-73-1	1,3-Dichlorobenzene	470	U
106-46-7	1,4-Dichlorobenzene	1600	
95-50-1	1,2-Dichlorobenzene	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470	U
106-44-5	4-Methylphenol	470	U
621-64-7	N-Nitroso-di-n-propylamine	2000	
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
111-91-1	bis(2-Chloroethoxy)methane	470	U
120-83-2	2,4-Dichlorophenol	470	U
120-82-1	1,2,4-Trichlorobenzene	1700	
91-20-3	Naphthalene	470	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	470	U
59-50-7	4-Chloro-3-methylphenol	2800	
91-57-6	2-Methylnaphthalene	470	U
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	1200	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	470	U
208-96-8	Acenaphthylene	470	U
606-20-2	2,6-Dinitrotoluene	470	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	1800	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS1MS

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890022

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090022B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 8

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1200	U
100-02-7	4-Nitrophenol	3800	E
132-64-9	Dibenzofuran	470	U
121-14-2	2,4-Dinitrotoluene	2100	
84-66-2	Diethylphthalate	470	U
7005-72-3	4-Chlorophenyl-phenylether	470	U
86-73-7	Fluorene	470	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-nitrosodiphenylamine (1)	470	U
101-55-3	4-Bromophenyl-phenylether	470	U
118-74-1	Hexachlorobenzene	470	U
87-86-5	Pentachlorophenol	3300	
85-01-8	Phenanthrene	470	U
120-12-7	Anthracene	470	U
86-74-8	Carbazole	470	U
84-74-2	Di-n-butylphthalate	470	U
206-44-0	Fluoranthene	470	U
129-00-0	Pyrene	2600	
85-68-7	Butylbenzylphthalate	470	U
91-94-1	3,3'-Dichlorobenzidine	470	U
56-55-3	Benzo(a)anthracene	470	U
218-01-9	Chrysene	470	U
117-81-7	bis(2-Ethylhexyl)phthalate	470	U
117-84-0	Di-n-octylphthalate	470	U
205-99-2	Benzo(b)fluoranthene	470	U
207-08-9	Benzo(k)fluoranthene	470	U
50-32-8	Benzo(a)pyrene	470	U
193-39-5	Indeno(1,2,3-cd)pyrene	470	U
53-70-3	Dibenzo(a,h)anthracene	470	U
191-24-2	Benzo(g,h,i)perylene	470	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS1MSD

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU- Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890022

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090023B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 8

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	3200	
111-44-4	bis(2-Chloroethyl)ether	470	U
95-57-8	2-Chlorophenol	2900	
541-73-1	1,3-Dichlorobenzene	470	U
106-46-7	1,4-Dichlorobenzene	1700	
95-50-1	1,2-Dichlorobenzene	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470	U
106-44-5	4-Methylphenol	470	U
621-64-7	N-Nitroso-di-n-propylamine	1900	
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
111-91-1	bis(2-Chloroethoxy)methane	470	U
120-83-2	2,4-Dichlorophenol	470	U
120-82-1	1,2,4-Trichlorobenzene	1600	
91-20-3	Naphthalene	470	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	470	U
59-50-7	4-Chloro-3-methylphenol	2700	
91-57-6	2-Methylnaphthalene	470	U
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	1200	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	470	U
208-96-8	Acenaphthylene	470	U
606-20-2	2,6-Dinitrotoluene	470	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	1800	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS1MSD

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890022

Sample wt/vol 30 0 (g/mL) g Lab File ID GH090023B64

Level (low/med) LOW Date Received 04/23/98

% Moisture 30 decanted (Y/N) N Date Extracted 04/27/98

Concentrated Extract Volume 500(uL) Date Analyzed 05/01/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 8

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1200	U
100-02-7	4-Nitrophenol	3700	
132-64-9	Dibenzofuran	470	U
121-14-2	2,4-Dinitrotoluene	2100	
84-66-2	Diethylphthalate	470	U
7005-72-3	4-Chlorophenyl-phenylether	470	U
86-73-7	Fluorene	470	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-nitrosodiphenylamine (1)	470	U
101-55-3	4-Bromophenyl-phenylether	470	U
118-74-1	Hexachlorobenzene	470	U
87-86-5	Pentachlorophenol	3200	
85-01-8	Phenanthrene	470	U
120-12-7	Anthracene	470	U
86-74-8	Carbazole	470	U
84-74-2	Di-n-butylphthalate	470	U
206-44-0	Fluoranthene	470	U
129-00-0	Pyrene	2500	
85-68-7	Butylbenzylphthalate	470	U
91-94-1	3,3'-Dichlorobenzidine	470	U
56-55-3	Benzo(a)anthracene	470	U
218-01-9	Chrysene	470	U
117-81-7	bis(2-Ethylhexyl)phthalate	470	U
117-84-0	Di-n-octylphthalate	470	U
205-99-2	Benzo(b)fluoranthene	470	U
207-08-9	Benzo(k)fluoranthene	470	U
50-32-8	Benzo(a)pyrene	470	U
193-39-5	Indeno(1,2,3-cd)pyrene	470	U
53-70-3	Dibenzo(a,h)anthracene	470	U
191-24-2	Benzo(g,h,i)perylene	470	U

(1) - Cannot be separated from Diphenylamine

FORM 2
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

GC Column(1) DB-608 ID 0 53 (mm) GC Column(2) RTX-1701 ID 0 53 (m

	CLIENT SAMPLE NO	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLKBT	78	79	84	82			0
02	ECCS1MS	85	86	105	101			0
03	ECCS1MSD	92	92	121	114			0
04	ECCR2	0*	16*	40	96			2
05	ECCR8	92	91	156D	240D			0
06	ECCR9	77	77	145	114			0
07	ECCS0	66	62	114	112			0
08	ECCR3	120	60	150	158*			1
09	ECCR4	89	96	162D	251D			0
10	ECCR5	78	75	181D	222D			0
11	ECCR6	74	148	113	105			0
12	ECCR7	77	105	116	117			0
13	ECCS1	82	87	105	100			0
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (30-150)
S2 (DCB) = Decachlorobiphenyl (30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 3
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix Spike - Sample No ECCS1

COMPOUND	SPIKE ADDED (ug/Kg	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
gamma-BHC (Lindane)	24	0 00	19	79	46-127
Heptachlor	24	0 00	20	83	35-130
Aldrin	24	0 00	18	75	34-132
Dieldrin	48	0 00	39	81	31-134
Endrin	48	0 00	46	96	42-139
4,4'-DDT	48	0 00	39	81	23-134

COMPOUND	SPIKE ADDED (ug/Kg	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	RE
gamma-BHC (Lindane)	24	21	88	11	50	46-127
Heptachlor	24	22	92	10	31	35-130
Aldrin	24	20	83	10	43	34-132
Dieldrin	48	43	90	10	38	31-134
Endrin	48	52	108	12	45	42-139
4,4'-DDT	48	45	94	15	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD 0 out of 6 outside limits
Spike Recovery 0 out of 12 outside limits

COMMENTS

4C
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO

PBLKBT

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Lab Sample ID 893834 Lab File ID _____

Matrix (soil/water) SOIL Extraction (SepF/Cont/Sonc) SONC

Sulfur Cleanup (Y/N) N Date Extracted 05/20/98

Date Analyzed (1) 05/20/98 Date Analyzed (2) 05/20/98

Time Analyzed (1) 2338 Time Analyzed (2) 2338

Instrument ID (1) VARIAN39 Instrument ID (2) VARIAN41

GC Column (1) DB-608 ID 0 53(mm) GC Column (2) RTX-1701 ID 0 53(m

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD

	EPA SAMPLE NO	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ECCS1MS	890025	05/22/98	05/22/98
02	ECCS1MSD	890024	05/22/98	05/22/98
03	ECCR2	890016	05/22/98	05/22/98
04	ECCR8	890032	05/22/98	05/22/98
05	ECCR9	890033	05/22/98	05/22/98
06	ECCS0	890034	05/22/98	05/22/98
07	ECCR3	890027	05/22/98	05/22/98
08	ECCR4	890028	05/22/98	05/22/98
09	ECCR5	890029	05/22/98	05/22/98
10	ECCR6	890030	05/22/98	05/22/98
11	ECCR7	890031	05/22/98	05/22/98
12	ECCS1	890035	05/22/98	05/22/98
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS _____

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

PBLKBT

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 893834

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture ____ decanted (Y/N)___ Date Received _____

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/20/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/20/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH ___ Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1 7	U
319-85-7	beta-BHC	1 7	U
319-86-8	delta-BHC	1 7	U
58-89-9	gamma-BHC (Lindane)	1 7	U
76-44-8	Heptachlor	1 7	U
309-00-2	Aldrin	1 7	U
1024-57-3	Heptachlor epoxide	1 7	U
959-98-8	Endosulfan I	1 7	U
60-57-1	Dieldrin	3 3	U
72-55-9	4,4'-DDE	3 3	U
72-20-8	Endrin	3 3	U
33213-65-9	Endosulfan II	3 3	U
72-54-8	4,4'-DDD	3 3	U
1031-07-8	Endosulfan sulfate	3 3	U
50-29-3	4,4'-DDT	3 3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3 3	U
7421-93-4	Endrin aldehyde	3 3	U
5103-71-9	alpha-Chlordane	1 7	U
5103-74-2	gamma-Chlordane	1 7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR2
X201

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890016

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture 40 decanted (Y/N) N Date Received 04/23/98

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/18/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/22/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 2 Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2 8	U
319-85-7	beta-BHC	2 8	U
319-86-8	delta-BHC	2 8	U
58-89-9	gamma-BHC (Lindane)	2 8	U
76-44-8	Heptachlor	3 1	P
309-00-2	Aldrin	2 8	U
1024-57-3	Heptachlor epoxide	20	P
959-98-8	Endosulfan I	2 8	U
60-57-1	Dieldrin	5 5	U
72-55-9	4,4'-DDE	5 5	U
72-20-8	Endrin	20	
33213-65-9	Endosulfan II	5 5	U
72-54-8	4,4'-DDD	1 1	JP
1031-07-8	Endosulfan sulfate	5 5	U
50-29-3	4,4'-DDT	5 5	U
72-43-5	Methoxychlor	52	
53494-70-5	Endrin ketone	15	P
7421-93-4	Endrin aldehyde	5 5	U
5103-71-9	alpha-Chlordane	1 5	JP
5103-74-2	gamma-Chlordane	2 8	U
8001-35-2	Toxaphene	280	U
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	55	U
11096-82-5	Aroclor-1260	55	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR3
X202

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890027

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture 59 decanted (Y/N) N Date Received 04/23/98

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/18/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/22/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3 Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	4.1 ~~0 27~~	JP u
319-85-7	beta-BHC	4 1	U
319-86-8	delta-BHC	4 1	U
58-89-9	gamma-BHC (Lindane)	4.1 ~~0 35~~	JP u
76-44-8	Heptachlor	4 1	U
309-00-2	Aldrin	4 1	U
1024-57-3	Heptachlor epoxide	4 1	U
959-98-8	Endosulfan I	4 1	U
60-57-1	Dieldrin	8 0	U
72-55-9	4,4'-DDE	5 4	JP
72-20-8	Endrin	5.4 ~~0 51~~	JP u
33213-65-9	Endosulfan II	2 2	JP
72-54-8	4,4'-DDD	1 6	JP
1031-07-8	Endosulfan sulfate	5.4 ~~0 33~~	JP u
50-29-3	4,4'-DDT	2 8	JP
72-43-5	Methoxychlor	39	JP
53494-70-5	Endrin ketone	8 0	U
7421-93-4	Endrin aldehyde	8 0	U
5103-71-9	alpha-Chlordane	4 1	U
5103-74-2	gamma-Chlordane	4.1 ~~0 75~~	JP u
8001-35-2	Toxaphene	410	U
12674-11-2	Aroclor-1016	80	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	80	U
53469-21-9	Aroclor-1242	80	U
12672-29-6	Aroclor-1248	420	P
11097-69-1	Aroclor-1254	80	U
11096-82-5	Aroclor-1260	80	U

3/25 [illegible]

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR4
X203

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890028

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture 41 decanted (Y/N) N Date Received 04/23/98

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/18/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/22/98

Injection Volume 2 0(uL) Dilution Factor 5 0

GPC Cleanup (Y/N) Y pH 7 1 Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	14	U
319-85-7	beta-BHC	14	U
319-86-8	delta-BHC	14	U
58-89-9	gamma-BHC (Lindane)	14	U
76-44-8	Heptachlor	14	U
309-00-2	Aldrin	14	U
1024-57-3	Heptachlor epoxide	26	P
959-98-8	Endosulfan I	14	U
60-57-1	Dieldrin	14	JP
72-55-9	4,4'-DDE	9 9	JP
72-20-8	Endrin	28	U
33213-65-9	Endosulfan II	3 5	JP
72-54-8	4,4'-DDD	28	U
1031-07-8	Endosulfan sulfate	28	U
50-29-3	4,4'-DDT	2 8	JP
72-43-5	Methoxychlor	23	JP
53494-70-5	Endrin ketone	28	U
7421-93-4	Endrin aldehyde	2 9	JP
5103-71-9	alpha-Chlordane	1 2	JP
5103-74-2	gamma-Chlordane	14	U
8001-35-2	Toxaphene	1400	U
12674-11-2	Aroclor-1016	280	U
11104-28-2	Aroclor-1221	570	U
11141-16-5	Aroclor-1232	280	U
53469-21-9	Aroclor-1242	280	U
12672-29-6	Aroclor-1248	2700	Y
11097-69-1	Aroclor-1254	280	U
11096-82-5	Aroclor-1260	280	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR5
X204

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890029

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture 62 decanted (Y/N) N Date Received 04/23/98

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/18/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/22/98

Injection Volume 2 0(uL) Dilution Factor 5 0

GPC Cleanup (Y/N) Y pH 7 4 Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	~~0.67~~ 22	JP U
319-85-7	beta-BHC	22	U
319-86-8	delta-BHC	22	U
58-89-9	gamma-BHC (Lindane)	22	U
76-44-8	Heptachlor	22	U
309-00-2	Aldrin	22	U
1024-57-3	Heptachlor epoxide	22	U
959-98-8	Endosulfan I	22	U
60-57-1	Dieldrin	43	U
72-55-9	4,4'-DDE	17	J
72-20-8	Endrin	2 4	JP
33213-65-9	Endosulfan II	11	JP
72-54-8	4,4'-DDD	4 7	JP
1031-07-8	Endosulfan sulfate	43	U
50-29-3	4,4'-DDT	22	JP
72-43-5	Methoxychlor	80	JP
53494-70-5	Endrin ketone	43	U
7421-93-4	Endrin aldehyde	43	U
5103-71-9	alpha-Chlordane	43 ~~0.76~~	JP U
5103-74-2	gamma-Chlordane	43 ~~2.7~~	JP U
8001-35-2	Toxaphene	2200	U
12674-11-2	Aroclor-1016	430	U
11104-28-2	Aroclor-1221	880	U
11141-16-5	Aroclor-1232	430	U
53469-21-9	Aroclor-1242	430	U
12672-29-6	Aroclor-1248	2100	Y
11097-69-1	Aroclor-1254	430	U
11096-82-5	Aroclor-1260	430	U

JRS 6/1/98

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR6
X205

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890030

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture 30 decanted (Y/N) N Date Received 04/23/98

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/18/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/22/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 6 Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	24 ~~0 54~~	JP U
319-85-7	beta-BHC	2 4	U
319-86-8	delta-BHC	2 4	U
58-89-9	gamma-BHC (Lindane)	2 4	U
76-44-8	Heptachlor	2 4	U
309-00-2	Aldrin	2 4	U
1024-57-3	Heptachlor epoxide	2 4	U
959-98-8	Endosulfan I	2 4	U
60-57-1	Dieldrin	2.4 ~~0 080~~	JP
72-55-9	4,4'-DDE	0 73	J
72-20-8	Endrin	4 7	U
33213-65-9	Endosulfan II	4 7	U
72-54-8	4,4'-DDD	4 7	U
1031-07-8	Endosulfan sulfate	4 7	U
50-29-3	4,4'-DDT	4.7 ~~0 40~~	JP
72-43-5	Methoxychlor	2 2	JP
53494-70-5	Endrin ketone	4 7	U
7421-93-4	Endrin aldehyde	4 7	U
5103-71-9	alpha-Chlordane	2 4	U
5103-74-2	gamma-Chlordane	24 ~~0 063~~	JP
8001-35-2	Toxaphene	240	U
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	96	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U

FORM I PEST OLM03 0

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR7
X206

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890031

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture 42 decanted (Y/N) N Date Received 04/23/98

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/18/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/22/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 3 Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2 9	U
319-85-7	beta-BHC	2 9	U
319-86-8	delta-BHC	2 9	U
58-89-9	gamma-BHC (Lindane)	2 9	U
76-44-8	Heptachlor	2 9	U
309-00-2	Aldrin	0 86	JP
1024-57-3	Heptachlor epoxide	2 9	U
959-98-8	Endosulfan I	2 9	U
60-57-1	Dieldrin	0 57	JP
72-55-9	4,4'-DDE	3 3	JP
72-20-8	Endrin	0 18	JP
33213-65-9	Endosulfan II	0 80	JP
72-54-8	4,4'-DDD	0 93	JP
1031-07-8	Endosulfan sulfate	5 7	U
50-29-3	4,4'-DDT	2 4	JP
72-43-5	Methoxychlor	29	U
53494-70-5	Endrin ketone	5 7	U
7421-93-4	Endrin aldehyde	0 38	JP
5103-71-9	alpha-Chlordane	2 9	U
5103-74-2	gamma-Chlordane	0 22	JP
8001-35-2	Toxaphene	290	U
12674-11-2	Aroclor-1016	57	U
11104-28-2	Aroclor-1221	120	U
11141-16-5	Aroclor-1232	57	U
53469-21-9	Aroclor-1242	57	U
12672-29-6	Aroclor-1248	210	
11097-69-1	Aroclor-1254	57	U
11096-82-5	Aroclor-1260	57	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR8
X207

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890032

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture 44 decanted (Y/N) N Date Received 04/23/98

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/18/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/22/98

Injection Volume 2 0(uL) Dilution Factor 5 0

GPC Cleanup (Y/N) Y pH 7 3 Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	15	U
319-85-7	beta-BHC	15	U
319-86-8	delta-BHC	15	U
58-89-9	gamma-BHC (Lindane)	15	U
76-44-8	Heptachlor	15	U
309-00-2	Aldrin	15	U
1024-57-3	Heptachlor epoxide	17	P
959-98-8	Endosulfan I	15	U
60-57-1	Dieldrin	16	JP
72-55-9	4,4'-DDE	10	JP
72-20-8	Endrin	29	U
33213-65-9	Endosulfan II	4 8	JP
72-54-8	4,4'-DDD	29	U
1031-07-8	Endosulfan sulfate	29	U
50-29-3	4,4'-DDT	29	U
72-43-5	Methoxychlor	67	J
53494-70-5	Endrin ketone	29	U
7421-93-4	Endrin aldehyde	2 4	JP
5103-71-9	alpha-Chlordane	15	U
5103-74-2	gamma-Chlordane	15	U
8001-35-2	Toxaphene	1500	U
12674-11-2	Aroclor-1016	290	U
11104-28-2	Aroclor-1221	600	U
11141-16-5	Aroclor-1232	290	U
53469-21-9	Aroclor-1242	290	U
12672-29-6	Aroclor-1248	1800	C
11097-69-1	Aroclor-1254	290	U
11096-82-5	Aroclor-1260	290	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCR9
X208

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890033

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture 35 decanted (Y/N) N Date Received 04/23/98

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/18/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/22/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 9 Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.6 ~~0 10~~	JP U
319-85-7	beta-BHC	2 6	U
319-86-8	delta-BHC	2.6 ~~0 12~~	JP U
58-89-9	gamma-BHC (Lindane)	2.6 ~~0.089~~	JP U
76-44-8	Heptachlor	2 6	U
309-00-2	Aldrin	2 6	U
1024-57-3	Heptachlor epoxide	1 7	JP
959-98-8	Endosulfan I	2 6	U
60-57-1	Dieldrin	1 3	JP
72-55-9	4,4'-DDE	0 88	JP
72-20-8	Endrin	0 94	JP
33213-65-9	Endosulfan II	0 89	JP
72-54-8	4,4'-DDD	5 1	U
1031-07-8	Endosulfan sulfate	5 1	U
50-29-3	4,4'-DDT	1 4	JP
72-43-5	Methoxychlor	3 4	JP
53494-70-5	Endrin ketone	5 1	U
7421-93-4	Endrin aldehyde	5 1	U
5103-71-9	alpha-Chlordane	2 6	U
5103-74-2	gamma-Chlordane	2.6 ~~0 16~~	JP U
8001-35-2	Toxaphene	260	U
12674-11-2	Aroclor-1016	51	U
11104-28-2	Aroclor-1221	100	U
11141-16-5	Aroclor-1232	51	U
53469-21-9	Aroclor-1242	51	U
12672-29-6	Aroclor-1248	120	P
11097-69-1	Aroclor-1254	51	U
11096-82-5	Aroclor-1260	39	JP

JMS 4/10/98

JMS 6/10/98

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS0
X209

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890034

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture 36 decanted (Y/N) N Date Received 04/23/98

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/18/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/22/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 7 4 Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6--------	alpha-BHC	0.15 ~~2 6~~ ~~0 15~~	J
319-85-7--------	beta-BHC	2 6	U
319-86-8--------	delta-BHC	2 6 ~~0.11~~	JPU
58-89-9---------	gamma-BHC (Lindane)	2 6	U
76-44-8---------	Heptachlor	2 6	U
309-00-2--------	Aldrin	2 6	U
1024-57-3-------	Heptachlor epoxide	2 6	U
959-98-8--------	Endosulfan I	2 6	U
60-57-1---------	Dieldrin	2 6 ~~0 10~~	JPU
72-55-9---------	4,4'-DDE	1 7	J
72-20-8---------	Endrin	5 2 ~~0 54~~	JPU
33213-65-9------	Endosulfan II	5 2 ~~0 28~~	JPU
72-54-8---------	4,4'-DDD	5 2 ~~0 28~~	JPU
1031-07-8-------	Endosulfan sulfate	5 2	U
50-29-3---------	4,4'-DDT	1 1	JP
72-43-5---------	Methoxychlor	5 1	J
53494-70-5------	Endrin ketone	5 2	U
7421-93-4-------	Endrin aldehyde	5 2	U
5103-71-9-------	alpha-Chlordane	2 6	U
5103-74-2-------	gamma-Chlordane	2.6 ~~0 078~~	JPU
8001-35-2-------	Toxaphene	260	U
12674-11-2------	Aroclor-1016	52	U
11104-28-2------	Aroclor-1221	100	U
11141-16-5------	Aroclor-1232	52	U
53469-21-9------	Aroclor-1242	52	U
12672-29-6------	Aroclor-1248	96	P
11097-69-1------	Aroclor-1254	52	U
11096-82-5------	Aroclor-1260	52	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

ECCS1
X210

Lab Name COMPUCHEM Contract 68D50004

Lab Code COMPU Case No 26147 SAS No SDG No ECCR2

Matrix (soil/water) SOIL Lab Sample ID 890035

Sample wt/vol 30 0 (g/mL) G Lab File ID _____

% Moisture 30 decanted (Y/N) N Date Received 04/23/98

Extraction (SepF/Cont/Sonc) SONC Date Extracted 05/18/98

Concentrated Extract Volume 5000(uL) Date Analyzed 05/22/98

Injection Volume 2 0(uL) Dilution Factor 1 0

GPC Cleanup (Y/N) Y pH 6 8 Sulfur Cleanup (Y/N) N

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2 4	U
319-85-7	beta-BHC	2 4	U
319-86-8	delta-BHC	2 4	U
58-89-9	gamma-BHC (Lindane)	2 4	U
76-44-8	Heptachlor	2 4	U
309-00-2	Aldrin	2 4	U
1024-57-3	Heptachlor epoxide	2 4	U
959-98-8	Endosulfan I	2 4	U
60-57-1	Dieldrin	4 7	U
72-55-9	4,4'-DDE	4.7 ~~0.22~~	JP U DHS Glide
72-20-8	Endrin	4 7	U
33213-65-9	Endosulfan II	4 7	U
72-54-8	4,4'-DDD	4 7	U
1031-07-8	Endosulfan sulfate	4 7	U
50-29-3	4,4'-DDT	4 7	U
72-43-5	Methoxychlor	1 9	J
53494-70-5	Endrin ketone	4 7	U
7421-93-4	Endrin aldehyde	4 7	U
5103-71-9	alpha-Chlordane	2 4	U
5103-74-2	gamma-Chlordane	2 4	U
8001-35-2	Toxaphene	240	U
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	96	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
- Data Tracking Form for Contract Samples

Data Set No _____ CERCLIS No IL/0523

Case No 26147 Site Name Location Waukegan Mun LF

Contractor or EPA Lab Compuchem Data User IEPA

No of Samples 10 Date Sampled or Data Received 5-29-98

Have Chain-of-Custody records been received? Yes ✓ No ✓
Have traffic reports or packing lists been received? Yes ✓ No _____
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No _____
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No _____
No of samples claimed 10 No of samples received 10

Received by Lynette Burnett Date 5-29-98

Received by LSSS Lynette Burnett Date 5-29-98

Review started 6/5/98 Reviewer Signature [illegible]

Total time spent on review 20 Date review completed 6/10/98

Copied by Lynette Burnett Date 6-22-98

Mailed to user by Lynette Burnett Date 6-22-98

DATA USER
Please fill in the blanks below and return this form to
Sylvia Griffen, Data mgmt Coordinator, Region V, 5SCRL

Data received by _____ Date _____

Data review received by _____ Date _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS Please indicate reasons why data are not suitable for your uses

_____

_____

Received by Data Mgmt Coordinator for Files Data _____

U S EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

SOW No ILM04 0

EPA SAMPLE NO	Lab Sample ID
MEBGS0	44256S
MEBGS1	44257S
MEBGS2	44258S
MEBGS3	44259S
MEBGS4	44260S
MEBGS5	44261S
MEBGS6	44262S
MEBGS7	44263S
MEBGS8	44264S
MEBGS9	44265S
MEBGS9D	44266S2
MEBGS9S	44267DS

RECEIVED
MAY 18 1998
US EPA REGIONAL LAB.
536 S CLARK ST
CHICAGO ILLINOIS 60605

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments
"E" qualifiers on Form I and IX for the Chromium, Copper, Potassium Vanadium and Zinc indicate chemical or physical interference effects, which were suspected during tnose elements analyses only

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 floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Signature Name PARVEEN HASAN

Date 5/12/98 Title QA/QC OFFICER

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

MEBGS0
X201

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Lab Sample ID 44256S

Level (low/med) LOW Date Received 04/23/98

% Solids 57 9

Concentration Units (ug/L or mg/Kg dry weight) MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11200			P
7440-36-0	Antimony	1 7	U		P
7440-38-2	Arsenic	7 0			P
7440-39-3	Barium	58 6	B		P
7440-41-7	Beryllium	0 57	B		P
7440-43-9	Cadmium	0 34	U		P
7440-70-2	Calcium	62800			P
7440-47-3	Chromium	19 9		E	P
7440-48-4	Cobalt	8 6	B		P
7440-50-8	Copper	26 6		E	P
7439-89-6	Iron	27500			P
7439-92-1	Lead	18 7			P
7439-95-4	Magnesium	27900			P
7439-96-5	Manganese	476			P
7439-97-6	Mercury	0 16	U		CV
7440-02-0	Nickel	23 5			P
7440-09-7	Potassium	2530		E	P
7782-49-2	Selenium	1 3	U		P
7440-22-4	Silver	0 67	U		P
7440-23-5	Sodium	411	B		P
7440-28-0	Thallium	2 0	U		P
7440-62-2	Vanadium	23 6		E	P
7440-66-6	Zinc	160		E	P
	Cyanide	0 35	U		CA

Color Before GRAY Clarity Before Texture MEDIUM

Color After YELLOW Clarity After Artifacts

Comments

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

MEBGS1
X202

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Lab Sample ID 44257S

Level (low/med) LOW Date Received 04/23/98

% Solids 46 3

Concentration Units (ug/L or mg/Kg dry weight) MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12800			P
7440-36-0	Antimony	2 1	U		P
7440-38-2	Arsenic	9 6			P
7440-39-3	Barium	154			P
7440-41-7	Beryllium	0 66	B		P
7440-43-9	Cadmium	0 42	U		P
7440-70-2	Calcium	75800			P
7440-47-3	Chromium	21 2		E	P
7440-48-4	Cobalt	8 5	B		P
7440-50-8	Copper	31 0		E	P
7439-89-6	Iron	39200			P
7439-92-1	Lead	31 3			P
7439-95-4	Magnesium	14400			P
7439-96-5	Manganese	657			P
7439-97-6	Mercury	0 21	U		CV
7440-02-0	Nickel	22 8			P
7440-09-7	Potassium	2470		E	P
7782-49-2	Selenium	1 7	U		P
7440-22-4	Silver	0 83	U		P
7440-23-5	Sodium	1290	B		P
7440-28-0	Thallium	2 5	U		P
7440-62-2	Vanadium	29 5		E	P
7440-66-6	Zinc	95 2		E	P
	Cyanide	0 43	U		CA

Color Before GRAY Clarity Before Texture MEDIUM

Color After YELLOW Clarity After Artifacts

Comments

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

MEBGS2
X203

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Lab Sample ID 44258S

Level (low/med) LOW Date Received 04/23/98

% Solids 60 7

Concentration Units (ug/L or mg/Kg dry weight) MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9350			P
7440-36-0	Antimony	1 6	U		P
7440-38-2	Arsenic	6 8			P
7440-39-3	Barium	52 7	B		P
7440-41-7	Beryllium	0 48	B		P
7440-43-9	Cadmium	0 33	U		P
7440-70-2	Calcium	12700			P
7440-47-3	Chromium	16 3		E	P
7440-48-4	Cobalt	8 4	B		P
7440-50-8	Copper	26 3		E	P
7439-89-6	Iron	16700			P
7439-92-1	Lead	18 7			P
7439-95-4	Magnesium	8220			P
7439-96-5	Manganese	200			P
7439-97-6	Mercury	0 16	U		CV
7440-02-0	Nickel	17 9			P
7440-09-7	Potassium	1480	B	E	P
7782-49-2	Selenium	1 3	U		P
7440-22-4	Silver	0 66	U		P
7440-23-5	Sodium	279	B		P
7440-28-0	Thallium	2 0	U		P
7440-62-2	Vanadium	23 6		E	P
7440-66-6	Zinc	54 0		E	P
	Cyanide	1 1			CA

Color Before GRAY Clarity Before Texture MEDIUM

Color After YELLOW Clarity After Artifacts

Comments

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

MEBGS3
X204

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Lab Sample ID 44259S

Level (low/med) LOW Date Received 04/23/98

% Solids 33 3

Concentration Units (ug/L or mg/Kg dry weight) MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13100			P
7440-36-0	Antimony	2 9	U		P
7440-38-2	Arsenic	13 2			P
7440-39-3	Barium	159			P
7440-41-7	Beryllium	0 79	B		P
7440-43-9	Cadmium	0 58	U		P
7440-70-2	Calcium	79500			P
7440-47-3	Chromium	24 2		E	P
7440-48-4	Cobalt	11 5	B		P
7440-50-8	Copper	165		E	P
7439-89-6	Iron	38100			P
7439-92-1	Lead	51 5			P
7439-95-4	Magnesium	27200			P
7439-96-5	Manganese	594			P
7439-97-6	Mercury	0 30	U		CV
7440-02-0	Nickel	26 1			P
7440-09-7	Potassium	3360		E	P
7782-49-2	Selenium	2 3	U		P
7440-22-4	Silver	1 2	U		P
7440-23-5	Sodium	1200	B		P
7440-28-0	Thallium	3 5	U		P
7440-62-2	Vanadium	31 1		E	P
7440-66-6	Zinc	258		E	P
	Cyanide	0 60	U		CA

Color Before BROWN Clarity Before Texture MEDIUM

Color After YELLOW Clarity After Artifacts

Comments

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

MEBGS4
>205

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Lab Sample ID 44260S

Level (low/med) LOW Date Received 04/23/98

% Solids 43 7

Concentration Units (ug/L or mg/Kg dry weight) MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10600			P
7440-36-0	Antimony	2 3	U		P
7440-38-2	Arsenic	7 0			P
7440-39-3	Barium	62 0	B		P
7440-41-7	Beryllium	0 98	B		P
7440-43-9	Cadmium	0 46	U		P
7440-70-2	Calcium	52500			P
7440-47-3	Chromium	19 6		E	P
7440-48-4	Cobalt	9 3	B		P
7440-50-8	Copper	37 1		E	P
7439-89-6	Iron	20500			P
7439-92-1	Lead	24 8			P
7439-95-4	Magnesium	22700			P
7439-96-5	Manganese	551			P
7439-97-6	Mercury	0 21	U		CV
7440-02-0	Nickel	20 2			P
7440-09-7	Potassium	2170	B	E	P
7782-49-2	Selenium	1 8	U		P
7440-22-4	Silver	0 92	U		P
7440-23-5	Sodium	267	B		P
7440-28-0	Thallium	2 8	B		P
7440-62-2	Vanadium	27 4		E	P
7440-66-6	Zinc	104		E	P
	Cyanide	0 51	B		CA

Color Before GRAY Clarity Before Texture MEDIUM

Color After YELLOW Clarity After Artifacts

Comments

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

MEBGS5
λ 206

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Lab Sample ID 44261S

Level (low/med) LOW Date Received 04/23/98

% Solids 70 6

Concentration Units (ug/L or mg/Kg dry weight) MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9500			P
7440-36-0	Antimony	1 4	U		P
7440-38-2	Arsenic	6 0			P
7440-39-3	Barium	48 4	B		P
7440-41-7	Beryllium	0 78	B		P
7440-43-9	Cadmium	0 28	U		P
7440-70-2	Calcium	24500			P
7440-47-3	Chromium	15 9		E	P
7440-48-4	Cobalt	7 5	B		P
7440-50-8	Copper	41 0		E	P
7439-89-6	Iron	18200			P
7439-92-1	Lead	22 2			P
7439-95-4	Magnesium	14400			P
7439-96-5	Manganese	313			P
7439-97-6	Mercury	0 14	U		CV
7440-02-0	Nickel	17 7			P
7440-09-7	Potassium	1560		E	P
7782-49-2	Selenium	1 1	U		P
7440-22-4	Silver	0 55	U		P
7440-23-5	Sodium	270	B		P
7440-28-0	Thallium	1 7	U		P
7440-62-2	Vanadium	25 2		E	P
7440-66-6	Zinc	111		E	P
	Cyanide	0 28	U		CA

Color Before BROWN Clarity Before Texture MEDIUM

Color After YELLOW Clarity After Artifacts

Comments

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

MEBGS6
X207

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Lab Sample ID 44262S

Level (low/med) LOW Date Received 04/23/98

% Solids 62 1

Concentration Units (ug/L or mg/Kg dry weight) MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15300			P
7440-36-0	Antimony	1 6	U		P
7440-38-2	Arsenic	10 3			P
7440-39-3	Barium	92 1			P
7440-41-7	Beryllium	1 1	B		P
7440-43-9	Cadmium	0 32	U		P
7440-70-2	Calcium	39500			P
7440-47-3	Chromium	24 9		E	P
7440-48-4	Cobalt	11 5	B		P
7440-50-8	Copper	31 1		E	P
7439-89-6	Iron	25200			P
7439-92-1	Lead	24 5			P
7439-95-4	Magnesium	23600			P
7439-96-5	Manganese	782			P
7439-97-6	Mercury	0 16	U		CV
7440-02-0	Nickel	26 3			P
7440-09-7	Potassium	2970		E	P
7782-49-2	Selenium	1 3	U		P
7440-22-4	Silver	0 63	U		P
7440-23-5	Sodium	343	B		P
7440-28-0	Thallium	1 9	U		P
7440-62-2	Vanadium	33 3		E	P
7440-66-6	Zinc	97 5		E	P
	Cyanide	0 32	U		CA

Color Before GRAY Clarity Before Texture MEDIUM

Color After YELLOW Clarity After Artifacts

Comments

U S EPA - CLP
1

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

MEBGS7
Y208

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Lab Sample ID 44263S

Level (low/med) LOW Date Received 04/23/98

% Solids 63 6

Concentration Units (ug/L or mg/Kg dry weight) MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15300			P
7440-36-0	Antimony	1 5	U		P
7440-38-2	Arsenic	7 8			P
7440-39-3	Barium	91 6			P
7440-41-7	Beryllium	1 0	B		P
7440-43-9	Cadmium	0 31	U		P
7440-70-2	Calcium	11100			P
7440-47-3	Chromium	24 6		E	P
7440-48-4	Cobalt	10 4	B		P
7440-50-8	Copper	27 6		E	P
7439-89-6	Iron	24300			P
7439-92-1	Lead	32 8			P
7439-95-4	Magnesium	8020			P
7439-96-5	Manganese	565			P
7439-97-6	Mercury	0 16	U		CV
7440-02-0	Nickel	22 3			P
7440-09-7	Potassium	2120		E	P
7782-49-2	Selenium	1 2	U		P
7440-22-4	Silver	0 61	U		P
7440-23-5	Sodium	865	B		P
7440-28-0	Thallium	1 9	B		P
7440-62-2	Vanadium	33 2		E	P
7440-66-6	Zinc	78 8		E	P
	Cyanide	0 31	U		CA

Color Before BROWN Clarity Before Texture MEDIUM

Color After YELLOW Clarity After Artifacts

Comments

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

MEBGS8
X209

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Lab Sample ID 44264S

Level (low/med) LOW Date Received 04/23/98

% Solids 67 6

Concentration Units (ug/L or mg/Kg dry weight) MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13700			P
7440-36-0	Antimony	1 5	U		P
7440-38-2	Arsenic	7 3			P
7440-39-3	Barium	88 4			P
7440-41-7	Beryllium	0 96	B		P
7440-43-9	Cadmium	0 29	U		P
7440-70-2	Calcium	12700			P
7440-47-3	Chromium	21 7		E	P
7440-48-4	Cobalt	12 0	B		P
7440-50-8	Copper	25 7		E	P
7439-89-6	Iron	22500			P
7439-92-1	Lead	29 5			P
7439-95-4	Magnesium	8660			P
7439-96-5	Manganese	633			P
7439-97-6	Mercury	0 15	U		CV
7440-02-0	Nickel	19 9			P
7440-09-7	Potassium	1900		E	P
7782-49-2	Selenium	1 2	U		P
7440-22-4	Silver	0 58	U		P
7440-23-5	Sodium	784	B		P
7440-28-0	Thallium	1 7	U		P
7440-62-2	Vanadium	31 0		E	P
7440-66-6	Zinc	68 8		E	P
	Cyanide	0 29	U		CA

Color Before BROWN Clarity Before Texture MEDIUM

Color After YELLOW Clarity After Artifacts

Comments

EPA SAMPLE NO

INORGANIC ANALYSIS DATA SHEET

MEBGS9

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Lab Sample ID 44265S

Level (low/med) LOW Date Received 04/23/98

% Solids 72 4

Concentration Units (ug/L or mg/Kg dry weight) MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8560			P
7440-36-0	Antimony	1 3	U		P
7440-38-2	Arsenic	6 9			P
7440-39-3	Barium	74 6			P
7440-41-7	Beryllium	0 67	B		P
7440-43-9	Cadmium	0 27	U		P
7440-70-2	Calcium	3140			P
7440-47-3	Chromium	15 1		E	P
7440-48-4	Cobalt	12 3	B		P
7440-50-8	Copper	22 4		E	P
7439-89-6	Iron	17000			P
7439-92-1	Lead	28 3			P
7439-95-4	Magnesium	2800			P
7439-96-5	Manganese	759			P
7439-97-6	Mercury	0 14	U		CV
7440-02-0	Nickel	15 3			P
7440-09-7	Potassium	900	B	E	P
7782-49-2	Selenium	1 1	U		P
7440-22-4	Silver	0 54	U		P
7440-23-5	Sodium	36 1	B		P
7440-28-0	Thallium	1 6	U		P
7440-62-2	Vanadium	24 2		E	P
7440-66-6	Zinc	57 8		E	P
	Cyanide	0 28	U		CA

Color Before BROWN Clarity Before Texture MEDIUM

Color After YELLOW Clarity After Artifacts

Comments

U S EPA - CLP

3

BLANKS

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Preparation Blank Matrix (soil/water) SOIL

Preparation Blank Concentration Units (ug/L or mg/kg) MG/KG

Analyte	Initial Calib Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	6 0	U	39 2	B	6 0	U	41 6	B	1 200	U	P
Antimony	5 0	U	5 0	U	5 0	U	5 0	U	1 000	U	P
Arsenic	6 2	B	6 0	U	6 0	U	6 0	U	1 200	U	P
Barium	1 0	U	1 0	U	1 0	U	1 0	U	0 200	U	P
Beryllium	1 0	U	1 0	U	1 0	U	1 0	U	0 200	U	P
Cadmium	1 0	U	1 0	U	1 0	U	1 0	U	0 200	U	P
Calcium	23 0	U	45 3	B	23 0	U	62 5	B	15 274	B	P
Chromium	1 0	U	1 0	U	1 0	U	1 0	U	0 200	U	P
Cobalt	1 0	U	1 0	U	1 0	U	1 0	U	0 200	U	P
Copper	1 0	U	1 0	U	-1 3	B	1 0	U	0 368	B	P
Iron	18 0	U	20 0	B	18 0	U	33 8	B	3 600	U	P
Lead	2 0	U	2 0	U	2 0	U	2 0	U	0 400	U	P
Magnesium	31 0	U	41 4	B	31 0	U	56 4	B	8 958	B	P
Manganese	1 0	U	1 0	U	1 0	U	1 0	U	0 200	U	P
Mercury	0 2	U	0 2	U	0 2	U	0 2	U	0 100	U	CV
Nickel	1 0	U	1 0	U	1 0	U	1 0	U	0 200	U	P
Potassium	44 0	U	44 0	U	44 0	U	44 0	U	8 800	U	P
Selenium	4 0	U	4 0	U	4 0	U	4 0	U	0 800	U	P
Silver	2 0	U	2 0	U	2 0	U	2 0	U	0 400	U	P
Sodium	30 0	U	30 0	U	-51 6	B	-77 4	B	-13 128	B	P
Thallium	6 0	U	6 0	U	6 0	U	6 0	U	1 200	U	P
Vanadium	1 0	U	1 0	U	1 0	U	1 0	U	0 200	U	P
Zinc	-5 6	B	-8 0	B	-4 6	B	-8 8	B	-1 266	B	P
Cyanide	4 0	U	4 0	U	4 0	U	4 0	U	0 200	U	CA

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BLANKS

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Preparation Blank Matrix (soil/water)

Preparation Blank Concentration Units (ug/L or mg/kg)

Analyte	Initial Calib Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			13 0	B	29 3	B					P
Antimony			5 0	U	5 0	U					P
Arsenic			6 0	U	6 0	U					P
Barium			1 0	U	1 0	U					P
Beryllium			1 0	B	1 0	B					P
Cadmium			1 0	U	1 0	U					P
Calcium			23 0	U	37 5	B					P
Chromium			1 0	U	1 0	U					P
C alt			1 0	U	1 0	U					P
C ɔer			3 6	B	3 8	B					P
Iron			39 9	B	30 6	B					P
Lead			2 0	U	2 0	U					P
Magnesium			31 0	U	42 0	B					P
Manganese			1 0	U	1 0	U					P
Mercury			0 2	U	0 2	U					CV
Nickel			1 0	U	1 0	U					P
Potassium			44 0	U	44 0	U					P
Selenium			4 0	U	4 0	U					P
Silver			2 0	U	2 0	U					P
Sodium			30 0	U	30 0	U					P
Thallium			6 0	U	6 0	U					P
Vanadium			-3 2	B	-3 4	B					P
Zinc			2 0	U	2 0	U					P
Cyanide											NR

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5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

MEBGS9S

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Level (low/med) LOW

% Solids for Sample 72 4

Concentration Units (ug/L or mg/kg dry weight) MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	131 7170		1 3410	U	134 10	98 2		P
Arsenic	75-125	17 8780		6 9114		10 73	102 2		P
Barium	75-125	615 5608		74 6446		536 39	100 8		P
Beryllium	75-125	14 3056		0 6651	B	13 41	101 7		P
Cadmium	75-125	13 3616		0 2682	U	13 41	99 6		P
Calcium									NR
Chromium	75-125	67 4140		15 1317		53 64	97 5		P
Cobalt	75-125	143 3460		12 3344	B	134 10	97 7		P
Copper	75-125	90 5997		22 3569		67 05	101 8		P
Iron									NR
Lead		32 9883		28 3377		5 36	86 8		P
Magnesium									NR
Manganese		878 6917		759 2716		134 10	89 1		P
Mercury	75-125	0 6064		0 1381	U	0 69	87 9		CV
Nickel	75-125	146 0763		15 3006		134 10	97 5		P
Potassium									NR
Selenium	75-125	2 4513		1 0728	U	2 68	91 5		P
Silver	75-125	14 3083		0 5364	U	13 41	106 7		P
Sodium									NR
Thallium	75-125	12 6723		1 6092	U	13 41	94 5		P
Vanadium	75-125	156 9356		24 1967		134 10	99 0		P
Zinc	75-125	187 2365		57 8179		134 10	96 5		P
Cyanide	75-125	6 6367		0 2762	U	6 91	96 0		CA

Comments

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6

DUPLICATES

EPA SAMPLE NO

MEBGS9D

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Level (low/med) LOW

% Solids for Sample 72 4 % Solids for Duplicate 73 0

Concentration Units (ug/L or mg/kg dry weight) MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		8561 6800		8563 1873		0 0		P
Antimony		1 3410	U	1 3410	U			P
Arsenic	2 7	6 9114		6 8793		0 5		P
Barium	53 6	74 6446		74 7841		0 2		P
Beryllium		0 6651	B	0 6651	B	0 0		P
Cadmium		0 2682	U	0 2682	U			P
Calcium	1341 0	3139 0173		3138 8430		0 0		P
Chromium		15 1317		15 1049		0 2		P
Cobalt		12 3344	B	12 3639	B	0 2		P
Copper	6 7	22 3569		22 3784		0 1		P
Iron		16959 5371		16987 6683		0 2		P
Lead		28 3377		28 1339		0 7		P
Magnesium	1341 0	2803 5965		2802 0705		0 1		P
Manganese		759 2716		759 3359		0 0		P
Mercury		0 1381	U	0 1381	U			CV
Nickel	10 7	15 3006		15 2792		0 1		P
Potassium		900 2682	B	899 8391	B	0 0		P
Selenium		1 0728	U	1 0728	U			P
Silver		0 5364	U	0 5364	U			P
Sodium		36 1423	B	32 5913	B	10 3		P
Thallium		1 6092	U	1 6092	U			P
Vanadium	13 4	24 1967		24 3308		0 6		P
Zinc		57 8179		57 8716		0 1		P
Cyanide		0 2762	U	0 2762	U			CA

ICP SERIAL DILUTIONS

EPA SAMPLE NO

MEBGS9L

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Matrix (soil/water) SOIL Level (low/med) LOW

Concentration Units ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	31923 08		30339 40		5 0		P
Antimony	5 00	U	25 00	U			P
Arsenic	25 77		33 70	B	30 8		P
Barium	278 32		272 70	B	2 0		P
Beryllium	2 48	B	6 20	B	150 0		P
Cadmium	1 00	U	5 00	U			P
Calcium	11704 14		11543 90	B	1 4		P
Chromium	56 42		68 00		20 5	E	P
Cobalt	45 99	B	49 65	B	8 0		P
Copper	83 36		93 80	B	12 5	E	P
Iron	63235 33		62905 30		0 5		P
Lead	105 66		104 20		1 4		P
Magnesium	10453 49		10288 85	B	1 6		P
Manganese	2831 02		2838 60		0 3		P
Mercury							NR
Nickel	57 05		59 15	B	3 7		P
Potassium	3356 74	B	2592 55	B	22 8	E	P
Selenium	4 00	U	20 00	U			P
Silver	2 00	U	10 00	U			P
Sodium	134 76	B	150 00	U	100 0		P
Thallium	6 00	U	30 00	U			P
Vanadium	90 22		74 15	B	17 8	E	P
Zinc	215 58		137 80		36 1	E	P

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

ICP ID Number Date 04/15/98

Flame AA ID Number CN

Furnace AA ID Number

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0 2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR
Cyanide	578 00		10	4 0	CA

Comments

CN SP-E LAMBDA-1 (UV/VIS) SPECTROMETER

U S EPA - CLP

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

ICP ID Number Date 04/15/98

Flame AA ID Number CV

Furnace AA ID Number

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253 70		0 2	0 2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR
Cyanide			10		NR

Comments

CV SPECTRO-PRODUCTS MERCURY ANALYZER

U S EPA - CLP

10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

ICP ID Number P0 Date 04/15/98

Flame AA ID Number

Furnace AA ID Number

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308 20		200	6 0	P
Antimony	206 80		60	5 0	P
Arsenic	189 00		10	6 0	P
Barium	493 40		200	1 0	P
Beryllium	313 00		5	1 0	P
Cadmium	226 50		5	1 0	P
Calcium	317 90		5000	23 0	P
Chromium	267 70		10	1 0	P
Cobalt	228 60		50	1 0	P
Copper	324 70		25	1 0	P
Iron	271 40		100	18 0	P
Lead	220 40		3	2 0	P
Magnesium	279 00		5000	31 0	P
Manganese	257 60		15	1 0	P
Mercury			0 2		NR
Nickel	231 60		40	1 0	P
Potassium	766 50		5000	44 0	P
Selenium	196 00		5	4 0	P
Silver	328 00		10	2 0	P
Sodium	588 90		5000	30 0	P
Thallium	190 90		10	6 0	P
Vanadium	292 40		50	1 0	P
Zinc	206 20		20	2 0	P
Cyanide			10		NR

Comments
P0 ICP 61E TRACE ANALYZER

U S EPA - CLP

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PREPARATION LOG

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Method CA

EPA Sample No	Preparation Date	Weight (gram)	Volume (mL)
LCSS	04/24/98	1 00	50
MEBGS0	04/24/98	1 00	50
MEBGS1	04/24/98	1 01	50
MEBGS2	04/24/98	1 03	50
MEBGS3	04/24/98	1 00	50
MEBGS4	04/24/98	1 00	50
MEBGS5	04/24/98	1 02	50
MEBGS6	04/24/98	1 00	50
MEBGS7	04/24/98	1 01	50
MEBGS8	04/24/98	1 02	50
MEBGS9	04/24/98	1 00	50
MEBGS9D	04/24/98	1 00	50
MEBGS9S	04/24/98	1 00	50
PBS	04/24/98	1 00	50

U S EPA - CLP

13
PREPARATION LOG

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Method CV

EPA Sample No	Preparation Date	Weight (gram)	Volume (mL)
LCSS	04/26/98	0 20	100
MEBGS0	04/26/98	0 22	100
MEBGS1	04/26/98	0 21	100
MEBGS2	04/26/98	0 20	100
MEBGS3	04/26/98	0 20	100
MEBGS4	04/26/98	0 22	100
MEBGS5	04/26/98	0 20	100
MEBGS6	04/26/98	0 20	100
MEBGS7	04/26/98	0 20	100
MEBGS8	04/26/98	0 20	100
MEBGS9	04/26/98	0 20	100
MEBGS9D	04/26/98	0 20	100
MEBGS9S	04/26/98	0 20	100
PBS	04/26/98	0 20	100

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PREPARATION LOG

Lab Name CHEMTECH CONSULTING GROUP Contract 68-D5-0166

Lab Code CHEM Case No 26147 SAS No SDG No MEBGS0

Method P

EPA Sample No	Preparation Date	Weight (gram)	Volume (mL)
LCSS	04/27/98	1 00	200
MEBGS0	04/27/98	1 03	200
MEBGS1	04/27/98	1 04	200
MEBGS2	04/27/98	1 00	200
MEBGS3	04/27/98	1 04	200
MEBGS4	04/27/98	1 00	200
MEBGS5	04/27/98	1 03	200
MEBGS6	04/27/98	1 02	200
MEBGS7	04/27/98	1 03	200
MEBGS8	04/27/98	1 02	200
MEBGS9	04/27/98	1 03	200
MEBGS9D	04/27/98	1 03	200
MEBGS9S	04/27/98	1 03	200
PBS	04/27/98	1 00	200

United States Environmental Protection Agency
Contract Laboratory Program

Inorganic Traffic Report & Chain of Custody Record
(For Inorganic CLP Analysis)

Case No: 26147

1 Matrix (Enter in Column A)
1 Surface Water
2 Ground Water
3 Leachate
4 Field QC
5 Soil/Sediment
6 Oil (High only)
7 Waste (High only)
8 Other (specify in Column A)

2 Preservative (Enter in Column D)
1 HCl
2 HNO3
3 NaOH
4 H_2SO_4
5 $K_2CR_2O_7$
6 Ice only
7 Other (specify in Column D)
N Not preserved

2 Region No: V
Sampling Co: IEPA
Sampler (Name): Bruce Everett
Sampler Signature: Bruce
3 Purpose
Lead: SF, PRP, ST, FED
Early Action: CLEM, PA, REM, RI, SI, ESI
Long-Term Act on: FS, RD, RA, O&M, NPLD

4 Date Shipped: 4/22/98
Carrier: FED EX
Airbill Number: 8668592380
5 Ship To: CHEMTECH CONSULTING GROUP, 110 ROUTE 4, ENGLEWOOD, NJ 07631
ATTN Bobby Morovati

6 Date Received: 4-23-98
Received by: B Morovati
SDG MEBGS0
Laboratory Contract Number: 68-D5-0166
Unit Price
7 Transfer to
Date Received
Received by
Contract Number
Price

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other	B Conc Low Med High	C Sample Type Comp / Grab	D Preservative (from Box 2) Other	E – RAS Analysis: Diss Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Organic Sample No	J Sampler Initials	K High Phases: Solids	Water Miscible Liq	Water Immis Liq
MEBGS0	5	L	G	6		X	X					5-078291	X201	4/21/98/1700	ECCR2	BE			
MEBGS1	5	L	G	6		X	X					5-078319	X202	4/21/98/1640	ECCR3	BE			
MEBGS2	5	L	G	6		X	X					5-078320	X203	4/21/98/1500	ECCR4	BE			
MEBGS3	5	L	G	6		X	X					5-078321	X204	4/21/98/1450	ECCR5	BE			
MEBGS4	5	L	G	6		X	X					5-078322	X205	4/21/98/1400	ECCR6	BE			
MEBGS5	5	L	G	6		X	X					5-078323	X206	4/21/98/1530	ECCR7	BE			
MEBGS6	5	L	G	6		X	X					5-078324	X207	4/22/98/0900	ECCR8	BE			
MEBGS7	5	L	C	6		X	X					5-078325	X208	4/22/98/0930	ECCR9	BE			
MEBGS8	5	L	C	6		X	X					5-078326	X209	4/22/98/0930	ECCS0	BE			
MEBGS9	5	L	G	6		X	X					5-078327	X210	4/22/98/1000	ECCS1	BE			

Shipment for Case Complete? (Y/N): Y
Page 1 of 1
Sample(s) to be Used for Laboratory QC: MEBGS9
Additional Sampler Signatures:
Chain of Custody Seal Number(s): 181905

CHAIN OF CUSTODY RECORD

Relinquished by (Signature)	Date / Time	Received by (Signature)	Relinquished by (Signature)	Date / Time	Received by (Signature)
Bruce	4/22/98 1300				
Relinquished by (Signature)	Date / Time	Received by (Signature)	Relinquished by (Signature)	Date / Time	Received by (Signature)
Relinquished by (Signature)	Date / Time	Received for Laboratory by (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	
		B Morovati	4/23/98 1130		

DISTRIBUTION: Green Region Copy; White Lab Copy for Return to Region; Pink CLASS Copy; Yellow Lab Copy for Return to SMO

EPA Form 9110 1

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21 012 14 REV

365552

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No _____ CERCLIS No IL 05/23

Case No 26147 Site Name Location Waukegan Mun LF

Contractor or EPA Lab Chemtech Data User IEPA

No of Samples 10 Date Sampled or Data Received 5-18-98

Have Chain-of-Custody records been received? Yes ✓ No ✓
Have traffic reports or packing lists been received? Yes ✓ No _____
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No _____
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No _____
No of samples claimed 10 No of samples received 10

Received by Lynette Burnett Date 5-18-98

Received by LSSS Lynette Burnett Date 5-18-98

Review started 5-19-98 Reviewer Signature Stephane Tobin

Total time spent on review 9hrs Date review completed 5-19-98

Copied by Lynette Burnett Date 6-2-98.

Mailed to user by Lynette Burnett Date 6-2-98

DATA USER
Please fill in the blanks below and return this form to
Sylvia Griffen, Data mgmt Coordinator, Region V, 5SCRL

Data received by _____ Date _____

Data review received by _____ Date _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS Please indicate reasons why data are not suitable for your uses

_____

_____

Received by Data Mgmt Coordinator for Files Data _____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE 05-26-98

SUBJECT Review of Data
Received for Review on May 18, 1998

FROM Stephen L Ostrodka, Chief (SRT-4J)/L F
Superfund Technical Support Section

TO Data User IEPA

We have reviewed the data by CADRE for the following case

Site name Waukegan Mun. LF (IL)

Case number 26147 **SDG number** MEBGS0

Number and Type of Samples 10 soil samples

Sample Numbers MEBGS0-MEBGS9

Laboratory Chemtech **Hrs for Review** _____

Following are our findings

All data are usable with the qualifications described in the attached narrative

L Finkelberg

05-26-98

CC Cecilia Luckett
Region 5 TPO

Case Number 26147 **SDG Number MEBGS0**
Site Name Waukegan Mun LF (IL) **Laboratory Chemtech**

Mail Code SM-5J

Below is a summary of the out-of-control audits and the possible effects on the data for this case

Ten (10) soil samples, numbered MEBGS0 through MEBGS9, were collected on 04/21-22/98 The lab received the samples on 04/23/98 in good condition All samples were analyzed for metals and cyanide All samples were analyzed using CLP SOW ILM04 0 analysis procedure

Mercury analysis was performed using a Cold Vapor AA Technique Cyanide analysis was performed using MIDI Distillation procedure The remaining inorganic analyses were performed using an Inductively Coupled Plasma-Atomic Emission Spectrometric procedure

Steffanie Tobin (Lockheed/ESAT)
Date. May 19, 1998

Case Number : 26147 **SDG Number MEBGS0**
Site Name Waukegan Mun LF (IL) **Laboratory Chemtech**

1 HOLDING TIME

HOLDING TIME CRITERIA

Inorganic

	-- Holding Time --		------- pH -------	
	Primary	Expanded	Primary	Expanded
Metals	180	0	2 0	0 0
Mercury	28	0	2 0	0 0
Cyanide	14	0	12 0	0 0

DC-280 The following inorganic soil samples were reviewed for holding time violations using criteria developed for water samples

MEBGS0, MEBGS1, MEBGS2, MEBGS3, MEBGS4, MEBGS5
MEBGS6, MEBGS7, MEBGS8, MEBGS9

2 CALIBRATIONS

CALIBRATION CRITERIA

Inorganic

Percent Recovery Limits

	--- Primary ---		-- Expanded ---	
	Low	High	Low	High
Cyanide	85 00	115 00	70 00	130 00
AA	90 00	110 00	75 00	125 00
ICP	90 00	110 00	75 00	125 00
Mercury	80 00	120 00	65 00	135 00

No problems were found for this qualification

3 BLANKS

LABORATORY BLANKS CRITERIA

DC-283 The following inorganic samples are associated with a blank analyte concentration whose absolute value is greater than the instrument detection limit (IDL) Data must be qualified using professional judgement Hits are flagged "J"

Beryllium
MEBGS0, MEBGS1, MEBGS2, MEBGS3, MEBGS4, MEBGS5,
MEBGS6, MEBGS7, MEBGS8, MEBGS9

Arsenic

Steffanie Tobin (Lockheed/ESAT)
Date. May 19, 1998

MEBGS0, MEBGS1, MEBGS2, MEBGS3, MEBGS4, MEBGS5, MEBGS7, MEBGS8, MEBGS9

The following inorganic samples are associated with a negative blank concentration whose absolute value is greater than the instrument detection limit (IDL) The sample concentration is greater than the IDL and less than five times the absolute value of the blank concentration Hits are qualified "J" Some non-detect concentration readings are sufficiently high that the negative blank reading may have caused the IDL to be elevated These non-detects are flagged "UJ"

Sodium
MEBGS9

DC-338 During review of the following inorganic samples, the reported IDL/default CRDL value was used for cyanide

MEBGS0, MEBGS1, MEBGS2, MEBGS3, MEBGS4, MEBGS5, MEBGS6, MEBGS7, MEBGS8, MEBGS9

4 MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND LAB CONTROL SAMPLE

MATRIX SPIKE CRITERIA

Inorganic	
Percent Recovery Limits	
Upper	125 0
Lower	75 0
Extreme lower	30 0

No problems were found for this qualification

5 LABORATORY AND FIELD DUPLICATE

No problems were found for this qualification

6 ICP ANALYSIS

DC-294 The analyte concentration is high (>50 X the IDL) and serial dilution percent difference is not in control (>10%) All associated data are qualified "J"

Potassium, Vanadium, Zinc
MEBGS0, MEBGS1, MEBGS2, MEBGS3, MEBGS4, MEBGS5
MEBGS6, MEBGS7, MEBGS8, MEBGS9

DC-295 The following inorganic samples are associated with an ICP serial dilution percent difference which is not in control

Case Number 26147 **SDG Number MEBGS0**
Site Name Waukegan Mun LF (IL) **Laboratory: Chemtech**

The serial dilution result is greater than the sample result, indicating a potential negative interference The data must be qualified using professional judgement All associated data are estimated "J"

Chromium, Copper
MEBGS0, MEBGS1, MEBGS2, MEBGS3, MEBGS4, MEBGS5
MEBGS6, MEBGS7, MEBGS8, MEBGS9

7 GFAA ANALYSIS

NA

8 SAMPLE RESULTS

All data, except those qualified above, are acceptable

Steffanie Tobin (Lockheed/ESAT)
Date. May 19, 1998

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit
J	The analyte was positively identified, the associated numerical value is an approximate concentration of the analyte in the sample
UJ	The analyte was not detected above the reported sample quantitation limit However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample
R	The data are unusable (The compound may or may not be present)

FILE NAME MEBGSO DATE 05/19/98 TIME 13 55

CRITERIA FILE FGDRI94

DATA

	ginal	X	Qualified

QUALIFICATIONS PERFORMED

	Quantitation Limit		CRDL Standards
	Percent Moisture	X	ICS
X	Holding Time	X	LCS
X	Calibrations	X	Duplicates
X	Matrix Spikes		Furnace AA QC
	IPC	X	ICP Serial Dilutions
	Internal Standards	X	Sample Results Verification
	SMC/Surrogates	X	Laboratory Blanks
	System Performance		Field QC
	Sample Cleanup		

PRINT NON DETECTS

X	Yes		No

PRINT REJECTED RESULTS

X	Yes		No

TAL QUALIFIED SPREADSHEET

Case No 26147
SDG No MEBGS0

Site Waukegan Mun LF (IL)
Laboratory CHEMTECH CONSULTING GROUP INC

EPA SAMPLE NUMBER	MEBGS0		MEBGS1		MEBGS2		MEBGS3		MEBGS4	
REGIONAL SAMPLE NUMBER										
SAMPLE LOCATION	X201		X202		X203		X204		X205	
SAMPLE TYPE	Routine Sample		Routine Sample		Routine Sample		Routine Sample		Routine Sample	
MATRIX/ANALYSIS	Soil/Low		Soil/Low		Soil/Low		Soil/Low		Soil/Low	
DILUTION FACTOR										
PERCENT SOLID	57 9		46 3		60 7		33 3		43 7	
INORG										
Aluminum	11200		12800		9350		13100		10600	
Antimony	1 7	U	2 1	U	1 6	U	2 9	U	2 3	U
Arsenic	7	J	9 6	J	6 8	J	13 2	J	7	J
Barium	58 6		154		52 7		159		62	
Beryllium	0 60	J	0 60	J	0 50	J	0 80	J	1	J
Cadmium	0 30	U	0 40	U	0 30	U	0 60	U	0 40	U
Calcium	62800		75800		12700		79500		52500	
Chromium	19 9	J	21 2	J	16 3	J	24 2	J	19 6	J
Cobalt	8 6		8 5		8 4		11 5		9 3	
Copper	26 6	J	31	J	26 3	J	165	J	37 1	J
Iron	27500		39200		16700		38100		20500	
Lead	18 7		31 3		18 7		51 6		24 8	
Magnesium	27900		14400		8220		27200		22700	
Manganese	476		657		200		594		551	
Mercury	0 20	U	0 20	U	0 20	U	0 30	U	0 20	U
Nickel	23 5		22 8		17 9		26 1		20 2	
Potassium	2530	J	2470	J	1480	J	3360	J	2170	J
Selenium	1 3	U	1 7	U	1 3	U	2 3	U	1 8	U
Silver	0 70	U	0 80	U	0 60	U	1 2	U	0 90	U
Sodium	411		1290		279		1200		267	
Thallium	2	U	2 5	U	2	U	3 5	U	2 8	
Vanadium	23 6	J	29 5	J	23 6	J	31 1	J	27 4	J
Zinc	160	J	95 2	J	54	J	258	J	104	J
Cyanide	0 30	U	0 40	U	1 1		0 60	U	0 50	

FILE NAME MEBGS0 DATE 05/19/98 TIME 13 55 CADRE98

er units are reported in ug/L
oil units are reported in mg/Kg

TAL QUALIFIED SPREADSHEET

Case No 26147
SDG No MEBGS0

Site Waukegan Mun LF (IL)
Laboratory CHEMTECH CONSULTING GROUP INC

EPA SAMPLE NUMBER	MEBGS5		MEBGS6		MEBGS7		MEBGS8		MEBGS9	
REGIONAL SAMPLE NUMBER										
PLE LOCATION	X206		X207		X208		X209		X210	
PLE TYPE	Routine Sample		Routine Sample		Routine Sample		Routine Sample		Routine Sample	
MATRIX/ANALYSIS	Soil/Low		Soil/Low		Soil/Low		Soil/Low		Soil/Low	
DILUTION FACTOR										
PERCENT SOLID	70 6		62 1		63 6		67 6		72 4	
INORG										
Aluminum	9500		15300		15300		13600		8560	
Antimony	1 4	U	1 6	U	1 5	U	1 4	U	1 3	U
Arsenic	6	J	10 3		7 8	J	7 3	J	6 9	J
Barium	48 4		92 1		91 6		88 4		74 6	
Beryllium	0 80	J	1	J	1	J	1	J	0 70	J
Cadmium	0 30	U	0 30	U	0 30	U	0 30	U	0 30	U
Calcium	24500		39500		11100		12700		3140	
Chromium	15 9	J	24 9	J	24 6	J	21 7	J	15 1	J
Cobalt	7 5		11 5		10 4		12		12 3	
Copper	41	J	31 1	J	27 6	J	25 7	J	22 4	J
Iron	18200		25200		24300		22500		17000	
Lead	22 2		24 5		32 8		29 5		28 3	
Magnesium	14400		23600		8020		8660		2800	
Manganese	313		782		565		633		759	
Mercury	0 10	U	0 20	U	0 20	U	0 10	U	0 10	U
Nickel	17 7		26 3		22 3		19 9		15 3	
Potassium	1560	J	2970	J	2120	J	1900	J	900	J
Selenium	1 1	U	1 3	U	1 2	U	1 2	U	1 1	U
Silver	0 60	U	0 60	U	0 60	U	0 60	U	0 50	U
Sodium	270		343		865		784		36 1	J
Thallium	1 6	U	1 9	U	1 9		1 7	U	1 6	U
Vanadium	25 2	J	33 3	J	33 2	J	31	J	24 2	J
Zinc	111	J	97 5	J	78 8	J	68 8	J	57 8	J
Cyanide	0 30	U	0 30	U	0 30	U	0 30	U	0 30	U

F F NAME MEBGS0 DATE 05/19/98 TIME 13 55 CADRE98

er units are reported in ug/L
Soil units are reported in mg/Kg

Page ___ of ___

QC EXCEPTI(UMMARY REPORT

CASE\SAS#: 26147 SITE: Waukegan Trun. LF (II) MATRIX: Soil WATER SAMPLE SPK: NA

DATA SET: MEBGSL LAB: Clwitch CONC: 100 WATER SAMPLE DUP: NA

LAB QC # MEBGS9 REVIEWED BY: Stephen Tobin SOIL SAMPLE SPK: MEBGS1

DATE: 5-19-98 SOIL SAMPLE DUP: MEBGS9

FORM #		FORM 2	FORM 2	FORM 3	FORM 3	FORM 3	FORM 4	FORM 5	FORM 6	FORM 7	FORM 7	FORM 9	FORM 9	FORM 6	FORM 5	FIELD	FIELD	FIELD	FIELD	COMMENTS
ELEMENT	HOLD TIME	INITIAL CALIB	CONTIN CALIB	CALIB BLANK	PREP WATER BLANK	PREP SOIL BLANK	ICS %R	SOIL SPIKE %R	SOIL DUP RPD	ICS AQ	ICS SOIL	SERIAL DILUTION AQUEOUS	SERIAL DILUTION SOIL	AQ DUP %R	AQ SPIKE %R	BLANK	DUP RPD	BLANK	DUP RPD	
ALUMINUM	OK	OK	OK	~~46~~	NA		OK	OK	OK	NA	OK	NA		NA	NA					
ANTIMONY																				
ARSENIC				62																
BARIUM																				
BERYLLIUM				10																
CADMIUM																				
CALCIUM				~~62.5~~		~~15274~~														
CHROMIUM													205							
COBALT																				
COPPER				~~-13/38~~		~~0.368~~							125							
IRON				~~39.9~~																
LEAD																				
MAGNESIUM				~~56.4~~		~~8958~~														
MANGANESE																				
MERCURY																				
NICKEL																				
POTASSIUM													228							
SELENIUM																				
SILVER																				
SODIUM				~~-77.4~~		~~-13128~~														
THALLIUM				-34																
TIN																				
VANADIUM													178							
ZINC				~~-8.8~~		~~-1266~~							361							
CYANIDE	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓		✓	✓					