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GILBERT TANK FARM
PARCELS 460, 461, 463, AND 472

BROWNFIELDS ASSESSMENT

VOLUME II

Havre De Grace, Maryland

August 1997

Prepared by: Maryland Department of the Environment
Waste Management Administration
Environmental Restoration and Redevelopment Program
Site Assessment Division
2500 Broening Highway
Baltimore, Maryland 21224

Prepared for: U.S. Environmental Protection Agency
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DATE : March 24, 1997

SUBJECT: Region III Data QA Review

FROM : Fredrick Foreman FF
Region III ESAT RPO (3ES20)

TO : Jim McCreary (3HW30)
Regional Project Manager (3HW50)

Attached is the organic data validation report for the Gilbert Tank Farm Site (Case 25233) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAPD.

If you have any questions regarding this review, please call me at (410) 573-2629.

Attachment

cc: Beth Creamer, MDE

TDF File: 0263

RECEIVED
MAR 26 97
CERCLA PRE-REMEDIAL DIVISION

Lockheed Martin Services Group
Environmental Services & Technologies Region 3
1419 Forest Drive, Suite 104 Annapolis, MD 21403
Telephone 410-268-7705 Facsimile 410-268-0331

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LOCKHEED MARTIN

DATE: MARCH 20, 1997

SUBJECT: ORGANIC DATA VALIDATION
SITE: GILBERT TANK FARM
CASE: 25233 SDGs: CNL23, CNL39

FROM: HARI PRASAD HP — DATA REVIEWER
MAHBOOBEH MECANIC MM — SENIOR OVERSIGHT CHEMIST

TO: FREDRICK FOREMAN
ESAT REGIONAL PROJECT OFFICER

THROUGH: DALE S. BOSHART DSB
ESAT TEAM MANAGER

OVERVIEW

The sample set for Case 25333 comprised a total of twenty-one (21) samples submitted to CompuChem Environmental Corporation (COMPU) for volatile, semivolatile, and pesticide/PCB analyses. Sample Delivery Group (SDG) CNL23 consisted of sixteen (16) soil samples and SDG CNL39 consisted of five (5) aqueous samples. Included in the sample set were one (1) field blank, one (1) soil field duplicate pair, and one (1) aqueous field duplicate pair. The samples were analyzed according to the Contract Laboratory Program (CLP) Statement of Work (SOW) OLM03.2, through the Routine Analytical Services (RAS) program.

SUMMARY

The data for SDG CNL23 were validated according to the EPA Innovative Approaches for Validation of Organic Data, Level C1, utilizing the Computer-Aided Data Review and Evaluation (CADRE) program, Version 2.3. CADRE utilizes the electronic data submitted by the laboratory, and evaluates the data according to the Region III Modifications to the National Functional Guidelines. The Quality Control (QC) measures evaluated by CADRE for this level of review are included in Appendix D. The chromatograms and mass spectra were also reviewed during validation. Because of software problems encountered while downloading the electronic data, SDG CNL39 was validated according to the EPA Innovative Approaches for Validation of Organic Data, Level M2. This level of review includes the review of all QC measures and excludes the review of the raw data and mass spectra. For your convenience, Data Summary Forms (DSFs) and calibration tables have been included for SDG CNL39.

All samples were successfully analyzed for all target compounds. All instrument and method sensitivities were according to the

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specified protocols. Areas of concern with respect to data usability are listed below.

MINOR PROBLEM

- During the volatile and semivolatile initial and/or continuing calibrations, several compounds failed the precision criteria [Percent Relative Standard Deviation (%RSD) > 30% and/or Percent Difference (%D) > 25%]. Acetone had a %RSD exceeding 50%. The quantitation limits for acetone in the affected samples were qualified "UJ". The "J" qualifier for the reported results for this compound was superseded by the "B" qualifier.

NOTES

- The maximum concentrations of the compounds detected during the analyses of the field and laboratory blanks are listed below. Affected samples with concentrations of common laboratory contaminants less than ten times (< 10X) the blank concentration and with concentrations of the other contaminants, listed less then five times (5X) the blank concentration, have been qualified "B".

Compound	Concentration
Methylene Chloride*	5 J µg/Kg
Acetone*	13 J µg/L
alpha-BHC	0.090 J µg/Kg
Dieldrin	0.0084 J µg/L
4,4'-DDT	0.013 J µg/L

* Common Laboratory Contaminant

- The Contract Required Quantitation Limits (CRQLs) reported on the CADRE Qualified Spreadsheet Reports are based on SOW OLM01.8. For some semivolatile compounds, these CRQLs are slightly lower than those reported on the laboratory Form 1s, the latter of which are based on OLM03.2.

- In the semivolatile continuing calibration standards, the benzene (b)/(k) fluoranthene isomers were chromatographically resolved. These isomers could not be resolved during the sample analyses. The reported results for these isomers have been qualified "NJ" on the CADRE Qualified Spreadsheet reports. See Quality Assurance Notice from the laboratory dated 1/6/97 in Appendix D.

- The reported results which are below the CRQLs have been qualified "J" during validation, unless superseded by the "B" qualifier.

- The pesticide/PCB compounds with %Ds greater than twenty-five percent (25%) between the two (2) analytical columns

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were qualified "J" during validation, unless superseded by the "B" qualifier.

The data for Case 25233, SDGs CNL23 and CNL39, were reviewed in accordance with the Region III Innovative Approaches for Validation of Organic Data, June 1995, and the Region III Modifications to the National Functional Guidelines for Organic Data Review, September, 1994.

ATTACHMENTS

Appendix A - Glossary of Data Qualifiers

Appendix B1 - CADRE Qualified Spreadsheet Reports for SDG CNL23

Appendix B2 - Data Summary Forms for SDG CNL39

Appendix C - CADRE Qualification Reports for SDG CNL23

Appendix D - Support Documentation

DCN: HP703A07.GIL

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Appendix A

Glossary of Data Qualifiers

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GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

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

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

NO CODE = Confirmed identification.

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

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

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

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

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

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

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

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

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

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

Q = No analytical result.

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Appendix B1

CADRE Qualified Spreadsheet Reports
for SDG CNL23

TCL QUALIFIED SPREADSHEET

ase No: 25233
)G No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

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?A SAMPLE NUMBER:	CNL23		CNL24		CNL25		CNL26		CNL27	
:GIONAL SAMPLE NUMBER:										
AMPLE LOCATION:	S-1		S-2		S-3		S-4		S-5	
AMPLE TYPE:	Routine Sample		Routine Sample		Routine Sample		Routine Sample		F. Dup. of CNL35	
ATRIX/ANALYSIS:	Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW	
ILUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
ERCENT MOISTURE:	15		15		11		17		16	
)A										
hloromethane	12	U	12	U	11	U	12	U	12	U
romomethane	12	U	12	U	11	U	12	U	12	U
inyl Chloride	12	U	12	U	11	U	12	U	12	U
hloroethane	12	U	12	U	11	U	12	U	12	U
ethylene Chloride	11	B	9	B	11	B	2	B	1	B
cetone	12	UJ	59	B	12	B	37	B	12	UJ
arbon Disulfide	12	U	12	U	11	U	12	U	12	U
,1-Dichloroethene	12	U	12	U	11	U	12	U	12	U
,1-Dichloroethane	12	U	12	U	11	U	12	U	12	U
,2-Dichloroethene (total)	12	U	12	U	11	U	12	U	12	U
hloroform	12	U	12	U	11	U	12	U	12	U
,2-Dichloroethane	12	U	12	U	11	U	12	U	12	U
-Butanone	12	U	12	U	11	U	12	U	12	U
,1,1-Trichloroethane	12	U	12	U	11	U	12	U	12	U
arbon Tetrachloride	12	U	12	U	11	U	12	U	12	U
romodichloromethane	12	U	12	U	11	U	12	U	12	U
,2-Dichloropropane	12	U	12	U	11	U	12	U	12	U
is-1,3-Dichloropropene	12	U	12	U	11	U	12	U	12	U
richloroethene	12	U	12	U	11	U	12	U	12	U
ibromochloromethane	12	U	12	U	11	U	12	U	12	U
,1,2-Trichloroethane	12	U	12	U	11	U	12	U	12	U
enzene	12	U	12	U	11	U	12	U	12	U
rans-1,3-Dichloropropene	12	U	12	U	11	U	12	U	12	U
romoform	12	U	12	U	11	U	12	U	12	U
-Methyl-2-Pentanone	12	U	12	U	11	U	12	U	12	U
-Hexanone	12	U	12	U	11	U	12	U	12	U
etrachloroethene	12	U	12	U	11	U	12	U	12	U
,1,2,2-Tetrachloroethane	12	U	12	U	11	U	12	U	12	U
oluene	12	U	12	U	11	U	12	U	12	U
hlorobenzene	12	U	12	U	11	U	12	U	12	U
thylbenzene	12	U	12	U	11	U	12	U	12	U
tyrene	12	U	12	U	11	U	12	U	12	U
ylene (total)	12	U	12	U	11	U	12	U	12	U

LE NAME: CNL23 DATE: 03/19/97 TIME: 09:57 CADRE 2.3

ater units are reported in ug/L.
oil units are reported in ug/Kg.

TCL QUALIFIED SPREADSHEET

ase No: 25233
DG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

ORIGINAL (Red)

PA SAMPLE NUMBER:	CNL28		CNL29		CNL30		CNL31		CNL32	
EGIONAL SAMPLE NUMBER:										
AMPLE LOCATION:	S-6		S-7		S-8		S-9		S-10	
AMPLE TYPE:	Routine Sample		Routine Sample		Routine Sample		Routine Sample		Routine Sample	
ATRIX/ANALYSIS:	Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW	
ILUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
ERCENT MOISTURE:	33		15		15		21		16	
OA										
hloromethane	15	U	12	U	12	U	13	U	12	U
romomethane	15	U	12	U	12	U	13	U	12	U
inyl Chloride	15	U	12	U	12	U	13	U	12	U
hloroethane	15	U	12	U	12	U	13	U	12	U
ethylene Chloride	5	B	8	B	4	B	3	B	6	B
cetone	4	B	120	B	14	B	6	B	5	B
arbon Disulfide	15	U	12	U	12	U	13	U	12	U
,1-Dichloroethene	15	U	12	U	12	U	13	U	12	U
,1-Dichloroethane	15	U	12	U	12	U	13	U	12	U
,2-Dichloroethene (total)	15	U	12	U	12	U	13	U	12	U
hloroform	15	U	12	U	12	U	13	U	12	U
,2-Dichloroethane	15	U	12	U	12	U	13	U	12	U
-Butanone	15	U	11	J	12	U	13	U	12	U
,1,1-Trichloroethane	15	U	12	U	12	U	13	U	12	U
arbon Tetrachloride	15	U	12	U	12	U	13	U	12	U
romodichloromethane	15	U	12	U	12	U	13	U	12	U
,2-Dichloropropane	15	U	12	U	12	U	13	U	12	U
is-1,3-Dichloropropene	15	U	12	U	12	U	13	U	12	U
richloroethene	15	U	12	U	12	U	13	U	12	U
ibromochloromethane	15	U	12	U	12	U	13	U	12	U
,1,2-Trichloroethane	15	U	12	U	12	U	13	U	12	U
enzene	15	U	12	U	12	U	13	U	12	U
rans-1,3-Dichloropropene	15	U	12	U	12	U	13	U	12	U
romoform	15	U	12	U	12	U	13	U	12	U
-Methyl-2-Pentanone	15	U	12	U	12	U	13	U	12	U
-Hexanone	15	U	12	U	12	U	13	U	12	U
etrachloroethene	15	U	12	U	12	U	13	U	12	U
,1,2,2-Tetrachloroethane	15	U	12	U	12	U	13	U	12	U
oluene	15	U	12	U	12	U	13	U	12	U
hlorobenzene	15	U	12	U	12	U	13	U	12	U
thylbenzene	15	U	2	J	12	U	13	U	12	U
tyrene	15	U	12	U	12	U	13	U	12	U
ylene (total)	15	U	12	U	12	U	13	U	12	U

ater units are reported in ug/L.
oil units are reported in ug/Kg.

TCL QUALIFIED SPREADSHEET

ase No: 25233
DG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

ORIGINAL (Red)

PA SAMPLE NUMBER:	CNL33		CNL34		CNL35		CNL36		CNL37	
EGIONAL SAMPLE NUMBER:										
AMPLE LOCATION:	S-11		S-12		S-13		SED-1		SED-2	
AMPLE TYPE:	Routine Sample		Routine Sample		F. Dup. of CNL27		Routine Sample		Routine Sample	
ATRIX/ANALYSIS:	Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW	
ILUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
ERCENT MOISTURE:	13		18		19		56		57	
OA										
hloromethane	11	U	12	U	12	U	23	U	23	U
romomethane	11	U	12	U	12	U	23	U	23	U
inyl Chloride	11	U	12	U	12	U	23	U	23	U
hloroethane	11	U	12	U	12	U	23	U	23	U
lethylene Chloride	2	B	5	B	2	B	2	J	23	U
cetone	9	B	7	B	7	B	60	B	20	B
arbon Disulfide	11	U	12	U	12	U	23	U	23	U
,1-Dichloroethene	11	U	12	U	12	U	23	U	23	U
,1-Dichloroethane	11	U	12	U	12	U	23	U	23	U
,2-Dichloroethene (total)	11	U	12	U	12	U	23	U	23	U
hloroform	11	U	12	U	12	U	23	U	23	U
,2-Dichloroethane	11	U	12	U	12	U	23	U	23	U
-Butanone	11	U	12	U	12	U	23	U	23	U
,1,1-Trichloroethane	11	U	12	U	12	U	23	U	23	U
arbon Tetrachloride	11	U	12	U	12	U	23	U	23	U
romodichloromethane	11	U	12	U	12	U	23	U	23	U
,2-Dichloropropane	11	U	12	U	12	U	23	U	23	U
is-1,3-Dichloropropene	11	U	12	U	12	U	23	U	23	U
richloroethene	11	U	12	U	12	U	23	U	23	U
ibromochloromethane	11	U	12	U	12	U	23	U	23	U
,1,2-Trichloroethane	11	U	12	U	12	U	23	U	23	U
enzene	11	U	12	U	12	U	23	U	23	U
rans-1,3-Dichloropropene	11	U	12	U	12	U	23	U	23	U
romoform	11	U	12	U	12	U	23	U	23	U
-Methyl-2-Pentanone	11	U	12	U	12	U	23	U	23	U
-Hexanone	11	U	12	U	12	U	23	U	23	U
etrachloroethene	11	U	12	U	12	U	23	U	23	U
,1,2,2-Tetrachloroethane	11	U	12	U	12	U	23	U	23	U
oluene	11	U	12	U	12	U	23	U	23	U
hlorobenzene	11	U	12	U	12	U	23	U	23	U
thylbenzene	11	U	12	U	12	U	23	U	23	U
tyrene	11	U	12	U	12	U	23	U	23	U
ylene (total)	11	U	12	U	12	U	23	U	23	U

LE NAME: CNL23 DATE: 03/19/97 TIME: 09:57 CADRE 2.3

ater units are reported in ug/L.
oil units are reported in ug/Kg.

TCL QUALIFIED SPREADSHEET

:ase No: 25233
:DG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

ORIGINAL (Red)

:PA SAMPLE NUMBER:	CNL38					
:EGIONAL SAMPLE NUMBER:						
:AMPLE LOCATION:	SED-3					
:AMPLE TYPE:	Routine Sample					
IATRIX/ANALYSIS:	Soil/LOW					
:ILUTION FACTOR:	1.0					
'ERCENT MOISTURE:	61					
'OA						
:hloromethane	26	U				
1romomethane	26	U				
'inyl Chloride	26	U				
:hloroethane	26	U				
lethylene Chloride	4	B				
ıcetone	74	B				
:arbon Disulfide	26	U				
1,1-Dichloroethene	26	U				
1,1-Dichloroethane	26	U				
1,2-Dichloroethene (total)	26	U				
:hloroform	26	U				
1,2-Dichloroethane	26	U				
2-Butanone	26	U				
1,1,1-Trichloroethane	26	U				
:arbon Tetrachloride	26	U				
1romodichloromethane	26	U				
1,2-Dichloropropane	26	U				
:is-1,3-Dichloropropene	26	U				
'richloroethene	26	U				
)ibromochloromethane	26	U				
1,1,2-Trichloroethane	26	U				
lenzene	26	U				
:rans-1,3-Dichloropropene	26	U				
1romoform	26	U				
4-Methyl-2-Pentanone	26	U				
2-Hexanone	26	U				
'etrachloroethene	26	U				
1,1,2,2-Tetrachloroethane	26	U				
'oluene	26	U				
:hlorobenzene	26	U				
:thylbenzene	26	U				
3tyrene	26	U				
(ylene (total)	26	U				

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

TCL QUALIFIED SPREADSHEET

ase No: 25233
DG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

ORIGINAL (Red)

PA SAMPLE NUMBER:	CNL23		CNL24		CNL25		CNL26		CNL27	
EGIONAL SAMPLE NUMBER:										
AMPLE LOCATION:	S-1		S-2		S-3		S-4		S-5	
AMPLE TYPE:	Routine Sample		Routine Sample		Routine Sample		Routine Sample		F. Dup. of CNL35	
ATRIX/ANALYSIS:	Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW	
ILUTION FACTOR:	1.0		1.0		1.0		1.0		1.0/5.0	
ERCENT MOISTURE:	15		15		11		17		16	
NA										
henol	380	U	380	U	370	U	390	U	390	U
is(2-Chloroethyl)ether	380	U	380	U	370	U	390	U	390	U
-Chlorophenol	380	U	380	U	370	U	390	U	390	U
,3-Dichlorobenzene	380	U	380	U	370	U	390	U	390	U
,4-Dichlorobenzene	380	U	380	U	370	U	390	U	390	U
,2-Dichlorobenzene	380	U	380	U	370	U	390	U	390	U
-Methylphenol	380	U	380	U	370	U	390	U	390	U
,2'-oxybis(1-Chloropropane)	380	U	380	U	370	U	390	U	390	U
-Methylphenol	380	U	380	U	370	U	390	U	390	U
-Nitroso-di-n-propylamine	380	U	380	U	370	U	390	U	390	U
exachloroethane	380	U	380	U	370	U	390	U	390	U
itrobenzene	380	U	380	U	370	U	390	U	390	U
sophorone	380	U	380	U	370	U	390	U	390	U
-Nitrophenol	380	U	380	U	370	U	390	U	390	U
,4-Dimethylphenol	380	U	380	U	370	U	390	U	390	U
is(2-Chloroethoxy)methane	380	U	380	U	370	U	390	U	390	U
,4-Dichlorophenol	380	U	380	U	370	U	390	U	390	U
,2,4-Trichlorobenzene	380	U	380	U	370	U	390	U	390	U
aphthalene	380	U	380	U	370	U	390	U	100	J
-Chloroaniline	380	U	380	U	370	U	390	U	390	U
exachlorobutadiene	380	U	380	U	370	U	390	U	390	U
-Chloro-3-methylphenol	380	U	380	U	370	U	390	U	390	U
-Methylnaphthalene	380	U	380	U	370	U	45	J	190	J
exachlorocyclopentadiene	380	U	380	U	370	U	390	U	390	U
,4,6-Trichlorophenol	380	U	380	U	370	U	390	U	390	U
,4,5-Trichlorophenol	930	U	930	U	900	U	950	U	940	U
-Chloronaphthalene	380	U	380	U	370	U	390	U	390	U
-Nitroaniline	930	U	930	U	900	U	950	U	940	U
imethylphthalate	380	U	380	U	370	U	390	U	390	U
cenaphthylene	380	U	380	U	370	U	390	U	160	J
,6-Dinitrotoluene	380	U	380	U	370	U	390	U	390	U
-Nitroaniline	930	U	930	U	900	U	950	U	940	U
cenaphthene	380	U	380	U	370	U	390	U	87	J
,4-Dinitrophenol	930	U	930	U	900	U	950	U	940	U
-Nitrophenol	930	U	930	U	900	U	950	U	940	U
ibenzofuran	380	U	380	U	370	U	390	U	110	J
,4-Dinitrotoluene	380	U	380	U	370	U	390	U	390	U
iethylphthalate	380	U	380	U	370	U	390	U	390	U
-Chlorophenyl-phenylether	380	U	380	U	370	U	390	U	390	U
luorene	380	U	380	U	370	U	390	U	470	
-Nitroaniline	930	U	930	U	900	U	950	U	940	U
,6-Dinitro-2-methylphenol	930	U	930	U	900	U	950	U	940	U
-Nitrosodiphenylamine (1)	380	U	380	U	370	U	390	U	390	U
-Bromophenyl-phenylether	380	U	380	U	370	U	390	U	390	U
exachlorobenzene	380	U	380	U	370	U	390	U	390	U
entachlorophenol	930	U	930	U	900	U	950	U	940	U
henanthrene	71	J	380	U	370	U	55	J	7300*	
nthracene	380	U	380	U	370	U	390	U	920	
arbazole	380	U	380	U	370	U	390	U	350	J
i-n-butylphthalate	380	U	380	U	370	U	390	U	390	U
luoranthene	200	J	380	U	370	U	390	U	9700*	
yrene	190	J	380	U	58	J	390	U	10000*	
utylbenzylphthalate	380	U	380	U	370	U	390	U	390	U
,3'-Dichlorobenzidine	380	U	380	U	370	U	390	U	390	U
enzo(a)anthracene	160	J	380	U	370	U	390	U	4200*	
hrysene	170	J	380	U	370	U	390	U	4600*	
is(2-Ethylhexyl)phthalate	320	J	44	J	230	J	390	U	390	U
i-n-octylphthalate	380	U	380	U	370	U	390	U	390	U
enzo(b)fluoranthene	340	NJ	380	U	370	U	390	U	5500*	NJ
enzo(k)fluoranthene	270	NJ	380	U	370	U	390	U	5500*	NJ
enzo(a)pyrene	190	J	380	U	370	U	390	U	4000*	
Indeno(1,2,3-cd)pyrene	100	J	380	U	370	U	390	U	1600	
ibenz(a,h)anthracene	45	J	380	U	370	U	390	U	410	
enzo(g,h,i)perylene	130	J	380	U	370	U	390	U	1600	

Water units are reported in ug/L. * = Results reported from the diluted analysis.
Soil units are reported in ug/Kg.

TCL QUALIFIED SPREADSHEET

ase No: 25233
DG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

ORIGINAL (Red)

PA SAMPLE NUMBER:	CNL28		CNL29		CNL30		CNL31		CNL32	
EGIONAL SAMPLE NUMBER:										
AMPLE LOCATION:	S-6		S-7		S-8		S-9		S-10	
AMPLE TYPE:	Routine Sample		Routine Sample		Routine Sample		Routine Sample		Routine Sample	
ATRIX/ANALYSIS:	Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW	
ILUTION FACTOR:	1.0/2.0		1.0		1.0		1.0		1.0	
ERCENT MOISTURE:	33		15		15		21		16	
NA										
henol	490	U	380	U	380	U	410	U	390	U
is(2-Chloroethyl)ether	490	U	380	U	380	U	410	U	390	U
-Chlorophenol	490	U	380	U	380	U	410	U	390	U
,3-Dichlorobenzene	490	U	380	U	380	U	410	U	390	U
,4-Dichlorobenzene	490	U	380	U	380	U	410	U	390	U
,2-Dichlorobenzene	490	U	380	U	380	U	410	U	390	U
-Methylphenol	490	U	380	U	380	U	410	U	390	U
,2'-oxybis(1-Chloropropane)	490	U	380	U	380	U	410	U	390	U
-Methylphenol	490	U	380	U	380	U	410	U	390	U
-Nitroso-di-n-propylamine	490	U	380	U	380	U	410	U	390	U
exachloroethane	490	U	380	U	380	U	410	U	390	U
itrobenzene	490	U	380	U	380	U	410	U	390	U
sophorone	490	U	380	U	380	U	410	U	390	U
-Nitrophenol	490	U	380	U	380	U	410	U	390	U
,4-Dimethylphenol	490	U	380	U	380	U	410	U	390	U
is(2-Chloroethoxy)methane	490	U	380	U	380	U	410	U	390	U
,4-Dichlorophenol	490	U	380	U	380	U	410	U	390	U
,2,4-Trichlorobenzene	490	U	380	U	380	U	410	U	390	U
aphthalene	160	J	160	J	380	U	110	J	390	U
-Chloroaniline	490	U	380	U	380	U	410	U	390	U
exachlorobutadiene	490	U	380	U	380	U	410	U	390	U
-Chloro-3-methylphenol	490	U	380	U	380	U	410	U	390	U
-Methylnaphthalene	120	J	560		380	U	190	J	390	U
exachlorocyclopentadiene	490	U	380	U	380	U	410	U	390	U
,4,6-Trichlorophenol	490	U	380	U	380	U	410	U	390	U
,4,5-Trichlorophenol	1200	U	920	U	920	U	1000	U	950	U
-Chloronaphthalene	490	U	380	U	380	U	410	U	390	U
-Nitroaniline	1200	U	920	U	920	U	1000	U	950	U
imethylphthalate	490	U	380	U	380	U	410	U	390	U
cenaphthylene	490	U	380	U	380	U	410	U	390	U
,6-Dinitrotoluene	490	U	380	U	380	U	410	U	390	U
-Nitroaniline	1200	U	920	U	920	U	1000	U	950	U
cenaphthene	300	J	380	U	380	U	410	U	390	U
,4-Dinitrophenol	1200	U	920	U	920	U	1000	U	950	U
-Nitrophenol	1200	U	920	U	920	U	1000	U	950	U
ibenzofuran	270	J	380	U	380	U	410	U	390	U
,4-Dinitrotoluene	490	U	380	U	380	U	410	U	390	U
iethylphthalate	490	U	380	U	380	U	410	U	390	U
-Chlorophenyl-phenylether	490	U	380	U	380	U	410	U	390	U
luorene	480	J	380	U	380	U	410	U	390	U
-Nitroaniline	1200	U	920	U	920	U	1000	U	950	U
,6-Dinitro-2-methylphenol	1200	U	920	U	920	U	1000	U	950	U
-Nitrosodiphenylamine (1)	490	U	380	U	380	U	410	U	390	U
-Bromophenyl-phenylether	490	U	380	U	380	U	410	U	390	U
exachlorobenzene	490	U	380	U	380	U	410	U	390	U
entachlorophenol	1200	U	920	U	920	U	1000	U	950	U
henanthrene	3900*		380	U	380	U	44	J	98	J
nthracene	890		380	U	380	U	410	U	390	U
arbazole	430	J	380	U	380	U	410	U	390	U
i-n-butylphthalate	490	U	380	U	380	U	410	U	390	U
luoranthene	4400*		380	U	380	U	120	J	210	J
yrene	3800		380	U	380	U	180	J	240	J
utylbenzylphthalate	490	U	380	U	380	U	410	U	390	U
,3'-Dichlorobenzidine	490	U	380	U	380	U	410	U	390	U
enzo(a)anthracene	2300		380	U	380	U	140	J	180	J
hrysene	1900		380	U	380	U	140	J	160	J
is(2-Ethylhexyl)phthalate	490	U	380	U	380	U	50	J	49	J
i-n-octylphthalate	490	U	380	U	380	U	410	U	390	U
enzo(b)fluoranthene	2200*	NJ	380	U	380	U	260	NJ	300	NJ
enzo(k)fluoranthene	2200*	NJ	380	U	380	U	200	NJ	240	NJ
enzo(a)pyrene	1800		380	U	380	U	170	J	190	J
Indeno(1,2,3-cd)pyrene	780		380	U	380	U	100	J	93	J
ibenz(a,h)anthracene	180	J	380	U	380	U	410	U	390	U
enzo(g,h,i)perylene	820		380	U	380	U	130	J	110	J

Water units are reported in ug/L. * = Results reported from the diluted analysis.
Soil units are reported in ug/Kg.

TCL QUALIFIED SPREADSHEET

ıse No: 25233
G No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

ORIGINAL (Red)

'A SAMPLE NUMBER:	CNL33		CNL34		CNL35		CNL36		CNL37	
GIONAL SAMPLE NUMBER:										
MPLE LOCATION:	S-11		S-12		S-13		SED-1		SED-2	
MPLE TYPE:	Routine Sample		Routine Sample		F. Dup. of CNL27		Routine Sample		Routine Sample	
TRIX/ANALYSIS:	Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW	
LUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
RCENT MOISTURE:	13		18		19		56		57	
IA										
ıenol	380	U	400	U	400	U	740	U	760	U
's(2-Chloroethyl)ether	380	U	400	U	400	U	740	U	760	U
·Chlorophenol	380	U	400	U	400	U	740	U	760	U
3-Dichlorobenzene	380	U	400	U	400	U	740	U	760	U
4-Dichlorobenzene	380	U	400	U	400	U	740	U	760	U
2-Dichlorobenzene	380	U	400	U	400	U	740	U	760	U
·Methylphenol	380	U	400	U	400	U	740	U	760	U
2'-oxybis(1-Chloropropane)	380	U	400	U	400	U	740	U	760	U
·Methylphenol	380	U	400	U	400	U	740	U	760	U
·Nitroso-di-n-propylamine	380	U	400	U	400	U	740	U	760	U
exachloroethane	380	U	400	U	400	U	740	U	760	U
itrobenzene	380	U	400	U	400	U	740	U	760	U
sophorone	380	U	400	U	400	U	740	U	760	U
·Nitrophenol	380	U	400	U	400	U	740	U	760	U
4-Dimethylphenol	380	U	400	U	400	U	740	U	760	U
is(2-Chloroethoxy)methane	380	U	400	U	400	U	740	U	760	U
4-Dichlorophenol	380	U	400	U	400	U	740	U	760	U
2,4-Trichlorobenzene	380	U	400	U	400	U	740	U	760	U
aphthalene	380	U	400	U	400	U	740	U	760	U
·Chloroaniline	380	U	400	U	400	U	740	U	760	U
exachlorobutadiene	380	U	400	U	400	U	740	U	760	U
·Chloro-3-methylphenol	380	U	400	U	400	U	740	U	760	U
-Methylnaphthalene	380	U	400	U	400	U	740	U	760	U
exachlorocyclopentadiene	380	U	400	U	400	U	740	U	760	U
4,6-Trichlorophenol	380	U	400	U	400	U	740	U	760	U
4,5-Trichlorophenol	910	U	970	U	980	U	1800	U	1800	U
·Chloronaphthalene	380	U	400	U	400	U	740	U	760	U
-Nitroaniline	910	U	970	U	980	U	1800	U	1800	U
imethylphthalate	380	U	400	U	400	U	740	U	760	U
cenaphthylene	380	U	400	U	400	U	740	U	760	U
6-Dinitrotoluene	380	U	400	U	400	U	740	U	760	U
-Nitroaniline	910	U	970	U	980	U	1800	U	1800	U
cenaphthene	380	U	400	U	400	U	740	U	760	U
4-Dinitrophenol	910	U	970	U	980	U	1800	U	1800	U
-Nitrophenol	910	U	970	U	980	U	1800	U	1800	U
ibenzofuran	380	U	400	U	400	U	740	U	760	U
4-Dinitrotoluene	380	U	400	U	400	U	740	U	760	U
iethylphthalate	380	U	400	U	400	U	740	U	760	U
-Chlorophenyl-phenylether	380	U	400	U	400	U	740	U	760	U
luorene	380	U	400	U	51	J	740	U	760	U
-Nitroaniline	910	U	970	U	980	U	1800	U	1800	U
6-Dinitro-2-methylphenol	910	U	970	U	980	U	1800	U	1800	U
-Nitrosodiphenylamine (1)	380	U	400	U	400	U	740	U	760	U
-Bromophenyl-phenylether	380	U	400	U	400	U	740	U	760	U
exachlorobenzene	380	U	400	U	400	U	740	U	760	U
entachlorophenol	910	U	970	U	980	U	1800	U	1800	U
henanthrene	380	U	400	U	780		740	U	760	U
nthracene	380	U	400	U	100	J	740	U	760	U
arbazole	380	U	400	U	61	J	740	U	760	U
i-n-butylphthalate	380	U	400	U	400	U	740	U	760	U
luoranthene	380	U	400	U	1500		150	J	160	J
yrene	380	U	400	U	1200		130	J	160	J
utylbenzylphthalate	380	U	400	U	400	U	740	U	760	U
3'-Dichlorobenzidine	380	U	400	U	400	U	740	U	760	U
enzo(a)anthracene	380	U	400	U	610		89	J	100	J
hrysene	380	U	400	U	670		88	J	120	J
is(2-Ethylhexyl)phthalate	380	U	400	U	300	J	74	J	94	J
i-n-octylphthalate	380	U	400	U	400	U	740	U	760	U
enzo(b)fluoranthene	380	U	400	U	1100	NJ	180	NJ	150	NJ
enzo(k)fluoranthene	380	U	400	U	880	NJ	140	NJ	150	NJ
enzo(a)pyrene	380	U	400	U	740		110	J	120	J
ndeno(1,2,3-cd)pyrene	380	U	400	U	360	J	740	U	760	U
ibenz(a,h)anthracene	380	U	400	U	81	J	740	U	760	U
enzo(g,h,i)perylene	150	J	400	U	390	J	740	U	760	U

'ater units are reported in ug/L.
oil units are reported in ug/Kg.

TCL QUALIFIED SPREADSHEET

ase No: 25233
DG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

ORIGINAL (Red)

PA SAMPLE NUMBER:	CNL38					
EGIONAL SAMPLE NUMBER:						
AMPLE LOCATION:	SED-3					
AMPLE TYPE:	Routine Sample					
ATRIX/ANALYSIS:	Soil/LOW					
ILUTION FACTOR:	1.0					
ERCENT MOISTURE:	61					
NA						
henol	840	U				
is(2-Chloroethyl)ether	840	U				
-Chlorophenol	840	U				
,3-Dichlorobenzene	840	U				
,4-Dichlorobenzene	840	U				
,2-Dichlorobenzene	840	U				
-Methylphenol	840	U				
,2'-oxybis(1-Chloropropane)	840	U				
-Methylphenol	840	U				
-Nitroso-di-n-propylamine	840	U				
exachloroethane	840	U				
itrobenzene	840	U				
sophorone	840	U				
-Nitrophenol	840	U				
,4-Dimethylphenol	840	U				
is(2-Chloroethoxy)methane	840	U				
,4-Dichlorophenol	840	U				
,2,4-Trichlorobenzene	840	U				
aphthalene	840	U				
-Chloroaniline	840	U				
exachlorobutadiene	840	U				
-Chloro-3-methylphenol	840	U				
-Methylnaphthalene	840	U				
exachlorocyclopentadiene	840	U				
,4,6-Trichlorophenol	840	U				
,4,5-Trichlorophenol	2000	U				
-Chloronaphthalene	840	U				
-Nitroaniline	2000	U				
imethylphthalate	840	U				
cenaphthylene	840	U				
,6-Dinitrotoluene	840	U				
-Nitroaniline	2000	U				
cenaphthene	840	U				
,4-Dinitrophenol	2000	U				
-Nitrophenol	2000	U				
ibenzofuran	840	U				
,4-Dinitrotoluene	840	U				
iethylphthalate	840	U				
-Chlorophenyl-phenylether	840	U				
luorene	840	U				
-Nitroaniline	2000	U				
,6-Dinitro-2-methylphenol	2000	U				
-Nitrosodiphenylamine (1)	840	U				
-Bromophenyl-phenylether	840	U				
exachlorobenzene	840	U				
entachlorophenol	2000	U				
henanthrene	100	J				
nthracene	840	U				
arbazole	840	U				
i-n-butylphthalate	840	U				
luoranthene	330	J				
yrene	250	J				
utylbenzylphthalate	840	U				
,3'-Dichlorobenzidine	840	U				
enzo(a)anthracene	180	J				
hrysene	170	J				
is(2-Ethylhexyl)phthalate	180	J				
i-n-octylphthalate	840	U				
enzo(b)fluoranthene	280	NJ				
enzo(k)fluoranthene	230	NJ				
enzo(a)pyrene	160	J				
ndeno(1,2,3-cd)pyrene	84	J				
ibenz(a,h)anthracene	840	U				
enzo(g,h,i)perylene	98	J				

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

TCL QUALIFIED SPREADSHEET

se No: 25233
G No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

A SAMPLE NUMBER:	CNL23		CNL24		CNL25		CNL26		CNL27	
GIONAL SAMPLE NUMBER:										
MPLE LOCATION:	S-1		S-2		S-3		S-4		S-5	
MPLE TYPE:	Routine Sample		Routine Sample		Routine Sample		Routine Sample		F. Dup. of CNL35	
TRIX/ANALYSIS:	Soil/		Soil/		Soil/		Soil/		Soil/	
LUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
RCENT MOISTURE:	15		15		11		17		16	
S										
pha-BHC	2.0	U	0.20	B	1.9	U	0.42	B	2.0	U
ta-BHC	2.0	U	2.0	U	1.9	U	2.0	U	2.0	U
lta-BHC	2.0	U	0.13	J	0.27	J	0.51	J	2.3	J
mma-BHC (Lindane)	2.0	U	2.0	U	1.9	U	2.0	U	2.0	U
ptachlor	2.0	U	2.0	U	1.9	U	2.0	U	2.0	U
drin	2.0	U	2.0	U	1.9	U	2.0	U	2.0	U
ptachlor epoxide	2.0	U	2.0	U	1.9	U	2.0	U	2.0	U
dosulfan I	2.0	U	2.0	U	1.9	U	2.0	U	2.0	U
eldrin	0.085	J	3.8	U	3.7	U	4.0	U	0.32	J
4'-DDE	4.6		3.8	U	0.10	J	0.37	J	3.9	U
drin	3.9	U	3.8	U	3.7	U	4.0	U	3.9	U
dosulfan II	0.26	J	3.8	U	3.7	U	4.0	U	2.4	J
4'-DDD	3.9	U	3.8	U	3.7	U	0.66	J	0.28	J
dosulfan sulfate	3.9	U	3.8	U	3.7	U	4.0	U	3.9	U
4'-DDT	8.4		3.8	U	0.20	J	4.0	U	19	J
thoxychlor	32		2.1	J	6.1	J	20	J	130	J
drin ketone	0.13	J	3.8	U	3.7	U	4.0	U	0.70	J
drin aldehyde	3.9	U	3.8	U	3.7	U	4.0	U	3.9	U
pha-Chlordane	0.33	J	2.0	U	1.9	U	2.0	U	2.0	U
mma-Chlordane	0.23	J	2.0	U	1.9	U	2.0	U	1.5	J
xaphene	200	U	200	U	190	U	200	U	200	U
oclor-1016	39	U	38	U	37	U	39	U	39	U
oclor-1221	78	U	78	U	75	U	80	U	79	U
oclor-1232	39	U	38	U	37	U	39	U	39	U
oclor-1242	39	U	38	U	37	U	39	U	39	U
oclor-1248	39	U	38	U	37	U	39	U	39	U
oclor-1254	39	U	38	U	37	U	39	U	39	U
oclor-1260	39	U	38	U	37	U	39	U	39	U

.E NAME: CNL23 DATE: 03/19/97 TIME: 09:57 CADRE 2.3

ater units are reported in ug/L.
oil units are reported in ug/Kg.

ORIGINAL (Red)

TCL QUALIFIED SPREADSHEET

se No: 25233
G No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

A SAMPLE NUMBER:	CNL28		CNL29		CNL30		CNL31		CNL32	
GIONAL SAMPLE NUMBER:										
MPLE LOCATION:	S-6		S-7		S-8		S-9		S-10	
MPLE TYPE:	Routine Sample		Routine Sample		Routine Sample		Routine Sample		Routine Sample	
TRIX/ANALYSIS:	Soil/		Soil/		Soil/		Soil/		Soil/	
LUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
RCENT MOISTURE:	33		15		15		21		16	
S										
pha-BHC	2.5	U	0.11	B	2.0	U	2.1	U	2.0	U
ta-BHC	2.5	U	2.0	U	2.0	U	2.1	U	2.0	U
lta-BHC	2.1	J	2.0	U	2.0	U	1.2	J	1.5	J
mma-BHC (Lindane)	0.15	J	2.0	U	2.0	U	2.1	U	2.0	U
ptachlor	2.5	U	2.0	U	2.0	U	2.1	U	2.0	U
drin	2.5	U	2.0	U	2.0	U	2.1	U	2.0	U
ptachlor epoxide	2.5	U	2.0	U	0.10	J	2.1	U	2.0	U
dosulfan I	0.42	J	2.0	U	2.0	U	2.1	U	2.0	U
eldrin	4.9	U	3.9	U	3.9	U	4.2	U	0.85	J
4'-DDE	0.86	J	3.9	U	3.9	U	1.2	J	1.2	J
drin	4.9	U	3.9	U	3.9	U	4.2	U	3.9	U
dosulfan II	0.19	J	3.9	U	3.9	U	4.2	U	0.30	J
4'-DDD	4.4	J	3.9	U	3.9	U	4.2	U	3.9	U
dosulfan sulfate	4.9	U	0.27	J	3.9	U	4.2	U	3.9	U
4'-DDT	0.31	J	3.9	U	3.9	U	0.23	J	3.9	U
thoxychlor	220	J	20	U	4.4	J	21	J	29	
drin ketone	3.1	J	3.9	U	3.9	U	0.16	J	0.37	J
drin aldehyde	4.9	U	0.24	J	0.18	J	0.50	J	3.9	U
pha-Chlordane	2.5	U	2.0	U	2.0	U	2.1	U	2.0	U
mma-Chlordane	0.23	J	2.0	U	2.0	U	0.18	J	0.19	J
xaphene	250	U	200	U	200	U	210	U	200	U
oclor-1016	49	U	39	U	39	U	41	U	39	U
oclor-1221	99	U	79	U	79	U	84	U	80	U
oclor-1232	49	U	39	U	39	U	41	U	39	U
oclor-1242	49	U	39	U	39	U	41	U	39	U
oclor-1248	49	U	39	U	39	U	41	U	39	U
oclor-1254	49	U	39	U	39	U	41	U	39	U
oclor-1260	49	U	39	U	39	U	41	U	39	U

ater units are reported in ug/L.
oil units are reported in ug/Kg.

ORIGINAL (Red)

TCL QUALIFIED SPREADSHEET

se No: 25233
G No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

ORIGINAL (Red)

A SAMPLE NUMBER:	CNL33		CNL34		CNL35		CNL36		CNL37	
GIONAL SAMPLE NUMBER:										
MPLE LOCATION:	S-11		S-12		S-13		SED-1		SED-2	
MPLE TYPE:	Routine Sample		Routine Sample		F. Dup. of CNL27		Routine Sample		Routine Sample	
TRIX/ANALYSIS:	Soil/		Soil/		Soil/		Soil/		Soil/	
LUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
RCENT MOISTURE:	13		18		19		56		57	
S										
pha-BHC	2.0	U	0.083	B	0.10	B	3.8	U	4.0	U
ta-BHC	2.0	U	2.1	U	2.1	U	3.8	U	4.0	U
lta-BHC	2.0	U	2.1	U	2.8	J	3.8	U	4.0	U
mma-BHC (Lindane)	2.0	U	2.1	U	2.1	U	3.8	U	4.0	U
ptachlor	2.0	U	2.1	U	2.1	U	3.8	U	4.0	U
drin	2.0	U	2.1	U	2.1	U	3.8	U	4.0	U
ptachlor epoxide	0.31	J	0.098	J	2.1	U	3.8	U	4.0	U
dosulfan I	2.0	U	2.1	U	0.52	J	3.8	U	4.0	U
eldrin	3.8	U	10	J	12	J	0.32	J	0.81	J
4'-DDE	3.2	J	6.3	J	7.5	J	1.2	J	1.6	J
drin	3.8	U	1.0	J	4.1	U	0.53	J	7.7	U
dosulfan II	3.8	U	0.78	J	0.82	J	7.4	U	0.87	J
4'-DDD	3.8	U	4.0	U	4.1	U	7.4	U	7.7	U
dosulfan sulfate	3.8	U	4.0	U	4.1	U	7.4	U	7.7	U
4'-DDT	3.0	J	0.92	J	1.0	J	1.3	J	7.7	U
thoxychlor	2.3	J	170	J	170	J	38	U	20	J
drin ketone	3.8	U	3.0	J	0.94	J	0.28	J	7.7	U
drin aldehyde	3.8	U	4.0	U	4.1	U	0.56	J	7.7	U
pha-Chlordane	2.6		2.1	U	2.1	U	3.8	U	4.0	U
mma-Chlordane	1.8	J	2.1	U	1.3	J	3.8	U	4.0	U
xaphene	190	U	200	U	210	U	380	U	400	U
oclor-1016	38	U	40	U	41	U	74	U	77	U
oclor-1221	77	U	81	U	83	U	150	U	160	U
oclor-1232	38	U	40	U	41	U	74	U	77	U
oclor-1242	38	U	40	U	41	U	74	U	77	U
oclor-1248	38	U	40	U	41	U	74	U	77	U
oclor-1254	38	U	40	U	41	U	74	U	77	U
oclor-1260	38	U	40	U	41	U	74	U	77	U

ater units are reported in ug/L.
il units are reported in ug/Kg.

TCL QUALIFIED SPREADSHEET

Case No: 25233
SDG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

ORIGINAL (Red)

EPA SAMPLE NUMBER:	CNL38					
REGIONAL SAMPLE NUMBER:						
SAMPLE LOCATION:	SED-3					
SAMPLE TYPE:	Routine Sample					
MATRIX/ANALYSIS:	Soil/					
DILUTION FACTOR:	1.0					
PERCENT MOISTURE:	61					
PES						
alpha-BHC	4.3	U				
beta-BHC	4.3	U				
delta-BHC	4.3	U				
gamma-BHC (Lindane)	4.3	U				
Heptachlor	0.26	J				
Aldrin	1.4	J				
Heptachlor epoxide	0.29	J				
Endosulfan I	0.29	J				
Dieldrin	1.6	J				
4,4'-DDE	0.66	J				
Endrin	8.4	U				
Endosulfan II	1.4	J				
4,4'-DDD	8.4	U				
Endosulfan sulfate	8.4	U				
4,4'-DDT	0.55	J				
Methoxychlor	22	J				
Endrin ketone	8.4	U				
Endrin aldehyde	8.4	U				
alpha-Chlordane	4.3	U				
gamma-Chlordane	0.52	J				
Toxaphene	430	U				
Aroclor-1016	84	U				
Aroclor-1221	170	U				
Aroclor-1232	84	U				
Aroclor-1242	84	U				
Aroclor-1248	84	U				
Aroclor-1254	84	U				
Aroclor-1260	84	U				

Water units are reported in ug/L.
Soil units are re

ORIGINAL (Red)

Appendix B2

Data Summary Forms
for SDG CNL39

DATA SUMMARY FORM: V O L A T I L E S 1
WATER SAMPLES
(ug/L)

Site Name: Gilbert Tank Farm

Case No. 25233 SDG No. CNL39

Sampling Date: 12/17/96

To calculate sample quantitation limits:
(CRQL * Dilution Factor)

	Sample No.	CNL39	CNL40	CNL41	CNL42	CNL43				
	Dilution Factor	1.0	1.0	1.0	1.0	1.0				
	Location	SW-1	SW-2	SW-3	SW-4	FB-1				
			Duplicate of CNL42		Duplicate of CNL40	Field Blank				
CRQL	COMPOUND									
10	Chloromethane									
10	Bromomethane									
10	Vinyl Chloride									
10	Chloroethane									
10	Methylene Chloride									
10	Acetone					13 J				
10	Carbon Disulfide									
10	1,1-Dichloroethene									
10	1,1-Dichloroethane									
10	1,2-Dichloroethene (total)									
10	Chloroform									
10	1,2-Dichloroethane									
10	2-Butanone									
10	1,1,1-Trichloroethane									
10	Carbon Tetrachloride									
10	Bromodichloromethane									
10	1,2-Dichloropropane									
10	cis-1,3-Dichloropropene									
10	Trichloroethene									
10	Dibromochloromethane									
10	1,1,2-Trichloroethane									
10	Benzene									
10	trans-1,3-Dichloropropene									
10	Bromoform									

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

ORIGINAL (Red)

DATA SUMMARY FORM: V O L A T I L E S 2
WATER SAMPLES
(ug/L)

Site Name: Gilbert Tank Farm

Case No. 25233 SDG No. CNL39

Sampling Date: 12/17/96

To calculate sample quantitation limits:
(CRQL * Dilution Factor)

	Sample No.	CNL39	CNL40	CNL41	CNL42	CNL43				
	Dilution Factor	1.0	1.0	1.0	1.0	1.0				
	Location	SW-1	SW-2	SW-3	SW-4	FB-1				
			Duplicate of CNL42		Duplicate of CNL40	Field Blank				
CRQL	COMPOUND									
10	4-Methyl-2-pentanone									
10	2-Hexanone									
10	Tetrachloroethene									
10	1,1,2,2-Tetrachloroethane									
10	Toluene									
10	Chlorobenzene									
10	Ethylbenzene									
10	Styrene									
10	Xylenes (total)									

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

ORIGINAL (Red)

DATA SUMMARY FORM: S E M I V O L A T I L E S 1
WATER SAMPLES
(ug/L)

Site Name: Gilbert Tank Farm

Case No. 25233 SDG No. CNL39

Sampling Date: 12/17/96

To calculate sample quantitation limits:
(CRQL * Dilution Factor)

	Sample No.	CNL39	CNL40	CNL41	CNL42	CNL43				
	Dilution Factor	1.0	1.0	1.0	1.0	1.0				
	Location	SW-1	SW-2	SW-3	SW-4	FB-1				
			Duplicate of CNL42		Duplicate of CNL40	Field Blank				
CRQL	COMPOUND									
10	Phenol									
10	bis(2-Chloroethyl)ether									
10	2-Chlorophenol									
10	1,3-Dichlorobenzene									
10	1,4-Dichlorobenzene									
10	1,2-Dichlorobenzene									
10	2-Methylphenol									
10	2,2'-oxybis(1-chloropropane)									
10	4-Methylphenol									
10	N-Nitroso-di-n-propylamine									
10	Hexachloroethane									
10	Nitrobenzene									
10	Isophorone									
10	2-Nitrophenol									
10	2,4-Dimethylphenol									
10	bis(2-Chloroethoxy)methane									
10	2,4-Dichlorophenol									
10	1,2,4-Trichlorobenzene									
10	Naphthalene		2 J		2 J					
10	4-Chloroaniline									
10	Hexachlorobutadiene									
10	4-Chloro-3-methylphenol									
10	2-Methylnaphthalene		1 J		1 J					
10	Hexachlorocyclopentadiene									

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

DATA SUMMARY FORM: S E M I V O L A T I L E S 2

WATER SAMPLES

(ug/L)

Site Name: Gilbert Tank Farm

Case No. 25233 SDG No. CNL39

Sampling Date: 12/17/96

To calculate sample quantitation limits:
(CRQL * Dilution Factor)

	Sample No.	CNL39	CNL40	CNL41	CNL42	CNL43				
	Dilution Factor	1.0	1.0	1.0	1.0	1.0				
	Location	SW-1	SW-2	SW-3	SW-4	FB-1				
			Duplicate of CNL42		Duplicate of CNL40	Field Blank				
CRQL	COMPOUND									
10	2,4,6-Trichlorophenol									
25	2,4,5-Trichlorophenol									
10	2-Chloronapthalene									
25	2-Nitroaniline									
10	Dimethylphthalate									
10	Acenaphthylene									
10	2,6-Dinitrotoluene									
25	3-Nitroaniline									
10	Acenaphthene									
25	2,4-Dinitrophenol									
25	4-Nitrophenol				1 J					
10	Dibenzofuran									
10	2,4-Dinitrotoluene									
10	Diethylphthalate									
10	4-Chlorophenyl-phenylether									
10	Fluorene									
25	4-Nitroaniline									
25	4,6-Dinitro-2-methylphenol									
10	N-Nitrosodiphenylamine (1)									
10	4-Bromophenyl-phenylether									
10	Hexachlorobenzene									
25	Pentachlorophenol									
10	Phenanthrene									
10	Anthracene									

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

ORIGINAL (Red)

DATA SUMMARY FORM: S E M I V O L A T I L E S 3
WATER SAMPLES
(ug/L)

Site Name: Gilbert Tank Farm

Case No. 25233 SDG No. CNL39

Sampling Date: 12/17/96

To calculate sample quantitation limits:
(CRQL * Dilution Factor)

	Sample No.	CNL39	CNL40	CNL41	CNL42	CNL43				
	Dilution Factor	1.0	1.0	1.0	1.0	1.0				
	Location	SW-1	SW-2	SW-3	SW-4	FB-1				
			Duplicate of CNL42		Duplicate of CNL40	Field Blank				
CRQL	COMPOUND									
10	Carbazole									
10	Di-n-butylphthalate		1 J							
10	Fluoranthene									
10	Pyrene				1 J					
10	Butylbenzylphthalate									
10	3,3'-Dichlorobenzidine									
10	Benzo(a)anthracene									
10	Chrysene									
10	bis(2-Ethylhexyl)phthalate			1 J						
10	Di-n-octylphthalate									
10	Benzo(b)fluoranthene									
10	Benzo(k)fluoranthene									
10	Benzo(a)pyrene									
10	Indeno(1,2,3-cd)pyrene									
10	Dibenzo(a,h)anthracene									
10	Benzo(g,h,i)perylene									

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

revised 07/90

DATA SUMMARY FORM: PESTICIDES/PCBs
WATER SAMPLES
(ug/L)

Site Name: Gilbert Tank Farm

Case No. 25233 SDG No. CNL39

To calculate sample quantitation limits:
(CRQL * Dilution Factor)

Sampling Date: 12/17/96

	Sample No.	CNL39		CNL40		CNL41		CNL42		CNL43									
	Dilution Factor	1.0		1.0		1.0		1.0		1.0									
	Location	SW-1		SW-2		SW-3		SW-4		FB-1									
				Duplicate of CNL42				Duplicate of CNL40		Field Blank									
CRQL	COMPOUND																		
0.050	alpha-BHC																		
0.050	beta-BHC																		
0.050	delta-BHC																		
0.050	gamma-BHC (Lindane)	0.0082	J																
0.050	Heptachlor	0.0081	J																
0.050	Aldrin	0.0092	J																
0.050	Heptachlor Epoxide																		
0.050	Endosulfan I																		
0.10	Dieldrin	0.020	B																
0.10	4,4'-DDE																		
0.10	Endrin	0.017	J																
0.10	Endosulfan II																		
0.10	4,4'-DDD																		
0.10	Endosulfan Sulfate																		
0.10	4,4'-DDT	0.022	B																
0.50	Methoxychlor																		
0.10	Endrin Ketone																		
0.10	Endrin Aldehyde																		
0.050	alpha-Chlordane																		
0.050	gamma-Chlordane																		
5.0	Toxaphene																		
1.0	Aroclor-1016																		
2.0	Aroclor-1221																		
1.0	Aroclor-1232																		
1.0	Aroclor-1242																		
1.0	Aroclor-1248																		
1.0	Aroclor-1254																		
1.0	Aroclor-1260																		

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITI

revised 07/

ORIGINAL (red)

Appendix C

CADRE Qualification Reports
for SDG CNL23

ORIGINAL (Red)

FILE NAME: CNL23 DATE: 02/25/97 TIME: 18:03

CRITERIA FILE: REG3091

DATA

	Original	X	Qualified

QUALIFICATIONS PERFORMED

X	Quantitation Limit		CRDL Standards
	Percent Moisture		ICS
X	Holding Time		LCS
X	Calibrations		Duplicates
X	Matrix Spikes		Furnace AA QC
X	IPC		ICP Serial Dilutions
X	Internal Standards		Sample Results Verification
X	SMC/Surrogates	X	Laboratory Blanks
X	System Performance		Field QC
	Sample Cleanup		

PRINT NON-DETECTS

X	Yes		No

PRINT REJECTED RESULTS

X	Yes		No

ORIGINAL (Red)

Quantitation Limit Report

SDG NO: CNL23 LABORATORY: COMPUCHEM LAB
CASE NO: 25233 AGENCY INPUT FILE: CNL23.OAS

CONTRACT REQUIRED SAMPLE QUANTITY

	Water	Low Soil	Med Soil
VOA	5.0 (ML)	5.0 (G)	4.0 (G)
BNA	1000.0 (ML)	30.0 (G)	1.0 (G)
PES	1000.0 (ML)	30.0 (G)	

DC-45: The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

CNL23
Methylene Chloride

CNL24
Methylene Chloride

CNL25MS
Acetone

CNL25MSD
Methylene Chloride, Acetone

CNL26
Methylene Chloride

CNL27
Methylene Chloride

CNL28
Methylene Chloride, Acetone

CNL29
Methylene Chloride, 2-Butanone, Ethylbenzene

CNL30
Methylene Chloride

CNL31
Methylene Chloride, Acetone

CNL32
Methylene Chloride, Acetone

CNL33
Methylene Chloride, Acetone

CNL34
Methylene Chloride, Acetone

CNL35
Methylene Chloride, Acetone

CNL36
Methylene Chloride

CNL37
Acetone

CNL38
Methylene Chloride

VBLKP1
Acetone

VBLKT4
Methylene Chloride

VBLKT5
Methylene Chloride

VBLKU4
Methylene Chloride, Acetone

VBLKU6
Methylene Chloride, Acetone

VHBLKU5
Methylene Chloride, Acetone

DC-110: The following semivolatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

CNL23
Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene
Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

CNL24

bis(2-Ethylhexyl)phthalate

CNL25
Pyrene, bis(2-Ethylhexyl)phthalate

CNL25MS
Fluoranthene

CNL25MSD
bis(2-Ethylhexyl)phthalate

CNL26
2-Methylnaphthalene, Phenanthrene

CNL27
Naphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene
Dibenzofuran, Carbazole

CNL27DL
2-Methylnaphthalene, Fluorene, Anthracene, Carbazole
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene

CNL28
Naphthalene, 2-Methylnaphthalene, Acenaphthene, Dibenzofuran
Fluorene, Carbazole, Dibenz(a,h)anthracene

CNL28DL
Naphthalene, 2-Methylnaphthalene, Acenaphthene, Dibenzofuran
Fluorene, Anthracene, Carbazole, Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

CNL29
Naphthalene

CNL31
Naphthalene, 2-Methylnaphthalene, Phenanthrene, Fluoranthene
Pyrene, Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate
Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene
Benzo(g,h,i)perylene

CNL32
Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene
Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

CNL33
Benzo(g,h,i)perylene

CNL35
Fluorene, Anthracene, Carbazole, bis(2-Ethylhexyl)phthalate
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

CNL36
Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene
bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene

CNL37
Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene
bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene

CNL38
Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene
Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

DC-111: The quantitation limits of the following semivolatile samples could not be calculated due to missing information. Hits are flagged "M" and non-detects are not flagged.

CNL27, CNL28, CNL35

DC-158: The following pesticide samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

CNL23
Dieldrin, Endosulfan II, Endrin ketone, alpha-Chlordane
gamma-Chlordane

CNL24
alpha-BHC, delta-BHC, Methoxychlor

CNL25
delta-BHC, 4,4'-DDE, 4,4'-DDT, Methoxychlor

CNL25MS
Heptachlor epoxide, 4,4'-DDE, Methoxychlor, Endrin ketone

CNL25MSD
delta-BHC, 4,4'-DDE, Methoxychlor, Endrin ketone

CNL26
alpha-BHC, delta-BHC, 4,4'-DDE, 4,4'-DDD

CNL27
Dieldrin, Endosulfan II, 4,4'-DDD, Endrin ketone
gamma-Chlordane

CNL28
delta-BHC, gamma-BHC (Lindane), Endosulfan I, 4,4'-DDE
Endosulfan II, 4,4'-DDD, 4,4'-DDT, Endrin ketone
gamma-Chlordane

CNL29
alpha-BHC, Endosulfan sulfate, Endrin aldehyde

CNL30
Heptachlor epoxide, Methoxychlor, Endrin aldehyde

CNL31
delta-BHC, 4,4'-DDE, 4,4'-DDT, Endrin ketone
Endrin aldehyde, gamma-Chlordane

CNL32
delta-BHC, Dieldrin, 4,4'-DDE, Endosulfan II
Endrin ketone, gamma-Chlordane

CNL33
Heptachlor epoxide, 4,4'-DDE, 4,4'-DDT, Methoxychlor
gamma-Chlordane

CNL34
alpha-BHC, Heptachlor epoxide, Endrin, Endosulfan II
4,4'-DDT, Endrin ketone

CNL35
alpha-BHC, Endosulfan I, Endosulfan II, 4,4'-DDT
Endrin ketone, gamma-Chlordane

CNL36
Dieldrin, 4,4'-DDE, Endrin, 4,4'-DDT
Endrin ketone, Endrin aldehyde

CNL37
Dieldrin, 4,4'-DDE, Endosulfan II, Methoxychlor

CNL38
Heptachlor, Aldrin, Heptachlor epoxide, Endosulfan I
Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDT
Methoxychlor, gamma-Chlordane

PBLKOX
alpha-BHC

Holding Time Report

SDG NO: CNL23
CASE NO: 25233

LABORATORY: COMPUCHEM LAB
AGENCY INPUT FILE: CNL23.OAS

HOLDING TIME CRITERIA

VOLATILES

Preserved	Primary	Expanded
Water	14	28

	---- Aromatic ----		-- Non-aromatic --	
Unpreserved	Primary	Expanded	Primary	Expanded
Water	7	14	14	28
Soil	14	28	14	28

SEMIVOLATILES

	--- Extraction ---		---- Analysis ----	
	Primary	Expanded	Primary	Expanded
Water	7	14	40	60
Soil	7	14	40	60

PESTICIDES

	--- Extraction ---		---- Analysis ----	
	Primary	Expanded	Primary	Expanded
Water	7	14	40	60
Soil	7	14	40	60

No problems found for this qualification.

ORIGINAL (Red)

Calibration Report

SDG NO: CNL23 LABORATORY: COMPUCHEM LAB
CASE NO: 25233 AGENCY INPUT FILE: CNL23.OAS

CALIBRATION CRITERIA

VOLATILES

	Primary	Expanded
Minimum RRF	0.05	0.05
Maximum %RSD (initial calibration)	30	50
Maximum %D (continuing calibration)	25	50
Calibration time period	12	

SEMIVOLATILES

	Primary	Expanded
Minimum RRF	0.05	0.05
Maximum %RSD (initial calibration)	30	50
Maximum %D (continuing calibration)	25	50
Calibration time period	12	

PESTICIDES

Maximum %RSD (initial calibration) - TCL analytes	20
- surrogates	30
Maximum RPD (continuing calibration)	25
INDA/INDB percent resolution	90
Continuing calibration sequence time	12

DC-22: The following volatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside criteria.
Hits are qualified "J" and non-detects are not qualified.

Chloromethane
CNL23, CNL24, CNL25, CNL25MS, CNL25MSD, CNL26
CNL27, CNL28, CNL29, CNL30, CNL31, CNL32
CNL33, CNL34, CNL35, CNL36, CNL37, CNL38
VBLKP1, VBLKT4, VBLKT5, VBLKU4, VBLKU6, VHBLKU5

Vinyl Chloride
CNL23, CNL24, CNL25, CNL25MS, CNL25MSD, CNL26
CNL27, CNL28, CNL29, CNL30, CNL31, CNL32
CNL33, CNL34, CNL35, CNL36, CNL37, CNL38

VBLKP1, VBLKT4, VBLKT5, VBLKU4, VBLKU6, VHBLKU5

DC-23: The following volatile samples are associated with a continuing calibration percent difference (%D) outside criteria. Hits are qualified "J" and non-detects are not qualified.

Chloromethane
CNL26, CNL29, CNL30, CNL31, CNL32, CNL33
CNL34, VBLKT5, VBLKU4

Bromomethane
CNL23, CNL24, CNL25, CNL25MS, CNL25MSD, CNL28
VBLKT4

Chloroethane
CNL23, CNL24, CNL25, CNL25MS, CNL25MSD, CNL27
CNL28, CNL36, CNL37, VBLKP1, VBLKT4, VHBLKU5

Acetone
CNL26, CNL29, CNL30, CNL31, CNL32, CNL33
CNL34, CNL35, CNL38, VBLKT5, VBLKU4, VBLKU6

2-Butanone
CNL27, CNL36, CNL37, VBLKP1, VHBLKU5

trans-1,3-Dichloropropene
CNL27, CNL36, CNL37, VBLKP1, VHBLKU5

Bromoform
CNL26, CNL29, CNL30, CNL31, CNL32, CNL33
CNL34, VBLKT5, VBLKU4

4-Methyl-2-Pentanone
CNL26, CNL27, CNL29, CNL30, CNL31, CNL32
CNL33, CNL34, CNL36, CNL37, VBLKP1, VBLKT5
VBLKU4, VHBLKU5

2-Hexanone
CNL27, CNL36, CNL37, VBLKP1, VHBLKU5

DC-98: The following semivolatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside criteria. Hits are qualified "J" and non-detects are not qualified.

2,4-Dinitrophenol
CNL23, CNL24, CNL25, CNL25MS, CNL25MSD, CNL26
CNL27, CNL27DL, CNL28, CNL28DL, CNL29, CNL30
CNL31, CNL32, CNL33, CNL34, CNL35, CNL36
CNL37, CNL38, SBLKPF

4-Nitroaniline
CNL23, CNL24, CNL25, CNL25MS, CNL25MSD, CNL26
CNL27, CNL27DL, CNL28, CNL28DL, CNL29, CNL30
CNL31, CNL32, CNL33, CNL34, CNL35, CNL36
CNL37, CNL38, SBLKPF

3,3'-Dichlorobenzidine
CNL23, CNL24, CNL25, CNL25MS, CNL25MSD, CNL26
CNL27, CNL27DL, CNL28, CNL28DL, CNL29, CNL30
CNL31, CNL32, CNL33, CNL34, CNL35, CNL36
CNL37, CNL38, SBLKPF

DC-100: The following semivolatile samples are associated with a continuing calibration having percent difference (%D) outside criteria. Hits are qualified "J" and non-detects are not qualified.

2,4-Dinitrophenol
CNL23, CNL24, CNL25, CNL25MS, CNL25MSD, CNL27
CNL28, CNL31, CNL32, CNL33, CNL34, CNL35
CNL36, CNL38, SBLKPF

DC-344: The following volatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside expanded criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Acetone
CNL23, CNL24, CNL25, CNL25MS, CNL25MSD, CNL26
CNL27, CNL28, CNL29, CNL30, CNL31, CNL32
CNL33, CNL34, CNL35, CNL36, CNL37, CNL38
VBLKP1, VBLKT4, VBLKT5, VBLKU4, VBLKU6, VHBLKU5

ORIGINAL (Red)

Matrix Spike Report

SDG NO: CNL23
CASE NO: 25233

LABORATORY: COMPUCHEM LAB
AGENCY INPUT FILE: CNL23.OAS

MATRIX SPIKE CRITERIA

VOLATILES

Percent Recovery Limits & RPD

	Water			Soil		
	Lower	Upper	RPD	Lower	Upper	RPD
1,1-Dichloroethene	61.0	145.0	14.0	59.0	172.0	22.0
Trichloroethene	71.0	120.0	14.0	62.0	137.0	24.0
Benzene	76.0	127.0	11.0	66.0	142.0	21.0
Toluene	76.0	125.0	13.0	59.0	139.0	21.0
Chlorobenzene	75.0	130.0	13.0	60.0	133.0	21.0

SEMIVOLATILES

Percent Recovery Limits & RPD

	Water			Soil		
	Lower	Upper	RPD	Lower	Upper	RPD
Phenol	12.0	110.0	42.0	26.0	90.0	35.0
2-Chlorophenol	27.0	123.0	40.0	25.0	102.0	50.0
1,4-Dichlorobenzene	36.0	97.0	28.0	28.0	104.0	27.0
N-Nitroso-di-n-propylamine	41.0	116.0	38.0	41.0	126.0	38.0
1,2,4-Trichlorobenzene	39.0	98.0	28.0	38.0	107.0	23.0
4-Chloro-3-methylphenol	23.0	97.0	42.0	26.0	103.0	33.0
Acenaphthene	46.0	118.0	31.0	31.0	137.0	19.0
4-Nitrophenol	10.0	80.0	50.0	11.0	114.0	50.0
2,4-Dinitrotoluene	24.0	96.0	38.0	28.0	89.0	47.0
Pentachlorophenol	9.0	103.0	50.0	17.0	109.0	47.0
Pyrene	26.0	127.0	31.0	35.0	142.0	36.0

PESTICIDES

Percent Recovery Limits & RPD

	Water			Soil		
	Lower	Upper	RPD	Lower	Upper	RPD

ORIGINAL (Red)

Matrix Spike Report

SDG NO: CNL23
CASE NO: 25233

LABORATORY: COMPUCHEM LAB
AGENCY INPUT FILE: CNL23.OAS

gamma-BHC (Lindane)	56.0	123.0	15.0	46.0	127.0	50.0
Heptachlor	40.0	131.0	20.0	35.0	130.0	31.0
Aldrin	40.0	120.0	22.0	34.0	132.0	43.0
Dieldrin	52.0	126.0	18.0	31.0	134.0	38.0
Endrin	56.0	121.0	21.0	42.0	139.0	45.0
4,4'-DDT	38.0	127.0	27.0	23.0	134.0	50.0

DC-38: The relative percent difference (RPD) between the following volatile matrix spike and matrix spike duplicate recoveries is outside criteria.
Hits and non-detects are not flagged.

CNL25MS
Benzene

CNL25MSD
Benzene

DC-39: The following volatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria.
Hits and non-detects are not flagged.

CNL25MS
Benzene, Toluene

DC-169: The relative percent difference (RPD) between the following pesticide matrix spike and matrix spike duplicate recoveries is outside criteria.
Hits and non-detects are not flagged.

CNL25MS
gamma-BHC (Lindane), Heptachlor

CNL25MSD
gamma-BHC (Lindane), Heptachlor

ORIGINAL (Red)

Instrument Performance Check Report

SDG NO: CNL23 LABORATORY: COMPUCHEM LAB
CASE NO: 25233 AGENCY INPUT FILE: CNL23.OAS

The complete primary criteria for BFB are as follows:

Bromofluorobenzene (BFB)

m/z	ION ABUNDANCE CRITERIA (Volatile)
50	8.0 - 40.0% of m/z 95
75	30.0 - 66.0% of m/z 95
95	base peak, 100.0% relative abundance
96	5.0 - 9.0% of m/z 95
173	less than 2.0% of m/z 174
174	50.0 - 120.0% of m/z 95
175	4.0 - 9.0% of m/z 174
176	93.0 - 101.0% of m/z 174
177	5.0 - 9.0% of m/z 176

The complete primary criteria for DFTPP are as follows:

Decafluorotriphenylphosphine (DFTPP)

m/z	ION ABUNDANCE CRITERIA (Semivolatile)
51	30.0 - 80.0% of m/z 198
68	less than 2.0% of m/z 69
69	present
70	less than 2.0% of m/z 69
127	25.0 - 75.0% of m/z 198
197	less than 1.0% of m/z 198
198	base peak, 100.0% relative abundance
199	5.0 - 9.0% of m/z 198
275	10.0 - 30.0% of m/z 198
365	greater than 0.75% of m/z 198
441	present, but less than m/z 443
442	40.0 - 110.0% of m/z 198
443	15.0 - 24.0% of m/z 442

No problems found for this qualification.

Internal Standards Report

SDG NO: CNL23
CASE NO: 25233

LABORATORY: COMPUCHEM LAB
AGENCY INPUT FILE: CNL23.OAS

INTERNAL STANDARD CRITERIA

VOLATILES

Retention Time & Area Count Limits

	-- Primary --		- Expanded --	
	Lower	Upper	Lower	Upper
Retention time	- 0.5	+ 0.5	- 0.5	+ 0.5
Area count	/ 2	* 2	/ 5	* 2

SEMIVOLATILES

Retention Time & Area Count Limits

	-- Primary --		- Expanded --	
	Lower	Upper	Lower	Upper
Retention time	- 0.5	+ 0.5	- 0.5	+ 0.5
Area count	/ 2	* 2	/ 5	* 2

No problems found for this qualification.

SMC/Surrogate Report

SDG NO: CNL23 LABORATORY: COMPUCHEM LAB

CASE NO: 25233 AGENCY INPUT FILE: CNL23.OAS

SMC/SURROGATE CRITERIA

VOLATILES

Percent Recovery Limits

	--- Water ---		---- Soil ---	
	Lower	Upper	Lower	Upper
Toluene-d8	88.0	110.0	84.0	138.0
Bromofluorobenzene	86.0	115.0	59.0	113.0
1,2-Dichloroethane-d4	76.0	114.0	70.0	121.0

SEMIVOLATILES

Percent Recovery Limits

	--- Water ---		---- Soil ---	
	Lower	Upper	Lower	Upper
Nitrobenzene-d5	35.0	114.0	23.0	120.0
2-Fluorobiphenyl	43.0	116.0	30.0	115.0
Terphenyl-d14	33.0	141.0	18.0	137.0
Phenol-d5	10.0	110.0	24.0	113.0
2-Fluorophenol	21.0	110.0	25.0	121.0
2,4,6-Tribromophenol	10.0	123.0	19.0	122.0
2-Chlorophenol-d4	33.0	110.0	20.0	130.0
1,2-Dichlorobenzene-d4	16.0	110.0	20.0	130.0

PESTICIDES

Percent Recovery Limits

	--- Water ---		---- Soil ---	
	Lower	Upper	Lower	Upper
Tetrachloro-m-xylene	30.0	150.0	30.0	150.0
Decachlorobiphenyl	30.0	150.0	30.0	150.0

DC-174: The following pesticide samples have surrogate percent recoveries

which exceed the upper limit of the criteria window.
Hits are qualified "K" and non-detects are not flagged.

CNL27, CNL34, CNL35

DC-177: The following pesticide samples have surrogate percent recoveries outside the lower limit of the criteria window, but greater than 10%. Hits are qualified "L" and non-detects are qualified "UL".

CNL25MS

ORIGINAL (Red)

System Performance Report

SDG NO: CNL23 LABORATORY: COMPUCHEM LAB
CASE NO: 25233 AGENCY INPUT FILE: CNL23.OAS

SYSTEM PERFORMANCE CRITERIA

Resolution & Breakdown Limits

RESC percent resolution	60.00
PEM percent resolution	90.00
4,4'-DDT percent breakdown	20.00
Endrin percent breakdown	20.00
Combined percent breakdown	30.00

No problems found for this qualification.

Laboratory Blanks Report

SDG NO: CNL23
CASE NO: 25233

LABORATORY: COMPUCHEM LAB
AGENCY INPUT FILE: CNL23.OAS

LABORATORY BLANKS CRITERIA

VOLATILES

Method Blank Contamination Threshold Multipliers

	First	Expanded
Common contaminant compounds	10.00	10.00
Other compounds	5.00	5.00

SEMIVOLATILES

Method Blank Contamination Threshold Multipliers

	First	Expanded
Common contaminant compounds	10.00	10.00
Other compounds	5.00	5.00

PESTICIDES

Method Blank Contamination Threshold Multipliers

	First	Expanded
All compounds	5.00	5.00

DC-31: The following volatile samples have analyte concentrations reported above the CRQL and less than or equal to ten times (10X) the associated method blank concentration.
Hits are qualified "B" and non-detects are not flagged.

Methylene Chloride
CNL25MS

Acetone
CNL26, CNL30, CNL36, CNL38

ORIGINAL (Red)

Laboratory Blanks Report

SDG NO: CNL23
CASE NO: 25233

LABORATORY: COMPUCHEM LAB
AGENCY INPUT FILE: CNL23.OAS

DC-71: The following volatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample concentrations have not been elevated to the CRQL.
Hits are qualified "B" and non-detects are not flagged.

CNL23
Methylene Chloride

CNL24
Methylene Chloride

CNL25
Methylene Chloride

CNL25MSD
Methylene Chloride

CNL26
Methylene Chloride

CNL28
Methylene Chloride

CNL29
Methylene Chloride

CNL30
Methylene Chloride

CNL31
Methylene Chloride, Acetone

CNL32
Methylene Chloride, Acetone

CNL33
Methylene Chloride, Acetone

CNL34
Methylene Chloride, Acetone

CNL35
Methylene Chloride, Acetone

CNL37
Acetone

ORIGINAL (Red)

CNL38
Methylene Chloride

DC-235: The following pesticide samples have analyte concentrations reported below the CRQL and less than or equal to five times (5X) the associated method blank concentration. Reported sample concentrations have not been elevated to the CRQL.
Hits are qualified "B" and non-detects are not flagged.

CNL24
alpha-BHC

CNL26
alpha-BHC

CNL29
alpha-BHC

CNL34
alpha-BHC

CNL35
alpha-BHC

ORIGINAL (Red)

```
 File  Data  View  Review  Report  Options  Utilities  Help

                    èë[±]ëë Agency Standard Import ëëëëëëë£
                    ¤                                     ¤
                    ¤  Input file name     : CNL23.OAS    ¤
                    ¤  Output file name    : CNL23.SDG    ¤
                    ¤  Records imported    : 8243         ¤
                    ¤  Errors              : 13           ¤
                    ¤  Warnings            : 0            ¤
                    ¤  Elapsed time        : 00:01:06     ¤
                    ¤  Available memory    : 12072008     ¤
                    ¤                                     ¤
                    ¤  ÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÜÝ  ¤
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                    ¤áááááááááááááááá STATUS áááááááááááááá¤
                    ¤                                     ¤
                    ¤                                     ¤
                    ¤                                     ¤
                    ¤  Import Successful : Press any key  ¤
                    àëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëëë¥

                                    CADRE

F1 Help
```

ORIGINAL (Red)

Missing Contents Error Report

SDG NO: CNL23
CASE NO: 25233

LABORATORY: COMPUCHEM LAB
AGENCY INPUT FILE: CNL23.OAS

FIELD DESCRIPTION	CADRE KEY		
Analysis Time	Record Type 20	Line 128	Format HH:MM
Analysis Time	Record Type 20	Line 141	Format HH:MM
Sulfur Cleanup	Record Type 27	Line 555	Format RANGE
Analysis Time	Record Type 20	Line 1797	Format HH:MM
Analysis Time	Record Type 20	Line 1810	Format HH:MM
Sulfur Cleanup	Record Type 27	Line 2224	Format RANGE
Purge	Record Type 21	Line 3376	Format RANGE
Purge	Record Type 21	Line 3560	Format RANGE
Purge	Record Type 21	Line 3953	Format RANGE
Purge	Record Type 21	Line 4561	Format RANGE
Purge	Record Type 21	Line 4759	Format RANGE
Analyte CAS Number	Record Type 30	Line 5049	Format #####[#][#][#]

ORIGINAL (Red)

Invalid Contents Error Report

SDG NO: CNL23 LABORATORY: COMPUCHEM LAB

CASE NO: 25233 AGENCY INPUT FILE: CNL23.OAS

REC	LINE #	FIELD DESCRIPTION	REPORTED VALUE	FORMAT EXPECTED
30	5049	Result Qualifier	TBF	RANGE

ORIGINAL
(Red)

Appendix D

Support Documentation

Computer-Aided Data Review and Evaluation (CADRE)

Level C1 - Organic

DATA ASSESSMENT	CADRE	REVIEWER
Action Level Notification		X
Instrument Tune (volatile and semivolatile only)	X	
GC/ECD Performance Check (pesticide only)	X	
Initial Calibration (RRF/CF)	X	
Initial Calibration (%RSD)	X	
Continuing Calibration (RRF) (volatile and semivolatile only)	X	
Continuing Calibration (%D)	X	
Laboratory Blank	X	
MS/MSD (%R, RPD)	X	
Internal Standard Area (volatile and semivolatile only)	X	
Field Blank	X	
Holding Time	X	
Retention Time	X	
Surrogate Recovery	X	
Dilution Factor		X
Pesticide Cleanup Checks (pesticide only)	X	
Mass Spectra (volatile and semivolatile only)		X
Chromatograms		X
Sample Paperwork		X
Raw Data		
Field Duplicate Comparison		
MS/MSD Comparison		
TIC Evaluation (volatile and semivolatile only)		

EPA United States Environmental Protection Agency Contract Laboratory Program

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

SAS No. (if applicable):
Case No.: 25233

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.: III
Sampling Co.: MDE/WAS
4. Date Shipped: 12/17/96
Carrier: Federal Express
6. Date Received: Received by: 12-19-96
Sampler (Name): Beth Creamer
Airbill Number: 1915746954
Laboratory Contract Number: 68D50004
Unit Price: 547.06
Sampler Signature: Beth Creamer
5. Ship To: CompuChem Environmental Corp. 4600 Silicon Drive Research Triangle Park, NC 27709 (919) 474-7000 ATTN: Sample Custodian
7. Transfer to:
Date Received
Received by
Contract Number
Price

3. Purpose*
Lead: SF, PRP, ST, FED
Early Action: CLEM, RA, 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.
CNL23	5	L	G	5	X	X	X		3-2200894 thru 3-2200896	S-1	12/17/96/1345	MCPG23	DSM			
CNL24	5	L	G	5	X	X	X		3-2200897 thru 3-2200899	S-2	12/17/96/1230	MCPG24	DSM			
CNL25	5	L	G	5	X	X	X		3-2200900 thru 3-2200905	S-3	12/17/96/1210	MCPG25	DSM			
CNL26	5	L	G	5	X	X	X		3-2200906 thru 3-2200908	S-4	12/17/96/1430	MCPG26	DSM			
CNL27	5	L	G	5	X	X	X		3-2200909 thru 3-2200911	S-5	12/17/96/1500	MCPG27	DSM			
CNL28	5	L	G	5	X	X	X		3-2200912 thru 3-2200914	S-6	12/17/96/1120	MCPG28	DSM			
CNL29	5	L	G	5	X	X	X		3-2200915 thru 3-2200917	S-7	12/17/96/1410	MCPG29	DSM			
CNL30	5	L	G	5	X	X	X		3-2200918 thru 3-2200920	S-8	12/17/96/1110	MCPG30	DSM			
CNL31	5	L	G	5	X	X	X		3-2200921 thru 3-2200923	S-9	12/17/96/0940	MCPG31	DSM			
CNL32	5	L	G	5	X	X	X		3-2200924 thru 3-2200926	S-10	12/17/96/1040	MCPG32	DSM			

Shipment for Case Complete? (Y/N): Y
Page: 1 of 3
Sample(s) to be Used for Laboratory QC: Do QC on CNL25
Original CNL23 MS 12/18/96
Additional Sampler Signatures: DSM
Chain of Custody Seal Number(s): 834850

COPY

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Peggy Smith	12/17/96 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	
		Glenn Lane	12-19-96 9:15	TEMP. 4	

859 860 861 862 863 864 865 866 867

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

EPA Form 9110-2 SDG CNL23

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

A21-012-4 REV 3/88

15

EPA United States Environmental Protection Agency
Contract Laboratory Program

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

SAS No. (if applicable):
Case No.: 25233

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.: III
Sampling Co.: MDE/WAS
4. Date Shipped: 12/17/96
Carrier: Federal Express
6. Date Received -- Received by: 12-19-96 Glenn Horne
Sampler (Name): Beth Creamer
Airbill Number: 1915746954
Laboratory Contract Number: 68D50004
Unit Price: 547.00
Sampler Signature: Beth Creamer
5. Ship To: CompuChem Environmental Corp. 4600 Silicon Drive Research Triangle Park, NC 27709 (919) 474-7000 ATTN: Sample Custodian
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.
CNL33	5	L	G	5	X	X	X		3-2200927 thru 3-2200929	S-11	12/17/96/1020	MCPG33	[illegible]			
CNL34	5	L	G	5	X	X	X		3-2200930 thru 3-2200932	S-12	12/17/96/1100	MCPG34	[illegible]			
CNL35	5	L	G	5	X	X	X		3-2200933 thru 3-2200935	S-13	12/17/96/1500	MCPG35	[illegible]			
CNL36	5	L	G	5	X	X	X		3-2200936 thru 3-2200938	Sed-1	12/17/96/1130	MCPG36	[illegible]			
CNL37	5	L	G	5	X	X	X		3-2200939 thru 3-2200941	Sed-2	12/17/96/1230	MCPG37	[illegible]			
CNL38	5	L	G	5	X	X	X		3-2200942 thru 3-2200944	Sed-3	12/17/96/1130	MCPG38	[illegible]	Final Sample		
CNL39	1	L	G	1,5	X	X	X		3-2200945 thru 3-2200948	SW-1	12/17/96/1130	MCPG39	[illegible]			
CNL40	1	L	G	1,5	X	X	X		3-2200949 thru 3-2200952	SW-2	12/17/96/1230	MCPG40	[illegible]			
CNL41	1	L	G	1,5	X	X	X		3-2200953 thru 3-2200964	SW-3	12/17/96/1130	MCPG41	[illegible]			
CNL42	1	L	G	1,5	X	X	X		3-2200965 thru 3-2200968	SW-4	12/17/96/1230	MCPG42	[illegible]			

Shipment for Case Complete? (Y/N): Y
Page: 2 of 3
Sample(s) to be Used for Laboratory QC: Do QC on CNL41
Additional Sampler Signatures: Beth Creamer
Chain of Custody Seal Number(s): 834868

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[illegible]	12/17/96 1800				
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	
		Glenn Horne	12-19-96 9:15	Temp 4.'	

834869
834870
834871
834872
834873
834874
834883
834884
834885

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

EPA Form 9110-2

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

SDG CNL23, CNL39.

A21-012-4 REV. 3/93

ORIGINAL (Red)

356005

EPA United States Environmental Protection Agency
Contract Laboratory Program

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

SAS No. (if applicable):
Case No.: 25233

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.: III
Sampling Co.: MDE/WAS
4. Date Shipped: 12/17/96
Carrier: Federal Express
6. Date Received -- Received by: 12-19-96 Glenn Dorne
Sampler (Name): Beth Creamer
Airbill Number: 1915746954
Laboratory Contract Number: 68D50004
Unit Price: 547.00
Sampler Signature: Beth Creamer
5. Ship To: CompuChem Environmental Corp. 4600 Silicon Drive Research Triangle Park, NC 27709 (919)474-7000 ATTN: Sample Custodian
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.
CNL43	4	L	G	1,5	X	X	X		3-2200969 thru 3-2200972	FB-1	12/17/96/1010	MCPG43	PMS	Final Sample		
									834886.							

Shipment for Case Complete? (Y/N): Y
Page 3 of 3
Sample(s) to be Used for Laboratory QC:
Additional Sampler Signatures: Peggy Smith
Chain of Custody Seal Number(s):

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Peggy Smith	12/17/96 / 1500				
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) Glenn Dorne	Date / Time 12-19-96 9:15	Remarks Is custody seal intact? Y/N/none TEMP 4	

A21-012-4 REV. 3/93

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

EPA Form 9110-2

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

SDG CNL39.

PAGE 2 OF 3

EPA SAMPLE SHIPPING LOG

(1) (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: Gilbert Tank Farm ; EPA PROJ. OFFICER: Michael Giuranna

RAS NO. 25233 ; SAS NO. — ; TASK NO.

PROJECT SITE LEADER: Beth Creamer ; PHONE NO. (410) 631 3493

PROJECT SAMPLE COORDINATOR: Peggy Smith ; PHONE NO. (410) 631 3493

SAS REQUEST (DETAILS REQUIRED) (10)

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC. (LOW/ MED./ HIGH)	SAMPLE PHASE (AQ/ SOL.)	TYPE OF REQUEST (ORG. DIO. OR INOR) SAS	EPA SAMPLE NO.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	SAS REQUEST (ITEMIZE)	DATE SHIPPED	DATA REC'D.
(12)	(13)	(14)	(15)	(16)	(17)	(18)	←			(19)		→	(11)	(12)	(13)	
DUP OF MCPG40	LOW	AQ	INORG	MCPG42	SENTIN	12/17/96										
FIELD BLANK	↓	↓	↓	MCPG43	↓	↓							1/6/97 MST MCPG 39			
	LOW	SOL	ORG	CNL 23	COMPU	12/17/96										
				CNL 24												
				CNL 25												
				CNL 26												
				CNL 27												
				CNL 28												
				CNL 29												
				CNL 30												
				CNL 31												
				CNL 32												
				CNL 33												
				CNL 34												
DUP OF CNL 27				CNL 35												
				CNL 36												
	↓	↓	↓	CNL 37	↓	↓										

ORIGINAL (Red)

EPA SAMPLE SHIPPING LOG

(REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: Gilbert Tank Farm ; EPA PROJ. OFFICER: Michael Giuranna
RAS NO. 25233 ; SAS NO. — ; TASK NO.
PROJECT SITE LEADER: Beth Creamer ; PHONE NO. (410) 631 3493
PROJECT SAMPLE COORDINATOR: Peggy Smith ; PHONE NO. (410) 631 3493

SAS REQUEST (DETAILS REQUIRED)
(10)

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC. (LOW/MED./HIGH)	SAMPLE PHASE (AQ/SOL.)	TYPE OF REQUEST (ORG. DIO. OR INOR.) SAS	EPA SAMPLE NO.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCDD	METALS	CN	LAB NAME	SAS REQUEST (ITEMIZE)	DATE SHIPPED	DATA REC'D.
(2)	(3)	(4)	(5)	(6)	(7)	(8)	←			(9)		→	(11)	(12)	(13)	
	LOW	SOL	ORG	CNL 38	COMPU	12/17/96										
		AQ		CNL 39			✓	✓	✓				Rec'd 1/6/97 CNL 39 MSF			
				CNL 40			✓	✓	✓							
MSMSD				CNL 41			✓	✓	✓							
DUP OF CNL 40				CNL 42			✓	✓	✓							
FIELD BLANK				CNL 43			✓	✓	✓							

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL39

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834874

Sample wt/vol: 5.0 (g/mL) mL Lab File ID: CN034874A57

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: not dec. _____ Date Analyzed: 12/21/96

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/L	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

ORIGINAL (Red)

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL40

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834883

Sample wt/vol: 5.0 (g/mL) mL Lab File ID: CN034883A57

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: not dec. _____ Date Analyzed: 12/21/96

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/L	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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL41

ORIGINAL (Red)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834884

Sample wt/vol: 5.0 (g/mL) mL Lab File ID: CN034884A57

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: not dec. _____ Date Analyzed: 12/21/96

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/L	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

ORIGINAL (Red)

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL42

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834885

Sample wt/vol: 5.0 (g/mL) mL Lab File ID: CN034885A57

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: not dec. _____ Date Analyzed: 12/21/96

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/L	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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL43

ORIGINAL (Red)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834886

Sample wt/vol: 5.0 (g/mL) mL Lab File ID: CN034886A57

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: not dec. _____ Date Analyzed: 12/21/96

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/L	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	13	
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

ORIGINAL (Red)

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL39

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834874

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH034874A60

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL39

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834874

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH034874A60

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

ORIGINAL (Red)

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL40

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834883

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH034883A60

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	2	J
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	1	J
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL40

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834883

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH034883A60

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

ORIGINAL (Red)

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL41

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834884

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH034884A60

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL41

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834884

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH034884A60

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

ORIGINAL (Red)

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL42

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834885

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH034885A60

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	2	J
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	1	J
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL42

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834885

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH034885A60

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	1	J
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	1	J
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

ORIGINAL (Red)

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL43

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834886

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH034886A60

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL43

ORIGINAL (Rev.)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834886

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH034886A60

Level: (low/med) LOW Date Received: 12/19/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL39

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834874

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 12/19/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:12/20/96

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.0082	J
76-44-8	Heptachlor	0.0081	J
309-00-2	Aldrin	0.0092	J
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.020	JB
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.017	JP
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.022	JPB
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL40

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834883

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 12/19/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:12/20/96

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL41

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 12/19/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:12/20/96

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ORIGINAL (Red)

CNL42

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834885

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 12/19/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:12/20/96

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

ORIGINAL (Red)

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNL43

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 834886

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 12/19/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:12/20/96

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

ORIGINAL (Red)

Calibration Listing

CASE NO: 25233
SDG NO: CNL23

LABORATORY: COMPUCHEM LABORATORIES, I

FRACTION	INSTRUMENT	TYPE	LAB FILE ID/ GC COLUMN	DATE	TIME	COMPOUND	RRF	%RSD (%D/RPD)
VOA	F50051	INITIAL	GW961219C51	12/19/96	09:44			
						Chloromethane		37.0
						Vinyl Chloride		32.6
						Acetone		60.6
VOA	F50051	CONTINUING	GS961220C51	12/20/96	06:23			
						Bromomethane		25.1
						Chloroethane		27.2
Assoc. Sample(s):		VBLKT4		12/20/96	08:06			
		CNL23		12/20/96	11:11			
		CNL24		12/20/96	11:52			
		CNL25		12/20/96	12:28			
		CNL25MS		12/20/96	13:02			
		CNL25MSD		12/20/96	13:38			
		CNL28		12/20/96	15:21			
VOA	F50051	CONTINUING	GT961221C51	12/21/96	06:34			
						Chloromethane		-26.3
						Acetone		36.7
						Bromoform		-35.2
						4-Methyl-2-Pentanone		-31.1
Assoc. Sample(s):		VBLKT5		12/21/96	08:18			
		CNL29		12/21/96	08:58			
		CNL30		12/21/96	12:18			
		CNL31		12/21/96	12:54			
		CNL32		12/21/96	13:38			
		VBLKU4		12/21/96	14:33			
		CNL33		12/21/96	15:08			
		CNL34		12/21/96	15:36			
		CNL26		12/21/96	16:09			
VOA	F50051	CONTINUING	GT961221B51	12/21/96	19:40			
						Acetone		29.5
Assoc. Sample(s):		VBLKU6		12/21/96	23:23			
		CNL35		12/22/96	00:09			
		CNL38		12/22/96	01:58			
VOA	F50051	CONTINUING	GS961223C51	12/23/96	06:22			
						Chloroethane		31.2
						2-Butanone		29.1
						trans-1,3-Dichloropropene		32.0
						4-Methyl-2-Pentanone		34.1
						2-Hexanone		30.9
Assoc. Sample(s):		VBLKP1		12/23/96	07:43			
		CNL27		12/23/96	08:31			
		CNL36		12/23/96	08:59			
		CNL37		12/23/96	09:36			
		VHBLKU5		12/23/96	10:31			
BNA	5972HP64	INITIAL	HG961228C64	12/28/96	10:41			
						2,4-Dinitrophenol		33.8
						4-Nitroaniline		42.4
						3,3'-Dichlorobenzidine		44.5
BNA	5972HP64	CONTINUING	HG961231A64	12/31/96	10:08			
						2,4-Dinitrophenol		27.0
Assoc. Sample(s):		SBLKPF		12/31/96	10:46			
		CNL25MS		12/31/96	11:59			
		CNL25		12/31/96	12:37			
		CNL25MSD		12/31/96	13:14			
		CNL23		12/31/96	13:51			
		CNL27		12/31/96	15:05			
		CNL28		12/31/96	15:43			
		CNL24		12/31/96	16:20			
		CNL31		12/31/96	16:58			
		CNL32		12/31/96	17:35			
		CNL33		12/31/96	18:13			
		CNL34		12/31/96	18:50			
		CNL35		12/31/96	19:27			
		CNL36		12/31/96	20:04			
		CNL38		12/31/96	21:18			
BNA	5972HP64	CONTINUING	HG970102C64	01/02/97	02:20			
Assoc. Sample(s):		CNL29		01/02/97	02:57			
		CNL30		01/02/97	03:34			
		CNL37		01/02/97	04:10			
		CNL26		01/02/97	04:47			

* Only RRF and %RSD (%D/RPD) values which do not meet criteria are listed.

RIGINAL
(Red)

Calibration Listing

CASE NO: 25233
SDG NO: CNL23

LABORATORY: COMPUCHEM LABORATORIES, I

FRACTION	INSTRUMENT	TYPE	LAB FILE ID/ GC COLUMN	DATE	TIME	COMPOUND	RRF	%RSD (%D/RPD)
		CNL27DL		01/02/97	05:23			
		CNL28DL		01/02/97	06:31			
PES	VARIAN02	PEM	DB-608	01/02/97	11:35			
PES	VARIAN02	INITIAL	DB-608	01/02/97	12:16			
PES	VARIAN02	PEM	DB-608	01/02/97	21:52			
PES	VARIAN02	PEM	DB-608	01/04/97	15:10			
PES	VARIAN02	INDA	DB-608	01/05/97	02:52			
PES	VARIAN02	INDB	DB-608	01/05/97	03:34			
PES	VARIAN02	PEM	DB-608	01/05/97	11:08			
PES	VARIAN02	PEM	DB-608	01/08/97	11:23			
PES	VARIAN02	INDA	DB-608	01/08/97	17:12			
PES	VARIAN02	INDB	DB-608	01/08/97	17:58			
PES	VARIAN03	PEM	RTX-1701	01/02/97	11:35			
PES	VARIAN03	INITIAL	RTX-1701	01/02/97	12:16			
PES	VARIAN03	PEM	RTX-1701	01/02/97	21:52			
PES	VARIAN03	PEM	RTX-1701	01/04/97	15:10			
PES	VARIAN03	INDA	RTX-1701	01/05/97	02:52			
PES	VARIAN03	INDB	RTX-1701	01/05/97	03:34			
PES	VARIAN03	PEM	RTX-1701	01/05/97	11:08			
PES	VARIAN03	PEM	RTX-1701	01/08/97	11:23			
PES	VARIAN03	INDA	RTX-1701	01/08/97	17:12			
PES	VARIAN03	INDB	RTX-1701	01/08/97	17:58			

* Only RRF and %RSD (%D/RPD) values which exceed criteria are listed.

ORIGINAL (Red)

TABLE I

ENVIRONMENTAL PROTECTION AGENCY REGION III
CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE NO. 25233 (SDG CNL39) CONTRACTOR ESAT

Instrument ID: F50057	Init. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	12/17/96 - 20:12			12/21/96 - 12:31					
	RF	%RSD	*	RF	%D	*	RF	%D	*
Chloromethane									
Bromomethane									
Vinyl Chloride									
Chloroethane									
Methylene Chloride									
Acetone		32.4	I		45.5	C			
Carbon Disulfide									
1,1-Dichloroethene									
1,1-Dichloroethane									
1,2-Dichloroethene (total)									
Chloroform									
1,2-Dichloroethane									
2-Butanone		36.8	I		40.1	C			
1,1,1-Trichloroethane									
Carbon Tetrachloride									
Bromodichloromethane									
1,2-Dichloropropane									
cis-1,3-Dichloropropene									
Trichloroethene									
Dibromochloromethane									
1,1,2-Trichloroethane									
Benzene									
trans-1,3-Dichloropropene									
Bromoform									
4-Methyl-2-Pentanone					39.5	C			
2-Hexanone					49.5	C			
Tetrachloroethene									
1,1,2,2-Tetrachloroethane					32.2	C			
Toluene									
Chlorobenzene									
Ethylbenzene									
Styrene									
Xylenes (total)									
AFFECTED SAMPLES:	All samples on this page.			All samples in the SDG.					

Reviewer Initials/Date: HP 3/12/97

ORIGINAL (Red)

TABLE I

ENVIRONMENTAL PROTECTION AGENCY REGION III
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS

CASE NO. 25233 (SDG CNL39) CONTRACTOR ESAT

Instrument ID: 5972HP60	Init. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	12/17/96 - 01:47			12/23/96 - 10:58			12/30/96 - 00:53		
	RF	%RSD	*	RF	%D	*	RF	%D	*
Phenol									
bis(2-Chloroethyl)ether									
2-Chlorophenol									
1,3-Dichlorobenzene									
1,4-Dichlorobenzene									
1,2-Dichlorobenzene									
2-Methylphenol									
2,2'-oxybis(1-Chloroprop.)								44.4	C
4-Methylphenol								25.2	C
N-Nitroso-di-n-propylamine									
Hexachloroethane									
Nitrobenzene									
Isophorone									
2-Nitrophenol									
2,4-Dimethylphenol									
bis(2-Chloroethoxy)methane									
2,4-Dichlorophenol									
1,2,4-Trichlorobenzene									
Naphthalene									
4-Chloroaniline								28.1	C
Hexachlorobutadiene								25.8	C
4-Chloro-3-Methylphenol									
2-Methylnaphthalene									
Hexachlorocyclopentadiene									
2,4,6-Trichlorophenol									
2,4,5-Trichlorophenol									
2-Chloronaphthalene									
2-Nitroaniline									
Dimethylphthalate									
Acenaphthylene									
2,6-Dinitrotoluene									
3-Nitroaniline									
Acenaphthene									
2,4-Dinitrophenol									
4-Nitrophenol									
Dibenzofuran									
2,4-Dinitrotoluene									
Diethylphthalate									
4-Chlorophenyl-phenylether								36.4	C
Fluorene								26.3	C
4,6-Dinitro-2-methylphenol									
4-Nitroaniline									

AFFECTED SAMPLES:	All samples on this page.	CNL39-CNL43 SBLKOS	CNL41MS CNL41MSD SBLKED

Reviewer Initials/Date: HP 3/12/97

* See last page of this table for DEFINITION OF CODES.

ORIGINAL (Red)

TABLE I

ENVIRONMENTAL PROTECTION AGENCY REGION III
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS

CASE NO. 25233 (SDG CNL39) CONTRACTOR ESAT

Instrument ID: 5972HP60	Init. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	12/17/96 - 01:47			12/23/96 - 10:58			12/30/96 - 00:53		
	RF	%RSD	*	RF	%D	*	RF	%D	*
N-Nitrosodiphenylamine(1)									
4-Bromophenyl-phenylether									
Hexachlorobenzene									
Pentachlorophenol									
Phenanthrene									
Anthracene									
Carbazole									
Di-n-butylphthalate									
Fluoranthene									
Pyrene									
Butylbenzylphthalate								29.8	C
Benzo(a)anthracene									
3,3'-Dichlorobenzidine									
Chrysene									
bis(2-Ethylhexyl)phthalate									
Di-n-octylphthalate									
Benzo(b)fluoranthene									
Benzo(k)fluoranthene								29.7	C
Benzo(a)pyrene									
Indeno(1,2,3-cd)pyrene									
Dibenz(a,h)anthracene									
Benzo(g,h,i)perylene									
AFFECTED SAMPLES:	All samples on this page.			CNL39-CNL43 SBLKOS			CNL41MS CNL41MSD SBLKED		

Reviewer Initials/Date: HP 3/12/97

* See last page of this table for DEFINITION OF CODES.

ORIGINAL (Red)

DEFINITION OF CODES USED IN TABLE I

I = %RSD exceeded 30% in the initial calibration, positive results are qualified "J". When the %RSD exceeded 50%, quantitation limits are qualified "UJ".

C = %D exceeded 25% in the continuing calibration, positive results are qualified "J". When the %D exceeded 50%, quantitation limits are qualified "UJ".

F = RF less than 0.05 in the calibration. All quantitation limits are qualified "R" and positive results are qualified "L".

+ = The "B" qualifier, denoting blank contamination, supersedes the qualifier issued in this table.

R = The "R" qualifier, denoting unusable results, supersedes the "F" qualifier issued in this table.

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Instrument ID: F50057 Calibration Date(s): 12/17/96 12/17/96

Heated Purge: (Y/N) N Calibration Time(s): 2012 2303

GC Column:DB624 ID: 0.53 (mm)

LAB FILE ID: RRF10 =CT961217B57 RRF20 =CY961217B57
RRF50 =CW961217B57 RRF100=CV961217B57 RRF200=CU961217B57

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	0.977	1.076	1.019	0.991	0.937	1.000	5.2
Bromomethane *	2.041	2.145	1.980	1.868	1.761	1.959	7.6*
Vinyl Chloride *	1.136	1.187	1.151	1.075	1.027	1.115	5.7*
Chloroethane	0.882	1.020	0.964	0.898	0.828	0.918	8.1
Methylene Chloride	1.872	1.439	1.353	1.242	1.140	1.409	20.0
Acetone	0.144	0.223	0.177	0.137	0.089	0.154	32.4
Carbon Disulfide	3.226	3.492	3.464	3.252	2.991	3.285	6.2
1,1-Dichloroethene *	1.254	1.371	1.352	1.269	1.181	1.285	6.0*
1,1-Dichloroethane *	2.708	2.791	2.699	2.432	2.264	2.579	8.6*
1,2-Dichloroethene (total)	1.545	1.393	1.499	1.256	1.172	1.373	11.5
Chloroform *	2.718	2.753	2.693	2.460	2.382	2.601	6.5*
1,2-Dichloroethane *	1.283	1.234	1.134	0.988	0.978	1.123	12.4*
2-Butanone	0.188	0.300	0.209	0.157	0.108	0.192	36.8
1,1,1-Trichloroethane *	0.708	0.688	0.680	0.605	0.597	0.656	7.8*
Carbon Tetrachloride *	0.827	0.827	0.804	0.719	0.701	0.776	7.9*
Bromodichloromethane *	0.895	0.864	0.841	0.729	0.718	0.809	10.0*
1,2-Dichloropropane	0.342	0.326	0.313	0.273	0.265	0.304	11.1
cis-1,3-Dichloropropene *	0.497	0.494	0.481	0.419	0.413	0.461	9.0*
Trichloroethene *	0.572	0.608	0.586	0.514	0.470	0.550	10.3*
Dibromochloromethane *	0.986	0.866	0.831	0.700	0.663	0.809	16.1*
1,1,2-Trichloroethane *	0.354	0.318	0.294	0.249	0.242	0.291	16.2*
Benzene *	0.770	0.699	0.653	0.561	0.530	0.643	15.4*
trans-1,3-Dichloropropene *	0.457	0.383	0.374	0.326	0.326	0.373	14.4*
Bromoform *	0.833	0.752	0.706	0.577	0.511	0.676	19.3*
4-Methyl-2-Pentanone	0.194	0.222	0.188	0.146	0.109	0.172	25.9
2-Hexanone	0.114	0.146	0.119	0.090	0.067	0.107	28.3
Tetrachloroethene *	0.846	0.819	0.742	0.623	0.543	0.715	18.0*
1,1,2,2-Tetrachloroethane *	0.536	0.541	0.455	0.391	0.344	0.453	19.3*
Toluene *	1.017	0.989	0.897	0.774	0.736	0.883	14.2*
Chlorobenzene *	0.987	0.930	0.887	0.783	0.741	0.866	11.8*
Ethylbenzene *	0.364	0.363	0.347	0.305	0.289	0.334	10.3*
Styrene *	0.782	0.767	0.688	0.582	0.495	0.663	18.5*
Xylene (Total) *	0.480	0.469	0.451	0.384	0.325	0.422	15.6*
Toluene-d8	0.993	0.917	0.876	0.837	0.796	0.884	8.6
Bromofluorobenzene *	0.881	0.756	0.721	0.695	0.650	0.741	11.8*
1,2-Dichloroethane-d4	1.221	1.104	1.049	1.011	1.035	1.084	7.7

* Compounds with required minimum and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

FORM VI VOA OLM03.0

RIGINAL (Red)

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Instrument ID: F50057 Calibration Date: 12/21/96 Time: 1231

Lab File ID: CS961221A57 Init. Calib. Date(s): 12/17/96 12/17/96

Heated Purge: (Y/N) N Init. Calib. Times: 2012 2303

GC Column: DB624 ID: 0.53 (mm)

Samples Affected: All samples in the SDG.

COMPOUND	$\overline{RRF}$	RRF250	MIN RRF	%D	MAX %D
Chloromethane	1.000	1.097		9.7	
Bromomethane	1.959	2.248	0.100	14.8	25.0
Vinyl Chloride	1.115	1.296	0.100	16.2	25.0
Chloroethane	0.918	1.036		12.9	
Methylene Chloride	1.409	1.410		0.1	
Acetone	0.154	0.084		-45.5	
Carbon Disulfide	3.285	3.672		11.8	
1,1-Dichloroethene	1.285	1.509	0.100	17.4	25.0
1,1-Dichloroethane	2.579	2.913	0.200	13.0	25.0
1,2-Dichloroethene (total)	1.373	1.540		12.2	
Chloroform	2.601	3.121	0.200	20.0	25.0
1,2-Dichloroethane	1.123	1.191	0.100	6.1	25.0
2-Butanone	0.192	0.115		-40.1	
1,1,1-Trichloroethane	0.656	0.732	0.100	11.6	25.0
Carbon Tetrachloride	0.776	0.871	0.100	12.2	25.0
Bromodichloromethane	0.809	0.842	0.200	4.1	25.0
1,2-Dichloropropane	0.304	0.304		0.0	
cis-1,3-Dichloropropene	0.461	0.449	0.200	-2.6	25.0
Trichloroethene	0.550	0.583	0.300	6.0	25.0
Dibromochloromethane	0.809	0.751	0.100	-7.2	25.0
1,1,2-Trichloroethane	0.291	0.255	0.100	-12.4	25.0
Benzene	0.643	0.659	0.500	2.5	25.0
trans-1,3-Dichloropropene	0.373	0.332	0.100	-11.0	25.0
Bromoform	0.676	0.563	0.100	-16.7	25.0
4-Methyl-2-Pentanone	0.172	0.104		-39.5	
2-Hexanone	0.107	0.054		-49.5	
Tetrachloroethene	0.715	0.807	0.200	12.9	25.0
1,1,2,2-Tetrachloroethane	0.453	0.307	0.300	-32.2	25.0
Toluene	0.883	0.959	0.400	8.6	25.0
Chlorobenzene	0.866	0.928	0.500	7.2	25.0
Ethylbenzene	0.334	0.368	0.100	10.2	25.0
Styrene	0.663	0.712	0.300	7.4	25.0
Xylene (Total)	0.422	0.473	0.300	12.1	25.0
Toluene-d8	0.884	0.935		5.8	
Bromofluorobenzene	0.741	0.736	0.200	-0.7	25.0
1,2-Dichloroethane-d4	1.084	1.135		4.7	

All other compounds must meet a minimum RRF of 0.010.

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

ORIGINAL (Red)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Instrument ID: 5972HP60 Calibration Date(s): 12/17/96 12/17/96

Calibration Time(s): 0147 0420

LAB FILE ID: RRF20 =HI961217C60 RRF50 =HG961217C60
RRF80 =HK961217C60 RRF120=HJ961217C60 RRF160=HH961217C60

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol *	1.797	1.707	1.618	1.549	1.490	1.632	7.5*
bis(2-Chloroethyl)ether *	1.300	1.207	1.192	1.123	1.094	1.183	6.8*
2-Chlorophenol *	1.488	1.394	1.293	1.222	1.161	1.312	10.0*
1,3-Dichlorobenzene *	1.550	1.425	1.348	1.263	1.204	1.358	10.0*
1,4-Dichlorobenzene *	1.575	1.456	1.382	1.272	1.200	1.377	10.8*
1,2-Dichlorobenzene *	1.461	1.335	1.240	1.123	1.036	1.239	13.6*
2-Methylphenol *	1.273	1.178	1.122	1.064	1.027	1.133	8.6*
2,2'-oxybis(1-Chloropropane)	2.420	2.317	2.267	2.205	2.127	2.267	4.9
4-Methylphenol *	1.210	1.061	0.945	0.872	0.826	0.983	15.8*
N-Nitroso-di-n-propylamine *	1.007	0.876	0.834	0.804	0.766	0.857	10.8*
Hexachloroethane *	0.769	0.734	0.705	0.664	0.638	0.702	7.5*
Nitrobenzene *	0.471	0.459	0.434	0.417	0.411	0.438	5.9*
Isophorone *	0.887	0.821	0.785	0.769	0.765	0.805	6.3*
2-Nitrophenol *	0.280	0.270	0.256	0.249	0.243	0.260	6.0*
2,4-Dimethylphenol *	0.373	0.363	0.350	0.338	0.332	0.351	4.8*
bis(2-Chloroethoxy)methane *	0.525	0.489	0.469	0.458	0.442	0.477	6.8*
2,4-Dichlorophenol *	0.356	0.341	0.313	0.303	0.295	0.322	8.0*
1,2,4-Trichlorobenzene *	0.357	0.329	0.302	0.286	0.275	0.310	10.7*
Naphthalene *	1.106	1.028	0.921	0.848	0.818	0.944	12.8*
4-Chloroaniline	0.272	0.227	0.214	0.201	0.206	0.224	12.9
Hexachlorobutadiene	0.206	0.193	0.172	0.164	0.157	0.178	11.4
4-Chloro-3-methylphenol *	0.342	0.327	0.306	0.297	0.290	0.312	7.0*
2-Methylnaphthalene *	0.641	0.618	0.556	0.522	0.497	0.567	10.8*
Hexachlorocyclopentadiene	0.467	0.455	0.419	0.396	0.382	0.424	8.7
2,4,6-Trichlorophenol *	0.451	0.413	0.388	0.359	0.362	0.395	9.7*
2,4,5-Trichlorophenol *	0.488	0.468	0.437	0.415	0.365	0.435	11.0*
2-Chloronaphthalene *	1.248	1.129	1.047	0.964	0.915	1.061	12.5*
2-Nitroaniline	0.508	0.479	0.479	0.443	0.441	0.470	6.0
Dimethylphthalate	1.437	1.289	1.241	1.157	1.118	1.248	10.0
Acenaphthylene *	1.989	1.787	1.627	1.526	1.462	1.678	12.7*
2,6-Dinitrotoluene *	0.358	0.334	0.330	0.307	0.294	0.325	7.6*
3-Nitroaniline	0.417	0.399	0.375	0.375	0.371	0.387	5.1
Acenaphthene *	1.182	1.071	0.976	0.897	0.843	0.994	13.7*
2,4-Dinitrophenol	0.164	0.203	0.203	0.205	0.211	0.197	9.6
4-Nitrophenol	0.207	0.212	0.204	0.201	0.206	0.206	2.0
Dibenzofuran *	1.610	1.419	1.255	1.138	1.079	1.300	16.7*
2,4-Dinitrotoluene *	0.450	0.396	0.350	0.318	0.303	0.363	16.5*

* Compounds with required minimum and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

ORIGINAL (Red)

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Instrument ID: 5972HP60 Calibration Date(s): 12/17/96 12/17/96

Calibration Time(s): 0147 0420

LAB FILE ID: RRF20 =HI961217C60 RRF50 =HG961217C60
RRF80 =HK961217C60 RRF120=HJ961217C60 RRF160=HH961217C60

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Diethylphthalate	1.608	1.452	1.369	1.273	1.208	1.382	11.3
4-Chlorophenyl-phenylether *	0.540	0.459	0.407	0.346	0.321	0.415	21.3*
Fluorene *	1.194	1.021	0.916	0.796	0.740	0.933	19.5*
4-Nitroaniline	0.372	0.365	0.331	0.339	0.306	0.343	7.9
4,6-Dinitro-2-methylphenol	0.168	0.180	0.176	0.168	0.177	0.174	3.3
N-nitrosodiphenylamine (1)	0.558	0.509	0.491	0.442	0.425	0.485	11.0
4-Bromophenyl-phenylether *	0.225	0.213	0.197	0.188	0.180	0.201	9.1*
Hexachlorobenzene *	0.294	0.270	0.246	0.232	0.221	0.253	11.6*
Pentachlorophenol *	0.159	0.172	0.167	0.162	0.158	0.164	3.6*
Phenanthrene *	1.142	1.017	0.946	0.892	0.840	0.967	12.2*
Anthracene *	1.105	0.954	0.881	0.883	0.769	0.918	13.5*
Carbazole	1.085	1.004	0.927	0.901	0.884	0.960	8.7
Di-n-butylphthalate	1.903	1.746	1.573	1.479	1.411	1.622	12.4
Fluoranthene *	1.123	1.024	0.930	0.851	0.815	0.949	13.3*
Pyrene *	1.830	1.580	1.567	1.439	1.355	1.554	11.6*
Butylbenzylphthalate	1.148	1.047	1.107	1.030	0.979	1.062	6.2
3,3'-Dichlorobenzidine	0.341	0.312	0.297	0.299	0.299	0.310	5.9
Benzo(a)anthracene *	1.232	1.214	1.157	1.162	1.086	1.170	4.9*
Chrysene *	1.305	1.212	1.141	1.007	0.995	1.132	11.8*
bis(2-Ethylhexyl)phthalate	1.644	1.524	1.473	1.371	1.277	1.458	9.7
Di-n-octylphthalate	2.884	2.353	2.314	2.025	1.812	2.278	17.8
Benzo(b)fluoranthene *	1.262	1.176	1.034	1.031	0.994	1.099	10.4*
Benzo(k)fluoranthene *	1.326	1.110	1.168	0.969	0.867	1.088	16.3*
Benzo(a)pyrene *	1.024	0.908	0.918	0.844	0.784	0.896	10.0*
Indeno(1,2,3-cd)pyrene *	1.333	1.013	1.052	0.956	0.958	1.062	14.7*
Dibenzo(a,h)anthracene *	0.937	0.742	0.747	0.683	0.671	0.756	14.1*
Benzo(g,h,i)perylene *	1.099	0.891	0.836	0.845	0.862	0.907	12.1*
Nitrobenzene-d5	0.496	0.486	0.458	0.435	0.435	0.462	6.1*
2-Fluorobiphenyl *	1.303	1.172	1.080	1.004	0.945	1.101	12.9*
Terphenyl-d14 *	0.965	0.877	0.859	0.803	0.750	0.851	9.5*
Phenol-d5 *	1.876	1.749	1.652	1.593	1.537	1.681	8.0*
2-Fluorophenol *	1.490	1.422	1.391	1.327	1.273	1.381	6.1*
2,4,6-Tribromophenol	0.166	0.152	0.144	0.134	0.130	0.145	10.0
2-Chlorophenol-d4 *	1.546	1.441	1.358	1.268	1.215	1.366	9.7*
1,2-Dichlorobenzene-d4 *	0.943	0.864	0.770	0.693	0.626	0.779	16.4*

(1) Cannot be seperated from Diphenylamine

* Compounds with required minimum and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

ORIGINAL (Red)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Instrument ID: 5972HP60 Calibration Date: 12/23/96 Time: 1058

Lab File ID: HG961223A60 Init. Calib. Date(s): 12/17/96 12/17/96

Init. Calib. Times: 0147 0420

Samples Affected: CNL39-CNL43 SBLK05.

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.632	1.720	0.800	5.4	25.0
bis(2-Chloroethyl)ether	1.183	1.208	0.700	2.1	25.0
2-Chlorophenol	1.312	1.405	0.800	7.1	25.0
1,3-Dichlorobenzene	1.358	1.446	0.600	6.5	25.0
1,4-Dichlorobenzene	1.377	1.445	0.500	4.9	25.0
1,2-Dichlorobenzene	1.239	1.346	0.400	8.6	25.0
2-Methylphenol	1.133	1.248	0.700	10.2	25.0
2,2'-oxybis(1-Chloropropane)	2.267	2.232		-1.5	
4-Methylphenol	0.983	1.161	0.600	18.1	25.0
N-Nitroso-di-n-propylamine	0.857	0.909	0.500	6.1	25.0
Hexachloroethane	0.702	0.754	0.300	7.4	25.0
Nitrobenzene	0.438	0.441	0.200	0.7	25.0
Isophorone	0.805	0.781	0.400	-3.0	25.0
2-Nitrophenol	0.260	0.260	0.100	0.0	25.0
2,4-Dimethylphenol	0.351	0.360	0.200	2.6	25.0
bis(2-Chloroethoxy)methane	0.477	0.486	0.300	1.9	25.0
2,4-Dichlorophenol	0.322	0.329	0.200	2.2	25.0
1,2,4-Trichlorobenzene	0.310	0.319	0.200	2.9	25.0
Naphthalene	0.944	1.012	0.700	7.2	25.0
4-Chloroaniline	0.224	0.230		2.7	
Hexachlorobutadiene	0.178	0.186		4.5	
4-Chloro-3-methylphenol	0.312	0.333	0.200	6.7	25.0
2-Methylnaphthalene	0.567	0.586	0.400	3.4	25.0
Hexachlorocyclopentadiene	0.424	0.388		-8.5	
2,4,6-Trichlorophenol	0.395	0.405	0.200	2.5	25.0
2,4,5-Trichlorophenol	0.435	0.491	0.200	12.9	25.0
2-Chloronaphthalene	1.061	1.142	0.800	7.6	25.0
2-Nitroaniline	0.470	0.486		3.4	
Dimethylphthalate	1.248	1.317		5.5	
Acenaphthylene	1.678	1.807	0.900	7.7	25.0
2,6-Dinitrotoluene	0.325	0.349	0.200	7.4	25.0
3-Nitroaniline	0.387	0.432		11.6	
Acenaphthene	0.994	1.102	0.900	10.9	25.0
2,4-Dinitrophenol	0.197	0.204		3.6	
4-Nitrophenol	0.206	0.236		14.6	
Dibenzofuran	1.300	1.447	0.800	11.3	25.0
2,4-Dinitrotoluene	0.363	0.410	0.200	12.9	25.0

All other compounds must meet a minimum RRF of 0.010.

ORIGINAL (Red)

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Instrument ID: 5972HP60 Calibration Date: 12/23/96 Time: 1058

Lab File ID: HG961223A60 Init. Calib. Date(s): 12/17/96 12/17/96

Init. Calib. Times: 0147 0420

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.382	1.486		7.5	
4-Chlorophenyl-phenylether	0.415	0.485	0.400	16.9	25.0
Fluorene	0.933	1.062	0.900	13.8	25.0
4-Nitroaniline	0.343	0.397		15.7	
4,6-Dinitro-2-methylphenol	0.174	0.173		-0.6	
N-nitrosodiphenylamine(1)	0.485	0.488		0.6	
4-Bromophenyl-phenylether	0.201	0.203	0.100	1.0	25.0
Hexachlorobenzene	0.253	0.266	0.100	5.1	25.0
Pentachlorophenol	0.164	0.164	0.050	0.0	25.0
Phenanthrene	0.967	1.026	0.700	6.1	25.0
Anthracene	0.918	0.959	0.700	4.5	25.0
Carbazole	0.960	1.004		4.6	
Di-n-butylphthalate	1.622	1.683		3.8	
Fluoranthene	0.949	1.027	0.600	8.2	25.0
Pyrene	1.554	1.586	0.600	2.1	25.0
Butylbenzylphthalate	1.062	1.104		4.0	
3,3'-Dichlorobenzidine	0.310	0.340		9.7	
Benzo(a)anthracene	1.170	1.228	0.800	5.0	25.0
Chrysene	1.132	1.150	0.700	1.6	25.0
bis(2-Ethylhexyl)phthalate	1.458	1.525		4.6	
Di-n-octylphthalate	2.278	2.281		0.1	
Benzo(b)fluoranthene	1.099	1.211	0.700	10.2	25.0
Benzo(k)fluoranthene	1.088	1.067	0.700	-1.9	25.0
Benzo(a)pyrene	0.896	0.879	0.700	-1.9	25.0
Indeno(1,2,3-cd)pyrene	1.062	1.077	0.500	1.4	25.0
Dibenzo(a,h)anthracene	0.756	0.757	0.400	0.1	25.0
Benzo(g,h,i)perylene	0.907	0.911	0.500	0.4	25.0
Nitrobenzene-d5	0.462	0.460	0.200	-0.4	25.0
2-Fluorobiphenyl	1.101	1.175	0.700	6.7	25.0
Terphenyl-d14	0.851	0.843	0.500	-0.9	25.0
Phenol-d5	1.681	1.762	0.800	4.8	25.0
2-Fluorophenol	1.381	1.398	0.600	1.2	25.0
2,4,6-Tribromophenol	0.145	0.152		4.8	
2-Chlorophenol-d4	1.366	1.451	0.800	6.2	25.0
1,2-Dichlorobenzene-d4	0.779	0.863	0.400	10.8	25.0

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Instrument ID: 5972HP60 Calibration Date: 12/30/96 Time: 0053

Lab File ID: HG961230C60 Init. Calib. Date(s): 12/17/96 12/17/96

Init. Calib. Times: 0147 0420

Samples Affected:

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
Phenol	1.632	1.451	0.800	-11.1	25.0	CNL41MS
bis(2-Chloroethyl)ether	1.183	0.928	0.700	-21.6	25.0	CNL41MSD
2-Chlorophenol	1.312	1.316	0.800	0.3	25.0	SBLKED.
1,3-Dichlorobenzene	1.358	1.423	0.600	4.8	25.0	
1,4-Dichlorobenzene	1.377	1.515	0.500	10.0	25.0	
1,2-Dichlorobenzene	1.239	1.414	0.400	14.1	25.0	
2-Methylphenol	1.133	1.046	0.700	-7.7	25.0	
2,2'-oxybis(1-Chloropropane)	2.267	1.260		-44.4		
4-Methylphenol	0.983	1.231	0.600	25.2	25.0	
N-Nitroso-di-n-propylamine	0.857	0.872	0.500	1.8	25.0	
Hexachloroethane	0.702	0.701	0.300	-0.1	25.0	
Nitrobenzene	0.438	0.376	0.200	-14.2	25.0	
Isophorone	0.805	0.627	0.400	-22.1	25.0	
2-Nitrophenol	0.260	0.242	0.100	-6.9	25.0	
2,4-Dimethylphenol	0.351	0.328	0.200	-6.6	25.0	
bis(2-Chloroethoxy)methane	0.477	0.395	0.300	-17.2	25.0	
2,4-Dichlorophenol	0.322	0.336	0.200	4.3	25.0	
1,2,4-Trichlorobenzene	0.310	0.384	0.200	23.9	25.0	
Naphthalene	0.944	1.097	0.700	16.2	25.0	
4-Chloroaniline	0.224	0.161		-28.1		
Hexachlorobutadiene	0.178	0.224		25.8		
4-Chloro-3-methylphenol	0.312	0.322	0.200	3.2	25.0	
2-Methylnaphthalene	0.567	0.656	0.400	15.7	25.0	
Hexachlorocyclopentadiene	0.424	0.413		-2.6		
2,4,6-Trichlorophenol	0.395	0.412	0.200	4.3	25.0	
2,4,5-Trichlorophenol	0.435	0.474	0.200	9.0	25.0	
2-Chloronaphthalene	1.061	1.107	0.800	4.3	25.0	
2-Nitroaniline	0.470	0.374		-20.4		
Dimethylphthalate	1.248	1.332		6.7		
Acenaphthylene	1.678	1.722	0.900	2.6	25.0	
2,6-Dinitrotoluene	0.325	0.310	0.200	-4.6	25.0	
3-Nitroaniline	0.387	0.314		-18.9		
Acenaphthene	0.994	1.067	0.900	7.3	25.0	
2,4-Dinitrophenol	0.197	0.188		-4.6		
4-Nitrophenol	0.206	0.245		18.9		
Dibenzofuran	1.300	1.564	0.800	20.3	25.0	
2,4-Dinitrotoluene	0.363	0.427	0.200	17.6	25.0	

All other compounds must meet a minimum RRF of 0.010.

ORIGINAL (Red)

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Instrument ID: 5972HP60 Calibration Date: 12/30/96 Time: 0053

Lab File ID: HG961230C60 Init. Calib. Date(s): 12/17/96 12/17/96

Init. Calib. Times: 0147 0420

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.382	1.406		1.7	
4-Chlorophenyl-phenylether	0.415	0.566	0.400	36.4	25.0
Fluorene	0.933	1.178	0.900	26.3	25.0
4-Nitroaniline	0.343	0.315		-8.2	
4,6-Dinitro-2-methylphenol	0.174	0.160		-8.0	
N-nitrosodiphenylamine(1)	0.485	0.458		-5.6	
4-Bromophenyl-phenylether	0.201	0.208	0.100	3.5	25.0
Hexachlorobenzene	0.253	0.279	0.100	10.3	25.0
Pentachlorophenol	0.164	0.165	0.050	0.6	25.0
Phenanthrene	0.967	1.029	0.700	6.4	25.0
Anthracene	0.918	0.969	0.700	5.6	25.0
Carbazole	0.960	0.960		0.0	
Di-n-butylphthalate	1.622	1.521		-6.2	
Fluoranthene	0.949	1.070	0.600	12.8	25.0
Pyrene	1.554	1.216	0.600	-21.8	25.0
Butylbenzylphthalate	1.062	0.746		-29.8	
3,3'-Dichlorobenzidine	0.310	0.304		-1.9	
Benzo(a)anthracene	1.170	1.148	0.800	-1.9	25.0
Chrysene	1.132	1.168	0.700	3.2	25.0
bis(2-Ethylhexyl)phthalate	1.458	1.164		-20.2	
Di-n-octylphthalate	2.278	1.830		-19.7	
Benzo(b)fluoranthene	1.099	1.109	0.700	0.9	25.0
Benzo(k)fluoranthene	1.088	1.411	0.700	29.7	25.0
Benzo(a)pyrene	0.896	0.977	0.700	9.0	25.0
Indeno(1,2,3-cd)pyrene	1.062	1.128	0.500	6.2	25.0
Dibenzo(a,h)anthracene	0.756	0.930	0.400	23.0	25.0
Benzo(g,h,i)perylene	0.907	0.941	0.500	3.7	25.0
Nitrobenzene-d5	0.462	0.395	0.200	-14.5	25.0
2-Fluorobiphenyl	1.101	1.244	0.700	13.0	25.0
Terphenyl-d14	0.851	0.754	0.500	-11.4	25.0
Phenol-d5	1.681	1.518	0.800	-9.7	25.0
2-Fluorophenol	1.381	1.170	0.600	-15.3	25.0
2,4,6-Tribromophenol	0.145	0.150		3.4	
2-Chlorophenol-d4	1.366	1.378	0.800	0.9	25.0
1,2-Dichlorobenzene-d4	0.779	0.925	0.400	18.7	25.0

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

ORIGINAL (Red)

SDG NARRATIVE

CASE # 25233
SDG # CNL23
CONTRACT # 68D50009 4 (AE) 1/15/97

JAN 1997

SAMPLE IDENTIFICATIONS: CNL23, CNL24, CNL25, CNL26, CNL27, CNL28, CNL29, CNL30, CNL31, CNL32, CNL33, CNL34, CNL35, CNL36, CNL37, CNL38

The sixteen (16) water samples listed above were received intact, properly refrigerated, with proper documentation, in sealed shipping containers, on December 19, 1996. The samples were prepared and analyzed for the volatile, semivolatile and pesticide/PCB fractions following Contract Laboratory Program (CLP) Statement of Work (SOW), document OLM03.2 protocol.

VOLATILES

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

The common laboratory solvent acetone was identified above the Contract Required Quantitation Limit (CRQL) in seven of these samples. This solvent was also present in some of the associated method blanks. There were no Target Compound List (TCL) analytes identified above the CRQL in any of these samples. The Tentatively Identified Compounds (TICs) found in three of these samples could be characterized as alkanes, alkenes and unknowns. The TICs present in twelve of these samples were charachterized as either carbon dioxide or laboratory artifacts.

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

The associated method and storage blanks met all quality control criteria. The method and storage blanks contained levels of the common laboratory solvents methylene chloride and acetone which were within allowable limits. The TICs found in the associated method and storage blanks were assessed as carbon dioxide.

CNL25 was used as the original to prepare the duplicate matrix spikes, as requested. With three exceptions, the duplicate matrix spikes met all advisory accuracy and precision criteria. The Percent Recoveries of benzene and toluene were flagged as outliers in matrix spike. The Relative Percent Difference of benzene was flagged as an outlier in the comparison of the duplicate matrix spikes.

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.

Jeannette R. McCormack 2/3/96
Jeannette R. McCormack
Technical Reviewer
December 31, 1996

COMPUCHEM
ENVIRONMENTAL
CORPORATION

ORIGINAL (Red)

QUALITY ASSURANCE NOTICE

CompuChem ID# 834872

Client ID# CNL37

Case # 25233 CNL23

In the continuing calibration standard associated with the above semivolatile sample, benzo(b)fluoranthene and benzo(k)fluoranthene were chromatographically resolved and were identified as separate peaks with different retention times. However, in the above sample, these isomers could not be chromatographically resolved. This is indicated with an "X" flag on the Form I.

The maximum concentration possible for each compound has been reported by basing each calculation on the entire area of the unresolved peaks. The concentration for each isomer was calculated using the appropriate compound-specific response factor. An Extracted Ion Current Profile (EICP) for each of the isomers has been provided.

If either value exceeds the concentration of the upper level standard in the initial calibration, a diluted analysis will be performed.

In some instances, there may be slight differences in the areas of the unresolved peaks presented on the EICPs for the two isomers. This can be attributed to the small variations in the retention time windows used to quantitate the compounds, and also to any manual integrations that may have been required.

This notice is being provided to the end-user to explain the "X" flags, and the selected means of reporting the values for benzo(b)fluoranthene and benzo(k)fluoranthene.

Reviewer's initials/ID Paul S. Anderson /2070

Date: January 6, 1997

QAN-SV-23
940215.r1

ORIGINAL (Red)

CompuChem Environmental
4600 Silicon Drive
Durham, NC 27703

SDG NARRATIVE

CASE: 25233
SDG: CNL39
CONTRACT: 68D50004

SAMPLE IDENTIFICATIONS: CNL39, CNL40, CNL41, CNL42, CNL43

This portion of the SDG narrative covers only the pesticide fractions of the samples listed above. For receiving information pertaining to these samples, please refer to the portion of the SDG narrative that covers the volatile fractions.

PESTICIDES

Extraction and analysis holding time requirements were met for these samples. There were no pesticide Target Compound List (TCL) analytes confirmed by dual column analysis at a concentration above the Contract Required Quantitation Limit (CRQL) in any of these samples. No PCB TCL analytes were confirmed by dual column analysis at a concentration above the CRQL in any of these samples.

All of the surrogates met recovery and retention time criteria in the analysis of these samples. The associated method blank met all quality control criteria. The method blank contained concentrations of the pesticide TCL analytes dieldrin and 4,4'-DDT which were within acceptance limits. No PCB TCL analytes were detected in the method blank.

CNL41 was used as the original to prepare the duplicate matrix spikes. The 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 12/26/96
Stephanie W. Winfield
Technical Reviewer
December 26, 1996

ORIGINAL (Red)

TCL ORIGINAL SPREADSHEET

Case No: 25233
SDG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

EPA SAMPLE NUMBER:	CNL27		CNL27DL		CNL28		CNL28DL	
REGIONAL SAMPLE NUMBER:								
SAMPLE LOCATION:	S-5		S-5		S-6		S-6	
SAMPLE TYPE:	Routine Sample		Routine Sample		Routine Sample		Routine Sample	
MATRIX/ANALYSIS:	Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW	
DILUTION FACTOR:	1.0		5.0		1.0		2.0	
PERCENT MOISTURE:	16		16		33		33	
BNA								
Phenol	390	U	1900	U	490	U	980	U
bis(2-Chloroethyl)ether	390	U	1900	U	490	U	980	U
2-Chlorophenol	390	U	1900	U	490	U	980	U
1,3-Dichlorobenzene	390	U	1900	U	490	U	980	U
1,4-Dichlorobenzene	390	U	1900	U	490	U	980	U
1,2-Dichlorobenzene	390	U	1900	U	490	U	980	U
2-Methylphenol	390	U	1900	U	490	U	980	U
2,2'-oxybis(1-Chloropropane)	390	U	1900	U	490	U	980	U
4-Methylphenol	390	U	1900	U	490	U	980	U
N-Nitroso-di-n-propylamine	390	U	1900	U	490	U	980	U
Hexachloroethane	390	U	1900	U	490	U	980	U
Nitrobenzene	390	U	1900	U	490	U	980	U
Isophorone	390	U	1900	U	490	U	980	U
2-Nitrophenol	390	U	1900	U	490	U	980	U
2,4-Dimethylphenol	390	U	1900	U	490	U	980	U
bis(2-Chloroethoxy)methane	390	U	1900	U	490	U	980	U
2,4-Dichlorophenol	390	U	1900	U	490	U	980	U
1,2,4-Trichlorobenzene	390	U	1900	U	490	U	980	U
Naphthalene	100	J	1900	U	160	J	150	JD
4-Chloroaniline	390	U	1900	U	490	U	980	U
Hexachlorobutadiene	390	U	1900	U	490	U	980	U
4-Chloro-3-methylphenol	390	U	1900	U	490	U	980	U
2-Methylnaphthalene	190	J	190	JD	120	J	110	JD
Hexachlorocyclopentadiene	390	U	1900	U	490	U	980	U
2,4,6-Trichlorophenol	390	U	1900	U	490	U	980	U
2,4,5-Trichlorophenol	980	U	4900	U	1200	U	2400	U
2-Chloronaphthalene	390	U	1900	U	490	U	980	U
2-Nitroaniline	980	U	4900	U	1200	U	2400	U
Dimethylphthalate	390	U	1900	U	490	U	980	U
Acenaphthylene	160	J	1900	U	490	U	980	U
2,6-Dinitrotoluene	390	U	1900	U	490	U	980	U
3-Nitroaniline	980	U	4900	U	1200	U	2400	U
Acenaphthene	87	J	1900	U	300	J	260	JD
2,4-Dinitrophenol	980	U	4900	U	1200	U	2400	U
4-Nitrophenol	980	U	4900	U	1200	U	2400	U
Dibenzofuran	110	J	1900	U	270	J	260	JD
2,4-Dinitrotoluene	390	U	1900	U	490	U	980	U
Diethylphthalate	390	U	1900	U	490	U	980	U
4-Chlorophenyl-phenylether	390	U	1900	U	490	U	980	U
Fluorene	470		470	JD	480	J	410	JD
4-Nitroaniline	980	U	4900	U	1200	U	2400	U
4,6-Dinitro-2-methylphenol	980	U	4900	U	1200	U	2400	U
N-Nitrosodiphenylamine (1)	390	U	1900	U	490	U	980	U
4-Bromophenyl-phenylether	390	U	1900	U	490	U	980	U
Hexachlorobenzene	390	U	1900	U	490	U	980	U
Pentachlorophenol	980	U	4900	U	1200	U	2400	U
Phenanthrene	6600	E	7300	D	4200	E	3900	D
Anthracene	920		930	JD	890		830	JD
Carbazole	350	J	410	JD	430	J	470	JD
Di-n-butylphthalate	390	U	1900	U	490	U	980	U
Fluoranthene	9900	E	9700	D	5100	E	4400	D
Pyrene	7400	E	10000	D	3800		3800	D
Butylbenzylphthalate	390	U	1900	U	490	U	980	U
3,3'-Dichlorobenzidine	390	U	1900	U	490	U	980	U
Benzo(a)anthracene	4200	E	4200	D	2300		2000	D
Chrysene	4200	E	4600	D	1900		2000	D
bis(2-Ethylhexyl)phthalate	390	U	1900	U	490	U	980	U
Di-n-octylphthalate	390	U	1900	U	490	U	980	U
Benzo(b)fluoranthene			5500	XD			2200	XD
Benzo(k)fluoranthene			5500	XD			2200	XD
Benzo(a)pyrene	4000	E	4000	D	1800		1500	D
Indeno(1,2,3-cd)pyrene	1600		1800	JD	780		720	JD
Dibenz(a,h)anthracene	410		720	JD	180	J	190	JD
Benzo(g,h,i)perylene	1600		1900	JD	820		790	JD

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL23

ORIGINAL (Red)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834850 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Dieldrin	1	19.52	19.51	19.65	0.085	
	2	14.80	14.72	14.86	2.0	999.9
4,4'-DDE	1	19.32	19.20	19.34	4.6	
	2	14.51	14.38	14.52	5.2	13.0
Endosulfan II	1	21.61	21.48	21.62	0.26	
	2	17.08	16.99	17.13	0.76	192.3
4,4'-DDT	1	22.38	22.26	22.40	12	
	2	17.58	17.44	17.58	8.4	42.8
Methoxychlor	1	25.45	25.33	25.47	38	
	2	19.59	19.52	19.66	32	18.8
Endrin ketone	1	25.86	25.82	25.96	2.3	
	2	20.60	20.55	20.69	0.13	999.9
alpha-Chlordane	1	18.41	18.29	18.43	0.53	
	2	14.15	14.03	14.17	0.33	60.6
gamma-Chlordane	1	17.82	17.71	17.85	0.23	
	2	13.95	13.82	13.96	0.73	217.4

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL24

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834859 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
alpha-BHC	1	11.22	11.14	11.24	0.20	
	2	7.94	7.86	7.96	0.20	0.0
delta-BHC	1	14.28	14.25	14.35	2.0	
	2	12.39	12.29	12.39	0.13	999.9
Methoxychlor	1	25.44	25.33	25.47	2.8	
	2	19.57	19.52	19.66	2.1	33.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL25

ORIGINAL (Red)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834860 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
delta-BHC	1	14.28	14.25	14.35	0.98	
	2	12.38	12.29	12.39	0.27	263.0
4,4'-DDE	1	19.31	19.20	19.34	0.10	
	2	14.51	14.38	14.52	0.35	250.0
4,4'-DDT	1	22.35	22.26	22.40	5.8	
	2	17.56	17.44	17.58	0.20	999.9
Methoxychlor	1	25.44	25.33	25.47	7.4	
	2	19.57	19.52	19.66	6.1	21.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL26

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834861 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
alpha-BHC	1	11.24	11.14	11.24	0.42	
	2	7.96	7.86	7.96	1.4	233.3
delta-BHC	1	14.29	14.25	14.35	2.6	
	2	12.38	12.29	12.39	0.51	409.8
4,4'-DDE	1	19.20	19.20	19.34	0.37	
	2	14.52	14.38	14.52	0.78	110.8
4,4'-DDD	1	21.20	21.19	21.33	0.66	
	2	16.97	16.94	17.08	8.6	999.9
Methoxychlor	1	25.44	25.33	25.47	28	
	2	19.58	19.52	19.66	20	40.0
	1					
	2					
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL27

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834862 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
delta-BHC	1	14.28	14.25	14.35	2.3	
	2	12.36	12.29	12.39	13	465.2
Dieldrin	1	19.52	19.51	19.65	0.32	
	2	14.77	14.72	14.86	2.6	712.5
Endosulfan II	1	21.60	21.48	21.62	2.4	
	2	17.05	16.99	17.13	2.9	20.8
4,4'-DDD	1	21.25	21.19	21.33	0.28	
	2	16.95	16.94	17.08	0.57	103.6
4,4'-DDT	1	22.38	22.26	22.40	39	
	2	17.57	17.44	17.58	19	105.3
Methoxychlor	1	25.45	25.33	25.47	200	
	2	19.59	19.52	19.66	130	53.8
Endrin ketone	1	25.87	25.82	25.96	7.5	
	2	20.57	20.55	20.69	0.70	971.4
gamma-Chlordane	1	17.81	17.71	17.85	1.5	
	2	13.86	13.82	13.96	1.6	6.7

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL28

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834863 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
delta-BHC	1	14.28	14.25	14.35	2.1	
	2	12.35	12.29	12.39	11	423.8
gamma-BHC (Lindane)	1	12.62	12.62	12.72	0.51	
	2	9.11	9.08	9.18	0.15	240.0
Endosulfan I	1	18.48	18.40	18.54	0.42	
	2	13.60	13.56	13.70	26	999.9
4,4'-DDE	1	19.21	19.20	19.34	0.86	
	2	14.50	14.38	14.52	5.8	574.4
Endosulfan II	1	21.60	21.48	21.62	1.9	
	2	17.11	16.99	17.13	0.19	900.0
4,4'-DDD	1	21.23	21.19	21.33	11	
	2	17.03	16.94	17.08	4.4	150.0
4,4'-DDT	1	22.29	22.26	22.40	10	
	2	17.49	17.44	17.58	0.31	999.9
Methoxychlor	1	25.44	25.33	25.47	370	
	2	19.58	19.52	19.66	220	68.2

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL28

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834863 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Endrin ketone	1	25.86	25.82	25.96	9.8	
	2	20.68	20.55	20.69	3.1	216.1
gamma-Chlordane	1	17.80	17.71	17.85	0.23	
	2	13.86	13.82	13.96	1.6	595.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL29

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834864 Date(s) Analyzed: 01/05/97 01/05/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
alpha-BHC	1	11.16	11.14	11.24	0.11	
	2	7.90	7.86	7.96	0.76	590.9
Endosulfan sulfate	1	23.18	23.08	23.22	0.27	
	2	19.52	19.39	19.53	2.0	640.7
Endrin aldehyde	1	22.67	22.64	22.78	0.24	
	2	18.42	18.34	18.48	1.1	358.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL30

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834865 Date(s) Analyzed: 01/05/97 01/05/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Heptachlor epoxide	1	17.23	17.12	17.26	0.16	
	2	12.76	12.74	12.88	0.10	60.0
Methoxychlor	1	25.40	25.33	25.47	7.5	
	2	19.54	19.52	19.66	4.4	70.4
Endrin aldehyde	1	22.70	22.64	22.78	0.18	
	2	18.45	18.34	18.48	2.3	999.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1

OLM03.0

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL31

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834866 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
delta-BHC	1	14.27	14.25	14.35	2.5	
	2	12.35	12.29	12.39	1.2	108.3
4,4'-DDE	1	19.29	19.20	19.34	1.3	
	2	14.50	14.38	14.52	1.2	8.3
4,4'-DDT	1	22.34	22.26	22.40	1.1	
	2	17.46	17.44	17.58	0.23	378.3
Methoxychlor	1	25.42	25.33	25.47	28	
	2	19.56	19.52	19.66	21	33.3
Endrin ketone	1	25.83	25.82	25.96	2.1	
	2	20.67	20.55	20.69	0.16	999.9
Endrin aldehyde	1	22.68	22.64	22.78	0.50	
	2	18.47	18.34	18.48	6.3	999.9
gamma-Chlordane	1	17.80	17.71	17.85	0.18	
	2	13.93	13.82	13.96	0.30	66.7
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL32

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834867 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
delta-BHC	1	14.27	14.25	14.35	1.5	
	2	12.36	12.29	12.39	1.7	13.3
Dieldrin	1	19.60	19.51	19.65	1.7	
	2	14.76	14.72	14.86	0.85	100.0
4,4'-DDE	1	19.34	19.20	19.34	1.3	
	2	14.50	14.38	14.52	1.2	8.3
Endosulfan II	1	21.58	21.48	21.62	0.35	
	2	17.05	16.99	17.13	0.30	16.7
Methoxychlor	1	25.42	25.33	25.47	36	
	2	19.56	19.52	19.66	29	24.1
Endrin ketone	1	25.84	25.82	25.96	1.4	
	2	20.67	20.55	20.69	0.37	278.4
gamma-Chlordane	1	17.78	17.71	17.85	0.19	
	2	13.84	13.82	13.96	0.86	352.6
	1					
	2					

FORM X PEST-1 OLM03.0

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL33

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834868 Date(s) Analyzed: 01/05/97 01/05/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Heptachlor epoxide	1	17.22	17.12	17.26	0.61	
	2	12.84	12.74	12.88	0.31	96.8
4,4'-DDE	1	19.29	19.20	19.34	4.8	
	2	14.49	14.38	14.52	3.2	50.0
4,4'-DDT	1	22.37	22.26	22.40	3.0	
	2	17.56	17.44	17.58	3.4	13.3
Methoxychlor	1	25.43	25.33	25.47	5.5	
	2	19.57	19.52	19.66	2.3	139.1
alpha-Chlordane	1	18.39	18.29	18.43	2.7	
	2	14.13	14.03	14.17	2.6	3.8
gamma-Chlordane	1	17.80	17.71	17.85	1.8	
	2	13.93	13.82	13.96	3.1	72.2
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL34

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834869 Date(s) Analyzed: 01/05/97 01/05/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
alpha-BHC	1	11.18	11.14	11.24	0.083	
	2	7.91	7.86	7.96	0.12	44.6
Heptachlor epoxide	1	17.25	17.12	17.26	5.2	
	2	12.79	12.74	12.88	0.098	999.9
Dieldrin	1	19.58	19.51	19.65	27	
	2	14.73	14.72	14.86	10	170.0
4,4'-DDE	1	19.31	19.20	19.34	6.3	
	2	14.46	14.38	14.52	13	106.3
Endrin	1	20.97	20.84	20.98	17	
	2	15.46	15.38	15.52	1.0	999.9
Endosulfan II	1	21.55	21.48	21.62	4.3	
	2	17.09	16.99	17.13	0.78	451.3
4,4'-DDT	1	22.39	22.26	22.40	3.4	
	2	17.54	17.44	17.58	0.92	269.6
Methoxychlor	1	25.40	25.33	25.47	320	
	2	19.56	19.52	19.66	170	88.2

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL34

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834869 Date(s) Analyzed: 01/05/97 01/05/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Endrin ketone	1	25.82	25.82	25.96	12	
	2	20.65	20.55	20.69	3.0	300.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL35

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834870 Date(s) Analyzed: 01/08/97 01/08/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
alpha-BHC	1	11.21	11.14	11.24	0.10	
	2	7.95	7.86	7.96	0.14	40.0
delta-BHC	1	14.26	14.25	14.35	2.8	
	2	12.35	12.29	12.39	26	828.6
Endosulfan I	1	18.45	18.40	18.54	0.52	
	2	13.60	13.56	13.70	41	999.9
Dieldrin	1	19.61	19.51	19.65	31	
	2	14.76	14.72	14.86	12	158.3
4,4'-DDE	1	19.34	19.20	19.34	7.5	
	2	14.50	14.38	14.52	15	100.0
Endosulfan II	1	21.58	21.48	21.62	4.8	
	2	17.12	16.99	17.13	0.82	485.4
4,4'-DDT	1	22.27	22.26	22.40	11	
	2	17.58	17.44	17.58	1.0	999.9
Methoxychlor	1	25.42	25.33	25.47	420	
	2	19.60	19.52	19.66	170	147.0

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL35

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834870 Date(s) Analyzed: 01/08/97 01/08/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Endrin ketone	1	25.84	25.82	25.96	0.94	
	2	20.56	20.55	20.69	0.99	5.3
gamma-Chlordane	1	17.78	17.71	17.85	1.3	
	2	13.86	13.82	13.96	5.9	353.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL36

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834871 Date(s) Analyzed: 01/05/97 01/05/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Dieldrin	1	19.60	19.51	19.65	1.9	
	2	14.72	14.72	14.86	0.32	493.8
4,4'-DDE	1	19.30	19.20	19.34	1.7	
	2	14.47	14.38	14.52	1.2	41.7
Endrin	1	20.96	20.84	20.98	0.53	
	2	15.38	15.38	15.52	0.84	58.5
4,4'-DDT	1	22.30	22.26	22.40	1.3	
	2	17.58	17.44	17.58	1.7	30.8
Endrin ketone	1	25.82	25.82	25.96	170	
	2	20.66	20.55	20.69	0.28	999.9
Endrin aldehyde	1	22.72	22.64	22.78	0.56	
	2	18.43	18.34	18.48	3.6	542.8
	1					
	2					
	1					
	2					

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL37

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834872 Date(s) Analyzed: 01/05/97 01/05/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Dieldrin	1	19.57	19.51	19.65	0.81	
	2	14.75	14.72	14.86	1.6	97.5
4,4'-DDE	1	19.27	19.20	19.34	1.6	
	2	14.47	14.38	14.52	2.1	31.2
Endosulfan II	1	21.58	21.48	21.62	0.87	
	2	17.10	16.99	17.13	3.0	244.8
Methoxychlor	1	25.40	25.33	25.47	24	
	2	19.54	19.52	19.66	20	20.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL38

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834873 Date(s) Analyzed: 01/05/97 01/05/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Heptachlor	1	13.93	13.84	13.94	8.7	
	2	9.75	9.70	9.80	0.26	999.9
Aldrin	1	15.18	15.08	15.18	1.8	
	2	10.59	10.52	10.62	1.4	28.6
Heptachlor epoxide	1	17.22	17.12	17.26	2.7	
	2	12.85	12.74	12.88	0.29	831.0
Endosulfan I	1	18.44	18.40	18.54	0.29	
	2	13.57	13.56	13.70	7.3	999.9
Dieldrin	1	19.60	19.51	19.65	8.6	
	2	14.81	14.72	14.86	1.6	437.5
4,4'-DDE	1	19.32	19.20	19.34	0.66	
	2	14.47	14.38	14.52	2.5	278.8
Endosulfan II	1	21.54	21.48	21.62	1.6	
	2	17.13	16.99	17.13	1.4	14.3
4,4'-DDT	1	22.30	22.26	22.40	3.3	
	2	17.45	17.44	17.58	0.55	500.0

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL38

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834873 Date(s) Analyzed: 01/05/97 01/05/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Methoxychlor	1	25.39	25.33	25.47	22	
	2	19.54	19.52	19.66	45	104.5
gamma-Chlordane	1	17.75	17.71	17.85	0.52	
	2	13.86	13.82	13.96	4.7	803.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO. ORIGINAL (Red)

PBLKOX

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 835035 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
alpha-BHC	1	11.22	11.14	11.24	0.090	
	2	7.94	7.86	7.96	0.15	66.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

MARKED ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL25MS

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834858 Date(s) Analyzed: 01/08/97 01/08/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
gamma-BHC (Lindane)	1	12.69	12.62	12.72	12	
	2	9.18	9.08	9.18	9.3	29.0
Heptachlor	1	13.92	13.84	13.94	12	
	2	9.80	9.70	9.80	10	20.0
Aldrin	1	15.15	15.08	15.18	14	
	2	10.62	10.52	10.62	11	27.3
Heptachlor epoxide	1	17.26	17.12	17.26	0.23	
	2	12.78	12.74	12.88	0.10	130.0
Dieldrin	1	19.61	19.51	19.65	35	
	2	14.85	14.72	14.86	32	9.4
4,4'-DDE	1	19.30	19.20	19.34	0.30	
	2	14.51	14.38	14.52	0.28	7.1
Endrin	1	20.93	20.84	20.98	39	
	2	15.51	15.38	15.52	33	18.2
4,4'-DDT	1	22.36	22.26	22.40	42	
	2	17.57	17.44	17.58	36	16.7

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

ORIGINAL (Red)

CNL25MS

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834858 Date(s) Analyzed: 01/08/97 01/08/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Methoxychlor	1	25.42	25.33	25.47	7.6	
	2	19.59	19.52	19.66	4.6	65.2
Endrin ketone	1	25.91	25.82	25.96	1.1	
	2	20.68	20.55	20.69	1.3	18.2
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL25MSD

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834857 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
delta-BHC	1	14.28	14.25	14.35	1.7	
	2	12.39	12.29	12.39	0.30	466.7
gamma-BHC (Lindane)	1	12.70	12.62	12.72	19	
	2	9.18	9.08	9.18	16	18.8
Heptachlor	1	13.93	13.84	13.94	18	
	2	9.80	9.70	9.80	16	12.5
Aldrin	1	15.17	15.08	15.18	18	
	2	10.62	10.52	10.62	16	12.5
Dieldrin	1	19.63	19.51	19.65	37	
	2	14.85	14.72	14.86	35	5.7
4,4'-DDE	1	19.30	19.20	19.34	0.29	
	2	14.50	14.38	14.52	0.41	41.4
Endrin	1	20.95	20.84	20.98	40	
	2	15.51	15.38	15.52	36	11.1
4,4'-DDT	1	22.37	22.26	22.40	41	
	2	17.56	17.44	17.58	37	10.8

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO. CNL25MSD

ORIGINAL (Red)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL23

Lab Sample ID: 834857 Date(s) Analyzed: 01/04/97 01/04/97

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Methoxychlor	1	25.44	25.33	25.47	7.5	
	2	19.58	19.52	19.66	5.2	44.2
Endrin ketone	1	25.92	25.82	25.96	0.50	
	2	20.68	20.55	20.69	1.1	120.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM X PEST-1 OLM03.0

ORIGINAL (Red)

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL39

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Lab Sample ID: 834874 Date(s) Analyzed: 12/23/96 12/23/96

Instrument ID (1): VARIAN21 Instrument ID (2): VARIAN20

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
gamma-BHC (Lindane)	1	11.56	11.50	11.60	0.0096	
	2	9.38	9.32	9.42	0.0082	17.1
Heptachlor	1	12.78	12.72	12.82	0.0081	
	2	9.99	9.93	10.03	0.0084	3.7
Aldrin	1	14.01	13.94	14.04	0.0092	
	2	10.83	10.76	10.86	0.0094	2.2
Dieldrin	1	18.62	18.54	18.68	0.020	
	2	15.31	15.23	15.37	0.020	0.0
Endrin	1	19.97	19.89	20.03	0.023	
	2	15.99	15.90	16.04	0.017	35.3
4,4'-DDT	1	21.61	21.54	21.68	0.028	
	2	18.24	18.15	18.29	0.022	27.3
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

PBLKOV

ORIGINAL (Red)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Lab Sample ID: 835033 Date(s) Analyzed: 12/23/96 12/23/96

Instrument ID (1): VARIAN21 Instrument ID (2): VARIAN20

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Dieldrin	1	18.63	18.54	18.68	0.0098	
	2	15.31	15.23	15.37	0.0084	16.7
4,4'-DDT	1	21.62	21.54	21.68	0.014	
	2	18.24	18.15	18.29	0.013	7.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

CNL41MS

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Lab Sample ID: 834881 Date(s) Analyzed: 12/23/96 12/23/96

Instrument ID (1): VARIAN21 Instrument ID (2): VARIAN20

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
gamma-BHC (Lindane)	1	11.56	11.50	11.60	0.39	
	2	9.37	9.32	9.42	0.36	8.3
Heptachlor	1	12.76	12.72	12.82	0.42	
	2	9.98	9.93	10.03	0.38	10.5
Aldrin	1	13.99	13.94	14.04	0.45	
	2	10.82	10.76	10.86	0.40	12.5
Dieldrin	1	18.61	18.54	18.68	0.84	
	2	15.30	15.23	15.37	0.80	5.0
Endrin	1	19.96	19.89	20.03	0.82	
	2	15.98	15.90	16.04	0.79	3.8
4,4'-DDT	1	21.60	21.54	21.68	0.85	
	2	18.23	18.15	18.29	0.82	3.6
Endrin ketone	1	25.09	25.03	25.17	0.039	
	2	21.42	21.35	21.49	0.044	12.8
Endrin aldehyde	1	21.88	21.81	21.95	0.035	
	2	19.14	19.07	19.21	0.063	80.0

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

ORIGINAL (Red)

CNL41MSD

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Lab Sample ID: 834882 Date(s) Analyzed: 12/23/96 12/23/96

Instrument ID (1): VARIAN21 Instrument ID (2): VARIAN20

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
gamma-BHC (Lindane)	1	11.56	11.50	11.60	0.38	
	2	9.38	9.32	9.42	0.37	2.7
Heptachlor	1	12.77	12.72	12.82	0.41	
	2	9.99	9.93	10.03	0.38	7.9
Aldrin	1	13.99	13.94	14.04	0.44	
	2	10.83	10.76	10.86	0.41	7.3
Dieldrin	1	18.61	18.54	18.68	0.82	
	2	15.30	15.23	15.37	0.78	5.1
Endrin	1	19.96	19.89	20.03	0.80	
	2	15.98	15.90	16.04	0.77	3.9
4,4'-DDT	1	21.60	21.54	21.68	0.83	
	2	18.23	18.15	18.29	0.81	2.5
Endrin ketone	1	25.10	25.03	25.17	0.040	
	2	21.42	21.35	21.49	0.046	15.0
Endrin aldehyde	1	21.88	21.81	21.95	0.036	
	2	19.14	19.07	19.21	0.069	91.7

ORIGINAL (Red)

TCL ORIGINAL SPREADSHEET

Case No: 25233
SDG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

EPA SAMPLE NUMBER:	CNL25MS		CNL25MSD				
REGIONAL SAMPLE NUMBER:							
SAMPLE LOCATION:	S-3		S-3				
SAMPLE TYPE:	Matrix Spike		Matrix Spike Dup				
MATRIX/ANALYSIS:	Soil/LOW		Soil/LOW				
DILUTION FACTOR:	1.0		1.0				
PERCENT MOISTURE:	11		11				
VOA							
Chloromethane	11	U	11	U			
Bromomethane	11	U	11	U			
Vinyl Chloride	11	U	11	U			
Chloroethane	11	U	11	U			
Methylene Chloride	13	B	6	JB			
Acetone	1	J	6	J			
Carbon Disulfide	11	U	11	U			
1,1-Dichloroethene	64		58				
1,1-Dichloroethane	11	U	11	U			
1,2-Dichloroethene (total)	11	U	11	U			
Chloroform	11	U	11	U			
1,2-Dichloroethane	11	U	11	U			
2-Butanone	11	U	11	U			
1,1,1-Trichloroethane	11	U	11	U			
Carbon Tetrachloride	11	U	11	U			
Bromodichloromethane	11	U	11	U			
1,2-Dichloropropane	11	U	11	U			
cis-1,3-Dichloropropene	11	U	11	U			
Trichloroethene	76		60				
Dibromochloromethane	11	U	11	U			
1,1,2-Trichloroethane	11	U	11	U			
Benzene	83		63				
trans-1,3-Dichloropropene	11	U	11	U			
Bromoform	11	U	11	U			
4-Methyl-2-Pentanone	11	U	11	U			
2-Hexanone	11	U	11	U			
Tetrachloroethene	11	U	11	U			
1,1,2,2-Tetrachloroethane	11	U	11	U			
Toluene	85		70				
Chlorobenzene	73		60				
Ethylbenzene	11	U	11	U			
Styrene	11	U	11	U			
Xylene (total)	11	U	11	U			

FILE NAME: CNL23 DATE: 02/25/97 TIME: 18:06 CADRE 2.3

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

TCL ORIGINAL SPREADSHEET

Case No: 25233
SDG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

EPA SAMPLE NUMBER:	CNL25MS		CNL25MSD				
REGIONAL SAMPLE NUMBER:							
SAMPLE LOCATION:	S-3		S-3				
SAMPLE TYPE:	Matrix Spike		Matrix Spike Dup				
MATRIX/ANALYSIS:	Soil/LOW		Soil/LOW				
DILUTION FACTOR:	1.0		1.0				
PERCENT MOISTURE:	11		11				
BNA							
Phenol	1800		1600				
bis(2-Chloroethyl)ether	370	U	370	U			
2-Chlorophenol	1800		1600				
1,3-Dichlorobenzene	370	U	370	U			
1,4-Dichlorobenzene	1100		1000				
1,2-Dichlorobenzene	370	U	370	U			
2-Methylphenol	370	U	370	U			
2,2'-oxybis(1-Chloropropane)	370	U	370	U			
4-Methylphenol	370	U	370	U			
N-Nitroso-di-n-propylamine	1200		1100				
Hexachloroethane	370	U	370	U			
Nitrobenzene	370	U	370	U			
Isophorone	370	U	370	U			
2-Nitrophenol	370	U	370	U			
2,4-Dimethylphenol	370	U	370	U			
bis(2-Chloroethoxy)methane	370	U	370	U			
2,4-Dichlorophenol	370	U	370	U			
1,2,4-Trichlorobenzene	1200		1200				
Naphthalene	370	U	370	U			
4-Chloroaniline	370	U	370	U			
Hexachlorobutadiene	370	U	370	U			
4-Chloro-3-methylphenol	1700		1700				
2-Methylnaphthalene	370	U	370	U			
Hexachlorocyclopentadiene	370	U	370	U			
2,4,6-Trichlorophenol	370	U	370	U			
2,4,5-Trichlorophenol	930	U	930	U			
2-Chloronaphthalene	370	U	370	U			
2-Nitroaniline	930	U	930	U			
Dimethylphthalate	370	U	370	U			
Acenaphthylene	370	U	370	U			
2,6-Dinitrotoluene	370	U	370	U			
3-Nitroaniline	930	U	930	U			
Acenaphthene	1300		1200				
2,4-Dinitrophenol	930	U	930	U			
4-Nitrophenol	2100		2000				
Dibenzofuran	370	U	370	U			
2,4-Dinitrotoluene	1200		1100				
Diethylphthalate	370	U	370	U			
4-Chlorophenyl-phenylether	370	U	370	U			
Fluorene	370	U	370	U			
4-Nitroaniline	930	U	930	U			
4,6-Dinitro-2-methylphenol	930	U	930	U			
N-Nitrosodiphenylamine (1)	370	U	370	U			
4-Bromophenyl-phenylether	370	U	370	U			
Hexachlorobenzene	370	U	370	U			
Pentachlorophenol	2300		2200				
Phenanthrene	370	U	370	U			
Anthracene	370	U	370	U			
Carbazole	370	U	370	U			
Di-n-butylphthalate	370	U	370	U			
Fluoranthene	40	J	370	U			
Pyrene	1300		1200				
Butylbenzylphthalate	370	U	370	U			
3,3'-Dichlorobenzidine	370	U	370	U			
Benzo(a)anthracene	370	U	370	U			
Chrysene	370	U	370	U			
bis(2-Ethylhexyl)phthalate	450		240	J			
Di-n-octylphthalate	370	U	370	U			
Benzo(b)fluoranthene	370	U	370	U			
Benzo(k)fluoranthene	370	U	370	U			
Benzo(a)pyrene	370	U	370	U			
Indeno(1,2,3-cd)pyrene	370	U	370	U			
Dibenz(a,h)anthracene	370	U	370	U			
Benzo(g,h,i)perylene	370	U	370	U			

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

ORIGINAL (Red)

TCL ORIGINAL SPREADSHEET

Case No: 25233
SDG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

EPA SAMPLE NUMBER:	CNL25MS		CNL25MSD				
REGIONAL SAMPLE NUMBER:							
SAMPLE LOCATION:	S-3		S-3				
SAMPLE TYPE:	Matrix Spike		Matrix Spike Dup				
MATRIX/ANALYSIS:	Soil/		Soil/				
DILUTION FACTOR:	1.0		1.0				
PERCENT MOISTURE:	11		11				
PES							
alpha-BHC	1.9	U	1.9	U			
beta-BHC	1.9	U	1.9	U			
delta-BHC	1.9	U	0.30	JP			
gamma-BHC (Lindane)	9.3	P	16				
Heptachlor	10		16				
Aldrin	11	P	16				
Heptachlor epoxide	0.10	JP	1.9	U			
Endosulfan I	1.9	U	1.9	U			
Dieldrin	32		35				
4,4'-DDE	0.28	J	0.29	JP			
Endrin	33		36				
Endosulfan II	3.7	U	3.7	U			
4,4'-DDD	3.7	U	3.7	U			
Endosulfan sulfate	3.7	U	3.7	U			
4,4'-DDT	36		37				
Methoxychlor	4.6	JP	5.2	JP			
Endrin ketone	1.1	J	0.50	JP			
Endrin aldehyde	3.7	U	3.7	U			
alpha-Chlordane	1.9	U	1.9	U			
gamma-Chlordane	1.9	U	1.9	U			
Toxaphene	190	U	190	U			
Aroclor-1016	37	U	37	U			
Aroclor-1221	75	U	75	U			
Aroclor-1232	37	U	37	U			
Aroclor-1242	37	U	37	U			
Aroclor-1248	37	U	37	U			
Aroclor-1254	37	U	37	U			
Aroclor-1260	37	U	37	U			

FILE NAME: CNL23 DATE: 02/25/97 TIME: 18:06 CADRE 2.3

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

ORIGINAL (Red)

TCL ORIGINAL SPREADSHEET

Case No: 25233
SDG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

EPA SAMPLE NUMBER:	VBLKP1		VBLKT4		VBLKT5		VBLKU4		VBLKU6	
REGIONAL SAMPLE NUMBER:										
SAMPLE LOCATION:										
SAMPLE TYPE:	Method Blank		Method Blank		Method Blank		Method Blank		Method Blank	
MATRIX/ANALYSIS:	Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW		Soil/LOW	
DILUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
PERCENT MOISTURE:	0		0		0		0		0	
VOA										
Chloromethane	10	U	10	U	10	U	10	U	10	U
Bromomethane	10	U	10	U	10	U	10	U	10	U
Vinyl Chloride	10	U	10	U	10	U	10	U	10	U
Chloroethane	10	U	10	U	10	U	10	U	10	U
Methylene Chloride	10	U	5	J	1	J	2	J	2	J
Acetone	3	J	10	U	10	U	5	J	7	J
Carbon Disulfide	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethene	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethane	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethene (total)	10	U	10	U	10	U	10	U	10	U
Chloroform	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethane	10	U	10	U	10	U	10	U	10	U
2-Butanone	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane	10	U	10	U	10	U	10	U	10	U
Carbon Tetrachloride	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane	10	U	10	U	10	U	10	U	10	U
1,2-Dichloropropane	10	U	10	U	10	U	10	U	10	U
cis-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U
Trichloroethene	10	U	10	U	10	U	10	U	10	U
Dibromochloromethane	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloroethane	10	U	10	U	10	U	10	U	10	U
Benzene	10	U	10	U	10	U	10	U	10	U
trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U
Bromoform	10	U	10	U	10	U	10	U	10	U
4-Methyl-2-Pentanone	10	U	10	U	10	U	10	U	10	U
2-Hexanone	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene	10	U	10	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U
Toluene	10	U	10	U	10	U	10	U	10	U
Chlorobenzene	10	U	10	U	10	U	10	U	10	U
Ethylbenzene	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U
Xylene (total)	10	U	10	U	10	U	10	U	10	U

FILE NAME: CNL23 DATE: 02/25/97 TIME: 18:07 CADRE 2.3

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

TCL ORIGINAL SPREADSHEET

Case No: 25233
SDG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

EPA SAMPLE NUMBER:	VHBLKU5					
REGIONAL SAMPLE NUMBER:						
SAMPLE LOCATION:						
SAMPLE TYPE:	Storage Blank					
MATRIX/ANALYSIS:	Soil/LOW					
DILUTION FACTOR:	1.0					
PERCENT MOISTURE:	0					
VOA						
Chloromethane	10	U				
Bromomethane	10	U				
Vinyl Chloride	10	U				
Chloroethane	10	U				
Methylene Chloride	1	J				
Acetone	3	JB				
Carbon Disulfide	10	U				
1,1-Dichloroethene	10	U				
1,1-Dichloroethane	10	U				
1,2-Dichloroethene (total)	10	U				
Chloroform	10	U				
1,2-Dichloroethane	10	U				
2-Butanone	10	U				
1,1,1-Trichloroethane	10	U				
Carbon Tetrachloride	10	U				
Bromodichloromethane	10	U				
1,2-Dichloropropane	10	U				
cis-1,3-Dichloropropene	10	U				
Trichloroethene	10	U				
Dibromochloromethane	10	U				
1,1,2-Trichloroethane	10	U				
Benzene	10	U				
trans-1,3-Dichloropropene	10	U				
Bromoform	10	U				
4-Methyl-2-Pentanone	10	U				
2-Hexanone	10	U				
Tetrachloroethene	10	U				
1,1,2,2-Tetrachloroethane	10	U				
Toluene	10	U				
Chlorobenzene	10	U				
Ethylbenzene	10	U				
Styrene	10	U				
Xylene (total)	10	U				

FILE NAME: CNL23 DATE: 02/25/97 TIME: 18:07 CADRE 2.3

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

ORIGINAL (Red)

TCL ORIGINAL SPREADSHEET

Case No: 25233
SDG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

EPA SAMPLE NUMBER:	SBLKPF					
REGIONAL SAMPLE NUMBER:						
SAMPLE LOCATION:						
SAMPLE TYPE:	Method Blank					
MATRIX/ANALYSIS:	Soil/LOW					
DILUTION FACTOR:	1.0					
PERCENT MOISTURE:	0					
BNA						
Phenol	330	U				
bis(2-Chloroethyl)ether	330	U				
2-Chlorophenol	330	U				
1,3-Dichlorobenzene	330	U				
1,4-Dichlorobenzene	330	U				
1,2-Dichlorobenzene	330	U				
2-Methylphenol	330	U				
2,2'-oxybis(1-Chloropropane)	330	U				
4-Methylphenol	330	U				
N-Nitroso-di-n-propylamine	330	U				
Hexachloroethane	330	U				
Nitrobenzene	330	U				
Isophorone	330	U				
2-Nitrophenol	330	U				
2,4-Dimethylphenol	330	U				
bis(2-Chloroethoxy)methane	330	U				
2,4-Dichlorophenol	330	U				
1,2,4-Trichlorobenzene	330	U				
Naphthalene	330	U				
4-Chloroaniline	330	U				
Hexachlorobutadiene	330	U				
4-Chloro-3-methylphenol	330	U				
2-Methylnaphthalene	330	U				
Hexachlorocyclopentadiene	330	U				
2,4,6-Trichlorophenol	330	U				
2,4,5-Trichlorophenol	830	U				
2-Chloronaphthalene	330	U				
2-Nitroaniline	830	U				
Dimethylphthalate	330	U				
Acenaphthylene	330	U				
2,6-Dinitrotoluene	330	U				
3-Nitroaniline	830	U				
Acenaphthene	330	U				
2,4-Dinitrophenol	830	U				
4-Nitrophenol	830	U				
Dibenzofuran	330	U				
2,4-Dinitrotoluene	330	U				
Diethylphthalate	330	U				
4-Chlorophenyl-phenylether	330	U				
Fluorene	330	U				
4-Nitroaniline	830	U				
4,6-Dinitro-2-methylphenol	830	U				
N-Nitrosodiphenylamine (1)	330	U				
4-Bromophenyl-phenylether	330	U				
Hexachlorobenzene	330	U				
Pentachlorophenol	830	U				
Phenanthrene	330	U				
Anthracene	330	U				
Carbazole	330	U				
Di-n-butylphthalate	330	U				
Fluoranthene	330	U				
Pyrene	330	U				
Butylbenzylphthalate	330	U				
3,3'-Dichlorobenzidine	330	U				
Benzo(a)anthracene	330	U				
Chrysene	330	U				
bis(2-Ethylhexyl)phthalate	330	U				
Di-n-octylphthalate	330	U				
Benzo(b)fluoranthene	330	U				
Benzo(k)fluoranthene	330	U				
Benzo(a)pyrene	330	U				
Indeno(1,2,3-cd)pyrene	330	U				
Dibenz(a,h)anthracene	330	U				
Benzo(g,h,i)perylene	330	U				

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

ORIGINAL (Red)

TCL ORIGINAL SPREADSHEET

Case No: 25233
SDG No: CNL23

Site: Gilbert Tank Farm
Laboratory: COMPUCHEM LABORATORIES, I

EPA SAMPLE NUMBER:	PBLKOX					
REGIONAL SAMPLE NUMBER:						
SAMPLE LOCATION:						
SAMPLE TYPE:	Method Blank					
MATRIX/ANALYSIS:	Soil/					
DILUTION FACTOR:	1.0					
PERCENT MOISTURE:	0					
PES						
alpha-BHC	0.09					
beta-BHC	1.7	U				
delta-BHC	1.7	U				
gamma-BHC (Lindane)	1.7	U				
Heptachlor	1.7	U				
Aldrin	1.7	U				
Heptachlor epoxide	1.7	U				
Endosulfan I	1.7	U				
Dieldrin	3.3	U				
4,4'-DDE	3.3	U				
Endrin	3.3	U				
Endosulfan II	3.3	U				
4,4'-DDD	3.3	U				
Endosulfan sulfate	3.3	U				
4,4'-DDT	3.3	U				
Methoxychlor	17	U				
Endrin ketone	3.3	U				
Endrin aldehyde	3.3	U				
alpha-Chlordane	1.7	U				
gamma-Chlordane	1.7	U				
Toxaphene	170	U				
Aroclor-1016	33	U				
Aroclor-1221	67	U				
Aroclor-1232	33	U				
Aroclor-1242	33	U				
Aroclor-1248	33	U				
Aroclor-1254	33	U				
Aroclor-1260	33	U				

FILE NAME: CNL23 DATE: 02/25/97 TIME: 18:07 CADRE 2.3

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ORIGINAL (Red)

VBLKCA

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: VBLKCA

Sample wt/vol: 5.0 (g/mL) mL Lab File ID: CB961221A57

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/21/96

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/L	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

ORIGINAL (Red)

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKCA

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: VBLKCA

Sample wt/vol: 5.0 (g/mL) mL Lab File ID: CB961221A57

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/21/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ORIGINAL (Red)

SBLKOS

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 835025

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH035025A60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

ORIGINAL (red)

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKOS

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 835025

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH035025A60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKOS

ORIGINAL (Red)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 835025

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH035025A60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/20/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	4.97	5	J
2.				
3.				
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30.				

ORIGINAL (Red)

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKED

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 835579

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH035579C60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/26/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ORIGINAL (Red)

SBLKED

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 835579

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH035579C60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/26/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

ORIGINAL (Red)

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKED

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 835579

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH035579C60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/26/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	4.83	8	J
2.	CYCLOHEXENOL (BC)	5.27	3	J
3.	CYCLOHEXENONE (BC)	5.85	2	J
4.	UNKNOWN (BC)	19.92	3	J
5.				
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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. ORIGINAL (Red)

PBLKOV

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 25233 SAS No.: SDG No.: CNL39

Matrix: (soil/water) WATER Lab Sample ID: 835033

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:12/20/96

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/23/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.0084	J
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.013	J
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

ORIGINAL
Red

INORGANIC

ORIGINAL (Red)

United States Environmental Protection Agency
Region III
Office of Analytical Services and Quality Assurance
(410) 573-2600

839 Bestgate Road
Annapolis, MD 21401
FAX: (410) 573-2698
(410) 573-2702

201 Defense Hwy., Suite 200
Annapolis, MD 21401
FAX: (410) 573-2771
(410) 573-2772

DATE : February 12, 1997

SUBJECT: Region III Data QA Review

FROM : Fredrick Foreman
Region III ESAT RPO (3ES20)

TO : Jim McCreary
Regional Project Manager (3HW30)

Attached is the inorganic data validation report for the Gilbert Tank Farm Site (Case 25233) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAPD.

If you have any questions regarding this review, please call me at (410) 573-2629.

Attachment

cc: Beth Creamer

TID File: 0397002 Task# 218

RECEIVED
FEB 20 97
CERCLA PRE-REMEDIAL DIVISION

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Lockheed Martin Services Group
Environmental Services & Technologies Region 3
1419 Forest Drive, Suite 104 Annapolis, MD 21403
Telephone 410-268-7705 Facsimile 410-268-0331

LOCKHEED MARTIN

DATE: February 6, 1997

SUBJECT: INORGANIC DATA VALIDATION, LEVEL IM1
SITE: GILBERT TANK FARM
Case 25233, SDGs MCPG23 and MCPG39

FROM: BEHROOZ KHOSHKHOO — INORGANIC DATA REVIEWER
MAHBOOBEH MECANIC — SENIOR OVERSIGHT CHEMIST

TO: FREDRICK FOREMAN
ESAT REGIONAL PROJECT OFFICER

THROUGH: DALE S. BOSHART
ESAT TEAM MANAGER

OVERVIEW

The set of samples for Case 25233, Sample Delivery Groups (SDGs) MCPG23 and MCPG39 consisted of five (5) aqueous and sixteen (16) soil samples analyzed for metals and cyanide (CN^-) by Sentinel Incorporated (SENTIN). The sample set included one (1) field blank, one (1) aqueous field duplicate pair and one (1) soil field duplicate pair. The samples were analyzed according to the Contract Laboratory Program (CLP) Statement of Work (SOW) ILM04.0 through the Routine Analytical Services (RAS) Program.

Samples MCPG28 and MCPG31 exceeded the soil Ten Day Chemical Health Advisory Level of 500 mg/Kg for the lead (Pb) analyte. These samples had this analyte at a concentration of 13300 mg/Kg and 1230 mg/Kg, respectively. The Regional Project Manager (RPM) was notified by facsimile.

SUMMARY

All samples were successfully analyzed for all Target Analyte List (TAL) analytes. Areas of concern with respect to data usability are listed below.

The validation was performed according to the Innovative Approaches for Inorganic Data Validation, Level IM1, which includes the review of all Quality Assurance/ Quality Control (QA/QC) forms but excludes the review of the raw data.

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The data in this case have been impacted by outliers present in the field and laboratory blanks, laboratory duplicate analyses, ICP serial dilution analyses, Contract Required Detection Limit (CRDL) standard analyses and matrix spike analyses. The details of these outliers are discussed under "Minor Problems" and the qualified analytical results for all samples are annotated on the Form Is.

The results for the field blank were used to qualify all samples.

MINOR PROBLEMS

The field (FB), preparation (PB) and continuing calibration (CCB) blanks had reported results greater than the Instrument Detection Limits (IDLs) for the analytes listed below. The reported results for these analytes in the affected samples which are less than five times (<5X) the blank concentration may be biased high and have been qualified "B".

SDG	Blank Type	Analytes
MCPG23	FB	Zinc (Zn), CN^-
	CCB	Antimony (Sb)
MCPG39	FB	Chromium (Cr), Copper (Cu), PB, Zn, CN^-
	PB	Copper (Cu), Pb, Magnesium (Mg), Potassium (K), CN^-
	CCB	Iron (Fe)

The Relative Percent Difference (RPD) for the laboratory duplicate analyses was outside the control limit (20% RPD) for the Pb analyte in SDG MCPG39. The reported results for this analyte are estimated. The "J" qualifier has been superseded by the "B" qualifier.

The percent differences (%D) for the ICP serial dilution analysis in both SDGs were outside the control limit (10%D) for the calcium (Ca) and K analytes. The reported results for these analytes are estimated and have been qualified "J", unless superseded by the "B" qualifier.

The Contract Required Detection Limit (CRDL) standard recoveries were mixed (>110% and <90%) for the Pb analyte in SDG MCPG39. The reported results which are less than two times (<2X) CRDL for this analyte in this SDG are estimated due to the opposing bias effects. The "J" qualifier has been superseded by the "B" qualifier as previously mentioned.

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ORIGINAL (Red)

The matrix spike recoveries were low (<75%) for the Sb analyte in SDG MCPG23 and the Fe analyte in SDG MCPG39. The reported results and quantitation limits for these analytes may be biased low and have been qualified "L" and "UL", respectively, except when superseded by the "B" qualifier.

The CRDL standard recoveries were low (<90%) for the Sb and selenium (Se) analytes in both SDGs. The reported results which are less than two times (<2X) CRDL and the quantitation limits for these analytes may be biased low and have been qualified "L" and "UL", respectively.

The CRDL standard recoveries were high (>110%) for the arsenic (As) analyte in both SDGs. The reported results for this analyte which are less than two times (<2X) CRDL may be biased high and have been qualified "K".

The laboratory blanks had negative results with absolute values greater than the IDL for the Ca and mercury (Hg) analytes in SDG MCPG23 and for the aluminum (Al), Ca and Hg analytes in SDG MCPG39. The reported results which are less than two times (<2X) the absolute value of the blank and the quantitation limits for these analytes in the affected samples may be biased low and have been qualified "L" and "UL", respectively.

NOTES

The post digestion spike recovery was extremely high (417.1%) for the Sb analyte in SDG MCPG23. The concentration of the spiking solution used for the post digestion spike analysis may not be at the nominal concentration.

The results for the aqueous field duplicate pair, samples MCPG40/MCPG42, were within the technical control limits of 20% RPD, ± CRDL, except for the CN^- analyte. The results for the soil field duplicate pair, samples MCPG27/MCPG35, were within the technical control limits of 35% RPD, ± 2 CRDL except for barium (Ba), Cu, Pb, Hg and Zn analytes. Because there are no criteria established in Region III for field duplicate precision, no data were qualified.

The data for Case 25233, SDGs MCPG23 and MCPG39, were reviewed in accordance with the Region III Innovative Approaches For Validation of Inorganic Data (Level IM1), June 1995.

.NAL
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ORIGINAL
(Red)

ATTACHMENTS

APPENDIX A	GLOSSARY OF DATA QUALIFIER CODES
APPENDIX B	ANNOTATED FORM Is
APPENDIX C	SUPPORT DOCUMENTATION

BK71GIL25.233

ORIGINAL
(Red)

APPENDIX A

GLOSSARY OF DATA QUALIFIER CODES

ORIGINAL (Red)

APPENDIX A

GLOSSARY OF DATA QUALIFIER CODES (INORGANIC)

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

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

(NO CODE) = Confirmed identification.

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

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

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

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

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

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

[] = Analyte present. As values approach the IDL the quantitation may not be accurate.

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

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

Q = No analytical result.

ORIGINAL
(Red)

APPENDIX B

ANNOTATED FORM Is

ORIGINAL
(Red)

MCPG23

evel IM1 Review
tation Location: S-1
ampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG23

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

atrix (soil/water): SOIL Lab Sample ID: 04772S

evel (low/med): LOW Date Received: 12/18/96

Solids: 85.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	8870			P	
7440-36-0	Antimony	0.52	U	N	P	UL
7440-38-2	Arsenic	4.0			P	
7440-39-3	Barium	161			P	
7440-41-7	Beryllium	0.65	B		P	
7440-43-9	Cadmium	0.64	B		P	
7440-70-2	Calcium	2730		E	P	J
7440-47-3	Chromium	19.0			P	
7440-48-4	Cobalt	7.5	B		P	
7440-50-8	Copper	24.8			P	
7439-89-6	Iron	15200			P	
7439-92-1	Lead	56.0			P	
7439-95-4	Magnesium	1850			P	
7439-96-5	Manganese	348			P	
7439-97-6	Mercury	0.06	U		CV	UL
7440-02-0	Nickel	10.5			P	
7440-09-7	Potassium	638	B	E	P	J
7782-49-2	Selenium	0.70	U		P	UL
7440-22-4	Silver	1.2	B		P	
7440-23-5	Sodium	105	B		P	
7440-28-0	Thallium	0.57	U		P	
7440-62-2	Vanadium	25.2			P	
7440-66-6	Zinc	75.1			P	
	Cyanide	0.25	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

02/05/97 (DV)

DVQ = DATA VALIDATION QUALIFIER

2

Level IM1 Review
Station Location: S-2
Sampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG24

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04773S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 81.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	8950			P	
7440-36-0	Antimony	0.55	U	N	P	UL
7440-38-2	Arsenic	5.1			P	
7440-39-3	Barium	48.6			P	
7440-41-7	Beryllium	0.88	B		P	
7440-43-9	Cadmium	1.2	B		P	
7440-70-2	Calcium	1600		E	P	J
7440-47-3	Chromium	13.6			P	
7440-48-4	Cobalt	10.5	B		P	
7440-50-8	Copper	13.9			P	
7439-89-6	Iron	44100			P	
7439-92-1	Lead	17.7			P	
7439-95-4	Magnesium	1400			P	
7439-96-5	Manganese	455			P	
7439-97-6	Mercury	0.06	U		CV	UL
7440-02-0	Nickel	13.3			P	
7440-09-7	Potassium	784	B	E	P	J
7782-49-2	Selenium	0.74	U		P	UL
7440-22-4	Silver	3.3			P	
7440-23-5	Sodium	109	B		P	
7440-28-0	Thallium	0.60	U		P	
7440-62-2	Vanadium	17.0			P	
7440-66-6	Zinc	43.6			P	
	Cyanide	0.13	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

DVQ = DATA VALIDATION QUALIFIER

02/05/97 (DV)

3

Level IM1 Review
Station Location: S-3
Sampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG25

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04774S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 88.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	9620			P	
7440-36-0	Antimony	0.52	U	N	P	UL
7440-38-2	Arsenic	4.0			P	
7440-39-3	Barium	33.8	B		P	
7440-41-7	Beryllium	0.44	B		P	
7440-43-9	Cadmium	0.50	B		P	
7440-70-2	Calcium	835	B	E	P	J
7440-47-3	Chromium	17.6			P	
7440-48-4	Cobalt	5.2	B		P	
7440-50-8	Copper	8.9			P	
7439-89-6	Iron	16000			P	
7439-92-1	Lead	29.5			P	
7439-95-4	Magnesium	942	B		P	
7439-96-5	Manganese	168			P	
7439-97-6	Mercury	0.05	U		CV	UL
7440-02-0	Nickel	6.3	B		P	
7440-09-7	Potassium	777	B	E	P	J
7782-49-2	Selenium	0.70	U		P	UL
7440-22-4	Silver	1.4	B		P	
7440-23-5	Sodium	63.1	B		P	
7440-28-0	Thallium	0.56	U		P	
7440-62-2	Vanadium	23.9			P	
7440-66-6	Zinc	40.6			P	
	Cyanide	0.19	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

DVQ = DATA VALIDATION QUALIFIER

02/05/97 (DV)

evel IM1 Review
tation Location: S-4
ampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG26

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

atrix (soil/water): SOIL Lab Sample ID: 04775S

evel (low/med): LOW Date Received: 12/18/96

Solids: 86.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	11500			P	
7440-36-0	Antimony	0.53	U	N	P	UL
7440-38-2	Arsenic	2.7			P	
7440-39-3	Barium	38.2	B		P	
7440-41-7	Beryllium	0.34	B		P	
7440-43-9	Cadmium	0.37	B		P	
7440-70-2	Calcium	352	B	E	P	J
7440-47-3	Chromium	17.1			P	
7440-48-4	Cobalt	4.3	B		P	
7440-50-8	Copper	8.3			P	
7439-89-6	Iron	18300			P	
7439-92-1	Lead	12.3			P	
7439-95-4	Magnesium	1390			P	
7439-96-5	Manganese	96.6			P	
7439-97-6	Mercury	0.06	U		CV	UL
7440-02-0	Nickel	7.6	B		P	
7440-09-7	Potassium	614	B	E	P	J
7782-49-2	Selenium	0.71	U		P	UL
7440-22-4	Silver	1.3	B		P	
7440-23-5	Sodium	78.4	B		P	
7440-28-0	Thallium	0.58	U		P	
7440-62-2	Vanadium	29.1			P	
7440-66-6	Zinc	25.7			P	B
	Cyanide	0.09	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

0210597 (DV)

DVQ = DATA VALIDATION QUALIFIER

5

Level IM1 Review
Station Location: S-5
Sampling Date: 12/17/96
Field Duplicate of
MCPG35

1

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG27

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04776S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 79.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	16100			P	
7440-36-0	Antimony	0.55	U	N	P	UL
7440-38-2	Arsenic	5.0			P	
7440-39-3	Barium	58.5			P	
7440-41-7	Beryllium	0.46	B		P	
7440-43-9	Cadmium	0.73	B		P	
7440-70-2	Calcium	283	B	E	P	J
7440-47-3	Chromium	21.3			P	
7440-48-4	Cobalt	6.8	B		P	
7440-50-8	Copper	19.9			P	
7439-89-6	Iron	26400			P	
7439-92-1	Lead	61.9			P	
7439-95-4	Magnesium	1430			P	
7439-96-5	Manganese	244			P	
7439-97-6	Mercury	0.06	U		CV	UL
7440-02-0	Nickel	10.0			P	
7440-09-7	Potassium	898	B	E	P	J
7782-49-2	Selenium	0.74	U		P	UL
7440-22-4	Silver	1.9	B		P	
7440-23-5	Sodium	109	B		P	
7440-28-0	Thallium	0.60	U		P	
7440-62-2	Vanadium	37.5			P	
7440-66-6	Zinc	58.7			P	
	Cyanide	0.20	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

02/05/97 (DV)

DVQ = DATA VALIDATION QUALIFIER

FORM I - IN ILM04.0

6

evel IM1 Review
tation Location: S-6
ampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG28

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

atrix (soil/water): SOIL Lab Sample ID: 04777S

evel (low/med): LOW Date Received: 12/18/96

Solids: 64.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	5840			P	
7440-36-0	Antimony	38.3		N	P	L
7440-38-2	Arsenic	15.7			P	
7440-39-3	Barium	457			P	
7440-41-7	Beryllium	0.37	B		P	
7440-43-9	Cadmium	6.9			P	
7440-70-2	Calcium	4200		E	P	J
7440-47-3	Chromium	39.6			P	
7440-48-4	Cobalt	13.3	B		P	
7440-50-8	Copper	166			P	
7439-89-6	Iron	118000			P	
7439-92-1	Lead	13300			P	
7439-95-4	Magnesium	1130	B		P	
7439-96-5	Manganese	1870			P	
7439-97-6	Mercury	0.50			CV	
7440-02-0	Nickel	62.9			P	
7440-09-7	Potassium	549	B	E	P	J
7782-49-2	Selenium	0.89	U		P	UL
7440-22-4	Silver	9.3			P	
7440-23-5	Sodium	384	B		P	
7440-28-0	Thallium	0.72	U		P	
7440-62-2	Vanadium	17.3			P	
7440-66-6	Zinc	1930			P	
	Cyanide	1.5			CA	

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

02/05/97

DVQ = DATA VALIDATION QUALIFIER

Level IM1 Review
Station Location: S-7
Sampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG29

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04778S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 88.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	3080			P	
7440-36-0	Antimony	0.50	U	N	P	UL
7440-38-2	Arsenic	3.0			P	
7440-39-3	Barium	32.9	B		P	
7440-41-7	Beryllium	0.13	U		P	
7440-43-9	Cadmium	0.24	U		P	
7440-70-2	Calcium	4.4	U	E	P	UL
7440-47-3	Chromium	23.9			P	
7440-48-4	Cobalt	1.3	B		P	
7440-50-8	Copper	20.1			P	
7439-89-6	Iron	11700			P	
7439-92-1	Lead	72.1			P	
7439-95-4	Magnesium	180	B		P	
7439-96-5	Manganese	32.4			P	
7439-97-6	Mercury	0.05	U		CV	UL
7440-02-0	Nickel	4.2	B		P	
7440-09-7	Potassium	160	B	E	P	J
7782-49-2	Selenium	0.68	U		P	UL
7440-22-4	Silver	0.98	B		P	
7440-23-5	Sodium	41.0	U		P	
7440-28-0	Thallium	0.55	U		P	
7440-62-2	Vanadium	12.1			P	
7440-66-6	Zinc	31.1			P	B
	Cyanide	0.08	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

02/05/97

DVQ = DATA VALIDATION QUALIFIER

8

evel IM1 Review
tation Location: S-8
ampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG30

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04779S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 81.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	8060			P	
7440-36-0	Antimony	0.56	U	N	P	UL
7440-38-2	Arsenic	5.5			P	
7440-39-3	Barium	36.8	B		P	
7440-41-7	Beryllium	0.50	B		P	
7440-43-9	Cadmium	0.45	B		P	
7440-70-2	Calcium	961	B	E	P	J
7440-47-3	Chromium	14.6			P	
7440-48-4	Cobalt	7.9	B		P	
7440-50-8	Copper	13.4			P	
7439-89-6	Iron	20200			P	
7439-92-1	Lead	13.4			P	
7439-95-4	Magnesium	2020			P	
7439-96-5	Manganese	256			P	
7439-97-6	Mercury	0.06	U		CV	UL
7440-02-0	Nickel	12.3			P	
7440-09-7	Potassium	956	B	E	P	J
7782-49-2	Selenium	0.76	U		P	UL
7440-22-4	Silver	1.7	B		P	
7440-23-5	Sodium	109	B		P	
7440-28-0	Thallium	0.61	U		P	
7440-62-2	Vanadium	18.5			P	
7440-66-6	Zinc	50.0			P	
	Cyanide	0.11	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

02/05/97 (DI)

DVQ = DATA VALIDATION QUALIFIER

9

Level IM1 Review
Station Location: S-9
Sampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG31

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04780S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 79.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	5670			P	
7440-36-0	Antimony	0.56	U	N	P	UL
7440-38-2	Arsenic	5.8			P	
7440-39-3	Barium	119			P	
7440-41-7	Beryllium	0.38	B		P	
7440-43-9	Cadmium	0.74	B		P	
7440-70-2	Calcium	2360		E	P	J
7440-47-3	Chromium	38.1			P	
7440-48-4	Cobalt	6.0	B		P	
7440-50-8	Copper	27.1			P	
7439-89-6	Iron	16900			P	
7439-92-1	Lead	1230			P	
7439-95-4	Magnesium	1210	B		P	
7439-96-5	Manganese	103			P	
7439-97-6	Mercury	0.07	B		CV	L
7440-02-0	Nickel	12.0			P	
7440-09-7	Potassium	534	B	E	P	J
7782-49-2	Selenium	0.88	B		P	L
7440-22-4	Silver	1.0	B		P	
7440-23-5	Sodium	110	B		P	
7440-28-0	Thallium	0.61	U		P	
7440-62-2	Vanadium	17.5			P	
7440-66-6	Zinc	188			P	
	Cyanide	1.1			CA	

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

02/05/97 (DV)

DVQ = DATA VALIDATION QUALIFIER

10

Level IM1 Review
Station Location: S-10
Sampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG32

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04781S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 86.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	6320			P	
7440-36-0	Antimony	0.49	U	N	P	UL
7440-38-2	Arsenic	3.7			P	
7440-39-3	Barium	51.9			P	
7440-41-7	Beryllium	0.33	B		P	
7440-43-9	Cadmium	0.41	B		P	
7440-70-2	Calcium	7880		E	P	J
7440-47-3	Chromium	11.2			P	
7440-48-4	Cobalt	7.5	B		P	
7440-50-8	Copper	26.9			P	
7439-89-6	Iron	13600			P	
7439-92-1	Lead	58.9			P	
7439-95-4	Magnesium	1460			P	
7439-96-5	Manganese	503			P	
7439-97-6	Mercury	0.60			CV	
7440-02-0	Nickel	9.9			P	
7440-09-7	Potassium	1010	B	E	P	J
7782-49-2	Selenium	0.66	U		P	UL
7440-22-4	Silver	1.0	B		P	
7440-23-5	Sodium	152	B		P	
7440-28-0	Thallium	0.53	U		P	
7440-62-2	Vanadium	14.3			P	
7440-66-6	Zinc	69.1			P	
	Cyanide	0.44	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

DVQ = DATA VALIDATION QUALIFIER

02/05/97 (DV)

11

Level IM1 Review
Station Location: S-11
Sampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG33

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04782S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 87.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	6260			P	
7440-36-0	Antimony	0.53	U	N	P	UL
7440-38-2	Arsenic	5.6			P	
7440-39-3	Barium	37.4	B		P	
7440-41-7	Beryllium	0.32	B		P	
7440-43-9	Cadmium	0.36	B		P	
7440-70-2	Calcium	799	B	E	P	J
7440-47-3	Chromium	23.1			P	
7440-48-4	Cobalt	5.7	B		P	
7440-50-8	Copper	15.0			P	
7439-89-6	Iron	14900			P	
7439-92-1	Lead	35.2			P	
7439-95-4	Magnesium	1190			P	
7439-96-5	Manganese	457			P	
7439-97-6	Mercury	0.05	U		CV	UL
7440-02-0	Nickel	8.5	B		P	
7440-09-7	Potassium	700	B	E	P	J
7782-49-2	Selenium	0.71	U		P	UL
7440-22-4	Silver	0.99	B		P	
7440-23-5	Sodium	42.7	U		P	
7440-28-0	Thallium	0.57	U		P	
7440-62-2	Vanadium	17.2			P	
7440-66-6	Zinc	41.4			P	
	Cyanide	0.22	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

DVQ = DATA VALIDATION QUALIFIER

02/05/97 (DV)

R

Level IM1 Review
Station Location: S-12
Sampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG34

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04783S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 82.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	9510			P	
7440-36-0	Antimony	0.51	U	N	P	UL
7440-38-2	Arsenic	4.9			P	
7440-39-3	Barium	46.1			P	
7440-41-7	Beryllium	0.49	B		P	
7440-43-9	Cadmium	0.52	B		P	
7440-70-2	Calcium	704	B	E	P	J
7440-47-3	Chromium	15.0			P	
7440-48-4	Cobalt	8.1	B		P	
7440-50-8	Copper	13.1			P	
7439-89-6	Iron	19600			P	
7439-92-1	Lead	26.7			P	
7439-95-4	Magnesium	2150			P	
7439-96-5	Manganese	506			P	
7439-97-6	Mercury	0.06	U		CV	UL
7440-02-0	Nickel	13.9			P	
7440-09-7	Potassium	863	B	E	P	J
7782-49-2	Selenium	0.69	U		P	UL
7440-22-4	Silver	1.7	B		P	
7440-23-5	Sodium	98.5	B		P	
7440-28-0	Thallium	0.55	U		P	
7440-62-2	Vanadium	19.6			P	
7440-66-6	Zinc	53.7			P	
	Cyanide	0.18	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

DVQ = DATA VALIDATION QUALIFIER

[signature] 03/05/97 (DV)

13

Level IM1 Review
Station Location: S-13
Sampling Date: 12/17/96
Field Duplicate of
MCPG27

1

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG35

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04784S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 78.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	11400			P	
7440-36-0	Antimony	0.63	B	N	P	B
7440-38-2	Arsenic	5.6			P	
7440-39-3	Barium	271			P	
7440-41-7	Beryllium	0.55	B		P	
7440-43-9	Cadmium	2.0			P	
7440-70-2	Calcium	729	B	E	P	J
7440-47-3	Chromium	22.3			P	
7440-48-4	Cobalt	7.2	B		P	
7440-50-8	Copper	31.2			P	
7439-89-6	Iron	21300			P	
7439-92-1	Lead	259			P	
7439-95-4	Magnesium	1480			P	
7439-96-5	Manganese	248			P	
7439-97-6	Mercury	0.50			CV	
7440-02-0	Nickel	16.8			P	
7440-09-7	Potassium	743	B	E	P	J
7782-49-2	Selenium	0.77	U		P	UL
7440-22-4	Silver	1.9	B		P	
7440-23-5	Sodium	80.6	B		P	
7440-28-0	Thallium	0.62	U		P	
7440-62-2	Vanadium	31.1			P	
7440-66-6	Zinc	196			P	
	Cyanide	1.2			CA	

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

DVQ = DATA VALIDATION QUALIFIER

02/05/97

14

FORM I - IN ILM04.0

Level IM1 Review
Station Location: Sed-1
Sampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG36

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Matrix (soil/water): SOIL Lab Sample ID: 04785S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 47.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	12100			P	
7440-36-0	Antimony	0.92	U	N	P	UL
7440-38-2	Arsenic	2.6	B		P	K
7440-39-3	Barium	107			P	
7440-41-7	Beryllium	1.1	B		P	
7440-43-9	Cadmium	0.64	B		P	
7440-70-2	Calcium	1560	B	E	P	J
7440-47-3	Chromium	21.1			P	
7440-48-4	Cobalt	19.6	B		P	
7440-50-8	Copper	19.7			P	
7439-89-6	Iron	22000			P	
7439-92-1	Lead	19.3			P	
7439-95-4	Magnesium	3330			P	
7439-96-5	Manganese	851			P	
7439-97-6	Mercury	0.10	U		CV	UL
7440-02-0	Nickel	32.2			P	
7440-09-7	Potassium	1270	B	E	P	J
7782-49-2	Selenium	1.2	U		P	UL
7440-22-4	Silver	1.8	B		P	
7440-23-5	Sodium	116	B		P	
7440-28-0	Thallium	1.0	U		P	
7440-62-2	Vanadium	23.6			P	
7440-66-6	Zinc	107			P	
	Cyanide	1.8			CA	

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

DVQ = DATA VALIDATION QUALIFIER

02/05/97 (DV)

5

evel IM1 Review
tation Location: Sed-2
ampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG37

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

atrix (soil/water): SOIL Lab Sample ID: 04786S

evel (low/med): LOW Date Received: 12/18/96

Solids: 40.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	11800			P	
7440-36-0	Antimony	1.1	U	N	P	UL
7440-38-2	Arsenic	6.6			P	K
7440-39-3	Barium	113			P	
7440-41-7	Beryllium	1.7	B		P	
7440-43-9	Cadmium	1.3	B		P	
7440-70-2	Calcium	2760		E	P	J
7440-47-3	Chromium	20.8			P	
7440-48-4	Cobalt	43.2			P	
7440-50-8	Copper	34.7			P	
7439-89-6	Iron	26100			P	
7439-92-1	Lead	39.9			P	
7439-95-4	Magnesium	3170			P	
7439-96-5	Manganese	1730			P	
7439-97-6	Mercury	0.12	U		CV	UL
7440-02-0	Nickel	60.7			P	
7440-09-7	Potassium	1340	B	E	P	J
7782-49-2	Selenium	1.5	U		P	UL
7440-22-4	Silver	2.7	B		P	
7440-23-5	Sodium	160	B		P	
7440-28-0	Thallium	1.2	U		P	
7440-62-2	Vanadium	20.3	B		P	
7440-66-6	Zinc	238			P	
	Cyanide	0.21	B		CA	B

olor Before: BROWN Clarity Before: Texture: MEDIUM

olor After: COLORLESS Clarity After: Artifacts:

omments:

02/05/97 (DV)

16

DVQ = DATA VALIDATION QUALIFIER

evel IM1 Review
tation Location: Sed-3
ampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG38

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

latrix (soil/water): SOIL Lab Sample ID: 04787S

evel (low/med): LOW Date Received: 12/18/96

Solids: 36.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	14500			P	
7440-36-0	Antimony	1.3	U	N	P	UL
7440-38-2	Arsenic	8.6			P	K
7440-39-3	Barium	142			P	
7440-41-7	Beryllium	2.1	B		P	
7440-43-9	Cadmium	1.8	B		P	
7440-70-2	Calcium	3670		E	P	J
7440-47-3	Chromium	26.4			P	
7440-48-4	Cobalt	53.3			P	
7440-50-8	Copper	48.7			P	
7439-89-6	Iron	32600			P	
7439-92-1	Lead	61.1			P	
7439-95-4	Magnesium	3890			P	
7439-96-5	Manganese	2050			P	
7439-97-6	Mercury	0.13	U		CV	UL
7440-02-0	Nickel	76.4			P	
7440-09-7	Potassium	1580	B	E	P	J
7782-49-2	Selenium	1.7	U		P	UL
7440-22-4	Silver	3.4	B		P	
7440-23-5	Sodium	276	B		P	
7440-28-0	Thallium	1.4	U		P	
7440-62-2	Vanadium	24.8	B		P	
7440-66-6	Zinc	315			P	
	Cyanide	0.42	B		CA	B

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

02/05/97 (DV)

DVQ = DATA VALIDATION QUALIFIER

ORIGINAL
(Red)

MCPG39

Level IM1 Review
Station Location: SW-1
Sampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG39

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

Matrix (soil/water): WATER Lab Sample ID: 04767S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	1430			P	
7440-36-0	Antimony	2.3	U		P	UL
7440-38-2	Arsenic	2.1	U		P	
7440-39-3	Barium	37.0	B		P	
7440-41-7	Beryllium	0.60	U		P	
7440-43-9	Cadmium	1.1	U		P	
7440-70-2	Calcium	13800		E	P	J
7440-47-3	Chromium	3.4	B		P	B
7440-48-4	Cobalt	1.9	B		P	
7440-50-8	Copper	5.3	B		P	B
7439-89-6	Iron	1970		N	P	L
7439-92-1	Lead	3.6		*	P	B
7439-95-4	Magnesium	4400	B		P	
7439-96-5	Manganese	143			P	
7439-97-6	Mercury	0.10	U		CV	UL
7440-02-0	Nickel	5.8	B		P	
7440-09-7	Potassium	2140	B	E	P	J
7782-49-2	Selenium	3.1	U		P	UL
7440-22-4	Silver	1.4	U		P	
7440-23-5	Sodium	5270			P	
7440-28-0	Thallium	2.5	U		P	
7440-62-2	Vanadium	2.4	B		P	
7440-66-6	Zinc	45.9			P	B
	Cyanide	1.8	B		CA	B

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

02/05/97 (DV)

DVQ = DATA VALIDATION QUALIFIER

:vel IM1 Review
:ation Location: SW-2
:mpling Date: 12/17/96
:eld Duplicate of
:PG42

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG40

:ab Name: SENTINEL, INC. Contract: 68-D6-0001

:ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

Matrix (soil/water): WATER Lab Sample ID: 04768S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	1340			P	
7440-36-0	Antimony	2.3	U		P	UL
7440-38-2	Arsenic	2.1	U		P	
7440-39-3	Barium	35.8	B		P	
7440-41-7	Beryllium	0.60	U		P	
7440-43-9	Cadmium	1.1	U		P	
7440-70-2	Calcium	13700		E	P	J
7440-47-3	Chromium	2.7	B		P	B
7440-48-4	Cobalt	1.7	B		P	
7440-50-8	Copper	5.8	B		P	B
7439-89-6	Iron	1890		N	P	L
7439-92-1	Lead	6.1		*	P	B
7439-95-4	Magnesium	4350	B		P	
7439-96-5	Manganese	135			P	
7439-97-6	Mercury	0.10	U		CV	UL
7440-02-0	Nickel	4.7	B		P	
7440-09-7	Potassium	2120	B	E	P	J
7782-49-2	Selenium	3.1	U		P	UL
7440-22-4	Silver	1.4	U		P	
7440-23-5	Sodium	5120			P	
7440-28-0	Thallium	2.5	U		P	
7440-62-2	Vanadium	2.3	B		P	
7440-66-6	Zinc	42.2			P	B
	Cyanide	2.2	B		CA	B

:olor Before: COLORLESS Clarity Before: CLEAR Texture:

:olor After: COLORLESS Clarity After: CLEAR Artifacts:

:omments:

02/05/97

DVQ = DATA VALIDATION QUALIFIER

evel IM1 Review
tation Location: SW-3
ampling Date: 12/17/96

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG41

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

Matrix (soil/water): WATER Lab Sample ID: 04769S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	1470			P	
7440-36-0	Antimony	2.3	U		P	UL
7440-38-2	Arsenic	2.6	B		P	K
7440-39-3	Barium	37.1	B		P	
7440-41-7	Beryllium	0.60	U		P	
7440-43-9	Cadmium	1.1	U		P	
7440-70-2	Calcium	14100		E	P	J
7440-47-3	Chromium	3.1	B		P	B
7440-48-4	Cobalt	2.1	B		P	
7440-50-8	Copper	3.2	B		P	B
7439-89-6	Iron	2030		N	P	L
7439-92-1	Lead	3.7		*	P	B
7439-95-4	Magnesium	4640	B		P	
7439-96-5	Manganese	141			P	
7439-97-6	Mercury	0.10	U		CV	UL
7440-02-0	Nickel	5.8	B		P	
7440-09-7	Potassium	2180	B	E	P	J
7782-49-2	Selenium	3.1	U		P	UL
7440-22-4	Silver	1.4	U		P	
7440-23-5	Sodium	5010			P	
7440-28-0	Thallium	5.6	B		P	
7440-62-2	Vanadium	2.1	U		P	
7440-66-6	Zinc	48.2			P	B
	Cyanide	1.5	B		CA	B

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

[illegible] 01/05/97 (DV)

DVQ = DATA VALIDATION QUALIFIER

Level IM1 Review
Station Location: SW-4
Sampling Date: 12/17/96
Field Duplicate of
MCPG40

1

ORIGINAL (Red)

INORGANIC ANALYSIS DATA SHEET

MCPG42

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

Matrix (soil/water): WATER Lab Sample ID: 04770S

Level (low/med): LOW Date Received: 12/18/96

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	1350			P	
7440-36-0	Antimony	2.3	U		P	UL
7440-38-2	Arsenic	2.1	U		P	
7440-39-3	Barium	36.1	B		P	
7440-41-7	Beryllium	0.60	U		P	
7440-43-9	Cadmium	1.1	U		P	
7440-70-2	Calcium	13600		E	P	J
7440-47-3	Chromium	2.7	B		P	B
7440-48-4	Cobalt	2.0	B		P	
7440-50-8	Copper	7.4	B		P	B
7439-89-6	Iron	1870		N	P	L
7439-92-1	Lead	7.5		*	P	B
7439-95-4	Magnesium	4340	B		P	
7439-96-5	Manganese	134			P	
7439-97-6	Mercury	0.10	U		CV	UL
7440-02-0	Nickel	5.2	B		P	
7440-09-7	Potassium	2130	B	E	P	J
7782-49-2	Selenium	3.1	U		P	UL
7440-22-4	Silver	1.4	U		P	
7440-23-5	Sodium	5240			P	
7440-28-0	Thallium	2.5	U		P	
7440-62-2	Vanadium	2.4	B		P	
7440-66-6	Zinc	47.3			P	B
	Cyanide	15.0			CA	

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

02/05/97

DVQ = DATA VALIDATION QUALIFIER

evel IM1 Review
tation Location: FB-1
ampling Date: 12/17/96
ield Blank

INORGANIC ANALYSIS DATA SHEET

MCPG43

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

latrix (soil/water): WATER Lab Sample ID: 04771S

evel (low/med): LOW Date Received: 12/18/96

Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	DVQ
7429-90-5	Aluminum	31.8	U		P	UL
7440-36-0	Antimony	2.3	U		P	UL
7440-38-2	Arsenic	2.1	U		P	
7440-39-3	Barium	0.90	U		P	
7440-41-7	Beryllium	0.60	U		P	
7440-43-9	Cadmium	1.1	U		P	
7440-70-2	Calcium	20.2	U	E	P	UL
7440-47-3	Chromium	2.0	B		P	
7440-48-4	Cobalt	1.0	U		P	
7440-50-8	Copper	4.6	B		P	B
7439-89-6	Iron	38.7	B	N	P	B
7439-92-1	Lead	4.4		*	P	B
7439-95-4	Magnesium	109	B		P	B
7439-96-5	Manganese	0.60	U		P	
7439-97-6	Mercury	0.10	U		CV	UL
7440-02-0	Nickel	2.7	U		P	
7440-09-7	Potassium	96.4	B	E	P	B
7782-49-2	Selenium	3.1	U		P	UL
7440-22-4	Silver	1.4	U		P	
7440-23-5	Sodium	187	U		P	
7440-28-0	Thallium	2.5	U		P	
7440-62-2	Vanadium	2.1	U		P	
7440-66-6	Zinc	35.7			P	
	Cyanide	1.8	B		CA	B

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

DVQ = DATA VALIDATION QUALIFIER

02/05/97

ORIGINAL
(Red)

APPENDIX C

SUPPORT DOCUMENTATION

EPA United States Environmental Protection Agency Contract Laboratory Program

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analyis)

SAS No. (if applicable):

Case No.: 25233

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.: III

Sampling Co.: MDE/WAS

Sampler (Name): Bob Creamer

Sampler Signature: Bob Creamer

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

4. Date Shipped: 12/17/96

Carrier: Federal Express

Airbill Number: 1169386481

5. Ship To: Sentinel Inc. 2800 Bob Wallace Ave Suite L3 Huntsville, AL 35805 (205) 534-9800 ATTN: Sample Custodian

6. Date Received – Received by: 12/18/96 – Susan Pearsall

Laboratory Contract Number: 68-D6-0001

Unit Price: $65.00

7. Transfer to:

Date Received:

Received by:

Contract Number:

Price:

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: 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.
MCPG23	5	L	G	6		X	X					3-2200973	S-1	~~CNL23~~	CNL23	DSM			
MCPG24	5	L	G	6		X	X					3-2200974	S-2	12/17/96/1230	CNL24	DSM			
MCPG25	5	L	G	6		X	X					3-2200975	S-3	12/17/96/1210	CNL25	DSM			
MCPG26	5	L	G	6		X	X					3-2200976	S-4	12/17/96/1430	CNL26	DSM			
MCPG27	5	L	G	6		X	X					3-2200977	S-5	12/17/96/1500	CNL27	DSM			
MCPG28	5	L	G	6		X	X					3-2200978	S-6	12/17/96/1120	CNL28	DSM			
MCPG29	5	L	G	6		X	X					3-2200979	S-7	12/17/96/1410	CNL29	DSM			
MCPG30	5	L	G	6		X	X					3-2200980	S-8	12/17/96/1140	CNL30	DSM			
MCPG31	5	L	G	6		X	X					3-2200981	S-9	12/17/96/9:40	CNL31	DSM			
MCPG32	5	L	G	6		X	X					3-2200982	S-10	12/17/96/1100	CNL32	DSM			

Shipment for Case Complete? (Y/N): Y

Page: 1 of 3

Sample(s) to be Used for Laboratory QC: Do QC on MCPG25

Additional Sampler Signatures: DSM

Chain of Custody Seal Number(s):

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Doug Smith	12/18/96 1500				
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	
		Susan Pearsall	12/18/96 09:22		

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-1

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS

A21-012-6 REV. 3/93

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EPA United States Environmental Protection Agency
Contract Laboratory Program

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

SAS No. (If applicable):
Case No.: 25233

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.: III
Sampling Co.: MDE/WAS
Sampler (Name): Beth Creamer
Sampler Signature: Beth Creamer
3. Purpose*
Lead: SF, PRP, ST, FED
Early Action: CLEM, PA, REM, RI, SI, ESI
Long-Term Action: FS, RD, RA, O&M, NPLD

4. Date Shipped: 12/17/96
Carrier: Federal Express
Airbill Number: 1169356481
5. Ship To: Sentinel Inc.
2800 Bob Wallas Ave, Suite L3
Huntsville, AL 35805
(205) 534-9809
ATTN: Sample Custodian

6. Date Received – Received by: 12/18/96 Susan Peasall
Laboratory Contract Number: 68-D6-0001
Unit Price: $65.00
7. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

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: 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.
MCPG33	5	L	G	6		X	X					3-2200983	S-11	12/17/96/1020	CNL33	DSM			
MCPG34	5	L	G	6		X	X					3-2200984	S-12	12/17/96/1100	CNL34	DSM			
MCPG35	5	L	G	6		X	X					3-2200985	S-13	12/17/96/1500	CNL35	DSM			
MCPG36	5	L	G	6		X	X					3-2200986	Sed-1	12/17/96/1130	CNL36	[illegible]			
MCPG37	5	L	G	6		X	X					3-2200987	Sed-2	12/17/96/1230	CNL37	[illegible]			
MCPG38	5	L	G	6		X	X					3-2200988	Sed-3	12/17/96/1130	CNL38	[illegible]			
MCPG39	1	L	G	2,3		X	X					3-2200989 thru 3-2200990	SW-1	12/17/96/1130	CNL39	[illegible]			
MCPG40	1	L	G	2,3		X	X					3-2200991, 3-2200992	SW-2	12/17/96/1230	CNL40	[illegible]			
MCPG41	1	L	G	2,3		X	X					3-2200993, 3-2200996	SW-3	12/17/96/1130	CNL41	[illegible]			
MCPG42	1	L	G	2,3		X	X					3-2200997, 3-2200998	SW-4	12/17/96/1230	CNL42	[illegible]			

Shipment for Case Complete? (Y/N): Y
Page: 2 of 3
Sample(s) to be Used for Laboratory QC: Do QC on MCPG41
Additional Sampler Signatures: Beth Creamer, [illegible]
Chain of Custody Seal Number(s):

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Peggy Smith	12/17/96 1800				
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	
		Susan Peasall	12/18/96 09:22		

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-1

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEF...

A21-0124 REV. 3/93

ORIGINAL

EPA United States Environmental Protection Agency
Contract Laboratory Program

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

SAS No. (if applicable):

Case No.: 25233

1. Project Code: GBTF
Account Code: RTSA03N922
2. Region No.: III
Sampling Co.: MDENAS
4. Date Shipped: 12/17/96
Carrier: Federal Express

Regional Information: —
Sampler (Name): Beth Creamer
Airbill Number: 1169386481

Non-Superfund Program: —
Sampler Signature: Beth Creamer
5. Ship To: Sentinel Inc. 2800 Bob Wallace Ave. Suite 3 Huntsville, AL 35805 (205) 534-9800 ATTN: Sample Custodian

Site Name: Gilbert Tank Farm
3. Purpose*: Lead: SB, PRP, ST, FED; Early Action: CLEM, PA, REM, RI, S, ESI; Long-Term Action: FS, RD, RA, O&M, NPLD
Site Spill ID: —
City, State: Havredebrace, MD

6. 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)
7. Preservative (Enter in Column D): 1. HCl, 2. HNO3, 3. NaOH, 4. H2SO4, 5. K2CR2O7, 6. Ice only, 7. Other (specify in Column D), N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6)	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 7)	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 Field QC Qualifier (B = Blank, S = Spike, D = Duplicate, R = Rinsate, PE = Perform. Eval., — = Not a QC Sample)
MCPG43	4	L	G	2,3		X	X					3-2200999, 3-2201000	FB-1	12/17/96/1010	CNL43	PWS	B
					X								SW-1				PWS 12/17/96
					X								SW-2				PWS 12/17/96
					X								SW-3				PWS 12/17/96
					X								SW-4				PWS 12/17/96

Shipment for Case Complete? (Y/N): Y
Page: 3 of 3
Sample(s) to be Used for Laboratory QC:
Additional Sampler Signatures: Peggy Smith
Chain of Custody Seal Number(s):

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Peggy Smith	12/17/96 1800				
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	

A21-012-5 REV. 3/93

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-1

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

25233

PAGE 1 OF 3

EPA SAMPLE SHIPPING LOG

(1) (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: Gilbert Tank Farm ; EPA PROJ. OFFICER: Michael Giuranna
RAS NO. 25233 ; SAS NO. — ; TASK NO.
PROJECT SITE LEADER: Beth Creamer ; PHONE NO. (410) 631-3493
PROJECT SAMPLE COORDINATOR: Peggy Smith ; PHONE NO. (410) 631-3493

QC SAMPLE INFORMATION AND/OR COMMENTS (2)	CONC. (LOW/MED./HIGH) (3)	SAMPLE PHASE (AQ/SOL.) (4)	TYPE OF REQUEST (ORG. DEL. OR INOR.) SAS (5)	EPA SAMPLE NO. (6)	ORGANICS OR INORGANICS: LAB NAME (7)	DATE SHIPPED (8)	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA (9)	BNA	PEST	TCDD	METALS	CN
	Low	SOL	INORG	MCPG 23	SENTIN	12/17/96						
				MCPG 24								
MS/MSD				MCPG 25								
				MCPG 26								
				MCPG 27								
				MCPG 28								
				MCPG 29								
				MCPG 30								
				MCPG 31								
				MCPG 32								
				MCPG 33								
				MCPG 34								
DUP OF MCPG27				MCPG 35								
				MCPG 36								
				MCPG 37								
				MCPG 38								
		AQ		MCPG 39								
				MCPG 40								
MS MSD				MCPG 41								

SAS REQUEST (DETAILS REQUIRED) (10)

LAB NAME (11)	SAS REQUEST (ITEMIZE) (12)	DATE SHIPPED (13)	DATA REC'D.
1/6/97 MDA MCPG 23			
1/6/97 MDA MCPG 39			

FINAL SAMPLING: YES ☐ NO ☐ FINAL SHIPPING DATE:

ORIGINAL (Red)

EPA SAMPLE SHIPPING LOG

(1) (REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: Gilbert Tank Farm ; EPA PROJ. OFFICER: Michael Giuranna
RAS NO. 25233 ; SAS NO. — ; TASK NO.
PROJECT SITE LEADER: Beth Creamer ; PHONE NO. (410) 631 3493
PROJECT SAMPLE COORDINATOR: Peggy Smith ; PHONE NO. (410) 631 3493

SAS REQUEST (DETAILS REQUIRED)
(10)

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC. (LOW/MED./HIGH)	SAMPLE PHASE (AQ/SOL.)	TYPE OF REQUEST (ORG. DIO. OR INOR.) SAS	EPA SAMPLE NO.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCBB	METALS	CN	LAB NAME	SAS REQUEST (ITEMIZE)	DATE SHIPPED	DATA REC'D.
(2)	(3)	(4)	(5)	(6)	(7)	(8)	←			(9)		→	(11)	(12)	(13)	
	LOW	SOL	ORG	CNL 38	COMPU	12/17/96										
		AQ		CNL 39												
				CNL 40												
MSMSD				CNL 41												
DUP OF CNL 40				CNL 42												
FIELD BLANK				CNL 43												

ORIGINAL (Red)

MCPG23

ORIGINAL (Red)

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

SOW No.: ILM04.0

EPA Sample No.	Lab Sample ID.
MCPG23	04772S
MCPG24	04773S
MCPG25	04774S
MCPG25D	04774S2
MCPG25S	04774DS
MCPG26	04775S
MCPG27	04776S
MCPG28	04777S
MCPG29	04778S
MCPG30	04779S
MCPG31	04780S
MCPG32	04781S
MCPG33	04782S
MCPG34	04783S
MCPG35	04784S
MCPG36	04785S
MCPG37	04786S
MCPG38	04787S

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: Concentrations are estimated for calcium and potassium due to possible sample matrix interferents.

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: MV Kilgore Name: Melvin V. Kilgore, Jr.

Date: 12/30/90 Title: Lab Director

ORIGINAL (Red)

2B
CRDL STANDARD FOR AA AND ICP

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

A CRDL Standard Source: ULT 423

CP CRDL Standard Source: ULT ICUS 118

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony				120.0	99.56	83.0	96.81	80.7
Arsenic				20.0	22.14	110.7	21.05	105.2
Barium								
Beryllium				10.0	9.80	98.0	9.69	96.9
Cadmium				10.0	10.52	105.2	10.11	101.1
Calcium								
Chromium				20.0	19.11	95.6	19.36	96.8
Cobalt				100.0	101.65	101.6	101.16	101.2
Copper				50.0	51.64	103.3	52.15	104.3
Iron								
Lead				6.0	4.61	76.8	7.65	127.5
Magnesium								
Manganese				30.0	30.44	101.5	30.34	101.1
Mercury	0.2	0.22	110.0					
Nickel				80.0	83.72	104.6	83.04	103.8
Potassium								
Selenium				10.0	9.17	91.7	8.78	87.8
Silver				20.0	18.28	91.4	18.13	90.6
Sodium								
Thallium				20.0	21.16	105.8	21.98	109.9
Vanadium				100.0	100.35	100.4	100.93	100.9
Zinc				40.0	43.93	109.8	43.20	108.0

21

ORIGINAL (Red)

2B
CRDL STANDARD FOR AA AND ICP

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

A CRDL Standard Source:

CP CRDL Standard Source: ULT ICUS 118

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony				120.0			100.08	83.4
Arsenic				20.0			21.53	107.6
Barium								
Beryllium				10.0			10.10	101.0
Cadmium				10.0			10.35	103.5
Calcium								
Chromium				20.0			19.81	99.0
Cobalt				100.0			104.37	104.4
Copper				50.0			53.04	106.1
Iron								
Lead				6.0			7.56	126.0
Magnesium								
Manganese				30.0			31.55	105.2
Mercury								
Nickel				80.0			84.23	105.3
Potassium								
Selenium				10.0			7.86	78.6
Silver				20.0			18.24	91.2
Sodium								
Thallium				20.0			21.09	105.4
Vanadium				100.0			101.54	101.5
Zinc				40.0			44.68	111.7

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ORIGINAL (Red)

2B
CRDL STANDARD FOR AA AND ICP

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

A CRDL Standard Source:

CP CRDL Standard Source: ULT ICUS 118

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony				120.0			98.88	82.4
Arsenic				20.0			22.14	110.7
Barium								
Beryllium				10.0			10.28	102.8
Cadmium				10.0			10.14	101.4
Calcium								
Chromium				20.0			20.03	100.2
Cobalt				100.0			104.92	104.9
Copper				50.0			50.98	102.0
Iron								
Lead				6.0			7.80	130.0
Magnesium								
Manganese				30.0			31.42	104.7
Mercury								
Nickel				80.0			84.75	105.9
Potassium								
Selenium				10.0			8.54	85.4
Silver				20.0			18.59	93.0
Sodium								
Thallium				20.0			18.27	91.4
Vanadium				100.0			101.09	101.1
Zinc				40.0			41.85	104.6

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ORIGINAL (Red)

BLANKS

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

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	-59.0	B	-52.5	B	-56.6	B	-45.2	B	-9.407	B	P
Antimony	2.3	U	2.3	U	2.3	U	2.9	B	0.460	U	P
Arsenic	2.5	B	2.1	U	2.1	U	2.1	U	0.420	U	P
Barium	0.9	U	0.9	U	0.9	U	0.9	U	0.180	U	P
Beryllium	0.6	U	0.6	U	0.6	U	0.6	U	0.120	U	P
Cadmium	1.1	U	1.1	U	1.1	U	1.1	U	0.220	U	P
Calcium	-517.5	B	-512.2	B	-515.0	B	-511.2	B	-102.029	B	P
Chromium	1.1	U	1.1	U	1.1	U	1.1	U	0.220	U	P
Cobalt	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Copper	1.2	U	1.2	U	2.1	B	1.2	U	0.474	B	P
Iron	10.5	B	19.0	B	12.7	B	12.0	B	1.778	B	P
Lead	1.4	U	1.4	U	1.4	U	1.4	U	0.280	U	P
Magnesium	40.7	B	47.4	B	38.6	B	42.5	B	7.985	B	P
Manganese	0.6	U	0.6	U	0.6	U	0.6	U	0.120	U	P
Mercury	0.1	U	-0.1	B	-0.1	B	-0.1	B	-0.056	B	CV
Nickel	2.7	U	2.7	U	2.7	U	2.7	U	0.540	U	P
Potassium	27.0	B	24.3	U	24.3	U	24.3	U	5.907	B	P
Selenium	3.1	U	3.1	U	3.1	U	3.1	U	0.620	U	P
Silver	1.4	U	1.4	U	1.4	U	1.4	U	0.280	U	P
Sodium	187.0	U	187.0	U	187.0	U	187.0	U	37.400	U	P
Thallium	5.9	B	3.2	B	2.5	U	2.5	U	0.500	U	P
Vanadium	2.1	U	2.1	U	2.1	U	2.1	U	0.420	U	P
Zinc	1.1	U	1.1	U	2.5	B	2.1	B	0.220	U	P
Cyanide	0.9	U	0.9	U	0.9	U	0.9	U	0.073	B	CA

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ORIGINAL (Red)

BLANKS

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

reparation Blank Matrix (soil/water): SOIL

reparation 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			-49.6	B	31.8	U	-32.3	B			P
Antimony			2.3	U	2.8	B	3.9	B			P
Arsenic			2.1	U	2.1	U	2.1	U			P
Barium			0.9	U	0.9	U	0.9	U			P
Beryllium			0.6	U	0.6	U	0.6	U			P
Cadmium			1.1	U	1.1	U	1.1	U			P
Calcium			-505.1	B	-474.8	B	-500.5	B			P
Chromium			1.1	U	1.1	U	1.1	U			P
Cobalt			1.0	U	1.0	U	1.0	U			P
Copper			2.4	B	1.2	U	1.4	B			P
Iron			16.0	B	26.4	B	17.7	B			P
Lead			1.4	U	1.4	U	1.4	U			P
Magnesium			42.1	B	80.6	B	54.1	B			P
Manganese			0.6	U	0.6	U	0.6	U			P
Mercury			-0.1	B							CV
Nickel			2.7	U	2.7	U	2.7	U			P
Potassium			24.3	U	24.3	U	24.3	U			P
Selenium			3.1	U	3.1	U	3.1	U			P
Silver			1.4	U	1.4	U	1.4	U			P
Sodium			187.0	U	187.0	U	187.0	U			P
Thallium			2.5	U	2.5	U	2.5	U			P
Vanadium			2.1	U	2.1	U	2.1	U			P
Zinc			4.0	B	1.1	U	1.1	U			P
Cyanide			0.9	U					0.048	B	CA

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ORIGINAL (Red)

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCPG25S

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

atrix (soil/water): SOIL Level (low/med): LOW

Solids for Sample: 88.5

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	44.7556		0.5198	U	106.60	42.0	N	P
Arsenic	75-125	12.4492		3.9876		8.53	99.2		P
Barium	75-125	448.2469		33.7591	B	426.39	97.2		P
Beryllium	75-125	10.6716		0.4432	B	10.66	96.0		P
Cadmium	75-125	10.7939		0.5012	B	10.66	96.6		P
Calcium									NR
Chromium	75-125	59.5067		17.5720		42.64	98.3		P
Cobalt	75-125	110.9251		5.2219	B	106.60	99.2		P
Copper	75-125	62.9596		8.9462		53.30	101.3		P
Iron									NR
Lead		41.6214		29.5322		4.26	283.8		P
Magnesium									NR
Manganese	75-125	283.2323		167.5175		106.60	108.6		P
Mercury	75-125	0.5326		0.0538	U	0.54	98.6		CV
Nickel	75-125	113.6088		6.3261	B	106.60	100.6		P
Potassium									NR
Selenium	75-125	1.6542		0.7006	U	2.13	77.7		P
Silver	75-125	10.6445		1.4009	B	10.66	86.7		P
Sodium									NR
Thallium	75-125	8.8715		0.5650	U	10.66	83.2		P
Vanadium	75-125	131.9166		23.8969		106.60	101.3		P
Zinc	75-125	150.6462		40.5946		106.60	103.2		P
Cyanide	75-125	6.2588		0.1909	B	5.65	107.4		CA

Comments:

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ORIGINAL (Red)

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCPG25A

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

atrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony		500.51		2.30	U	120.0	417.1		P
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

omments:

ORIGINAL (Red)

EPA SAMPLE NO.

MCPG25L

ICP SERIAL DILUTIONS

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

atrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-ence	Q	M
Aluminum	42560.90		41994.91		1.3		P
Antimony	2.30	U	11.50	U			P
Arsenic	17.64		15.58	B	11.7		P
Barium	149.38	B	151.61	B	1.5		P
Beryllium	1.96	B	3.00	U	100.0		P
Cadmium	2.22	B	5.50	U	100.0		P
Calcium	3695.01	B	1802.22	B	51.2	E	P
Chromium	77.76		81.25		4.5		P
Cobalt	23.11	B	23.22	B	0.5		P
Copper	39.59		50.95	B	28.7		P
Iron	70920.26		69224.34		2.4		P
Lead	130.68		138.84		6.2		P
Magnesium	4168.41	B	4544.40	B	9.0		P
Manganese	741.26		743.44		0.3		P
Mercury							NR
Nickel	27.99	B	26.37	B	5.8		P
Potassium	3438.29	B	3803.69	B	10.6	E	P
Selenium	3.10	U	15.50	U			P
Silver	6.20	B	7.00	U	100.0		P
Sodium	279.27	B	935.00	U	100.0		P
Thallium	2.50	U	12.50	U			P
Vanadium	105.74		107.25	B	1.4		P
Zinc	179.63		181.92		1.3		P

3A

ORIGINAL (Red)

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ANALYSIS RUN LOG

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Instrument ID Number: P3 Method: P

Start date: 12/19/96 End date: 12/20/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2212		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
S	1.00	2218		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
ICV	1.00	2224		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
ICB	1.00	2230		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
CRI1	1.00	2236			X	X		X			X	X	X		X		X		X			X		X	X		
ICSA	1.00	2242		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
ICSAB	1.00	2248		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
CCV	1.00	2253		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
CCB1	1.00	2259		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
ZZZZZZ	1.00	2305																									
ZZZZZZ	1.00	2311																									
ZZZZZZ	1.00	2317																									
ZZZZZZ	1.00	2323																									
ZZZZZZ	1.00	2329																									
ZZZZZZ	1.00	2335																									
ZZZZZZ	1.00	2341																									
ZZZZZZ	1.00	2346																									
ZZZZZZ	1.00	2352																									
CCV	1.00	2358		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
CCB 2	1.00	0004		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
ZZZZZZ	1.00	0010																									
ZZZZZZ	1.00	0016																									
PBS	1.00	0022		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
LCSS	1.00	0028		X	X	X	X	X			X	X	X	X	X		X		X	X		X	X	X	X		
LCSS	10.00	0034								X						X											
MCPG25L	5.00	0040		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
CRI 2	1.00	0045			X	X		X			X	X	X		X		X		X			X		X	X		
ICSA	1.00	0051		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
ICSAB	1.00	0057		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
CCV	1.00	0103		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
CCB3	1.00	0109		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		
MCPG25	1.00	0115		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X		

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ORIGINAL (Red)

ANALYSIS RUN LOG

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Instrument ID Number: P3 Method: P

Start date: 12/19/96 End date: 12/20/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	[illegible]
MCPG25D	1.00	0121		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG25S	1.00	0127		_	X	X	X	X	_	_	X	X	X	_	X	_	X	_	X	_	_	X	_	X	X	_	_
MCPG25A	1.00	0133		_	X	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
MCPG23	1.00	0139		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG24	1.00	0144		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG26	1.00	0150		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG27	1.00	0156		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG28	1.00	0202		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
CCV 4	1.00	0208		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
CCB 4	1.00	0214		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG29	1.00	0220		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG30	1.00	0226		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG31	1.00	0232		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG32	1.00	0238		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG33	1.00	0243		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG34	1.00	0249		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
CRI 3	1.00	0255		_	X	X	_	X	_	_	X	X	X	_	X	_	X	_	X	_	_	X	_	X	X	_	_
ICSA	1.00	0301		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
ICSAB	1.00	0307		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
CCV	1.00	0313		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
CCB 5	1.00	0319		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG35	1.00	0325		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG36	1.00	0331		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG37	1.00	0337		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
MCPG38	1.00	0343		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
CRI 4	1.00	0348		_	X	X	_	X	_	_	X	X	X	_	X	_	X	_	X	_	_	X	_	X	X	_	_
ICSA	1.00	0354		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
ICSAB	1.00	0400		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
CCV	1.00	0406		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
CCB 6	1.00	0412		X	X	X	X	X	_	X	X	X	X	X	X	X	X	_	X	X	_	X	X	X	X	_	_
				_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
				_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
				_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

FORM XIV - IN

ORIGINAL (Red)

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ANALYSIS RUN LOG

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Instrument ID Number: P3 Method: P

Start date: 12/20/96 End date: 12/21/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1732							X												X					X	
S	1.00	1738							X												X					X	
ICV	1.00	1944							X												X					X	
ICB	1.00	1949							X												X					X	
CRI1	1.00	1955							X												X					X	
ICSA	1.00	2001							X												X					X	
ICSAB	1.00	2007							X												X					X	
CCV	1.00	2013							X												X					X	
CCB1	1.00	2019							X												X					X	
ZZZZZZ	1.00	2024																									
ZZZZZZ	1.00	2030																									
ZZZZZZ	1.00	2036																									
ZZZZZZ	1.00	2042																									
ZZZZZZ	1.00	2048																									
ZZZZZZ	1.00	2053																									
ZZZZZZ	1.00	2059																									
ZZZZZZ	1.00	2105																									
ZZZZZZ	1.00	2111																									
CCV	1.00	2117							X												X					X	
CCB2	1.00	2122							X												X					X	
ZZZZZZ	1.00	2128																									
ZZZZZZ	1.00	2134																									
PBS	1.00	2140							X												X					X	
LCSS	1.00	2146							X												X					X	
LCSS	10.00	2151																									
MCPG25L	5.00	2157							X												X					X	
CRI2	1.00	2203							X												X					X	
ICSA	1.00	2209							X												X					X	
ICSAB	1.00	2215							X												X					X	
CCV	1.00	2220							X												X					X	
CCB3	1.00	2226							X												X					X	
MCPG25	1.00	2232							X												X					X	

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ORIGINAL (Red)

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ANALYSIS RUN LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

nstrument ID Number: P3 Method: P

tart date: 12/20/96 End date: 12/21/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MCPG25D	1.00	2238							X												X					X	
MCPG25S	1.00	2244							X												X					X	
MCPG25A	1.00	2249																									
MCPG23	1.00	2255							X												X					X	
MCPG24	1.00	2301							X												X					X	
MCPG26	1.00	2307							X												X					X	
MCPG27	1.00	2313							X												X					X	
MCPG28	1.00	2319							X												X					X	
CCV	1.00	2324							X												X					X	
CCB	1.00	2330							X												X					X	
MCPG29	1.00	2336							X												X					X	
MCPG30	1.00	2342							X												X					X	
MCPG31	1.00	2348							X												X					X	
MCPG32	1.00	2353							X												X					X	
MCPG33	1.00	2359							X												X					X	
MCPG34	1.00	0005							X												X					X	
CRI	1.00	0011							X												X					X	
ICSA	1.00	0017							X												X					X	
ICSAB	1.00	0022							X												X					X	
CCV	1.00	0028							X												X					X	
CCB	1.00	0034							X												X					X	
MCPG35	1.00	0040							X												X					X	
MCPG36	1.00	0046							X												X					X	
MCPG37	1.00	0052							X												X					X	
MCPG38	1.00	0057							X												X					X	
ZZZZZZ	1.00	0103																									
CRI	1.00	0109							X												X					X	
ICSA	1.00	0115							X												X					X	
ICSAB	1.00	0121							X												X					X	
CCV	1.00	0126							X												X					X	
CCB	1.00	0132							X												X					X	

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ORIGINAL (Red)

14

ANALYSIS RUN LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

nstrument ID Number: C2 Method: CV

tart date: 12/20/96 End date: 12/20/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
30	1.00	0900																X									
30.2	1.00	0902																X									
30.5	1.00	0904																X									
31.0	1.00	0906																X									
32.0	1.00	0908																X									
35.0	1.00	0910																X									
310.0	1.00	0912																X									
ICV	1.00	0914																X									
ICB	1.00	0916																X									
CRA	1.00	0918																X									
CCV	1.00	1032																X									
CCB	1.00	1034																X									
PBS	1.00	1036																X									
LCSS	10.00	1038																X									
MCPG25	1.00	1040																X									
MCPG25D	1.00	1042																X									
MCPG25S	1.00	1044																X									
MCPG23	1.00	1046																X									
MCPG24	1.00	1048																X									
MCPG26	1.00	1050																X									
MCPG27	1.00	1052																X									
CCV	1.00	1054																X									
CCB	1.00	1056																X									
MCPG28	1.00	1058																X									
MCPG29	1.00	1100																X									
MCPG30	1.00	1102																X									
MCPG31	1.00	1104																X									
MCPG32	1.00	1106																X									
MCPG33	1.00	1108																X									
MCPG34	1.00	1110																X									
MCPG35	1.00	1112																X									
MCPG36	1.00	1114																X									

FORM XIV - IN

ORIGINAL (Red)

ANALYSIS RUN LOG

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Instrument ID Number: C2 Method: CV

Start date: 12/20/96 End date: 12/20/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV	1.00	1116																X									
CCB	1.00	1118																X									
MCPG37	1.00	1120																X									
MCPG38	1.00	1122																X									
CCV	1.00	1124																X									
CCB	1.00	1126																X									

FORM XIV - IN

ORIGINAL (Red)

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ANALYSIS RUN LOG

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

Instrument ID Number: C1 Method: CA

Start date: 12/19/96 End date: 12/19/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1552																									X
S10.0	1.00	1553																									X
S50.0	1.00	1554																									X
S100.0	1.00	1555																									X
S200.0	1.00	1557																									X
S91	1.00	1600																									X
ICV	1.00	1601																									X
ICB	1.00	1602																									X
CCV	1.00	1603																									X
CCB	1.00	1605																									X
PBS	1.00	1606																									X
LCSS	1.00	1607																									X
MCPG25	1.00	1608																									X
MCPG25D	1.00	1609																									X
MCPG25S	1.00	1611																									X
MCPG23	1.00	1612																									X
MCPG24	1.00	1613																									X
MCPG26	1.00	1614																									X
CCV	1.00	1615																									X
CCB	1.00	1617																									X
MCPG27	1.00	1618																									X
MCPG28	1.00	1619																									X
MCPG29	1.00	1620																									X
PBS	1.00	1621																									X
LCSS	1.00	1622																									X
MCPG30	1.00	1623																									X
MCPG31	1.00	1625																									X
MCPG32	1.00	1626																									X
CCV	1.00	1627																									X
CCB	1.00	1628																									X
MCPG33	1.00	1629																									X
MCPG34	1.00	1630																									X

ORIGINAL (Red)

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ANALYSIS RUN LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

nstrument ID Number: C1 Method: CA

tart date: 12/19/96 End date: 12/19/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MCPG35	1.00	1631																									X
MCPG36	1.00	1633																									X
MCPG37	1.00	1634																									X
MCPG38	1.00	1635																									X
CCV	1.00	1636																									X
CCB	1.00	1637																									X

FORM XIV - IN

ORIGINAL (Red)

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PREPARATION LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

ethod: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	12/19/96	1.00	200
MCPG23	12/19/96	1.03	200
MCPG24	12/19/96	1.02	200
MCPG25	12/19/96	1.00	200
MCPG25A	12/19/96	1.00	200
MCPG25D	12/19/96	1.05	200
MCPG25L	12/19/96	1.00	200
MCPG25S	12/19/96	1.06	200
MCPG26	12/19/96	1.01	200
MCPG27	12/19/96	1.05	200
MCPG28	12/19/96	1.08	200
MCPG29	12/19/96	1.03	200
MCPG30	12/19/96	1.01	200
MCPG31	12/19/96	1.03	200
MCPG32	12/19/96	1.09	200
MCPG33	12/19/96	1.00	200
MCPG34	12/19/96	1.09	200
MCPG35	12/19/96	1.03	200
MCPG36	12/19/96	1.04	200
MCPG37	12/19/96	1.04	200
MCPG38	12/19/96	1.01	200
PBS	12/19/96	1.00	200

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ORIGINAL (Red)

13
PREPARATION LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

ethod: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	12/19/96	0.20	100
MCPG23	12/19/96	0.20	100
MCPG24	12/19/96	0.21	100
MCPG25	12/19/96	0.21	100
MCPG25D	12/19/96	0.22	100
MCPG25S	12/19/96	0.21	100
MCPG26	12/19/96	0.21	100
MCPG27	12/19/96	0.22	100
MCPG28	12/19/96	0.22	100
MCPG29	12/19/96	0.21	100
MCPG30	12/19/96	0.22	100
MCPG31	12/19/96	0.21	100
MCPG32	12/19/96	0.21	100
MCPG33	12/19/96	0.22	100
MCPG34	12/19/96	0.22	100
MCPG35	12/19/96	0.22	100
MCPG36	12/19/96	0.20	100
MCPG37	12/19/96	0.20	100
MCPG38	12/19/96	0.22	100
PBS	12/19/96	0.20	100

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ORIGINAL (Red)

13
PREPARATION LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

ethod: CA

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	12/19/96	1.01	50
MCPG23	12/19/96	1.00	50
MCPG24	12/19/96	1.00	50
MCPG25	12/19/96	1.00	50
MCPG25D	12/19/96	1.00	50
MCPG25S	12/19/96	1.00	50
MCPG26	12/19/96	1.00	50
MCPG27	12/19/96	1.00	50
MCPG28	12/19/96	1.00	50
MCPG29	12/19/96	1.00	50
PBS	12/19/96	1.00	50
S91	12/19/96		50

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ORIGINAL (Red)

13
PREPARATION LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

ethod: CA

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	12/19/96	1.01	50
MCPG30	12/19/96	1.01	50
MCPG31	12/19/96	1.00	50
MCPG32	12/19/96	1.00	50
MCPG33	12/19/96	1.00	50
MCPG34	12/19/96	1.00	50
MCPG35	12/19/96	1.00	50
MCPG36	12/19/96	1.01	50
MCPG37	12/19/96	1.00	50
MCPG38	12/19/96	1.00	50
PBS	12/19/96	1.00	50

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ORIGINAL (Red)

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

CP ID Number: P3 Date: 10/15/96

lame AA ID Number:

urnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200	31.8	P
Antimony	206.80		60	2.3	P
Arsenic	189.00		10	2.1	P
Barium	493.40		200	0.9	P
Beryllium	313.00		5	0.6	P
Cadmium	226.50		5	1.1	P
Calcium	317.90		5000	20.2	P
Chromium	267.70		10	1.1	P
Cobalt	228.60		50	1.0	P
Copper	324.70		25	1.2	P
Iron	271.40		100	1.4	P
Lead	220.30		3	1.4	P
Magnesium	279.00		5000	10.2	P
Manganese	257.60		15	0.6	P
Mercury			0.2		NR
Nickel	231.60		40	2.7	P
Potassium	766.40		5000	24.3	P
Selenium	196.00		5	3.1	P
Silver	328.00		10	1.4	P
Sodium	330.20		5000	187.0	P
Thallium	190.80		10	2.5	P
Vanadium	292.40		50	2.1	P
Zinc	206.20		20	1.1	P
Cyanide			10		NR

omments:

P3: THERMO JARRELL ASH

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ORIGINAL (Red)

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

CP ID Number: Date: 10/15/96

'lame AA ID Number: C2

'urnace 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	0.1	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:
C2: BACHARACH

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ORIGINAL (Red)

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG23

ICP ID Number: Date: 10/15/96

Flame AA ID Number: C1

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	0.9	CA

Comments:
C1: LACHAT

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ORIGINAL
(Red)

MCPG39

ORIGINAL (Red)

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

OW No.: ILM04.0

EPA Sample No.	Lab Sample ID.
MCPG39	04767S
MCPG40	04768S
MCPG41	04769S
MCPG41D	04769S2
MCPG41S	04769DS
MCPG42	04770S
MCPG43	04771S

ere ICP interelement corrections applied? Yes/No YES
ere ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

omments: Concentrations are estimated for calcium and potassium due to possible sample matrix interferents.

certify that this data package is in compliance with the terms and onditions of the contract, both technically and for completeness, for ther than the conditions detailed above. Release of the data contained n this hardcopy data package and in the computer-readable data submitted n floppy diskette has been authorized by the Laboratory Manager or the anager's designee, as verified by the following signature.

ignature: MV Kilgore Name: Melvin V. Kilgore, Jr.

ate: 12/30/96 Title: Lab Director

ORIGINAL (Red)

2B
CRDL STANDARD FOR AA AND ICP

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

A CRDL Standard Source: ULT 423

CP CRDL Standard Source: ULT ICUS 118

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
					Initial		Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				120.0	99.56	83.0	96.81	80.7
Antimony				20.0	22.14	110.7	21.05	105.2
Arsenic								
Barium				10.0	9.80	98.0	9.69	96.9
Beryllium				10.0	10.52	105.2	10.11	101.1
Cadmium								
Calcium				20.0	19.11	95.6	19.36	96.8
Chromium				100.0	101.65	101.6	101.16	101.2
Cobalt				50.0	51.64	103.3	52.15	104.3
Copper								
Iron				6.0	4.61	76.8	7.65	127.5
Lead								
Magnesium				30.0	30.44	101.5	30.34	101.1
Manganese								
Mercury	0.2	0.22	110.0	80.0	83.72	104.6	83.04	103.8
Nickel								
Potassium				10.0	9.17	91.7	8.78	87.8
Selenium				20.0	18.28	91.4	18.13	90.6
Silver								
Sodium				20.0	21.16	105.8	21.98	109.9
Thallium				100.0	100.35	100.4	100.93	100.9
Vanadium				40.0	42.21	105.5	43.68	109.2
Zinc								

ORIGINAL (Red)

3

BLANKS

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	-59.0	B	-52.5	B	-56.6	B	-45.2	B	-40.006	B	P
Antimony	2.3	U	2.3	U	2.3	U	2.9	B	2.300	U	P
Arsenic	2.5	B	2.1	U	2.1	U	2.1	U	2.100	U	P
Barium	0.9	U	0.9	U	0.9	U	0.9	U	0.900	U	P
Beryllium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Cadmium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Calcium	-517.5	B	-512.2	B	-515.0	B	-511.2	B	-505.254	B	P
Chromium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Cobalt	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Copper	1.2	U	1.2	U	2.1	B	1.2	U	2.332	B	P
Iron	10.5	B	19.0	B	12.7	B	12.0	B	9.719	B	P
Lead	1.4	U	1.4	U	1.4	U	1.4	U	1.818	B	P
Magnesium	40.7	B	47.4	B	38.6	B	42.5	B	43.508	B	P
Manganese	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Mercury	0.1	U	-0.1	B	-0.1	B			-0.113	B	CV
Nickel	2.7	U	2.7	U	2.7	U	2.7	U	2.700	U	P
Potassium	27.0	B	24.3	U	24.3	U	24.3	U	29.219	B	P
Selenium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Silver	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Sodium	187.0	U	187.0	U	187.0	U	187.0	U	187.000	U	P
Thallium	5.9	B	3.2	B	2.5	U	2.5	U	2.500	U	P
Vanadium	2.1	U	2.1	U	2.1	U	2.1	U	2.100	U	P
Zinc	1.1	U	1.1	U	3.5	B	4.7	B	1.100	U	P
Cyanide	0.9	U	0.9	U	0.9	U			1.315	B	CA

ORIGINAL (Red)

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCPG41S

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

atrix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	3049.4620		1473.9570		2000.00	78.8		P
Antimony	75-125	507.5730		2.3000	U	500.00	101.5		P
Arsenic	75-125	43.4430		2.5500	B	40.00	102.2		P
Barium	75-125	2000.6600		37.0740	B	2000.00	98.2		P
Beryllium	75-125	48.9390		0.6000	U	50.00	97.9		P
Cadmium	75-125	51.5760		1.1000	U	50.00	103.2		P
Calcium									NR
Chromium	75-125	188.7820		3.1030	B	200.00	92.8		P
Cobalt	75-125	500.1440		2.1380	B	500.00	99.6		P
Copper	75-125	253.8220		3.2460	B	250.00	100.2		P
Iron	75-125	2770.6410		2029.7410		1000.00	74.1	N	P
Lead	75-125	27.8920		3.6580		20.00	121.2		P
Magnesium									NR
Manganese	75-125	632.9840		141.0710		500.00	98.4		P
Mercury	75-125	0.9643		0.1000	U	1.00	96.4		CV
Nickel	75-125	494.0240		5.8160	B	500.00	97.6		P
Potassium									NR
Selenium	75-125	8.8810		3.1000	U	10.00	88.8		P
Silver	75-125	45.6120		1.4000	U	50.00	91.2		P
Sodium									NR
Thallium	75-125	49.5450		5.5510	B	50.00	88.0		P
Vanadium	75-125	486.2200		2.1000	U	500.00	97.2		P
Zinc	75-125	540.3950		48.1680		500.00	98.4		P
Cyanide	75-125	97.3643		1.5004	B	100.00	95.9		CA

Comments:

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ORIGINAL (Red)

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCPG41A

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron		5804.85		2029.74		4060.0	93.0		P
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

ORIGINAL (Red)

EPA SAMPLE NO.

DUPLICATES

MCPG41D

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

atrix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		1473.9570		1623.7650		9.7		P
Antimony		2.3000	U	2.3000	U			P
Arsenic		2.5500	B	2.1000	U	200.0		P
Barium		37.0740	B	37.2410	B	0.4		P
Beryllium		0.6000	U	0.6000	U			P
Cadmium		1.1000	U	1.1000	U			P
Calcium	5000.0	14055.2930		13705.0630		2.5		P
Chromium		3.1030	B	2.6460	B	15.9		P
Cobalt		2.1380	B	1.8300	B	15.5		P
Copper		3.2460	B	4.9190	B	41.0		P
Iron		2029.7410		2005.1680		1.2		P
Lead	3.0	3.6580		6.7790		59.8	*	P
Magnesium		4636.1590	B	4342.1100	B	6.6		P
Manganese		141.0710		138.1800		2.1		P
Mercury		0.1000	U	0.1000	U			CV
Nickel		5.8160	B	5.3960	B	7.5		P
Potassium		2176.2790	B	2164.0280	B	0.6		P
Selenium		3.1000	U	3.1000	U			P
Silver		1.4000	U	1.4000	U			P
Sodium	5000.0	5013.3770		4982.0410	B	0.6		P
Thallium		5.5510	B	2.5000	U	200.0		P
Vanadium		2.1000	U	2.3950	B	200.0		P
Zinc	20.0	48.1680		40.2990		17.8		P
Cyanide		1.5004	B	1.5782	B	5.1		CA

ORIGINAL (Red)

EPA SAMPLE NO.

ICP SERIAL DILUTIONS

MCPG41L

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	1473.96		1427.12		3.2		P
Antimony	2.30	U	11.50	U			P
Arsenic	2.55	B	10.50	U	100.0		P
Barium	37.07	B	38.12	B	2.8		P
Beryllium	0.60	U	3.00	U			P
Cadmium	1.10	U	5.50	U			P
Calcium	14055.29		11461.15	B	18.5	E	P
Chromium	3.10	B	5.50	U	100.0		P
Cobalt	2.14	B	5.00	U	100.0		P
Copper	3.25	B	8.93	B	174.8		P
Iron	2029.74		1957.97		3.5		P
Lead	3.66		11.42	B	212.0		P
Magnesium	4636.16	B	4780.46	B	3.1		P
Manganese	141.07		136.40		3.3		P
Mercury							NR
Nickel	5.82	B	13.50	U	100.0		P
Potassium	2176.28	B	2520.46	B	15.8	E	P
Selenium	3.10	U	15.50	U			P
Silver	1.40	U	7.00	U			P
Sodium	5013.38		5098.98	B	1.7		P
Thallium	5.55	B	45.64	B	722.3		P
Vanadium	2.10	U	10.50	U			P
Zinc	48.17		54.46	B	13.1		P

ORIGINAL (Red)

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ANALYSIS RUN LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

nstrument ID Number: P3 Method: P

tart date: 12/19/96 End date: 12/20/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	2212		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
S	1.00	2218		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
ICV	1.00	2224		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
ICB	1.00	2230		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CRI1	1.00	2236			X	X		X			X	X	X		X		X		X			X		X	X	X	
ICSA	1.00	2242		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
ICSAB	1.00	2248		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CCV	1.00	2253		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CCB1	1.00	2259		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
PBW	1.00	2305		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
LCSW	1.00	2311		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
MCPG41L	5.00	2317		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
MCPG41	1.00	2323		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
MCPG41D	1.00	2329		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
MCPG41S	1.00	2335		X	X	X	X	X			X	X	X	X	X		X		X			X		X	X	X	
MCPG41A	1.00	2341																									
MCPG39	1.00	2346		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
MCPG40	1.00	2352		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CCV	1.00	2358		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CCB2	1.00	0004		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
MCPG42	1.00	0010		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
MCPG43	1.00	0016		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
ZZZZZZ	1.00	0022																									
ZZZZZZ	1.00	0028																									
ZZZZZZ	1.00	0034																									
ZZZZZZ	1.00	0040																									
CRI2	1.00	0045			X	X		X			X	X	X		X		X		X			X		X	X	X	
ICSA	1.00	0051		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
ICSAB	1.00	0057		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CCV	1.00	0103		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	
CCB3	1.00	0109		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	

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ORIGINAL (Red)

14

ANALYSIS RUN LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

nstrument ID Number: P3 Method: P

tart date: 12/20/96 End date: 12/21/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1732							X					X							X						
S	1.00	1738							X					X							X						
ICV	1.00	1944							X					X							X						
ICB	1.00	1949							X					X							X						
CRI	1.00	1955							X												X						
ICSA	1.00	2001							X					X							X						
ICSAB	1.00	2007							X					X							X						
CCV	1.00	2013							X					X							X						
CCB	1.00	2019							X					X							X						
PBW	1.00	2024							X												X						
LCSW	1.00	2030							X												X						
MCPG41L	5.00	2036							X												X						
MCPG41	1.00	2042							X												X						
MCPG41D	1.00	2048							X												X						
MCPG41S	1.00	2053							X												X						
MCPG41A	1.00	2059																									
MCPG39	1.00	2105							X												X						
MCPG40	1.00	2111							X												X						
CCV	1.00	2117							X					X							X						
CCB	1.00	2122							X					X							X						
MCPG42	1.00	2128							X												X						
MCPG43	1.00	2134							X												X						
ZZZZZZ	1.00	2140																									
ZZZZZZ	1.00	2146																									
ZZZZZZ	1.00	2151																									
ZZZZZZ	1.00	2157																									
CRI	1.00	2203							X												X						
ICSA	1.00	2209							X					X							X						
ICSAB	1.00	2215							X					X							X						
CCV	1.00	2220							X					X							X						
CCB	1.00	2226							X					X							X						
ZZZZZZ	1.00	2232																									

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ORIGINAL (Red)

14

ANALYSIS RUN LOG

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

Instrument ID Number: P3 Method: P

Start date: 12/20/96 End date: 12/21/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2238																									
ZZZZZZ	1.00	2244																									
ZZZZZZ	1.00	2249																									
ZZZZZZ	1.00	2255																									
ZZZZZZ	1.00	2301																									
ZZZZZZ	1.00	2307																									
ZZZZZZ	1.00	2313																									
ZZZZZZ	1.00	2319																									
CCV	1.00	2324							X					X							X						
CCB	1.00	2330							X					X							X						
ZZZZZZ	1.00	2336																									
ZZZZZZ	1.00	2342																									
ZZZZZZ	1.00	2348																									
ZZZZZZ	1.00	2353																									
ZZZZZZ	1.00	2359																									
ZZZZZZ	1.00	0005																									
CRI	1.00	0011							X												X						
ICSA	1.00	0017							X					X							X						
ICSAB	1.00	0022							X					X							X						
CCV	1.00	0028							X					X							X						
CCB	1.00	0034							X					X							X						
ZZZZZZ	1.00	0040																									
ZZZZZZ	1.00	0046																									
ZZZZZZ	1.00	0052																									
ZZZZZZ	1.00	0057																									
MCPG41A	1.00	0103												X													
CRI	1.00	0109							X												X						
ICSA	1.00	0115							X					X							X						
ICSAB	1.00	0121							X					X							X						
CCV	1.00	0126							X					X							X						
CCB	1.00	0132							X					X							X						

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ANALYSIS RUN LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

nstrument ID Number: C2 Method: CV

tart date: 12/20/96 End date: 12/20/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0900																X									
S0.2	1.00	0902																X									
S0.5	1.00	0904																X									
S1.0	1.00	0906																X									
S2.0	1.00	0908																X									
S5.0	1.00	0910																X									
S10.0	1.00	0912																X									
ICV	1.00	0914																X									
ICB	1.00	0916																X									
CRA	1.00	0918																X									
CCV	1.00	1012																X									
CCB	1.00	1014																X									
PBW	1.00	1016																X									
MCPG41	1.00	1018																X									
MCPG41D	1.00	1020																X									
MCPG41S	1.00	1022																X									
MCPG39	1.00	1024																X									
MCPG40	1.00	1026																X									
MCPG42	1.00	1028																X									
MCPG43	1.00	1030																X									
CCV	1.00	1032																X									
CCB	1.00	1034																X									

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ORIGINAL (Red)

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ANALYSIS RUN LOG

ıb Name: SENTINEL, INC. Contract: 68-D6-0001

ıb Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

ıstrument ID Number: C1 Method: CA

:art date: 12/19/96 End date: 12/19/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1742																									X
S10.0	1.00	1743																									X
S50.0	1.00	1744																									X
S100.0	1.00	1745																									X
S200.0	1.00	1746																									X
S93	1.00	1749																									X
ICV	1.00	1751																									X
ICB	1.00	1752																									X
CCV	1.00	1753																									X
CCB	1.00	1754																									X
PBW	1.00	1755																									X
MCPG41	1.00	1756																									X
MCPG41D	1.00	1758																									X
MCPG41S	1.00	1759																									X
MCPG39	1.00	1800																									X
MCPG40	1.00	1801																									X
MCPG42	1.00	1802																									X
MCPG43	1.00	1803																									X
CCV	1.00	1804																									X
CCB	1.00	1806																									X

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ORIGINAL (Red)

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PREPARATION LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

ethod: P

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	12/19/96		100
MCPG39	12/19/96		100
MCPG40	12/19/96		100
MCPG41	12/19/96		100
MCPG41A	12/19/96		100
MCPG41D	12/19/96		100
MCPG41L	12/19/96		100
MCPG41S	12/19/96		100
MCPG42	12/19/96		100
MCPG43	12/19/96		100
PBW	12/19/96		100

ORIGINAL (Red)

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PREPARATION LOG

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
MCPG39	12/19/96		100
MCPG40	12/19/96		100
MCPG41	12/19/96		100
MCPG41D	12/19/96		100
MCPG41S	12/19/96		100
MCPG42	12/19/96		100
MCPG43	12/19/96		100
PBW	12/19/96		100

ORIGINAL (Red)

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PREPARATION LOG

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

lethod: CA

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
MCPG39	12/18/96		50
MCPG40	12/18/96		50
MCPG41	12/18/96		50
MCPG41D	12/18/96		50
MCPG41S	12/18/96		50
MCPG42	12/18/96		50
MCPG43	12/18/96		50
PBW	12/18/96		50
S93	12/18/96		50

ORIGINAL (Red)

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

ab Name: SENTINEL, INC. Contract: 68-D6-0001

ab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

CP ID Number: P3 Date: 10/15/96

lame AA ID Number:

urnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200	31.8	P
Antimony	206.80		60	2.3	P
Arsenic	189.00		10	2.1	P
Barium	493.40		200	0.9	P
Beryllium	313.00		5	0.6	P
Cadmium	226.50		5	1.1	P
Calcium	317.90		5000	20.2	P
Chromium	267.70		10	1.1	P
Cobalt	228.60		50	1.0	P
Copper	324.70		25	1.2	P
Iron	271.40		100	1.4	P
Lead	220.30		3	1.4	P
Magnesium	279.00		5000	10.2	P
Manganese	257.60		15	0.6	P
Mercury			0.2		NR
Nickel	231.60		40	2.7	P
Potassium	766.40		5000	24.3	P
Selenium	196.00		5	3.1	P
Silver	328.00		10	1.4	P
Sodium	330.20		5000	187.0	P
Thallium	190.80		10	2.5	P
Vanadium	292.40		50	2.1	P
Zinc	206.20		20	1.1	P
Cyanide			10		NR

Comments:
P3: THERMO JARRELL ASH

ORIGINAL (Red)

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SENTINEL, INC. Contract: 68-D6-0001

Lab Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

ICP ID Number: Date: 10/15/96

Flame AA ID Number: C2

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	0.1	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:
C2: BACHARACH

ORIGINAL (Red)

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

b Name: SENTINEL, INC. Contract: 68-D6-0001

b Code: SENTIN Case No.: 25233 SAS No.: SDG No.: MCPG39

P ID Number: Date: 10/15/96

ame AA ID Number: C1

rnace 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	0.9	CA

Comments:
C1: LACHAT

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