N00204.AR.005226
NAS PENSACOLA
5090.3a

FINAL REMEDIAL INVESTIGATION REPORT VOLUME 3 OF 3 SITE 41 WETLANDS NAS PENSACOLA FL
8/31/2000
ENSAFE, INC

FINAL REMEDIAL INVESTIGATION REPORT
SITE 41, NAS PENSACOLA WETLANDS
NAVAL AIR STATION
PENSACOLA, FLORIDA

SOUTHNAVFACENGCOM
CONTRACT NUMBER:
N62467-89-D-0318

CTO-036

Volume III of III
Appendices A to I

Prepared for:

Comprehensive Long-Term
Environmental Action Navy
Naval Air Station
Pensacola, Florida

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August 31, 2000

Appendix A
Phase IIA Surface Water and Sediment Analytical Results

Phase IIA Sample Identification Format

The samples were identified in accordance with the following format:

Format: 1 2 3 4 5 6 7 8 9 0

1 2 3 The first three digits are for the site where the sample was collected. Most samples begin with 041 to identify Site 41. A few samples were collected during another site investigation. In those cases, the first three digits correspond to that particular site. For example, sediment samples collected from a wetland during the Site 1 investigation, begins 001.

4 This digit represents the matrix of the sample. Sediment is designated with an "M," and surface water is designated with a "W."

5 6 7 8 The fifth and sixth characters referred to the wetland number, and the seventh and eighth characters referred to the sample number within that wetland. For example, sediment sample location 2 within Wetland 3 was designated "041M030201." For wetland numbers three characters long (18A, 18B, etc.), the wetland number was given in the fifth, sixth, and seventh characters. For example, sediment sample location 3 in Wetland 18A was designated "041M18A301."

9 0 Because all sediment samples were collected from the upper interval and all surface water samples were collected during sampling event 1, the last two characters are "-01."

Validation Qualifiers

U **Undetected** — The analyte was analyzed for but not detected, or was also found in an associated blank at a concentration less than 10 times the blank concentration for common organic laboratory contaminants or five times the blank concentration for other target analytes or elements. The associated value shown is the quantitative limit.

J **Estimated Value** — At least one QC parameter was outside control limits.

NJ **Presumptive Identification** — NJ is used for pesticide/PCB analysis when the percent difference exceeds the QC limits by 100% or more. It indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification at an estimated concentration. This qualifier is used for pesticide/PCB validation only.

UJ **Undetected and Estimated** — The analyte was analyzed for, but not detected above the listed estimated quantitation limit; the quantitation limit is estimated because one or more QC parameters were outside control limits.

D **Diluted Result** — The compound was reanalyzed at a secondary dilution factor. If one or more compounds are outside the calibration range during an initial analysis, the laboratory flags the analyte "E." When diluted, the sample results are flagged "D." Generally, values from the initial analysis will be used, except where the value exceeded the calibration range. In this case, the initial analysis value will be substituted by the diluted value to ensure the most representative data. The "D" flag will remain on the value to alert the data user that a secondary dilution value was used.

R/UR **Unusable Data** — One or more QC parameters grossly exceeded control limits.

PENSACOLA, SITE 41
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PHASE IIA

% SOLID							
	SAMPLE ID ------->	041-M-0101-01	041-M-0102-01	041-M-0103-01	041-W-0103-01	041-M-0104-01	041-M-0301-01
	ORIGINAL ID ----->	041M010101	041M010201	041M010301	041W010301	041M010401	041M030101
	LAB SAMPLE ID --->	960039-09	960039-10	960039-11	960039-14	960039-12	950998-15
	ID FROM REPORT -->	041M010101	041M010201	041M010301	041W010301	041M010401	041M030101
	SAMPLE DATE ----->	01/17/96	01/17/96	01/18/96	01/17/96	01/17/96	12/01/95
	DATE EXTRACTED -->	02/03/96	02/03/96	02/03/96	02/03/96	02/03/96	01/13/96
	DATE ANALYZED --->	02/05/96	02/05/96	02/05/96	02/05/96	02/05/96	01/14/96
	MATRIX ---------->	Sediment	Sediment	Sediment	Water	Sediment	Sediment
	UNITS ---------->	%	%	%	%	%	%
CAS #	Parameter	63A401 VAL	63A401 VAL	63A401 VAL	63A401 VAL	63A401 VAL	EM0040 VAL
9999000 58 8	SOLIDS	74.	42.2	76.8	NR	61.	76.8

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID						
SAMPLE ID ------->	041-W-0301-01	041-M-0302-01	041-W-0302-01	041-M-0303-01	041-W-0303-01	041-M-0304-01
ORIGINAL ID ----->	041W030101	041M030201	041W030201	041M030301	041W030301	041M030401
LAB SAMPLE ID --->	950998-20	950998-16	950998-21	951012-01	951012-07	951012-02
ID FROM REPORT -->	041W030101	041M030201	041W030201	041M030301	041W030301	041M030401
SAMPLE DATE ----->	12/01/95	12/01/95	12/01/95	12/04/95	12/04/95	12/04/95
DATE EXTRACTED -->	01/13/96	01/13/96	01/13/96	01/14/96	01/14/96	01/14/96
DATE ANALYZED --->	01/14/96	01/14/96	01/14/96	01/15/96	01/15/96	01/15/96
MATRIX ---------->	Water	Sediment	Water	Sediment	Water	Sediment
UNITS ---------->	%	%	%	%	%	%

CAS #	Parameter	EM0040	VAL	EM0040	VAL	EM0040	VAL	030301	VAL	030301	VAL	030301	VAL
9999000-58-8	SOLIDS	NR		9.6		NR		32.6		NR		78.4	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID													
		SAMPLE ID ------->	041-M-0304-01		041-W-0304-01		041-M-0305-01		041-M-0305-01		041-M-0306-01		041-M-0307-01
		ORIGINAL ID ----->	041M030401		041W030401		041M030501		041M030501		041M030601		041M030701
		LAB SAMPLE ID --->	960182-19		951012-08		951012-03		960182-20		951012-04		951012-05
		ID FROM REPORT -->	041M030401		041W030401		041M030501		041M030501		041M030601		041M030701
		SAMPLE DATE ----->	12/04/95		12/04/95		12/04/95		12/04/95		12/04/95		12/04/95
		DATE EXTRACTED -->	03/22/96		01/14/96		01/14/96		03/22/96		01/14/96		01/14/96
		DATE ANALYZED --->	04/11/96		01/15/96		01/15/96		04/11/96		01/15/96		01/15/96
		MATRIX ---------->	Sediment		Water		Sediment		Sediment		Sediment		Sediment
		UNITS ---------->	%		%		%		%		%		%
CAS #	Parameter		Z13601	VAL	030301	VAL	030301	VAL	Z13601	VAL	030301	VAL	030301	VAL
9999000-58-8	SOLIDS		88.1		NR		94.8		17.9		63.4		17.3	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID													
	SAMPLE ID ------->	041-M-04D1-01		041-W-04D1-01		041-M-04D2-01		041-M-04D2-01		041-M-04D3-01		041-M-04D4-01	
	ORIGINAL ID ----->	041M04D101		041W04D101		041M04D201		041M04D201		041M04D301		041M04D401	
	LAB SAMPLE ID --->	951012-09		960025-07		951012-10		960182-18		951012-11		951012-12	
	ID FROM REPORT -->	041M04D101		041W04D101		041M04D201		041M04D201		041M04D301		041M04D401	
	SAMPLE DATE ----->	12/05/95		01/15/96		12/05/95		12/05/95		12/05/95		12/05/95	
	DATE EXTRACTED -->	01/14/96		02/03/96		01/14/96		03/22/96		01/14/96		01/14/96	
	DATE ANALYZED --->	01/15/96		02/05/96		01/15/96		04/11/96		01/15/96		01/15/96	
	MATRIX ---------->	Sediment		Water		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	030301	VAL	EM005	VAL	030301	VAL	Z13601	VAL	030301	VAL	030301	VAL
9999000-58-8	SOLIDS	38.1		NR		26.1		30.8		83.6		27.5	

*** Validation Complete ***

PENSACOLA, SITE 41
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PHASE IIA

% SOLID							
SAMPLE ID ------->	041-W-04D4-01	041-M-04D5-01	041-M-0601-01	041-M-0602-01	041-M-0603-01	041-W-0603-01
ORIGINAL ID ----->	041W04D401	041M04D501	041M060101	041M060201	041M060301	041W060301
LAB SAMPLE ID --->	960025-08	951012-13	950941-01	950941-02	950941-03	950940-19
ID FROM REPORT -->	041W04D401	041M04D501	041M060101	041M060201	041M060301	041W060301
SAMPLE DATE ----->	01/15/96	12/05/95	11/15/95	11/15/95	11/15/95	11/15/95
DATE EXTRACTED -->	02/03/96	01/14/96	12/19/95	12/19/95	12/19/95	12/10/95
DATE ANALYZED --->	02/05/96	01/15/96	12/20/95	12/20/95	12/20/95	12/11/95
MATRIX ---------->	Water	Sediment	Sediment	Sediment	Sediment	Water
UNITS ----------->	%	%	%	%	%	%

CAS #	Parameter	EM005	VAL	030301	VAL	M06010	VAL	M06010	VAL	M06010	VAL	M06070	VAL
9999000-58-8	SOLIDS	NR		85.4		82.7		81.9		70.4		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
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PHASE IIA

% SOLID							
SAMPLE ID ------->	041-M-0604-01	041-M-0605-01	041-M-0606-01	041-M-0607-01	041-W-0607-01	041-M-0608-01
ORIGINAL ID ----->	041M060401	041M060501	041M060601	041M060701	041W060701	041M060801
LAB SAMPLE ID --->	950941-04	950950-20	950950-21	950940-01	950940-07	950940-02
ID FROM REPORT -->	041M060401	041M060501	041M060601	041M060701	041W060701	041M060801
SAMPLE DATE ----->	11/15/95	11/16/95	11/16/95	11/14/95	11/14/95	11/14/95
DATE EXTRACTED -->	12/19/95	12/20/95	12/20/95	12/10/95	12/10/95	12/10/95
DATE ANALYZED --->	12/20/95	12/27/95	12/27/95	12/11/95	12/11/95	12/11/95
MATRIX ---------->	Sediment	Sediment	Sediment	Sediment	Water	Sediment
UNITS ---------->	%	%	%	%	%	%

CAS #	Parameter	M06010	VAL	5A0101	VAL	5A0101	VAL	M06070	VAL	M06070	VAL	M06070	VAL
9999000-58-8	SOLIDS	81.6		81.4		51.2		37.6		NR		80.9	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
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% SOLID							
SAMPLE ID ------->	041-M-0609-01	041-M-0611-01	041-M-10A1-01	041-M-10A1-01	041-M-10A2-01	041-M-10A3-01
ORIGINAL ID ----->	041M060901	041M061101	041M10A101	041M10A101	041M10A201	041M10A301
LAB SAMPLE ID --->	950940-03	950950-23	960183-04	950983-14	950983-08	950979-01
ID FROM REPORT -->	041M060901	041M061101	041M10A101	041M10A101	041M10A201	041M10A301
SAMPLE DATE ----->	11/14/95	11/16/95	11/28/95	11/28/95	11/28/95	11/27/95
DATE EXTRACTED -->	12/10/95	12/20/95	03/27/96	01/05/96	01/05/96	01/04/96
DATE ANALYZED --->	12/11/95	12/27/95	04/11/96	01/05/96	01/05/96	01/05/96
MATRIX ---------->	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
UNITS ---------->	%	%	%	%	%	%

CAS #	Parameter	M06070	VAL	5A0101	VAL	Z30201	VAL	Z53301	VAL	Z53301	VAL	041M10	VAL
9999000-58-8	SOLIDS	73.3		81.3		83.8		61.9		83.4		82.6	

*** Validation Complete ***

PENSACOLA, SITE 41
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PHASE IIA

% SOLID													
	SAMPLE ID ------->	041-M-1201-01		041-W-1201-01		041-M-1202-01		041-M-1301-01		041-W-1301-01		041-M-1501-01	
	ORIGINAL ID ----->	041M120101		041W120101		041M120201		041M130101		041W130101		041M150101	
	LAB SAMPLE ID --->	950983-09		950983-11		950991-10		950979-02		950979-05		951021-05	
	ID FROM REPORT -->	041M120101		041W120101		041M120201		041M130101		041W130101		041M150101	
	SAMPLE DATE ----->	11/28/95		11/28/95		11/29/95		11/27/95		11/27/95		12/06/95	
	DATE EXTRACTED -->	01/05/96		01/05/96		01/10/96		01/04/96		01/04/96		01/16/96	
	DATE ANALYZED --->	01/05/96		01/05/96		01/11/96		01/05/96		01/05/96		01/18/96	
	MATRIX ---------->	Sediment		Water		Sediment		Sediment		Water		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	Z53301	VAL	Z53301	VAL	Z30301	VAL	041M10	VAL	041M10	VAL	EM0050	VAL
9999000-58-8	SOLIDS	63.8		NR		50.2		73.8		NR		12.6	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID						
SAMPLE ID ------->	041-W-1501-01	041-M-1502-01	041-W-1502-01	041-M-1503-01	041-M-1504-01	041-M-1601-01
ORIGINAL ID ----->	041W150101	041M150201	041W150201	041M150301	041M150401	041M160101
LAB SAMPLE ID --->	951021-10	951021-06	951021-11	951021-07	951021-08	951029-02
ID FROM REPORT -->	041W150101	041M150201	041W150201	041M150301	041M150401	041M160101
SAMPLE DATE ----->	12/06/95	12/06/95	12/06/95	12/06/95	12/06/95	12/07/95
DATE EXTRACTED -->	01/16/96	01/16/96	01/16/96	01/16/96	01/16/96	01/18/96
DATE ANALYZED --->	01/18/96	01/18/96	01/18/96	01/18/96	01/18/96	01/20/96
MATRIX ---------->	Water	Sediment	Water	Sediment	Sediment	Sediment
UNITS ---------->	%	%	%	%	%	%

CAS #	Parameter	EM0050	VAL	EM0050	VAL	EM0050	VAL	EM0050	VAL	EM0050	VAL	EW0010	VAL
9999000-58-8	SOLIDS	NR		9.2		NR		12.9		29.5		82.	

*** Validation Complete ***

PENSACOLA, SITE 41
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% SOLID													
	SAMPLE ID ------->	041-W-1601-01		041-M-1602-01		041-M-1602-01		041-W-1602-01		041-M-1603-01		041-M-1701-01	
	ORIGINAL ID ----->	041W160101		041M160201		041M160201		041W160201		041M160301		041M170101	
	LAB SAMPLE ID --->	951029-06		951029-03		960182-17		951029-07		951029-04		960025-03	
	ID FROM REPORT -->	041W160101		041M160201		041M160201		041W160201		041M160301		041M170101	
	SAMPLE DATE ----->	12/07/95		12/07/95		12/07/95		12/07/95		12/07/95		01/15/96	
	DATE EXTRACTED -->	01/18/96		01/18/96		03/22/96		01/18/96		01/18/96		02/03/96	
	DATE ANALYZED --->	01/20/96		01/20/96		04/11/96		01/20/96		01/20/96		02/05/96	
	MATRIX ---------->	Water		Sediment		Sediment		Water		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EW0010	VAL	EW0010	VAL	Z13601	VAL	EW0010	VAL	EW0010	VAL	EM005	VAL
9999000-58-8	SOLIDS	NR		44.7		55.1		NR		19.3		75.3	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID							
	SAMPLE ID ------->	041-W-1701-01	041-M-1702-01	041-M-1703-01	041-M-18A1-01	041-M-18A2-01	041-W-18A2-01
	ORIGINAL ID ----->	041W170101	041M170201	041M170301	041M18A101	041M18A201	041W18A201
	LAB SAMPLE ID --->	960025-09	960025-04	960025-05	951050-18	951050-19	951050-21
	ID FROM REPORT -->	041W170101	041M170201	041M170301	041M18A101	041M18A201	041W18A201
	SAMPLE DATE ----->	01/15/96	01/15/96	01/15/96	12/15/95	12/15/95	12/15/95
	DATE EXTRACTED -->	02/03/96	02/03/96	02/03/96	01/21/96	01/21/96	01/21/96
	DATE ANALYZED --->	02/05/96	02/05/96	02/05/96	01/23/96	01/23/96	01/23/96
	MATRIX ---------->	Water	Sediment	Sediment	Sediment	Sediment	Water
	UNITS ---------->	%	%	%	%	%	%
CAS #	Parameter	EM005 VAL	EM005 VAL	EM005 VAL	EMD060 VAL	EMD060 VAL	EMD060 VAL
9999000-58-8	SOLIDS	NR	81.3	78.3	13.2	8.8	NR

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID						
SAMPLE ID ------->	041-M-18A3-01	041-M-18B1-01	041-W-18B1-01	041-W-1901-01	041-W-1903-01	041-M-19A1-01
ORIGINAL ID ----->	041M18A301	041M18B101	041W18B101	041W190101	041W190301	041M19A101
LAB SAMPLE ID --->	951050-05	951050-06	951050-08	960039-15	960039-16	960025-11
ID FROM REPORT -->	041M18A301	041M18B101	041W18B101	041W190101	041W190301	041M19A101
SAMPLE DATE ----->	12/14/95	12/14/95	12/14/95	01/17/96	01/17/96	01/16/96
DATE EXTRACTED -->	01/21/96	01/21/96	01/21/96	02/03/96	02/03/96	02/03/96
DATE ANALYZED --->	01/23/96	01/23/96	01/23/96	02/05/96	02/05/96	02/05/96
MATRIX ---------->	Sediment	Sediment	Water	Water	Water	Sediment
UNITS ---------->	%	%	%	%	%	%

CAS #	Parameter	EMD060	VAL	EMD060	VAL	EMD060	VAL	63A401	VAL	63A401	VAL	EM005	VAL
9999000-58-8	SOLIDS	8.7		15.2		NR		NR		NR		15.9	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID							
	SAMPLE ID ------->	041-M-19A2-01	041-M-19B1-01	041-M-2501-01	041-W-2501-01	041-M-2502-01	041-M-2503-01
	ORIGINAL ID ----->	041M19A201	041M19B101	041M250101	041W250101	041M250201	041M250301
	LAB SAMPLE ID --->	960025-12	960025-13	950941-05	950940-20	950941-06	950941-07
	ID FROM REPORT -->	041M19A201	041M19B101	041M250101	041W250101	041M250201	041M250301
	SAMPLE DATE ----->	01/16/96	01/16/96	11/15/95	11/15/95	11/15/95	11/15/95
	DATE EXTRACTED -->	02/03/96	02/03/96	12/19/95	12/10/95	12/19/95	12/19/95
	DATE ANALYZED --->	02/05/96	02/05/96	12/20/95	12/11/95	12/20/95	12/20/95
	MATRIX ---------->	Sediment	Sediment	Sediment	Water	Sediment	Sediment
	UNITS ---------->	%	%	%	%	%	%
CAS #	Parameter	EM005 VAL	EM005 VAL	M06010 VAL	M06070 VAL	M06010 VAL	M06010 VAL
9999000-58-8	SOLIDS	76.9	76.2	10.3	NR	13.9	12.6

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID													
	SAMPLE ID ------->	041-W-2503-01		041-M-2701-01		041-M-2702-01		041-W-2702-01		041-M-3201-01		041-W-3201-01	
	ORIGINAL ID ----->	041W250301		041M270101		041M270201		041W270201		041M320101		041W320101	
	LAB SAMPLE ID --->	950940-21		950941-08		950941-09		950940-22		950940-04		950940-08	
	ID FROM REPORT -->	041W250301		041M270101		041M270201		041W270201		041M320101		041W320101	
	SAMPLE DATE ----->	11/15/95		11/15/95		11/15/95		11/15/95		11/14/95		11/14/95	
	DATE EXTRACTED -->	12/10/95		12/19/95		12/19/95		12/10/95		12/10/95		12/10/95	
	DATE ANALYZED --->	12/11/95		12/20/95		12/20/95		12/11/95		12/11/95		12/11/95	
	MATRIX ---------->	Water		Sediment		Sediment		Water		Sediment		Water	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	M06070	VAL	M06010	VAL	M06010	VAL	M06070	VAL	M06070	VAL	M06070	VAL
9999000-58-8	SOLIDS	NR		44.1		31.		NR		6.6		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID							
	SAMPLE ID ------->	041-M-3202-01	041-M-3203-01	041-M-3203-01	041-W-3203-01	041-M-3301-01	041-W-3301-01
	ORIGINAL ID ----->	041M320201	041M320301	041M320301	041W320301	041M330101	041W330101
	LAB SAMPLE ID --->	950940-05	950940-06	960183-08	950940-09	950940-12	950940-15
	ID FROM REPORT -->	041M320201	041M320301	041M320301	041W320301	041M330101	041W330101
	SAMPLE DATE ----->	11/14/95	11/14/95	11/14/95	11/14/95	11/13/95	11/13/95
	DATE EXTRACTED -->	12/10/95	12/10/95	03/27/96	12/10/95	12/10/95	12/10/95
	DATE ANALYZED --->	12/11/95	12/11/95	04/11/96	12/11/95	12/11/95	12/11/95
	MATRIX ---------->	Sediment	Sediment	Sediment	Water	Sediment	Water
	UNITS ---------->	%	%	%	%	%	%
CAS #	Parameter	M06070 VAL	M06070 VAL	Z30201 VAL	M06070 VAL	M06070 VAL	M06070 VAL
9999000-58-8	SOLIDS	7.8	9.5	10.3	NR	29.	NR

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID						
SAMPLE ID ------->	041-M-3302-01	041-M-3302-01	041-M-3303-01	041-W-3303-01	041-M-4801-01	041-W-4801-01
ORIGINAL ID ----->	041M330201	041M330201	041M330301	041W330301	041M480101	041W480101
LAB SAMPLE ID --->	950940-13	960183-09	950940-14	950940-16	960043-10	960043-14
ID FROM REPORT -->	041M330201	041M330201	041M330301	041W330301	041M480101	041W480101
SAMPLE DATE ----->	11/13/95	11/13/95	11/13/95	11/13/95	01/22/96	01/22/96
DATE EXTRACTED -->	12/10/95	03/27/96	12/10/95	12/10/95	02/06/96	02/06/96
DATE ANALYZED --->	12/11/95	04/11/96	12/11/95	12/11/95	02/07/96	02/07/96
MATRIX ---------->	Sediment	Sediment	Sediment	Water	Sediment	Water
UNITS ---------->	%	%	%	%	%	%

CAS #	Parameter	M06070	VAL	Z30201	VAL	M06070	VAL	M06070	VAL	M00901	VAL	M00901	VAL
9999000-58-8	SOLIDS	34.7		42.6		78.		NR		55.4		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
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% SOLID						
SAMPLE ID ------->	041-M-4901-01	041-W-4901-01	041-M-4902-01	041-M-4903-01	041-W-4903-01	041-M-52A1-01
ORIGINAL ID ----->	041M490101	041W490101	041M490201	041M490301	041W490301	041M52A101
LAB SAMPLE ID --->	960025-14	960043-15	960025-15	960025-16	960043-16	960055-01
ID FROM REPORT -->	041M490101	041W490101	041M490201	041M490301	041W490301	041M52A101
SAMPLE DATE ----->	01/16/96	01/22/96	01/16/96	01/16/96	01/22/96	01/23/96
DATE EXTRACTED -->	02/03/96	02/06/96	02/03/96	02/03/96	02/06/96	02/09/96
DATE ANALYZED --->	02/05/96	02/07/96	02/05/96	02/05/96	02/07/96	02/14/96
MATRIX ---------->	Sediment	Water	Sediment	Sediment	Water	Sediment
UNITS ---------->	%	%	%	%	%	%

CAS #	Parameter	EM005	VAL	M00901	VAL	EM005	VAL	EM005	VAL	M00901	VAL	M52A10	VAL
9999000-58-8	SOLIDS	73.2		NR		71.3		72.7		NR		11.5	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
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% SOLID																	
	SAMPLE ID ------->	041-W-52A1-01		041-M-52D1-01		041-M-52E1-01		041-M-52E2-01		041-M-52E3-01		041-W-52E3-01	
	ORIGINAL ID ----->	041W52A101		041M52D101		041M52E101		041M52E201		041M52E301		041W52E301	
	LAB SAMPLE ID --->	960055-06		960055-02		960055-03		960055-04		960055-08		960055-07	
	ID FROM REPORT -->	041W52A101		041M52D101		041M52E101		041M52E201		041M52E301		041W52E301	
	SAMPLE DATE ----->	01/23/96		01/23/96		01/23/96		01/23/96		01/24/96		01/23/96	
	DATE EXTRACTED -->	02/09/96		02/09/96		02/09/96		02/09/96		02/09/96		02/09/96	
	DATE ANALYZED --->	02/14/96		02/14/96		02/14/96		02/14/96		02/14/96		02/14/96	
	MATRIX ---------->	Water		Sediment		Sediment		Sediment		Sediment		Water	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL
9999000-58-8	SOLIDS	NR		46.7		53.4		12.2		69.7		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
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% SOLID													
	SAMPLE ID ------->	041-M-56A1-01		041-W-56A1-01		041-M-5701-01		041-W-5701-01		041-M-5801-01		041-W-5801-01	
	ORIGINAL ID ----->	041M56A101		041W56A101		041M570101		041W570101		041M580101		041W580101	
	LAB SAMPLE ID --->	960055-09		960055-20		950991-11		950991-15		960055-10		960055-21	
	ID FROM REPORT -->	041M56A101		041W56A101		041M570101		041W570101		041M580101		041W580101	
	SAMPLE DATE ----->	01/24/96		01/24/96		11/29/95		11/29/95		01/24/96		01/24/96	
	DATE EXTRACTED -->	02/09/96		02/09/96		01/10/96		01/10/96		02/09/96		02/09/96	
	DATE ANALYZED --->	02/14/96		02/14/96		01/11/96		01/11/96		02/14/96		02/14/96	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	Z30301	VAL	Z30301	VAL	M52A10	VAL	M52A10	VAL
9999000-58-8	SOLIDS	66.1		NR		50.8		NR		68.9		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
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% SOLID							
SAMPLE ID ------->	041-M-5A01-01	041-W-5A01-01	041-M-5A02-01	041-W-5A02-01	041-M-5A03-01	041-M-5A04-01
ORIGINAL ID ----->	041M5A0101	041W5A0101	041M5A0201	041W5A0201	041M5A0301	041M5A0401
LAB SAMPLE ID --->	950950-01	950950-07	950950-02	950950-08	950950-03	950950-04
ID FROM REPORT -->	041M5A0101	041W5A0101	041M5A0201	041W5A0201	041M5A0301	041M5A0401
SAMPLE DATE ----->	11/16/95	11/16/95	11/16/95	11/16/95	11/16/95	11/16/95
DATE EXTRACTED -->	12/20/95	12/20/95	12/20/95	12/20/95	12/20/95	12/20/95
DATE ANALYZED --->	12/27/95	12/27/95	12/27/95	12/27/95	12/27/95	12/27/95
MATRIX ---------->	Sediment	Water	Sediment	Water	Sediment	Sediment
UNITS ---------->	%	%	%	%	%	%

CAS #	Parameter	5A0101	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL
9999000-58-8	SOLIDS	16.2		NR		26.5		NR		26.9		11.6	

*** Validation Complete ***

% SOLID													
		SAMPLE ID ------->	041-W-5A04-01		041-M-5A05-01		041-W-5A05-01		041-M-5A06-01		041-W-5A06-01		041-M-5A07-01
		ORIGINAL ID ----->	041W5A0401		041M5A0501		041W5A0501		041M5A0601		041W5A0601		041M5A0701
		LAB SAMPLE ID --->	950950-09		950979-03		950979-06		950952-07		950952-14		950950-05
		ID FROM REPORT -->	041W5A0401		041M5A0501		041W5A0501		041M5A0601		041W5A0601		041M5A0701
		SAMPLE DATE ----->	11/16/95		11/27/95		11/27/95		11/17/95		11/17/95		11/16/95
		DATE EXTRACTED -->	12/20/95		01/04/96		01/04/96		12/27/95		12/27/96		12/20/95
		DATE ANALYZED --->	12/27/95		01/05/96		01/05/96		12/27/95		12/27/95		12/27/95
		MATRIX ---------->	Water		Sediment		Water		Sediment		Water		Sediment
		UNITS ---------->	%		%		%		%		%		%
CAS #	Parameter		5A0101	VAL	041M10	VAL	041M10	VAL	Z42101	VAL	Z42101	VAL	5A0101	VAL
9999000-58-8	SOLIDS		NR		18.7		NR		70.1		NR		83.2	

*** Validation Complete ***

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PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID													
	SAMPLE ID ------->	041-W-5A07-01		041-M-5B01-01		041-M-5B02-01		041-W-5B02-01		041-M-63A1-01		041-M-63A2-01	
	ORIGINAL ID ----->	041W5A0701		041M5B0101		041M5B0201		041W5B0201		041M63A101		041M63A201	
	LAB SAMPLE ID --->	950950-10		950952-08		950952-09		950952-15		960025-18		960025-19	
	ID FROM REPORT -->	041W5A0701		041M5B0101		041M5B0201		041W5B0201		041M63A101		041M63A201	
	SAMPLE DATE ----->	11/16/95		11/17/95		11/17/95		11/17/95		01/18/96		01/18/96	
	DATE EXTRACTED -->	12/20/95		12/27/95		12/27/95		12/27/96		02/03/96		02/03/96	
	DATE ANALYZED --->	12/27/95		12/27/95		12/27/95		12/27/95		02/05/96		02/05/96	
	MATRIX ---------->	Water		Sediment		Sediment		Water		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	5A0101	VAL	Z42101	VAL	Z42101	VAL	Z42101	VAL	EM005	VAL	EM005	VAL
9999000-58-8	SOLIDS	NR		72.7		13.4		NR		82.2		78.9	

*** Validation Complete ***

PENSACOLA, SITE 41
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% SOLID							
	SAMPLE ID ------->	041-W-63A2-01	041-M-63A3-01	041-M-63A3-01	041-M-63A4-01	041-M-63A5-01	041-M-63B1-01
	ORIGINAL ID ----->	041W63A201	041M63A301	041M63A301	041M63A401	041M63A501	041M63B101
	LAB SAMPLE ID --->	960039-07	960025-20	960182-04	960039-01	960039-02	960039-03
	ID FROM REPORT -->	041W63A201	041M63A301	041M63A301	041M63A401	041M63A501	041M63B101
	SAMPLE DATE ----->	01/18/96	01/18/96	01/18/96	01/18/96	01/18/96	01/18/96
	DATE EXTRACTED -->	02/03/96	02/03/96	03/22/96	02/03/96	02/03/96	02/03/96
	DATE ANALYZED --->	02/05/96	02/05/96	04/11/96	02/05/96	02/05/96	02/05/96
	MATRIX ---------->	Water	Sediment	Sediment	Sediment	Sediment	Sediment
	UNITS ---------->	%	%	%	%	%	%
CAS #	Parameter	63A401 VAL	EM005 VAL	Z13601 VAL	63A401 VAL	63A401 VAL	63A401 VAL
9999000-58-8	SOLIDS	NR	57.6	55.4	72.6	81.8	69.

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
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% SOLID							
SAMPLE ID ------->	041-M-63B2-01	041-W-63B2-01	041-M-63B3-01	041-M-63B4-01	041-W-63B4-01	041-M-6401-01
ORIGINAL ID ----->	041M63B201	041W63B201	041M63B301	041M63B401	041W63B401	041M640101
LAB SAMPLE ID --->	960039-04	960039-08	960039-05	960055-11	960055-17	960087-05
ID FROM REPORT -->	041M63B2D1	041W63B201	041M63B301	041M63B401	041W63B401	041M640101
SAMPLE DATE ----->	01/18/96	01/18/96	01/18/96	01/24/96	01/24/96	02/09/96
DATE EXTRACTED -->	02/03/96	02/03/96	02/03/96	02/09/96	02/09/96	03/02/96
DATE ANALYZED --->	02/05/96	02/05/96	02/05/96	02/14/96	02/14/96	03/03/96
MATRIX ---------->	Sediment	Water	Sediment	Sediment	Water	Sediment
UNITS ---------->	%	%	%	%	%	%

CAS #	Parameter	63A401	VAL	63A401	VAL	63A401	VAL	M52A10	VAL	M52A10	VAL	640801	VAL
9999000-58-8	SOLIDS	69.7		NR		76.4		75.7		NR		71.8	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

% SOLID													
	SAMPLE ID ------->	041-M-6402-01		041-M-6403-01		041-M-6404-01		041-M-6405-01		041-M-6406-01		041-M-6407-01	
	ORIGINAL ID ----->	041M640201		041M640301		041M640401		041M640501		041M640601		041M640701	
	LAB SAMPLE ID --->	950941-12		950941-13		960087-06		950941-14		950941-15		950941-16	
	ID FROM REPORT -->	041M640201		041M640301		041M640401		041M640501		041M640601		041M640701	
	SAMPLE DATE ----->	11/15/95		11/15/95		02/09/96		11/15/95		11/15/95		11/15/95	
	DATE EXTRACTED -->	12/19/95		12/19/95		03/02/96		12/19/95		12/19/95		12/19/95	
	DATE ANALYZED --->	12/20/95		12/20/95		03/03/96		12/20/95		12/20/95		12/20/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	M06010	VAL	M06010	VAL	640801	VAL	M06010	VAL	M06010	VAL	M06010	VAL
9999000-58-8	SOLIDS	60.7		12.8		11.6		19.		56.3		76.	

*** Validation Complete ***

PENSACOLA, SITE 41
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PHASE IIA

% SOLID													
	SAMPLE ID ------->	041-M-6408-01		041-M-6409-01		041-M-6410-01		041-M-6411-01		041-M-6412-01		041-M-6413-01	
	ORIGINAL ID ----->	041M640801		041M640901		041M641001		041M641101		041M641201		041M641301	
	LAB SAMPLE ID --->	960087-01		950941-17		950950-11		950950-12		950941-18		950950-13	
	ID FROM REPORT -->	041M640801		041M640901		041M641001		041M641101		041M641201		041M641301	
	SAMPLE DATE ----->	02/01/96		11/15/95		11/16/95		11/16/95		11/15/95		11/16/95	
	DATE EXTRACTED -->	03/02/96		12/19/95		12/20/95		12/20/95		12/19/95		12/20/95	
	DATE ANALYZED --->	03/03/96		12/20/95		12/27/95		12/27/95		12/20/95		12/27/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	640801	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL	M06010	VAL	5A0101	VAL
9999000-58-8	SOLIDS	73.		79.9		16.4		25.4		80.1		16.3	

*** Validation Complete ***

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% SOLID							
SAMPLE ID ------->	041-M-6414-01	041-M-6414-01	041-M-6415-01	041-M-6415-01	041-M-6416-01	041-M-6417-01
ORIGINAL ID ----->	041M641401	041M641401	041M641501	041M641501	041M641601	041M641701
LAB SAMPLE ID --->	950950-14	960183-06	950941-19	960183-07	950950-15	950950-16
ID FROM REPORT -->	041M641401	041M641401	041M641501	041M641501	041M641601	041M641701
SAMPLE DATE ----->	11/16/95	11/16/95	11/15/95	11/15/95	11/16/95	11/16/95
DATE EXTRACTED -->	12/20/95	03/27/96	12/19/95	03/27/96	12/20/95	12/20/95
DATE ANALYZED --->	12/27/95	04/11/96	12/26/95	04/11/96	12/27/95	12/27/95
MATRIX ---------->	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
UNITS ---------->	%	%	%	%	%	%

CAS #	Parameter	5A0101	VAL	Z30201	VAL	M06010	VAL	Z30201	VAL	5A0101	VAL	5A0101	VAL
9999000-58-8	SOLIDS	15.6		29.5		75.4		79.4		17.9		54.9	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
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% SOLID													
	SAMPLE ID ------->	041-M-6418-01		041-M-6419-01		041-M-6420-01		041-M-6421-01		041-M-6422-01		041-M-6423-01	
	ORIGINAL ID ----->	041M641801		041M641901		041M642001		041M642101		041M642201		041M642301	
	LAB SAMPLE ID --->	960087-04		960087-02		950950-17		950950-18		950952-10		950952-11	
	ID FROM REPORT -->	041M641801		041M641901		041M642001		041M642101		041M642201		041M642301	
	SAMPLE DATE ----->	02/06/96		02/01/96		11/16/95		11/16/95		11/17/95		11/17/95	
	DATE EXTRACTED -->	03/02/96		03/02/96		12/20/95		12/20/95		12/27/95		12/27/95	
	DATE ANALYZED --->	03/03/96		03/03/96		12/27/95		12/27/95		12/27/95		12/27/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	640801	VAL	640801	VAL	5A0101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL
9999000-58-8	SOLIDS	79.5		15.8		78.9		73.4		41.1		69.7	

*** Validation Complete ***

PENSACOLA, SITE 41
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% SOLID													
	SAMPLE ID ------->	041-M-6424-01		041-M-7201-01		041-W-7201-01		041-M-7202-01		041-M-7901-01		041-M-7903-01	
	ORIGINAL ID ----->	041M642401		041M720101		041W720101		041MZ20201		041M790101		041M790301	
	LAB SAMPLE ID --->	950952-12		950991-12		950991-09		950991-13		960064-04		960064-05	
	ID FROM REPORT -->	041M642401		041M720101		041W720101		041MZ20201		041M790101		041M790301	
	SAMPLE DATE ----->	11/17/95		11/29/95		11/29/95		11/29/95		01/26/96		01/26/96	
	DATE EXTRACTED -->	12/27/95		01/10/96		01/10/96		01/10/96		02/19/96		02/19/96	
	DATE ANALYZED --->	12/27/95		01/11/96		01/11/96		01/11/96		02/19/96		02/19/96	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	Z42101	VAL	Z30301	VAL	Z30301	VAL	Z30301	VAL	EM0060	VAL	EM0060	VAL
9999000-58-8	SOLIDS	73.2		73.8		NR		78.5		36.4		74.4	

*** Validation Complete ***

% SOLID													
		SAMPLE ID ------->	041-W-W101-01		041-W-W102-01		041-W-W103-01		041-M-W201-01		041-M-W202-01		041-W-W202-01
		ORIGINAL ID ----->	041WW10101		041WW10201		041WW10301		041MW20101		041MW20201		041WW20201
		LAB SAMPLE ID --->	960043-17		960043-18		960043-19		960055-14		960055-15		960055-18
		ID FROM REPORT -->	041WW10101		041WW10201		041WW10301		041MW20101		041MW20201		041WW20201
		SAMPLE DATE ----->	01/22/96		01/22/96		01/22/96		01/24/96		01/24/96		01/24/96
		DATE EXTRACTED -->	02/06/96		02/06/96		02/06/96		02/09/96		02/09/96		02/09/96
		DATE ANALYZED --->	02/07/96		02/07/96		02/07/96		02/14/96		02/14/96		02/14/96
		MATRIX ---------->	Water		Water		Water		Sediment		Sediment		Water
		UNITS ---------->	%		%		%		%		%		%
CAS #	Parameter		M00901	VAL	M00901	VAL	M00901	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL
9999000-58-8	SOLIDS		NR		NR		NR		69.3		71.5		NR

*** Validation Complete ***

% SOLID							
	SAMPLE ID ------->	041-M-W203-01					
	ORIGINAL ID ----->	041MW20301					
	LAB SAMPLE ID --->	960055-16					
	ID FROM REPORT -->	041MW20301					
	SAMPLE DATE ----->	01/24/96					
	DATE EXTRACTED -->	02/09/96					
	DATE ANALYZED --->	02/14/96					
	MATRIX ---------->	Sediment					
	UNITS ---------->	%					
CAS #	Parameter	M52A10	VAL				
9999000-58-8	SOLIDS	17.					

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-0101-01		041-M-0102-01		041-M-0103-01		041-M-0104-01		041-M-0301-01		041-M-0302-01	
	ORIGINAL ID ----->	041M010101		041M010201		041M010301		041M010401		041M030101		041M030201	
	LAB SAMPLE ID --->	GTX-961-06		GTX-961-07		GTX-961-08		GTX-961-09		GTX-935-01		GTX-935-02	
	ID FROM REPORT -->	041M010101		041M010201		041M010301		041M010401		041M030101		041M030201	
	SAMPLE DATE ----->	01/17/96		01/17/96		01/18/96		01/17/96					
	DATE ANALYZED --->	01/24/95		01/24/96		01/24/96		01/24/96		12/07/95		12/07/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	63A401	VAL	63A401	VAL	63A401	VAL	63A401	VAL	EM0040	VAL	EM0040	VAL
9999900-32-7	Seive Size #10	100.	NA	98.	NA	99.	SP	100.	NA	91.	NA	100.	NA
9999900-32-8	Seive Size #20	100.	NA	91.	NA	98.	SP	100.	NA	89.	NA	100.	NA
9999900-32-9	Seive Size #40	95.	NA	85.	NA	81.	SP	92.	NA	79.	NA	94.	NA
9999900-33-1	Seive Size #100	24.	NA	55.	NA	6.	SP	24.	NA	19.	NA	84.	NA
9999900-33-0	Seive Size #60	56.	NA	67.	NA	26.	SP	48.	NA	45.	NA	89.	NA
9999900-33-2	Seive Size #200	24.	NA	53.	NA	3.	SP	18.	NA	8.	NA	83.	NA
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	SP	0.	NA	0.	NA	0.	NA
9999900-32-5	Seive Size 0.375"	NR		100.	NA	NR		NR		100.	NA	NR	
9999900-32-6	Seive Size #4	NR		99.	NA	100.	SP	NR		94.	NA	NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-0303-01		041-M-0304-01		041-M-0304-01		041-M-0305-01		041-M-0305-01		041-M-0306-01	
	ORIGINAL ID ----->	041M030301		041M030401		041M030401		041M030501		041M030501		041M030601	
	LAB SAMPLE ID --->	GTX-936-01		GTX-936-02		GTX-1021-19		GTX-936-03		GTX-1021-20		GTX-936-04	
	ID FROM REPORT -->	041M030301		041M030401		041M030401		041M030501		041M030501		041M030601	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	12/11/95		12/11/95		04/19/96		12/11/95		04/19/96		12/11/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	030301	VAL	030301	VAL	Z13601	VAL	030301	VAL	Z13601	VAL	030301	VAL
9999900-32-7	Seive Size #10	100.	NA	100.	NA	100.	SP	100.	NA	100.	NA	100.	NA
9999900-32-8	Seive Size #20	99.	NA	99.	NA	99.	SP	71.	NA	94.	NA	99.	NA
9999900-32-9	Seive Size #40	71.	NA	70.	NA	80.	SP	54.	NA	80.	NA	68.	NA
9999900-33-1	Seive Size #100	13.	NA	5.	NA	3.	SP	38.	NA	62.	NA	6.	NA
9999900-33-0	Seive Size #60	23.	NA	12.	NA	17.	SP	45.	NA	70.	NA	16.	NA
9999900-33-2	Seive Size #200	12.	NA	5.	NA	2.	SP	31.	NA	56.	NA	5.	NA
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	SP	0.	NA	0.	NA	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		NR	
9999900-32-6	Seive Size #4	NR		NR		NR		NR		NR		NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-0307-01		041-M-0401-01		041-M-0402-01		041-M-0403-01		041-M-0404-01		041-M-0405-01	
	ORIGINAL ID ----->	041M030701		041M040401		041M040201		041M040301		041M040401		041M040501	
	LAB SAMPLE ID --->	GTX-936-05		GTX-936-06		GTX-936-07		GTX-936-08		GTX-936-09		GTX-936-10	
	ID FROM REPORT -->	041M030701		041M040401		041M040201		041M040301		041M040401		041M040501	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	12/11/95		12/11/95		12/11/95		12/11/95		12/11/95		12/11/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL
9999900-32-7	Seive Size #10	79.	NA	100.	NA	100.	NA	100.	SP	100.	NA	63.	SP
9999900-32-8	Seive Size #20	51.	NA	95.	NA	98.	NA	99.	SP	97.	NA	62.	SP
9999900-32-9	Seive Size #40	41.	NA	80.	NA	78.	NA	63.	SP	84.	NA	49.	SP
9999900-33-1	Seive Size #100	27.	NA	35.	NA	37.	NA	3.	SP	34.	NA	1.	SP
9999900-33-0	Seive Size #60	33.	NA	56.	NA	58.	NA	21.	SP	55.	NA	13.	SP
9999900-33-2	Seive Size #200	22.	NA	28.	NA	32.	NA	1.	SP	30.	NA	1.	SP
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	NA	0.	SP	0.	NA	0.	SP
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		100.	SP
9999900-32-6	Seive Size #4	100.	NA	NR		NR		100.	SP	NR		63.	SP
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
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PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-04D2-01		041-M-0601-01		041-M-0602-01		041-M-0603-01		041-M-0604-01		041-M-0605-01	
	ORIGINAL ID ----->	041M04D201		041M060101		041M060201		041M060301		041M060401		041M060501	
	LAB SAMPLE ID --->	GTX-1021-18		GTX-921-01		GTX-921-02		GTX-921-03		GTX-921-04		GTX-922-14	
	ID FROM REPORT -->	041M04D201		041M060101		041M060201		041M060301		041M060401		041M060501	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	04/19/96		11/22/95		11/22/95		11/22/95		11/22/95		11/21/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	Z13601	VAL	M06010	VAL	M06010	VAL	M06010	VAL	M06010	VAL	EA0101	VAL
9999900-32-7	Seive Size #10	100.	NA	92.	SP	81.	SP	96.	SP	100.	SP	100.	SP
9999900-32-8	Seive Size #20	99.	NA	84.	SP	72.	SP	93.	SP	99.	SP	95.	SP
9999900-32-9	Seive Size #40	97.	NA	57.	SP	41.	SP	73.	SP	75.	SP	71.	SP
9999900-33-1	Seive Size #100	64.	NA	4.	SP	3.	SP	15.	SP	1.	SP	9.	SP
9999900-33-0	Seive Size #60	86.	NA	16.	SP	9.	SP	24.	SP	11.	SP	32.	SP
9999900-33-2	Seive Size #200	60.	NA	2.	SP	2.	SP	3.	SP	1.	SP	4.	SP
9999900-33-3	Seive Size Pan	0.	NA	0.	SP	0.	SP	0.	SP	0.	SP	0.	SP
9999900-32-5	Seive Size 0.375"	NR		100.	SP	100.	SP	NR		NR		NR	
9999900-32-6	Seive Size #4	100.	NA	96.	SP	86.	SP	100.	SP	NR		100.	SP
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-0606-01		041-M-0607-01		041-M-0608-01		041-M-0609-01		041-M-0611-01		041-M-10A1-01	
	ORIGINAL ID ----->	041M060601		041M060701		041M060801		041M060901		041M061101		041M10A101	
	LAB SAMPLE ID --->	GTX-922-15		GTX-920-01		GTX-920-02		GTX-920-03		GTX-922-17		GTX-1022-04	
	ID FROM REPORT -->	041M060601		041M060701		041M060801		041M060901		041M061101		041M10A101	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	11/21/95		11/20/95		11/20/95		11/20/95		11/21/95		04/18/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EA0101	VAL	M06070	VAL	M06070	VAL	M06070	VAL	EA0101	VAL	Z30201	VAL
9999900-32-7	Seive Size #10	98.	SP	93.	SP	98.	SP	100.	SP	100.	SP	100.	NA
9999900-32-8	Seive Size #20	97.	SP	87.	SP	95.	SP	100.	SP	99.	SP	99.	NA
9999900-32-9	Seive Size #40	66.	SP	68.	SP	73.	SP	72.	SP	71.	SP	86.	NA
9999900-33-1	Seive Size #100	6.	SP	8.	SP	2.	SP	2.	SP	2.	SP	11.	NA
9999900-33-0	Seive Size #60	18.	SP	17.	SP	16.	SP	10.	SP	9.	SP	37.	NA
9999900-33-2	Seive Size #200	4.	SP	4.	SP	1.	SP	1.	SP	2.	SP	7.	NA
9999900-33-3	Seive Size Pan	0.	SP	0.	SP	0.	SP	0.	SP	0.	SP	0.	NA
9999900-32-5	Seive Size 0.375"	100.	SP	NR		100.	SP	NR		NR		NR	
9999900-32-6	Seive Size #4	99.	SP	100.	SP	98.	SP	NR		NR		100.	NA
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-10A1-01		041-M-10A2-01		041-M-10A3-01		041-M-10A4-01		041-M-10A5-01		041-M-10A6-01	
	ORIGINAL ID ----->	041M10A101		041M10A201		041M10A301		041M10A401		041M10A501		041M10A601	
	LAB SAMPLE ID --->	GTX-928-03		GTX-928-01		GTX-927-01		GTX-935-04		GTX-935-05		GTX-935-06	
	ID FROM REPORT -->	041M10A101		041M10A201		041M10A301		041M10A401		041M10A501		041M10A601	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	12/01/95		12/01/95		11/27/95		12/07/95		12/07/95		12/07/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	Z53301	VAL	Z53301	VAL	041M10	VAL	EM0040	VAL	EM0040	VAL	EM0040	VAL
9999900-32-7	Seive Size #10	99.	NA	98.	SP	99.	SP	98.	SP	99.	SP	100.	SP
9999900-32-8	Seive Size #20	98.	NA	97.	SP	97.	SP	95.	SP	97.	SP	99.	SP
9999900-32-9	Seive Size #40	83.	NA	82.	SP	73.	SP	70.	SP	70.	SP	65.	SP
9999900-33-1	Seive Size #100	9.	NA	8.	SP	10.	SP	5.	SP	6.	SP	1.	SP
9999900-33-0	Seive Size #60	35.	NA	33.	SP	26.	SP	19.	SP	20.	SP	12.	SP
9999900-33-2	Seive Size #200	5.	NA	5.	SP	5.	SP	3.	SP	3.	SP	1.	SP
9999900-33-3	Seive Size Pan	0.	NA	0.	SP	0.	SP	0.	SP	0.	SP	0.	SP
9999900-32-5	Seive Size 0.375"	NR		100.	SP	NR		NR		NR		NR	
9999900-32-6	Seive Size #4	100.	NA	99.	SP	100.	SP	100.	SP	100.	SP	100.	SP
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-10B1-01		041-M-1201-01		041-M-1202-01		041-M-1301-01		041-M-1501-01		041-M-1502-01	
	ORIGINAL ID ----->	041M10B101		041M120101		041M120201		041M130101		041M150101		041M150201	
	LAB SAMPLE ID --->	GTX-935-07		GTX-928-02		GTX-929-01		GTX-927-02		GTX-938-01		GTX-938-02	
	ID FROM REPORT -->	041M10B101		041M120101		041M120201		041M130101		041M150101		041M150201	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	12/07/95		12/01/95		12/04/95		11/27/95		12/12/95		12/12/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EM0040	VAL	Z53301	VAL	Z30301	VAL	041M10	VAL	EM0050	VAL	EM0050	VAL
9999900-32-7	Seive Size #10	100.	NA	99.	SP	100.	NA	100.	NA	100.	NA	100.	NA
9999900-32-8	Seive Size #20	98.	NA	97.	SP	99.	NA	99.	NA	96.	NA	99.	NA
9999900-32-9	Seive Size #40	53.	NA	74.	SP	77.	NA	77.	NA	87.	NA	95.	NA
9999900-33-1	Seive Size #100	9.	NA	3.	SP	12.	NA	12.	NA	78.	NA	91.	NA
9999900-33-0	Seive Size #60	15.	NA	18.	SP	24.	NA	26.	NA	81.	NA	92.	NA
9999900-33-2	Seive Size #200	8.	NA	2.	U	11.	NA	12.	NA	77.	NA	90.	NA
9999900-33-3	Seive Size Pan	0.	NA	0.	SP	0.	NA	0.	NA	0.	NA	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		NR	
9999900-32-6	Seive Size #4	NR		100.	SP	NR		100.	NA	NR		NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-1503-01		041-M-1504-01		041-M-1601-01		041-M-1602-01		041-M-1602-01		041-M-1603-01	
	ORIGINAL ID ----->	041M150301		041M150401		041M160101		041M160201		041M160201		041M160301	
	LAB SAMPLE ID --->	GTX-938-03		GTX-938-04		GTX-939-01		GTX-939-02		GTX-1021-17		GTX-939-03	
	ID FROM REPORT -->	041M150301		041M150401		041M160101		041M160201		041M160201		041M160301	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	12/12/95		12/12/95		12/14/95		12/14/95		04/19/96		12/14/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EM0050	VAL	EM0050	VAL	EW0010	VAL	EW0010	VAL	Z13601	VAL	EW0010	VAL
9999900-32-7	Seive Size #10	100.	NA	100.	NA	100.	SP	100.	NA	100.	NA	100.	NA
9999900-32-8	Seive Size #20	90.	NA	99.	NA	99.	SP	99.	NA	98.	NA	100.	NA
9999900-32-9	Seive Size #40	85.	NA	86.	NA	66.	SP	73.	NA	83.	NA	96.	NA
9999900-33-1	Seive Size #100	83.	NA	41.	NA	2.	SP	14.	NA	17.	NA	57.	NA
9999900-33-0	Seive Size #60	84.	NA	56.	NA	12.	SP	28.	NA	40.	NA	74.	NA
9999900-33-2	Seive Size #200	82.	NA	39.	NA	2.	SP	13.	NA	16.	NA	55.	NA
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	SP	0.	NA	0.	NA	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		NR	
9999900-32-6	Seive Size #4	NR		100.	NA	100.	SP	NR		NR		NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-1701-01		041-M-1702-01		041-M-1703-01		041-M-18A1-01		041-M-18A2-01		041-M-18A3-01	
	ORIGINAL ID ----->	041M170101		041M170201		041M170301		041M18A101		041M18A201		041M18A301	
	LAB SAMPLE ID --->	GTX-955-01		GTX-955-02		GTX-955-03		GTX-945-03		GTX-945-04		GTX-945-01	
	ID FROM REPORT -->	041M170101		041M170201		041M170301		041M18A101		041M18A201		041M18A301	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	01/19/96		01/19/96		01/19/96		12/20/95		12/20/95		12/20/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EM005	VAL	EM005	VAL	EM005	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL
9999900-32-7	Seive Size #10	100.	SP	100.	SP	100.	SP	100.	NA	100.	NA	100.	NA
9999900-32-8	Seive Size #20	100.	SP	100.	SP	100.	SP	90.	NA	98.	NA	99.	NA
9999900-32-9	Seive Size #40	80.	SP	83.	SP	82.	SP	78.	NA	97.	NA	98.	NA
9999900-33-1	Seive Size #100	4.	SP	4.	SP	5.	SP	58.	NA	24.	NA	96.	NA
9999900-33-0	Seive Size #60	33.	SP	38.	SP	37.	SP	60.	NA	61.	NA	97.	NA
9999900-33-2	Seive Size #200	3.	SP	2.	SP	3.	SP	53.	NA	6.	NA	96.	NA
9999900-33-3	Seive Size Pan	0.	SP	0.	SP	0.	SP	0.	NA	0.	NA	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		NR	
9999900-32-6	Seive Size #4	NR		NR		NR		NR		NR		NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-18B1-01		041-M-19A1-01		041-M-19A2-01		041-M-19B1-01		041-M-2501-01		041-M-2502-01	
	ORIGINAL ID ----->	041M18B101		041M19A101		041M19A201		041M19B101		041M250101		041M250101	
	LAB SAMPLE ID --->	GTX-945-02		GTX-955-04		GTX-955-05		GTX-955-06		GTX-921-05		GTX-921-06	
	ID FROM REPORT -->	041M18B101		041M19A101		041M19A201		041M19B101		041M250101		041M250101	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	12/20/95		01/19/96		01/19/96		01/19/96		11/22/95		11/22/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EM0060	VAL	EM005	VAL	EM005	VAL	EM005	VAL	M06010	VAL	M06010	VAL
9999900-32-7	Seive Size #10	100.	NA	NR		100.	SP	100.	SP	100.	NA	100.	NA
9999900-32-8	Seive Size #20	100.	NA	100.	NA	99.	SP	99.	SP	98.	NA	100.	NA
9999900-32-9	Seive Size #40	94.	NA	98.	NA	63.	SP	83.	SP	85.	NA	95.	NA
9999900-33-1	Seive Size #100	61.	NA	89.	NA	1.	SP	8.	SP	64.	NA	72.	NA
9999900-33-0	Seive Size #60	76.	NA	91.	NA	10.	SP	31.	SP	69.	NA	83.	NA
9999900-33-2	Seive Size #200	58.	NA	88.	NA	1.	SP	4.	SP	63.	NA	70.	NA
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	SP	0.	SP	0.	NA	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		NR	
9999900-32-6	Seive Size #4	NR		NR		NR		NR		NR		NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

GRAIN SIZE													
	SAMPLE ID ------->	041-M-2503-01		041-M-2701-01		041-M-3201-01		041-M-3202-01		041-M-3203-01		041-M-3301-01	
	ORIGINAL ID ----->	041M250301		041M270101		041M320101		041M320201		041M320301		041M330101	
	LAB SAMPLE ID --->	GTX-921-07		GTX-921-08		GTX-920-04		GTX-920-05		GTX-920-06		GTX-920-07	
	ID FROM REPORT -->	041M250301		041M270101		041M320101		041M320201		041M320301		041M330101	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	11/22/95		11/22/95		11/20/95		11/20/95		11/20/95		11/20/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	M06010	VAL	M06010	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
9999900-32-7	Seive Size #10	100.	NA	100.	NA	100.	NA	100.	NA	100.	NA	98.	NA
9999900-32-8	Seive Size #20	98.	NA	99.	NA	99.	NA	96.	NA	97.	NA	96.	NA
9999900-32-9	Seive Size #40	94.	NA	80.	NA	89.	NA	82.	NA	86.	NA	74.	NA
9999900-33-1	Seive Size #100	79.	NA	25.	NA	74.	NA	65.	NA	66.	NA	6.	NA
9999900-33-0	Seive Size #60	88.	NA	38.	NA	80.	NA	72.	NA	75.	NA	20.	NA
9999900-33-2	Seive Size #200	76.	NA	24.	NA	68.	NA	61.	NA	61.	NA	6.	NA
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	NA	0.	NA	0.	NA	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		100.	NA
9999900-32-6	Seive Size #4	NR		100.	NA	NR		NR		NR		100.	NA
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-3302-01		041-M-3302-01		041-M-3303-01		041-M-36A3-01		041-M-4801-01		041-M-4901-01	
	ORIGINAL ID ----->	041M330201		041M330201		041M330301		041M36A301		041M480101		041M490101	
	LAB SAMPLE ID --->	GTX-920-08		GTX-1022-09		GTX-920-09		GTX-1021-04		GTX-962-04		GTX-955-07	
	ID FROM REPORT -->	041M330201		041M330201		041M330301		041M36A301		041M480101		041M490101	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	11/20/95		04/18/96		11/20/95		04/19/96		01/24/96		01/19/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	M06070	VAL	Z30201	VAL	M06070	VAL	Z13601	VAL	M00901	VAL	EM005	VAL
9999900-32-7	Seive Size #10	100.	NA	100.	NA	100.	SP	100.	NA	100.	NA	100.	NA
9999900-32-8	Seive Size #20	99.	NA	97.	NA	99.	SP	98.	NA	98.	NA	97.	NA
9999900-32-9	Seive Size #40	77.	NA	79.	NA	62.	SP	62.	NA	69.	NA	69.	NA
9999900-33-1	Seive Size #100	32.	NA	11.	NA	2.	SP	26.	NA	10.	NA	11.	NA
9999900-33-0	Seive Size #60	36.	NA	24.	NA	8.	SP	29.	NA	25.	NA	19.	NA
9999900-33-2	Seive Size #200	31.	NA	11.	NA	1.	SP	25.	NA	10.	NA	11.	NA
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	SP	0.	NA	0.	NA	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		NR	
9999900-32-6	Seive Size #4	NR		NR		NR		NR		NR		NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
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PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-4902-01		041-M-4903-01		041-M-5203-01		041-M-52A1-01		041-M-52D1-01		041-M-52E1-01	
	ORIGINAL ID ----->	041M490201		041M490301		041M520301		041M52A101		041M52D101		041M52E101	
	LAB SAMPLE ID --->	GTX-955-08		GTX-955-09		GTX-1022-08		GTX-964-01		GTX-964		GTX-964-03	
	ID FROM REPORT -->	041M490201		041M490301		041M520301		041M52A101		041M52D101		041M52E101	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	01/19/96		01/19/96		04/18/96		01/25/96		01/25/96		01/25/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EM005	VAL	EM005	VAL	Z30201	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL
9999900-32-7	Seive Size #10	100.	NA	100.	NA	100.	NA	100.	NA	100.	NA	100.	NA
9999900-32-8	Seive Size #20	99.	NA	98.	NA	96.	NA	94.	NA	98.	NA	100.	NA
9999900-32-9	Seive Size #40	74.	NA	73.	NA	88.	NA	90.	NA	89.	NA	88.	NA
9999900-33-1	Seive Size #100	17.	NA	8.	NA	71.	NA	86.	NA	18.	NA	12.	NA
9999900-33-0	Seive Size #60	27.	NA	17.	NA	77.	NA	87.	NA	46.	NA	33.	NA
9999900-33-2	Seive Size #200	17.	NA	7.	NA	65.	NA	85.	NA	17.	NA	11.	NA
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	NA	0.	NA	0.	NA	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		NR	
9999900-32-6	Seive Size #4	NR		100.	NA	NR		NR		NR		NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-52E2-01		041-M-52E3-01		041-M-56A1-01		041-M-5701-01		041-M-5801-01		041-M-5A01-01	
	ORIGINAL ID ----->	041M52E201		041M52E301		041M56A101		041M570101		041M580101		041M5A0101	
	LAB SAMPLE ID --->	GTX-964-04		GTX-969-04		GTX-969-05		GTX-929-02		GTX-969-06		GTX-922-01	
	ID FROM REPORT -->	041M52E201		041M52E301		041M56A101		041M570101		041M580101		041M5A0101	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	01/25/96		02/01/96		02/01/96		12/04/95		02/01/96		11/21/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	Z30301	VAL	M52A10	VAL	EA0101	VAL
9999900-32-7	Seive Size #10	100.	NA	100.	NA	100.	NA	100.	NA	100.	SP	94.	NA
9999900-32-8	Seive Size #20	99.	NA	98.	NA	100.	NA	99.	NA	99.	SP	90.	NA
9999900-32-9	Seive Size #40	89.	NA	79.	NA	87.	NA	85.	NA	63.	SP	73.	NA
9999900-33-1	Seive Size #100	24.	NA	8.	NA	11.	NA	11.	NA	2.	SP	33.	NA
9999900-33-0	Seive Size #60	53.	NA	26.	NA	29.	NA	22.	NA	5.	SP	50.	NA
9999900-33-2	Seive Size #200	23.	NA	8.	NA	10.	NA	11.	NA	2.	SP	21.	NA
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	NA	0.	NA	0.	SP	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		NR	
9999900-32-6	Seive Size #4	NR		100.	NA	NR		NR		100.	SP	100.	NA
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-5A02-01		041-M-5A03-01		041-M-5A04-01		041-M-5A05-01		041-M-5A06-01		041-M-5A07-01	
	ORIGINAL ID ----->	041M5A0201		041M5A0301		041M5A0401		041M5A0501		041M5A0601		041M5A0701	
	LAB SAMPLE ID --->	GTX-922-02		GTX-922-03		GTX-922-04		GTX-927-03		GTX-923-01		GTX-922-05	
	ID FROM REPORT -->	041M5A0201		041M5A0301		041M5A0401		041M5A0501		041M5A0601		041M5A0701	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	11/21/96		11/21/95		11/21/95		11/27/95		11/28/95		11/21/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EA0101	VAL	EA0101	VAL	EA0101	VAL	041M10	VAL	Z42101	VAL	EA0101	VAL
9999900-32-7	Seive Size #10	98.	SP	99.	NA	100.	NA	100.	NA	99.	SP	96.	SP
9999900-32-8	Seive Size #20	91.	SP	98.	NA	90.	NA	89.	NA	98.	SP	85.	SP
9999900-32-9	Seive Size #40	60.	SP	88.	NA	64.	NA	78.	NA	69.	SP	56.	SP
9999900-33-1	Seive Size #100	4.	SP	47.	NA	44.	NA	55.	NA	3.	SP	1.	SP
9999900-33-0	Seive Size #60	14.	SP	63.	NA	54.	NA	62.	NA	12.	SP	9.	SP
9999900-33-2	Seive Size #200	2.	SP	37.	NA	34.	NA	50.	NA	2.	SP	0.	SP
9999900-33-3	Seive Size Pan	0.	SP	0.	NA	0.	NA	0.	NA	0.	SP	0.	SP
9999900-32-5	Seive Size 0.375"	100.	SP	NR		NR		NR		NR		NR	
9999900-32-6	Seive Size #4	99.	SP	100.	NA	NR		100.	NA	100.	SP	100.	SP
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-5B01-01		041-M-5B02-01		041-M-63A1-01		041-M-63A2-01		041-M-63A3-01		041-M-63A4-01	
	ORIGINAL ID ----->	041M5B0101		041M5B0201		041M63A101		041M63A201		041M63A301		041M63A401	
	LAB SAMPLE ID --->	GTX-923-02		GTX-923-03		GTX-960-01		GTX-960-02		GTX-960-03		GTX-961-01	
	ID FROM REPORT -->	041M5B0101		041M5B0201		041M63A101		041M63A201		041M63A301		041M63A401	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	11/28/95		11/28/95		01/24/96		01/24/96		01/24/96		01/24/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	Z42101	VAL	Z42101	VAL	EM005	VAL	EM005	VAL	EM005	VAL	63A401	VAL
9999900-32-7	Seive Size #10	100.	SP	100.	NA	99.	SP	99.	SP	92.	SP	100.	NA
9999900-32-8	Seive Size #20	100.	SP	99.	NA	97.	SP	95.	SP	75.	SP	99.	NA
9999900-32-9	Seive Size #40	68.	SP	77.	NA	61.	SP	50.	SP	33.	SP	79.	NA
9999900-33-1	Seive Size #100	2.	SP	16.	NA	9.	SP	3.	SP	4.	SP	44.	NA
9999900-33-0	Seive Size #60	9.	SP	24.	NA	36.	SP	13.	SP	8.	SP	57.	NA
9999900-33-2	Seive Size #200	1.	SP	15.	NA	3.	SP	1.	SP	3.	SP	39.	NA
9999900-33-3	Seive Size Pan	0.	SP	0.	NA	0.	SP	0.	SP	0.	SP	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		NR	
9999900-32-6	Seive Size #4	100.	SP	NR		100.	SP	100.	SP	100.	SP	NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-63A5-01		041-M-63B1-01		041-M-63B2-01		041-M-63B3-01		041-M-63B4-01		041-M-6402-01	
	ORIGINAL ID ----->	041M63A501		041M63B101		041M63B201		041M63B301		041M63B401		041M640201	
	LAB SAMPLE ID --->	GTX-961-02		GTX-961-03		GTX-961-04		GTX-961-05		GTX-969-01		GTX-921-12	
	ID FROM REPORT -->	041M63A501		041M63B101		041M63B201		041M63B301		041M63B401		041M640201	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	01/24/96		01/24/96		01/24/96		01/24/96		02/01/96		11/22/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	63A401	VAL	63A401	VAL	63A401	VAL	63A401	VAL	M52A10	VAL	M06010	VAL
9999900-32-7	Seive Size #10	98.	SP	100.	NA	99.	SP	98.	SP	100.	SP	100.	NA
9999900-32-8	Seive Size #20	94.	SP	95.	NA	99.	SP	97.	SP	100.	SP	99.	NA
9999900-32-9	Seive Size #40	32.	SP	58.	NA	93.	SP	53.	SP	72.	SP	96.	NA
9999900-33-1	Seive Size #100	1.	SP	20.	NA	12.	SP	2.	SP	1.	SP	74.	NA
9999900-33-0	Seive Size #60	2.	SP	28.	NA	63.	SP	11.	SP	20.	SP	84.	NA
9999900-33-2	Seive Size #200	1.	SP	19.	NA	2.	SP	1.	SP	1.	SP	71.	NA
9999900-33-3	Seive Size Pan	0.	SP	0.	NA	0.	SP	0.	SP	0.	SP	0.	NA
9999900-32-5	Seive Size 0.375"	100.	SP	NR		NR		100.	SP	NR		NR	
9999900-32-6	Seive Size #4	99.	SP	NR		100.	SP	99.	SP	NR		NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
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PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-6403-01		041-M-6405-01		041-M-6406-01		041-M-6407-01		041-M-6409-01		041-M-6410-01	
	ORIGINAL ID ----->	041M640301		041M640501		041M640601		041M640701		041M640901		041M641001	
	LAB SAMPLE ID --->	GTX-921-13		GTX-921-14		GTX-921-15		GTX-921-16		GTX-921-17		GTX-922-06	
	ID FROM REPORT -->	041M640301		041M640501		041M640601		041M640701		041M640901		041M641001	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	11/22/95		11/22/95		11/22/95		11/22/95		11/22/95		11/21/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	M06010	VAL	M06010	VAL	M06010	VAL	M06010	VAL	M06010	VAL	EA0101	VAL
9999900-32-7	Seive Size #10	100.	NA	98.	NA	98.	NA	98.	SP	100.	SP	NR	
9999900-32-8	Seive Size #20	95.	NA	93.	NA	95.	NA	97.	SP	98.	SP	100.	NA
9999900-32-9	Seive Size #40	93.	NA	77.	NA	73.	NA	85.	SP	46.	SP	100.	NA
9999900-33-1	Seive Size #100	90.	NA	10.	NA	15.	NA	4.	SP	3.	SP	95.	NA
9999900-33-0	Seive Size #60	91.	NA	35.	NA	29.	NA	24.	SP	10.	SP	97.	NA
9999900-33-2	Seive Size #200	88.	NA	7.	NA	14.	NA	3.	SP	3.	SP	94.	NA
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	NA	0.	SP	0.	SP	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		NR		100.	SP	NR		NR	
9999900-32-6	Seive Size #4	NR		100.	NA	100.	NA	99.	SP	100.	SP	NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-6411-01		041-M-6412-01		041-M-6413-01		041-M-6414-01		041-M-6414-01		041-M-6415-01	
	ORIGINAL ID ----->	041M641101		041M641201		041M641301		041M641401		041M641401		041M641501	
	LAB SAMPLE ID --->	GTX-922-07		GTX-921-18		GTX-922-08		GTX-922-09		GTX-1022-06		GTX-1022-07	
	ID FROM REPORT -->	041M641101		041M641201		041M641301		041M641401		041M641401		041M641501	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	11/21/95		11/22/95		11/21/95		11/21/95		04/18/96		04/18/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EA0101	VAL	M06010	VAL	EA0101	VAL	EA0101	VAL	Z30201	VAL	Z30201	VAL
9999900-32-7	Seive Size #10	100.	NA	100.	SP	100.	NA	100.	NA	100.	NA	99.	SP
9999900-32-8	Seive Size #20	99.	NA	98.	SP	99.	NA	100.	NA	96.	NA	99.	SP
9999900-32-9	Seive Size #40	93.	NA	55.	SP	98.	NA	99.	NA	93.	NA	88.	SP
9999900-33-1	Seive Size #100	40.	NA	1.	SP	95.	NA	91.	NA	80.	NA	1.	SP
9999900-33-0	Seive Size #60	66.	NA	12.	SP	97.	NA	98.	NA	89.	NA	22.	SP
9999900-33-2	Seive Size #200	36.	NA	1.	SP	95.	NA	89.	NA	77.	NA	1.	SP
9999900-33-3	Seive Size Pan	0.	NA	0.	SP	0.	NA	0.	NA	0.	NA	0.	SP
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		100.	SP
9999900-32-6	Seive Size #4	NR		100.	SP	NR		NR		NR		99.	SP
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-6416-01		041-M-6417-01		041-M-6420-01		041-M-6421-01		041-M-6422-01		041-M-6423-01	
	ORIGINAL ID ----->	041M641601		041M641701		041M642001		041M642101		041M642201		041M642301	
	LAB SAMPLE ID --->	GTX-922-10		GTX-922-11		GTX-922-12		GTX-922-13		GTX-923-04		GTX-923-05	
	ID FROM REPORT -->	041M641601		041M641701		041M642001		041M642101		041M642201		041M642301	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	11/21/95		11/21/95		11/21/95		11/21/95		11/28/95		11/28/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EA0101	VAL	EA0101	VAL	EA0101	VAL	EA0101	VAL	Z42101	VAL	Z42101	VAL
9999900-32-7	Seive Size #10	100.	NA	89.	NA	100.	SP	100.	SP	60.	NA	100.	SP
9999900-32-8	Seive Size #20	99.	NA	86.	NA	99.	SP	100.	SP	57.	NA	99.	SP
9999900-32-9	Seive Size #40	99.	NA	70.	NA	83.	SP	80.	SP	47.	NA	87.	SP
9999900-33-1	Seive Size #100	91.	NA	9.	NA	5.	SP	3.	SP	8.	NA	5.	SP
9999900-33-0	Seive Size #60	96.	NA	33.	NA	27.	SP	17.	SP	25.	NA	43.	SP
9999900-33-2	Seive Size #200	89.	NA	6.	NA	5.	SP	2.	SP	6.	NA	1.	SP
9999900-33-3	Seive Size Pan	0.	NA	0.	NA	0.	SP	0.	SP	0.	NA	0.	SP
9999900-32-5	Seive Size 0.375"	NR		100.	NA	NR		NR		69.	NA	NR	
9999900-32-6	Seive Size #4	NR		90.	NA	NR		NR		64.	NA	100.	SP
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		100.	NA	NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		85.	NA	NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		71.	NA	NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

GRAIN SIZE													
	SAMPLE ID ------->	041-M-6424-01		041-M-7201-01		041-M-7202-01		041-M-7202-01		041-M-7901-01		041-M-7902-01	
	ORIGINAL ID ----->	041M642401		041M720101		041M720201		041M720201		041M790101		041M790201	
	LAB SAMPLE ID --->	GTX-923-06		GTX-929-03		GTX-921-09		GTX-929-04		GTX-968-02		GTX-969-03	
	ID FROM REPORT -->	041M642401		041M720101		041M720201		041M720201		041M790101		041M790201	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	11/28/95		12/04/95		11/22/95		12/04/95		02/01/96		02/01/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	Z42101	VAL	Z30301	VAL	M06010	VAL	Z30301	VAL	EM0060	VAL	M52A10	VAL
9999900-32-7	Seive Size #10	100.	SP	99.	SP	96.	NA	100.	SP	100.	NA	100.	NA
9999900-32-8	Seive Size #20	100.	SP	97.	SP	92.	NA	98.	SP	98.	NA	100.	NA
9999900-32-9	Seive Size #40	85.	SP	76.	SP	66.	NA	66.	SP	87.	NA	90.	NA
9999900-33-1	Seive Size #100	2.	SP	4.	SP	17.	NA	0.	SP	43.	NA	37.	NA
9999900-33-0	Seive Size #60	24.	SP	18.	SP	24.	NA	6.	SP	59.	NA	52.	NA
9999900-33-2	Seive Size #200	2.	SP	3.	SP	15.	NA	0.	SP	38.	NA	36.	NA
9999900-33-3	Seive Size Pan	0.	SP	0.	SP	0.	NA	0.	SP	0.	NA	0.	NA
9999900-32-5	Seive Size 0.375"	NR		NR		100.	NA	NR		NR		NR	
9999900-32-6	Seive Size #4	NR		100.	SP	98.	NA	100.	SP	NR		NR	
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

GRAIN SIZE															
	SAMPLE ID ------->	041-M-7903-01		041-M-7903-01		041-M-W201-01		041-M-W202-01		041-M-W203-01		RA8-M-0001-01	
	ORIGINAL ID ----->	041M790301		041M790301		041MW20101		041MW20201		041MW20301		RA8M000101	
	LAB SAMPLE ID --->	GTX-968-01		GTX-969-02		GTX-969-07		GTX-969-08		GTX-969-09		GTX-962-01	
	ID FROM REPORT -->	041M790301		041M790301		041MW20101		041MW20201		041MW20301		RA8M000101	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	02/01/96		02/01/96		02/01/96		02/01/96		02/01/96		01/24/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	%		%		%		%		%		%	
CAS #	Parameter	EM0060	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M00901	VAL
9999900-32-7	Seive Size #10	100.	SP	99.	SP	100.	NA	100.	SP	100.	NA	99.	SP
9999900-32-8	Seive Size #20	100.	SP	98.	SP	100.	NA	99.	SP	99.	NA	99.	SP
9999900-32-9	Seive Size #40	78.	SP	66.	SP	84.	NA	71.	SP	90.	NA	91.	SP
9999900-33-1	Seive Size #100	2.	SP	3.	SP	13.	NA	1.	SP	41.	NA	6.	SP
9999900-33-0	Seive Size #60	15.	SP	13.	SP	31.	NA	12.	SP	60.	NA	37.	SP
9999900-33-2	Seive Size #200	1.	SP	3.	SP	12.	NA	1.	SP	39.	NA	4.	SP
9999900-33-3	Seive Size Pan	0.	SP	0.	SP	0.	NA	0.	SP	0.	NA	0.	SP
9999900-32-5	Seive Size 0.375"	NR		NR		NR		NR		NR		100.	SP
9999900-32-6	Seive Size #4	NR		100.	SP	NR		100.	SP	NR		100.	SP
9999900-33-4	Seive Size 1"	NR		NR		NR		NR		NR		NR	
9999900-33-5	Seive Size .75"	NR		NR		NR		NR		NR		NR	
9999900-33-6	Seive Size .5"	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

GRAIN SIZE									
		SAMPLE ID ------->	RA8-M-0002-01		RA8-M-0003-01				
		ORIGINAL ID ----->	RA8M000201		RA8M000301				
		LAB SAMPLE ID --->	GTX-962-02		GTX-962-03				
		ID FROM REPORT -->	RA8M000201		RA8M000301				
		SAMPLE DATE ----->							
		DATE ANALYZED --->	01/24/96		01/24/96				
		MATRIX ---------->	Sediment		Sediment				
		UNITS ---------->	%		%				
CAS #	Parameter		M00901	VAL	M00901	VAL			
9999900-32-7	Seive Size #10		100.	NA	100.	SP			
9999900-32-8	Seive Size #20		100.	NA	99.	SP			
9999900-32-9	Seive Size #40		88.	NA	82.	SP			
9999900-33-1	Seive Size #100		12.	NA	2.	SP			
9999900-33-0	Seive Size #60		41.	NA	27.	SP			
9999900-33-2	Seive Size #200		11.	NA	2.	SP			
9999900-33-3	Seive Size Pan		0.	NA	0.	SP			
9999900-32-5	Seive Size 0.375"		NR		NR				
9999900-32-6	Seive Size #4		NR		NR				
9999900-33-4	Seive Size 1"		NR		NR				
9999900-33-5	Seive Size .75"		NR		NR				
9999900-33-6	Seive Size .5"		NR		NR				

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

HARDNESS													
	SAMPLE ID ------->	041-W-0103-01		041-W-0301-01		041-W-0302-01		041-W-0303-01		041-W-0304-01		041-W-04D1-01	
	ORIGINAL ID ----->	041W010301		041W030101		041W030201		041W030301		041W030401		041W04D101	
	LAB SAMPLE ID --->	960039-14		950998-20		950998-21		951012-07		951012-08		960025-07	
	ID FROM REPORT -->	041W010301		041W030101		041W030201		041W030301		041W030401		041W04D101	
	SAMPLE DATE ----->	01/17/96		12/01/95		12/01/95		12/04/95		12/04/95		01/15/96	
	DATE EXTRACTED -->	02/05/96		01/15/96		01/15/96		01/15/96		01/15/96		02/05/96	
	DATE ANALYZED --->	02/03/96		01/13/96		01/13/96		01/14/96		01/14/96		02/03/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	MG/L		MG/L		MG/L		MG/L		MG/L		MG/L	
CAS #	Parameter	63A401	VAL	EM0040	VAL	EM0040	VAL	030301	VAL	030301	VAL	EM005	VAL
9999900-03-3	Hardness as CaCO3	87.1		75.6		90.9		63.6		75.9		344.	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

HARDNESS													
	SAMPLE ID ------->	041-W-04D4-01		041-W-0603-01		041-W-0607-01		041-W-1201-01		041-W-1301-01		041-W-1501-01	
	ORIGINAL ID ----->	041W04D401		041W060301		041W060701		041W120101		041W130101		041W150101	
	LAB SAMPLE ID --->	960025-08		950940-19		950940-07		950983-11		950979-05		951021-10	
	ID FROM REPORT -->	041W04D401		041W060301		041W060701		041W120101		041W130101		041W150101	
	SAMPLE DATE ----->	01/15/96		11/15/95		11/14/95		11/28/95		11/27/95		12/06/95	
	DATE EXTRACTED -->	02/05/96		12/12/95		12/12/95		01/06/96		01/06/96		01/22/96	
	DATE ANALYZED --->	02/03/96		12/10/95		12/10/95		01/05/96		01/04/96		01/16/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	MG/L		mg/L		mg/L		MG/L		MG/L		MG/L	
CAS #	Parameter	EM005	VAL	M06070	VAL	M06070	VAL	Z53301	VAL	041M10	VAL	EM0050	VAL
9999900-03-3	Hardness as CaCO3	735.		53.5		75.9		216.		271.		708.	

*** Validation Complete ***

HARDNESS													
		SAMPLE ID ------->	041-W-1502-01		041-W-1601-01		041-W-1602-01		041-W-1701-01		041-W-18A2-01		041-W-18B1-01
		ORIGINAL ID ----->	041W150201		041W160101		041W160201		041W170101		041W18A201		041W18B101
		LAB SAMPLE ID --->	951021-11		951029-06		951029-07		960025-09		951050-21		951050-08
		ID FROM REPORT -->	041W150201		041W160101		041W160201		041W170101		041W18A201		041W18B101
		SAMPLE DATE ----->	12/06/95		12/07/95		12/07/95		01/15/96		12/15/95		12/14/95
		DATE EXTRACTED -->	01/22/96		01/22/96		01/22/96		02/05/96		01/23/96		01/23/96
		DATE ANALYZED --->	01/16/96		01/18/96		01/18/96		02/03/96		01/21/96		01/21/96
		MATRIX ---------->	Water		Water		Water		Water		Water		Water
		UNITS ---------->	MG/L		MG/L		MG/L		MG/L		MG/L		MG/L
CAS #	Parameter		EM0050	VAL	EW0010	VAL	EW0010	VAL	EM005	VAL	EMD060	VAL	EMD060	VAL
9999900-03-3	Hardness as CaCO3		360.		1470.		1680.		1730.		31.1		49.3

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

HARDNESS													
	SAMPLE ID ------->	041-W-1901-01		041-W-1903-01		041-W-2501-01		041-W-2503-01		041-W-2702-01		041-W-3201-01	
	ORIGINAL ID ----->	041W190101		041W190301		041W250101		041W250301		041W270201		041W320101	
	LAB SAMPLE ID --->	960039-15		960039-16		950940-20		950940-21		950940-22		950940-08	
	ID FROM REPORT -->	041W190101		041W190301		041W250101		041W250301		041W270201		041W320101	
	SAMPLE DATE ----->	01/17/96		01/17/96		11/15/95		11/15/95		11/15/95		11/14/95	
	DATE EXTRACTED -->	02/05/96		02/05/96		12/12/95		12/12/95		12/12/95		12/12/95	
	DATE ANALYZED --->	02/03/96		02/03/96		12/10/95		12/10/95		12/10/95		12/10/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	MG/L		MG/L		mg/L		mg/L		mg/L		mg/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
9999900-03-3	Hardness as CaCO3	71.8		193.		63.		101.		1600.		16.9	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

HARDNESS													
	SAMPLE ID ------->	041-W-3203-01		041-W-3301-01		041-W-3303-01		041-W-4801-01		041-W-4901-01		041-W-4903-01	
	ORIGINAL ID ----->	041W320301		041W330101		041W330301		041W480101		041W490101		041W490301	
	LAB SAMPLE ID --->	950940-09		950940-15		950940-16		960043-14		960043-15		960043-16	
	ID FROM REPORT -->	041W320301		041W330101		041W330301		041W480101		041W490101		041W490301	
	SAMPLE DATE ----->	11/14/95		11/13/95		11/13/95		01/22/96		01/22/96		01/22/96	
	DATE EXTRACTED -->	12/12/95		12/12/95		12/12/95		02/07/96		02/07/96		02/07/96	
	DATE ANALYZED --->	12/10/95		12/10/95		12/10/95		02/06/96		02/06/96		02/06/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	mg/L		mg/L		mg/L		MG/L		MG/L		MG/L	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	M00901	VAL	M00901	VAL	M00901	VAL
9999900-03-3	Hardness as CaCO3	24.5		200.		320.		6.6		14.3		6.3	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

HARDNESS													
	SAMPLE ID ------->	041-W-52A1-01		041-W-52E3-01		041-W-56A1-01		041-W-5701-01		041-W-5801-01		041-W-5A01-01	
	ORIGINAL ID ----->	041W52A101		041W52E301		041W56A101		041W570101		041W580101		041W5A0101	
	LAB SAMPLE ID --->	960055-06		960055-07		960055-20		950991-15		960055-21		950950-07	
	ID FROM REPORT -->	041W52A101		041W52E301		041W56A101		041W570101		041W580101		041W5A0101	
	SAMPLE DATE ----->	01/23/96		01/23/96		01/24/96		11/29/95		01/24/96		11/16/95	
	DATE EXTRACTED -->	02/14/96		02/14/96		02/14/96		01/11/96		02/14/96		01/04/95	
	DATE ANALYZED --->	02/09/96		02/09/96		02/09/96		01/10/96		02/09/96		12/20/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	MG/L		MG/L		MG/L		MG/L		MG/L		MG/L	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	Z30301	VAL	M52A10	VAL	5A0101	VAL
9999900-03-3	Hardness as CaCO3	5.8		30.4		38.7		55.		40.		69.2	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

HARDNESS													
	SAMPLE ID ------->	041-W-5A02-01		041-W-5A04-01		041-W-5A05-01		041-W-5A06-01		041-W-5A07-01		041-W-5B02-01	
	ORIGINAL ID ----->	041W5A0201		041W5A0401		041W5A0501		041W5A0601		041W5A0701		041W5B0201	
	LAB SAMPLE ID --->	950950-08		950950-09		950979-06		950952-14		950950-10		950952-15	
	ID FROM REPORT -->	041W5A0201		041W5A0401		041W5A0501		041W5A0601		041W5A0701		041W5B0201	
	SAMPLE DATE ----->	11/16/95		11/16/95		11/27/95		11/17/95		11/16/95		11/17/95	
	DATE EXTRACTED -->	01/04/95		01/04/95		01/06/96		01/03/96		01/04/95		01/03/96	
	DATE ANALYZED --->	12/20/95		12/20/95		01/04/96		12/27/96		12/20/95		12/27/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	MG/L		MG/L		MG/L		mg/l		MG/L		mg/l	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	041M10	VAL	Z42101	VAL	5A0101	VAL	Z42101	VAL
9999900 03 3	Hardness as CaCO3	37.		41.4		99.		22.2		47.1		52.3	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

HARDNESS													
	SAMPLE ID ------->	041-W-63A2-01		041-W-63B2-01		041-W-63B4-01		041-W-7201-01		041-W-W101-01		041-W-W102-01	
	ORIGINAL ID ----->	041W63A201		041W63B201		041W63B401		041W720101		041WW10101		041WW10201	
	LAB SAMPLE ID --->	960039-07		960039-08		960055-17		950991-09		960043-17		960043-18	
	ID FROM REPORT -->	041W63A201		041W63B201		041W63B401		041W720101		041WW10101		041WW10201	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/24/96		11/29/95		01/22/96		01/22/96	
	DATE EXTRACTED -->	02/05/96		02/05/96		02/14/96		01/11/96		02/07/96		02/07/96	
	DATE ANALYZED --->	02/03/96		02/03/96		02/09/96		01/10/96		02/06/96		02/06/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	MG/L		MG/L		MG/L		MG/L		MG/L		MG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	M52A10	VAL	Z30301	VAL	M00901	VAL	M00901	VAL
9999900-03-3	Hardness as CaCO3	120.		141.		136.		32.1		21.2		15.2	

*** Validation Complete ***

HARDNESS	SAMPLE ID ------->	041-W-W103-01	041-W-W202-01				
	ORIGINAL ID ----->	041WW10301	041WW20201				
	LAB SAMPLE ID --->	960043-19	960055-18				
	ID FROM REPORT -->	041WW10301	041WW20201				
	SAMPLE DATE ----->	01/22/96	01/24/96				
	DATE EXTRACTED -->	02/07/96	02/14/96				
	DATE ANALYZED --->	02/06/96	02/09/96				
	MATRIX ---------->	Water	Water				
	UNITS ---------->	MG/L	MG/L				
CAS #	Parameter	M00901 VAL	M52A10 VAL				
9999900-03-3	Hardness as CaCO3	11.2	43.3				

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

NF METALS													
	SAMPLE ID ------->	041-M-0304-01		041-M-0305-01		041-M-04D2-01		041-M-10A1-01		041-M-1602-01		041-M-3203-01	
	ORIGINAL ID ----->	041M030401		041M030501		041M04D201		041M10A101		041M160201		041M320301	
	LAB SAMPLE ID --->	960182-19		960182-20		960182-18		960183-04		960182-17		960183-08	
	ID FROM REPORT -->	041M030401		041M030501		041M04D201		041M10A101		041M160201		041M320301	
	SAMPLE DATE ----->	12/04/95		12/04/95		12/05/95		11/28/95		12/07/95		11/14/95	
	DATE EXTRACTED -->	03/22/96		03/22/96		03/22/96		03/27/96		03/22/96		03/27/96	
	DATE ANALYZED --->	04/11/96		04/11/96		04/11/96		04/11/96		04/11/96		04/11/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	Z13601	VAL	Z13601	VAL	Z13601	VAL	Z30201	VAL	Z13601	VAL	Z30201	VAL
7429-90-5	Aluminum	706.		5210.		33400.		4530.	J	1370.		12100.	J
7440-36-0	Antimony	12.4	J	44.	J	18.2	UR	6.7	U	15.1	J	58.2	U
7440-38-2	Arsenic	0.28	UJ	15.4	J	20.4	J	1.4	UJ	0.47	UJ	2.8	UJ
7440-39-3	Barium	4.5	U	102.	J	59.	J	7.9	U	8.4	U	39.2	U
7440-41-7	Beryllium	0.14	U	0.65	U	0.81	J	0.15	UJ	0.23	U	1.3	UJ
7440-43-9	Cadmium	0.28	UJ	1.3	UJ	1.	UJ	0.29	UJ	0.47	UJ	2.5	UJ
7440-70-2	Calcium	383.	J	6440.		3460.		186.	J	54.4	U	4020.	J
7440-47-3	Chromium	1.7	J	15.8	J	85.1		3.9	U	20.4		11.4	U
7440-48-4	Cobalt	1.	U	1.3	U	5.8	U	0.92	UJ	1.9	U	4.5	UJ
7440-50-8	Copper	1.4	J	18.8	J	53.	J	2.4	J	5.7	J	15.1	J
7439-89-6	Iron	3820.		338000.		47500.		2440.	J	5280.		1790.	J
7439-92-1	Lead	1.8	UJ	14.3	UJ	350.	J	7.4	J	11.	UJ	51.7	J
7439-95-4	Magnesium	33.8	U	270.	U	5170.		69.7	J	12.6	U	2260.	J
7439-96-5	Manganese	6.2		253.		90.2		21.9	J	20.7		14.4	J
7440-02-0	Nickel	1.3	UJ	5.8	UJ	12.8	J	1.5	J	2.6	J	11.4	UR
7440-09-7	Potassium	47.2	J	292.	J	3150.		165.	J	687.	J	1540.	J
7782-49-2	Selenium	3.3	J	4.4	UJ	4.6	J	0.58	UJ	0.93	UJ	7.7	UJ
7440-22-4	Silver	0.71	UR	10.5	J	2.	UR	0.73	UR	1.2	UR	6.3	UR
7440-23-5	Sodium	40.2	J	212.	U	10800.		30.5	UJ	2410.	U	2590.	J
7440-28-0	Thallium	0.57	UR	2.6	UR	1.6	UR	0.58	UR	0.93	UR	5.1	UR
7440-62-2	Vanadium	2.2	J	22.6	J	59.1		8.		10.6	J	20.8	J
7440-66-6	Zinc	4.2	J	14.4	J	112.		7.2	J	14.1	J	10.4	UJ
7439-97-6	Mercury	0.03	UR	0.13	UR	0.12	UR	0.03	UR	0.05	UR	0.31	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

HF METALS													
	SAMPLE ID ------->	041-M-3302-01		041-M-63A3-01		041-M-6414-01		041-M-6415-01					
	ORIGINAL ID ----->	041M330201		041M63A301		041M641401		041M641501					
	LAB SAMPLE ID --->	960183-09		960182-04		960183-06		960183-07					
	ID FROM REPORT -->	041M330201		041M63A301		041M641401		041M641501					
	SAMPLE DATE ----->	11/13/95		01/18/96		11/16/95		11/15/95					
	DATE EXTRACTED -->	03/27/96		03/22/96		03/27/96		03/27/96					
	DATE ANALYZED --->	04/11/96		04/11/96		04/11/96		04/11/96					
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment					
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG					
CAS #	Parameter	Z30201	VAL	Z13601	VAL	Z30201	VAL	Z30201	VAL				
7429-90-5	Aluminum	2190.	J	6740.		29000.	J	837.	J				
7440-36-0	Antimony	18.4	U	12.6	J	35.7	U	8.	U				
7440-38-2	Arsenic	1.1	UJ	0.93	J	15.1	UJ	0.84	UJ				
7440-39-3	Barium	6.	U	22.	J	42.9	J	2.3	U				
7440-41-7	Beryllium	0.31	UJ	0.23	U	1.1	J	0.17	UJ				
7440-43-9	Cadmium	0.63	UJ	6.4		7.2	J	0.35	UJ				
7440-70-2	Calcium	930.	J	2380.		761.	J	2450.					
7440-47-3	Chromium	3.4	U	63.		577.		8.1	U				
7440-48-4	Cobalt	0.63	UJ	1.8	U	9.4	J	0.35	UJ				
7440-50-8	Copper	5.8	J	14.6	J	76.9		2.8	J				
7439-89-6	Iron	1480.	J	3970.		32400.	J	502.	J				
7439-92-1	Lead	6.5	J	81.1	UJ	179.	J	2.3	J				
7439-95-4	Magnesium	818.	J	351.	J	380.	J	150.	J				
7439-96-5	Manganese	6.2	J	23.1		127.	J	2.7	J				
7440-02-0	Nickel	2.8	UR	7.3	J	12.7	J	1.6	UR				
7440-09-7	Potassium	545.	J	335.	J	4520.	J	114.	U				
7782-49-2	Selenium	4.6	UJ	2.3	UJ	6.4	UJ	4.3	UJ				
7440-22-4	Silver	1.6	UR	1.2	UR	2.2	UR	0.87	UR				
7440-23-5	Sodium	5050.	J	187.	U	9650.	J	617.	J				
7440-28-0	Thallium	1.3	UR	0.93	UR	1.8	UR	0.7	UR				
7440-62-2	Vanadium	5.3	J	13.2		60.7		1.2	J				
7440-66-6	Zinc	6.3	J	110.		175.	J	3.2	J				
7439-97-6	Mercury	0.06	UR	0.14	UR	0.36	J	0.04	UR				

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-0103-01		041-W-0301-01		041-W-0302-01		041-W-0303-01		041-W-0304-01		041-W-04D1-01	
	ORIGINAL ID ----->	041W010301		041W030101		041W030201		041W030301		041W030401		041W04D101	
	LAB SAMPLE ID --->	960039-14		950998-20		950998-21		951012-07		951012-08		960025-07	
	ID FROM REPORT -->	041W010301		041W030101		041W030201		041W030301		041W030401		041W04D101	
	SAMPLE DATE ----->	01/17/96		12/01/95		12/01/95		12/04/95		12/04/95		01/15/96	
	DATE EXTRACTED -->	01/23/96		12/05/95		12/05/95		12/05/95		12/05/95		01/18/96	
	DATE ANALYZED --->	01/29/96		12/18/95		12/18/95		12/21/95		12/18/95		01/30/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	EM0040	VAL	EM0040	VAL	030301	VAL	030301	VAL	EM005	VAL
108-95-2	Phenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-44-4	bis(2-Chloroethyl)ether	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
95-57-8	2-Chlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-48-7	2-Methylphenol (o-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
106-44-5	4-Methylphenol (p-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-72-1	Hexachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
98-95-3	Nitrobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-59-1	Isophorone	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-75-5	2-Nitrophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
105-67-9	2,4-Dimethylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-83-2	2,4-Dichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-82-1	1,2,4-Trichlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-20-3	Naphthalene	1.	U	1.	U	1.	U	1.	U	1.		1.	U
106-47-8	4-Chloroaniline	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
87-68-3	Hexachlorobutadiene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-57-6	2-Methylnaphthalene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
77-47-4	Hexachlorocyclopentadiene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
88-06-2	2,4,6-Trichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
91-58-7	2-Chloronaphthalene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-74-4	2-Nitroaniline	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
131-11-3	Dimethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
208-96-8	Acenaphthylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
606-20-2	2,6-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
99-09-2	3-Nitroaniline	20.	U	20.	U	20.	U	20.	UJ	20.	U	20.	U
83-32-9	Acenaphthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
51-28-5	2,4-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
100-02-7	4-Nitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
132-64-9	Dibenzofuran	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
121-14-2	2,4-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
84-66-2	Diethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
7005-72-3	4-Chlorophenylphenyl ether	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U

*** Validation Complete ***

LOWSVOA													
	SAMPLE ID ------->	041-W-0103-01		041-W-0301-01		041-W-0302-01		041-W-0303-01		041-W-0304-01		041-W-04D1-01	
	ORIGINAL ID ----->	041W010301		041W030101		041W030201		041W030301		041W030401		041W04D101	
	LAB SAMPLE ID --->	960039-14		950998-20		950998-21		951012-07		951012-08		960025-07	
	ID FROM REPORT -->	041W010301		041W030101		041W030201		041W030301		041W030401		041W04D101	
	SAMPLE DATE ----->	01/17/96		12/01/95		12/01/95		12/04/95		12/04/95		01/15/96	
	DATE EXTRACTED -->	01/23/96		12/05/95		12/05/95		12/05/95		12/05/95		01/18/96	
	DATE ANALYZED --->	01/29/96		12/18/95		12/18/95		12/21/95		12/18/95		01/30/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	EM0040	VAL	EM0040	VAL	030301	VAL	030301	VAL	EM005	VAL
86-73-7	Fluorene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-01-6	4-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
118-74-1	Hexachlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
87-86-5	Pentachlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
85-01-8	Phenanthrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
120-12-7	Anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
84-74-2	Di-n-butylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
206-44-0	Fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
129-00-0	Pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
85-68-7	Butylbenzylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-94-1	3,3'-Dichlorobenzidine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
56-55-3	Benzo(a)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
218-01-9	Chrysene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
117-84-0	Di-n-octylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
205-99-2	Benzo(b)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
207-08-9	Benzo(k)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
50-32-8	Benzo(a)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
53-70-3	Dibenz(a,h)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
191-24-2	Benzo(g,h,i)perylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
106-46-7	1,4-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
95-50-1	1,2-Dichlorobenzene	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-04D4-01		041-W-0603-01		041-W-0607-01		041-W-1201-01		041-W-1301-01		041-W-1501-01	
	ORIGINAL ID ----->	041W04D401		041W060301		041W060701		041W120101		041W130101		041W150101	
	LAB SAMPLE ID --->	960025-08		950940-19		950940-07		950983-11		950979-05		951021-10	
	ID FROM REPORT -->	041W04D401		041W060301		041W060701		041W120101		041W130101		041W150101	
	SAMPLE DATE ----->	01/15/96		11/15/95		11/14/95		11/28/95		11/27/95		12/06/95	
	DATE EXTRACTED -->	01/18/96		11/19/95		11/17/95		11/29/95		12/14/95		12/28/95	
	DATE ANALYZED --->	01/30/96		12/04/95		11/30/95		12/05/95		12/22/95		01/04/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	EM005	VAL	M06070	VAL	M06070	VAL	Z53301	VAL	041M10	VAL	EM0050	VAL
108-95-2	Phenol	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
111-44-4	bis(2-Chloroethyl)ether	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
95-57-8	2-Chlorophenol	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
95-48-7	2-Methylphenol (o-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
106-44-5	4-Methylphenol (p-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
67-72-1	Hexachloroethane	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
98-95-3	Nitrobenzene	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
78-59-1	Isophorone	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
88-75-5	2-Nitrophenol	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
105-67-9	2,4-Dimethylphenol	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
120-83-2	2,4-Dichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
120-82-1	1,2,4-Trichlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
91-20-3	Naphthalene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
106-47-8	4-Chloroaniline	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
87-68-3	Hexachlorobutadiene	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
91-57-6	2-Methylnaphthalene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
77-47-4	Hexachlorocyclopentadiene	5.	UJ	5.	U	5.	U	5.	U	5.	UJ	5.	U
88-06-2	2,4,6-Trichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	20.	U	20.	U	20.	U	20.	UJ	20.	U
91-58-7	2-Chloronaphthalene	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
88-74-4	2-Nitroaniline	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
131-11-3	Dimethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
208-96-8	Acenaphthylene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
606-20-2	2,6-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
99-09-2	3-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	UJ	20.	U
83-32-9	Acenaphthene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
51-28-5	2,4-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	UJ	20.	U
100-02-7	4-Nitrophenol	20.	U	20.	UJ	20.	U	20.	U	20.	UJ	20.	U
132-64-9	Dibenzofuran	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
121-14-2	2,4-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
84-66-2	Diethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
7005-72-3	'lorophenylphenyl ether	5.	U	5.		5.	U	5.	U	5.	UJ	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-04D4-01		041-W-0603-01		041-W-0607-01		041-W-1201-01		041-W-1301-01		041-W-1501-01	
	ORIGINAL ID ----->	041W04D401		041W060301		041W060701		041W120101		041W130101		041W150101	
	LAB SAMPLE ID --->	960025-08		950940-19		950940-07		950983-11		950979-05		951021-10	
	ID FROM REPORT -->	041W04D401		041W060301		041W060701		041W120101		041W130101		041W150101	
	SAMPLE DATE ----->	01/15/96		11/15/95		11/14/95		11/28/95		11/27/95		12/06/95	
	DATE EXTRACTED -->	01/18/96		11/19/95		11/17/95		11/29/95		12/14/95		12/28/95	
	DATE ANALYZED --->	01/30/96		12/04/95		11/30/95		12/05/95		12/22/95		01/04/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	EM005	VAL	M06070	VAL	M06070	VAL	Z53301	VAL	041M10	VAL	EM0050	VAL
86-73-7	Fluorene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
100-01-6	4-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	UJ	20.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	UJ	20.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
118-74-1	Hexachlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
87-86-5	Pentachlorophenol	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
85-01-8	Phenanthrene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
120-12-7	Anthracene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
84-74-2	Di-n-butylphthalate	5.	U	5.	U	5.	U	1.	J	5.	UJ	5.	U
206-44-0	Fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
129-00-0	Pyrene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
85-68-7	Butylbenzylphthalate	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
91-94-1	3,3'-Dichlorobenzidine	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
56-55-3	Benzo(a)anthracene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
218-01-9	Chrysene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	5.	U	5.	U	5.	U	5.	UJ	7.	U
117-84-0	Di-n-octylphthalate	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
205-99-2	Benzo(b)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
207-08-9	Benzo(k)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
50-32-8	Benzo(a)pyrene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
53-70-3	Dibenz(a,h)anthracene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
191-24-2	Benzo(g,h,i)perylene	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	U
541-73-1	1,3-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
106-46-7	1,4-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
95-50-1	1,2-Dichlorobenzene	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-1502-01		041-W-1601-01		041-W-1602-01		041-W-1701-01		041-W-18A2-01		041-W-18B1-01	
	ORIGINAL ID ----->	041W150201		041W160101		041W160201		041W170101		041W18A201		041W18B101	
	LAB SAMPLE ID --->	951021-11		951029-06		951029-07		960025-09		951050-21		951050-08	
	ID FROM REPORT -->	041W150201		041W160101		041W160201		041W170101		041W18A201		041W18B101	
	SAMPLE DATE ----->	12/06/95		12/07/95		12/07/95		01/15/96		12/15/95		12/14/95	
	DATE EXTRACTED -->	12/28/95		12/26/95		12/13/95		01/18/96		12/21/95		12/21/95	
	DATE ANALYZED --->	01/04/96		01/04/96		12/26/95		01/30/96		01/04/96		01/04/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	EM0050	VAL	EW0010	VAL	EW0010	VAL	EM005	VAL	EMD060	VAL	EMD060	VAL
108-95-2	Phenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-44-4	bis(2-Chloroethyl)ether	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
95-57-8	2-Chlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-48-7	2-Methylphenol (o-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
106-44-5	4-Methylphenol (p-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-72-1	Hexachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
98-95-3	Nitrobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-59-1	Isophorone	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-75-5	2-Nitrophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
105-67-9	2,4-Dimethylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-83-2	2,4-Dichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-82-1	1,2,4-Trichlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-20-3	Naphthalene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-47-8	4-Chloroaniline	5.	U	5.	U	5.	UJ	5.	U	5.	U	5.	U
87-68-3	Hexachlorobutadiene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-57-6	2-Methylnaphthalene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
77-47-4	Hexachlorocyclopentadiene	5.	U	5.	U	5.	U	5.	UJ	5.	U	5.	U
88-06-2	2,4,6-Trichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
91-58-7	2-Chloronaphthalene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-74-4	2-Nitroaniline	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
131-11-3	Dimethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
208-96-8	Acenaphthylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
606-20-2	2,6-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
99-09-2	3-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
83-32-9	Acenaphthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
51-28-5	2,4-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
100-02-7	4-Nitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
132-64-9	Dibenzofuran	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
121-14-2	2,4-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
84-66-2	Diethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
7005-72-3	[illegible]hlorophenylphenyl ether	5.	U	5.		5.	U	5.	U	5.	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-1502-01		041-W-1601-01		041-W-1602-01		041-W-1701-01		041-W-18A2-01		041-W-18B1-01	
	ORIGINAL ID ----->	041W150201		041W160101		041W160201		041W170101		041W18A201		041W18B101	
	LAB SAMPLE ID --->	951021-11		951029-06		951029-07		960025-09		951050-21		951050-08	
	ID FROM REPORT -->	041W150201		041W160101		041W160201		041W170101		041W18A201		041W18B101	
	SAMPLE DATE ----->	12/06/95		12/07/95		12/07/95		01/15/96		12/15/95		12/14/95	
	DATE EXTRACTED -->	12/28/95		12/26/95		12/13/95		01/18/96		12/21/95		12/21/95	
	DATE ANALYZED --->	01/04/96		01/04/96		12/26/95		01/30/96		01/04/96		01/04/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	EM0050	VAL	EW0010	VAL	EW0010	VAL	EM005	VAL	EMD060	VAL	EMD060	VAL
86-73-7	Fluorene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-01-6	4-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
118-74-1	Hexachlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
87-86-5	Pentachlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
85-01-8	Phenanthrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
120-12-7	Anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
84-74-2	Di-n-butylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
206-44-0	Fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
129-00-0	Pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
85-68-7	Butylbenzylphthalate	5.	U	5.	U	5.	UJ	5.	U	5.	U	5.	U
91-94-1	3,3'-Dichlorobenzidine	5.	U	5.	U	5.	UJ	5.	U	5.	U	5.	U
56-55-3	Benzo(a)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
218-01-9	Chrysene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
117-84-0	Di-n-octylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
205-99-2	Benzo(b)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
207-08-9	Benzo(k)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
50-32-8	Benzo(a)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
53-70-3	Dibenz(a,h)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
191-24-2	Benzo(g,h,i)perylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
106-46-7	1,4-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
95-50-1	1,2-Dichlorobenzene	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA															
	SAMPLE ID ------->	041-W-1901-01		041-W-1903-01		041-W-2501-01		041-W-2503-01		041-W-2702-01		041-W-3201-01	
	ORIGINAL ID ----->	041W190101		041W190301		041W250101		041W250301		041W270201		041W320101	
	LAB SAMPLE ID --->	960039-15		960039-16		950940-20		950940-21		950940-22		950940-08	
	ID FROM REPORT -->	041W190101		041W190301		041W250101		041W250301		041W270201		041W320101	
	SAMPLE DATE ----->	01/17/96		01/17/96		11/15/95		11/15/95		11/15/95		11/14/95	
	DATE EXTRACTED -->	01/23/96		01/23/96		12/19/95		11/17/95		12/19/95		11/17/95	
	DATE ANALYZED --->	02/01/96		02/01/96		12/22/95		12/04/95		12/22/95		11/30/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
108-95-2	Phenol	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
111-44-4	bis(2-Chloroethyl)ether	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
95-57-8	2-Chlorophenol	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
95-48-7	2-Methylphenol (o-Cresol)	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
106-44-5	4-Methylphenol (p-Cresol)	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
67-72-1	Hexachloroethane	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
98-95-3	Nitrobenzene	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
78-59-1	Isophorone	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
88-75-5	2-Nitrophenol	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
105-67-9	2,4-Dimethylphenol	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
120-83-2	2,4-Dichlorophenol	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
120-82-1	1,2,4-Trichlorobenzene	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
91-20-3	Naphthalene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
106-47-8	4-Chloroaniline	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
87-68-3	Hexachlorobutadiene	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
91-57-6	2-Methylnaphthalene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
77-47-4	Hexachlorocyclopentadiene	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
88-06-2	2,4,6-Trichlorophenol	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	20.	U	20.	UR	20.	U	20.	U	20.	U
91-58-7	2-Chloronaphthalene	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
88-74-4	2-Nitroaniline	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
131-11-3	Dimethylphthalate	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
208-96-8	Acenaphthylene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
606-20-2	2,6-Dinitrotoluene	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
99-09-2	3-Nitroaniline	20.	U	20.	U	20.	UR	20.	U	20.	U	20.	U
83-32-9	Acenaphthene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
51-28-5	2,4-Dinitrophenol	20.	U	20.	U	20.	UR	20.	U	20.	U	20.	U
100-02-7	4-Nitrophenol	20.	U	20.	U	20.	UR	20.	UJ	20.	U	20.	U
132-64-9	Dibenzofuran	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
121-14-2	2,4-Dinitrotoluene	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
84-66-2	Diethylphthalate	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
7005-72-3	4-Chlorophenylphenyl ether	5.	U	5.		5.	UR	5.	U	5.	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-1901-01		041-W-1903-01		041-W-2501-01		041-W-2503-01		041-W-2702-01		041-W-3201-01	
	ORIGINAL ID ----->	041W190101		041W190301		041W250101		041W250301		041W270201		041W320101	
	LAB SAMPLE ID --->	960039-15		960039-16		950940-20		950940-21		950940-22		950940-08	
	ID FROM REPORT -->	041W190101		041W190301		041W250101		041W250301		041W270201		041W320101	
	SAMPLE DATE ----->	01/17/96		01/17/96		11/15/95		11/15/95		11/15/95		11/14/95	
	DATE EXTRACTED -->	01/23/96		01/23/96		12/19/95		11/17/95		12/19/95		11/17/95	
	DATE ANALYZED --->	02/01/96		02/01/96		12/22/95		12/04/95		12/22/95		11/30/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
86-73-7	Fluorene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
100-01-6	4-Nitroaniline	20.	U	20.	U	20.	UR	20.	U	20.	U	20.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	U	20.	U	20.	UR	20.	U	20.	U	20.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
118-74-1	Hexachlorobenzene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
87-86-5	Pentachlorophenol	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
85-01-8	Phenanthrene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
120-12-7	Anthracene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
84-74-2	Di-n-butylphthalate	28.		5.	U	5.	UR	5.	U	5.	U	5.	U
206-44-0	Fluoranthene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
129-00-0	Pyrene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
85-68-7	Butylbenzylphthalate	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
91-94-1	3,3'-Dichlorobenzidine	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
56-55-3	Benzo(a)anthracene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
218-01-9	Chrysene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	5.	U	39.	UR	5.	U	5.	U	5.	U
117-84-0	Di-n-octylphthalate	5.	U	5.	U	5.	UR	5.	U	5.	U	5.	U
205-99-2	Benzo(b)fluoranthene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
207-08-9	Benzo(k)fluoranthene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
50-32-8	Benzo(a)pyrene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
53-70-3	Dibenz(a,h)anthracene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
191-24-2	Benzo(g,h,i)perylene	1.	U	1.	U	1.	UR	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
106-46-7	1,4-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
95-50-1	1,2-Dichlorobenzene	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-3203-01		041-W-3301-01		041-W-3303-01		041-W-4801-01		041-W-4901-01		041-W-4903-01	
	ORIGINAL ID ----->	041W320301		041W330101		041W330301		041W480101		041W490101		041W490301	
	LAB SAMPLE ID --->	950940-09		950940-15		950940-16		960043-14		960043-15		960043-16	
	ID FROM REPORT -->	041W320301		041W330101		041W330301		041W480101		041W490101		041W490301	
	SAMPLE DATE ----->	11/14/95		11/13/95		11/13/95		01/22/96		01/22/96		01/22/96	
	DATE EXTRACTED -->	11/17/95		11/17/95		11/17/95		01/26/96		01/26/96		01/26/96	
	DATE ANALYZED --->	11/30/95		11/30/95		11/30/95		02/05/96		01/30/96		02/05/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	M00901	VAL	M00901	VAL	M00901	VAL
108-95-2	Phenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-44-4	bis(2-Chloroethyl)ether	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
95-57-8	2-Chlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-48-7	2-Methylphenol (o-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
106-44-5	4-Methylphenol (p-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-72-1	Hexachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
98-95-3	Nitrobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-59-1	Isophorone	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-75-5	2-Nitrophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
105-67-9	2,4-Dimethylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-83-2	2,4-Dichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-82-1	1,2,4-Trichlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-20-3	Naphthalene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-47-8	4-Chloroaniline	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
87-68-3	Hexachlorobutadiene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-57-6	2-Methylnaphthalene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
77-47-4	Hexachlorocyclopentadiene	5.	U	5.	U	5.	U	5.	UJ	5.	UJ	5.	UJ
88-06-2	2,4,6-Trichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
91-58-7	2-Chloronaphthalene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-74-4	2-Nitroaniline	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
131-11-3	Dimethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
208-96-8	Acenaphthylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
606-20-2	2,6-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
99-09-2	3-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
83-32-9	Acenaphthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
51-28-5	2,4-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
100-02-7	4-Nitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
132-64-9	Dibenzofuran	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
121-14-2	2,4-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
84-66-2	Diethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
7005-72-7	lorophenylphenyl ether	5.	U	5.		5.	U	5.	U	5.	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-3203-01		041-W-3301-01		041-W-3303-01		041-W-4801-01		041-W-4901-01		041-W-4903-01	
	ORIGINAL ID ----->	041W320301		041W330101		041W330301		041W480101		041W490101		041W490301	
	LAB SAMPLE ID --->	950940-09		950940-15		950940-16		960043-14		960043-15		960043-16	
	ID FROM REPORT -->	041W320301		041W330101		041W330301		041W480101		041W490101		041W490301	
	SAMPLE DATE ----->	11/14/95		11/13/95		11/13/95		01/22/96		01/22/96		01/22/96	
	DATE EXTRACTED -->	11/17/95		11/17/95		11/17/95		01/26/96		01/26/96		01/26/96	
	DATE ANALYZED --->	11/30/95		11/30/95		11/30/95		02/05/96		01/30/96		02/05/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	M00901	VAL	M00901	VAL	M00901	VAL
86-73-7	Fluorene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-01-6	4-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
118-74-1	Hexachlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
87-86-5	Pentachlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
85-01-8	Phenanthrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
120-12-7	Anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
84-74-2	Di-n-butylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
206-44-0	Fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
129-00-0	Pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
85-68-7	Butylbenzylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-94-1	3,3'-Dichlorobenzidine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
56-55-3	Benzo(a)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
218-01-9	Chrysene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
117-84-0	Di-n-octylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
205-99-2	Benzo(b)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
207-08-9	Benzo(k)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
50-32-8	Benzo(a)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
53-70-3	Dibenz(a,h)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
191-24-2	Benzo(g,h,i)perylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
106-46-7	1,4-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
95-50-1	1,2-Dichlorobenzene	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA															
	SAMPLE ID ------->	041-W-52A1-01		041-W-52E3-01		041-W-56A1-01		041-W-5701-01		041-W-5801-01		041-W-5A01-01	
	ORIGINAL ID ----->	041W52A101		041W52E301		041W56A101		041W570101		041W580101		041W5A0101	
	LAB SAMPLE ID --->	960055-06		960055-07		960055-20		950991-15		960055-21		950950-07	
	ID FROM REPORT -->	041W52A101		041W52E301		041W56A101		041W570101		041W580101		041W5A0101	
	SAMPLE DATE ----->	01/23/96		01/23/96		01/24/96		11/29/95		01/24/96		11/16/95	
	DATE EXTRACTED -->	01/30/96		01/30/96		01/30/96		12/02/95		01/30/96		11/18/95	
	DATE ANALYZED --->	02/01/96		02/01/96		02/01/96		12/08/95		02/01/96		12/05/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Soil	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/KG	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	Z30301	VAL	M52A10	VAL	5A0101	VAL
108-95-2	Phenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-44-4	bis(2-Chloroethyl)ether	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
95-57-8	2-Chlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-48-7	2-Methylphenol (o-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
106-44-5	4-Methylphenol (p-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-72-1	Hexachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
98-95-3	Nitrobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-59-1	Isophorone	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-75-5	2-Nitrophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
105-67-9	2,4-Dimethylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-83-2	2,4-Dichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-82-1	1,2,4-Trichlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-20-3	Naphthalene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-47-8	4-Chloroaniline	5.	U	5.	U	5.	U	5.	UJ	5.	U	5.	U
87-68-3	Hexachlorobutadiene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-57-6	2-Methylnaphthalene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
77-47-4	Hexachlorocyclopentadiene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-06-2	2,4,6-Trichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
91-58-7	2-Chloronaphthalene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-74-4	2-Nitroaniline	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
131-11-3	Dimethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
208-96-8	Acenaphthylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
606-20-2	2,6-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
99-09-2	3-Nitroaniline	20.	U	20.	U	20.	U	20.	UJ	20.	U	20.	U
83-32-9	Acenaphthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
51-28-5	2,4-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
100-02-7	4-Nitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
132-64-9	Dibenzofuran	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
121-14-2	2,4-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
84-66-2	Diethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
7005-72-3	[illegible]hlorophenylphenyl ether	5.	U	5.		5.	U	5.	U	5.	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-52A1-01		041-W-52E3-01		041-W-56A1-01		041-W-5701-01		041-W-5801-01		041-W-5A01-01	
	ORIGINAL ID ----->	041W52A101		041W52E301		041W56A101		041W570101		041W580101		041W5A0101	
	LAB SAMPLE ID --->	960055-06		960055-07		960055-20		950991-15		960055-21		950950-07	
	ID FROM REPORT -->	041W52A101		041W52E301		041W56A101		041W570101		041W580101		041W5A0101	
	SAMPLE DATE ----->	01/23/96		01/23/96		01/24/96		11/29/95		01/24/96		11/16/95	
	DATE EXTRACTED -->	01/30/96		01/30/96		01/30/96		12/02/95		01/30/96		11/18/95	
	DATE ANALYZED --->	02/01/96		02/01/96		02/01/96		12/08/95		02/01/96		12/05/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Soil	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/KG	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	Z30301	VAL	M52A10	VAL	5A0101	VAL
86-73-7	Fluorene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-01-6	4-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
118-74-1	Hexachlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
87-86-5	Pentachlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
85-01-8	Phenanthrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
120-12-7	Anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
84-74-2	Di-n-butylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
206-44-0	Fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
129-00-0	Pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
85-68-7	Butylbenzylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-94-1	3,3'-Dichlorobenzidine	5.	U	5.	U	5.	U	5.	UJ	5.	U	5.	U
56-55-3	Benzo(a)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
218-01-9	Chrysene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	5.	U	5.	U	5.	U	5.	U	2.	J
117-84-0	Di-n-octylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
205-99-2	Benzo(b)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
207-08-9	Benzo(k)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
50-32-8	Benzo(a)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
53-70-3	Dibenz(a,h)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
191-24-2	Benzo(g,h,i)perylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	NR		NR		NR		5.	U	NR		NR	
106-46-7	1,4-Dichlorobenzene	NR		NR		NR		5.	U	NR		NR	
95-50-1	1,2-Dichlorobenzene	NR		NR		NR		5.	U	NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-5A02-01		041-W-5A04-01		041-W-5A05-01		041-W-5A06-01		041-W-5A07-01		041-W-5B02-01	
	ORIGINAL ID ----->	041W5A0201		041W5A0401		041W5A0501		041W5A0601		041W5A0701		041W5B0201	
	LAB SAMPLE ID --->	950950-08		950950-09		950979-06		950952-14		950950-10		950952-15	
	ID FROM REPORT -->	041W5A0201		041W5A0401		041W5A0501		041W5A0601		041W5A0701		041W5B0201	
	SAMPLE DATE ----->	11/16/95		11/16/95		11/27/95		11/17/95		11/16/95		11/17/95	
	DATE EXTRACTED -->	11/18/95		11/18/95		11/29/95		11/21/95		11/18/95		11/21/95	
	DATE ANALYZED --->	11/30/95		12/05/95		12/06/95		12/18/95		12/05/95		12/18/95	
	MATRIX ---------->	Soil		Soil		Water		Water		Water		Water	
	UNITS ---------->	UG/KG		UG/KG		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	041M10	VAL	Z42101	VAL	5A0101	VAL	Z42101	VAL
108-95-2	Phenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-44-4	bis(2-Chloroethyl)ether	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
95-57-8	2-Chlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	1.	J
95-48-7	2-Methylphenol (o-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
106-44-5	4-Methylphenol (p-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	5.	U	5.	U	5.	U	5.	U	1.	J
67-72-1	Hexachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
98-95-3	Nitrobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-59-1	Isophorone	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-75-5	2-Nitrophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
105-67-9	2,4-Dimethylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-83-2	2,4-Dichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-82-1	1,2,4-Trichlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-20-3	Naphthalene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-47-8	4-Chloroaniline	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
87-68-3	Hexachlorobutadiene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	1.	J
91-57-6	2-Methylnaphthalene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
77-47-4	Hexachlorocyclopentadiene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-06-2	2,4,6-Trichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
91-58-7	2-Chloronaphthalene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-74-4	2-Nitroaniline	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
131-11-3	Dimethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
208-96-8	Acenaphthylene	1.	U	5.	U	1.	U	1.	U	1.	U	1.	U
606-20-2	2,6-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
99-09-2	3-Nitroaniline	20.	U	20.	U	20.	UJ	20.	U	20.	U	20.	U
83-32-9	Acenaphthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
51-28-5	2,4-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
100-02-7	4-Nitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
132-64-9	Dibenzofuran	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
121-14-2	2,4-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
84-66-2	Diethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
7005-72-3	4-Chlorophenylphenyl ether	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-5A02-01		041-W-5A04-01		041-W-5A05-01		041-W-5A06-01		041-W-5A07-01		041-W-5B02-01	
	ORIGINAL ID ----->	041W5A0201		041W5A0401		041W5A0501		041W5A0601		041W5A0701		041W5B0201	
	LAB SAMPLE ID --->	950950-08		950950-09		950979-06		950952-14		950950-10		950952-15	
	ID FROM REPORT -->	041W5A0201		041W5A0401		041W5A0501		041W5A0601		041W5A0701		041W5B0201	
	SAMPLE DATE ----->	11/16/95		11/16/95		11/27/95		11/17/95		11/16/95		11/17/95	
	DATE EXTRACTED -->	11/18/95		11/18/95		11/29/95		11/21/95		11/18/95		11/21/95	
	DATE ANALYZED --->	11/30/95		12/05/95		12/06/95		12/18/95		12/05/95		12/18/95	
	MATRIX ---------->	Soil		Soil		Water		Water		Water		Water	
	UNITS ---------->	UG/KG		UG/KG		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	041M10	VAL	Z42101	VAL	5A0101	VAL	Z42101	VAL
86-73-7	Fluorene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-01-6	4-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
118-74-1	Hexachlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
87-86-5	Pentachlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
85-01-8	Phenanthrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
120-12-7	Anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
84-74-2	Di-n-butylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
206-44-0	Fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
129-00-0	Pyrene	11.	U	1.	U	1.	U	1.	U	1.	U	2.	
85-68-7	Butylbenzylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-94-1	3,3'-Dichlorobenzidine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
56-55-3	Benzo(a)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
218-01-9	Chrysene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	5.		3.	J	2.	J	5.	U	2.	J
117-84-0	Di-n-octylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
205-99-2	Benzo(b)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
207-08-9	Benzo(k)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
50-32-8	Benzo(a)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
53-70-3	Dibenz(a,h)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
191-24-2	Benzo(g,h,i)perylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
106-46-7	1,4-Dichlorobenzene	NR		NR		NR		NR		NR		NR	
95-50-1	1,2-Dichlorobenzene	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA															
	SAMPLE ID ------->	041-W-63A2-01		041-W-63B2-01		041-W-63B4-01		041-W-7201-01		041-W-W101-01		041-W-W102-01	
	ORIGINAL ID ----->	041W63A201		041W63B201		041W63B401		041W720101		041WW10101		041WW10201	
	LAB SAMPLE ID --->	960039-07		960039-08		960055-17		950991-09		960043-17		960043-18	
	ID FROM REPORT -->	041W63A201		041W63B201		041W63B401		041W720101		041WW10101		041WW10201	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/24/96		11/29/95		01/22/96		01/22/96	
	DATE EXTRACTED -->	01/23/96		01/23/96		01/30/96		12/02/95		01/26/96		01/26/96	
	DATE ANALYZED --->	01/29/96		01/29/96		02/05/96		12/08/95		01/30/96		02/05/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	M52A10	VAL	Z30301	VAL	M00901	VAL	M00901	VAL
108-95-2	Phenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-44-4	bis(2-Chloroethyl)ether	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
95-57-8	2-Chlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-48-7	2-Methylphenol (o-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
106-44-5	4-Methylphenol (p-Cresol)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-72-1	Hexachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
98-95-3	Nitrobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-59-1	Isophorone	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-75-5	2-Nitrophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
105-67-9	2,4-Dimethylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-83-2	2,4-Dichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
120-82-1	1,2,4-Trichlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-20-3	Naphthalene	1.	U	1.	U	1.	U	1.	U	6.		1.	U
106-47-8	4-Chloroaniline	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
87-68-3	Hexachlorobutadiene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-57-6	2-Methylnaphthalene	1.	U	1.	U	1.	U	1.	U	3.		1.	U
77-47-4	Hexachlorocyclopentadiene	5.	U	5.	U	5.	UJ	5.	U	5.	UJ	5.	UJ
88-06-2	2,4,6-Trichlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
91-58-7	2-Chloronaphthalene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
88-74-4	2-Nitroaniline	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
131-11-3	Dimethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
208-96-8	Acenaphthylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
606-20-2	2,6-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
99-09-2	3-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
83-32-9	Acenaphthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
51-28-5	2,4-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
100-02-7	4-Nitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
132-64-9	Dibenzofuran	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
121-14-2	2,4-Dinitrotoluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
84-66-2	Diethylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
7005-72-[illegible]	lorophenylphenyl ether	5.	U	5.		5.	U	5.	U	5.	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA													
	SAMPLE ID ------->	041-W-63A2-01		041-W-63B2-01		041-W-63B4-01		041-W-7201-01		041-W-W101-01		041-W-W102-01	
	ORIGINAL ID ----->	041W63A201		041W63B201		041W63B401		041W720101		041WW10101		041WW10201	
	LAB SAMPLE ID --->	960039-07		960039-08		960055-17		950991-09		960043-17		960043-18	
	ID FROM REPORT -->	041W63A201		041W63B201		041W63B401		041W720101		041WW10101		041WW10201	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/24/96		11/29/95		01/22/96		01/22/96	
	DATE EXTRACTED -->	01/23/96		01/23/96		01/30/96		12/02/95		01/26/96		01/26/96	
	DATE ANALYZED --->	01/29/96		01/29/96		02/05/96		12/08/95		01/30/96		02/05/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	M52A10	VAL	Z30301	VAL	M00901	VAL	M00901	VAL
86-73-7	Fluorene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-01-6	4-Nitroaniline	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	U	20.	U	20.	U	20.	U	20.	U	20.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
118-74-1	Hexachlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
87-86-5	Pentachlorophenol	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
85-01-8	Phenanthrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
120-12-7	Anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
84-74-2	Di-n-butylphthalate	5.	U	22.		5.	U	5.	U	5.	U	5.	U
206-44-0	Fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
129-00-0	Pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
85-68-7	Butylbenzylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
91-94-1	3,3'-Dichlorobenzidine	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
56-55-3	Benzo(a)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
218-01-9	Chrysene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	5.	U	5.	U	7.	U	5.	U	5.	
117-84-0	Di-n-octylphthalate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
205-99-2	Benzo(b)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
207-08-9	Benzo(k)fluoranthene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
50-32-8	Benzo(a)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
53-70-3	Dibenz(a,h)anthracene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
191-24-2	Benzo(g,h,i)perylene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	NR		NR		NR		5.	U	NR		NR	
106-46-7	1,4-Dichlorobenzene	NR		NR		NR		5.	U	NR		NR	
95-50-1	1,2-Dichlorobenzene	NR		NR		NR		5.	U	NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWSVOA									
	SAMPLE ID ------->	041-W-W103-01		041-W-W202-01					
	ORIGINAL ID ----->	041WW10301		041WW20201					
	LAB SAMPLE ID --->	960043-19		960055-18					
	ID FROM REPORT -->	041WW10301		041WW20201					
	SAMPLE DATE ----->	01/22/96		01/24/96					
	DATE EXTRACTED -->	01/26/96		01/30/96					
	DATE ANALYZED --->	02/05/96		02/08/96					
	MATRIX ---------->	Water		Water					
	UNITS ---------->	UG/L		UG/L					
CAS #	Parameter	M00901	VAL	M52A10	VAL				
108-95-2	Phenol	5.	U	5.	U				
111-44-4	bis(2-Chloroethyl)ether	1.	U	1.	U				
95-57-8	2-Chlorophenol	5.	U	5.	U				
95-48-7	2-Methylphenol (o-Cresol)	5.	U	5.	U				
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	5.	U				
106-44-5	4-Methylphenol (p-Cresol)	5.	U	5.	U				
621-64-7	N-Nitroso-di-n-propylamine	5.	U	5.	U				
67-72-1	Hexachloroethane	5.	U	5.	U				
98-95-3	Nitrobenzene	5.	U	5.	U				
78-59-1	Isophorone	5.	U	5.	U				
88-75-5	2-Nitrophenol	5.	U	5.	U				
105-67-9	2,4-Dimethylphenol	5.	U	5.	U				
111-91-1	bis(2-Chloroethoxy)methane	5.	U	5.	U				
120-83-2	2,4-Dichlorophenol	5.	U	5.	U				
120-82-1	1,2,4-Trichlorobenzene	5.	U	5.	U				
91-20-3	Naphthalene	1.	U	1.	U				
106-47-8	4-Chloroaniline	5.	U	5.	U				
87-68-3	Hexachlorobutadiene	5.	U	5.	U				
59-50-7	4-Chloro-3-methylphenol	5.	U	5.	U				
91-57-6	2-Methylnaphthalene	1.	U	1.					
77-47-4	Hexachlorocyclopentadiene	5.	UJ	5.	UJ				
88-06-2	2,4,6-Trichlorophenol	5.	U	5.	U				
95-95-4	2,4,5-Trichlorophenol	20.	U	20.	U				
91-58-7	2-Chloronaphthalene	5.	U	5.	U				
88-74-4	2-Nitroaniline	5.	U	5.	U				
131-11-3	Dimethylphthalate	5.	U	5.	U				
208-96-8	Acenaphthylene	1.	U	1.	U				
606-20-2	2,6-Dinitrotoluene	5.	U	5.	U				
99-09-2	3-Nitroaniline	20.	U	20.	U				
83-32-9	Acenaphthene	1.	U	1.	U				
51-28-5	2,4-Dinitrophenol	20.	U	20.	U				
100-02-7	4-Nitrophenol	20.	U	20.	U				
132-64-9	Dibenzofuran	5.	U	5.	U				
121-14-2	2,4-Dinitrotoluene	5.	U	5.	U				
84-66-2	Diethylphthalate	5.	U	5.	U				
7005-72-3	[illegible]hlorophenylphenyl ether	5.	U	5.					

*** Validation Complete ***

LOWSVOA									
	SAMPLE ID ------->	041-W-W103-01		041-W-W202-01					
	ORIGINAL ID ----->	041WW10301		041WW20201					
	LAB SAMPLE ID --->	960043-19		960055-18					
	ID FROM REPORT -->	041WW10301		041WW20201					
	SAMPLE DATE ----->	01/22/96		01/24/96					
	DATE EXTRACTED -->	01/26/96		01/30/96					
	DATE ANALYZED --->	02/05/96		02/08/96					
	MATRIX ---------->	Water		Water					
	UNITS ---------->	UG/L		UG/L					
CAS #	Parameter	M00901	VAL	M52A10	VAL				
86-73-7	Fluorene	1.	U	1.	U				
100-01-6	4-Nitroaniline	20.	U	20.	U				
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	U	20.	U				
86-30-6	N-Nitrosodiphenylamine	5.	U	5.	U				
101-55-3	4-Bromophenyl-phenylether	5.	U	5.	U				
118-74-1	Hexachlorobenzene	1.	U	1.	U				
87-86-5	Pentachlorophenol	5.	U	5.	U				
85-01-8	Phenanthrene	1.	U	1.	U				
120-12-7	Anthracene	1.	U	1.	U				
84-74-2	Di-n-butylphthalate	5.	U	5.	U				
206-44-0	Fluoranthene	1.	U	1.	U				
129-00-0	Pyrene	1.	U	1.	U				
85-68-7	Butylbenzylphthalate	5.	U	5.	U				
91-94-1	3,3'-Dichlorobenzidine	5.	U	5.	U				
56-55-3	Benzo(a)anthracene	1.	U	1.	U				
218-01-9	Chrysene	1.	U	1.	U				
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	5.	U				
117-84-0	Di-n-octylphthalate	5.	U	5.	U				
205-99-2	Benzo(b)fluoranthene	1.	U	1.	U				
207-08-9	Benzo(k)fluoranthene	1.	U	1.	U				
50-32-8	Benzo(a)pyrene	1.	U	1.	U				
193-39-5	Indeno(1,2,3-cd)pyrene	1.	U	1.	U				
53-70-3	Dibenz(a,h)anthracene	1.	U	1.	U				
191-24-2	Benzo(g,h,i)perylene	1.	U	1.	U				
541-73-1	1,3-Dichlorobenzene	NR		NR					
106-46-7	1,4-Dichlorobenzene	NR		NR					
95-50-1	1,2-Dichlorobenzene	NR		NR					

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA

SAMPLE ID ------->		041-W-0103-01		041-W-0301-01		041-W-0302-01		041-W-0303-01		041-W-0304-01		041-W-04D1-01	
ORIGINAL ID ----->		041W010301		041W030101		041W030201		041W030301		041W030401		041W04D101	
LAB SAMPLE ID --->		960039-14		950998-20		950998-21		951012-07		951012-08		960025-07	
ID FROM REPORT -->		041W010301		041W030101		041W030201		041W030301		041W030401		041W04D101	
SAMPLE DATE ----->		01/17/96		12/01/95		12/01/95		12/04/95		12/04/95		01/15/96	
DATE ANALYZED --->		01/20/96		12/05/95		12/05/95		12/06/95		12/06/95		01/18/96	
MATRIX ---------->		Water		Water		Water		Water		Water		Water	
UNITS ---------->		UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	EM0040	VAL	EM0040	VAL	030301	VAL	030301	VAL	EM005	VAL
74-87-3	Chloromethane	1.	UJ	1.	U	1.	U	1.	U	1.	U	1.	U
74-83-9	Bromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-01-4	Vinyl chloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-00-3	Chloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-09-2	Methylene chloride	6.	U	1200.	D	5.	U	3.	U	120.	D	2.	U
67-64-1	Acetone	15.	UR	12.	UR	15.	U	14.	UR	11.	UR	12.	UR
75-15-0	Carbon disulfide	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-35-4	1,1-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-34-3	1,1-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.		1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
67-66-3	Chloroform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
107-06-2	1,2-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-93-3	2-Butanone (MEK)	2.	J	5.	UR	5.	UR	5.	UR	5.	UR	5.	UR
71-55-6	1,1,1-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
56-23-5	Carbon tetrachloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-27-4	Bromodichloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-87-5	1,2-Dichloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-01-6	Trichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
124-48-1	Dibromochloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
71-43-2	Benzene	1.	U	1.	U	1.		2.		3.		1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-25-2	Bromoform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
96-12-8	1,2-Dibromo-3-Chloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	U	5.	UR	5.	UR	5.	U	5.	U	5.	U
591-78-6	2-Hexanone	5.	U	5.	U	5.	U	5.	UR	5.	UR	5.	U
127-18-4	Tetrachloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-88-3	Toluene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-90-7	Chlorobenzene	1.	U	3.		13.		30.	D	14.		1.	U
100-41-4	Ethylbenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-42-5	Styrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
1330-20-7	Xylene (Total)	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-46-7	Dichlorobenzene	1.	U	2.		4.		10.		4.		1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA													
	SAMPLE ID ------->	041-W-0103-01		041-W-0301-01		041-W-0302-01		041-W-0303-01		041-W-0304-01		041-W-04D1-01	
	ORIGINAL ID ----->	041W010301		041W030101		041W030201		041W030301		041W030401		041W04D101	
	LAB SAMPLE ID --->	960039-14		950998-20		950998-21		951012-07		951012-08		960025-07	
	ID FROM REPORT -->	041W010301		041W030101		041W030201		041W030301		041W030401		041W04D101	
	SAMPLE DATE ----->	01/17/96		12/01/95		12/01/95		12/04/95		12/04/95		01/15/96	
	DATE ANALYZED --->	01/20/96		12/05/95		12/05/95		12/06/95		12/06/95		01/18/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	EM0040	VAL	EM0040	VAL	030301	VAL	030301	VAL	EM005	VAL
95-50-1	1,2-Dichlorobenzene	1.	U	1.	U	1.	U	1.		1.	U	1.	U
74-97-5	Chlorobromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-93-4	1,2-Dibromoethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA															
	SAMPLE ID ------->	041-W-04D4-01		041-W-0603-01		041-W-0607-01		041-W-1201-01		041-W-1301-01		041-W-1501-01	
	ORIGINAL ID ----->	041W04D401		041W060301		041W060701		041W120101		041W130101		041W150101	
	LAB SAMPLE ID --->	960025-08		950940-19		950940-07		950983-11		950979-05		951021-10	
	ID FROM REPORT -->	041W04D401		041W060301		041W060701		041W120101		041W130101		041W150101	
	SAMPLE DATE ----->	01/15/96		11/15/95		11/14/95		11/28/95		11/27/95		12/06/95	
	DATE ANALYZED --->	01/18/96		11/18/95		11/17/95		11/30/95		11/30/95		12/11/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	EM005	VAL	M06070	VAL	M06070	VAL	Z53301	VAL	041M10	VAL	EM0050	VAL
74-87-3	Chloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-83-9	Bromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-01-4	Vinyl chloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-00-3	Chloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-09-2	Methylene chloride	87.	D	1.	UJ	13.		7.	U	15.	U	3.	U
67-64-1	Acetone	4.	UR	5.	UR	17.	U	11.	UR	11.	UR	8.	UR
75-15-0	Carbon disulfide	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-35-4	1,1-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-34-3	1,1-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
67-66-3	Chloroform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
107-06-2	1,2-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-93-3	2-Butanone (MEK)	5.	UR	5.	UR	5.	U	5.	UR	5.	UR	5.	U
71-55-6	1,1,1-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
56-23-5	Carbon tetrachloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-27-4	Bromodichloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-87-5	1,2-Dichloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-01-6	Trichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
124-48-1	Dibromochloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
71-43-2	Benzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-25-2	Bromoform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
96-12-8	1,2-Dibromo-3-Chloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
591-78-6	2-Hexanone	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
127-18-4	Tetrachloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-88-3	Toluene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-90-7	Chlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-41-4	Ethylbenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-42-5	Styrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
1330-20-7	Xylene (Total)	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-46-7	Dichlorobenzene	1.	U	1.		1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA													
	SAMPLE ID ------->	041-W-04D4-01		041-W-0603-01		041-W-0607-01		041-W-1201-01		041-W-1301-01		041-W-1501-01	
	ORIGINAL ID ----->	041W04D401		041W060301		041W060701		041W120101		041W130101		041W150101	
	LAB SAMPLE ID --->	960025-08		950940-19		950940-07		950983-11		950979-05		951021-10	
	ID FROM REPORT -->	041W04D401		041W060301		041W060701		041W120101		041W130101		041W150101	
	SAMPLE DATE ----->	01/15/96		11/15/95		11/14/95		11/28/95		11/27/95		12/06/95	
	DATE ANALYZED --->	01/18/96		11/18/95		11/17/95		11/30/95		11/30/95		12/11/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	EM005	VAL	M06070	VAL	M06070	VAL	Z53301	VAL	041M10	VAL	EM0050	VAL
95-50-1	1,2-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-97-5	Chlorobromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-93-4	1,2-Dibromoethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA															
	SAMPLE ID ------->	041-W-1502-01		041-W-1601-01		041-W-1602-01		041-W-1701-01		041-W-18A2-01		041-W-18B1-01	
	ORIGINAL ID ----->	041W150201		041W160101		041W160201		041W170101		041W18A201		041W18B101	
	LAB SAMPLE ID --->	951021-11		951029-06		951029-07		960025-09		951050-21		951050-08	
	ID FROM REPORT -->	041W150201		041W160101		041W160201		041W170101		041W18A201		041W18B101	
	SAMPLE DATE ----->	12/06/95		12/07/95		12/07/95		01/15/96		12/15/95		12/14/95	
	DATE ANALYZED --->	12/16/95		12/12/95		12/12/95		01/19/96		12/21/95		12/21/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	EM0050	VAL	EW0010	VAL	EW0010	VAL	EM005	VAL	EMD060	VAL	EMD060	VAL
74-87-3	Chloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-83-9	Bromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-01-4	Vinyl chloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-00-3	Chloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-09-2	Methylene chloride	9.	U	7.	U	6.	U	38.	D	2.	U	2.	U
67-64-1	Acetone	23.	UR	18.	UR	14.	UR	7.	UR	34.	UR	11.	UR
75-15-0	Carbon disulfide	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-35-4	1,1-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-34-3	1,1-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
67-66-3	Chloroform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
107-06-2	1,2-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-93-3	2-Butanone (MEK)	5.	UR	5.	UR	5.	UR	1.	UR	5.	UR	5.	UR
71-55-6	1,1,1-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
56-23-5	Carbon tetrachloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-27-4	Bromodichloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-87-5	1,2-Dichloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-01-6	Trichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
124-48-1	Dibromochloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
71-43-2	Benzene	1.	U	1.	U	1.	U	1.	U	5.		1.	
10061-02-6	trans-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-25-2	Bromoform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
96-12-8	1,2-Dibromo-3-Chloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
591-78-6	2-Hexanone	5.	UR	5.	UR	5.	UR	5.	U	5.	U	5.	U
127-18-4	Tetrachloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-88-3	Toluene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-90-7	Chlorobenzene	1.	U	1.		1.	U	1.	U	14.		5.	
100-41-4	Ethylbenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-42-5	Styrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
1330-20-7	Xylene (Total)	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-46-7	Dichlorobenzene	1.	U	1.		1.	U	1.	U	2.		1.	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA													
	SAMPLE ID ------->	041-W-1502-01		041-W-1601-01		041-W-1602-01		041-W-1701-01		041-W-18A2-01		041-W-18B1-01	
	ORIGINAL ID ----->	041W150201		041W160101		041W160201		041W170101		041W18A201		041W18B101	
	LAB SAMPLE ID --->	951021-11		951029-06		951029-07		960025-09		951050-21		951050-08	
	ID FROM REPORT -->	041W150201		041W160101		041W160201		041W170101		041W18A201		041W18B101	
	SAMPLE DATE ----->	12/06/95		12/07/95		12/07/95		01/15/96		12/15/95		12/14/95	
	DATE ANALYZED --->	12/16/95		12/12/95		12/12/95		01/19/96		12/21/95		12/21/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	EM0050	VAL	EW0010	VAL	EW0010	VAL	EM005	VAL	EMD060	VAL	EMD060	VAL
95-50-1	1,2-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-97-5	Chlorobromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-93-4	1,2-Dibromoethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA															
	SAMPLE ID ------->	041-W-1901-01		041-W-1903-01		041-W-2501-01		041-W-2503-01		041-W-2702-01		041-W-3201-01	
	ORIGINAL ID ----->	041W190101		041W190301		041W250101		041W250301		041W270201		041W320101	
	LAB SAMPLE ID --->	960039-15		960039-16		950940-20		950940-21		950940-22		950940-08	
	ID FROM REPORT -->	041W190101		041W190301		041W250101		041W250301		041W270201		041W320101	
	SAMPLE DATE ----->	01/17/96		01/17/96		11/15/95		11/15/95		11/15/95		11/14/95	
	DATE ANALYZED --->	01/22/96		01/21/96		11/18/95		11/18/95		11/18/95		11/17/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
74-87-3	Chloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-83-9	Bromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-01-4	Vinyl chloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-00-3	Chloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-09-2	Methylene chloride	3.	U	4.	U	1.	UJ	1700.	D	4.	UJ	6.	UJ
67-64-1	Acetone	5.	UR	6.	UR	9.	UR	22.	UR	9.	UR	33.	U
75-15-0	Carbon disulfide	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-35-4	1,1-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-34-3	1,1-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
67-66-3	Chloroform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
107-06-2	1,2-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-93-3	2-Butanone (MEK)	5.	UR	5.	UR	5.	UR	5.	UR	5.	UR	5.	U
71-55-6	1,1,1-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
56-23-5	Carbon tetrachloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-27-4	Bromodichloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-87-5	1,2-Dichloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-01-6	Trichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
124-48-1	Dibromochloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
71-43-2	Benzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-25-2	Bromoform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
96-12-8	1,2-Dibromo-3-Chloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
591-78-6	2-Hexanone	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
127-18-4	Tetrachloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-88-3	Toluene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-90-7	Chlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-41-4	Ethylbenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-42-5	Styrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
1330-20-7	Xylene (Total)	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-46-7	Dichlorobenzene	1.	U	1.		1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA													
	SAMPLE ID ------->	041-W-1901-01		041-W-1903-01		041-W-2501-01		041-W-2503-01		041-W-2702-01		041-W-3201-01	
	ORIGINAL ID ----->	041W190101		041W190301		041W250101		041W250301		041W270201		041W320101	
	LAB SAMPLE ID --->	960039-15		960039-16		950940-20		950940-21		950940-22		950940-08	
	ID FROM REPORT -->	041W190101		041W190301		041W250101		041W250301		041W270201		041W320101	
	SAMPLE DATE ----->	01/17/96		01/17/96		11/15/95		11/15/95		11/15/95		11/14/95	
	DATE ANALYZED --->	01/22/96		01/21/96		11/18/95		11/18/95		11/18/95		11/17/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
95-50-1	1,2-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-97-5	Chlorobromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-93-4	1,2-Dibromoethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA

SAMPLE ID ------->		041-W-3203-01		041-W-3301-01		041-W-3303-01		041-W-4801-01		041-W-4901-01		041-W-4903-01	
ORIGINAL ID ----->		041W320301		041W330101		041W330301		041W480101		041W490101		041W490301	
LAB SAMPLE ID --->		950940-09		950940-15		950940-16		960043-14		960043-15		960043-16	
ID FROM REPORT -->		041W320301		041W330101		041W330301		041W480101		041W490101		041W490301	
SAMPLE DATE ----->		11/14/95		11/13/95		11/13/95		01/22/96		01/22/96		01/22/96	
DATE ANALYZED --->		11/18/95		11/18/95		11/18/95		01/25/96		01/24/96		01/24/96	
MATRIX ---------->		Water		Water		Water		Water		Water		Water	
UNITS ---------->		UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	M00901	VAL	M00901	VAL	M00901	VAL
74 87 3	Chloromethane	1.	U	1.	U	1.	U	1.	U	1.	UJ	1.	UJ
74 83 9	Bromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75 01 4	Vinyl chloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75 00 3	Chloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75 09 2	Methylene chloride	14.		1.	UJ	1.	UJ	3.	U	4.	U	3.	U
67 64 1	Acetone	13.	UR	8.	UR	13.	UR	7.	UR	4.	J	6.	J
75 15 0	Carbon disulfide	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75 35 4	1,1 Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75 34 3	1,1 Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156 59 2	cis-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156 60 5	trans-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
67-66-3	Chloroform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
107-06-2	1,2-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-93-3	2-Butanone (MEK)	5.	UR	5.	UR	5.	UR	5.	UR	5.	UR	5.	UR
71-55-6	1,1,1-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
56-23-5	Carbon tetrachloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-27-4	Bromodichloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-87-5	1,2-Dichloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-01-6	Trichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
124-48-1	Dibromochloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
71-43-2	Benzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-25-2	Bromoform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
96-12-8	1,2-Dibromo-3-Chloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
591-78-6	2-Hexanone	5.	U	5.	U	5.	U	5.	U	5.	UR	5.	UR
127-18-4	Tetrachloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-88-3	Toluene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-90-7	Chlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-41-4	Ethylbenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-42-5	Styrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
1330-20-7	Xylene (Total)	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-46-7	Dichlorobenzene	1.	U	1.		1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA													
	SAMPLE ID ------->	041-W-3203-01		041-W-3301-01		041-W-3303-01		041-W-4801-01		041-W-4901-01		041-W-4903-01	
	ORIGINAL ID ----->	041W320301		041W330101		041W330301		041W480101		041W490101		041W490301	
	LAB SAMPLE ID --->	950940-09		950940-15		950940-16		960043-14		960043-15		960043-16	
	ID FROM REPORT -->	041W320301		041W330101		041W330301		041W480101		041W490101		041W490301	
	SAMPLE DATE ----->	11/14/95		11/13/95		11/13/95		01/22/96		01/22/96		01/22/96	
	DATE ANALYZED --->	11/18/95		11/18/95		11/18/95		01/25/96		01/24/96		01/24/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	M00901	VAL	M00901	VAL	M00901	VAL
95-50-1	1,2-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-97-5	Chlorobromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-93-4	1,2-Dibromoethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA															
	SAMPLE ID ------->	041-W-52A1-01		041-W-52E3-01		041-W-56A1-01		041-W-5701-01		041-W-5801-01		041-W-5A01-01	
	ORIGINAL ID ----->	041W52A101		041W52E301		041W56A101		041W570101		041W580101		041W5A0101	
	LAB SAMPLE ID --->	960055-06		960055-07		960055-20		950991-15		960055-21		950950-07	
	ID FROM REPORT -->	041W52A101		041W52E301		041W56A101		041W570101		041W580101		041W5A0101	
	SAMPLE DATE ----->	01/23/96		01/23/96		01/24/96		11/29/95		01/24/96		11/16/95	
	DATE ANALYZED --->	01/25/96		01/25/96		01/25/96		12/04/95		01/25/96		11/21/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	Z30301	VAL	M52A10	VAL	5A0101	VAL
74-87-3	Chloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-83-9	Bromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-01-4	Vinyl chloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-00-3	Chloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-09-2	Methylene chloride	3.	U	3.	U	2.	U	150.	D	2.	U	7.	U
67-64-1	Acetone	4.	UR	7.	UR	18.	UR	13.	U	37.	UR	5.	UR
75-15-0	Carbon disulfide	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-35-4	1,1-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-34-3	1,1-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	
156-59-2	cis-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
67-66-3	Chloroform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
107-06-2	1,2-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-93-3	2-Butanone (MEK)	5.	UR	5.	UR	5.	UR	5.	U	5.	UR	5.	UR
71-55-6	1,1,1-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
56-23-5	Carbon tetrachloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-27-4	Bromodichloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-87-5	1,2-Dichloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-01-6	Trichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
124-48-1	Dibromochloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
71-43-2	Benzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-25-2	Bromoform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
96-12-8	1,2-Dibromo-3-Chloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
591-78-6	2-Hexanone	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
127-18-4	Tetrachloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-88-3	Toluene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-90-7	Chlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-41-4	Ethylbenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-42-5	Styrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
1330-20-7	Xylene (Total)	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-46-7	Dichlorobenzene	1.	U	1.		1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA													
	SAMPLE ID ------->	041-W-52A1-01		041-W-52E3-01		041-W-56A1-01		041-W-5701-01		041-W-5801-01		041-W-5A01-01	
	ORIGINAL ID ----->	041W52A101		041W52E301		041W56A101		041W570101		041W580101		041W5A0101	
	LAB SAMPLE ID --->	960055-06		960055-07		960055-20		950991-15		960055-21		950950-07	
	ID FROM REPORT -->	041W52A101		041W52E301		041W56A101		041W570101		041W580101		041W5A0101	
	SAMPLE DATE ----->	01/23/96		01/23/96		01/24/96		11/29/95		01/24/96		11/16/95	
	DATE ANALYZED --->	01/25/96		01/25/96		01/25/96		12/04/95		01/25/96		11/21/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	Z30301	VAL	M52A10	VAL	5A0101	VAL
95-50-1	1,2-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-97-5	Chlorobromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-93-4	1,2-Dibromoethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA													
	SAMPLE ID ------->	041-W-5A02-01		041-W-5A04-01		041-W-5A05-01		041-W-5A06-01		041-W-5A07-01		041-W-5B02-01	
	ORIGINAL ID ----->	041W5A0201		041W5A0401		041W5A0501		041W5A0601		041W5A0701		041W5B0201	
	LAB SAMPLE ID --->	950950-08		950950-09		950979-06		950952-14		950950-10		950952-15	
	ID FROM REPORT -->	041W5A0201		041W5A0401		041W5A0501		041W5A0601		041W5A0701		041W5B0201	
	SAMPLE DATE ----->	11/16/95		11/16/95		11/27/95		11/17/95		11/16/95		11/17/95	
	DATE ANALYZED --->	11/21/95		11/21/95		11/30/95		11/22/95		11/21/95		11/22/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	041M10	VAL	Z42101	VAL	5A0101	VAL	Z42101	VAL
74-87-3	Chloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-83-9	Bromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-01-4	Vinyl chloride	1.	U	1.	U	1.	U	1.	U	1.	U	6.	
75-00-3	Chloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-09-2	Methylene chloride	6.	U	7.	U	7.	U	6.	U	5.	U	8.	U
67-64-1	Acetone	9.	UR	8.	UR	14.	UR	9.	J	6.	UR	8.	J
75-15-0	Carbon disulfide	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-35-4	1,1-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-34-3	1,1-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	3.	
156-59-2	cis-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.		1.	U	54.	UR
156-60-5	trans-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
67-66-3	Chloroform	1.	U	1.	U	1.	U	1.		1.	U	1.	U
107-06-2	1,2-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-93-3	2-Butanone (MEK)	5.	UR	5.	UR	5.	UR	5.	UR	5.	UR	5.	UR
71-55-6	1,1,1-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
56-23-5	Carbon tetrachloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-27-4	Bromodichloromethane	1.	U	1.	U	1.	U	2.		1.	U	1.	U
78-87-5	1,2-Dichloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-01-6	Trichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	10.	
124-48-1	Dibromochloromethane	1.	U	1.	U	1.	U	2.		1.	U	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
71-43-2	Benzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-25-2	Bromoform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
96-12-8	1,2-Dibromo-3-Chloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
591-78-6	2-Hexanone	5.	U	5.	U	5.	U	5.	UJ	5.	U	5.	UJ
127-18-4	Tetrachloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-88-3	Toluene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-90-7	Chlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-41-4	Ethylbenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-42-5	Styrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
1330-20-7	Xylene (Total)	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
541-73-1	1,3-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-46-7	Dichlorobenzene	1.	U	1.		1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA													
	SAMPLE ID ------->	041-W-5A02-01		041-W-5A04-01		041-W-5A05-01		041-W-5A06-01		041-W-5A07-01		041-W-5B02-01	
	ORIGINAL ID ----->	041W5A0201		041W5A0401		041W5A0501		041W5A0601		041W5A0701		041W5B0201	
	LAB SAMPLE ID --->	950950-08		950950-09		950979-06		950952-14		950950-10		950952-15	
	ID FROM REPORT -->	041W5A0201		041W5A0401		041W5A0501		041W5A0601		041W5A0701		041W5B0201	
	SAMPLE DATE ----->	11/16/95		11/16/95		11/27/95		11/17/95		11/16/95		11/17/95	
	DATE ANALYZED --->	11/21/95		11/21/95		11/30/95		11/22/95		11/21/95		11/22/95	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	041M10	VAL	Z42101	VAL	5A0101	VAL	Z42101	VAL
95-50-1	1,2-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-97-5	Chlorobromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-93-4	1,2-Dibromoethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA

SAMPLE ID ------->	041-W-63A2-01	041-W-63B2-01	041-W-63B4-01	041-W-7201-01	041-W-W101-01	041-W-W102-01
ORIGINAL ID ----->	041W63A201	041W63B201	041W63B401	041W720101	041WW10101	041WW10201
LAB SAMPLE ID --->	960039-07	960039-08	960055-17	950991-09	960043-17	960043-18
ID FROM REPORT -->	041W63A201	041W63B201	041W63B401	041W720101	041WW10101	041WW10201
SAMPLE DATE ----->	01/18/96	01/18/96	01/24/96	11/29/95	01/22/96	01/22/96
DATE ANALYZED --->	01/20/96	01/20/96	01/25/96	12/04/95	01/24/96	01/24/96
MATRIX ---------->	Water	Water	Water	Water	Water	Water
UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	63A401	VAL	63A401	VAL	M52A10	VAL	Z30301	VAL	M00901	VAL	M00901	VAL
74-87-3	Chloromethane	1.	UJ	1.	UJ	1.	U	1.	U	1.	UJ	1.	UJ
74-83-9	Bromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-01-4	Vinyl chloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-00-3	Chloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-09-2	Methylene chloride	4.	U	5.	U	2.	U	12.	U	2.	U	4.	U
67-64-1	Acetone	10.	UR	9.	UR	11.	UR	5.	U	13.	J	42.	UR
75-15-0	Carbon disulfide	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-35-4	1,1-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-34-3	1,1-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	3.		1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
67-66-3	Chloroform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
107-06-2	1,2-Dichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-93-3	2-Butanone (MEK)	5.	UR	5.	UR	5.	UR	5.	U	5.	UR	5.	UR
71-55-6	1,1,1-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
56-23-5	Carbon tetrachloride	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-27-4	Bromodichloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
78-87-5	1,2-Dichloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-01-6	Trichloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
124-48-1	Dibromochloromethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
71-43-2	Benzene	1.	U	1.	U	1.	U	1.	U	16.		24.	
10061-02-6	trans-1,3-Dichloropropene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
75-25-2	Bromoform	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
96-12-8	1,2-Dibromo-3-Chloropropane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
591-78-6	2-Hexanone	5.	U	5.	U	5.	U	5.	U	5.	UR	5.	UR
127-18-4	Tetrachloroethene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
108-88-3	Toluene	1.	U	1.	U	1.	U	1.	U	3.		3.	
108-90-7	Chlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
100-41-4	Ethylbenzene	1.	U	1.	U	1.	U	1.	U	7.		11.	
100-42-5	Styrene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
1330-20-7	Xylene (Total)	1.	U	1.	U	1.	U	1.	U	46.		150.	D
541-73-1	1,3-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-46-7	[illegible]-Dichlorobenzene	1.	U	1.		1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA													
	SAMPLE ID ------->	041-W-63A2-01		041-W-63B2-01		041-W-63B4-01		041-W-7201-01		041-W-W101-01		041-W-W102-01	
	ORIGINAL ID ----->	041W63A201		041W63B201		041W63B401		041W720101		041WW10101		041WW10201	
	LAB SAMPLE ID --->	960039-07		960039-08		960055-17		950991-09		960043-17		960043-18	
	ID FROM REPORT -->	041W63A201		041W63B201		041W63B401		041W720101		041WW10101		041WW10201	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/24/96		11/29/95		01/22/96		01/22/96	
	DATE ANALYZED --->	01/20/96		01/20/96		01/25/96		12/04/95		01/24/96		01/24/96	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	M52A10	VAL	Z30301	VAL	M00901	VAL	M00901	VAL
95-50-1	1,2-Dichlorobenzene	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
74-97-5	Chlorobromomethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U
106-93-4	1,2-Dibromoethane	1.	U	1.	U	1.	U	1.	U	1.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

LOWVOA									
	SAMPLE ID ------->	041-W-W103-01		041-W-W202-01					
	ORIGINAL ID ----->	041WW10301		041WW20201					
	LAB SAMPLE ID --->	960043-19		960055-18					
	ID FROM REPORT -->	041WW10301		041WW20201					
	SAMPLE DATE ----->	01/22/96		01/24/96					
	DATE ANALYZED --->	01/25/96		01/25/96					
	MATRIX ---------->	Water		Water					
	UNITS ---------->	UG/L		UG/L					
CAS #	Parameter	M00901	VAL	M52A10	VAL				
74-87-3	Chloromethane	1.	UJ	1.	U				
74-83-9	Bromomethane	1.	U	1.	U				
75-01-4	Vinyl chloride	1.	U	1.	U				
75-00-3	Chloroethane	1.	U	1.	U				
75-09-2	Methylene chloride	2.	U	2.	U				
67-64-1	Acetone	12.	UR	33.	UR				
75-15-0	Carbon disulfide	1.	U	1.	U				
75-35-4	1,1-Dichloroethene	1.	U	1.	U				
75-34-3	1,1-Dichloroethane	1.	U	1.	U				
156-59-2	cis-1,2-Dichloroethene	1.	U	1.	U				
156-60-5	trans-1,2-Dichloroethene	1.	U	1.	U				
67-66-3	Chloroform	1.	U	1.	U				
107-06-2	1,2-Dichloroethane	1.	U	1.	U				
78-93-3	2-Butanone (MEK)	5.	UR	5.	UR				
71-55-6	1,1,1-Trichloroethane	1.	U	1.	U				
56-23-5	Carbon tetrachloride	1.	U	1.	U				
75-27-4	Bromodichloromethane	1.	U	1.	U				
78-87-5	1,2-Dichloropropane	1.	U	1.	U				
10061-01-5	cis-1,3-Dichloropropene	1.	U	1.	U				
79-01-6	Trichloroethene	1.	U	1.	U				
124-48-1	Dibromochloromethane	1.	U	1.	U				
79-00-5	1,1,2-Trichloroethane	1.	U	1.	U				
71-43-2	Benzene	1.	U	1.	U				
10061-02-6	trans-1,3-Dichloropropene	1.	U	1.	U				
75-25-2	Bromoform	1.	U	1.	U				
96-12-8	1,2-Dibromo-3-Chloropropane	1.	U	1.	U				
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	U	5.	U				
591-78-6	2-Hexanone	5.	U	5.	U				
127-18-4	Tetrachloroethene	1.	U	1.	U				
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	1.	U				
108-88-3	Toluene	1.	U	1.	U				
108-90-7	Chlorobenzene	1.	U	1.	U				
100-41-4	Ethylbenzene	1.	U	1.	U				
100-42-5	Styrene	1.	U	1.	U				
1330-20-7	Xylene (Total)	1.	U	1.	U				
541-73-1	1,3-Dichlorobenzene	1.	U	1.	U				
106-46-[illegible]	[illegible]ichlorobenzene	1.	U	1.					

*** Validation Complete ***

LOWVOA								
	SAMPLE ID ------->	041-W-W103-01		041-W-W202-01				
	ORIGINAL ID ----->	041WW10301		041WW20201				
	LAB SAMPLE ID --->	960043-19		960055-18				
	ID FROM REPORT -->	041WW10301		041WW20201				
	SAMPLE DATE ----->	01/22/96		01/24/96				
	DATE ANALYZED --->	01/25/96		01/25/96				
	MATRIX ---------->	Water		Water				
	UNITS ---------->	UG/L		UG/L				
CAS #	Parameter	M00901	VAL	M52A10	VAL			
95-50-1	1,2-Dichlorobenzene	1.	U	1.	U			
74-97-5	Chlorobromomethane	1.	U	1.	U			
106-93-4	1,2-Dibromoethane	1.	U	1.	U			

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	001-M-0001-01		001-W-0001-01		001-M-0003-01		001-W-0003-01		001-M-0003-02		001-W-0003-02	
	ORIGINAL ID ----->	01M0101		01W0101		01M0301		01W0301		01M0302		01W0302	
	LAB SAMPLE ID --->	622185		622180		621852		621828		621860		621830	
	ID FROM REPORT -->	MAC001		MAC002		MAC002		MAC003		MAC003		MAC004	
	SAMPLE DATE ----->	06/29/94		06/29/94		06/28/94		06/28/94		06/28/94		06/28/94	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	MG/KG		UG/L		MG/KG		UG/L		MG/KG		UG/L	
CAS #	Parameter	93612	VAL	89362	VAL	93612	VAL	89362	VAL	93612	VAL	89362	VAL
7429-90-5	Aluminum	4430.	J	2120.		2540.	J	170.		809.	J	175.	
7440-36-0	Antimony	12.9	U	55.9	U	8.7	U	55.9	U	8.8	U	55.9	U
7440-38-2	Arsenic	1.2	U	3.4		1.6	J	2.8	U	1.6	J	2.8	U
7440-39-3	Barium	10.9		32.1		8.5		35.8		5.2		34.4	
7440-41-7	Beryllium	0.47	U	0.5	U	0.32	U	0.5	U	0.32	U	0.5	U
7440-43-9	Cadmium	1.5	U	4.6	UJ	2.2		4.6	UJ	0.99	U	4.6	UJ
7440-70-2	Calcium	327.	J	11700.		1030.	J	29100.		355.	J	29100.	
7440-47-3	Chromium	7.8		13.5		16.9		9.2	U	2.4		9.2	U
7440-48-4	Cobalt	1.8	U	7.3	U	1.2	U	7.3	U	1.2	U	7.3	U
7440-50-8	Copper	6.1		7.5		6.2		4.5	U	3.1	U	4.5	U
7439-89-6	Iron	1490.	J	3540.		13200.	J	8080.		15800.	J	8430.	
7439-92-1	Lead	22.	J	6.	J	36.3	J	1.6	UJ	5.5	J	1.6	UJ
7439-95-4	Magnesium	130.		2140.		98.		2280.		39.9	U	2320.	
7439-96-5	Manganese	3.7		143.		35.1		127.		6.6		136.	
7439-97-6	Mercury	0.21	U	0.2	U	0.14	U	0.2	U	0.15	U	0.2	U
7440-02-0	Nickel	17.1	U	16.4	U	11.5	U	16.4	U	11.6	U	16.4	U
7440-09-7	Potassium	1090.	U	1040.		738.	U	1950.		742.	U	1840.	
7782-49-2	Selenium	1.7	U	3.9	U	1.1	U	3.9	U	1.1	U	3.9	UJ
7440-22-4	Silver	1.7	U	3.6	U	1.2	U	3.6	U	1.2	U	3.6	U
7440-23-5	Sodium	204.		5510.		96.6	U	7010.		94.6	U	7220.	
7440-28-0	Thallium	1.5	U	3.6	UJ	1.	U	36.	UJ	1.	U	3.6	UJ
7440-62-2	Vanadium	4.5		10.2		4.4		4.7		2.2		4.4	U
7440-66-6	Zinc	10.4		39.7		15.8		9.2	U	6.		9.2	U
57-12-5	Cyanide (CN)	1.1	U	10.	U	0.72	U	10.	U	0.73	U	10.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	001-M-0003-03		001-W-0003-03		001-M-0016-01		001-W-0016-01		001-M-0018-01		001-W-0018-01	
	ORIGINAL ID ----->	01M0303		01W0303		01M1601		01W1601		01M1801		01W1801	
	LAB SAMPLE ID --->	621862		621836		622186		622181		622187		622179	
	ID FROM REPORT -->	MAC004		MAC005		MAC006		MAC007		MAC007		MAC008	
	SAMPLE DATE ----->	06/28/94		06/28/94		06/29/94		06/29/94		06/29/94		06/29/94	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	MG/KG		UG/L		MG/KG		UG/L		MG/KG		UG/L	
CAS #	Parameter	93612	VAL	89362	VAL	93612	VAL	89362	VAL	93612	VAL	89362	VAL
7429-90-5	Aluminum	1530.	J	98.6		5120.	J	98.9		8120.	J	237.	
7440-36-0	Antimony	8.	U	55.9	U	11.	U	55.9	U	64.3	U	55.9	U
7440-38-2	Arsenic	0.74	UJ	2.8	UJ	1.4	J	2.8	U	8.4	J	2.8	U
7440-39-3	Barium	1.6		30.5		4.2		25.1	U	35.9		5.2	U
7440-41-7	Beryllium	0.29	U	0.5	U	0.4	U	0.5	U	2.3	U	0.5	U
7440-43-9	Cadmium	0.9	U	4.6	UJ	1.2	U	4.6	UJ	7.2	U	4.6	UJ
7440-70-2	Calcium	395.	J	27600.		464.	J	145000.		6840.	J	3060.	
7440-47-3	Chromium	1.6		9.2	U	10.3		9.2	U	11.1	U	9.2	U
7440-48-4	Cobalt	1.1	U	7.3	U	1.5	U	7.3	U	8.7	U	7.3	U
7440-50-8	Copper	2.8	U	4.5	U	3.9	U	4.5	U	23.	U	4.5	U
7439-89-6	Iron	1940.	J	7810.		4680.	J	414.		15000.	J	848.	
7439-92-1	Lead	7.2	J	1.9	J	4.1	J	16.	UJ	63.3	J	1.6	UJ
7439-95-4	Magnesium	40.4		2310.		1190.		419000.		951.		1110.	
7439-96-5	Manganese	2.3		146.		14.3		56.6		105.		47.6	
7439-97-6	Mercury	0.13	U	0.2	U	0.18	U	0.2	U	1.1	U	0.2	U
7440-02-0	Nickel	10.5	U	16.4	U	14.5	U	16.4	U	84.9	U	16.4	U
7440-09-7	Potassium	673.	U	1680.		929.	U	162000.		5440.	U	901.	
7782-49-2	Selenium	1.	U	3.9	UJ	1.4	U	3.9	UJ	8.3	UJ	3.9	U
7440-22-4	Silver	1.1	U	3.6	U	1.5	U	3.6	U	8.5	U	3.6	U
7440-23-5	Sodium	98.	U	7420.		1890.		3820000.		738.		5340.	
7440-28-0	Thallium	0.95	U	3.6	UJ	1.3	U	360.	UJ	7.7	U	3.6	UJ
7440-62-2	Vanadium	2.5		4.4	U	6.9		4.4	U	16.	U	4.4	U
7440-66-6	Zinc	4.		9.2	U	12.2		9.2	U	17.1		9.2	U
57-12-5	Cyanide (CN)	0.66	U	10.	U	0.91	U	10.	U	5.3	U	10.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL															
	SAMPLE ID ------->	010-M-0001-01		033-M-0010-01		033-W-0010-02		033-M-0020-01		033-W-0020-02		033-M-0030-01	
	ORIGINAL ID ----->	10M0101		33M01001		33W01002		33M02001		33W02002		33M03001	
	LAB SAMPLE ID --->	39496-051		533365		533167		533371		533170		533348	
	ID FROM REPORT -->	10M0101		33M01001		33W01002		33M02001		33W02002		33M03001	
	SAMPLE DATE ----->			01/19/93		01/20/93		01/19/93		01/20/93		01/19/93	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	MG/KG		MG/KG		UG/L		MG/KG		UG/L		MG/KG	
CAS #	Parameter	CT520	VAL	652605	VAL	652353	VAL	652605	VAL	652353	VAL	652605	VAL
7429-90-5	Aluminum	313.	J	2660.		1280.		2340.		953.		1100.	
7440-36-0	Antimony	3.8	U	15.2	U	57.	U	15.1	U	57.	U	14.5	U
7440-38-2	Arsenic	0.71	U	1.3	J	3.	U	0.82	J	3.	U	1.	U
7440-39-3	Barium	2.4	U	5.3	J	16.1	J	8.	J	13.4	J	1.6	J
7440-41-7	Beryllium	0.1	U	0.8	U	3.	U	0.79	U	3.	U	0.76	U
7440-43-9	Cadmium	0.65	U	1.3	U	5.2		2.8		5.	U	1.3	U
7440-70-2	Calcium	731.	J	1260.	J	12900.		250.	J	14500.		155.	J
7440-47-3	Chromium	1.8	U	18.5		10.	U	79.		10.8		9.3	
7440-48-4	Cobalt	20.7	J	3.2	U	12.	U	3.2	U	12.	U	3.1	U
7440-50-8	Copper	14.2	J	6.6	U	25.	U	9.3		25.	U	6.4	U
7439-89-6	Iron	402.	J	1210.		5110.		1010.		1090.		710.	
7439-92-1	Lead	31.4		6.5		2.4	J	5.3		2.	U	5.7	
7439-95-4	Magnesium	42.5	UJ	223.	J	2950.	J	242.	J	5470.		140.	U
7439-96-5	Manganese	1.2	UJ	16.1		280.		5.8		38.6		4.1	
7439-97-6	Mercury	0.03	U	0.13	U	0.2	U	0.13	U	0.2	U	0.13	U
7440-02-0	Nickel	4.3		10.1	U	38.	U	10.1	U	38.	U	9.7	U
7440-09-7	Potassium	158.	U	1050.	U	3950.	U	1050.	U	3950.	U	1010.	U
7782-49-2	Selenium	0.41	UJ	1.1	U	3.	U	1.1	U	3.	U	1.	U
7440-22-4	Silver	0.88	U	2.7	U	10.	U	3.	U	24500.		2.7	U
7440-23-5	Sodium	10.	U	122.	J	5050.		482.	J	24500.		137.	J
7440-28-0	Thallium	0.68	U	0.53	U	3.	U	0.79	U	3.	U	0.76	U
7440-62-2	Vanadium	1.1	J	4.	U	15.	U	4.	U	15.	U	3.8	U
7440-66-6	Zinc	59.6	J	38.2		37.1		22.3		39.2		8.	
57-12-5	Cyanide (CN)	0.12	UJ	0.66	U	10.	U	0.66	U	10.	U	0.64	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL															
		SAMPLE ID ------->	033-W-0030-02		033-M-0040-01		033-W-0040-02		041-M-0101-01		041-M-0102-01		041-M-0103-01		
		ORIGINAL ID ----->	33W03002		33M04001		33W04002		041M010101		041M010201		041M010301		
		LAB SAMPLE ID --->	533171		533360		533172		960039-09		960039-10		960039-11		
		ID FROM REPORT -->	33W03002		33M04001		33W04002		041M010101		041M010201		041M010301		
		SAMPLE DATE ----->	01/20/93		01/19/93		01/20/93		01/17/96		01/17/96		01/18/96		
		DATE EXTRACTED -->							01/21/96		01/21/96		01/21/96		
		DATE ANALYZED --->							01/22/96		01/22/96		01/22/96		
		MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Sediment		
		UNITS ---------->	UG/L		MG/KG		UG/L		MG/KG		MG/KG		MG/KG		
CAS #	Parameter		652353	VAL	652605	VAL	652353	VAL	63A401	VAL	63A401	VAL	63A401	VAL	
7429-90-5	Aluminum		696.		4150.		737.		2230.	J	27800.	J	1510.	J	
7440-36-0	Antimony		57.	U	14.8	U	57.	U	0.15	UJ	3.1	J	0.14	UJ	
7440-38-2	Arsenic		3.	U	6.2		3.	U	2.5		0.44	J	0.4	J	
7440-39-3	Barium		12.1	J	15.1	J	11.9	J	3.7	J	73.9		5.9	J	
7440-41-7	Beryllium		3.	U	0.78	U	3.	U	0.07	U	0.75		0.07	U	
7440-43-9	Cadmium		5.	U	34.6		5.	U	0.15	U	1.2		0.53		
7440-70-2	Calcium		13900.		2760.		13000.		552.	J	2390.	J	921.	J	
7440-47-3	Chromium		10.	U	1180.		10.	U	1.5		57.7		9.8		
7440-48-4	Cobalt		12.	U	3.1	U	12.	U	0.15	U	1.8	J	0.4	J	
7440-50-8	Copper		25.	U	45.1		25.	U	1.1	J	22.3		18.3		
7439-89-6	Iron		808.		1210.		808.		484.		6150.		1770.		
7439-92-1	Lead		2.	U	161.		2.	U	87.3		1.8		48.8		
7439-95-4	Magnesium		5160.		143.	U	4810.	J	75.9	J	621.	J	144.	J	
7439-96-5	Manganese		19.3		27.1		11.3	J	4.		17.8		10.4		
7439-97-6	Mercury		0.2	U	0.13	U	0.2	U	0.07	J	0.25		0.17		
7440-02-0	Nickel		38.	U	52.1		38.	U	0.8	J	8.		3.9		
7440-09-7	Potassium		3950.	U	1030.	U	3950.	U	55.9	J	309.	J	28.	J	
7782-49-2	Selenium		3.	U	1.	U	3.	U	1.3		0.5	U	0.27	U	
7440-22-4	Silver		10.	U	3.6	U	10.	U	0.37	U	0.63	U	0.34	U	
7440-23-5	Sodium		21700.		156.	J	20300.		16.	U	97.	J	17.5	U	
7440-28-0	Thallium		3.	U	0.78	U	3.	U	0.3	U	0.5	U	0.27	U	
7440-62-2	Vanadium		15.	U	3.9	U	15.	U	2.3	J	35.3		2.5	J	
7440-66-6	Zinc		38.9		115.		29.		2.2		91.		69.1		
57-12-5	Cyanide (CN)		10.	U	0.65	U	10.	U	0.63	U	1.2	U	0.62	U	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL															
	SAMPLE ID ------->	041-W-0103-01		041-M-0104-01		041-M-0301-01		041-W-0301-01		041-M-0302-01		041-W-0302-01	
	ORIGINAL ID ----->	041W010301		041M010401		041M030101		041W030101		041M030201		041W030201	
	LAB SAMPLE ID --->	960039-14		960039-12		950998-15		950998-20		950998-16		950998-21	
	ID FROM REPORT -->	041W010301		041M010401		041M030101		041W030101		041M030201		041W030201	
	SAMPLE DATE ----->	01/17/96		01/17/96		12/01/95		12/01/95		12/01/95		12/01/95	
	DATE EXTRACTED -->	01/21/96		01/21/96		01/13/96		01/13/96		01/13/96		01/13/96	
	DATE ANALYZED --->	01/22/96		01/22/96		01/14/96		01/14/96		01/14/96		01/14/96	
	MATRIX ---------->	Water		Sediment		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/L		MG/KG		MG/KG		UG/L		MG/KG		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	EM0040	VAL	EM0040	VAL	EM0040	VAL	EM0040	VAL
7429-90-5	Aluminum	68.1	U	4290.	J	3590.	J	149.	J	7780.	J	2150.	
7440-36-0	Antimony	2.	UJ	0.47	J	0.13	UJ	2.	UJ	2.4	J	3.3	J
7440-38-2	Arsenic	2.	U	2.5		1.8		2.7	J	12.8		17.2	
7440-39-3	Barium	10.8	J	17.7		7.4	J	27.6	J	31.7	J	43.2	J
7440-41-7	Beryllium	1.	U	0.11	J	0.07	U	1.	U	0.53	U	1.	U
7440-43-9	Cadmium	2.	U	2.		0.52	J	3.	U	5.8	J	3.4	J
7440-70-2	Calcium	30700.		1080.	J	31800.		26700.		7490.		32600.	
7440-47-3	Chromium	5.	U	27.3		4.5		8.	U	20.8		8.7	J
7440-48-4	Cobalt	2.	U	0.99	J	0.2	U	3.	U	2.5	J	3.	U
7440-50-8	Copper	4.	U	31.8		2.2	J	4.	U	17.8		4.7	J
7439-89-6	Iron	302.		2930.		11400.	J	17900.		21200.	J	59600.	
7439-92-1	Lead	2.	U	153.		12.6	J	1.	U	101.	J	20.3	
7439-95-4	Magnesium	2560.	J	250.	J	429.	J	2160.	J	312.	J	2290.	J
7439-96-5	Manganese	17.4		11.3		54.5	J	150.		66.1	J	265.	
7439-97-6	Mercury	0.14	U	0.2		0.06	U	0.13	U	0.47	U	0.13	U
7440-02-0	Nickel	9.	U	7.5		0.79	U	12.	U	6.4	U	12.	U
7440-09-7	Potassium	2300.	J	65.3	J	31.7	J	1420.	J	94.4	J	1620.	J
7782-49-2	Selenium	4.	U	0.35	U	0.2	UJ	3.	UJ	2.	J	3.	UJ
7440-22-4	Silver	5.	U	0.43	U	0.26	UJ	4.	U	2.1	UJ	4.	U
7440-23-5	Sodium	7370.		33.	J	207.	J	6530.		76.	J	5770.	
7440-28-0	Thallium	4.	U	0.35	U	0.2	UJ	3.	U	1.6	UJ	3.	U
7440-62-2	Vanadium	2.	U	10.3		6.7	J	2.	U	21.1	J	6.5	J
7440-66-6	Zinc	19.3	J	294.		6.4	J	3.	UJ	32.4	J	10.4	J
57-12-5	Cyanide (CN)	5.	U	0.79	U	0.64	U	5.	U	5.2	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-0303-01		041-W-0303-01		041-M-0304-01		041-W-0304-01		041-M-0305-01		041-M-0306-01	
	ORIGINAL ID ----->	041M030301		041W030301		041M030401		041W030401		041M030501		041M030601	
	LAB SAMPLE ID --->	951012-01		951012-07		951012-02		951012-08		951012-03		951012-04	
	ID FROM REPORT -->	041M030301		041W030301		041M030401		041W030401		041M030501		041M030601	
	SAMPLE DATE ----->	12/04/95		12/04/95		12/04/95		12/04/95		12/04/95		12/04/95	
	DATE EXTRACTED -->	01/14/96		01/14/96		01/14/96		01/14/96		01/14/96		01/14/96	
	DATE ANALYZED --->	01/15/96		01/15/96		01/15/96		01/15/96		01/15/96		01/15/96	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Sediment	
	UNITS ---------->	MG/KG		UG/L		MG/KG		UG/L		MG/KG		MG/KG	
CAS #	Parameter	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL
7429-90-5	Aluminum	1570.		951.		426.		211.		546.		788.	
7440-36-0	Antimony	0.44	J	2.	U	0.13	UJ	3.	J	0.23	J	0.15	U
7440-38-2	Arsenic	35.5		48.9		0.56	J	3.2	J	3.5		2.2	
7440-39-3	Barium	16.4	J	56.8	J	2.5	J	35.	J	15.4		5.2	J
7440-41-7	Beryllium	0.16	U	1.	U	0.06	U	1.	U	0.05	U	0.08	U
7440-43-9	Cadmium	2.9		3.8	J	0.19	U	3.	U	2.		1.8	
7440-70-2	Calcium	2410.		22900.		380.		26600.		850.		350.	J
7440-47-3	Chromium	7.3		9.3	J	1.5		8.	U	5.3		4.9	
7440-48-4	Cobalt	0.47	U	3.	U	0.19	U	3.	U	0.16	U	0.23	U
7440-50-8	Copper	4.6		9.6	J	0.86	U	4.	U	1.9	U	1.7	U
7439-89-6	Iron	68000.		176000.		3660.		21500.		61100.		18000.	
7439-92-1	Lead	11.5		7.1		2.9		1.	U	2.4		8.	
7439-95-4	Magnesium	77.4	J	1540.	J	23.2	J	2290.	J	27.6	J	27.5	J
7439-96-5	Manganese	39.4	J	206.		3.3	J	142.		37.7	J	5.7	J
7439-97-6	Mercury	0.15	U	0.13	U	0.06	U	0.13	U	0.05	U	0.06	U
7440-02-0	Nickel	1.9	U	12.	U	0.78	J	12.	U	0.65	U	0.91	U
7440-09-7	Potassium	47.4	J	1380.	J	10.9	J	1490.	J	13.5	J	14.8	J
7782-49-2	Selenium	1.8		3.	U	0.19	U	3.	U	0.16	U	0.44	J
7440-22-4	Silver	0.63	UJ	4.	U	0.26	UJ	4.	U	0.22	UJ	0.3	UJ
7440-23-5	Sodium	26.8	J	5850.		2.5	U	5860.		7.9	J	4.5	J
7440-28-0	Thallium	0.47	U	3.	U	0.19	U	3.7	U	0.16	U	0.23	U
7440-62-2	Vanadium	6.3	J	11.1	J	1.2	J	2.2	J	4.8		3.2	J
7440-66-6	Zinc	3.4		3.	U	1.7		3.	U	1.2		6.3	
57-12-5	Cyanide (CN)	1.4	U	5.	U	0.6	U	5.	U	1.5		0.77	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-0307-01		041-M-04D1-01		041-W-04D1-01		041-M-04D2-01		041-M-04D3-01		041-M-04D4-01	
	ORIGINAL ID ----->	041M030701		041M04D101		041W04D101		041M04D201		041M04D301		041M04D401	
	LAB SAMPLE ID --->	951012-05		951012-09		960025-07		951012-10		951012-11		951012-12	
	ID FROM REPORT -->	041M030701		041M04D101		041W04D101		041M04D201		041M04D301		041M04D401	
	SAMPLE DATE ----->	12/04/95		12/05/95		01/15/96		12/05/95		12/05/95		12/05/95	
	DATE EXTRACTED -->	01/14/96		01/14/96		01/20/96		01/14/96		01/14/96		01/14/96	
	DATE ANALYZED --->	01/15/96		01/15/96		01/22/96		01/15/96		01/15/96		01/15/96	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		UG/L		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	030301	VAL	030301	VAL	EM005	VAL	030301	VAL	030301	VAL	030301	VAL
7429-90-5	Aluminum	25600.		11600.		69.5	U	14700.		390.		10000.	
7440-36-0	Antimony	0.62	UJ	0.27	U	2.	UJ	0.95	J	0.12	U	0.38	U
7440-38-2	Arsenic	27.1		12.		2.	U	20.		0.49	J	11.	
7440-39-3	Barium	438.		6.4	J	13.9	U	9.	J	0.34	J	8.	J
7440-41-7	Beryllium	1.6	U	0.37	J	1.	U	0.55	J	0.06	U	0.43	J
7440-43-9	Cadmium	72.7		3.5		2.	U	3.7		0.26	J	2.8	
7440-70-2	Calcium	28200.		2090.		32600.		4510.		188.	J	2120.	
7440-47-3	Chromium	196.		70.2		5.	U	65.5		1.3		43.5	
7440-48-4	Cobalt	4.7	U	1.1	J	2.	U	2.1	J	0.18	U	1.6	J
7440-50-8	Copper	68.8		21.3		4.	U	45.8		2.6		27.	
7439-89-6	Iron	386000.		31500.		1580.		39400.		840.		21800.	
7439-92-1	Lead	18.7		190.		2.	U	348.		10.9		162.	
7439-95-4	Magnesium	1420.	J	2790.		63700.		4590.		181.	J	2580.	
7439-96-5	Manganese	1270.	J	60.9	J	36.4		69.3	J	2.	J	50.6	J
7439-97-6	Mercury	0.24	U	0.12	J	0.13	U	0.15	U	0.05	U	0.16	J
7440-02-0	Nickel	18.6	U	6.1		9.	U	6.7	J	0.72	U	6.1	J
7440-09-7	Potassium	468.	J	873.		21500.		1530.		55.	J	771.	J
7782-49-2	Selenium	0.93	U	1.5	J	4.	U	1.8	J	0.18	U	2.3	J
7440-22-4	Silver	6.2	UJ	0.55	UJ	5.	U	0.77	UJ	0.24	UJ	0.77	UJ
7440-23-5	Sodium	291.	J	4730.		686000.		11800.		677.		4280.	
7440-28-0	Thallium	0.93	U	0.41	U	4.	U	0.58	U	0.18	U	0.58	U
7440-62-2	Vanadium	160.		25.		2.	U	38.7		0.9	J	21.6	
7440-66-6	Zinc	297.		70.6		4.	U	102.		3.6		77.5	
57-12-5	Cyanide (CN)	5.1	J	1.2	U	5.	U	1.9	U	0.59	U	1.8	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL																	
	SAMPLE ID ------->	041-W-04D4-01		041-M-04D5-01		041-M-0601-01		041-M-0602-01		041-M-0603-01		041-W-0603-01	
	ORIGINAL ID ----->	041W04D401		041M04D501		041M060101		041M060201		041M060301		041W060301	
	LAB SAMPLE ID --->	960025-08		951012-13		950941-01		950941-02		950941-03		950940-19	
	ID FROM REPORT -->	041W04D401		041M04D501		041M060101		041M060201		041M060301		041W060301	
	SAMPLE DATE ----->	01/15/96		12/05/95		11/15/95		11/15/95		11/15/95		11/15/95	
	DATE EXTRACTED -->	01/20/96		01/14/96		12/19/95		12/19/95		12/19/95		12/10/95	
	DATE ANALYZED --->	01/22/96		01/15/96		12/20/95		12/20/95		12/20/95		12/11/95	
	MATRIX ---------->	Water		Sediment		Sediment		Sediment		Sediment		Water	
	UNITS ---------->	UG/L		MG/KG		MG/KG		MG/KG		MG/KG		UG/L	
CAS #	Parameter	EM005	VAL	030301	VAL	M06010	VAL	M06010	VAL	M06010	VAL	M06070	VAL
7429-90-5	Aluminum	112.	U	561.		1650.	J	1410.	J	2360.	J	191.	U
7440-36-0	Antimony	2.	UJ	0.12	U	0.12	UR	0.12	UR	0.16	J	2.	UJ
7440-38-2	Arsenic	2.	U	0.51	J	0.74		0.28	J	0.53	J	2.	U
7440-39-3	Barium	12.8	U	0.58	J	37.		7.8	J	11.8	J	11.6	U
7440-41-7	Beryllium	1.	U	0.06	U	0.14	J	0.1	J	0.11	J	1.	U
7440-43-9	Cadmium	2.	U	0.18	U	0.28	J	0.33		0.32	J	3.	U
7440-70-2	Calcium	55000.		26.3	J	8370.	J	5880.	J	2420.	J	18300.	
7440-47-3	Chromium	5.	U	0.74		2.5		2.		4.4		8.	U
7440-48-4	Cobalt	2.	U	0.18	U	0.52	J	0.23	J	0.37	J	3.	U
7440-50-8	Copper	4.	U	0.49	J	7.8	J	8.3	J	20.9	J	4.	U
7439-89-6	Iron	695.		671.		1620.	J	1150.	J	1730.	J	334.	
7439-92-1	Lead	2.	U	0.73		47.4	J	10.9	J	36.1	J	1.	U
7439-95-4	Magnesium	145000.		19.6	J	1160.		1180.		430.		1910.	J
7439-96-5	Manganese	22.6		27.9	J	29.3		26.3		21.8		19.5	
7439-97-6	Mercury	0.13	U	0.05	U	0.05	U	0.06	U	0.06	U	0.13	U
7440-02-0	Nickel	9.	U	0.74	U	1.6	J	0.84	J	1.2	J	12.	U
7440-09-7	Potassium	45900.		18.4	J	122.	J	72.6	J	80.6	J	1520.	J
7782-49-2	Selenium	4.	U	0.18	U	0.18	U	0.18	U	0.2	U	3.	U
7440-22-4	Silver	5.	U	0.25	UJ	0.23	UJ	0.23	UJ	0.27	UJ	4.	U
7440-23-5	Sodium	1270000.		2.5	J	54.7	J	33.6	J	105.	J	13800.	
7440-28-0	Thallium	11.		0.18	U	0.67		0.18	U	0.2	U	3.	U
7440-62-2	Vanadium	2.	U	1.3	J	2.7	J	2.3	J	3.3	J	2.1	J
7440-66-6	Zinc	4.	U	1.4		64.2	J	29.5	J	74.1	J	11.3	U
57-12-5	Cyanide (CN)	5.	U	0.57	U	0.6	U	0.59	U	0.68	U	5.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL																		
	SAMPLE ID ------->	041-M-0604-01		041-M-0605-01		041-M-0606-01		041-M-0607-01		041-W-0607-01		041-M-0608-01	
	ORIGINAL ID ----->	041M060401		041M060501		041M060601		041M060701		041W060701		041M060801	
	LAB SAMPLE ID --->	950941-04		950950-20		950950-21		950940-01		950940-07		950940-02	
	ID FROM REPORT -->	041M060401		041M060501		041M060601		041M060701		041W060701		041M060801	
	SAMPLE DATE ----->	11/15/95		11/16/95		11/16/95		11/14/95		11/14/95		11/14/95	
	DATE EXTRACTED -->	12/19/95		12/20/95		12/20/95		12/10/95		12/10/95		12/10/95	
	DATE ANALYZED --->	12/20/95		12/27/95		12/27/95		12/11/95		12/11/95		12/11/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Water		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		UG/L		MG/KG	
CAS #	Parameter	M06010	VAL	5A0101	VAL	5A0101	VAL	M06070	VAL	M06070	VAL	M06070	VAL
7429 90 5	Aluminum	400.	J	390.		3990.		5980.		406.		618.	
7440 36 0	Antimony	0.12	UR	0.12	UJ	0.32	J	0.25	U	2.	UJ	0.12	UJ
7440 38 2	Arsenic	0.12	U	0.12	U	1.4		2.1		2.	U	0.14	J
7440 39 3	Barium	4.3	J	1.8	J	14.6	J	22.8	J	15.9	J	1.	J
7440 41 7	Beryllium	0.06	U	0.06	U	0.1	U	0.13	U	1.	U	0.06	U
7440 43 9	Cadmium	0.18	U	0.19	U	0.76		5.4		3.	U	0.19	J
7440 70 2	Calcium	162.	J	178.	J	1900.		2330.		24700.		1700.	
7440 47 3	Chromium	0.85		0.56	J	7.5		73.5		8.	U	19.6	
7440 48 4	Cobalt	0.19	J	0.19	UJ	0.29	UJ	2.5	J	3.	U	0.18	J
7440 50 8	Copper	13.6	J	3.6		19.		48.2		4.	U	0.97	J
7439 89 6	Iron	328.	J	335.		3640.		4320.		376.		410.	
7439-92-1	Lead	16.2	J	9.4		49.1		147.		1.2	J	6.6	
7439-95-4	Magnesium	32.7	J	28.7	J	224.	J	279.	J	3480.	J	178.	J
7439-96-5	Manganese	1.5		1.4		17.9		35.2		33.4		1.9	
7439-97-6	Mercury	0.05	U	0.05	U	0.08	U	0.11	J	0.13	U	0.05	U
7440-02-0	Nickel	0.72	U	0.74	U	1.3	J	4.2	J	12.	U	0.69	U
7440-09-7	Potassium	17.	J	9.6	J	78.1	J	161.	J	3050.	J	12.5	J
7782-49-2	Selenium	0.18	U	0.19	U	0.29	U	0.85		3.	U	0.17	U
7440-22-4	Silver	0.24	UJ	0.25	U	0.39	U	0.89	J	4.	U	0.23	U
7440-23-5	Sodium	13.9	J	2.4	U	4.9	J	64.2	J	10300.		9.5	J
7440-28-0	Thallium	0.18	U	0.19	U	0.29	U	0.68	J	3.3	J	0.17	U
7440-62-2	Vanadium	0.6	J	0.73	J	7.5		11.3		2.3	J	1.2	J
7440-66-6	Zinc	28.1	J	18.8		75.7		207.		10.8	U	3.8	U
57-12-5	Cyanide (CN)	0.6	U	0.61	U	0.95	U	1.3	U	5.	U	0.6	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL																		
		SAMPLE ID ------->	041-M-0609-01		041-M-0611-01		041-M-10A1-01		041-M-10A2-01		041-M-10A3-01		041-M-1201-01	
		ORIGINAL ID ----->	041M060901		041M061101		041M10A101		041M10A201		041M10A301		041M120101	
		LAB SAMPLE ID --->	950940-03		950950-23		950983-14		950983-08		950979-01		950983-09	
		ID FROM REPORT -->	041M060901		041M061101		041M10A101		041M10A201		041M10A301		041M120101	
		SAMPLE DATE ----->	11/14/95		11/16/95		11/28/95		11/28/95		11/27/95		11/28/95	
		DATE EXTRACTED -->	12/10/95		12/20/95		01/05/96		01/05/96		01/04/96		01/05/96	
		DATE ANALYZED --->	12/11/95		12/27/95		01/05/96		01/05/96		01/05/96		01/05/96	
		MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
		UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter		M06070	VAL	5A0101	VAL	Z53301	VAL	Z53301	VAL	041M10	VAL	Z53301	VAL
7429-90-5	Aluminum		562.		482.		3490.		8910.		3350.		593.	
7440-36-0	Antimony		0.13	UJ	0.62	UJ	0.19	UJ	0.41	UJ	0.19	J	0.83	UJ
7440-38-2	Arsenic		0.47	J	0.3	J	1.2		3.6		1.7		0.17	U
7440-39-3	Barium		1.2	J	1.3	J	3.5	J	3.5	J	7.	J	0.86	J
7440-41-7	Beryllium		0.07	U	0.06	U	0.09	U	0.06	U	0.06	U	0.08	U
7440-43-9	Cadmium		0.24	J	0.72		0.26	U	0.27	J	1.7		0.25	U
7440-70-2	Calcium		62.5	J	1700.		260.	J	1200.	J	3880.	J	1290.	J
7440-47-3	Chromium		15.6		22.4		4.9		10.1		11.6		2.1	
7440-48-4	Cobalt		0.2	U	0.19	UJ	0.26	U	3.9		0.19	U	0.25	U
7440-50-8	Copper		2.9		4.		2.4		5.2		7.4		0.67	J
7439-89-6	Iron		384.		1200.		2570.		7420.		1750.		367.	
7439-92-1	Lead		10.8		6.		8.2		8.5		49.9	J	5.1	
7439-95-4	Magnesium		27.3	J	558.		46.2	J	50.	J	66.8	J	103.	J
7439-96-5	Manganese		1.2		7.4		20.6		135.		7.8		2.9	
7439-97-6	Mercury		0.06	U	0.05	U	0.07	U	0.05	U	0.05	U	0.06	U
7440-02-0	Nickel		0.79	U	0.96	J	1.6	J	1.	J	1.5	J	1.	U
7440-09-7	Potassium		18.7	J	19.4	J	38.1	J	21.6	J	19.5	J	26.2	J
7782-49-2	Selenium		0.2	U	0.19	U	0.26	U	0.18	U	0.2	J	0.25	U
7440-22-4	Silver		0.26	U	0.25	U	0.34	UJ	0.32	J	0.25	UJ	0.33	UJ
7440-23-5	Sodium		13.	J	6.6	J	3.3	UJ	2.4	UJ	35.2	J	229.	J
7440-28-0	Thallium		0.2	U	0.19	U	0.26	UJ	0.18	UJ	1.5	J	0.25	UJ
7440-62-2	Vanadium		0.98	J	1.	J	6.9		16.4		4.6		1.3	J
7440-66-6	Zinc		9.7		18.3		6.7		8.		39.6		2.3	J
57-12-5	Cyanide (CN)		0.66	U	0.61	U	0.8	U	0.59	U	0.6	U	0.76	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-W-1201-01		041-M-1202-01		041-M-1301-01		041-W-1301-01		041-M-1501-01		041-W-1501-01	
	ORIGINAL ID ----->	041W120101		041M120201		041M130101		041W130101		041M150101		041W150101	
	LAB SAMPLE ID --->	950983-11		950991-10		950979-02		950979-05		951021-05		951021-10	
	ID FROM REPORT -->	041W120101		041M120201		041M130101		041W130101		041M150101		041W150101	
	SAMPLE DATE ----->	11/28/95		11/29/95		11/27/95		11/27/95		12/06/95		12/06/95	
	DATE EXTRACTED -->	01/05/96		01/10/96		01/04/96		01/04/96		01/16/96		01/16/96	
	DATE ANALYZED --->	01/05/96		01/11/96		01/05/96		01/05/96		01/18/96		01/18/96	
	MATRIX ---------->	Water		Sediment		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/L		MG/KG		MG/KG		UG/L		MG/KG		UG/L	
CAS #	Parameter	Z53301	VAL	Z30301	VAL	041M10	VAL	041M10	VAL	EM0050	VAL	EM0050	VAL
7429-90-5	Aluminum	179.	U	3070.		1590.		145000.		9350.		213000.	
7440-36-0	Antimony	2.	U	0.2	UR	0.15	J	2.8	J	2.	UJ	32.4	J
7440-38-2	Arsenic	2.	U	0.24	J	0.14	J	26.6		4.8		68.8	
7440-39-3	Barium	8.	UJ	3.1	J	0.88	J	95.4	J	36.2	J	642.	
7440-41-7	Beryllium	1.	U	0.12	J	0.11	J	4.4	J	0.41	U	3.2	J
7440-43-9	Cadmium	3.	U	0.3	U	0.2	U	9.8		1.2	U	3.	U
7440-70-2	Calcium	23000.		1950.		327.	J	47500.		6600.	J	178000.	
7440-47-3	Chromium	8.1	J	4.8	J	4.		225.		14.3	J	327.	
7440-48-4	Cobalt	3.	U	0.3	U	0.2	U	7.8	J	1.2	U	23.5	J
7440-50-8	Copper	4.	UJ	2.9		1.2	J	142.		8.5	J	191.	
7439-89-6	Iron	1150.		484.		229.		36200.		12100.		715000.	
7439-92-1	Lead	1.2	J	27.1		9.2	J	1220.		39.7		801.	
7439-95-4	Magnesium	38400.		468.	J	187.	J	37100.		1250.	J	63700.	
7439-96-5	Manganese	47.9		7.6		0.85	J	150.		47.7		1640.	
7439-97-6	Mercury	0.13	U	0.1	U	0.06	U	1.3		0.35	U	0.94	
7440-02-0	Nickel	12.	U	1.2	U	0.81	U	47.2		4.9	U	103.	
7440-09-7	Potassium	24100.		138.	J	50.6	J	16600.		469.	J	16000.	
7782-49-2	Selenium	3.	U	0.43	J	0.41	J	13.6		1.6	J	16.3	
7440-22-4	Silver	4.	U	0.41	U	0.27	UJ	4.	U	1.6	UJ	4.	U
7440-23-5	Sodium	541000.		1840.		290.	J	199000.		1100.	J	141000.	
7440-28-0	Thallium	12.2		0.3	UJ	0.2	UJ	3.	U	1.2	U	3.	U
7440-62-2	Vanadium	2.	U	6.6		7.5		324.		14.8	J	337.	
7440-66-6	Zinc	7.8	J	3.		1.7		536.		26.3		1010.	
57-12-5	Cyanide (CN)	5.	U	0.99	U	0.66	U	5.	U	3.8	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-1502-01		041-W-1502-01		041-M-1503-01		041-M-1504-01		041-M-1601-01		041-W-1601-01	
	ORIGINAL ID ----->	041M150201		041W150201		041M150301		041M150401		041M160101		041W160101	
	LAB SAMPLE ID --->	951021-06		951021-11		951021-07		951021-08		951029-02		951029-06	
	ID FROM REPORT -->	041M150201		041W150201		041M150301		041M150401		041M160101		041W160101	
	SAMPLE DATE ----->	12/06/95		12/06/95		12/06/95		12/06/95		12/07/95		12/07/95	
	DATE EXTRACTED -->	01/16/96		12/12/95		01/16/96		01/16/96		01/03/96		01/03/96	
	DATE ANALYZED --->	01/18/96		12/13/95		01/18/96		01/18/96		01/03/96		01/03/96	
	MATRIX ---------->	Sediment		Water		Sediment		Sediment		Sediment		Water	
	UNITS ---------->	MG/KG		UG/L		MG/KG		MG/KG		MG/KG		UG/L	
CAS #	Parameter	EM0050	VAL	EM0050	VAL	EM0050	VAL	EM0050	VAL	EW0010	VAL	EW0010	VAL
7429-90-5	Aluminum	15800.		934.		7810.		7980.		255.		90.7	U
7440-36-0	Antimony	6.	J	3.7	U	1.5	UJ	0.72	UJ	0.65	UR	10.	UJ
7440-38-2	Arsenic	15.2		4.5	J	141.		2.5		0.72		2.	U
7440-39-3	Barium	20.3	J	34.7	J	40.9	J	6.2	J	0.69	U	31.9	J
7440-41-7	Beryllium	0.57	U	1.	U	0.41	U	0.34	J	0.07	U	1.	U
7440-43-9	Cadmium	1.7	U	3.	U	1.2	U	0.52	U	0.19	U	3.	U
7440-70-2	Calcium	7910.	J	87100.		11300.	J	3010.	J	53.9	J	104000.	
7440-47-3	Chromium	45.7	J	8.	U	37.7	J	20.8	J	1.9		8.	U
7440-48-4	Cobalt	1.7	U	3.	U	1.2	U	1.5	J	0.19	U	3.	U
7440-50-8	Copper	20.2		4.	J	18.9		5.5	J	1.4	J	4.	U
7439-89-6	Iron	37600.		8300.		223000.		11200.		1330.		816.	
7439-92-1	Lead	211.		22.5		174.		20.7		2.1		1.	U
7439-95-4	Magnesium	4980.		34600.		912.	J	3160.		109.	J	294000.	
7439-96-5	Manganese	176.		121.		520.		74.9		1.4		55.2	
7439-97-6	Mercury	0.45	UJ	0.13	U	0.32	UJ	0.14	UJ	0.05	U	0.13	U
7440-02-0	Nickel	12.4	J	12.	U	4.9	U	5.6	J	0.78	U	12.	U
7440-09-7	Potassium	1460.	J	11400.		310.	J	992.		42.9	J	98700.	
7782-49-2	Selenium	2.7	J	3.	U	1.2	U	0.93		0.19	U	3.	U
7440-22-4	Silver	2.3	UJ	4.	U	1.6	UJ	0.69	UJ	0.26	U	4.	U
7440-23-5	Sodium	14200.		174000.		206.	J	10600.		480.		2410000.	
7440-28-0	Thallium	1.7	U	3.2	J	1.2	U	0.52	U	0.19	U	13.9	
7440-62-2	Vanadium	36.		2.	J	25.2		10.5		1.2	J	2.	U
7440-66-6	Zinc	59.9		12.7	J	83.6		23.5		2.5		7.4	J
57-12-5	Cyanide (CN)	5.2	U	5.	U	3.9	U	1.6	U	0.59	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-1602-01		041-W-1602-01		041-M-1603-01		041-M-1701-01		041-W-1701-01		041-M-1702-01	
	ORIGINAL ID ----->	041M160201		041W160201		041M160301		041M170101		041W170101		041M170201	
	LAB SAMPLE ID --->	951029-03		951029-07		951029-04		960025-03		960025-09		960025-04	
	ID FROM REPORT -->	041M160201		041W160201		041M160301		041M170101		041W170101		041M170201	
	SAMPLE DATE ----->	12/07/95		12/07/95		12/07/95		01/15/96		01/15/96		01/15/96	
	DATE EXTRACTED -->	01/03/96		01/03/96		01/03/96		01/20/96		01/20/96		01/20/96	
	DATE ANALYZED --->	01/03/96		01/03/96		01/03/96		01/22/96		01/22/96		01/22/96	
	MATRIX ---------->	Sediment		Water		Sediment		Sediment		Water		Sediment	
	UNITS ---------->	MG/KG		UG/L		MG/KG		MG/KG		UG/L		MG/KG	
CAS #	Parameter	EW0010	VAL	EW0010	VAL	EW0010	VAL	EM005	VAL	EM005	VAL	EM005	VAL
7429-90-5	Aluminum	3140.		304.		8880.		516.		54.3	U	438.	
7440-36-0	Antimony	0.23	UR	10.	UJ	0.53	UR	0.13	UJ	2.	UJ	0.13	UJ
7440-38-2	Arsenic	1.5		2.	U	10.9		0.58	J	2.2	J	0.34	J
7440-39-3	Barium	2.3	J	30.5	J	8.1	J	0.48	J	10.6	J	0.5	J
7440-41-7	Beryllium	0.18	J	1.	U	0.47	J	0.07	U	1.	U	0.06	U
7440-43-9	Cadmium	0.61		3.	U	8.5		0.13	U	2.6	U	0.13	U
7440-70-2	Calcium	518.	J	115000.		2090.		76.2	J	106000.		57.5	J
7440-47-3	Chromium	19.1		8.	U	78.4		2.1		5.	U	3.	
7440-48-4	Cobalt	0.7	J	3.	U	1.7	J	0.13	U	2.	U	0.14	J
7440-50-8	Copper	5.3		4.	U	90.8		0.87	J	4.	U	0.75	J
7439-89-6	Iron	5420.		1020.		39500.		727.		263.		467.	
7439-92-1	Lead	14.		1.	U	182.		2.2		2.	U	2.2	
7439-95-4	Magnesium	1280.		339000.		3830.		160.	J	356000.		114.	J
7439-96-5	Manganese	24.2		50.1		211.		1.7		7.4	J	0.8	J
7439-97-6	Mercury	0.1	U	0.13	U	0.41	J	0.05	U	0.13	U	0.05	U
7440-02-0	Nickel	1.9	J	12.	U	8.4	J	0.6	U	9.	U	0.56	U
7440-09-7	Potassium	512.	J	115000.		1580.		58.7	J	109000.		39.1	J
7782-49-2	Selenium	0.4	J	3.	U	0.84	J	0.27	UJ	4.	U	0.25	UJ
7440-22-4	Silver	0.45	U	4.	U	1.8	J	0.34	U	5.	U	0.31	U
7440-23-5	Sodium	3380.		2710000.		12300.		513.		3040000.		275.	J
7440-28-0	Thallium	0.34	U	14.8		0.8	U	0.31	J	16.3		0.25	U
7440-62-2	Vanadium	5.8		2.	U	34.		1.4	J	2.	U	1.6	J
7440-66-6	Zinc	29.5		7.1	J	319.		2.4		4.7	J	1.8	
57-12-5	Cyanide (CN)	1.	U	5.	U	2.6	U	0.63	U	5.	U	0.59	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL															
	SAMPLE ID ------->	041-M-1703-01		041-M-18A1-01		041-M-18A2-01		041-W-18A2-01		041-M-18A3-01		041-M-18B1-01	
	ORIGINAL ID ----->	041M170301		041M18A101		041M18A201		041W18A201		041M18A301		041M18B101	
	LAB SAMPLE ID --->	960025-05		951050-18		951050-19		951050-21		951050-05		951050-06	
	ID FROM REPORT -->	041M170301		041M18A101		041M18A201		041W18A201		041M18A301		041M18B101	
	SAMPLE DATE ----->	01/15/96		12/15/95		12/15/95		12/15/95		12/14/95		12/14/95	
	DATE EXTRACTED -->	01/20/96		01/09/96		01/09/96		01/09/96		01/09/96		01/09/96	
	DATE ANALYZED --->	01/22/96		01/09/96		01/09/96		01/09/96		01/09/96		01/09/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Water		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		UG/L		MG/KG		MG/KG	
CAS #	Parameter	EM005	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL
7429-90-5	Aluminum	842.		9540.		2720.		1220.		1550.		11100.	
7440-36-0	Antimony	0.13	UJ	0.77	UJ	5.8	UJ	10.	UJ	1.2	UJ	0.68	UJ
7440-38-2	Arsenic	0.27	J	2.9	J	31.4		68.3		2.9	J	83.8	
7440-39-3	Barium	0.73	J	17.9	J	25.9	J	26.2	J	18.3	J	10.9	J
7440-41-7	Beryllium	0.07	U	0.38	U	0.58	U	1.	U	0.61	U	0.73	J
7440-43-9	Cadmium	0.18	U	1.2	U	1.7	U	3.	U	1.8	U	1.	U
7440-70-2	Calcium	129.	J	228.	J	4840.		9420.		3250.		3100.	
7440-47-3	Chromium	3.6		5.8		8.9		15.6		6.3		66.2	
7440-48-4	Cobalt	0.17	J	1.2	U	1.7	U	3.	U	1.8	U	1.	U
7440-50-8	Copper	1.3	J	22.6		5.2	J	4.	U	11.5	J	17.9	
7439-89-6	Iron	1190.		805.		48200.		122000.		11400.		128000.	
7439-92-1	Lead	3.4		70.1		45.4		12.2		66.		111.	
7439-95-4	Magnesium	320.	J	206.	J	510.	J	1850.	J	1890.	J	3420.	
7439-96-5	Manganese	2.4		15.3		77.		144.		31.2		46.7	
7439-97-6	Mercury	0.06	U	0.3	U	0.54	U	0.13	U	0.48	U	0.33	U
7440-02-0	Nickel	0.59	U	4.6	U	7.	U	12.	U	7.3	U	4.1	U
7440-09-7	Potassium	119.	J	151.	J	254.	J	1940.	J	322.	J	846.	J
7782-49-2	Selenium	0.26	UJ	3.8		1.7	U	3.	U	2.9	J	2.2	
7440-22-4	Silver	0.33	U	1.5	U	2.3	U	4.	U	2.4	U	1.4	U
7440-23-5	Sodium	1350.		153.	J	191.	J	6160.		630.	J	3300.	
7440-28-0	Thallium	0.26	U	1.2	UJ	1.7	UJ	3.	U	1.8	UJ	1.	UJ
7440-62-2	Vanadium	2.1	J	9.	J	8.2	J	10.	J	7.3	J	50.9	
7440-66-6	Zinc	4.2		6.7	J	10.4	J	3.	U	12.7		49.3	
57-12-5	Cyanide (CN)	0.61	U	3.7	U	5.6	U	5.	U	5.7	U	8.8	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL															
	SAMPLE ID ------->	041-W-18B1-01		041-W-1901-01		041-W-1903-01		041-M-19A1-01		041-M-19A2-01		041-M-19B1-01	
	ORIGINAL ID ----->	041W18B101		041W190101		041W190301		041M19A101		041M19A201		041M19B101	
	LAB SAMPLE ID --->	951050-08		960039-15		960039-16		960025-11		960025-12		960025-13	
	ID FROM REPORT -->	041W18B101		041W190101		041W190301		041M19A101		041M19A201		041M19B101	
	SAMPLE DATE ----->	12/14/95		01/17/96		01/17/96		01/16/96		01/16/96		01/16/96	
	DATE EXTRACTED -->	12/20/95		01/21/96		01/21/96		01/20/96		01/20/96		01/20/96	
	DATE ANALYZED --->	12/20/95		01/22/96		01/22/96		01/22/96		01/22/96		01/22/96	
	MATRIX ---------->	Water		Water		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/L		UG/L		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	EM060	VAL	63A401	VAL	63A401	VAL	EM005	VAL	EM005	VAL	EM005	VAL
7429-90-5	Aluminum	119.	J	111000.		2140.		18900.		494.		976.	
7440-36-0	Antimony	2.	UJ	19.2	J	2.	J	0.67	UJ	0.67	UJ	0.14	UJ
7440-38-2	Arsenic	5.6	U	268.		4.8	J	15.7		0.17	J	0.83	
7440-39-3	Barium	6.2	U	300.		7.4	J	30.2	J	0.58	J	0.76	J
7440-41-7	Beryllium	1.	U	4.	J	1.	U	0.48	J	0.07	U	0.07	U
7440-43-9	Cadmium	3.	U	2.	U	2.	U	0.91	U	0.21	U	0.14	U
7440-70-2	Calcium	7760.		21200.		17200.		1720.		47.5	J	151.	J
7440-47-3	Chromium	8.	U	99.5		5.	U	16.5		1.2		3.	
7440-48-4	Cobalt	3.	U	38.5	J	2.	U	3.4	J	0.13	U	0.14	U
7440-50-8	Copper	4.	U	41.9		4.	U	10.7		0.78	J	1.6	J
7439-89-6	Iron	10900.		332000.		4030.		16800.		545.		1840.	
7439-92-1	Lead	1.	U	86.9		5.6		16.2		1.2		3.8	
7439-95-4	Magnesium	7280.		4570.	J	36400.		572.	J	30.1	J	270.	J
7439-96-5	Manganese	110.		12700.		26.3		169.		1.3		3.4	
7439-97-6	Mercury	0.14	U	0.59		0.13	U	0.27	U	0.05	U	0.06	U
7440-02-0	Nickel	12.	U	25.8	J	9.	U	7.	J	0.6	U	0.63	U
7440-09-7	Potassium	3600.	J	2720.	J	11400.		463.	J	17.5	J	88.9	J
7782-49-2	Selenium	3.	U	4.	U	4.	U	1.3	UJ	0.27	UJ	0.28	UJ
7440-22-4	Silver	4.	U	5.	U	5.	U	1.7	U	0.33	U	0.35	U
7440-23-5	Sodium	48300.		4730.	J	291000.		137.	J	18.6	J	805.	
7440-28-0	Thallium	3.	U	4.	U	4.	U	1.3	U	0.27	U	0.28	U
7440-62-2	Vanadium	2.	U	277.		4.4	J	35.4		0.99	J	2.5	J
7440-66-6	Zinc	3.	U	204.		7.1	J	30.6		1.4		4.8	
57-12-5	Cyanide (CN)	5.	U	5.	U	5.	U	3.1	U	0.65	U	0.65	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL															
	SAMPLE ID ------->	041-M-2501-01		041-W-2501-01		041-M-2502-01		041-M-2503-01		041-W-2503-01		041-M-2701-01	
	ORIGINAL ID ----->	041M250101		041W250101		041M250201		041M250301		041W250301		041M270101	
	LAB SAMPLE ID --->	950941-05		950940-20		950941-06		950941-07		950940-21		950941-08	
	ID FROM REPORT -->	041M250101		041W250101		041M250201		041M250301		041W250301		041M270101	
	SAMPLE DATE ----->	11/15/95		11/15/95		11/15/95		11/15/95		11/15/95		11/15/95	
	DATE EXTRACTED -->	12/19/95		12/10/95		12/19/95		12/19/95		12/10/95		12/19/95	
	DATE ANALYZED --->	12/20/95		12/11/95		12/20/95		12/20/95		12/11/95		12/20/95	
	MATRIX ---------->	Sediment		Water		Sediment		Sediment		Water		Sediment	
	UNITS ---------->	MG/KG		UG/L		MG/KG		MG/KG		UG/L		MG/KG	
CAS #	Parameter	M06010	VAL	M06070	VAL	M06010	VAL	M06010	VAL	M06070	VAL	M06010	VAL
7429-90-5	Aluminum	4180.	J	1820.		8780.	J	12500.	J	221.		2900.	J
7440-36-0	Antimony	4.6	UR	2.	UJ	0.7	UR	0.78	UR	2.	U	1.1	UR
7440-38-2	Arsenic	1.1	J	2.4	J	8.		8.8		2.	U	1.1	
7440-39-3	Barium	2.3	J	2.2	U	5.6	J	8.6	J	1.9	U	2.3	J
7440-41-7	Beryllium	0.46	U	1.	U	0.47	J	0.59	J	1.	U	0.11	U
7440-43-9	Cadmium	1.4	U	3.	U	1.	U	1.3	J	3.	U	0.33	U
7440-70-2	Calcium	1770.	J	4620.	J	3700.	J	17900.	J	6720.		941.	J
7440-47-3	Chromium	7.1		8.	U	33.		59.1		8.	U	11.1	
7440-48-4	Cobalt	1.6	J	3.	U	1.9	J	2.	J	3.	U	0.46	J
7440-50-8	Copper	6.1	J	4.	U	12.2	J	19.6	J	4.	U	4.2	J
7439-89-6	Iron	1780.	J	4030.		13500.	J	18500.	J	317.		1440.	J
7439-92-1	Lead	21.4	J	4.9		32.1	J	58.7	J	1.	U	13.5	J
7439-95-4	Magnesium	1420.	J	12500.		5490.		6660.		20400.		1200.	
7439-96-5	Manganese	2.6	J	4.2	J	30.7		66.		2.9	J	5.1	
7439-97-6	Mercury	0.44	U	0.13	U	0.31	U	0.4	U	0.13	U	0.09	U
7440-02-0	Nickel	5.5	U	12.	U	6.9	J	6.5	J	12.	U	2.	J
7440-09-7	Potassium	172.	J	3980.	J	1430.	J	2060.		7060.		406.	J
7782-49-2	Selenium	1.4	U	3.	U	1.9	J	1.2	U	3.	U	0.39	J
7440-22-4	Silver	1.8	UJ	4.	U	1.4	UJ	1.6	UJ	4.	U	0.43	UJ
7440-23-5	Sodium	640.	J	105000.		22400.	J	24700.	J	185000.		3170.	J
7440-28-0	Thallium	1.4	U	3.9	J	1.	U	1.2	U	3.	U	0.33	U
7440-62-2	Vanadium	10.1	J	6.4	J	22.8		33.7		2.	U	5.2	J
7440-66-6	Zinc	7.3	J	7.4	U	21.7	J	57.1	J	5.4	U	8.2	J
57-12-5	Cyanide (CN)	4.8	U	5.	U	3.5	U	3.8	U	5.	U	1.1	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL																		
	SAMPLE ID ------->	041-M-2702-01		041-W-2702-01		041-M-3201-01		041-W-3201-01		041-M-3202-01		041-M-3203-01	
	ORIGINAL ID ----->	041M270201		041W270201		041M320101		041W320101		041M320201		041M320301	
	LAB SAMPLE ID --->	950941-09		950940-22		950940-04		950940-08		950940-05		950940-06	
	ID FROM REPORT -->	041M270201		041W270201		041M320101		041W320101		041M320201		041M320301	
	SAMPLE DATE ----->	11/15/95		11/15/95		11/14/95		11/14/95		11/14/95		11/14/95	
	DATE EXTRACTED -->	12/19/95		12/10/95		12/10/95		12/10/95		12/10/95		12/10/95	
	DATE ANALYZED --->	12/20/95		12/11/95		12/11/95		12/11/95		12/11/95		12/11/95	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Sediment	
	UNITS ---------->	MG/KG		UG/L		MG/KG		UG/L		MG/KG		MG/KG	
CAS #	Parameter	M06010	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
7429-90-5	Aluminum	3670.	J	5550.		3670.		141.	U	3920.		7780.	
7440-36-0	Antimony	0.32	UR	2.	UJ	1.6	UJ	2.	UJ	6.7	UJ	5.	U
7440-38-2	Arsenic	0.98	J	4.1	J	1.6	U	2.	U	1.3	U	1.	U
7440-39-3	Barium	3.1	J	11.6	U	9.1	J	5.4	U	6.7	J	9.7	J
7440-41-7	Beryllium	0.16	U	1.	U	0.78	U	1.	U	0.67	U	0.51	J
7440-43-9	Cadmium	0.47	U	3.	U	2.3	U	3.	U	2.	U	1.5	U
7440-70-2	Calcium	1260.	J	99000.		2150.	J	1750.	J	2430.	J	4320.	
7440-47-3	Chromium	12.4		13.3		7.2	J	8.	U	5.7	J	6.	
7440-48-4	Cobalt	0.51	J	3.	U	2.3	U	3.	U	2.	U	1.5	U
7440-50-8	Copper	3.4	J	9.2	J	5.7	J	4.	U	5.7	J	9.2	J
7439-89-6	Iron	1380.	J	2230.		652.		182.		471.		832.	
7439-92-1	Lead	13.2	J	25.9		41.3		1.	U	41.6		52.3	
7439-95-4	Magnesium	2070.		327000.		2230.	J	3050.	J	2460.	J	4280.	
7439-96-5	Manganese	5.1		1.	U	5.5	J	10.	J	3.5	J	5.6	J
7439-97-6	Mercury	0.12	U	0.17	J	0.61	U	0.13	U	0.49	U	0.51	J
7440-02-0	Nickel	3.	J	12.	U	9.3	U	12.	U	8.1	U	6.	U
7440-09-7	Potassium	689.	J	106000.		433.	J	1170.	J	306.	J	485.	J
7782-49-2	Selenium	0.47	U	3.	U	2.3	U	3.	U	2.4	J	3.6	
7440-22-4	Silver	0.63	UJ	4.	U	3.1	U	4.	U	2.7	U	2.	U
7440-23-5	Sodium	8610.	J	2580000.		3680.	J	30000.		2980.	J	2580.	
7440-28-0	Thallium	0.47	U	3.	U	2.3	U	3.	U	2.	U	1.5	U
7440-62-2	Vanadium	6.9	J	11.	J	6.6	J	2.	U	5.2	J	7.6	J
7440-66-6	Zinc	4.7	J	19.6	J	6.8	J	3.9	U	7.9	J	9.4	J
57-12-5	Cyanide (CN)	1.6	U	5.	U	7.5	U	5.	U	6.4	U	5.3	U

*** Validation Complete ***

PENSACOLA, SITE 41
WETLAND W1

VOA

SAMPLE ID -------->	003-M-0013-01
ORIGINAL ID ----->	03M1301
LAB SAMPLE ID --->	39496-14
ID FROM REPORT -->	F30414
SAMPLE DATE ----->	03/02/94
DATE ANALYZED --->	03/11/94
MATRIX ---------->	Sediment
UNITS ---------->	UG/KG

CAS #	Parameter	CT520	VAL
75-09-2	Methylene chloride	12.	U
1330-20-7	Xylene (Total)	12.	U
67-64-1	Acetone	87.	U
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl chloride	12.	U
75-00-3	Chloroethane	12.	U
75-15-0	Carbon disulfide	12.	U
75-35-4	1,1-Dichloroethene	12.	U
75-34-3	1,1-Dichloroethane	12.	U
540-59-0	1,2-Dichloroethene (total)	12.	U
67-66-3	Chloroform	12.	U
107-06-2	1,2-Dichloroethane	12.	U
78-93-3	2-Butanone (MEK)	12.	U
71-55-6	1,1,1-Trichloroethane	12.	U
56-23-5	Carbon tetrachloride	12.	U
75-27-4	Bromodichloromethane	12.	U
78-87-5	1,2-Dichloropropane	12.	U
10061-01-5	cis-1,3-Dichloropropene	12.	U
79-01-6	Trichloroethene	12.	U
124-48-1	Dibromochloromethane	12.	U
79-00-5	1,1,2-Trichloroethane	12.	U
71-43-2	Benzene	12.	U
10061-02-6	trans-1,3-Dichloropropene	12.	U
75-25-2	Bromoform	12.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	12.	U
79-34-5	1,1,2,2-Tetrachloroethane	12.	U
108-88-3	Toluene	12.	U
108-90-7	Chlorobenzene	12.	U
100-41-4	Ethylbenzene	12.	U
100-42-5	Styrene	12.	U

*** Validation Complete ***

PENSACOLA, SITE 41
WETLAND W1

VOA													
	SAMPLE ID ------->	003-M-0007-01		003-M-0008-01		003-M-0009-01		003-M-0010-01		003-M-0011-01		003-M-0012-01	
	ORIGINAL ID ----->	03M0701		03M0801		03M0901		03M1001		03M1101		03M1201	
	LAB SAMPLE ID --->	39496-7		39496-8		39496-9		39496-10		39496-12		39496-13	
	ID FROM REPORT -->	F30407		F30408		F30409		F30410		F30412		F30413	
	SAMPLE DATE ----->	03/02/94		03/02/94		03/02/94		03/02/94		03/02/94		03/02/94	
	DATE ANALYZED --->	03/11/94		03/10/94		03/09/94		03/11/94		03/11/94		03/11/94	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL
75-09-2	Methylene chloride	54.	U	16.	U	35.	U	13.	U	12.	U	12.	U
1330-20-7	Xylene (Total)	680.		14.	U	20.	U	11.	U	12.	U	12.	U
67-64-1	Acetone	960.	U	120.	U	160.	U	110.	U	55.	U	64.	U
74-87-3	Chloromethane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
74-83-9	Bromomethane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
75-01-4	Vinyl chloride	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
75-00-3	Chloroethane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
75-15-0	Carbon disulfide	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
75-35-4	1,1-Dichloroethene	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
75-34-3	1,1-Dichloroethane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
540-59-0	1,2-Dichloroethene (total)	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
67-66-3	Chloroform	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
107-06-2	1,2-Dichloroethane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
78-93-3	2-Butanone (MEK)	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
71-55-6	1,1,1-Trichloroethane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
56-23-5	Carbon tetrachloride	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
75-27-4	Bromodichloromethane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
78-87-5	1,2-Dichloropropane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
10061-01-5	cis-1,3-Dichloropropene	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
79-01-6	Trichloroethene	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
124-48-1	Dibromochloromethane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
79-00-5	1,1,2-Trichloroethane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
71-43-2	Benzene	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
10061-02-6	trans-1,3-Dichloropropene	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
75-25-2	Bromoform	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
591-78-6	2-Hexanone	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
127-18-4	Tetrachloroethene	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
79-34-5	1,1,2,2-Tetrachloroethane	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
108-88-3	Toluene	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
108-90-7	Chlorobenzene	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
100-41-4	Ethylbenzene	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U
100-42-5	Styrene	66.	U	14.	U	20.	U	11.	U	12.	U	12.	U

*** Validation Complete ***

PENSACOLA, SITE 41
WETLAND W1

VOA															
	SAMPLE ID ------->	003-M-0001-01		003-M-0002-01		003-M-0003-01		003-M-0004-01		003-M-0005-01		003-M-0006-01	
	ORIGINAL ID ----->	03M0101		03M0201		03M0301		03M0401		03M0501		03M0601	
	LAB SAMPLE ID --->	39496-1		39496-2		39496-3		39496-4		39496-5		39496-6	
	ID FROM REPORT -->	F30401		F30402		F30403		F30404		F30405		F30406	
	SAMPLE DATE ----->	03/02/94		03/02/94		03/02/94		03/02/94		03/02/94		03/02/94	
	DATE ANALYZED --->	03/09/94		03/09/94		03/09/94		03/09/94		03/11/94		03/10/94	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL
75-09-2	Methylene chloride	19.	U	27.	U	39.	U	17.	U	150.	U	17.	U
1330-20-7	Xylene (Total)	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
67-64-1	Acetone	38.	U	70.	U	140.	U	76.	U	2400.	U	150.	U
74-87-3	Chloromethane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
74-83-9	Bromomethane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
75-01-4	Vinyl chloride	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
75-00-3	Chloroethane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
75-15-0	Carbon disulfide	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
75-35-4	1,1-Dichloroethene	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
75-34-3	1,1-Dichloroethane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
540-59-0	1,2-Dichloroethene (total)	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
67-66-3	Chloroform	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
107-06-2	1,2-Dichloroethane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
78-93-3	2-Butanone (MEK)	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
71-55-6	1,1,1-Trichloroethane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
56-23-5	Carbon tetrachloride	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
75-27-4	Bromodichloromethane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
78-87-5	1,2-Dichloropropane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
10061-01-5	cis-1,3-Dichloropropene	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
79-01-6	Trichloroethene	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
124-48-1	Dibromochloromethane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
79-00-5	1,1,2-Trichloroethane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
71-43-2	Benzene	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
10061-02-6	trans-1,3-Dichloropropene	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
75-25-2	Bromoform	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
591-78-6	2-Hexanone	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
127-18-4	Tetrachloroethene	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
79-34-5	1,1,2,2-Tetrachloroethane	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
108-88-3	Toluene	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
108-90-7	Chlorobenzene	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
100-41-4	Ethylbenzene	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U
100-42-5	Styrene	12.	U	14.	U	18.	U	13.	U	140.	U	16.	U

*** Validation Complete ***

SVOA

SAMPLE ID -------->	003-M-0013-01
ORIGINAL ID ----->	03M1301
LAB SAMPLE ID --->	39496-31
ID FROM REPORT -->	F30414
SAMPLE DATE ----->	03/02/94
DATE EXTRACTED -->	03/08/94
DATE ANALYZED --->	03/10/94
MATRIX ---------->	Sediment
UNITS ---------->	UG/KG

CAS #	Parameter	CT520	VAL
121-14-2	2,4-Dinitrotoluene	380.	U
84-66-2	Diethylphthalate	380.	U
7005-72-3	4-Chlorophenylphenyl ether	380.	U
86-73-7	Fluorene	380.	U
100-01-6	4-Nitroaniline	920.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	920.	U
86-30-6	N-Nitrosodiphenylamine	380.	U
101-55-3	4-Bromophenyl-phenylether	380.	U
118-74-1	Hexachlorobenzene	380.	U
87-86-5	Pentachlorophenol	920.	U
85-01-8	Phenanthrene	380.	U
120-12-7	Anthracene	380.	U
86-74-8	Carbazole	380.	U
84-74-2	Di-n-butylphthalate	380.	U
206-44-0	Fluoranthene	380.	U
129-00-0	Pyrene	380.	U
85-68-7	Butylbenzylphthalate	380.	U
91-94-1	3,3'-Dichlorobenzidine	380.	U
56-55-3	Benzo(a)anthracene	380.	U
218-01-9	Chrysene	380.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	380.	U
117-84-0	Di-n-octylphthalate	380.	U
205-99-2	Benzo(b)fluoranthene	380.	U
207-08-9	Benzo(k)fluoranthene	380.	U
50-32-8	Benzo(a)pyrene	380.	U
193-39-5	Indeno(1,2,3-cd)pyrene	380.	U
53-70-3	Dibenz(a,h)anthracene	380.	U
191-24-2	Benzo(g,h,i)perylene	380.	U

*** Validation Complete ***

PENSACOLA, SITE 41
WETLAND W1

SVOA

SAMPLE ID -------->	003-M-0013-01
ORIGINAL ID ----->	03M1301
LAB SAMPLE ID --->	39496-31
ID FROM REPORT -->	F30414
SAMPLE DATE ----->	03/02/94
DATE EXTRACTED -->	03/08/94
DATE ANALYZED --->	03/10/94
MATRIX ---------->	Sediment
UNITS ---------->	UG/KG

CAS #	Parameter	CT520	VAL
108-95-2	Phenol	380.	U
111-44-4	bis(2-Chloroethyl)ether	380.	U
95-57-8	2-Chlorophenol	380.	U
541-73-1	1,3-Dichlorobenzene	380.	U
106-46-7	1,4-Dichlorobenzene	380.	U
95-50-1	1,2-Dichlorobenzene	380.	U
95-48-7	2-Methylphenol (o-Cresol)	380.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380.	U
106-44-5	4-Methylphenol (p-Cresol)	380.	U
621-64-7	N-Nitroso-di-n-propylamine	380.	U
67-72-1	Hexachloroethane	380.	U
98-95-3	Nitrobenzene	380.	U
78-59-1	Isophorone	380.	U
88-75-5	2-Nitrophenol	380.	U
105-67-9	2,4-Dimethylphenol	380.	U
111-91-1	bis(2-Chloroethoxy)methane	380.	U
120-83-2	2,4-Dichlorophenol	380.	U
120-82-1	1,2,4-Trichlorobenzene	380.	U
91-20-3	Naphthalene	380.	U
106-47-8	4-Chloroaniline	380.	U
87-68-3	Hexachlorobutadiene	380.	U
59-50-7	4-Chloro-3-methylphenol	380.	U
91-57-6	2-Methylnaphthalene	380.	U
77-47-4	Hexachlorocyclopentadiene	380.	U
88-06-2	2,4,6-Trichlorophenol	380.	U
95-95-4	2,4,5-Trichlorophenol	920.	U
91-58-7	2-Chloronaphthalene	380.	U
88-74-4	2-Nitroaniline	920.	U
131-11-3	Dimethylphthalate	380.	U
208-96-8	Acenaphthylene	380.	U
606-20-2	2,6-Dinitrotoluene	380.	U
99-09-2	3-Nitroaniline	920.	U
83-32-9	Acenaphthene	380.	U
51-28-5	2,4-Dinitrophenol	920.	U
100-02-7	4-Nitrophenol	920.	U
132-64-9	Dibenzofuran	380.	U

*** Validation Complete ***

PENSACOLA, SITE 41
WETLAND W1

SVOA													
	SAMPLE ID ------->	003-M-0007-01		003-M-0008-01		003-M-0009-01		003-M-0010-01		003-M-0011-01		003-M-0012-01	
	ORIGINAL ID ----->	03M0701		03M0801		03M0901		03M1001		03M1101		03M1201	
	LAB SAMPLE ID --->	39496-24		39496-25		39496-26		39496-27		39496-29		39496-30	
	ID FROM REPORT -->	F30407		F30408		F30409		F30410		F30412		F30413	
	SAMPLE DATE ----->	03/02/94		03/02/94		03/02/94		03/02/94		03/02/94		03/02/94	
	DATE EXTRACTED -->	03/08/94		03/08/94		03/08/94		03/08/94		03/08/94		03/08/94	
	DATE ANALYZED --->	03/09/94		03/10/94		03/09/94		03/09/94		03/10/94		03/10/94	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL
121-14-2	2,4-Dinitrotoluene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
84-66-2	Diethylphthalate	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
7005-72-3	4-Chlorophenylphenyl ether	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
86-73-7	Fluorene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
100-01-6	4-Nitroaniline	2100.	U	1100.	U	1600.	U	940.	U	940.	U	920.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	2100.	U	1100.	U	1600.	U	940.	U	940.	U	920.	U
86-30-6	N-Nitrosodiphenylamine	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
101-55-3	4-Bromophenyl-phenylether	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
118-74-1	Hexachlorobenzene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
87-86-5	Pentachlorophenol	2100.	U	1100.	U	1600.	U	940.	U	940.	U	920.	U
85-01-8	Phenanthrene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
120-12-7	Anthracene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
86-74-8	Carbazole	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
84-74-2	Di-n-butylphthalate	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
206-44-0	Fluoranthene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
129-00-0	Pyrene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
85-68-7	Butylbenzylphthalate	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
91-94-1	3,3'-Dichlorobenzidine	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
56-55-3	Benzo(a)anthracene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
218-01-9	Chrysene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
117-84-0	Di-n-octylphthalate	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
205-99-2	Benzo(b)fluoranthene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
207-08-9	Benzo(k)fluoranthene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
50-32-8	Benzo(a)pyrene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
193-39-5	Indeno(1,2,3-cd)pyrene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
53-70-3	Dibenz(a,h)anthracene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
191-24-2	Benzo(g,h,i)perylene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U

*** Validation Complete ***

PENSACOLA, SITE 41
WETLAND W1

SVOA													
	SAMPLE ID ------->	003-M-0007-01		003-M-0008-01		003-M-0009-01		003-M-0010-01		003-M-0011-01		003-M-0012-01	
	ORIGINAL ID ----->	03M0701		03M0801		03M0901		03M1001		03M1101		03M1201	
	LAB SAMPLE ID --->	39496-24		39496-25		39496-26		39496-27		39496-29		39496-30	
	ID FROM REPORT -->	F30407		F30408		F30409		F30410		F30412		F30413	
	SAMPLE DATE ----->	03/02/94		03/02/94		03/02/94		03/02/94		03/02/94		03/02/94	
	DATE EXTRACTED -->	03/08/94		03/08/94		03/08/94		03/08/94		03/08/94		03/08/94	
	DATE ANALYZED --->	03/09/94		03/10/94		03/09/94		03/09/94		03/10/94		03/10/94	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL
108-95-2	Phenol	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
111-44-4	bis(2-Chloroethyl)ether	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
95-57-8	2-Chlorophenol	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
541-73-1	1,3-Dichlorobenzene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
106-46-7	1,4-Dichlorobenzene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
95-50-1	1,2-Dichlorobenzene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
95-48-7	2-Methylphenol (o-Cresol)	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
106-44-5	4-Methylphenol (p-Cresol)	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
621-64-7	N-Nitroso-di-n-propylamine	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
67-72-1	Hexachloroethane	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
98-95-3	Nitrobenzene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
78-59-1	Isophorone	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
88-75-5	2-Nitrophenol	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
105-67-9	2,4-Dimethylphenol	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
111-91-1	bis(2-Chloroethoxy)methane	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
120-83-2	2,4-Dichlorophenol	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
120-82-1	1,2,4-Trichlorobenzene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
91-20-3	Naphthalene	300.	J	450.	U	670.	U	390.	U	390.	U	380.	U
106-47-8	4-Chloroaniline	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
87-68-3	Hexachlorobutadiene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
59-50-7	4-Chloro-3-methylphenol	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
91-57-6	2-Methylnaphthalene	240.	J	450.	U	670.	U	390.	U	390.	U	380.	U
77-47-4	Hexachlorocyclopentadiene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
88-06-2	2,4,6-Trichlorophenol	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
95-95-4	2,4,5-Trichlorophenol	2100.	U	1100.	U	1600.	U	940.	U	940.	U	920.	U
91-58-7	2-Chloronaphthalene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
88-74-4	2-Nitroaniline	2100.	U	1100.	U	1600.	U	940.	U	940.	U	920.	U
131-11-3	Dimethylphthalate	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
208-96-8	Acenaphthylene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
606-20-2	2,6-Dinitrotoluene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
99-09-2	3-Nitroaniline	2100.	U	1100.	U	1600.	U	940.	U	940.	U	920.	U
83-32-9	Acenaphthene	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U
51-28-5	2,4-Dinitrophenol	2100.	U	1100.	U	1600.	U	940.	U	940.	U	920.	U
100-02-7	4-Nitrophenol	2100.	U	1100.	U	1600.	U	940.	U	940.	U	920.	U
132-64-9	Dibenzofuran	860.	U	450.	U	670.	U	390.	U	390.	U	380.	U

*** Validation Complete ***

PENSACOLA, SITE 41
WETLAND W1

SVOA													
	SAMPLE ID ------->	003-M-0001-01		003-M-0002-01		003-M-0003-01		003-M-0004-01		003-M-0005-01		003-M-0006-01	
	ORIGINAL ID ----->	03M0101		03M0201		03M0301		03M0401		03M0501		03M0601	
	LAB SAMPLE ID --->	39496-18		39496-19		39496-20		39496-21		39496-22		39496-23	
	ID FROM REPORT -->	F30401		F30402		F30403		F30404		F30405		F30406	
	SAMPLE DATE ----->	03/02/94		03/02/94		03/02/94		03/02/94		03/02/94		03/02/94	
	DATE EXTRACTED -->	03/08/94		03/08/94		03/08/94		03/08/94		03/08/94		03/08/94	
	DATE ANALYZED --->	03/09/94		03/10/94		03/09/94		03/09/94		03/10/94		03/10/94	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL
121-14-2	2,4-Dinitrotoluene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
84-66-2	Diethylphthalate	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
7005-72-3	4-Chlorophenylphenyl ether	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
86-73-7	Fluorene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
100-01-6	4-Nitroaniline	1000.	U	2300.	U	1500.	U	1000.	U	140000.	U	2800.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1000.	U	2300.	U	1500.	U	1000.	U	140000.	U	2800.	U
86-30-6	N-Nitrosodiphenylamine	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
101-55-3	4-Bromophenyl-phenylether	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
118-74-1	Hexachlorobenzene	430.	U	950.	U	620.	U	120.	J	56000.	U	1200.	U
87-86-5	Pentachlorophenol	1000.	U	2300.	U	1500.	U	1000.	U	140000.	U	2800.	U
85-01-8	Phenanthrene	160.	J	950.	U	620.	U	430.	U	56000.	U	1200.	U
120-12-7	Anthracene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
86-74-8	Carbazole	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
84-74-2	Di-n-butylphthalate	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
206-44-0	Fluoranthene	210.	J	950.	U	620.	U	430.	U	56000.	U	1200.	U
129-00-0	Pyrene	180.	J	950.	U	620.	U	430.	U	56000.	U	1200.	U
85-68-7	Butylbenzylphthalate	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
91-94-1	3,3'-Dichlorobenzidine	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
56-55-3	Benzo(a)anthracene	98.	J	950.	U	620.	U	430.	U	56000.	U	1200.	U
218-01-9	Chrysene	110.	J	950.	U	620.	U	430.	U	56000.	U	1200.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
117-84-0	Di-n-octylphthalate	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
205-99-2	Benzo(b)fluoranthene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
207-08-9	Benzo(k)fluoranthene	93.	J	950.	U	620.	U	430.	U	56000.	U	1200.	U
50-32-8	Benzo(a)pyrene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
193-39-5	Indeno(1,2,3-cd)pyrene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
53-70-3	Dibenz(a,h)anthracene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
191-24-2	Benzo(g,h,i)perylene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U

*** Validation Complete ***

PENSACOLA, SITE 41
WETLAND W1

SVOA															
	SAMPLE ID ------->	003-M-0001-01		003-M-0002-01		003-M-0003-01		003-M-0004-01		003-M-0005-01		003-M-0006-01	
	ORIGINAL ID ----->	03M0101		03M0201		03M0301		03M0401		03M0501		03M0601	
	LAB SAMPLE ID --->	39496-18		39496-19		39496-20		39496-21		39496-22		39496-23	
	ID FROM REPORT -->	F30401		F30402		F30403		F30404		F30405		F30406	
	SAMPLE DATE ----->	03/02/94		03/02/94		03/02/94		03/02/94		03/02/94		03/02/94	
	DATE EXTRACTED -->	03/08/94		03/08/94		03/08/94		03/08/94		03/08/94		03/08/94	
	DATE ANALYZED --->	03/09/94		03/10/94		03/09/94		03/09/94		03/10/94		03/10/94	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL	CT520	VAL
108-95-2	Phenol	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
111-44-4	bis(2-Chloroethyl)ether	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
95-57-8	2-Chlorophenol	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
541-73-1	1,3-Dichlorobenzene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
106-46-7	1,4-Dichlorobenzene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
95-50-1	1,2-Dichlorobenzene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
95-48-7	2-Methylphenol (o-Cresol)	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
106-44-5	4-Methylphenol (p-Cresol)	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
621-64-7	N-Nitroso-di-n-propylamine	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
67-72-1	Hexachloroethane	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
98-95-3	Nitrobenzene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
78-59-1	Isophorone	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
88-75-5	2-Nitrophenol	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
105-67-9	2,4-Dimethylphenol	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
111-91-1	bis(2-Chloroethoxy)methane	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
120-83-2	2,4-Dichlorophenol	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
120-82-1	1,2,4-Trichlorobenzene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
91-20-3	Naphthalene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
106-47-8	4-Chloroaniline	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
87-68-3	Hexachlorobutadiene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
59-50-7	4-Chloro-3-methylphenol	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
91-57-6	2-Methylnaphthalene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
77-47-4	Hexachlorocyclopentadiene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
88-06-2	2,4,6-Trichlorophenol	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
95-95-4	2,4,5-Trichlorophenol	1000.	U	2300.	U	1500.	U	1000.	U	140000.	U	2800.	U
91-58-7	2-Chloronaphthalene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
88-74-4	2-Nitroaniline	1000.	U	2300.	U	1500.	U	1000.	U	140000.	U	2800.	U
131-11-3	Dimethylphthalate	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
208-96-8	Acenaphthylene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
606-20-2	2,6-Dinitrotoluene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
99-09-2	3-Nitroaniline	1000.	U	2300.	U	1500.	U	1000.	U	140000.	U	2800.	U
83-32-9	Acenaphthene	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U
51-28-5	2,4-Dinitrophenol	1000.	U	2300.	U	1500.	U	1000.	U	140000.	U	2800.	U
100-02-7	4-Nitrophenol	1000.	U	2300.	U	1500.	U	1000.	U	140000.	U	2800.	U
132-64-9	Dibenzofuran	430.	U	950.	U	620.	U	430.	U	56000.	U	1200.	U

*** Validation Complete ***

PENSACOLA, SITE 41
WETLAND W1

PEST

SAMPLE ID ------->	003-M-0013-01
ORIGINAL ID ----->	03M1301
LAB SAMPLE ID --->	39496-31
ID FROM REPORT -->	F30414
SAMPLE DATE ----->	03/02/94
DATE EXTRACTED -->	03/07/94
DATE ANALYZED --->	03/14/94
MATRIX ---------->	Sediment
UNITS ----------->	UG/KG

CAS #	Parameter	CT520	
319-84-6	alpha-BHC	2.	U
319-85-7	beta-BHC	2.	U
319-86-8	delta-BHC	2.	U
58-89-9	gamma-BHC (Lindane)	2.	U
76-44-8	Heptachlor	2.	U
309-00-2	Aldrin	2.	U
1024-57-3	Heptachlor epoxide	2.	U
959-98-8	Endosulfan I	2.	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	20.	U
53494-70-5	Endrin ketone	3.8	U
7421-93-4	Endrin aldehyde	3.8	U
5103-71-9	alpha-Chlordane	2.	U
5103-74-2	gamma-Chlordane	2.	U
8001-35-2	Toxaphene	200.	U
12674-11-2	Aroclor-1016	38.	U
11104-28-2	Aroclor-1221	77.	U
11141-16-5	Aroclor-1232	38.	U
53469-21-9	Aroclor-1242	38.	U
12672-29-6	Aroclor-1248	38.	U
11097-69-1	Aroclor-1254	38.	U
11096-82-5	Aroclor-1260	38.	U

PENSACOLA, SITE 41
WETLAND W1

PEST													
	SAMPLE ID ------->	003-M-0007-01		003-M-0008-01		003-M-0009-01		003-M-0010-01		003-M-0011-01		003-M-0012-01	
	ORIGINAL ID ----->	03M0701		03M0801		03M0901		03M1001		03M1101		03M1201	
	LAB SAMPLE ID --->	39496-24		39496-25		39496-26		39496-27		39496-29		39496-30	
	ID FROM REPORT -->	F30407		F30408		F30409		F30410		F30412		F30413	
	SAMPLE DATE ----->	03/02/94		03/02/94		03/02/94		03/02/94		03/02/94		03/02/94	
	DATE EXTRACTED -->	03/07/94		03/07/94		03/07/94		03/07/94		03/07/94		03/07/94	
	DATE ANALYZED --->	03/13/94		03/13/94		03/13/94		03/13/94		03/14/94		03/14/94	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	CT520		CT520		CT520		CT520		CT520		CT520	
319-84-6	alpha-BHC	4.4	U	2.4	U	3.5	U	2.	U	2.	U	1.9	U
319-85-7	beta-BHC	4.4	U	2.4	U	3.5	U	2.	U	2.	U	1.9	U
319-86-8	delta-BHC	4.4	U	2.4	U	3.5	U	2.	U	2.	U	1.9	U
58-89-9	gamma-BHC (Lindane)	4.4	U	2.4	U	3.5	U	2.	U	2.	U	1.9	U
76-44-8	Heptachlor	4.4	U	2.4	U	3.5	U	2.	U	2.	U	1.9	U
309-00-2	Aldrin	4.4	U	2.4	U	3.5	U	2.	U	2.	U	1.9	U
1024-57-3	Heptachlor epoxide	4.4	U	2.4	U	3.5	U	2.	U	2.	U	1.9	U
959-98-8	Endosulfan I	4.4	U	2.4	U	3.5	U	2.	U	2.	U	1.9	U
60-57-1	Dieldrin	8.6	U	4.6	U	6.7	U	3.9	U	3.8	U	3.8	U
72-55-9	4,4'-DDE	8.6	U	66.		6.7	U	3.9	U	3.8	U	3.8	U
72-20-8	Endrin	8.6	U	4.6	U	6.7	U	3.9	U	3.8	U	3.8	U
33213-65-9	Endosulfan II	8.6	U	4.6	U	6.7	U	3.9	U	3.8	U	3.8	U
72-54-8	4,4'-DDD	17.		170.	J	9.1		3.9	U	3.8	U	3.8	U
1031-07-8	Endosulfan sulfate	8.6	U	4.6	U	6.7	U	3.9	U	3.8	U	3.8	U
50-29-3	4,4'-DDT	8.6	U	17.		6.7	U	3.9	U	3.8	U	3.8	U
72-43-5	Methoxychlor	44.	U	24.	U	35.	U	20.	U	20.	U	19.	U
53494-70-5	Endrin ketone	8.6	U	4.6	U	6.7	U	3.9	U	3.8	U	3.8	U
7421-93-4	Endrin aldehyde	8.6	U	4.6	U	6.7	U	3.9	U	3.8	U	3.8	U
5103-71-9	alpha-Chlordane	4.4	U	2.4	U	3.5	U	2.	U	2.	U	1.9	U
5103-74-2	gamma-Chlordane	4.4	U	2.4	U	3.5	U	2.	U	2.	U	1.9	U
8001-35-2	Toxaphene	440.	U	240.	U	350.	U	200.	U	200.	U	190.	U
12674-11-2	Aroclor-1016	86.	U	46.	U	67.	U	39.	U	38.	U	38.	U
11104-28-2	Aroclor-1221	180.	U	93.	U	140.	U	79.	U	78.	U	77.	U
11141-16-5	Aroclor-1232	86.	U	46.	U	67.	U	39.	U	38.	U	38.	U
53469-21-9	Aroclor-1242	86.	U	46.	U	67.	U	39.	U	38.	U	38.	U
12672-29-6	Aroclor-1248	86.	U	46.	U	67.	U	39.	U	38.	U	38.	U
11097-69-1	Aroclor-1254	86.	U	46.	U	67.	U	39.	U	38.	U	38.	U
11096-82-5	Aroclor-1260	86.	U	46.	U	67.	U	39.	U	38.	U	38.	U

PENSACOLA, SITE 41
WETLAND W1

PEST													
	SAMPLE ID ------->	003-M-0001-01		003-M-0002-01		003-M-0003-01		003-M-0004-01		003-M-0005-01		003-M-0006-01	
	ORIGINAL ID ----->	03M0101		03M0201		03M0301		03M0401		03M0501		03M0601	
	LAB SAMPLE ID --->	39496-18		39496-19		39496-20		39496-21		39496-22		39496-23	
	ID FROM REPORT -->	F30401		F30402		F30403		F30404		F30405		F30406	
	SAMPLE DATE ----->	03/02/94		03/02/94		03/02/94		03/02/94		03/02/94		03/02/94	
	DATE EXTRACTED -->	03/07/94		03/07/94		03/07/94		03/07/94		03/07/94		03/07/94	
	DATE ANALYZED --->	03/12/94		03/12/94		03/12/94		03/12/94		03/12/94		03/12/94	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	CT520		CT520		CT520		CT520		CT520		CT520	
319-84-6	alpha-BHC	2.2	U	2.5	U	3.2	U	2.2	U	4.7	U	3.	U
319-85-7	beta-BHC	2.2	U	2.5	U	3.2	U	2.2	U	4.7	U	3.	U
319-86-8	delta-BHC	2.2	U	2.5	U	3.2	U	2.2	U	4.7	U	3.	U
58-89-9	gamma-BHC (Lindane)	2.2	U	2.5	U	3.2	U	2.2	U	4.7	U	3.	U
76-44-8	Heptachlor	2.2	U	2.5	U	3.2	U	2.2	U	4.7	U	3.	U
309-00-2	Aldrin	2.2	U	2.5	U	3.2	U	2.2	U	4.7	U	3.	U
1024-57-3	Heptachlor epoxide	2.2	U	2.5	U	3.2	U	2.2	U	4.7	U	3.	U
959-98-8	Endosulfan I	2.2	U	2.5	U	3.2	U	2.2	U	4.7	U	3.	U
60-57-1	Dieldrin	4.3	U	4.8	U	6.2	U	4.3	U	9.1	U	5.8	U
72-55-9	4,4'-DDE	4.3	U	4.8	U	6.2	U	4.3	U	9.1	U	5.8	U
72-20-8	Endrin	4.3	U	4.8	U	6.2	U	4.3	U	9.1	U	5.8	U
33213-65-9	Endosulfan II	4.3	U	4.8	U	6.2	U	4.3	U	9.1	U	5.8	U
72-54-8	4,4'-DDD	4.3	U	4.8	U	6.2	U	4.3	U	9.1	U	5.8	U
1031-07-8	Endosulfan sulfate	4.3	U	4.8	U	6.2	U	4.3	U	9.1	U	5.8	U
50-29-3	4,4'-DDT	4.3	U	4.8	U	6.2	U	4.3	U	9.1	U	5.8	U
72-43-5	Methoxychlor	22.	U	25.	U	32.	U	22.	U	47.	U	30.	U
53494-70-5	Endrin ketone	4.3	U	4.8	U	6.2	U	4.3	U	9.1	U	5.8	U
7421-93-4	Endrin aldehyde	4.3	U	4.8	U	6.2	U	4.3	U	9.1	U	5.8	U
5103-71-9	alpha-Chlordane	2.2	U	2.5	U	3.2	U	2.2	U	4.7	U	3.	U
5103-74-2	gamma-Chlordane	2.2	U	2.5	U	3.2	U	2.2	U	4.7	U	3.	U
8001-35-2	Toxaphene	220.	U	250.	U	320.	U	220.	U	470.	U	300.	U
12674-11-2	Aroclor-1016	43.	U	48.	U	62.	U	43.	U	91.	U	58.	U
11104-28-2	Aroclor-1221	87.	U	97.	U	130.	U	86.	U	180.	U	120.	U
11141-16-5	Aroclor-1232	43.	U	48.	U	62.	U	43.	U	91.	U	58.	U
53469-21-9	Aroclor-1242	43.	U	48.	U	62.	U	43.	U	91.	U	58.	U
12672-29-6	Aroclor-1248	43.	U	48.	U	62.	U	43.	U	91.	U	58.	U
11097-69-1	Aroclor-1254	43.	U	48.	U	62.	U	43.	U	91.	U	58.	U
11096-82-5	Aroclor-1260	43.	U	48.	U	62.	U	43.	U	91.	U	58.	U

PENSACOLA, SITE 41
WETLAND W1

METAL							
	SAMPLE ID ------->	003-M-0013-01					
	ORIGINAL ID ----->	03M1301					
	LAB SAMPLE ID --->	39496-048					
	ID FROM REPORT -->	F30414					
	SAMPLE DATE ----->	03/02/94					
	MATRIX ---------->	Sediment					
	UNITS ---------->	MG/KG					
CAS #	Parameter	CT520					
7429-90-5	Aluminum	1450.	J				
7440-36-0	Antimony	3.5	U				
7440-38-2	Arsenic	0.66	U				
7440-39-3	Barium	3.9	J				
7440-41-7	Beryllium	0.09	U				
7440-43-9	Cadmium	0.48	U				
7440-70-2	Calcium	218.	J				
7440-47-3	Chromium	2.1	J				
7440-48-4	Cobalt	19.5					
7440-50-8	Copper	3.6	J				
7439-89-6	Iron	1470.	J				
7439-92-1	Lead	10.3	J				
7439-95-4	Magnesium	64.1	J				
7439-96-5	Manganese	6.2	J				
7439-97-6	Mercury	0.04	U				
7440-02-0	Nickel	4.1	J				
7440-09-7	Potassium	147.	U				
7782-49-2	Selenium	0.39	UJ				
7440-22-4	Silver	0.82	U				
7440-23-5	Sodium	8.	J				
7440-28-0	Thallium	0.63	U				
7440-62-2	Vanadium	2.2	J				
7440-66-6	Zinc	4.6	J				
57-12-5	Cyanide (CN)	0.11	U				

METAL	SAMPLE ID -------->	003-M-0007-01		003-M-0008-01		003-M-0009-01		003-M-0010-01		003-M-0011-01		003-M-0012-01	
	ORIGINAL ID ----->	03M0701		03M0801		03M0901		03M1001		03M1101		03M1201	
	LAB SAMPLE ID --->	39496-041		39496-042		39496-043		39496-044		39496-046		39496-047	
	ID FROM REPORT -->	F30407		F30408		F30409		F30410		F30412		F30413	
	SAMPLE DATE ----->	03/02/94		03/02/94		03/02/94		03/02/94		03/02/94		03/02/94	
	MATRIX ----------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ------------>	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	CT520		CT520		CT520		CT520		CT520		CT520	
7429-90-5	Aluminum	5240.	J	1510.	J	2640.	J	1960.	J	1610.	J	1480.	J
7440-36-0	Antimony	5.5	U	2.3	U	4.1	U	3.	U	2.3	U	2.8	U
7440-38-2	Arsenic	1.	U	0.42	U	0.76	U	0.57	U	0.43	U	0.52	U
7440-39-3	Barium	11.4	J	2.	J	9.1	J	2.7	J	3.6	J	3.6	J
7440-41-7	Beryllium	0.24	J	0.06	U	0.11	U	0.08	U	0.06	J	0.07	U
7440-43-9	Cadmium	0.86	J	0.3	U	0.55	U	0.41	U	0.31	U	0.38	U
7440-70-2	Calcium	985.	J	78.	J	1400.	J	110.	J	147.	J	118.	J
7440-47-3	Chromium	6.3		2.		4.		3.5		2.5		3.	
7440-48-4	Cobalt	1.4	J	0.46	J	22.9		17.1		0.48	U	16.	
7440-50-8	Copper	6.6	J	0.57	J	6.3	J	3.5	J	0.39	U	3.	J
7439-89-6	Iron	448.	J	215.	J	1100.	J	547.	J	479.	J	941.	J
7439-92-1	Lead	42.3	J	10.1	J	9.7	J	10.	J	5.7	J	7.4	J
7439-95-4	Magnesium	133.	J	31.2	J	103.	J	38.1	J	42.1	J	31.3	J
7439-96-5	Manganese	13.5	J	0.52	J	12.1	J	0.9	J	1.1	J	0.76	J
7439-97-6	Mercury	0.09	U	0.06	U	0.04	U	0.05	U	0.03	U	0.02	U
7440-02-0	Nickel	3.7	U	1.5	U	3.8	J	2.3	J	1.5	U	2.4	J
7440-09-7	Potassium	230.	U	94.2	U	170.	U	126.	U	96.6	U	117.	J
7782-49-2	Selenium	1.3	J	0.27	J	0.52	J	0.33	UJ	0.25	UJ	0.31	UJ
7440-22-4	Silver	1.3	U	0.52	U	0.95	U	0.7	U	0.54	U	0.65	U
7440-23-5	Sodium	20.	J	6.6	J	14.	J	7.5	J	7.5	J	8.9	J
7440-28-0	Thallium	0.99	U	0.41	U	0.74	U	0.55	U	0.42	U	0.51	U
7440-62-2	Vanadium	7.7	J	2.6	J	5.5	J	4.6	J	3.8	J	2.8	J
7440-66-6	Zinc	15.2	J	0.83	J	7.6	J	1.4	J	1.6	J	1.2	J
57-12-5	Cyanide (CN)	0.24	U	0.13	U	0.14	U	0.11	U	0.11	U	0.11	U

PENSACOLA, SITE 41
WETLAND W1

METAL	SAMPLE ID ------->	003-M-0001-01	003-M-0002-01	003-M-0003-01	003-M-0004-01	003-M-0005-01	003-M-0006-01
	ORIGINAL ID ----->	03M0101	03M0201	03M0301	03M0401	03M0501	03M0601
	LAB SAMPLE ID --->	39496-035	39496-036	39496-037	39496-038	39496-039	39496-040
	ID FROM REPORT -->	F30401	F30402	F30403	F30404	F30405	F30406
	SAMPLE DATE ----->	03/02/94	03/02/94	03/02/94	03/02/94	03/02/94	03/02/94
	MATRIX ---------->	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
	UNITS ----------->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
CAS #	Parameter	CT520	CT520	CT520	CT520	CT520	CT520
7429-90-5	Aluminum	1550. J	2360. J	4690. J	2310. J	9540. J	1760. J
7440-36-0	Antimony	3.1 U	4.4 U	3.7 U	3.9 U	7.4 U	4.5 U
7440-38-2	Arsenic	0.58 U	0.82 U	0.84 J	0.72 U	1.4 U	0.83 U
7440-39-3	Barium	11.1 J	8.2 J	30.9 J	13.4 J	29.2 J	3.2 J
7440-41-7	Beryllium	0.08 U	0.11 U	0.11 J	0.1 U	0.26 J	0.11 U
7440-43-9	Cadmium	0.42 U	0.6 U	1.9	1.3	6.	0.6 U
7440-70-2	Calcium	866. J	383. J	3420. J	9130. J	4660. J	227. J
7440-47-3	Chromium	2.5	3.6	68.7	5.6	11.6	2.3 J
7440-48-4	Cobalt	17.7	28.7	0.91 J	22.	1.5 U	20.3
7440-50-8	Copper	4.5 J	12.8	40.2	27.9	86.3	6.9 J
7439-89-6	Iron	525. J	493. J	5230. J	1940. J	2620. J	555. J
7439-92-1	Lead	14.2 J	16.1 J	950. J	245. J	833. J	18.4 J
7439-95-4	Magnesium	58.1 J	66.2 J	164. J	152. J	231. J	47.1 J
7439-96-5	Manganese	36.7 J	4.2 J	42. J	18.3 J	11.7 J	0.6 J
7439-97-6	Mercury	0.06 U	0.05 U	0.05 U	0.05 U	0.11 J	0.06 U
7440-02-0	Nickel	3.7 J	10.2 J	4.7 J	5.4 J	4.9 U	8.3 J
7440-09-7	Potassium	130. U	184. U	155. U	161. U	307. U	185. U
7782-49-2	Selenium	0.34 UJ	0.48 J	0.88 J	0.42 UJ	3.7 J	0.78 J
7440-22-4	Silver	0.72 U	1. U	0.86 U	0.89 U	1.7 U	1. U
7440-23-5	Sodium	6.6 J	13.8 J	23.1 J	57.5 J	35.2 J	11.8 J
7440-28-0	Thallium	0.56 U	0.79 U	0.67 U	0.69 U	1.3 U	0.8 U
7440-62-2	Vanadium	1.9 J	1.9 J	6.5 J	2.3 J	10.1 J	2. J
7440-66-6	Zinc	11. J	7.5 J	126. J	55.5 J	97.7 J	1.8 J
57-12-5	Cyanide (CN)	0.13 U	0.09 U	0.18 U	0.1 U	0.26 U	0.11 U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA											
	SAMPLE ID ------->	041-M-7903-01		041-M-W201-01		041-M-W202-01		041-M-W203-01		066-W-66WL-00	
	ORIGINAL ID ----->	041M790301		041MW20101		041MW20201		041MW20301		66WL	
	LAB SAMPLE ID --->	960064-05		960055-14		960055-15		960055-16		524187	
	ID FROM REPORT -->	041M790301		041MW20101		041MW20201		041MW20301		66WL	
	SAMPLE DATE ----->	01/26/96		01/24/96		01/24/96		01/24/96		11/19/92	
	DATE ANALYZED --->	01/28/96		01/27/96		01/27/96		01/30/96		11/21/92	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Water	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/L	
CAS #	Parameter	EM0060	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	6	VAL
74-87-3	Chloromethane	12.	U	31.	U	13.	U	48.	U	50.	U
74-83-9	Bromomethane	12.	U	31.	U	13.	U	48.	U	50.	U
75-01-4	Vinyl chloride	4.	U	9.	U	4.	U	14.	U	50.	U
75-00-3	Chloroethane	12.	U	31.	U	13.	U	48.	U	50.	U
75-09-2	Methylene chloride	12.	U	31.	U	13.	U	48.	U	42.	U
67-64-1	Acetone	12.	U	54.	U	28.	U	210.		50.	U
75-15-0	Carbon disulfide	12.	U	31.	U	13.	U	48.	U	50.	U
75-35-4	1,1-Dichloroethene	12.	U	31.	U	13.	U	48.	U	50.	U
75-34-3	1,1-Dichloroethane	12.	U	31.	U	13.	U	48.	U	50.	U
540-59-0	1,2-Dichloroethene (total)	12.	U	31.	U	13.	U	48.	U	50.	U
67-66-3	Chloroform	12.	U	31.	U	13.	U	48.	U	50.	U
107-06-2	1,2-Dichloroethane	12.	U	31.	U	13.	U	48.	U	50.	U
78-93-3	2-Butanone (MEK)	12.	U	31.	U	13.	U	48.	U	50.	U
71-55-6	1,1,1-Trichloroethane	12.	U	31.	U	13.	U	48.	U	50.	U
56-23-5	Carbon tetrachloride	12.	U	31.	U	13.	U	48.	U	50.	U
75-27-4	Bromodichloromethane	12.	U	31.	U	13.	U	48.	U	50.	U
78-87-5	1,2-Dichloropropane	12.	U	31.	U	13.	U	48.	U	50.	U
10061-01-5	cis-1,3-Dichloropropene	12.	U	31.	U	13.	U	48.	U	50.	U
79-01-6	Trichloroethene	12.	U	31.	U	13.	U	48.	U	50.	U
124-48-1	Dibromochloromethane	12.	U	31.	U	13.	U	48.	U	50.	U
79-00-5	1,1,2-Trichloroethane	12.	U	31.	U	13.	U	48.	U	50.	U
71-43-2	Benzene	12.	U	31.	U	13.	U	48.	U	50.	U
10061-02-6	trans-1,3-Dichloropropene	12.	U	31.	U	13.	U	48.	U	50.	U
75-25-2	Bromoform	12.	U	31.	U	13.	U	48.	U	50.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	12.	U	31.	U	13.	U	48.	U	50.	U
591-78-6	2-Hexanone	12.	U	31.	U	13.	U	48.	U	50.	U
127-18-4	Tetrachloroethene	12.	U	31.	U	13.	U	48.	U	50.	U
79-34-5	1,1,2,2-Tetrachloroethane	12.	U	31.	U	13.	U	48.	U	50.	U
108-88-3	Toluene	12.	U	31.	U	13.	U	48.	U	50.	U
108-90-7	Chlorobenzene	12.	U	31.	U	13.	U	48.	U	220.	
100-41-4	Ethylbenzene	12.	U	31.	U	13.	U	48.	U	50.	U
100-42-5	Styrene	12.	U	31.	U	13.	U	48.	U	50.	U
1330-20-7	Xylene (Total)	12.	U	31.	U	13.	U	48.	U	50.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA															
	SAMPLE ID ------->	041-M-6422-01		041-M-6423-01		041-M-6424-01		041-M-7201-01		041-M-7202-01		041-M-7901-01	
	ORIGINAL ID ----->	041M642201		041M642301		041M642401		041M720101		041MZ20201		041M790101	
	LAB SAMPLE ID --->	950952-10		950952-11		950952-12		950991-12		950991-13		960064-04	
	ID FROM REPORT -->	041M642201		041M642301		041M642401		041M720101		041MZ20201		041M790101	
	SAMPLE DATE ----->	11/17/95		11/17/95		11/17/95		11/29/95		11/29/95		01/26/96	
	DATE ANALYZED --->	11/26/95		11/26/95		11/26/95		12/01/95		12/02/95		01/28/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	Z42101	VAL	Z42101	VAL	Z42101	VAL	Z30301	VAL	Z30301	VAL	EM0060	VAL
74-87-3	Chloromethane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
74-83-9	Bromomethane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
75-01-4	Vinyl chloride	4.	U	4.	U	4.	U	470.	U	4.	U	8.	U
75-00-3	Chloroethane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
75-09-2	Methylene chloride	14.	U	16.	U	13.	U	740.	J	12.	U	26.	U
67-64-1	Acetone	9.	J	14.	U	13.	U	1600.	UJ	32.		78.	U
75-15-0	Carbon disulfide	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
75-35-4	1,1-Dichloroethene	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
75-34-3	1,1-Dichloroethane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
540-59-0	1,2-Dichloroethene (total)	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
67-66-3	Chloroform	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
107-06-2	1,2-Dichloroethane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
78-93-3	2-Butanone (MEK)	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
71-55-6	1,1,1-Trichloroethane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
56-23-5	Carbon tetrachloride	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
75-27-4	Bromodichloromethane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
78-87-5	1,2-Dichloropropane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
10061-01-5	cis-1,3-Dichloropropene	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
79-01-6	Trichloroethene	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
124-48-1	Dibromochloromethane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
79-00-5	1,1,2-Trichloroethane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
71-43-2	Benzene	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
10061-02-6	trans-1,3-Dichloropropene	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
75-25-2	Bromoform	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
591-78-6	2-Hexanone	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
127-18-4	Tetrachloroethene	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
79-34-5	1,1,2,2-Tetrachloroethane	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
108-88-3	Toluene	14.	U	14.	U	13.	U	1600.	U	12.	U	7.	J
108-90-7	Chlorobenzene	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
100-41-4	Ethylbenzene	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
100-42-5	Styrene	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U
1330-20-7	Xylene (Total)	14.	U	14.	U	13.	U	1600.	U	12.	U	26.	U

*** Validation Complete ***

VOA															
	SAMPLE ID ------->	041-M-6416-01		041-M-6417-01		041-M-6418-01		041-M-6419-01 RE		041-M-6420-01		041-M-6421-01	
	ORIGINAL ID ----->	041M641601		041M641701		041M641801		041M641901		041M642001		041M642101	
	LAB SAMPLE ID --->	950950-15		950950-16		960087-04		960087-02		950950-17		950950-18	
	ID FROM REPORT -->	041M641601		041M641701		041M641801		041M641901		041M642001		041M642101	
	SAMPLE DATE ----->	11/16/95		11/16/95		02/06/96		02/01/96		11/16/95		11/16/95	
	DATE ANALYZED --->	11/24/95		11/24/95		02/07/96		02/06/96		11/24/95		11/25/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	640801	VAL	640801	VAL	5A0101	VAL	5A0101	VAL
74-87-3	Chloromethane	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
74-83-9	Bromomethane	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
75-01-4	Vinyl chloride	17.	U	6.	U	4.	U	18.	U	4.	U	4.	U
75-00-3	Chloroethane	56.	U	20.	U	12.	U	59.	UJ	13.	U	14.	U
75-09-2	Methylene chloride	270.	J	110.	J	12.	U	72.		64.	J	14.	U
67-64-1	Acetone	180.		20.	U	12.	U	220.		13.	U	14.	U
75-15-0	Carbon disulfide	11.	J	20.	U	12.	U	59.	U	13.	U	14.	U
75-35-4	1,1-Dichloroethene	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
75-34-3	1,1-Dichloroethane	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
540-59-0	1,2-Dichloroethene (total)	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
67-66-3	Chloroform	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
107-06-2	1,2-Dichloroethane	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
78-93-3	2-Butanone (MEK)	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
71-55-6	1,1,1-Trichloroethane	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
56-23-5	Carbon tetrachloride	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
75-27-4	Bromodichloromethane	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
78-87-5	1,2-Dichloropropane	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
10061-01-5	cis-1,3-Dichloropropene	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
79-01-6	Trichloroethene	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
124-48-1	Dibromochloromethane	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
79-00-5	1,1,2-Trichloroethane	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
71-43-2	Benzene	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
10061-02-6	trans-1,3-Dichloropropene	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
75-25-2	Bromoform	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	56.	U	20.	U	12.	U	59.	U	13.	U	14.	U
591-78-6	2-Hexanone	56.	U	20.	U	12.	U	59.	UJ	13.	U	14.	U
127-18-4	Tetrachloroethene	56.	U	20.	U	12.	U	59.	UJ	13.	U	14.	U
79-34-5	1,1,2,2-Tetrachloroethane	56.	U	20.	U	12.	U	59.	UJ	13.	U	14.	U
108-88-3	Toluene	56.	U	20.	U	12.	U	59.	UJ	13.	U	14.	U
108-90-7	Chlorobenzene	56.	U	20.	U	12.	U	59.	UJ	13.	U	14.	U
100-41-4	Ethylbenzene	56.	U	20.	U	12.	U	59.	UJ	13.	U	14.	U
100-42-5	Styrene	56.	U	20.	U	12.	U	59.	UJ	13.	U	14.	U
1330-20-7	Xylene (Total)	56.	U	20.	U	12.	U	59.	UJ	13.	U	14.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA													
	SAMPLE ID ------->	041-M-6410-01		041-M-6411-01		041-M-6412-01		041-M-6413-01		041-M-6414-01		041-M-6415-01	
	ORIGINAL ID ----->	041M641001		041M641101		041M641201		041M641301		041M641401		041M641501	
	LAB SAMPLE ID --->	950950-11		950950-12		950941-18		950950-13		950950-14		950941-19	
	ID FROM REPORT -->	041M641001		041M641101		041M641201		041M641301		041M641401		041M641501	
	SAMPLE DATE ----->	11/16/95		11/16/95		11/15/95		11/16/95		11/16/95		11/15/95	
	DATE ANALYZED --->	11/22/95		11/22/95		11/22/95		11/25/95		11/24/95		11/22/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL	M06010	VAL
74-87-3	Chloromethane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
74-83-9	Bromomethane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
75-01-4	Vinyl chloride	18.	U	13.	U	4.	U	21.	U	17.	U	4.	U
75-00-3	Chloroethane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
75-09-2	Methylene chloride	59.	U	42.	U	16.	U	110.	U	400.	J	14.	U
67-64-1	Acetone	150.		42.	U	12.	U	91.		420.		14.	J
75-15-0	Carbon disulfide	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
75-35-4	1,1-Dichloroethene	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
75-34-3	1,1-Dichloroethane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
540-59-0	1,2-Dichloroethene (total)	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
67-66-3	Chloroform	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
107-06-2	1,2-Dichloroethane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
78-93-3	2-Butanone (MEK)	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
71-55-6	1,1,1-Trichloroethane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
56-23-5	Carbon tetrachloride	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
75-27-4	Bromodichloromethane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
78-87-5	1,2-Dichloropropane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
10061-01-5	cis-1,3-Dichloropropene	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
79-01-6	Trichloroethene	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
124-48-1	Dibromochloromethane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
79-00-5	1,1,2-Trichloroethane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
71-43-2	Benzene	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
10061-02-6	trans-1,3-Dichloropropene	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
75-25-2	Bromoform	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
591-78-6	2-Hexanone	59.	U	42.	U	12.	UJ	71.	U	56.	U	14.	U
127-18-4	Tetrachloroethene	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
79-34-5	1,1,2,2-Tetrachloroethane	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
108-88-3	Toluene	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
108-90-7	Chlorobenzene	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
100-41-4	Ethylbenzene	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
100-42-5	Styrene	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U
1330-20-7	Xylene (Total)	59.	U	42.	U	12.	U	71.	U	56.	U	14.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA															
	SAMPLE ID ------->	041-M-6404-01		041-M-6405-01		041-M-6406-01		041-M-6407-01		041-M-6408-01		041-M-6409-01	
	ORIGINAL ID ----->	041M640401		041M640501		041M640601		041M640701		041M640801		041M640901	
	LAB SAMPLE ID --->	960087-06		950941-14		950941-15		950941-16		960087-01		950941-17	
	ID FROM REPORT -->	041M640401		041M640501		041M640601		041M640701		041M640801		041M640901	
	SAMPLE DATE ----->	02/09/96		11/15/95		11/15/95		11/15/95		02/01/96		11/15/95	
	DATE ANALYZED --->	02/13/96		11/22/95		11/24/95		11/22/95		02/04/96		11/22/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	640801	VAL	M06010	VAL	M06010	VAL	M06010	VAL	640801	VAL	M06010	VAL
74-87-3	Chloromethane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
74-83-9	Bromomethane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
75-01-4	Vinyl chloride	10.	U	8.	U	49.	U	4.	U	4.	U	4.	U
75-00-3	Chloroethane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
75-09-2	Methylene chloride	34.	U	26.	U	170.	U	14.	U	13.	U	14.	U
67-64-1	Acetone	34.	U	26.	U	160.	U	25.	J	13.	U	24.	J
75-15-0	Carbon disulfide	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
75-35-4	1,1-Dichloroethene	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
75-34-3	1,1-Dichloroethane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
540-59-0	1,2-Dichloroethene (total)	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
67-66-3	Chloroform	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
107-06-2	1,2-Dichloroethane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
78-93-3	2-Butanone (MEK)	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
71-55-6	1,1,1-Trichloroethane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
56-23-5	Carbon tetrachloride	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
75-27-4	Bromodichloromethane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
78-87-5	1,2-Dichloropropane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
10061-01-5	cis-1,3-Dichloropropene	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
79-01-6	Trichloroethene	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
124-48-1	Dibromochloromethane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
79-00-5	1,1,2-Trichloroethane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
71-43-2	Benzene	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
10061-02-6	trans-1,3-Dichloropropene	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
75-25-2	Bromoform	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
591-78-6	2-Hexanone	34.	U	26.	UJ	160.	U	14.	U	13.	U	13.	U
127-18-4	Tetrachloroethene	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
79-34-5	1,1,2,2-Tetrachloroethane	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
108-88-3	Toluene	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
108-90-7	Chlorobenzene	48.		26.	U	160.	U	14.	U	13.	U	13.	U
100-41-4	Ethylbenzene	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
100-42-5	Styrene	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U
1330-20-7	Xylene (Total)	34.	U	26.	U	160.	U	14.	U	13.	U	13.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA

	SAMPLE ID ------->	041-M-63B2-01		041-M-63B3-01		041-M-63B4-01		041-M-6401-01		041-M-6402-01		041-M-6403-01 RE	
	ORIGINAL ID ----->	041M63B201		041M63B301		041M63B401		041M640101		041M640201		041M640301	
	LAB SAMPLE ID --->	960039-04		960039-05		960055-11		960087-05		950941-12		950941-13	
	ID FROM REPORT -->	041M63B201		041M63B301		041M63B401		041M640101		041M640201		041M640301	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/24/96		02/09/96		11/15/95		11/15/95	
	DATE ANALYZED --->	01/21/96		01/21/96		01/26/96		02/13/96		11/22/95		11/22/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	63A401	VAL	63A401	VAL	M52A10	VAL	640801	VAL	M06010	VAL	M06010	VAL
74-87-3	Chloromethane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
74-83-9	Bromomethane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
75-01-4	Vinyl chloride	4.	U	4.	U	4.	U	5.	U	12000.	U	43.	U
75-00-3	Chloroethane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
75-09-2	Methylene chloride	15.	U	13.	U	14.	U	16.	U	14000.	U	140.	U
67-64-1	Acetone	59.	U	45.	U	14.	U	19.	U	12000.	U	390.	J
75-15-0	Carbon disulfide	15.	U	13.	U	14.	U	16.	U	6200.	U	140.	U
75-35-4	1,1-Dichloroethene	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
75-34-3	1,1-Dichloroethane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
540-59-0	1,2-Dichloroethene (total)	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
67-66-3	Chloroform	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
107-06-2	1,2-Dichloroethane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
78-93-3	2-Butanone (MEK)	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
71-55-6	1,1,1-Trichloroethane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
56-23-5	Carbon tetrachloride	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
75-27-4	Bromodichloromethane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
78-87-5	1,2-Dichloropropane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
10061-01-5	cis-1,3-Dichloropropene	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
79-01-6	Trichloroethene	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
124-48-1	Dibromochloromethane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
79-00-5	1,1,2-Trichloroethane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
71-43-2	Benzene	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
10061-02-6	trans-1,3-Dichloropropene	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
75-25-2	Bromoform	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	UJ
591-78-6	2-Hexanone	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	UJ
127-18-4	Tetrachloroethene	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	UJ
79-34-5	1,1,2,2-Tetrachloroethane	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	UJ
108-88-3	Toluene	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	UJ
108-90-7	Chlorobenzene	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	UJ
100-41-4	Ethylbenzene	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	UJ
100-42-5	Styrene	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	UJ
1330-20-7	Xylene (Total)	15.	U	13.	U	14.	U	16.	U	12000.	U	140.	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA															
	SAMPLE ID ------->	041-M-63A1-01		041-M-63A2-01		041-M-63A3-01		041-M-63A4-01		041-M-63A5-01		041-M-63B1-01	
	ORIGINAL ID ----->	041M63A101		041M63A201		041M63A301		041M63A401		041M63A501		041M63B101	
	LAB SAMPLE ID --->	960025-18		960025-19		960025-20		960039-01		960039-02		960039-03	
	ID FROM REPORT -->	041M63A101		041M63A201		041M63A301		041M63A401		041M63A501		041M63B101	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/18/96		01/18/96		01/18/96		01/18/96	
	DATE ANALYZED --->	01/20/96		01/23/96		01/21/96		01/20/96		01/20/96		01/21/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM005	VAL	EM005	VAL	EM005	VAL	63A401	VAL	63A401	VAL	63A401	VAL
74-87-3	Chloromethane	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
74-83-9	Bromomethane	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
75-01-4	Vinyl chloride	4.	U	4.	U	6.	U	5.	U	4.	U	7.	U
75-00-3	Chloroethane	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
75-09-2	Methylene chloride	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
67-64-1	Acetone	12.	UJ	12.	U	19.	U	18.	UJ	13.	UJ	24.	U
75-15-0	Carbon disulfide	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
75-35-4	1,1-Dichloroethene	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
75-34-3	1,1-Dichloroethane	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
540-59-0	1,2-Dichloroethene (total)	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
67-66-3	Chloroform	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
107-06-2	1,2-Dichloroethane	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
78-93-3	2-Butanone (MEK)	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
71-55-6	1,1,1-Trichloroethane	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
56-23-5	Carbon tetrachloride	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
75-27-4	Bromodichloromethane	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
78-87-5	1,2-Dichloropropane	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
10061-01-5	cis-1,3-Dichloropropene	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
79-01-6	Trichloroethene	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
124-48-1	Dibromochloromethane	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
79-00-5	1,1,2-Trichloroethane	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
71-43-2	Benzene	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
10061-02-6	trans-1,3-Dichloropropene	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
75-25-2	Bromoform	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	12.	U	12.	U	19.	U	18.	U	13.	U	24.	U
591-78-6	2-Hexanone	12.	U	12.	U	19.	UJ	18.	U	13.	U	24.	U
127-18-4	Tetrachloroethene	12.	U	12.	U	19.	UJ	18.	U	13.	U	24.	U
79-34-5	1,1,2,2-Tetrachloroethane	12.	U	12.	U	19.	UJ	18.	U	13.	U	24.	U
108-88-3	Toluene	12.	U	12.	U	19.	UJ	18.	U	13.	U	24.	U
108-90-7	Chlorobenzene	12.	U	12.	U	19.	UJ	18.	U	13.	U	24.	U
100-41-4	Ethylbenzene	12.	U	12.	U	19.	UJ	18.	U	13.	U	24.	U
100-42-5	Styrene	12.	U	12.	U	19.	UJ	18.	U	13.	U	24.	U
1330-20-7	Xylene (Total)	12.	U	12.	U	19.	UJ	18.	U	13.	U	24.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA													
	SAMPLE ID ------->	041-M-5A04-01		041-M-5A05-01 RE		041-M-5A06-01		041-M-5A07-01		041-M-5B01-01		041-M-5B02-01	
	ORIGINAL ID ----->	041M5A0401		041M5A0501		041M5A0601		041M5A0701		041M5B0101		041M5B0201	
	LAB SAMPLE ID --->	950950-04		950979-03		950952-07		950950-05		950952-08		950952-09	
	ID FROM REPORT -->	041M5A0401		041M5A0501		041M5A0601		041M5A0701		041M5B0101		041M5B0201	
	SAMPLE DATE ----->	11/16/95		11/27/95		11/17/95		11/16/95		11/17/95		11/17/95	
	DATE ANALYZED --->	11/22/95		11/30/95		11/27/95		11/22/95		11/26/95		11/26/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	5A0101	VAL	041M10	VAL	Z42101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL
74-87-3	Chloromethane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
74-83-9	Bromomethane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
75-01-4	Vinyl chloride	25.	U	53.	U	4.	U	4.	U	4.	U	42.	
75-00-3	Chloroethane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
75-09-2	Methylene chloride	83.	U	62.	U	13.	U	13.	U	12.	U	31.	U
67-64-1	Acetone	450.		130.	U	140.	J	13.	U	180.		66.	
75-15-0	Carbon disulfide	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
75-35-4	1,1-Dichloroethene	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
75-34-3	1,1-Dichloroethane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
540-59-0	1,2-Dichloroethene (total)	83.	U	53.	U	13.	U	13.	U	12.	U	11.	J
67-66-3	Chloroform	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
107-06-2	1,2-Dichloroethane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
78-93-3	2-Butanone (MEK)	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
71-55-6	1,1,1-Trichloroethane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
56-23-5	Carbon tetrachloride	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
75-27-4	Bromodichloromethane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
78-87-5	1,2-Dichloropropane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
10061-01-5	cis-1,3-Dichloropropene	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
79-01-6	Trichloroethene	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
124-48-1	Dibromochloromethane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
79-00-5	1,1,2-Trichloroethane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
71-43-2	Benzene	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
10061-02-6	trans-1,3-Dichloropropene	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
75-25-2	Bromoform	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
591-78-6	2-Hexanone	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
127-18-4	Tetrachloroethene	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
79-34-5	1,1,2,2-Tetrachloroethane	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
108-88-3	Toluene	280.		53.	U	13.	U	13.	U	12.	U	13.	J
108-90-7	Chlorobenzene	83.	U	53.	U	13.	U	13.	U	12.	U	7.	J
100-41-4	Ethylbenzene	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
100-42-5	Styrene	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U
1330-20-7	Xylene (Total)	83.	U	53.	U	13.	U	13.	U	12.	U	31.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA															
	SAMPLE ID ------->	041-M-56A1-01		041-M-5701-01		041-M-5801-01		041-M-5A01-01		041-M-5A02-01		041-M-5A03-01	
	ORIGINAL ID ----->	041M56A101		041M570101		041M580101		041M5A0101		041M5A0201		041M5A0301	
	LAB SAMPLE ID --->	960055-09		950991-11		960055-10		950950-01		950950-02		950950-03	
	ID FROM REPORT -->	041M56A101		041M570101		041M580101		041M5A0101		041M5A0201		041M5A0301	
	SAMPLE DATE ----->	01/24/96		11/29/95		01/24/96		11/16/95		11/16/95		11/16/95	
	DATE ANALYZED --->	01/26/96		12/02/95		01/26/96		11/24/95		11/22/95		11/22/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M52A10	VAL	Z30301	VAL	M52A10	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL
74-87-3	Chloromethane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
74-83-9	Bromomethane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
75-01-4	Vinyl chloride	8.	U	6.	U	17.	U	13.	U	6.	U	8.	U
75-00-3	Chloroethane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
75-09-2	Methylene chloride	25.	U	21.	U	56.	U	250.	J	21.	U	26.	U
67-64-1	Acetone	87.	U	49.		520.		1600.	D	5200.	J	4400.	J
75-15-0	Carbon disulfide	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
75-35-4	1,1-Dichloroethene	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
75-34-3	1,1-Dichloroethane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
540-59-0	1,2-Dichloroethene (total)	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
67-66-3	Chloroform	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
107-06-2	1,2-Dichloroethane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
78-93-3	2-Butanone (MEK)	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
71-55-6	1,1,1-Trichloroethane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
56-23-5	Carbon tetrachloride	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
75-27-4	Bromodichloromethane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
78-87-5	1,2-Dichloropropane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
79-01-6	Trichloroethene	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
124-48-1	Dibromochloromethane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
79-00-5	1,1,2-Trichloroethane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
71-43-2	Benzene	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
75-25-2	Bromoform	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
591-78-6	2-Hexanone	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
127-18-4	Tetrachloroethene	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
108-88-3	Toluene	25.	U	21.	U	56.	U	110.		21.	U	5.	J
108-90-7	Chlorobenzene	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
100-41-4	Ethylbenzene	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
100-42-5	Styrene	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U
1330-20-7	Xylene (Total)	25.	U	21.	U	56.	U	43.	U	21.	U	26.	U

*** Validation Complete ***

VOA															
	SAMPLE ID ------->	041-M-4903-01		041-M-52A1-01 RE		041-M-52D1-01		041-M-52E1-01		041-M-52E2-01		041-M-52E3-01	
	ORIGINAL ID ----->	041M490301		041M52A101		041M52D101		041M52E101		041M52E201		041M52E301	
	LAB SAMPLE ID --->	960025-16		960055-01		960055-02		960055-03		960055-04		960055-08	
	ID FROM REPORT -->	041M490301		041M52A101		041M52D101		041M52E101		041M52E201		041M52E301	
	SAMPLE DATE ----->	01/16/96		01/23/96		01/23/96		01/23/96		01/23/96		01/24/96	
	DATE ANALYZED --->	01/18/96		01/26/96		01/24/96		01/24/96		01/26/96		01/26/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM005	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL
74-87-3	Chloromethane	2.	J	71.	U	16.	U	17.	U	45.	U	14.	U
74-83-9	Bromomethane	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
75-01-4	Vinyl chloride	4.	U	21.	U	5.	U	5.	U	14.	U	4.	U
75-00-3	Chloroethane	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
75-09-2	Methylene chloride	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
67-64-1	Acetone	23.	U	1300.		29.	U	52.	U	200.	U	31.	U
75-15-0	Carbon disulfide	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
75-35-4	1,1-Dichloroethene	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
75-34-3	1,1-Dichloroethane	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
540-59-0	1,2-Dichloroethene (total)	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
67-66-3	Chloroform	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
107-06-2	1,2-Dichloroethane	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
78-93-3	2-Butanone (MEK)	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
71-55-6	1,1,1-Trichloroethane	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
56-23-5	Carbon tetrachloride	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
75-27-4	Bromodichloromethane	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
78-87-5	1,2-Dichloropropane	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
10061-01-5	cis-1,3-Dichloropropene	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
79-01-6	Trichloroethene	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
124-48-1	Dibromochloromethane	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
79-00-5	1,1,2-Trichloroethane	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
71-43-2	Benzene	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
10061-02-6	trans-1,3-Dichloropropene	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
75-25-2	Bromoform	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	15.	U	71.	U	16.	U	17.	U	45.	U	14.	U
591-78-6	2-Hexanone	15.	U	71.	UJ	16.	U	17.	U	45.	UJ	14.	U
127-18-4	Tetrachloroethene	15.	U	71.	UJ	16.	U	17.	U	45.	UJ	14.	U
79-34-5	1,1,2,2-Tetrachloroethane	15.	U	71.	UJ	16.	U	17.	U	45.	UJ	14.	U
108-88-3	Toluene	15.	U	71.	UJ	16.	U	17.	U	21.	J	14.	U
108-90-7	Chlorobenzene	15.	U	71.	UJ	16.	U	17.	U	45.	UJ	14.	U
100-41-4	Ethylbenzene	15.	U	71.	UJ	16.	U	17.	U	45.	UJ	14.	U
100-42-5	Styrene	15.	U	71.	UJ	16.	U	17.	U	45.	UJ	14.	U
1330-20-7	Xylene (Total)	15.	U	71.	UJ	16.	U	17.	U	45.	UJ	14.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA													
	SAMPLE ID ------->	041-M-3301-01		041-M-3302-01		041-M-3303-01		041-M-4801-01		041-M-4901-01		041-M-4902-01	
	ORIGINAL ID ----->	041M330101		041M330201		041M330301		041M480101		041M490101		041M490201	
	LAB SAMPLE ID --->	950940-12		950940-13		950940-14		960043-10		960025-14		960025-15	
	ID FROM REPORT -->	041M330101		041M330201		041M330301		041M480101		041M490101		041M490201	
	SAMPLE DATE ----->	11/13/95		11/13/95		11/13/95		01/22/96		01/16/96		01/16/96	
	DATE ANALYZED --->	11/21/95		11/21/95		11/22/95		01/24/96		01/18/96		01/18/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	M00901	VAL	EM005	VAL	EM005	VAL
74-87-3	Chloromethane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
74-83-9	Bromomethane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
75-01-4	Vinyl chloride	38.	U	7.	U	4.	U	4.	U	19.	U	4.	U
75-00-3	Chloroethane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
75-09-2	Methylene chloride	240.	U	43.	U	25.	U	14.	U	65.	U	13.	U
67-64-1	Acetone	120.	U	270.		19.	U	22.	U	65.	U	14.	U
75-15-0	Carbon disulfide	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
75-35-4	1,1-Dichloroethene	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
75-34-3	1,1-Dichloroethane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
540-59-0	1,2-Dichloroethene (total)	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
67-66-3	Chloroform	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
107-06-2	1,2-Dichloroethane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
78-93-3	2-Butanone (MEK)	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
71-55-6	1,1,1-Trichloroethane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
56-23-5	Carbon tetrachloride	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
75-27-4	Bromodichloromethane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
78-87-5	1,2-Dichloropropane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
10061-01-5	cis-1,3-Dichloropropene	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
79-01-6	Trichloroethene	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
124-48-1	Dibromochloromethane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
79-00-5	1,1,2-Trichloroethane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
71-43-2	Benzene	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
10061-02-6	trans-1,3-Dichloropropene	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
75-25-2	Bromoform	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
591-78-6	2-Hexanone	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
127-18-4	Tetrachloroethene	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
79-34-5	1,1,2,2-Tetrachloroethane	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
108-88-3	Toluene	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
108-90-7	Chlorobenzene	120.	U	6.	J	13.	U	14.	U	65.	U	13.	U
100-41-4	Ethylbenzene	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
100-42-5	Styrene	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U
1330-20-7	Xylene (Total)	120.	U	23.	U	13.	U	14.	U	65.	U	13.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA													
	SAMPLE ID ------->	041-M-2503-01		041-M-2701-01		041-M-2702-01		041-M-3201-01		041-M-3202-01		041-M-3203-01	
	ORIGINAL ID ----->	041M250301		041M270101		041M270201		041M320101		041M320201		041M320301	
	LAB SAMPLE ID --->	950941-07		950941-08		950941-09		950940-04		950940-05		950940-06	
	ID FROM REPORT -->	041M250301		041M270101		041M270201		041M320101		041M320201		041M320301	
	SAMPLE DATE ----->	11/15/95		11/15/95		11/15/95		11/14/95		11/14/95		11/14/95	
	DATE ANALYZED --->	11/22/95		11/21/95		11/22/95		11/21/95		11/20/95		11/22/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06010	VAL	M06010	VAL	M06010	VAL	M06070	VAL	M06070	VAL	M06070	VAL
74-87-3	Chloromethane	59.	U	16.	U	26.	U	120.	U	83.	U	91.	U
74-83-9	Bromomethane	59.	U	16.	U	26.	U	120.	U	83.	U	91.	U
75-01-4	Vinyl chloride	18.	U	5.	U	8.	U	38.	U	25.	U	27.	U
75-00-3	Chloroethane	59.	U	16.	U	26.	U	120.	U	83.	U	91.	U
75-09-2	Methylene chloride	59.	U	26.	U	37.	U	210.	U	200.	U	210.	U
67-64-1	Acetone	940.	J	16.	U	100.	U	220.	U	930.		1900.	J
75-15-0	Carbon disulfide	59.	U	16.	U	26.	U	120.	U	83.	U	91.	U
75-35-4	1,1-Dichloroethene	59.	U	16.	U	26.	U	120.	U	83.	U	91.	U
75-34-3	1,1-Dichloroethane	59.	U	16.	U	26.	U	120.	U	83.	U	91.	U
540-59-0	1,2-Dichloroethene (total)	59.	U	16.	U	26.	U	120.	U	83.	U	91.	U
67-66-3	Chloroform	59.	U	16.	U	26.	U	120.	U	83.	U	91.	U
107-06-2	1,2-Dichloroethane	59.	U	16.	U	26.	U	120.	U	83.	U	91.	U
78-93-3	2-Butanone (MEK)	59.	U	16.	U	26.	U	120.	U	83.	U	70.	J
71-55-6	1,1,1-Trichloroethane	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
56-23-5	Carbon tetrachloride	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
75-27-4	Bromodichloromethane	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
78-87-5	1,2-Dichloropropane	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
10061-01-5	cis-1,3-Dichloropropene	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
79-01-6	Trichloroethene	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
124-48-1	Dibromochloromethane	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
79-00-5	1,1,2-Trichloroethane	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
71-43-2	Benzene	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
10061-02-6	trans-1,3-Dichloropropene	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
75-25-2	Bromoform	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
591-78-6	2-Hexanone	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
127-18-4	Tetrachloroethene	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
79-34-5	1,1,2,2-Tetrachloroethane	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
108-88-3	Toluene	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
108-90-7	Chlorobenzene	59.	U	16.	UJ	26.	U	120.	U	14.	J	91.	U
100-41-4	Ethylbenzene	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
100-42-5	Styrene	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U
1330-20-7	Xylene (Total)	59.	U	16.	UJ	26.	U	120.	U	83.	UJ	91.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA																	
	SAMPLE ID ------->	041-M-18B1-01		041-M-19A1-01		041-M-19A2-01		041-M-19B1-01		041-M-2501-01		041-M-2502-01	
	ORIGINAL ID ----->	041M18B101		041M19A101		041M19A201		041M19B101		041M250101		041M250201	
	LAB SAMPLE ID --->	951050-06		960025-11		960025-12		960025-13		950941-05		950941-06	
	ID FROM REPORT -->	041M18B101		041M19A101		041M19A201		041M19B101		041M250101		041M250201	
	SAMPLE DATE ----->	12/14/95		01/16/96		01/16/96		01/16/96		11/15/95		11/15/95	
	DATE ANALYZED --->	12/22/95		01/18/96		01/18/96		01/18/96		11/22/95		11/21/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM0060	VAL	EM005	VAL	EM005	VAL	EM005	VAL	M06010	VAL	M06010	VAL
74-87-3	Chloromethane	43.	U	77.	U	2.	J	13.	U	110.	U	77.	U
74-83-9	Bromomethane	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
75-01-4	Vinyl chloride	13.	U	23.	U	4.	U	4.	U	33.	U	23.	U
75-00-3	Chloroethane	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
75-09-2	Methylene chloride	43.	U	77.	U	12.	U	13.	U	110.	U	140.	U
67-64-1	Acetone	440.	J	250.	U	12.	U	23.	U	110.	U	77.	U
75-15-0	Carbon disulfide	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
75-35-4	1,1-Dichloroethene	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
75-34-3	1,1-Dichloroethane	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
540-59-0	1,2-Dichloroethene (total)	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
67-66-3	Chloroform	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
107-06-2	1,2-Dichloroethane	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
78-93-3	2-Butanone (MEK)	98.	J	77.	U	12.	U	13.	U	110.	U	77.	U
71-55-6	1,1,1-Trichloroethane	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
56-23-5	Carbon tetrachloride	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
75-27-4	Bromodichloromethane	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
78-87-5	1,2-Dichloropropane	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
10061-01-5	cis-1,3-Dichloropropene	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
79-01-6	Trichloroethene	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
124-48-1	Dibromochloromethane	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
79-00-5	1,1,2-Trichloroethane	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
71-43-2	Benzene	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
10061-02-6	trans-1,3-Dichloropropene	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
75-25-2	Bromoform	43.	U	77.	U	12.	U	13.	U	110.	U	77.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	43.	U	77.	U	12.	U	13.	U	110.	U	77.	UJ
591-78-6	2-Hexanone	43.	U	77.	U	12.	U	13.	U	110.	U	77.	UJ
127-18-4	Tetrachloroethene	43.	U	77.	U	12.	U	13.	U	23.	J	77.	UJ
79-34-5	1,1,2,2-Tetrachloroethane	43.	U	77.	U	12.	U	13.	U	110.	U	77.	UJ
108-88-3	Toluene	43.	U	77.	U	12.	U	13.	U	110.	U	77.	UJ
108-90-7	Chlorobenzene	43.	U	77.	U	12.	U	13.	U	110.	U	77.	UJ
100-41-4	Ethylbenzene	43.	U	77.	U	12.	U	13.	U	110.	U	77.	UJ
100-42-5	Styrene	43.	U	77.	U	12.	U	13.	U	110.	U	77.	UJ
1330-20-7	Xylene (Total)	43.	U	77.	U	12.	U	13.	U	110.	U	77.	UJ

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA															
	SAMPLE ID ------->	041-M-1701-01		041-M-1702-01		041-M-1703-01		041-M-18A1-01		041-M-18A2-01		041-M-18A3-01	
	ORIGINAL ID ----->	041M170101		041M170201		041M170301		041M18A101		041M18A201		041M18A301	
	LAB SAMPLE ID --->	960025-03		960025-04		960025-05		951050-18		951050-19		951050-05	
	ID FROM REPORT -->	041M170101		041M170201		041M170301		041M18A101		041M18A201		041M18A301	
	SAMPLE DATE ----->	01/15/96		01/15/96		01/15/96		12/15/95		12/15/95		12/14/95	
	DATE ANALYZED --->	01/17/96		01/17/96		01/17/96		12/22/95		12/23/95		12/21/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM005	VAL	EM005	VAL	EM005	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL
74-87-3	Chloromethane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
74-83-9	Bromomethane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
75-01-4	Vinyl chloride	4.	U	4.	U	4.	U	27.	UR	43.	U	30.	U
75-00-3	Chloroethane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
75-09-2	Methylene chloride	13.	U	12.	U	13.	U	91.	UR	750.		100.	U
67-64-1	Acetone	13.	U	12.	U	14.	U	91.	UR	750.		480.	J
75-15-0	Carbon disulfide	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
75-35-4	1,1-Dichloroethene	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
75-34-3	1,1-Dichloroethane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
540-59-0	1,2-Dichloroethene (total)	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
67-66-3	Chloroform	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
107-06-2	1,2-Dichloroethane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
78-93-3	2-Butanone (MEK)	13.	U	12.	U	13.	U	91.	UR	140.	U	120.	J
71-55-6	1,1,1-Trichloroethane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
56-23-5	Carbon tetrachloride	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
75-27-4	Bromodichloromethane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
78-87-5	1,2-Dichloropropane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
10061-01-5	cis-1,3-Dichloropropene	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
79-01-6	Trichloroethene	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
124-48-1	Dibromochloromethane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
79-00-5	1,1,2-Trichloroethane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
71-43-2	Benzene	13.	U	12.	U	13.	U	91.	UR	34.	J	50.	J
10061-02-6	trans-1,3-Dichloropropene	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
75-25-2	Bromoform	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	UJ
591-78-6	2-Hexanone	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	UJ
127-18-4	Tetrachloroethene	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	UJ
79-34-5	1,1,2,2-Tetrachloroethane	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	UJ
108-88-3	Toluene	13.	U	12.	U	13.	U	91.	UR	85.	J	220.	J
108-90-7	Chlorobenzene	2.	J	12.	U	13.	U	91.	UR	430.		46.	J
100-41-4	Ethylbenzene	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	UJ
100-42-5	Styrene	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	UJ
1330-20-7	Xylene (Total)	13.	U	12.	U	13.	U	91.	UR	140.	U	100.	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA													
	SAMPLE ID ------->	041-M-1502-01		041-M-1503-01		041-M-1504-01		041-M-1601-01		041-M-1602-01		041-M-1603-01	
	ORIGINAL ID ----->	041M150201		041M150301		041M150401		041M160101		041M160201		041M160301	
	LAB SAMPLE ID --->	951021-06		951021-07		951021-08		951029-02		951029-03		951029-04	
	ID FROM REPORT -->	041M150201		041M150301		041M150401		041M160101		041M160201		041M160301	
	SAMPLE DATE ----->	12/06/95		12/06/95		12/06/95		12/07/95		12/07/95		12/07/95	
	DATE ANALYZED --->	12/12/95		12/12/95		12/13/95		12/14/95		12/14/95		12/15/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM0050	VAL	EM0050	VAL	EM0050	VAL	EW0010	VAL	EW0010	VAL	EW0010	VAL
74-87-3	Chloromethane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
74-83-9	Bromomethane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
75-01-4	Vinyl chloride	23.	U	21.	U	13.	U	4.	U	5.	U	14.	U
75-00-3	Chloroethane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
75-09-2	Methylene chloride	34.	J	110.	U	43.	U	12.	U	55.	U	110.	
67-64-1	Acetone	130.		1400.		43.	U	12.	UJ	130.	U	330.	U
75-15-0	Carbon disulfide	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
75-35-4	1,1-Dichloroethene	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
75-34-3	1,1-Dichloroethane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
540-59-0	1,2-Dichloroethene (total)	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
67-66-3	Chloroform	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
107-06-2	1,2-Dichloroethane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
78-93-3	2-Butanone (MEK)	77.	U	350.		43.	U	12.	U	17.	U	45.	U
71-55-6	1,1,1-Trichloroethane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
56-23-5	Carbon tetrachloride	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
75-27-4	Bromodichloromethane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
78-87-5	1,2-Dichloropropane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
10061-01-5	cis-1,3-Dichloropropene	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
79-01-6	Trichloroethene	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
124-48-1	Dibromochloromethane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
79-00-5	1,1,2-Trichloroethane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
71-43-2	Benzene	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
10061-02-6	trans-1,3-Dichloropropene	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
75-25-2	Bromoform	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
591-78-6	2-Hexanone	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
127-18-4	Tetrachloroethene	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
79-34-5	1,1,2,2-Tetrachloroethane	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
108-88-3	Toluene	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
108-90-7	Chlorobenzene	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
100-41-4	Ethylbenzene	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
100-42-5	Styrene	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U
1330-20-7	Xylene (Total)	77.	U	71.	U	43.	U	12.	U	17.	U	45.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA

	SAMPLE ID ------->	041-M-10A2-01		041-M-10A3-01		041-M-1201-01		041-M-1202-01		041-M-1301-01		041-M-1501-01	
	ORIGINAL ID ----->	041M10A201		041M10A301		041M120101		041M120201		041M130101		041M150101	
	LAB SAMPLE ID --->	950983-08		950979-01		950983-09		950991-10		950979-02		951021-05	
	ID FROM REPORT -->	041M10A201		041M10A301		041M120101		041M120201		041M130101		041M150101	
	SAMPLE DATE ----->	11/28/95		11/27/95		11/28/95		11/29/95		11/27/95		12/06/95	
	DATE ANALYZED --->	12/01/95		11/29/95		11/30/95		12/01/95		11/30/95		12/12/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	Z53301	VAL	041M10	VAL	Z53301	VAL	Z30301	VAL	041M10	VAL	EM0050	VAL
74-87-3	Chloromethane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
74-83-9	Bromomethane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
75-01-4	Vinyl chloride	4.	U	13.	U	570.	U	770.	U	14.	U	20.	UR
75-00-3	Chloroethane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
75-09-2	Methylene chloride	16.	U	21.	U	1900.	U	1300.	J	16.	U	100.	UR
67-64-1	Acetone	12.	U	19.	U	1900.	U	2600.	UJ	23.	U	430.	UR
75-15-0	Carbon disulfide	12.	U	13.	U	1900.	U	2600.	U	14.	U	21.	UR
75-35-4	1,1-Dichloroethene	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
75-34-3	1,1-Dichloroethane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
540-59-0	1,2-Dichloroethene (total)	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
67-66-3	Chloroform	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
107-06-2	1,2-Dichloroethane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
78-93-3	2-Butanone (MEK)	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
71-55-6	1,1,1-Trichloroethane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
56-23-5	Carbon tetrachloride	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
75-27-4	Bromodichloromethane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
78-87-5	1,2-Dichloropropane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
10061-01-5	cis-1,3-Dichloropropene	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
79-01-6	Trichloroethene	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
124-48-1	Dibromochloromethane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
79-00-5	1,1,2-Trichloroethane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
71-43-2	Benzene	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
10061-02-6	trans-1,3-Dichloropropene	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
75-25-2	Bromoform	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
108-10-1	4-Methyl-2-Pentanone (MIBK)	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
591-78-6	2-Hexanone	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
127-18-4	Tetrachloroethene	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
79-34-5	1,1,2,2-Tetrachloroethane	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
108-88-3	Toluene	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
108-90-7	Chlorobenzene	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
100-41-4	Ethylbenzene	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
100-42-5	Styrene	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR
1330-20-7	Xylene (Total)	12.	U	13.	U	1900.	U	2600.	U	14.	U	67.	UR

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA															
	SAMPLE ID ------->	041-M-0606-01		041-M-0607-01		041-M-0608-01		041-M-0609-01		041-M-0611-01		041-M-10A1-01	
	ORIGINAL ID ----->	041M060601		041M060701		041M060801		041M060901		041M061101		041M10A101	
	LAB SAMPLE ID --->	950950-21		950940-01		950940-02		950940-03		950950-23		950983-14	
	ID FROM REPORT -->	041M060601		041M060701		041M060801		041M060901		041M061101		041M10A101	
	SAMPLE DATE ----->	11/16/95		11/14/95		11/14/95		11/14/95		11/16/95		11/28/95	
	DATE ANALYZED --->	11/25/95		11/21/95		11/21/95		11/20/95		11/25/95		12/01/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	5A0101	VAL	M06070	VAL	M06070	VAL	M06070	VAL	5A0101	VAL	Z53301	VAL
74-87-3	Chloromethane	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
74-83-9	Bromomethane	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
75-01-4	Vinyl chloride	5.	U	12.	U	4.	U	4.	U	4.	U	4.	U
75-00-3	Chloroethane	15.	U	40.	U	12.	U	2.	J	12.	U	13.	U
75-09-2	Methylene chloride	15.	U	78.	U	12.	U	16.	U	32.	U	17.	U
67-64-1	Acetone	54.		190.	U	4000.		570.	UR	790.	D	25.	U
75-15-0	Carbon disulfide	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
75-35-4	1,1-Dichloroethene	15.	U	40.	U	12.	U	8.	J	12.	U	13.	U
75-34-3	1,1-Dichloroethane	15.	U	40.	U	12.	U	9.	J	12.	U	13.	U
540-59-0	1,2-Dichloroethene (total)	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
67-66-3	Chloroform	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
107-06-2	1,2-Dichloroethane	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
78-93-3	2-Butanone (MEK)	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
71-55-6	1,1,1-Trichloroethane	15.	U	40.	U	12.	U	4.	J	12.	U	13.	U
56-23-5	Carbon tetrachloride	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
75-27-4	Bromodichloromethane	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
78-87-5	1,2-Dichloropropane	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
10061-01-5	cis-1,3-Dichloropropene	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
79-01-6	Trichloroethene	15.	U	5.	J	12.	U	2.	J	3.	J	13.	U
124-48-1	Dibromochloromethane	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
79-00-5	1,1,2-Trichloroethane	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
71-43-2	Benzene	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
10061-02-6	trans-1,3-Dichloropropene	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
75-25-2	Bromoform	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
591-78-6	2-Hexanone	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
127-18-4	Tetrachloroethene	15.	U	40.	U	12.	U	2.	J	4.	J	13.	U
79-34-5	1,1,2,2-Tetrachloroethane	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
108-88-3	Toluene	15.	U	6.	J	12.	U	4.	J	12.	U	13.	U
108-90-7	Chlorobenzene	15.	U	40.	U	12.	U	2.	J	12.	U	13.	U
100-41-4	Ethylbenzene	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
100-42-5	Styrene	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U
1330-20-7	Xylene (Total)	15.	U	40.	U	12.	U	12.	U	12.	U	13.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA															
	SAMPLE ID ------->	041-M-04D5-01		041-M-0601-01		041-M-0602-01		041-M-0603-01		041-M-0604-01		041-M-0605-01	
	ORIGINAL ID ----->	041M04D501		041M060101		041M060201		041M060301		041M060401		041M060501	
	LAB SAMPLE ID --->	951012-13		950941-01		950941-02		950941-03		950941-04		950950-20	
	ID FROM REPORT -->	041M04D501		041M060101		041M060201		041M060301		041M060401		041M060501	
	SAMPLE DATE ----->	12/05/95		11/15/95		11/15/95		11/15/95		11/15/95		11/16/95	
	DATE ANALYZED --->	12/07/95		11/24/95		11/20/95		11/20/95		11/21/95		11/25/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	030301	VAL	M06010	VAL	M06010	VAL	M06010	VAL	M06010	VAL	5A0101	VAL
74-87-3	Chloromethane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
74-83-9	Bromomethane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
75-01-4	Vinyl chloride	3.	U	4.	U	4.	U	4.	U	4.	U	4.	U
75-00-3	Chloroethane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
75-09-2	Methylene chloride	12.	U	21.	U	12.	U	18.	U	45.	U	12.	U
67-64-1	Acetone	60.		12.	U	210.		100.		12.	U	13.	
75-15-0	Carbon disulfide	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
75-35-4	1,1-Dichloroethene	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
75-34-3	1,1-Dichloroethane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
540-59-0	1,2-Dichloroethene (total)	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
67-66-3	Chloroform	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
107-06-2	1,2-Dichloroethane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
78-93-3	2-Butanone (MEK)	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
71-55-6	1,1,1-Trichloroethane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
56-23-5	Carbon tetrachloride	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
75-27-4	Bromodichloromethane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
78-87-5	1,2-Dichloropropane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
10061-01-5	cis-1,3-Dichloropropene	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
79-01-6	Trichloroethene	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
124-48-1	Dibromochloromethane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
79-00-5	1,1,2-Trichloroethane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
71-43-2	Benzene	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
10061-02-6	trans-1,3-Dichloropropene	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
75-25-2	Bromoform	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
591-78-6	2-Hexanone	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
127-18-4	Tetrachloroethene	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
79-34-5	1,1,2,2-Tetrachloroethane	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
108-88-3	Toluene	12.	U	12.	U	12.	U	14.	J	12.	U	12.	U
108-90-7	Chlorobenzene	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
100-41-4	Ethylbenzene	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
100-42-5	Styrene	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U
1330-20-7	Xylene (Total)	12.	U	12.	U	12.	U	14.	U	12.	U	12.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA													
	SAMPLE ID ------->	041-M-0306-01		041-M-0307-01		041-M-04D1-01		041-M-04D2-01		041-M-04D3-01		041-M-04D4-01	
	ORIGINAL ID ----->	041M030601		041M030701		041M04D101		041M04D201		041M04D301		041M04D401	
	LAB SAMPLE ID --->	951012-04		951012-05		951012-09		951012-10		951012-11		951012-12	
	ID FROM REPORT -->	041M030601		041M030701		041M04D101		041M04D201		041M04D301		041M04D401	
	SAMPLE DATE ----->	12/04/95		12/04/95		12/05/95		12/05/95		12/05/95		12/05/95	
	DATE ANALYZED --->	12/05/95		12/07/95		12/07/95		12/08/95		12/07/95		12/07/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL
74-87-3	Chloromethane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
74-83-9	Bromomethane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
75-01-4	Vinyl chloride	4.	U	17.	U	11.	U	11.	U	4.	U	11.	U
75-00-3	Chloroethane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
75-09-2	Methylene chloride	34.	U	61.	U	38.	U	47.	U	14.	U	38.	U
67-64-1	Acetone	120.	U	1100.	J	250.	U	250.		33.		280.	
75-15-0	Carbon disulfide	14.	U	56.	U	27.	J	4.	J	14.	U	18.	J
75-35-4	1,1-Dichloroethene	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
75-34-3	1,1-Dichloroethane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
540-59-0	1,2-Dichloroethene (total)	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
67-66-3	Chloroform	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
107-06-2	1,2-Dichloroethane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
78-93-3	2-Butanone (MEK)	14.	U	180.		36.	U	36.	U	14.	U	37.	U
71-55-6	1,1,1-Trichloroethane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
56-23-5	Carbon tetrachloride	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
75-27-4	Bromodichloromethane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
78-87-5	1,2-Dichloropropane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
10061-01-5	cis-1,3-Dichloropropene	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
79-01-6	Trichloroethene	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
124-48-1	Dibromochloromethane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
79-00-5	1,1,2-Trichloroethane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
71-43-2	Benzene	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
10061-02-6	trans-1,3-Dichloropropene	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
75-25-2	Bromoform	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
591-78-6	2-Hexanone	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
127-18-4	Tetrachloroethene	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
79-34-5	1,1,2,2-Tetrachloroethane	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
108-88-3	Toluene	14.	U	2.	J	36.	U	36.	U	14.	U	37.	U
108-90-7	Chlorobenzene	4.	J	29.	J	36.	U	36.	U	14.	U	37.	U
100-41-4	Ethylbenzene	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
100-42-5	Styrene	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U
1330-20-7	Xylene (Total)	14.	U	56.	U	36.	U	36.	U	14.	U	37.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA													
	SAMPLE ID ------->	041-M-0104-01		041-M-0301-01		041-M-0302-01		041-M-0303-01		041-M-0304-01		041-M-0305-01	
	ORIGINAL ID ----->	041M010401		041M030101		041M030201		041M030301		041M030401		041M030501	
	LAB SAMPLE ID --->	960039-12		950998-15		950998-16		951012-01		951012-02		951012-03	
	ID FROM REPORT -->	041M010401		041M030101		041M030201		041M030301		041M030401		041M030501	
	SAMPLE DATE ----->	01/17/96		12/01/95		12/01/95		12/04/95		12/04/95		12/04/95	
	DATE ANALYZED --->	01/21/96		12/03/95		12/03/95		12/06/95		12/06/95		12/06/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	63A401	VAL	EM0040	VAL	EM0040	VAL	030301	VAL	030301	VAL	030301	VAL
74-87-3	Chloromethane	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
74-83-9	Bromomethane	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
75-01-4	Vinyl chloride	4.	U	4.	U	13.	U	30.	U	6.	U	60.	U
75-00-3	Chloroethane	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
75-09-2	Methylene chloride	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
67-64-1	Acetone	53.	U	27.	U	130.	U	240.	U	39.	U	1600.	U
75-15-0	Carbon disulfide	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
75-35-4	1,1-Dichloroethene	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
75-34-3	1,1-Dichloroethane	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
540-59-0	1,2-Dichloroethene (total)	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
67-66-3	Chloroform	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
107-06-2	1,2-Dichloroethane	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
78-93-3	2-Butanone (MEK)	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
71-55-6	1,1,1-Trichloroethane	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
56-23-5	Carbon tetrachloride	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
75-27-4	Bromodichloromethane	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
78-87-5	1,2-Dichloropropane	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
10061-01-5	cis-1,3-Dichloropropene	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
79-01-6	Trichloroethene	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
124-48-1	Dibromochloromethane	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
79-00-5	1,1,2-Trichloroethane	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
71-43-2	Benzene	14.	U	14.	U	34.	J	18.	J	20.	U	200.	U
10061-02-6	trans-1,3-Dichloropropene	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
75-25-2	Bromoform	14.	U	14.	U	42.	U	100.	U	20.	U	200.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	14.	U	14.	U	42.	UJ	100.	U	20.	U	200.	U
591-78-6	2-Hexanone	14.	U	14.	U	42.	UJ	100.	U	20.	U	200.	U
127-18-4	Tetrachloroethene	14.	U	14.	U	42.	UJ	100.	U	20.	U	200.	U
79-34-5	1,1,2,2-Tetrachloroethane	14.	U	14.	U	42.	UJ	100.	U	20.	U	200.	U
108-88-3	Toluene	14.	U	14.	U	42.	UJ	100.	U	20.	U	200.	U
108-90-7	Chlorobenzene	14.	U	2.	J	410.	J	620.		29.		200.	U
100-41-4	Ethylbenzene	14.	U	14.	U	42.	UJ	100.	U	20.	U	200.	U
100-42-5	Styrene	14.	U	14.	U	42.	UJ	100.	U	20.	U	200.	U
1330-20-7	Xylene (Total)	14.	U	14.	U	42.	UJ	100.	U	20.	U	200.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA															
	SAMPLE ID ------->	033-W-0030-02		033-M-0040-01		033-W-0040-02		041-M-0101-01 RE		041-M-0102-01 RE		041-M-0103-01	
	ORIGINAL ID ----->	33W03002		33M04001		33W04002		041M010101		041M010201		041M010301	
	LAB SAMPLE ID --->	533147		533359		533149		960039-09		960039-10		960039-11	
	ID FROM REPORT -->	33W03002		33M04001		33W04002		041M010101		041M010201		041M010301	
	SAMPLE DATE ----->	01/20/93		01/19/93		01/20/93		01/17/96		01/17/96		01/18/96	
	DATE ANALYZED --->	01/25/93		01/27/93		01/25/93		01/21/96		01/21/96		01/21/96	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	549	VAL	578	VAL	549	VAL	63A401	VAL	63A401	VAL	63A401	VAL
74-87-3	Chloromethane	10.	U	13.	U	10.	U	14.	U	21.	U	13.	U
74-83-9	Bromomethane	10.	U	13.	U	10.	U	14.	U	21.	U	13.	U
75-01-4	Vinyl chloride	10.	U	13.	U	10.	U	4.	U	6.	U	4.	U
75-00-3	Chloroethane	10.	U	13.	U	10.	U	14.	U	21.	U	13.	U
75-09-2	Methylene chloride	14.	U	11.	U	17.	U	14.	U	21.	U	13.	U
67-64-1	Acetone	10.	U	45.	U	10.	U	28.	U	250.		72.	U
75-15-0	Carbon disulfide	10.	U	13.	U	10.	U	14.	U	21.	U	13.	U
75-35-4	1,1-Dichloroethene	10.	U	13.	U	10.	U	14.	U	21.	U	13.	U
75-34-3	1,1-Dichloroethane	10.	U	13.	U	10.	U	14.	U	21.	U	13.	U
540-59-0	1,2-Dichloroethene (total)	10.	U	13.	U	10.	U	14.	U	21.	U	13.	U
67-66-3	Chloroform	10.	U	13.	U	10.	U	14.	U	21.	U	13.	U
107-06-2	1,2-Dichloroethane	10.	U	13.	U	10.	U	14.	U	21.	U	13.	U
78-93-3	2-Butanone (MEK)	10.	U	13.	U	10.	U	14.	U	110.		13.	U
71-55-6	1,1,1-Trichloroethane	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
56-23-5	Carbon tetrachloride	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
75-27-4	Bromodichloromethane	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
78-87-5	1,2-Dichloropropane	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
79-01-6	Trichloroethene	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
124-48-1	Dibromochloromethane	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
79-00-5	1,1,2-Trichloroethane	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
71-43-2	Benzene	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
75-25-2	Bromoform	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U	13.	U	10.	U	14.	U	21.	UJ	13.	U
591-78-6	2-Hexanone	10.	U	13.	U	10.	U	14.	UJ	21.	UJ	13.	UJ
127-18-4	Tetrachloroethene	10.	U	13.	U	10.	U	14.	UJ	21.	UJ	13.	UJ
79-34-5	1,1,2,2-Tetrachloroethane	10.	U	13.	U	10.	U	14.	UJ	21.	UJ	13.	UJ
108-88-3	Toluene	10.	U	13.	U	10.	U	14.	UJ	21.	UJ	13.	UJ
108-90-7	Chlorobenzene	10.	U	13.	U	10.	U	14.	UJ	21.	UJ	13.	UJ
100-41-4	Ethylbenzene	10.	U	13.	U	10.	U	14.	UJ	21.	UJ	13.	UJ
100-42-5	Styrene	10.	U	13.	U	10.	U	14.	UJ	21.	UJ	13.	UJ
1330-20-7	Xylene (Total)	2.	J	13.	U	2.	J	14.	UJ	21.	UJ	13.	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA															
	SAMPLE ID ------->	010-M-0001-01		033-M-0010-01		033-W-0010-02		033-M-0020-01		033-W-0020-02		033-M-0030-01	
	ORIGINAL ID ----->	10M0101		33M01001		33W01002		33M02001		33W02002		33M03001	
	LAB SAMPLE ID --->	39496-17		533364		533140		533370		533144		533344	
	ID FROM REPORT -->	10M0101		33M01001		33W01002		33M02001		33W02002		33M03001	
	SAMPLE DATE ----->			01/19/93		01/20/93		01/19/93		01/20/93		01/19/93	
	DATE ANALYZED --->	03/11/94		01/27/93		01/25/93		01/27/93		01/25/93		01/27/93	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/L		UG/KG		UG/L		UG/KG	
CAS #	Parameter	CT520	VAL	578	VAL	549	VAL	578	VAL	549	VAL	578	VAL
74-87-3	Chloromethane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
74-83-9	Bromomethane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
75-01-4	Vinyl chloride	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
75-00-3	Chloroethane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
75-09-2	Methylene chloride	13.	U	10.	U	11.	U	13.	U	3.	U	15.	U
67-64-1	Acetone	150.	U	34.	U	10.	U	47.	U	10.	U	48.	U
75-15-0	Carbon disulfide	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
75-35-4	1,1-Dichloroethene	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
75-34-3	1,1-Dichloroethane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
540-59-0	1,2-Dichloroethene (total)	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
67-66-3	Chloroform	13.	U	2.	U	10.	U	13.	U	10.	U	13.	U
107-06-2	1,2-Dichloroethane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
78-93-3	2-Butanone (MEK)	13.	U	13.	U	69.	U	13.	U	10.	U	13.	U
71-55-6	1,1,1-Trichloroethane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
56-23-5	Carbon tetrachloride	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
75-27-4	Bromodichloromethane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
78-87-5	1,2-Dichloropropane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
10061-01-5	cis-1,3-Dichloropropene	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
79-01-6	Trichloroethene	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
124-48-1	Dibromochloromethane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
79-00-5	1,1,2-Trichloroethane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
71-43-2	Benzene	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
10061-02-6	trans-1,3-Dichloropropene	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
75-25-2	Bromoform	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
591-78-6	2-Hexanone	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
127-18-4	Tetrachloroethene	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
79-34-5	1,1,2,2-Tetrachloroethane	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
108-88-3	Toluene	13.	U	13.	U	10.	U	13.	U	2.	J	13.	U
108-90-7	Chlorobenzene	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
100-41-4	Ethylbenzene	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
100-42-5	Styrene	13.	U	13.	U	10.	U	13.	U	10.	U	13.	U
1330-20-7	Xylene (Total)	13.	U	13.	U	1.	J	13.	U	10.	U	13.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA															
	SAMPLE ID ------->	001-M-0003-03		001-W-0003-03		001-M-0016-01		001-W-0016-01		001-M-0018-01		001-W-0018-01	
	ORIGINAL ID ----->	01M0303		01W0303		01M1601		01W1601		01M1801		01W1801	
	LAB SAMPLE ID --->	621861		621833		622183		622178		622184		622169	
	ID FROM REPORT -->	01M0303		01W0303		01M1601		01W1601		01M1801		01W1801	
	SAMPLE DATE ----->	06/28/94		06/28/94		06/29/94		06/29/94		06/29/94		06/29/94	
	DATE ANALYZED --->	07/06/94		07/05/94		07/07/94		07/07/94		07/07/94		07/07/94	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	00011	VAL	00001	VAL	00011	VAL	00001	VAL	00011	VAL	00001	VAL
74-87-3	Chloromethane	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
74-83-9	Bromomethane	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
75-01-4	Vinyl chloride	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
75-00-3	Chloroethane	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
75-09-2	Methylene chloride	9.	U	10.	U	20.	U	3.	U	100.	U	3.	U
67-64-1	Acetone	28.	U	10.	U	50.	U	10.	U	100.	U	10.	U
75-15-0	Carbon disulfide	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
75-35-4	1,1-Dichloroethene	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
75-34-3	1,1-Dichloroethane	13.	U	10.	U	19.	U	2.	J	110.	U	10.	U
540-59-0	1,2-Dichloroethene (total)	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
67-66-3	Chloroform	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
107-06-2	1,2-Dichloroethane	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
78-93-3	2-Butanone (MEK)	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
71-55-6	1,1,1-Trichloroethane	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
56-23-5	Carbon tetrachloride	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
75-27-4	Bromodichloromethane	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
78-87-5	1,2-Dichloropropane	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
10061-01-5	cis-1,3-Dichloropropene	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
79-01-6	Trichloroethene	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
124-48-1	Dibromochloromethane	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
79-00-5	1,1,2-Trichloroethane	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
71-43-2	Benzene	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
10061-02-6	trans-1,3-Dichloropropene	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
75-25-2	Bromoform	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
591-78-6	2-Hexanone	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
127-18-4	Tetrachloroethene	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
108-88-3	Toluene	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
108-90-7	Chlorobenzene	13.	U	10.	U	19.	U	1.	J	110.	U	10.	U
100-41-4	Ethylbenzene	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
100-42-5	Styrene	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U
1330-20-7	Xylene (Total)	13.	U	10.	U	19.	U	10.	U	110.	U	10.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

VOA													
	SAMPLE ID ------->	001-M-0001-01		001-W-0001-01		001-M-0003-01		001-W-0003-01		001-M-0003-02		001-W-0003-02	
	ORIGINAL ID ----->	01M0101		01W0101		01M0301		01W0301		01M0302		01W0302	
	LAB SAMPLE ID --->	622182		622177		621841		621827		621859		621829	
	ID FROM REPORT -->	01M0101		01W0101		01M0301		01W0301		01M0302		01W0302	
	SAMPLE DATE ----->	06/29/94		06/29/94		06/28/94		06/28/94		06/28/94		06/28/94	
	DATE ANALYZED --->	07/07/94		07/07/94		07/06/94		07/05/94		07/06/94		07/05/94	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	00011	VAL	00001	VAL	00011	VAL	00001	VAL	00011	VAL	00001	VAL
74-87-3	Chloromethane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
74-83-9	Bromomethane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
75-01-4	Vinyl chloride	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
75-00-3	Chloroethane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
75-09-2	Methylene chloride	120.	U	10.	U	8.	U	10.	U	26.	U	10.	U
67-64-1	Acetone	14.	U	35.	U	14.	U	10.	U	53.	U	10.	U
75-15-0	Carbon disulfide	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
75-35-4	1,1-Dichloroethene	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
75-34-3	1,1-Dichloroethane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
540-59-0	1,2-Dichloroethene (total)	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
67-66-3	Chloroform	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
107-06-2	1,2-Dichloroethane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
78-93-3	2-Butanone (MEK)	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
71-55-6	1,1,1-Trichloroethane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
56-23-5	Carbon tetrachloride	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
75-27-4	Bromodichloromethane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
78-87-5	1,2-Dichloropropane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
10061-01-5	cis-1,3-Dichloropropene	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
79-01-6	Trichloroethene	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
124-48-1	Dibromochloromethane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
79-00-5	1,1,2-Trichloroethane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
71-43-2	Benzene	20.	U	10.	U	14.	U	2.	J	14.	U	1.	J
10061-02-6	trans-1,3-Dichloropropene	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
75-25-2	Bromoform	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
591-78-6	2-Hexanone	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
127-18-4	Tetrachloroethene	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
108-88-3	Toluene	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
108-90-7	Chlorobenzene	20.	U	10.	U	14.	U	6.	J	14.	U	7.	J
100-41-4	Ethylbenzene	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
100-42-5	Styrene	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U
1330-20-7	Xylene (Total)	20.	U	10.	U	14.	U	10.	U	14.	U	10.	U

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TOC											
	SAMPLE ID ------->	041-M-7903-01		041-M-W201-01		041-M-W202-01		041-M-W203-01			
	ORIGINAL ID ----->	041M790301		041MW20101		041MW20201		041MW20301			
	LAB SAMPLE ID --->	960064-05		960055-14		960055-15		960055-16			
	ID FROM REPORT -->	041M790301		041MW20101		041MW20201		041MW20301			
	SAMPLE DATE ----->	01/26/96		01/24/96		01/24/96		01/24/96			
	DATE EXTRACTED -->	02/16/96		02/16/96		02/16/96		02/16/96			
	DATE ANALYZED --->	02/16/96		02/16/96		02/16/96		02/16/96			
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment			
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG			
CAS #	Parameter	EM0060	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL		
9999900 01 4	Total Organic Carbon (TOC)	2070.		16800.		5110.		165000.			

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-6422-01		041-M-6423-01		041-M-6424-01		041-M-7201-01		041-M-7202-01		041-M-7901-01	
	ORIGINAL ID ----->	041M642201		041M642301		041M642401		041M720101		041MZ20201		041M790101	
	LAB SAMPLE ID --->	950952-10		950952-11		950952-12		950991-12		950991-13		960064-04	
	ID FROM REPORT -->	041M642201		041M642301		041M642401		041M720101		041MZ20201		041M790101	
	SAMPLE DATE ----->	11/17/95		11/17/95		11/17/95		11/29/95		11/29/95		01/26/96	
	DATE EXTRACTED -->	12/03/96		12/03/96		12/03/96		12/22/96		12/22/96		02/20/96	
	DATE ANALYZED --->	12/03/96		12/03/96		12/03/96		12/22/96		12/22/96		02/20/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	Z42101	VAL	Z42101	VAL	Z42101	VAL	Z30301	VAL	Z30301	VAL	EM0060	VAL
9999900-01-4	Total Organic Carbon (TOC)	9270.		4040.		739.		2940.		1640.		33500.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-6416-01		041-M-6417-01		041-M-6418-01		041-M-6419-01		041-M-6420-01		041-M-6421-01	
	ORIGINAL ID ----->	041M641601		041M641701		041M641801		041M641901		041M642001		041M642101	
	LAB SAMPLE ID --->	950950-15		950950-16		960087-04		960087-02		950950-17		950950-18	
	ID FROM REPORT -->	041M641601		041M641701		041M641801		041M641901		041M642001		041M642101	
	SAMPLE DATE ----->	11/16/95		11/16/95		02/06/96		02/01/96		11/16/95		11/16/95	
	DATE EXTRACTED -->	11/30/95		11/30/95		02/28/96		02/28/96		12/01/95		12/01/95	
	DATE ANALYZED --->	11/30/95		11/30/95		02/28/96		02/28/96		12/01/95		12/01/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	640801	VAL	640801	VAL	5A0101	VAL	5A0101	VAL
9999900-01-4	Total Organic Carbon (TOC)	67500.		14600.		3680.		64000.		4200.		1380.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-6410-01		041-M-6411-01		041-M-6412-01		041-M-6413-01		041-M-6414-01		041-M-6415-01	
	ORIGINAL ID ----->	041M641001		041M641101		041M641201		041M641301		041M641401		041M641501	
	LAB SAMPLE ID --->	950950-11		950950-12		950941-18		950950-13		950950-14		950941-19	
	ID FROM REPORT -->	041M641001		041M641101		041M641201		041M641301		041M641401		041M641501	
	SAMPLE DATE ----->	11/16/95		11/16/95		11/15/95		11/16/95		11/16/95		11/15/95	
	DATE EXTRACTED -->	11/30/95		11/30/95		11/29/95		11/30/95		11/30/95		11/29/95	
	DATE ANALYZED --->	11/30/95		11/30/95		11/29/95		11/30/95		11/30/95		11/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL	M06010	VAL
9999900-01-4	Total Organic Carbon (TOC)	89700.		40100.		1760.		76100.		68700.		1990.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-6404-01		041-M-6405-01		041-M-6406-01		041-M-6407-01		041-M-6408-01		041-M-6409-01	
	ORIGINAL ID ----->	041M640401		041M640501		041M640601		041M640701		041M640801		041M640901	
	LAB SAMPLE ID --->	960087-06		950941-14		950941-15		950941-16		960087-01		950941-17	
	ID FROM REPORT -->	041M640401		041M640501		041M640601		041M640701		041M640801		041M640901	
	SAMPLE DATE ----->	02/09/96		11/15/95		11/15/95		11/15/95		02/01/96		11/15/95	
	DATE EXTRACTED -->	02/28/96		11/29/95		11/29/95		11/29/95		02/28/96		11/29/95	
	DATE ANALYZED --->	02/28/96		11/29/95		11/29/95		11/29/95		02/28/96		11/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	640801	VAL	M06010	VAL	M06010	VAL	M06010	VAL	640801	VAL	M06010	VAL
9999900-01-4	Total Organic Carbon (TOC)	187000.		83500.		28100.		4780.		8510.		1620.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-63B2-01		041-M-63B3-01		041-M-63B4-01		041-M-6401-01		041-M-6402-01		041-M-6403-01	
	ORIGINAL ID ----->	041M63B201		041M63B301		041M63B401		041M640101		041M640201		041M640301	
	LAB SAMPLE ID --->	960039-04		960039-05		960055-11		960087-05		950941-12		950941-13	
	ID FROM REPORT -->	041M63B201		041M63B301		041M63B401		041M640101		041M640201		041M640301	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/24/96		02/09/96		11/15/95		11/15/95	
	DATE EXTRACTED -->	02/13/96		02/14/96		02/16/96		02/28/96		11/29/95		11/29/95	
	DATE ANALYZED --->	02/13/96		02/14/96		02/16/96		02/28/96		11/29/95		11/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	63A401	VAL	63A401	VAL	M52A10	VAL	640801	VAL	M06010	VAL	M06010	VAL
9999900-01-4	Total Organic Carbon (TOC)	2400.		1430.		2950.		7520.		44200.		194000.	

*** Validation Complete ***

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TOC

	SAMPLE ID ------->	041-M-63A1-01		041-M-63A2-01		041-M-63A3-01		041-M-63A4-01		041-M-63A5-01		041-M-63B1-01	
	ORIGINAL ID ----->	041M63A101		041M63A201		041M63A301		041M63A401		041M63A501		041M63B101	
	LAB SAMPLE ID --->	960025-18		960025-19		960025-20		960039-01		960039-02		960039-03	
	ID FROM REPORT -->	041M63A101		041M63A201		041M63A301		041M63A401		041M63A501		041M63B101	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/18/96		01/18/96		01/18/96		01/18/96	
	DATE EXTRACTED -->	01/24/96		01/24/96		01/24/96		02/12/96		02/13/96		02/13/96	
	DATE ANALYZED --->	01/24/96		01/24/96		01/24/96		02/12/96		02/13/96		02/13/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	EM005	VAL	EM005	VAL	EM005	VAL	63A401	VAL	63A401	VAL	63A401	VAL
9999900 01 4	Total Organic Carbon (TOC)	873.		1690.		42300.		9630.		1650.		25200.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-5A04-01		041-M-5A05-01		041-M-5A06-01		041-M-5A07-01		041-M-5B01-01		041-M-5B02-01	
	ORIGINAL ID ----->	041M5A0401		041M5A0501		041M5A0601		041M5A0701		041M5B0101		041M5B0201	
	LAB SAMPLE ID --->	950950-04		950979-03		950952-07		950950-05		950952-08		950952-09	
	ID FROM REPORT -->	041M5A0401		041M5A0501		041M5A0601		041M5A0701		041M5B0101		041M5B0201	
	SAMPLE DATE ----->	11/16/95		11/27/95		11/17/95		11/16/95		11/17/95		11/17/95	
	DATE EXTRACTED -->	11/30/95		12/20/96		12/02/96		11/30/95		12/02/96		12/02/96	
	DATE ANALYZED --->	11/30/95		12/20/96		12/02/96		11/30/95		12/02/96		12/02/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	5A0101	VAL	041M10	VAL	Z42101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL
9999900-01-4	Total Organic Carbon (TOC)	409000.		153000.		6420.		2100.		1790.		74500.	

*** Validation Complete ***

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TOC																	
	SAMPLE ID ------->	041-M-56A1-01		041-M-5701-01		041-M-5801-01		041-M-5A01-01		041-M-5A02-01		041-M-5A03-01	
	ORIGINAL ID ----->	041M56A101		041M570101		041M580101		041M5A0101		041M5A0201		041M5A0301	
	LAB SAMPLE ID --->	960055-09		950991-11		960055-10		950950-01		950950-02		950950-03	
	ID FROM REPORT -->	041M56A101		041M570101		041M580101		041M5A0101		041M5A0201		041M5A0301	
	SAMPLE DATE ----->	01/24/96		11/29/95		01/24/96		11/16/95		11/16/95		11/16/95	
	DATE EXTRACTED -->	02/16/96		12/22/96		02/16/96		11/30/95		11/30/95		11/30/95	
	DATE ANALYZED --->	02/16/96		12/22/96		02/16/96		11/30/95		11/30/95		11/30/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ----------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	M52A10	VAL	Z30301	VAL	M52A10	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL
9999900-01-4	Total Organic Carbon (TOC)	12600.		26000.		4910.		254000.		37500.		99700.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-4903-01		041-M-52A1-01		041-M-52D1-01		041-M-52E1-01		041-M-52E2-01		041-M-52E3-01	
	ORIGINAL ID ----->	041M490301		041M52A101		041M52D101		041M52E101		041M52E201		041M52E301	
	LAB SAMPLE ID --->	960025-16		960055-01		960055-02		960055-03		960055-04		960055-08	
	ID FROM REPORT -->	041M490301		041M52A101		041M52D101		041M52E101		041M52E201		041M52E301	
	SAMPLE DATE ----->	01/16/96		01/23/96		01/23/96		01/23/96		01/23/96		01/24/96	
	DATE EXTRACTED -->	01/24/96		02/15/96		02/15/96		02/15/96		02/15/96		02/16/96	
	DATE ANALYZED --->	01/24/96		02/15/96		02/15/96		02/15/96		02/15/96		02/16/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	EM005	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL
9999900-01-4	Total Organic Carbon (TOC)	14800.		468000.		52500.		22800.		221000.		6800.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-3301-01		041-M-3302-01		041-M-3303-01		041-M-4801-01		041-M-4901-01		041-M-4902-01	
	ORIGINAL ID ----->	041M330101		041M330201		041M330301		041M480101		041M490101		041M490201	
	LAB SAMPLE ID --->	950940-12		950940-13		950940-14		960043-10		960025-14		960025-15	
	ID FROM REPORT -->	041M330101		041M330201		041M330301		041M480101		041M490101		041M490201	
	SAMPLE DATE ----->	11/13/95		11/13/95		11/13/95		01/22/96		01/16/96		01/16/96	
	DATE EXTRACTED -->	11/27/95		11/27/95		11/27/95		02/14/96		01/24/96		01/24/96	
	DATE ANALYZED --->	11/27/95		11/27/95		11/27/95		02/14/96		01/24/96		01/24/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	M00901	VAL	EM005	VAL	EM005	VAL
9999900-01-4	Total Organic Carbon (TOC)	42800.		38700.		3060.		44300.		8110.		12600.	

*** Validation Complete ***

TOC													
	SAMPLE ID ------->	041-M-2503-01		041-M-2701-01		041-M-2702-01		041-M-3201-01		041-M-3202-01		041-M-3203-01	
	ORIGINAL ID ----->	041M250301		041M270101		041M270201		041M320101		041M320201		041M320301	
	LAB SAMPLE ID --->	950941-07		950941-08		950941-09		950940-04		950940-05		950940-06	
	ID FROM REPORT -->	041M250301		041M270101		041M270201		041M320101		041M320201		041M320301	
	SAMPLE DATE ----->	11/15/95		11/15/95		11/15/95		11/14/95		11/14/95		11/14/95	
	DATE EXTRACTED -->	11/28/95		11/29/95		11/29/95		11/27/95		11/27/95		11/27/95	
	DATE ANALYZED --->	11/28/95		11/29/95		11/29/95		11/27/95		11/27/95		11/27/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	M06010	VAL	M06010	VAL	M06010	VAL	M06070	VAL	M06070	VAL	M06070	VAL
9999900-01-4	Total Organic Carbon (TOC)	125000.		39800.		52100.		382000.		434000.		373000.	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

TOC													
	SAMPLE ID ------->	041-M-18B1-01		041-M-19A1-01		041-M-19A2-01		041-M-19B1-01		041-M-2501-01		041-M-2502-01	
	ORIGINAL ID ----->	041M18B101		041M19A101		041M19A201		041M19B101		041M250101		041M250201	
	LAB SAMPLE ID --->	951050-06		960025-11		960025-12		960025-13		950941-05		950941-06	
	ID FROM REPORT -->	041M18B101		041M19A101		041M19A201		041M19B101		041M250101		041M250201	
	SAMPLE DATE ----->	12/14/95		01/16/96		01/16/96		01/16/96		11/15/95		11/15/95	
	DATE EXTRACTED -->	01/09/96		01/23/96		01/24/96		01/24/96		11/28/95		11/28/95	
	DATE ANALYZED --->	01/09/96		01/23/96		01/24/96		01/24/96		11/28/95		11/28/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	EMD060	VAL	EM005	VAL	EM005	VAL	EM005	VAL	M06010	VAL	M06010	VAL
9999900 01 4	Total Organic Carbon (TOC)	118000.		4230.		674.		2100.		212000.		121000.	

*** Validation Complete ***

PENSACOLA, SITE 41
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TOC													
	SAMPLE ID ------->	041-M-1701-01		041-M-1702-01		041-M-1703-01		041-M-18A1-01		041-M-18A2-01		041-M-18A3-01	
	ORIGINAL ID ----->	041M170101		041M170201		041M170301		041M18A101		041M18A201		041M18A301	
	LAB SAMPLE ID --->	960025-03		960025-04		960025-05		951050-18		951050-19		951050-05	
	ID FROM REPORT -->	041M170101		041M170201		041M170301		041M18A101		041M18A201		041M18A301	
	SAMPLE DATE ----->	01/15/96		01/15/96		01/15/96		12/15/95		12/15/95		12/14/95	
	DATE EXTRACTED -->	01/23/96		01/23/96		01/23/96		01/09/96		01/09/96		01/09/96	
	DATE ANALYZED --->	01/23/96		01/23/96		01/23/96		01/09/96		01/09/96		01/09/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	EM005	VAL	EM005	VAL	EM005	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL
9999900-01-4	Total Organic Carbon (TOC)	4130.		1670.		2230.		208000.		119000.		343000.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-1502-01		041-M-1503-01		041-M-1504-01		041-M-1601-01		041-M-1602-01		041-M-1603-01	
	ORIGINAL ID ----->	041M150201		041M150301		041M150401		041M160101		041M160201		041M160301	
	LAB SAMPLE ID --->	951021-06		951021-07		951021-08		951029-02		951029-03		951029-04	
	ID FROM REPORT -->	041M150201		041M150301		041M150401		041M160101		041M160201		041M160301	
	SAMPLE DATE ----->	12/06/95		12/06/95		12/06/95		12/07/95		12/07/95		12/07/95	
	DATE EXTRACTED -->	01/02/96		01/02/96		01/02/96		01/03/96		01/03/96		01/03/96	
	DATE ANALYZED --->	01/02/96		01/02/96		01/02/96		01/03/96		01/03/96		01/03/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	EM0050	VAL	EM0050	VAL	EM0050	VAL	EW0010	VAL	EW0010	VAL	EW0010	VAL
9999900-01-4	Total Organic Carbon (TOC)	149000.		112000.		395000.		1440.		12600.		55300.	

*** Validation Complete ***

PENSACOLA, SITE 41
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TOC													
	SAMPLE ID ------->	041-M-10A2-01		041-M-10A3-01		041-M-1201-01		041-M-1202-01		041-M-1301-01		041-M-1501-01	
	ORIGINAL ID ----->	041M10A201		041M10A301		041M120101		041M120201		041M130101		041M150101	
	LAB SAMPLE ID --->	950983-08		950979-01		950983-09		950991-10		950979-02		951021-05	
	ID FROM REPORT -->	041M10A201		041M10A301		041M120101		041M120201		041M130101		041M150101	
	SAMPLE DATE ----->	11/28/95		11/27/95		11/28/95		11/29/95		11/27/95		12/06/95	
	DATE EXTRACTED -->	12/21/96		12/20/96		12/21/96		12/22/96		12/20/96		01/02/96	
	DATE ANALYZED --->	12/21/96		12/20/96		12/21/96		12/22/96		12/20/96		01/02/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	Z53301	VAL	041M10	VAL	Z53301	VAL	Z30301	VAL	041M10	VAL	EM0050	VAL
9999900-01-4	Total Organic Carbon (TOC)	2030.		5640.		7240.		41000.		13800.		121000.	

*** Validation Complete ***

PENSACOLA, SITE 41
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TOC															
	SAMPLE ID ------->	041-M-0606-01		041-M-0607-01		041-M-0608-01		041-M-0609-01		041-M-0611-01		041-M-10A1-01	
	ORIGINAL ID ----->	041M060601		041M060701		041M060801		041M060901		041M061101		041M10A101	
	LAB SAMPLE ID --->	950950-21		950940-01		950940-02		950940-03		950950-23		950983-14	
	ID FROM REPORT -->	041M060601		041M060701		041M060801		041M060901		041M061101		041M10A101	
	SAMPLE DATE ----->	11/16/95		11/14/95		11/14/95		11/14/95		11/16/95		11/28/95	
	DATE EXTRACTED -->	12/01/95		11/27/95		11/27/95		11/27/95		12/01/95		12/21/96	
	DATE ANALYZED --->	12/01/95		11/27/95		11/27/95		11/27/95		12/01/95		12/21/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	5A0101	VAL	M06070	VAL	M06070	VAL	M06070	VAL	5A0101	VAL	Z53301	VAL
9999900-01-4	Total Organic Carbon (TOC)	13000.		40300.		1480.		2650.		1370.		3690.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-04D5-01		041-M-0601-01		041-M-0602-01		041-M-0603-01		041-M-0604-01		041-M-0605-01	
	ORIGINAL ID ----->	041M04D501		041M060101		041M060201		041M060301		041M060401		041M060501	
	LAB SAMPLE ID --->	951012-13		950941-01		950941-02		950941-03		950941-04		950950-20	
	ID FROM REPORT -->	041M04D501		041M060101		041M060201		041M060301		041M060401		041M060501	
	SAMPLE DATE ----->	12/05/95		11/15/95		11/15/95		11/15/95		11/15/95		11/16/95	
	DATE EXTRACTED -->	12/29/96		11/28/95		11/28/95		11/28/95		11/28/95		12/01/95	
	DATE ANALYZED --->	12/29/96		11/28/95		11/28/95		11/28/95		11/28/95		12/01/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	030301	VAL	M06010	VAL	M06010	VAL	M06010	VAL	M06010	VAL	5A0101	VAL
9999900-01-4	Total Organic Carbon (TOC)	1540.		3620.		3780.		11000.		1210.		2040.	

*** Validation Complete ***

PENSACOLA, SITE 41
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TOC													
	SAMPLE ID ------->	041-M-0306-01		041-M-0307-01		041-M-04D1-01		041-M-04D2-01		041-M-04D3-01		041-M-04D4-01	
	ORIGINAL ID ----->	041M030601		041M030701		041M04D101		041M04D201		041M04D301		041M04D401	
	LAB SAMPLE ID --->	951012-04		951012-05		951012-09		951012-10		951012-11		951012-12	
	ID FROM REPORT -->	041M030601		041M030701		041M04D101		041M04D201		041M04D301		041M04D401	
	SAMPLE DATE ----->	12/04/95		12/04/95		12/05/95		12/05/95		12/05/95		12/05/95	
	DATE EXTRACTED -->	12/29/96		12/29/96		12/29/96		12/29/96		12/29/96		12/29/96	
	DATE ANALYZED --->	12/29/96		12/29/96		12/29/96		12/29/96		12/29/96		12/29/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL
9999900 01 4	Total Organic Carbon (TOC)	6720.		73900.		33000.		45100.		2040.		70000.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-0104-01		041-M-0301-01		041-M-0302-01		041-M-0303-01		041-M-0304-01		041-M-0305-01	
	ORIGINAL ID ----->	041M010401		041M030101		041M030201		041M030301		041M030401		041M030501	
	LAB SAMPLE ID --->	960039-12		950998-15		950998-16		951012-01		951012-02		951012-03	
	ID FROM REPORT -->	041M010401		041M030101		041M030201		041M030301		041M030401		041M030501	
	SAMPLE DATE ----->	01/17/96		12/01/95		12/01/95		12/04/95		12/04/95		12/04/95	
	DATE EXTRACTED -->	02/14/96		12/27/96		12/26/96		12/28/96		12/28/96		12/28/96	
	DATE ANALYZED --->	02/14/96		12/27/96		12/26/96		12/28/96		12/28/96		12/28/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	63A401	VAL	EM0040	VAL	EM0040	VAL	030301	VAL	030301	VAL	030301	VAL
9999900-01-4	Total Organic Carbon (TOC)	30600.		8150.		241000.		51800.		4780.		10800.	

*** Validation Complete ***

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TOC													
	SAMPLE ID ------->	041-M-0007-01		041-M-0008-01		041-M-0009-01		041-M-0101-01		041-M-0102-01		041-M-0103-01	
	ORIGINAL ID ----->	41M000701		41M000801		41M000901		041M010101		041M010201		041M010301	
	LAB SAMPLE ID --->	M501265*7		M501265*8		M501265*9		960039-09		960039-10		960039-11	
	ID FROM REPORT -->	41M000701		41M000801		41M000901		041M010101		041M010201		041M010301	
	SAMPLE DATE ----->							01/17/96		01/17/96		01/18/96	
	DATE EXTRACTED -->							02/14/96		02/14/96		02/14/96	
	DATE ANALYZED --->	03/01/95		03/01/95		03/31/95		02/14/96		02/14/96		02/14/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		mg/kg		mg/kg		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	EAH030	VAL	EAH030	VAL	EAH030	VAL	63A401	VAL	63A401	VAL	63A401	VAL
9999900-01-4	Total Organic Carbon (TOC)	160.		3600.		3100.		36300.		145000.		5320.	

*** Validation Complete ***

PENSACOLA, SITE 41
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TOC													
	SAMPLE ID ------->	041-M-0001-01		041-M-0002-01		041-M-0003-01		041-M-0004-01		041-M-0005-01		041-M-0006-01	
	ORIGINAL ID ----->	41M000101		41M000201		41M000301		41M000401		41M000501		41M000601	
	LAB SAMPLE ID --->	M501265*2		M501265*1		M501265*3		M501265*4		M501265*5		M501265*6	
	ID FROM REPORT -->	41M000101		41M000201		41M000301		41M000401		41M000501		41M000601	
	SAMPLE DATE ----->												
	DATE ANALYZED --->	03/01/95		03/01/95		03/01/95		03/01/95		03/01/95		03/01/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	EAH030	VAL	EAH030	VAL	EAH030	VAL	EAH030	VAL	EAH030	VAL	EAH030	VAL
9999900-01-4	Total Organic Carbon (TOC)	730.		50.	<	4400.		5600.		280.		8100.	

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SVOA									
	SAMPLE ID ------->	041-M-W202-01		041-M-W203-01					
	ORIGINAL ID ----->	041MW20201		041MW20301					
	LAB SAMPLE ID --->	960055-15		960055-16					
	ID FROM REPORT -->	041MW20201		041MW20301					
	SAMPLE DATE ----->	01/24/96		01/24/96					
	DATE EXTRACTED -->	01/30/96		01/30/96					
	DATE ANALYZED --->	02/10/96		02/15/96					
	MATRIX ---------->	Sediment		Sediment					
	UNITS ---------->	UG/KG		UG/KG					
CAS #	Parameter	M52A10	VAL	M52A10	VAL				
121-14-2	2,4-Dinitrotoluene	410.	U	3700.	U				
84-66-2	Diethylphthalate	410.	U	220.	J				
7005-72-3	4-Chlorophenylphenyl ether	410.	U	3700.	U				
86-73-7	Fluorene	20.	U	180.	U				
100-01-6	4-Nitroaniline	1000.	U	8900.	U				
534-52-1	2-Methyl-4,6-Dinitrophenol	1000.	U	8900.	U				
86-30-6	N-Nitrosodiphenylamine	410.	U	3700.	U				
101-55-3	4-Bromophenyl-phenylether	410.	U	3700.	U				
118-74-1	Hexachlorobenzene	410.	U	3700.	U				
87-86-5	Pentachlorophenol	1000.	U	8900.	U				
85-01-8	Phenanthrene	41.	U	370.	U				
120-12-7	Anthracene	41.	U	370.	U				
86-74-8	Carbazole	410.	U	3700.	U				
84-74-2	Di-n-butylphthalate	33.	J	3700.	U				
206-44-0	Fluoranthene	41.	U	370.	U				
129-00-0	Pyrene	41.	U	370.	U				
85-68-7	Butylbenzylphthalate	21.	J	3700.	U				
91-94-1	3,3'-Dichlorobenzidine	410.	U	3700.	U				
56-55-3	Benzo(a)anthracene	41.	U	370.	U				
218-01-9	Chrysene	41.	U	370.	U				
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	55.	J	3700.	U				
117-84-0	Di-n-octylphthalate	410.	U	3700.	U				
205-99-2	Benzo(b)fluoranthene	41.	U	370.	U				
207-08-9	Benzo(k)fluoranthene	41.	U	370.	U				
50-32-8	Benzo(a)pyrene	41.	U	370.	U				
193-39-5	Indeno(1,2,3-cd)pyrene	41.	U	370.	U				
53-70-3	Dibenz(a,h)anthracene	41.	U	370.	U				
191-24-2	Benzo(g,h,i)perylene	41.	U	370.	U				

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
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SVOA									
	SAMPLE ID ------->	041-M-W202-01		041-M-W203-01					
	ORIGINAL ID ----->	041MW20201		041MW20301					
	LAB SAMPLE ID --->	960055-15		960055-16					
	ID FROM REPORT -->	041MW20201		041MW20301					
	SAMPLE DATE ----->	01/24/96		01/24/96					
	DATE EXTRACTED -->	01/30/96		01/30/96					
	DATE ANALYZED --->	02/10/96		02/15/96					
	MATRIX ---------->	Sediment		Sediment					
	UNITS ---------->	UG/KG		UG/KG					
CAS #	Parameter	M52A10	VAL	M52A10	VAL				
108-95-2	Phenol	410.	U	3700.	U				
111-44-4	bis(2-Chloroethyl)ether	41.	U	370.	U				
95-57-8	2-Chlorophenol	410.	U	3700.	U				
541-73-1	1,3-Dichlorobenzene	410.	U	3700.	U				
106-46-7	1,4-Dichlorobenzene	410.	U	3700.	U				
95-50-1	1,2-Dichlorobenzene	410.	U	3700.	U				
95-48-7	2-Methylphenol (o-Cresol)	410.	U	3700.	U				
108-60-1	2,2'-oxybis(1-Chloropropane)	410.	U	3700.	U				
106-44-5	4-Methylphenol (p-Cresol)	410.	U	3700.	U				
621-64-7	N-Nitroso-di-n-propylamine	41.	U	370.	U				
67-72-1	Hexachloroethane	410.	U	3700.	U				
98-95-3	Nitrobenzene	410.	U	3700.	U				
78-59-1	Isophorone	410.	U	3700.	U				
88-75-5	2-Nitrophenol	410.	U	3700.	U				
105-67-9	2,4-Dimethylphenol	410.	U	3700.	U				
111-91-1	bis(2-Chloroethoxy)methane	410.	U	3700.	U				
120-83-2	2,4-Dichlorophenol	410.	U	3700.	U				
120-82-1	1,2,4-Trichlorobenzene	410.	U	3700.	U				
91-20-3	Naphthalene	41.	U	370.	U				
106-47-8	4-Chloroaniline	410.	U	3700.	U				
87-68-3	Hexachlorobutadiene	410.	U	3700.	U				
59-50-7	4-Chloro-3-methylphenol	410.	U	3700.	U				
91-57-6	2-Methylnaphthalene	41.	U	370.	U				
77-47-4	Hexachlorocyclopentadiene	410.	U	3700.	U				
88-06-2	2,4,6-Trichlorophenol	410.	U	3700.	U				
95-95-4	2,4,5-Trichlorophenol	1000.	U	8900.	U				
91-58-7	2-Chloronaphthalene	410.	U	3700.	U				
88-74-4	2-Nitroaniline	410.	U	3700.	U				
131-11-3	Dimethylphthalate	410.	U	3700.	U				
208-96-8	Acenaphthylene	41.	U	370.	U				
606-20-2	2,6-Dinitrotoluene	410.	U	3700.	U				
99-09-2	3-Nitroaniline	1000.	U	8900.	U				
83-32-9	Acenaphthene	20.	U	180.	U				
51-28-5	2,4-Dinitrophenol	1000.	U	8900.	U				
100-02-7	4-Nitrophenol	1000.	U	8900.	U				
132-64-9	Dibenzofuran	410.	U	3700.					

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-6424-01		041-M-7201-01		041-M-7202-01		041-M-7901-01		041-M-7903-01		041-M-W201-01	
	ORIGINAL ID ----->	041M642401		041M720101		041MZ20201		041M790101		041M790301		041MW20101	
	LAB SAMPLE ID --->	950952-12		950991-12		950991-13		960064-04		960064-05		960055-14	
	ID FROM REPORT -->	041M642401		041M720101		041MZ20201		041M790101		041M790301		041MW20101	
	SAMPLE DATE ----->	11/17/95		11/29/95		11/29/95		01/26/96		01/26/96		01/24/96	
	DATE EXTRACTED -->	11/21/95		12/02/95		12/02/95		02/03/96		02/03/96		01/30/96	
	DATE ANALYZED --->	12/01/95		12/09/95		12/08/95		02/10/96		02/10/96		02/12/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	Z42101	VAL	Z30301	VAL	Z30301	VAL	EM0060	VAL	EM0060	VAL	M52A10	VAL
121-14-2	2,4-Dinitrotoluene	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
84-66-2	Diethylphthalate	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
7005-72-3	4-Chlorophenylphenyl ether	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
86-73-7	Fluorene	20.	U	22.	U	20.	U	43.	U	20.	U	21.	U
100-01-6	4-Nitroaniline	1000.	U	1100.	U	990.	U	2100.	U	1000.	U	1000.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1000.	U	1100.	U	990.	U	2100.	U	1000.	U	1000.	U
86-30-6	N-Nitrosodiphenylamine	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
101-55-3	4-Bromophenyl-phenylether	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
118-74-1	Hexachlorobenzene	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
87-86-5	Pentachlorophenol	1000.	U	1100.	U	990.	U	2100.	U	42.	U	1000.	U
85-01-8	Phenanthrene	42.	U	49.		41.	U	88.	U	42.	U	43.	U
120-12-7	Anthracene	420.	U	41.	J	41.	U	88.	U	420.	U	43.	U
86-74-8	Carbazole	420.	UJ	450.	U	410.	U	880.	U	420.	U	430.	U
84-74-2	Di-n-butylphthalate	420.	U	43.	J	410.	U	880.	U	22.	J	39.	J
206-44-0	Fluoranthene	42.	U	120.		30.	J	130.		42.	U	47.	
129-00-0	Pyrene	42.	U	98.		38.	J	100.		42.	U	82.	
85-68-7	Butylbenzylphthalate	420.	U	450.	U	410.	U	57.	J	22.	J	32.	J
91-94-1	3,3'-Dichlorobenzidine	420.	U	450.	U	410.	U	880.	U	42.	U	430.	U
56-55-3	Benzo(a)anthracene	42.	U	47.		41.	U	53.	J	42.	U	43.	U
218-01-9	Chrysene	42.	U	47.		41.	U	67.	J	420.	U	40.	J
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	420.	U	450.	U	500.	U	800.	U	420.	U	460.	
117-84-0	Di-n-octylphthalate	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
205-99-2	Benzo(b)fluoranthene	42.	U	90.		41.	U	100.		42.	U	28.	J
207-08-9	Benzo(k)fluoranthene	42.	U	27.	J	41.	U	50.	J	42.	U	43.	U
50-32-8	Benzo(a)pyrene	42.	U	43.	J	41.	U	73.	J	42.	U	43.	U
193-39-5	Indeno(1,2,3-cd)pyrene	42.	U	47.		41.	U	56.	J	42.	U	26.	J
53-70-3	Dibenz(a,h)anthracene	42.	U	45.	U	41.	U	88.	U	42.	U	43.	U
191-24-2	Benzo(g,h,i)perylene	42.	U	58.		41.	U	83.	J	42.	U	43.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-6424-01		041-M-7201-01		041-M-7202-01		041-M-7901-01		041-M-7903-01		041-M-W201-01	
	ORIGINAL ID ----->	041M642401		041M720101		041MZ20201		041M790101		041M790301		041MW20101	
	LAB SAMPLE ID --->	950952-12		950991-12		950991-13		960064-04		960064-05		960055-14	
	ID FROM REPORT -->	041M642401		041M720101		041MZ20201		041M790101		041M790301		041MW20101	
	SAMPLE DATE ----->	11/17/95		11/29/95		11/29/95		01/26/96		01/26/96		01/24/96	
	DATE EXTRACTED -->	11/21/95		12/02/95		12/02/95		02/03/96		02/03/96		01/30/96	
	DATE ANALYZED --->	12/01/95		12/09/95		12/08/95		02/10/96		02/10/96		02/12/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	Z42101	VAL	Z30301	VAL	Z30301	VAL	EM0060	VAL	EM0060	VAL	M52A10	VAL
108-95-2	Phenol	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
111-44-4	bis(2-Chloroethyl)ether	42.	U	45.	U	41.	U	88.	U	42.	U	43.	U
95-57-8	2-Chlorophenol	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
541-73-1	1,3-Dichlorobenzene	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
106-46-7	1,4-Dichlorobenzene	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
95-50-1	1,2-Dichlorobenzene	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
95-48-7	2-Methylphenol (o-Cresol)	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420.	UR	450.	U	410.	U	880.	U	420.	U	430.	UJ
106-44-5	4-Methylphenol (p-Cresol)	420.	U	450.	U	410.	U	170.	J	420.	U	430.	U
621-64-7	N-Nitroso-di-n-propylamine	42.	U	45.	U	41.	U	88.	U	42.	U	43.	U
67-72-1	Hexachloroethane	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
98-95-3	Nitrobenzene	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
78-59-1	Isophorone	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
88-75-5	2-Nitrophenol	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
105-67-9	2,4-Dimethylphenol	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
111-91-1	bis(2-Chloroethoxy)methane	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
120-83-2	2,4-Dichlorophenol	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
120-82-1	1,2,4-Trichlorobenzene	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
91-20-3	Naphthalene	42.	U	45.	U	41.	U	88.	U	42.	U	43.	U
106-47-8	4-Chloroaniline	420.	U	450.	U	410.	U	880.	UR	420.	UR	430.	U
87-68-3	Hexachlorobutadiene	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
59-50-7	4-Chloro-3-methylphenol	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
91-57-6	2-Methylnaphthalene	42.	U	45.	U	41.	U	88.	U	42.	U	43.	U
77-47-4	Hexachlorocyclopentadiene	420.	UJ	450.	U	410.	U	880.	U	420.	U	430.	U
88-06-2	2,4,6-Trichlorophenol	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
95-95-4	2,4,5-Trichlorophenol	1000.	U	1100.	U	990.	U	2100.	U	1000.	U	1000.	U
91-58-7	2-Chloronaphthalene	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
88-74-4	2-Nitroaniline	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
131-11-3	Dimethylphthalate	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
208-96-8	Acenaphthylene	42.	U	45.	U	41.	U	88.	U	42.	U	43.	U
606-20-2	2,6-Dinitrotoluene	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U
99-09-2	3-Nitroaniline	1000.	UJ	1100.	U	990.	U	2100.	U	1000.	U	1000.	U
83-32-9	Acenaphthene	20.	U	22.	U	20.	U	43.	U	20.	U	21.	U
51-28-5	2,4-Dinitrophenol	1000.	U	1100.	U	990.	U	2100.	U	1000.	U	1000.	U
100-02-7	4-Nitrophenol	1000.	U	1100.	U	990.	U	2100.	U	1000.	U	1000.	U
132-64-9	Dibenzofuran	420.	U	450.	U	410.	U	880.	U	420.	U	430.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-6418-01		041-M-6419-01		041-M-6420-01		041-M-6421-01		041-M-6422-01		041-M-6423-01	
	ORIGINAL ID ----->	041M641801		041M641901		041M642001		041M642101		041M642201		041M642301	
	LAB SAMPLE ID --->	960087-04		960087-02		950950-17		950950-18		950952-10		950952-11	
	ID FROM REPORT -->	041M641801		041M641901		041M642001		041M642101		041M642201		041M642301	
	SAMPLE DATE ----->	02/06/96		02/01/96		11/16/95		11/16/95		11/17/95		11/17/95	
	DATE EXTRACTED -->	02/11/96		02/11/96		11/21/95		11/21/95		11/21/95		12/17/95	
	DATE ANALYZED --->	02/15/96		02/15/96		12/02/95		12/02/95		12/01/95		12/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	640801	VAL	640801	VAL	5A0101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL
121-14-2	2,4-Dinitrotoluene	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
84-66-2	Diethylphthalate	80.	J	910.	J	420.	U	410.	U	460.	U	420.	U
7005-72-3	4-Chlorophenylphenyl ether	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
86-73-7	Fluorene	21.	U	94.	U	20.	U	20.	U	22.	U	20.	U
100-01-6	4-Nitroaniline	1100.	U	4700.	U	1000.	U	1000.	U	1100.	U	1000.	UJ
534-52-1	2-Methyl-4,6-Dinitrophenol	1100.	U	4700.	U	1000.	U	1000.	U	1100.	U	1000.	U
86-30-6	N-Nitrosodiphenylamine	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
101-55-3	4-Bromophenyl-phenylether	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
118-74-1	Hexachlorobenzene	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
87-86-5	Pentachlorophenol	1100.	U	4700.	U	1000.	U	1000.	U	1100.	U	1000.	U
85-01-8	Phenanthrene	43.	U	210.		42.	U	41.	U	57.		42.	U
120-12-7	Anthracene	43.	U	190.	U	42.	U	41.	U	460.	U	420.	U
86-74-8	Carbazole	430.	U	1900.	U	420.	U	410.	U	460.	UJ	420.	U
84-74-2	Di-n-butylphthalate	430.	U	130.	J	420.	U	410.	U	46.	J	420.	U
206-44-0	Fluoranthene	43.	U	580.		24.	J	41.	U	92.		26.	J
129-00-0	Pyrene	43.	U	550.		22.	J	41.	U	68.		22.	J
85-68-7	Butylbenzylphthalate	430.	U	140.	J	420.	U	410.	U	460.	U	420.	U
91-94-1	3,3'-Dichlorobenzidine	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
56-55-3	Benzo(a)anthracene	43.	U	340.		42.	U	41.	U	38.	J	42.	U
218-01-9	Chrysene	43.	U	390.		42.	U	41.	U	35.	J	42.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	33.	J	530.	J	420.	U	410.	U	460.	U	420.	U
117-84-0	Di-n-octylphthalate	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	UJ
205-99-2	Benzo(b)fluoranthene	43.	U	550.		42.	U	41.	U	39.	J	21.	J
207-08-9	Benzo(k)fluoranthene	43.	U	240.		42.	U	41.	U	46.	U	42.	U
50-32-8	Benzo(a)pyrene	43.	U	360.		42.	U	41.	U	25.	J	42.	U
193-39-5	Indeno(1,2,3-cd)pyrene	43.	U	260.		42.	U	41.	U	46.	U	42.	U
53-70-3	Dibenz(a,h)anthracene	43.	U	190.	U	42.	U	41.	U	46.	U	42.	U
191-24-2	Benzo(g,h,i)perylene	43.	U	260.		42.	U	41.	U	46.	U	42.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-6418-01		041-M-6419-01		041-M-6420-01		041-M-6421-01		041-M-6422-01		041-M-6423-01	
	ORIGINAL ID ----->	041M641801		041M641901		041M642001		041M642101		041M642201		041M642301	
	LAB SAMPLE ID --->	960087-04		960087-02		950950-17		950950-18		950952-10		950952-11	
	ID FROM REPORT -->	041M641801		041M641901		041M642001		041M642101		041M642201		041M642301	
	SAMPLE DATE ----->	02/06/96		02/01/96		11/16/95		11/16/95		11/17/95		11/17/95	
	DATE EXTRACTED -->	02/11/96		02/11/96		11/21/95		11/21/95		11/21/95		12/17/95	
	DATE ANALYZED --->	02/15/96		02/15/96		12/02/95		12/02/95		12/01/95		12/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	640801	VAL	640801	VAL	5A0101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL
108-95-2	Phenol	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
111-44-4	bis(2-Chloroethyl)ether	43.	U	190.	U	42.	U	41.	U	46.	U	42.	U
95-57-8	2-Chlorophenol	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
541-73-1	1,3-Dichlorobenzene	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
106-46-7	1,4-Dichlorobenzene	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
95-50-1	1,2-Dichlorobenzene	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
95-48-7	2-Methylphenol (o-Cresol)	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
106-44-5	4-Methylphenol (p-Cresol)	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
621-64-7	N-Nitroso-di-n-propylamine	43.	U	190.	U	42.	U	41.	U	46.	U	42.	U
67-72-1	Hexachloroethane	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
98-95-3	Nitrobenzene	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
78-59-1	Isophorone	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
88-75-5	2-Nitrophenol	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
105-67-9	2,4-Dimethylphenol	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
111-91-1	bis(2-Chloroethoxy)methane	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
120-83-2	2,4-Dichlorophenol	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
120-82-1	1,2,4-Trichlorobenzene	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
91-20-3	Naphthalene	43.	U	190.	U	42.	U	41.	U	46.	U	42.	U
106-47-8	4-Chloroaniline	430.	U	1900.	U	420.	U	410.	UJ	460.	U	420.	UJ
87-68-3	Hexachlorobutadiene	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
59-50-7	4-Chloro-3-methylphenol	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
91-57-6	2-Methylnaphthalene	43.	U	190.	U	42.	U	41.	U	46.	U	42.	U
77-47-4	Hexachlorocyclopentadiene	430.	U	1900.	U	420.	U	410.	U	460.	UJ	420.	U
88-06-2	2,4,6-Trichlorophenol	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
95-95-4	2,4,5-Trichlorophenol	1100.	U	4700.	U	1000.	U	1000.	U	1100.	U	1000.	U
91-58-7	2-Chloronaphthalene	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
88-74-4	2-Nitroaniline	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
131-11-3	Dimethylphthalate	430.	U	1900.	U	420.	U	410.	U	510.		420.	U
208-96-8	Acenaphthylene	43.	U	190.	U	42.	U	41.	U	46.	U	42.	U
606-20-2	2,6-Dinitrotoluene	430.	U	1900.	U	420.	U	410.	U	460.	U	420.	U
99-09-2	3-Nitroaniline	1100.	U	4700.	U	1000.	U	1000.	U	1100.	UJ	1000.	UJ
83-32-9	Acenaphthene	21.	U	94.	U	20.	U	20.	U	22.	U	20.	U
51-28-5	2,4-Dinitrophenol	1100.	U	4700.	U	1000.	U	1000.	U	1100.	U	1000.	UJ
100-02-7	4-Nitrophenol	1100.	U	4700.	U	1000.	U	1000.	U	1100.	U	1000.	U
132-64-[illegible]	[illegible]enzofuran	430.	U	1900.		420.	U	410.	U	460.	U	420.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-6412-01		041-M-6413-01		041-M-6414-01		041-M-6415-01		041-M-6416-01		041-M-6417-01	
	ORIGINAL ID ----->	041M641201		041M641301		041M641401		041M641501		041M641601		041M641701	
	LAB SAMPLE ID --->	950941-18		950950-13		950950-14		950941-19		95095015		950950-16	
	ID FROM REPORT -->	041M641201		041M641301		041M641401		041M641501		041M641601		041M641701	
	SAMPLE DATE ----->	11/15/95		11/16/95		11/16/95		11/15/95		11/16/95		11/16/95	
	DATE EXTRACTED -->	11/18/95		11/21/95		11/21/95		11/18/95		11/21/95		11/21/95	
	DATE ANALYZED --->	11/27/95		12/02/95		12/02/95		12/05/95		12/02/95		12/02/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06010	VAL	5A0101	VAL	5A0101	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL
121-14-2	2,4-Dinitrotoluene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
84-66-2	Diethylphthalate	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
7005-72-3	4-Chlorophenylphenyl ether	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
86-73-7	Fluorene	20.	U	89.	U	99.	U	21.	U	94.	U	30.	U
100-01-6	4-Nitroaniline	990.	U	4400.	U	5000.	U	1000.	UJ	4700.	U	1500.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	990.	U	4400.	U	5000.	U	1000.	U	4700.	U	1500.	U
86-30-6	N-Nitrosodiphenylamine	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
101-55-3	4-Bromophenyl-phenylether	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
118-74-1	Hexachlorobenzene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
87-86-5	Pentachlorophenol	990.	U	4400.	U	5000.	U	1000.	U	4700.	U	1500.	U
85-01-8	Phenanthrene	41.	U	190.		200.	U	43.	U	140.	J	610.	U
120-12-7	Anthracene	41.	U	180.	U	200.	U	43.	U	190.	U	610.	U
86-74-8	Carbazole	410.	U	1800.	U	2000.	U	430.	UJ	1900.	U	610.	U
84-74-2	Di-n-butylphthalate	410.	U	1800.	U	2000.	U	430.		130.	J	610.	U
206-44-0	Fluoranthene	41.	U	410.		250.		28.	J	330.		83.	
129-00-0	Pyrene	41.	U	370.		190.	J	25.	J	250.		74.	
85-68-7	Butylbenzylphthalate	410.	U	170.	J	2000.	U	430.	U	1900.	U	610.	U
91-94-1	3,3'-Dichlorobenzidine	410.	UJ	1800.	U	2000.	U	430.	U	1900.	U	610.	U
56-55-3	Benzo(a)anthracene	41.	U	180.	J	200.	U	43.	U	120.	J	61.	U
218-01-9	Chrysene	41.	U	160.	J	130.	J	43.	U	160.	J	37.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	410.	U	1900.	U	2000.	U	430.	U	1900.	U	610.	U
117-84-0	Di-n-octylphthalate	410.	UJ	1800.	U	2000.	U	430.	U	1900.	U	610.	U
205-99-2	Benzo(b)fluoranthene	41.	U	270.		180.	J	22.	J	230.		68.	
207-08-9	Benzo(k)fluoranthene	41.	U	120.	J	200.	U	43.	U	190.	U	61.	U
50-32-8	Benzo(a)pyrene	41.	U	190.		120.	J	43.	U	140.	J	45.	J
193-39-5	Indeno(1,2,3-cd)pyrene	41.	U	110.	J	200.	U	43.	U	190.	U	61.	U
53-70-3	Dibenz(a,h)anthracene	41.	U	180.	U	200.	U	43.	U	190.	U	61.	U
191-24-2	Benzo(g,h,i)perylene	41.	U	130.	J	200.	U	43.	U	190.	U	61.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-6412-01		041-M-6413-01		041-M-6414-01		041-M-6415-01		041-M-6416-01		041-M-6417-01	
	ORIGINAL ID ----->	041M641201		041M641301		041M641401		041M641501		041M641601		041M641701	
	LAB SAMPLE ID --->	950941-18		950950-13		950950-14		950941-19		95095015		950950-16	
	ID FROM REPORT -->	041M641201		041M641301		041M641401		041M641501		041M641601		041M641701	
	SAMPLE DATE ----->	11/15/95		11/16/95		11/16/95		11/15/95		11/16/95		11/16/95	
	DATE EXTRACTED -->	11/18/95		11/21/95		11/21/95		11/18/95		11/21/95		11/21/95	
	DATE ANALYZED --->	11/27/95		12/02/95		12/02/95		12/05/95		12/02/95		12/02/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06010	VAL	5A0101	VAL	5A0101	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL
108-95-2	Phenol	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
111-44-4	bis(2-Chloroethyl)ether	41.	U	180.	U	200.	U	43.	U	190.	U	61.	U
95-57-8	2-Chlorophenol	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
541-73-1	1,3-Dichlorobenzene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
106-46-7	1,4-Dichlorobenzene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
95-50-1	1,2-Dichlorobenzene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
95-48-7	2-Methylphenol (o-Cresol)	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410.	U	1800.	U	2000.	U	430.	UR	1900.	U	610.	U
106-44-5	4-Methylphenol (p-Cresol)	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
621-64-7	N-Nitroso-di-n-propylamine	41.	U	180.	U	200.	U	43.	U	190.	U	61.	U
67-72-1	Hexachloroethane	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
98-95-3	Nitrobenzene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
78-59-1	Isophorone	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
88-75-5	2-Nitrophenol	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
105-67-9	2,4-Dimethylphenol	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
111-91-1	bis(2-Chloroethoxy)methane	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
120-83-2	2,4-Dichlorophenol	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
120-82-1	1,2,4-Trichlorobenzene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
91-20-3	Naphthalene	41.	U	180.	U	200.	U	43.	U	190.	U	61.	U
106-47-8	4-Chloroaniline	410.	U	1800.	U	2000.	UJ	430.	UJ	1900.	UJ	610.	U
87-68-3	Hexachlorobutadiene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
59-50-7	4-Chloro-3-methylphenol	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
91-57-6	2-Methylnaphthalene	41.	U	180.	U	200.	U	43.	U	190.	U	61.	U
77-47-4	Hexachlorocyclopentadiene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
88-06-2	2,4,6-Trichlorophenol	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
95-95-4	2,4,5-Trichlorophenol	990.	U	4400.	U	5000.	U	1000.	U	4700.	U	1500.	U
91-58-7	2-Chloronaphthalene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
88-74-4	2-Nitroaniline	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
131-11-3	Dimethylphthalate	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
208-96-8	Acenaphthylene	41.	U	1800.	U	200.	U	43.	U	190.	U	61.	U
606-20-2	2,6-Dinitrotoluene	410.	U	1800.	U	2000.	U	430.	U	1900.	U	610.	U
99-09-2	3-Nitroaniline	990.	U	4400.	U	5000.	U	1000.	UR	4700.	U	1500.	U
83-32-9	Acenaphthene	20.	U	89.	U	99.	U	21.	U	94.	U	30.	U
51-28-5	2,4-Dinitrophenol	990.	U	4400.	U	5000.	U	1000.	U	4700.	U	1500.	U
100-02-7	4-Nitrophenol	990.	U	4400.	U	5000.	U	1000.	U	4700.	U	1500.	U
132-64-9	Dibenzofuran	410.	U	1800.		2000.	U	430.	U	1900.	U	610.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-6406-01		041-M-6407-01		041-M-6408-01		041-M-6409-01		041-M-6410-01		041-M-6411-01	
	ORIGINAL ID ----->	041M640601		041M640701		041M640801		041M640901		041M641001		041M641101	
	LAB SAMPLE ID --->	950941-15		950941-16		960087-01		950941-17		950950-11		950950-12	
	ID FROM REPORT -->	041M640601		041M640701		041M640801		041M640901		041M641001		041M641101	
	SAMPLE DATE ----->	11/15/95		11/15/95		02/01/96		11/15/95		11/16/95		11/16/95	
	DATE EXTRACTED -->	11/18/95		11/18/95		02/11/96		11/18/95		11/21/95		11/21/95	
	DATE ANALYZED --->	12/08/95		11/29/95		02/15/96		11/27/95		12/02/95		12/02/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06010	VAL	M06010	VAL	640801	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL
121-14-2	2,4-Dinitrotoluene	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
84-66-2	Diethylphthalate	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
7005-72-3	4-Chlorophenylphenyl ether	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
86-73-7	Fluorene	1300.	U	21.	U	25.	U	20.	U	94.	U	57.	U
100-01-6	4-Nitroaniline	66000.	UJ	1100.	U	1200.	U	990.	U	4700.	U	2800.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	66000.	U	1100.	U	1200.	U	990.	U	4700.	U	2800.	U
86-30-6	N-Nitrosodiphenylamine	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
101-55-3	4-Bromophenyl-phenylether	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
118-74-1	Hexachlorobenzene	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
87-86-5	Pentachlorophenol	66000.	U	1100.	U	1200.	U	990.	U	4700.	U	2800.	U
85-01-8	Phenanthrene	2700.	U	42.	J	59.		41.	U	300.		100.	J
120-12-7	Anthracene	2700.	U	44.	U	51.	U	41.	U	190.	U	120.	U
86-74-8	Carbazole	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
84-74-2	Di-n-butylphthalate	27000.	U	42.	J	28.	J	410.	U	160.	J	1200.	U
206-44-0	Fluoranthene	1700.	J	78.		120.		41.	U	720.		220.	
129-00-0	Pyrene	1500.	J	50.		120.	J	41.	U	590.		200.	
85-68-7	Butylbenzylphthalate	27000.	U	440.	U	28.	J	29.	J	120.	J	90.	J
91-94-1	3,3'-Dichlorobenzidine	27000.	UJ	440.	U	510.	U	410.	UJ	1900.	U	1200.	U
56-55-3	Benzo(a)anthracene	2700.	U	27.	J	51.		41.	U	240.		130.	
218-01-9	Chrysene	2700.	U	23.	J	61.		41.	U	320.		96.	J
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	27000.	U	440.	U	220.	J	410.	U	3500.	U	2500.	U
117-84-0	Di-n-octylphthalate	27000.	U	440.	U	510.	UJ	410.	UJ	1900.	U	1200.	U
205-99-2	Benzo(b)fluoranthene	2700.	U	49.		72.		41.	U	480.		200.	
207-08-9	Benzo(k)fluoranthene	2700.	U	44.	U	35.	J	41.	U	190.	J	120.	U
50-32-8	Benzo(a)pyrene	2700.	U	40.	J	51.		41.	U	290.		150.	
193-39-5	Indeno(1,2,3-cd)pyrene	2700.	U	44.	U	39.	J	41.	U	150.	J	80.	J
53-70-3	Dibenz(a,h)anthracene	2700.	U	44.	U	51.	U	41.	U	190.	U	120.	U
191-24-2	Benzo(g,h,i)perylene	2700.	U	29.	J	43.	J	41.	U	150.	J	94.	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-6406-01		041-M-6407-01		041-M-6408-01		041-M-6409-01		041-M-6410-01		041-M-6411-01	
	ORIGINAL ID ----->	041M640601		041M640701		041M640801		041M640901		041M641001		041M641101	
	LAB SAMPLE ID --->	950941-15		950941-16		960087-01		950941-17		950950-11		950950-12	
	ID FROM REPORT -->	041M640601		041M640701		041M640801		041M640901		041M641001		041M641101	
	SAMPLE DATE ----->	11/15/95		11/15/95		02/01/96		11/15/95		11/16/95		11/16/95	
	DATE EXTRACTED -->	11/18/95		11/18/95		02/11/96		11/18/95		11/21/95		11/21/95	
	DATE ANALYZED --->	12/08/95		11/29/95		02/15/96		11/27/95		12/02/95		12/02/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06010	VAL	M06010	VAL	640801	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL
108-95-2	Phenol	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
111-44-4	bis(2-Chloroethyl)ether	2700.	U	44.	U	51.	U	41.	U	190.	U	120.	U
95-57-8	2-Chlorophenol	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
541-73-1	1,3-Dichlorobenzene	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
106-46-7	1,4-Dichlorobenzene	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
95-50-1	1,2-Dichlorobenzene	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
95-48-7	2-Methylphenol (o-Cresol)	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	27000.	UR	440.	U	510.	U	410.	U	1900.	U	1200.	U
106-44-5	4-Methylphenol (p-Cresol)	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
621-64-7	N-Nitroso-di-n-propylamine	2700.	U	44.	U	51.	U	41.	U	190.	U	120.	U
67-72-1	Hexachloroethane	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
98-95-3	Nitrobenzene	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
78-59-1	Isophorone	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
88-75-5	2-Nitrophenol	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
105-67-9	2,4-Dimethylphenol	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
111-91-1	bis(2-Chloroethoxy)methane	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
120-83-2	2,4-Dichlorophenol	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
120-82-1	1,2,4-Trichlorobenzene	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
91-20-3	Naphthalene	2700.	U	44.	U	51.	U	41.	U	190.	U	120.	U
106-47-8	4-Chloroaniline	27000.	U	440.	U	510.	U	410.	U	1900.	UJ	1200.	U
87-68-3	Hexachlorobutadiene	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
59-50-7	4-Chloro-3-methylphenol	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
91-57-6	2-Methylnaphthalene	2700.	U	44.	U	51.	U	41.	U	190.	U	120.	U
77-47-4	Hexachlorocyclopentadiene	27000.	UJ	440.	U	510.	U	410.	U	1900.	U	1200.	U
88-06-2	2,4,6-Trichlorophenol	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
95-95-4	2,4,5-Trichlorophenol	66000.	U	1100.	U	1200.	U	990.	U	4700.	U	2800.	U
91-58-7	2-Chloronaphthalene	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
88-74-4	2-Nitroaniline	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
131-11-3	Dimethylphthalate	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
208-96-8	Acenaphthylene	2700.	U	44.	U	51.	U	41.	U	190.	U	120.	U
606-20-2	2,6-Dinitrotoluene	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U
99-09-2	3-Nitroaniline	66000.	UR	1100.	U	1200.	U	990.	U	4700.	U	2800.	U
83-32-9	Acenaphthene	1300.	U	21.	U	25.	U	20.	U	94.	U	57.	U
51-28-5	2,4-Dinitrophenol	66000.	UJ	1100.	U	1200.	U	990.	U	4700.	U	2800.	U
100-02-7	4-Nitrophenol	66000.	U	1100.	U	1200.	U	990.	U	4700.	U	2800.	U
132-64-9	Dibenzofuran	27000.	U	440.	U	510.	U	410.	U	1900.	U	1200.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-63B4-01		041-M-6401-01		041-M-6402-01		041-M-6403-01		041-M-6404-01		041-M-6405-01	
	ORIGINAL ID ----->	041M63B401		041M640101		041M640201		041M640301		041M640401		041M640501	
	LAB SAMPLE ID --->	960055-11		960087-05		950941-12		950941-13		960087-06		950941-14	
	ID FROM REPORT -->	041M63B401		041M640101		041M640201		041M640301		041M640401		041M640501	
	SAMPLE DATE ----->	01/24/96		02/09/96		11/15/95		11/15/95		02/09/96		11/15/95	
	DATE EXTRACTED -->	01/30/96		02/12/96		11/18/95		11/18/95		02/12/96		11/18/95	
	DATE ANALYZED --->	02/10/96		02/19/96		12/19/95		11/29/95		02/19/96		11/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M52A10	VAL	640801	VAL	M06010	VAL	M06010	VAL	640801	VAL	M06010	VAL
121-14-2	2,4-Dinitrotoluene	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
84-66-2	Diethylphthalate	440.	U	2000.		26000.	U	2700.	U	3700.	U	1400.	U
7005-72-3	4-Chlorophenylphenyl ether	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
86-73-7	Fluorene	47.		160.		1300.	U	130.	U	180.	U	210.	
100-01-6	4-Nitroaniline	1100.	U	1100.	U	63000.	U	6600.	U	8900.	U	3300.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1100.	U	1100.	U	63000.	U	6600.	U	8900.	U	3300.	U
86-30-6	N-Nitrosodiphenylamine	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
101-55-3	4-Bromophenyl-phenylether	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
118-74-1	Hexachlorobenzene	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
87-86-5	Pentachlorophenol	1100.	U	1100.	U	63000.	U	6600.	U	8900.	U	3300.	U
85-01-8	Phenanthrene	120.		950.		2800.		230.	J	370.	U	1400.	
120-12-7	Anthracene	44.		230.		2600.	U	270.	U	370.	U	330.	
86-74-8	Carbazole	440.	U	230.	J	26000.	U	2700.	U	3700.	U	400.	J
84-74-2	Di-n-butylphthalate	27.	J	450.	U	26000.	U	320.	J	3700.	U	120.	J
206-44-0	Fluoranthene	59.		1200.		5700.		770.		230.	J	2300.	
129-00-0	Pyrene	41.	J	1100.	J	4600.		660.		200.	J	2100.	
85-68-7	Butylbenzylphthalate	29.	J	450.	U	26000.	U	280.	J	3700.	U	280.	J
91-94-1	3,3'-Dichlorobenzidine	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
56-55-3	Benzo(a)anthracene	44.	U	590.		1400.	J	340.		370.	U	840.	
218-01-9	Chrysene	44.	U	580.		1500.	J	500.		370.	U	830.	
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	33.	J	450.	U	26000.	U	2700.	U	3700.	U	2600.	U
117-84-0	Di-n-octylphthalate	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
205-99-2	Benzo(b)fluoranthene	44.	U	730.		2600.		1100.		370.	U	1900.	
207-08-9	Benzo(k)fluoranthene	44.	U	190.		2600.	U	250.	J	370.	U	210.	
50-32-8	Benzo(a)pyrene	44.	U	470.		2600.	U	580.		370.	U	910.	
193-39-5	Indeno(1,2,3-cd)pyrene	44.	U	260.		2600.	U	360.		370.	U	600.	
53-70-3	Dibenz(a,h)anthracene	44.	U	25.	J	2600.	U	270.	U	370.	U	140.	U
191-24-2	Benzo(g,h,i)perylene	44.	U	270.		2600.	U	300.		370.	U	590.	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-63B4-01		041-M-6401-01		041-M-6402-01		041-M-6403-01		041-M-6404-01		041-M-6405-01	
	ORIGINAL ID ----->	041M63B401		041M640101		041M640201		041M640301		041M640401		041M640501	
	LAB SAMPLE ID --->	960055-11		960087-05		950941-12		950941-13		960087-06		950941-14	
	ID FROM REPORT -->	041M63B401		041M640101		041M640201		041M640301		041M640401		041M640501	
	SAMPLE DATE ----->	01/24/96		02/09/96		11/15/95		11/15/95		02/09/96		11/15/95	
	DATE EXTRACTED -->	01/30/96		02/12/96		11/18/95		11/18/95		02/12/96		11/18/95	
	DATE ANALYZED --->	02/10/96		02/19/96		12/19/95		11/29/95		02/19/96		11/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M52A10	VAL	640801	VAL	M06010	VAL	M06010	VAL	640801	VAL	M06010	VAL
108-95-2	Phenol	440.	U	450.	U	26000.	U	2700.	U	220.	J	1400.	U
111-44-4	bis(2-Chloroethyl)ether	44.	U	45.	U	2600.	U	270.	U	370.	U	140.	U
95-57-8	2-Chlorophenol	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
541-73-1	1,3-Dichlorobenzene	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
106-46-7	1,4-Dichlorobenzene	440.	U	450.	U	26000.	U	2700.	U	260.	J	70.	J
95-50-1	1,2-Dichlorobenzene	440.	U	450.	U	26000.	U	2700.	U	190.	J	1400.	U
95-48-7	2-Methylphenol (o-Cresol)	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	440.	U	450.	UJ	26000.	U	2700.	U	3700.	UJ	1400.	U
106-44-5	4-Methylphenol (p-Cresol)	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
621-64-7	N-Nitroso-di-n-propylamine	44.	U	45.	U	2600.	U	270.	U	370.	U	140.	U
67-72-1	Hexachloroethane	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
98-95-3	Nitrobenzene	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
78-59-1	Isophorone	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
88-75-5	2-Nitrophenol	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
105-67-9	2,4-Dimethylphenol	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
111-91-1	bis(2-Chloroethoxy)methane	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
120-83-2	2,4-Dichlorophenol	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
120-82-1	1,2,4-Trichlorobenzene	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
91-20-3	Naphthalene	23.	J	56.		2600.	U	270.	U	370.	U	71.	J
106-47-8	4-Chloroaniline	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
87-68-3	Hexachlorobutadiene	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
59-50-7	4-Chloro-3-methylphenol	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
91-57-6	2-Methylnaphthalene	24.	J	30.	J	2600.	U	270.	U	370.	U	140.	U
77-47-4	Hexachlorocyclopentadiene	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
88-06-2	2,4,6-Trichlorophenol	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
95-95-4	2,4,5-Trichlorophenol	1100.	U	1100.	U	63000.	U	6600.	U	8900.	U	3300.	U
91-58-7	2-Chloronaphthalene	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
88-74-4	2-Nitroaniline	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
131-11-3	Dimethylphthalate	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
208-96-8	Acenaphthylene	44.	U	45.	U	2600.	U	270.	U	370.	U	90.	J
606-20-2	2,6-Dinitrotoluene	440.	U	450.	U	26000.	U	2700.	U	3700.	U	1400.	U
99-09-2	3-Nitroaniline	1100.	U	1100.	U	63000.	U	6600.	U	8900.	U	3300.	U
83-32-9	Acenaphthene	39.		120.		1300.	U	130.	U	180.	U	230.	
51-28-5	2,4-Dinitrophenol	1100.	U	1100.	U	63000.	U	6600.	U	8900.	U	3300.	U
100-02-7	4-Nitrophenol	1100.	U	1100.	U	63000.	U	6600.	U	8900.	U	3300.	U
132-64-9	Dibenzofuran	34.	J	72.		26000.	U	2700.	U	3700.	U	85.	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-63A3-01		041-M-63A4-01		041-M-63A5-01		041-M-63B1-01		041-M-63B2-01		041-M-63B3-01	
	ORIGINAL ID ----->	041M63A301		041M63A401		041M63A501		041M63B101		041M63B201		041M63B301	
	LAB SAMPLE ID --->	960025-20		960039-01		960039-02		960039-03		960039-04		960039-05	
	ID FROM REPORT -->	041M63A301		041M63A401		041M63A501		041M63B101		041M63B201		041M63B301	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/18/96		01/18/96		01/18/96		01/18/96	
	DATE EXTRACTED -->	01/20/96		01/22/96		01/22/96		01/22/96		01/22/96		01/22/96	
	DATE ANALYZED --->	01/26/96		01/30/96		01/31/96		01/30/96		01/31/96		01/31/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM005	VAL	63A401	VAL	63A401	VAL	63A401	VAL	63A401	VAL	63A401	VAL
121-14-2	2,4-Dinitrotoluene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
84-66-2	Diethylphthalate	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
7005-72-3	4-Chlorophenylphenyl ether	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
86-73-7	Fluorene	720.	U	25.	U	20.	U	34.	U	22.	U	21.	U
100-01-6	4-Nitroaniline	36000.	U	1200.	U	980.	U	1700.	U	1100.	U	1000.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	36000.	U	1200.	U	980.	U	1700.	U	1100.	U	1000.	U
86-30-6	N-Nitrosodiphenylamine	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
101-55-3	4-Bromophenyl-phenylether	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
118-74-1	Hexachlorobenzene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
87-86-5	Pentachlorophenol	36000.	U	1200.	U	980.	U	1700.	U	1100.	U	1000.	U
85-01-8	Phenanthrene	1500.	U	47.	J	40.	U	71.	U	46.	U	42.	U
120-12-7	Anthracene	1500.	U	51.	U	40.	U	71.	U	46.	U	42.	U
86-74-8	Carbazole	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
84-74-2	Di-n-butylphthalate	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
206-44-0	Fluoranthene	1500.	U	130.		40.	U	41.	J	86.		42.	U
129-00-0	Pyrene	1500.	U	120.		40.	U	41.	J	65.		42.	U
85-68-7	Butylbenzylphthalate	1400.	J	61.	J	400.	U	710.	U	460.	U	420.	U
91-94-1	3,3'-Dichlorobenzidine	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
56-55-3	Benzo(a)anthracene	1500.	U	63.		40.	U	71.	U	46.	U	42.	U
218-01-9	Chrysene	1500.	U	74.		40.	U	71.	U	46.	U	42.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	15000.	U	130.	J	99.	J	97.	J	42.	J	420.	U
117-84-0	Di-n-octylphthalate	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
205-99-2	Benzo(b)fluoranthene	1500.	U	120.		40.	U	56.	J	46.	U	42.	U
207-08-9	Benzo(k)fluoranthene	1500.	U	37.	J	40.	U	71.	U	46.	U	42.	U
50-32-8	Benzo(a)pyrene	1500.	U	72.		40.	U	39.	J	46.	U	42.	U
193-39-5	Indeno(1,2,3-cd)pyrene	1500.	U	47.	J	40.	U	71.	U	46.	U	42.	U
53-70-3	Dibenz(a,h)anthracene	1500.	U	51.	U	40.	U	71.	U	46.	U	42.	U
191-24-2	Benzo(g,h,i)perylene	1500.	U	48.	J	40.	U	71.	U	46.	U	42.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-63A3-01		041-M-63A4-01		041-M-63A5-01		041-M-63B1-01		041-M-63B2-01		041-M-63B3-01	
	ORIGINAL ID ----->	041M63A301		041M63A401		041M63A501		041M63B101		041M63B201		041M63B301	
	LAB SAMPLE ID --->	960025-20		960039-01		960039-02		960039-03		960039-04		960039-05	
	ID FROM REPORT -->	041M63A301		041M63A401		041M63A501		041M63B101		041M63B201		041M63B301	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/18/96		01/18/96		01/18/96		01/18/96	
	DATE EXTRACTED -->	01/20/96		01/22/96		01/22/96		01/22/96		01/22/96		01/22/96	
	DATE ANALYZED --->	01/26/96		01/30/96		01/31/96		01/30/96		01/31/96		01/31/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM005	VAL	63A401	VAL	63A401	VAL	63A401	VAL	63A401	VAL	63A401	VAL
108-95-2	Phenol	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
111-44-4	bis(2-Chloroethyl)ether	1500.	U	51.	U	40.	U	71.	U	46.	U	42.	U
95-57-8	2-Chlorophenol	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
541-73-1	1,3-Dichlorobenzene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
106-46-7	1,4-Dichlorobenzene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
95-50-1	1,2-Dichlorobenzene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
95-48-7	2-Methylphenol (o-Cresol)	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
106-44-5	4-Methylphenol (p-Cresol)	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
621-64-7	N-Nitroso-di-n-propylamine	1500.	U	51.	U	40.	U	71.	U	46.	U	42.	U
67-72-1	Hexachloroethane	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
98-95-3	Nitrobenzene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
78-59-1	Isophorone	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
88-75-5	2-Nitrophenol	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
105-67-9	2,4-Dimethylphenol	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
111-91-1	bis(2-Chloroethoxy)methane	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
120-83-2	2,4-Dichlorophenol	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
120-82-1	1,2,4-Trichlorobenzene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
91-20-3	Naphthalene	1500.	U	51.	U	40.	U	71.	U	46.	U	42.	U
106-47-8	4-Chloroaniline	15000.	UJ	510.	U	400.	U	710.	U	460.	U	420.	U
87-68-3	Hexachlorobutadiene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
59-50-7	4-Chloro-3-methylphenol	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
91-57-6	2-Methylnaphthalene	1500.	U	51.	U	40.	U	71.	U	46.	U	42.	U
77-47-4	Hexachlorocyclopentadiene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
88-06-2	2,4,6-Trichlorophenol	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
95-95-4	2,4,5-Trichlorophenol	36000.	U	1200.	U	980.	U	1700.	U	1100.	U	1000.	U
91-58-7	2-Chloronaphthalene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
88-74-4	2-Nitroaniline	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
131-11-3	Dimethylphthalate	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
208-96-8	Acenaphthylene	1500.	U	51.	U	40.	U	71.	U	46.	U	42.	U
606-20-2	2,6-Dinitrotoluene	15000.	U	510.	U	400.	U	710.	U	460.	U	420.	U
99-09-2	3-Nitroaniline	36000.	U	1200.	U	980.	U	1700.	U	1100.	U	1000.	U
83-32-9	Acenaphthene	720.	U	25.	U	20.	U	34.	U	22.	U	21.	U
51-28-5	2,4-Dinitrophenol	36000.	U	1200.	U	980.	U	1700.	U	1100.	U	1000.	U
100-02-7	4-Nitrophenol	36000.	U	1200.	U	980.	U	1700.	U	1100.	U	1000.	U
132-64-9	enzofuran	15000.	U	510.		400.	U	710.	U	460.	U	420.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-5A06-01		041-M-5A07-01		041-M-5B01-01		041-M-5B02-01		041-M-63A1-01		041-M-63A2-01	
	ORIGINAL ID ----->	041M5A0601		041M5A0701		041M5B0101		041M5B0201		041M63A101		041M63A201	
	LAB SAMPLE ID --->	950952-07		950950-05		950952-08		950952-09		960025-18		960025-19	
	ID FROM REPORT -->	041M5A0601		041M5A0701		041M5B0101		041M5B0201		041M63A101		041M63A201	
	SAMPLE DATE ----->	11/17/95		11/16/95		11/17/95		11/17/95		01/18/96		01/18/96	
	DATE EXTRACTED -->	11/21/95		11/21/95		11/21/95		11/21/95		01/20/96		01/20/96	
	DATE ANALYZED --->	11/30/95		12/08/95		12/01/95		12/01/95		01/24/96		01/24/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	Z42101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL	EM005	VAL	EM005	VAL
121 14 2	2,4 Dinitrotoluene	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
84 66 2	Diethylphthalate	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
7005 72 3	4 Chlorophenylphenyl ether	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
86 73 7	Fluorene	22.	U	19.	U	20.	U	69.	U	19.	U	20.	U
100 01 6	4 Nitroaniline	1100.	UJ	960.	UJ	1000.	U	3400.	U	950.	U	1000.	U
534 52 1	2 Methyl 4,6 Dinitrophenol	1100.	U	960.	U	1000.	U	3400.	U	950.	UJ	1000.	UJ
86 30 6	N Nitrosodiphenylamine	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
101 55 3	4 Bromophenyl phenylether	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
118 74 1	Hexachlorobenzene	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
87 86 5	Pentachlorophenol	1100.	U	960.	U	1000.	U	3400.	U	950.	U	1000.	U
85 01 8	Phenanthrene	45.	U	230.		41.	U	140.	U	39.	U	42.	U
120-12-7	Anthracene	450.	U	44.		410.	U	1400.	U	39.	U	42.	U
86-74-8	Carbazole	450.	U	48.	J	410.	UJ	1400.	UJ	390.	U	420.	U
84-74-2	Di-n-butylphthalate	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
206-44-0	Fluoranthene	45.	U	750.		41.	U	110.	J	39.	U	42.	U
129-00-0	Pyrene	45.	U	620.		41.	U	88.	J	39.	U	24.	J
85-68-7	Butylbenzylphthalate	450.	U	400.	UJ	38.	J	80.	J	22.	J	420.	U
91-94-1	3,3'-Dichlorobenzidine	450.	UJ	400.	U	410.	U	1400.	U	390.	U	420.	U
56-55-3	Benzo(a)anthracene	45.	U	240.		41.	U	140.	U	39.	U	42.	U
218-01-9	Chrysene	45.	U	390.		41.	U	140.	U	39.	U	42.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	690.		1300.		410.	U	1400.	U	380.	U	420.	U
117-84-0	Di-n-octylphthalate	450.	U	22.	J	410.	U	1400.	U	390.	U	420.	U
205-99-2	Benzo(b)fluoranthene	45.	U	360.		41.	U	83.	J	39.	U	42.	U
207-08-9	Benzo(k)fluoranthene	45.	U	170.		41.	U	140.	U	39.	U	42.	U
50-32-8	Benzo(a)pyrene	45.	U	240.		41.	U	140.	U	39.	U	42.	U
193-39-5	Indeno(1,2,3-cd)pyrene	45.	U	190.		41.	U	140.	U	39.	U	42.	U
53-70-3	Dibenz(a,h)anthracene	45.	U	40.	U	41.	U	140.	U	39.	U	42.	U
191-24-2	Benzo(g,h,i)perylene	45.	U	190.		41.	U	140.	U	39.	U	42.	U

*** Validation Complete ***

SVOA															
	SAMPLE ID ------->	041-M-5A06-01		041-M-5A07-01		041-M-5B01-01		041-M-5B02-01		041-M-63A1-01		041-M-63A2-01	
	ORIGINAL ID ----->	041M5A0601		041M5A0701		041M5B0101		041M5B0201		041M63A101		041M63A201	
	LAB SAMPLE ID --->	950952-07		950950-05		950952-08		950952-09		960025-18		960025-19	
	ID FROM REPORT -->	041M5A0601		041M5A0701		041M5B0101		041M5B0201		041M63A101		041M63A201	
	SAMPLE DATE ----->	11/17/95		11/16/95		11/17/95		11/17/95		01/18/96		01/18/96	
	DATE EXTRACTED -->	11/21/95		11/21/95		11/21/95		11/21/95		01/20/96		01/20/96	
	DATE ANALYZED --->	11/30/95		12/08/95		12/01/95		12/01/95		01/24/96		01/24/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	Z42101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL	EM005	VAL	EM005	VAL
108-95-2	Phenol	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
111-44-4	bis(2-Chloroethyl)ether	45.	U	40.	U	41.	U	140.	U	39.	U	42.	U
95-57-8	2-Chlorophenol	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
541-73-1	1,3-Dichlorobenzene	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
106-46-7	1,4-Dichlorobenzene	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
95-50-1	1,2-Dichlorobenzene	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
95-48-7	2-Methylphenol (o-Cresol)	450.	U	400.	U	410.	U	200.	J	390.	U	420.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	450.	UJ	400.	UR	410.	U	1400.	U	390.	U	420.	U
106-44-5	4-Methylphenol (p-Cresol)	450.	U	400.	U	410.	U	150.	J	390.	U	420.	U
621-64-7	N-Nitroso-di-n-propylamine	45.	U	40.	U	41.	U	140.	U	39.	U	42.	U
67-72-1	Hexachloroethane	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
98-95-3	Nitrobenzene	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
78-59-1	Isophorone	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
88-75-5	2-Nitrophenol	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
105-67-9	2,4-Dimethylphenol	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
111-91-1	bis(2-Chloroethoxy)methane	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
120-83-2	2,4-Dichlorophenol	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
120-82-1	1,2,4-Trichlorobenzene	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
91-20-3	Naphthalene	45.	U	40.	UJ	41.	U	140.	U	39.	U	42.	U
106-47-8	4-Chloroaniline	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
87-68-3	Hexachlorobutadiene	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
59-50-7	4-Chloro-3-methylphenol	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
91-57-6	2-Methylnaphthalene	45.	U	40.	U	41.	U	140.	U	39.	U	42.	U
77-47-4	Hexachlorocyclopentadiene	450.	UJ	400.	U	410.	UJ	1400.	UJ	390.	U	420.	U
88-06-2	2,4,6-Trichlorophenol	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
95-95-4	2,4,5-Trichlorophenol	1100.	U	960.	U	1000.	U	3400.	U	950.	U	1000.	U
91-58-7	2-Chloronaphthalene	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
88-74-4	2-Nitroaniline	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
131-11-3	Dimethylphthalate	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
208-96-8	Acenaphthylene	45.	U	40.	U	41.	U	140.	U	39.	U	42.	U
606-20-2	2,6-Dinitrotoluene	450.	U	400.	U	410.	U	1400.	U	390.	U	420.	U
99-09-2	3-Nitroaniline	1100.	UJ	960.	UJ	1000.	UJ	3400.	UJ	950.	U	1000.	U
83-32-9	Acenaphthene	22.	U	19.	U	20.	U	69.	U	19.	U	20.	U
51-28-5	2,4-Dinitrophenol	1100.	UJ	960.	U	1000.	U	3400.	U	950.	UJ	1000.	UJ
100-02-7	4-Nitrophenol	1100.	U	960.	U	1000.	U	3400.	U	950.	U	1000.	U
132-64-9	enzofuran	450.	U	400.		410.	U	1400.	U	390.	U	420.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-5801-01		041-M-5A01-01		041-M-5A02-01		041-M-5A03-01		041-M-5A04-01		041-M-5A05-01	
	ORIGINAL ID ----->	041M580101		041M5A0101		041M5A0201		041M5A0301		041M5A0401		041M5A0501	
	LAB SAMPLE ID --->	960055-10		950950-01		950950-02		950950-03		950950-04		950979-03	
	ID FROM REPORT -->	041M580101		041M5A0101		041M5A0201		041M5A0301		041M5A0401		041M5A0501	
	SAMPLE DATE ----->	01/24/96		11/16/95		11/16/95		11/16/95		11/16/95		11/27/95	
	DATE EXTRACTED -->	01/30/96		11/21/95		11/21/95		11/21/95		11/21/95		11/30/95	
	DATE ANALYZED --->	02/10/96		12/02/95		12/02/95		12/02/95		12/02/95		12/05/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M52A10	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL	041M10	VAL
121-14-2	2,4-Dinitrotoluene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
84-66-2	Diethylphthalate	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
7005-72-3	4-Chlorophenylphenyl ether	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
86-73-7	Fluorene	120.		57.	U	31.	U	59.	U	69.	U	75.	U
100-01-6	4-Nitroaniline	1100.	U	2800.	U	1500.	UJ	2900.	U	3500.	U	3800.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1100.	U	2800.	U	1500.	U	2900.	U	3500.	U	3800.	U
86-30-6	N-Nitrosodiphenylamine	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
101-55-3	4-Bromophenyl-phenylether	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
118-74-1	Hexachlorobenzene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
87-86-5	Pentachlorophenol	1100.	U	2800.	U	1500.	U	2900.	U	3500.	U	3800.	U
85-01-8	Phenanthrene	250.		110.	J	63.	U	120.	U	140.	U	240.	
120-12-7	Anthracene	84.		120.	U	63.	U	120.	U	140.	U	160.	U
86-74-8	Carbazole	40.	J	1200.	U	630.	U	1200.	U	1400.	U	96.	J
84-74-2	Di-n-butylphthalate	42.	J	1200.	U	630.	U	1200.	U	1400.	U	100.	J
206-44-0	Fluoranthene	110.		280.		71.		120.	U	88.	J	1100.	
129-00-0	Pyrene	70.		220.		71.		120.	U	83.	J	730.	
85-68-7	Butylbenzylphthalate	25.	J	1200.	U	630.	U	1200.	U	1400.	U	200.	J
91-94-1	3,3'-Dichlorobenzidine	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
56-55-3	Benzo(a)anthracene	46.	U	120.		63.	U	120.	U	140.	U	320.	
218-01-9	Chrysene	46.	U	180.		63.	U	120.	U	140.	U	510.	
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	34.	J	1200.	U	630.	U	1200.	U	1400.	U	1500.	J
117-84-0	Di-n-octylphthalate	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	UJ
205-99-2	Benzo(b)fluoranthene	46.	U	220.		57.	J	120.	U	140.	U	160.	U
207-08-9	Benzo(k)fluoranthene	46.	U	88.	J	63.	U	120.	U	73.	J	160.	U
50-32-8	Benzo(a)pyrene	46.	U	140.		37.	J	120.	U	140.	U	240.	
193-39-5	Indeno(1,2,3-cd)pyrene	46.	U	110.	J	63.	U	120.	U	140.	U	310.	
53-70-3	Dibenz(a,h)anthracene	46.	U	120.	U	63.	U	120.	U	140.	U	160.	U
191-24-2	Benzo(g,h,i)perylene	46.	U	120.		63.	U	120.	U	140.	U	280.	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-5801-01		041-M-5A01-01		041-M-5A02-01		041-M-5A03-01		041-M-5A04-01		041-M-5A05-01	
	ORIGINAL ID ----->	041M580101		041M5A0101		041M5A0201		041M5A0301		041M5A0401		041M5A0501	
	LAB SAMPLE ID --->	960055-10		950950-01		950950-02		950950-03		950950-04		950979-03	
	ID FROM REPORT -->	041M580101		041M5A0101		041M5A0201		041M5A0301		041M5A0401		041M5A0501	
	SAMPLE DATE ----->	01/24/96		11/16/95		11/16/95		11/16/95		11/16/95		11/27/95	
	DATE EXTRACTED -->	01/30/96		11/21/95		11/21/95		11/21/95		11/21/95		11/30/95	
	DATE ANALYZED --->	02/10/96		12/02/95		12/02/95		12/02/95		12/02/95		12/05/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M52A10	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL	041M10	VAL
108-95-2	Phenol	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
111-44-4	bis(2-Chloroethyl)ether	46.	U	120.	U	63.	U	120.	U	140.	U	160.	U
95-57-8	2-Chlorophenol	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
541-73-1	1,3-Dichlorobenzene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
106-46-7	1,4-Dichlorobenzene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
95-50-1	1,2-Dichlorobenzene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
95-48-7	2-Methylphenol (o-Cresol)	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
106-44-5	4-Methylphenol (p-Cresol)	460.	U	200.	J	630.	U	1200.	U	150.	J	100.	J
621-64-7	N-Nitroso-di-n-propylamine	46.	U	120.	U	63.	U	120.	U	140.	U	160.	U
67-72-1	Hexachloroethane	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
98-95-3	Nitrobenzene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
78-59-1	Isophorone	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
88-75-5	2-Nitrophenol	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
105-67-9	2,4-Dimethylphenol	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
111-91-1	bis(2-Chloroethoxy)methane	460.	U	1200.	U	630.	U	1200.	U	1400.	U	110.	J
120-83-2	2,4-Dichlorophenol	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
120-82-1	1,2,4-Trichlorobenzene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
91-20-3	Naphthalene	220.		120.	U	63.	U	120.	UJ	140.	U	160.	U
106-47-8	4-Chloroaniline	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
87-68-3	Hexachlorobutadiene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
59-50-7	4-Chloro-3-methylphenol	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
91-57-6	2-Methylnaphthalene	110.		120.	U	63.	U	120.	U	140.	U	160.	U
77-47-4	Hexachlorocyclopentadiene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
88-06-2	2,4,6-Trichlorophenol	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
95-95-4	2,4,5-Trichlorophenol	1100.	U	2800.	U	1500.	U	2900.	U	3500.	U	3800.	U
91-58-7	2-Chloronaphthalene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
88-74-4	2-Nitroaniline	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
131-11-3	Dimethylphthalate	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
208-96-8	Acenaphthylene	46.	U	120.	U	63.	U	120.	U	140.	U	120.	J
606-20-2	2,6-Dinitrotoluene	460.	U	1200.	U	630.	U	1200.	U	1400.	U	1600.	U
99-09-2	3-Nitroaniline	1100.	U	2800.	U	1500.	U	2900.	U	3500.	U	3800.	U
83-32-9	Acenaphthene	110.		57.	U	31.	U	59.	U	69.	U	75.	U
51-28-5	2,4-Dinitrophenol	1100.	U	2800.	U	1500.	U	2900.	U	3500.	U	3800.	U
100-02-7	4-Nitrophenol	1100.	U	2800.	U	1500.	U	2900.	U	3500.	U	3800.	U
132-64-9	Dibenzofuran	88.	J	1200.		630.	U	1200.	U	1400.	U	1600.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-52D1-01		041-M-52E1-01		041-M-52E2-01		041-M-52E3-01		041-M-56A1-01		041-M-5701-01	
	ORIGINAL ID ----->	041M52D101		041M52E101		041M52E201		041M52E301		041M56A101		041M570101	
	LAB SAMPLE ID --->	960055-02		960055-03		960055-04		960055-08		960055-09		950991-11	
	ID FROM REPORT -->	041M52D101		041M52E101		041M52E201		041M52E301		041M56A101		041M570101	
	SAMPLE DATE ----->	01/23/96		01/23/96		01/23/96		01/24/96		01/24/96		11/29/95	
	DATE EXTRACTED -->	01/30/96		01/30/96		01/30/96		01/30/96		01/30/96		12/02/95	
	DATE ANALYZED --->	02/10/96		02/10/96		02/10/96		02/11/96		02/10/96		12/09/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	Z30301	VAL
121-14-2	2,4-Dinitrotoluene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
84-66-2	Diethylphthalate	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
7005-72-3	4-Chlorophenylphenyl ether	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
86-73-7	Fluorene	41.	U	25.	U	43.	U	94.		25.	U	34.	U
100-01-6	4-Nitroaniline	2000.	U	1300.	U	2100.	U	1200.	U	1300.	U	1700.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	2000.	U	1300.	U	2100.	U	1200.	U	1300.	U	1700.	U
86-30-6	N-Nitrosodiphenylamine	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
101-55-3	4-Bromophenyl-phenylether	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
118-74-1	Hexachlorobenzene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
87-86-5	Pentachlorophenol	2000.	U	1300.	U	2100.	U	1200.	U	1300.	U	1700.	U
85-01-8	Phenanthrene	84.	U	52.	U	88.	U	240.		52.	U	71.	U
120-12-7	Anthracene	84.	U	52.	U	88.	U	100.		52.	U	71.	U
86-74-8	Carbazole	840.	U	520.	U	880.	U	45.	J	520.	U	710.	U
84-74-2	Di-n-butylphthalate	840.	U	49.	J	68.	J	480.	U	520.	U	710.	U
206-44-0	Fluoranthene	84.	U	140.		88.	U	130.		52.	U	68.	J
129-00-0	Pyrene	84.	U	140.		88.	U	82.		36.	J	72.	
85-68-7	Butylbenzylphthalate	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
91-94-1	3,3'-Dichlorobenzidine	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
56-55-3	Benzo(a)anthracene	84.	U	100.		88.	U	26.	J	52.	U	71.	U
218-01-9	Chrysene	84.	U	130.		88.	U	48.	U	52.	U	71.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	110.	J	260.	J	180.	J	50.	J	51.	J	710.	U
117-84-0	Di-n-octylphthalate	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
205-99-2	Benzo(b)fluoranthene	84.	U	190.		88.	U	48.	U	52.	U	41.	J
207-08-9	Benzo(k)fluoranthene	84.	U	61.		88.	U	48.	U	52.	U	71.	U
50-32-8	Benzo(a)pyrene	84.	U	64.		88.	U	48.	U	52.	U	71.	U
193-39-5	Indeno(1,2,3-cd)pyrene	84.	U	51.	J	88.	U	48.	U	52.	U	71.	U
53-70-3	Dibenz(a,h)anthracene	84.	U	52.	U	88.	U	48.	U	52.	U	71.	U
191-24-2	Benzo(g,h,i)perylene	84.	U	45.	J	88.	U	48.	U	52.	U	71.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-52D1-01		041-M-52E1-01		041-M-52E2-01		041-M-52E3-01		041-M-56A1-01		041-M-5701-01	
	ORIGINAL ID ----->	041M52D101		041M52E101		041M52E201		041M52E301		041M56A101		041M570101	
	LAB SAMPLE ID --->	960055-02		960055-03		960055-04		960055-08		960055-09		950991-11	
	ID FROM REPORT -->	041M52D101		041M52E101		041M52E201		041M52E301		041M56A101		041M570101	
	SAMPLE DATE ----->	01/23/96		01/23/96		01/23/96		01/24/96		01/24/96		11/29/95	
	DATE EXTRACTED -->	01/30/96		01/30/96		01/30/96		01/30/96		01/30/96		12/02/95	
	DATE ANALYZED --->	02/10/96		02/10/96		02/10/96		02/11/96		02/10/96		12/09/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	Z30301	VAL
108-95-2	Phenol	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
111-44-4	bis(2-Chloroethyl)ether	84.	U	52.	U	88.	U	48.	U	52.	U	71.	U
95-57-8	2-Chlorophenol	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
541-73-1	1,3-Dichlorobenzene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
106-46-7	1,4-Dichlorobenzene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
95-50-1	1,2-Dichlorobenzene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
95-48-7	2-Methylphenol (o-Cresol)	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
106-44-5	4-Methylphenol (p-Cresol)	840.	U	170.	J	110.	J	480.	U	520.	U	710.	U
621-64-7	N-Nitroso-di-n-propylamine	84.	U	52.	U	88.	U	48.	U	52.	U	71.	U
67-72-1	Hexachloroethane	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
98-95-3	Nitrobenzene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
78-59-1	Isophorone	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
88-75-5	2-Nitrophenol	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
105-67-9	2,4-Dimethylphenol	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
111-91-1	bis(2-Chloroethoxy)methane	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
120-83-2	2,4-Dichlorophenol	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
120-82-1	1,2,4-Trichlorobenzene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
91-20-3	Naphthalene	84.	U	52.	U	88.	U	100.		52.	U	71.	U
106-47-8	4-Chloroaniline	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
87-68-3	Hexachlorobutadiene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
59-50-7	4-Chloro-3-methylphenol	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
91-57-6	2-Methylnaphthalene	84.	U	52.	U	88.	U	50.		52.	U	71.	U
77-47-4	Hexachlorocyclopentadiene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
88-06-2	2,4,6-Trichlorophenol	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
95-95-4	2,4,5-Trichlorophenol	2000.	U	1300.	U	2100.	U	1200.	U	1300.	U	1700.	U
91-58-7	2-Chloronaphthalene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
88-74-4	2-Nitroaniline	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
131-11-3	Dimethylphthalate	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
208-96-8	Acenaphthylene	84.	U	52.	U	88.	U	48.	U	52.	U	71.	U
606-20-2	2,6-Dinitrotoluene	840.	U	520.	U	880.	U	480.	U	520.	U	710.	U
99-09-2	3-Nitroaniline	2000.	U	1300.	U	2100.	U	1200.	U	1300.	U	1700.	U
83-32-9	Acenaphthene	41.	U	25.	U	43.	U	77.		25.	U	34.	U
51-28-5	2,4-Dinitrophenol	2000.	U	1300.	U	2100.	U	1200.	U	1300.	U	1700.	U
100-02-7	4-Nitrophenol	2000.	U	1300.	U	2100.	U	1200.	U	1300.	U	1700.	U
132-64-[illegible]	[illegible]enzofuran	840.	U	520.		880.	U	72.	J	520.	U	710.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-3303-01		041-M-4801-01		041-M-4901-01		041-M-4902-01		041-M-4903-01		041-M-52A1-01	
	ORIGINAL ID ----->	041M330301		041M480101		041M490101		041M490201		041M490301		041M52A101	
	LAB SAMPLE ID --->	950940-14		960043-10		960025-14		960025-15		960025-16		960055-01	
	ID FROM REPORT -->	041M330301		041M480101		041M490101		041M490201		041M490301		041M52A101	
	SAMPLE DATE ----->	11/13/95		01/22/96		01/16/96		01/16/96		01/16/96		01/23/96	
	DATE EXTRACTED -->	11/30/95		01/24/96		01/20/96		01/20/96		01/20/96		01/30/96	
	DATE ANALYZED --->	12/07/95		02/06/96		01/24/96		01/24/96		01/24/96		02/12/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06070	VAL	M00901	VAL	EM005	VAL	EM005	VAL	EM005	VAL	M52A10	VAL
121 14 2	2,4 Dinitrotoluene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
84 66 2	Diethylphthalate	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
7005 72 3	4 Chlorophenylphenyl ether	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
86 73 7	Fluorene	230.		200.	U	20.	U	24.	U	22.	U	130.	U
100 01 6	4 Nitroaniline	1000.	U	10000.	U	990.	U	1200.	U	1100.	U	6700.	U
534 52 1	2 Methyl 4,6 Dinitrophenol	1000.	U	10000.	U	990.	UJ	1200.	UJ	1100.	UJ	6700.	U
86 30 6	N Nitrosodiphenylamine	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
101 55 3	4 Bromophenyl phenylether	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
118 74 1	Hexachlorobenzene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
87 86 5	Pentachlorophenol	1000.	U	10000.	U	990.	U	1200.	U	1100.	U	6700.	U
85 01 8	Phenanthrene	1900.		410.	U	41.	U	49.	U	46.	U	270.	U
120-12-7	Anthracene	700.		410.	U	41.	U	49.	U	46.	U	270.	U
86-74-8	Carbazole	220.	J	4100.	U	410.	U	490.	U	460.	U	2700.	U
84-74-2	Di-n-butylphthalate	32.	J	4100.	U	39.	J	490.	U	460.	U	150.	J
206-44-0	Fluoranthene	2700.		410.	U	41.	U	49.	U	46.	U	270.	U
129-00-0	Pyrene	2900.		410.	U	21.	J	49.	U	46.	U	270.	U
85-68-7	Butylbenzylphthalate	430.	U	4100.	U	30.	J	490.	U	460.	U	2700.	U
91-94-1	3,3'-Dichlorobenzidine	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
56-55-3	Benzo(a)anthracene	1800.		410.	U	41.	U	49.	U	46.	U	270.	U
218-01-9	Chrysene	1500.		410.	U	41.	U	49.	U	46.	U	270.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	430.	U	4100.	U	1700.		490.	U	460.	U	360.	J
117-84-0	Di-n-octylphthalate	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
205-99-2	Benzo(b)fluoranthene	1100.		410.	U	41.	U	49.	U	46.	U	270.	U
207-08-9	Benzo(k)fluoranthene	710.		410.	U	41.	U	49.	U	46.	U	270.	U
50-32-8	Benzo(a)pyrene	1100.		410.	U	41.	U	49.	U	46.	U	270.	U
193-39-5	Indeno(1,2,3-cd)pyrene	740.		410.	U	41.	U	49.	U	46.	U	270.	U
53-70-3	Dibenz(a,h)anthracene	43.	U	410.	U	41.	U	49.	U	46.	U	270.	U
191-24-2	Benzo(g,h,i)perylene	740.		410.	U	41.	U	49.	U	46.	U	270.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-3303-01		041-M-4801-01		041-M-4901-01		041-M-4902-01		041-M-4903-01		041-M-52A1-01	
	ORIGINAL ID ----->	041M330301		041M480101		041M490101		041M490201		041M490301		041M52A101	
	LAB SAMPLE ID --->	950940-14		960043-10		960025-14		960025-15		960025-16		960055-01	
	ID FROM REPORT -->	041M330301		041M480101		041M490101		041M490201		041M490301		041M52A101	
	SAMPLE DATE ----->	11/13/95		01/22/96		01/16/96		01/16/96		01/16/96		01/23/96	
	DATE EXTRACTED -->	11/30/95		01/24/96		01/20/96		01/20/96		01/20/96		01/30/96	
	DATE ANALYZED --->	12/07/95		02/06/96		01/24/96		01/24/96		01/24/96		02/12/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06070	VAL	M00901	VAL	EM005	VAL	EM005	VAL	EM005	VAL	M52A10	VAL
108-95-2	Phenol	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
111-44-4	bis(2-Chloroethyl)ether	43.	U	410.	U	41.	U	49.	U	46.	U	270.	U
95-57-8	2-Chlorophenol	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
541-73-1	1,3-Dichlorobenzene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
106-46-7	1,4-Dichlorobenzene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
95-50-1	1,2-Dichlorobenzene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
95-48-7	2-Methylphenol (o-Cresol)	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	UJ
106-44-5	4-Methylphenol (p-Cresol)	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
621-64-7	N-Nitroso-di-n-propylamine	43.	U	410.	U	41.	U	49.	U	46.	U	270.	U
67-72-1	Hexachloroethane	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
98-95-3	Nitrobenzene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
78-59-1	Isophorone	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
88-75-5	2-Nitrophenol	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
105-67-9	2,4-Dimethylphenol	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
111-91-1	bis(2-Chloroethoxy)methane	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
120-83-2	2,4-Dichlorophenol	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
120-82-1	1,2,4-Trichlorobenzene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
91-20-3	Naphthalene	46.		410.	U	41.	U	49.	U	46.	U	270.	U
106-47-8	4-Chloroaniline	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
87-68-3	Hexachlorobutadiene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
59-50-7	4-Chloro-3-methylphenol	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
91-57-6	2-Methylnaphthalene	43.	U	410.	U	41.	U	49.	U	46.	U	270.	U
77-47-4	Hexachlorocyclopentadiene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
88-06-2	2,4,6-Trichlorophenol	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
95-95-4	2,4,5-Trichlorophenol	1000.	U	10000.	U	990.	U	1200.	U	1100.	U	6700.	U
91-58-7	2-Chloronaphthalene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
88-74-4	2-Nitroaniline	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
131-11-3	Dimethylphthalate	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
208-96-8	Acenaphthylene	43.	U	410.	U	41.	U	49.	U	46.	U	270.	U
606-20-2	2,6-Dinitrotoluene	430.	U	4100.	U	410.	U	490.	U	460.	U	2700.	U
99-09-2	3-Nitroaniline	1000.	U	10000.	U	990.	U	1200.	U	1100.	U	6700.	U
83-32-9	Acenaphthene	180.		200.	U	20.	U	24.	U	22.	U	130.	U
51-28-5	2,4-Dinitrophenol	1000.	U	10000.	UJ	990.	UJ	1200.	UJ	1100.	UJ	6700.	U
100-02-7	4-Nitrophenol	1000.	U	10000.	U	990.	U	1200.	U	1100.	U	6700.	U
132-64-[illegible]	[illegible]enzofuran	70.	J	4100.		410.	U	490.	U	460.	U	2700.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-2702-01		041-M-3201-01		041-M-3202-01		041-M-3203-01		041-M-3301-01		041-M-3302-01	
	ORIGINAL ID ----->	041M270201		041M320101		041M320201		041M320301		041M330101		041M330201	
	LAB SAMPLE ID --->	950941-09		950940-04		950940-05		950940-06		950940-12		950940-13	
	ID FROM REPORT -->	041M270201		041M320101		041M320201		041M320301		041M330101		041M330201	
	SAMPLE DATE ----->	11/15/95		11/14/95		11/14/95		11/14/95		11/13/95		11/13/95	
	DATE EXTRACTED -->	11/18/95		11/18/95		11/18/95		11/18/95		11/18/95		11/18/95	
	DATE ANALYZED --->	11/29/95		11/29/95		11/29/95		12/09/95		11/29/95		11/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06010	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
121-14-2	2,4-Dinitrotoluene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
84-66-2	Diethylphthalate	390.	J	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
7005-72-3	4-Chlorophenylphenyl ether	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
86-73-7	Fluorene	66.	U	4000.	U	2000.	U	150.	U	370.	U	400.	U
100-01-6	4-Nitroaniline	3300.	U	200000.	U	100000.	U	7300.	U	18000.	U	20000.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	3300.	U	200000.	U	100000.	U	7300.	U	18000.	U	20000.	U
86-30-6	N-Nitrosodiphenylamine	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
101-55-3	4-Bromophenyl-phenylether	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
118-74-1	Hexachlorobenzene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
87-86-5	Pentachlorophenol	3300.	U	200000.	U	100000.	U	7300.	U	18000.	U	20000.	U
85-01-8	Phenanthrene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
120-12-7	Anthracene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
86-74-8	Carbazole	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
84-74-2	Di-n-butylphthalate	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
206-44-0	Fluoranthene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
129-00-0	Pyrene	140.	U	8200.	U	4100.	U	170.	J	760.	U	820.	U
85-68-7	Butylbenzylphthalate	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
91-94-1	3,3'-Dichlorobenzidine	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
56-55-3	Benzo(a)anthracene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
218-01-9	Chrysene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
117-84-0	Di-n-octylphthalate	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
205-99-2	Benzo(b)fluoranthene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
207-08-9	Benzo(k)fluoranthene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
50-32-8	Benzo(a)pyrene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
193-39-5	Indeno(1,2,3-cd)pyrene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
53-70-3	Dibenz(a,h)anthracene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
191-24-2	Benzo(g,h,i)perylene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-2702-01		041-M-3201-01		041-M-3202-01		041-M-3203-01		041-M-3301-01		041-M-3302-01	
	ORIGINAL ID ----->	041M270201		041M320101		041M320201		041M320301		041M330101		041M330201	
	LAB SAMPLE ID --->	950941-09		950940-04		950940-05		950940-06		950940-12		950940-13	
	ID FROM REPORT -->	041M270201		041M320101		041M320201		041M320301		041M330101		041M330201	
	SAMPLE DATE ----->	11/15/95		11/14/95		11/14/95		11/14/95		11/13/95		11/13/95	
	DATE EXTRACTED -->	11/18/95		11/18/95		11/18/95		11/18/95		11/18/95		11/18/95	
	DATE ANALYZED --->	11/29/95		11/29/95		11/29/95		12/09/95		11/29/95		11/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06010	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
108-95-2	Phenol	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
111-44-4	bis(2-Chloroethyl)ether	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
95-57-8	2-Chlorophenol	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
541-73-1	1,3-Dichlorobenzene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
106-46-7	1,4-Dichlorobenzene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
95-50-1	1,2-Dichlorobenzene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
95-48-7	2-Methylphenol (o-Cresol)	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1400.	U	82000.	U	41000.	U	3000.	UJ	7600.	U	8200.	U
106-44-5	4-Methylphenol (p-Cresol)	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
621-64-7	N-Nitroso-di-n-propylamine	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
67-72-1	Hexachloroethane	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
98-95-3	Nitrobenzene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
78-59-1	Isophorone	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
88-75-5	2-Nitrophenol	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
105-67-9	2,4-Dimethylphenol	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
111-91-1	bis(2-Chloroethoxy)methane	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
120-83-2	2,4-Dichlorophenol	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
120-82-1	1,2,4-Trichlorobenzene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
91-20-3	Naphthalene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
106-47-8	4-Chloroaniline	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
87-68-3	Hexachlorobutadiene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
59-50-7	4-Chloro-3-methylphenol	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
91-57-6	2-Methylnaphthalene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
77-47-4	Hexachlorocyclopentadiene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
88-06-2	2,4,6-Trichlorophenol	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
95-95-4	2,4,5-Trichlorophenol	3300.	U	200000.	U	100000.	U	7300.	U	18000.	U	20000.	U
91-58-7	2-Chloronaphthalene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
88-74-4	2-Nitroaniline	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
131-11-3	Dimethylphthalate	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
208-96-8	Acenaphthylene	140.	U	8200.	U	4100.	U	300.	U	760.	U	820.	U
606-20-2	2,6-Dinitrotoluene	1400.	U	82000.	U	41000.	U	3000.	U	7600.	U	8200.	U
99-09-2	3-Nitroaniline	3300.	U	200000.	U	100000.	U	7300.	U	18000.	U	20000.	U
83-32-9	Acenaphthene	66.	U	4000.	U	2000.	U	150.	U	370.	U	400.	U
51-28-5	2,4-Dinitrophenol	3300.	U	200000.	U	100000.	U	7300.	U	18000.	U	20000.	U
100-02-7	4-Nitrophenol	3300.	U	200000.	U	100000.	U	7300.	U	18000.	U	20000.	U
132-64-[illegible]	[illegible]nzofuran	1400.	U	82000.		41000.	U	3000.	U	7600.	U	8200.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-19A1-01		041-M-19A2-01		041-M-19B1-01		041-M-2502-01		041-M-2503-01		041-M-2701-01	
	ORIGINAL ID ----->	041M19A101		041M19A201		041M19B101		041M250201		041M250301		041M270101	
	LAB SAMPLE ID --->	960025-11		960025-12		960025-13		950941-06		950941-07		950941-08	
	ID FROM REPORT -->	041M19A101		041M19A201		041M19B101		041M250201		041M250301		041M270101	
	SAMPLE DATE ----->	01/16/96		01/16/96		01/16/96		11/15/95		11/15/95		11/15/95	
	DATE EXTRACTED -->	01/20/96		01/20/96		01/20/96		11/18/95		11/18/95		11/18/95	
	DATE ANALYZED --->	01/24/96		01/24/96		01/24/96		11/26/95		11/26/95		11/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM005	VAL	EM005	VAL	EM005	VAL	M06010	VAL	M06010	VAL	M06010	VAL
121-14-2	2,4-Dinitrotoluene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
84-66-2	Diethylphthalate	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
7005-72-3	4-Chlorophenylphenyl ether	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
86-73-7	Fluorene	130.	U	20.	U	21.	U	110.	U	50.	U	39.	U
100-01-6	4-Nitroaniline	6600.	U	980.	U	1000.	U	5700.	U	2500.	U	1900.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	6600.	UJ	980.	UJ	1000.	UJ	5700.	U	2500.	U	1900.	U
86-30-6	N-Nitrosodiphenylamine	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
101-55-3	4-Bromophenyl-phenylether	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
118-74-1	Hexachlorobenzene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
87-86-5	Pentachlorophenol	6600.	U	980.	U	1000.	U	5700.	U	2500.	U	1900.	U
85-01-8	Phenanthrene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
120-12-7	Anthracene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
86-74-8	Carbazole	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
84-74-2	Di-n-butylphthalate	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
206-44-0	Fluoranthene	270.	U	40.	U	28.	J	230.	U	100.	U	79.	U
129-00-0	Pyrene	270.	U	40.	U	28.	J	230.	U	100.	U	79.	U
85-68-7	Butylbenzylphthalate	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
91-94-1	3,3'-Dichlorobenzidine	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
56-55-3	Benzo(a)anthracene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
218-01-9	Chrysene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
117-84-0	Di-n-octylphthalate	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
205-99-2	Benzo(b)fluoranthene	270.	U	40.	U	43.	U	230.	U	59.	J	79.	U
207-08-9	Benzo(k)fluoranthene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
50-32-8	Benzo(a)pyrene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
193-39-5	Indeno(1,2,3-cd)pyrene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
53-70-3	Dibenz(a,h)anthracene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
191-24-2	Benzo(g,h,i)perylene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-19A1-01		041-M-19A2-01		041-M-19B1-01		041-M-2502-01		041-M-2503-01		041-M-2701-01	
	ORIGINAL ID ----->	041M19A101		041M19A201		041M19B101		041M250201		041M250301		041M270101	
	LAB SAMPLE ID --->	960025-11		960025-12		960025-13		950941-06		950941-07		950941-08	
	ID FROM REPORT -->	041M19A101		041M19A201		041M19B101		041M250201		041M250301		041M270101	
	SAMPLE DATE ----->	01/16/96		01/16/96		01/16/96		11/15/95		11/15/95		11/15/95	
	DATE EXTRACTED -->	01/20/96		01/20/96		01/20/96		11/18/95		11/18/95		11/18/95	
	DATE ANALYZED --->	01/24/96		01/24/96		01/24/96		11/26/95		11/26/95		11/29/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM005	VAL	EM005	VAL	EM005	VAL	M06010	VAL	M06010	VAL	M06010	VAL
108-95-2	Phenol	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
111-44-4	bis(2-Chloroethyl)ether	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
95-57-8	2-Chlorophenol	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
541-73-1	1,3-Dichlorobenzene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
106-46-7	1,4-Dichlorobenzene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
95-50-1	1,2-Dichlorobenzene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
95-48-7	2-Methylphenol (o-Cresol)	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2700.	U	400.	U	430.	U	2300.	UJ	1000.	UJ	790.	U
106-44-5	4-Methylphenol (p-Cresol)	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
621-64-7	N-Nitroso-di-n-propylamine	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
67-72-1	Hexachloroethane	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
98-95-3	Nitrobenzene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
78-59-1	Isophorone	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
88-75-5	2-Nitrophenol	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
105-67-9	2,4-Dimethylphenol	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
111-91-1	bis(2-Chloroethoxy)methane	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
120-83-2	2,4-Dichlorophenol	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
120-82-1	1,2,4-Trichlorobenzene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
91-20-3	Naphthalene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
106-47-8	4-Chloroaniline	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
87-68-3	Hexachlorobutadiene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
59-50-7	4-Chloro-3-methylphenol	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
91-57-6	2-Methylnaphthalene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
77-47-4	Hexachlorocyclopentadiene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
88-06-2	2,4,6-Trichlorophenol	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
95-95-4	2,4,5-Trichlorophenol	6600.	U	980.	U	1000.	U	5700.	U	2500.	U	1900.	U
91-58-7	2-Chloronaphthalene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
88-74-4	2-Nitroaniline	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
131-11-3	Dimethylphthalate	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
208-96-8	Acenaphthylene	270.	U	40.	U	43.	U	230.	U	100.	U	79.	U
606-20-2	2,6-Dinitrotoluene	2700.	U	400.	U	430.	U	2300.	U	1000.	U	790.	U
99-09-2	3-Nitroaniline	6600.	U	980.	U	1000.	U	5700.	U	2500.	U	1900.	U
83-32-9	Acenaphthene	130.	U	20.	U	21.	U	110.	U	50.	U	39.	U
51-28-5	2,4-Dinitrophenol	6600.	UJ	980.	UJ	1000.	UJ	5700.	U	2500.	U	1900.	U
100-02-7	4-Nitrophenol	6600.	U	980.	U	1000.	U	5700.	UJ	2500.	UJ	1900.	U
132-64-9	enzofuran	2700.	U	400.		430.	U	2300.	U	1000.	U	790.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-1702-01		041-M-1703-01		041-M-18A1-01		041-M-18A2-01		041-M-18A3-01		041-M-18B1-01	
	ORIGINAL ID ----->	041M170201		041M170301		041M18A101		041M18A201		041M18A301		041M18B101	
	LAB SAMPLE ID --->	960025-04		960025-05		951050-18		951050-19		951050-05		951050-06	
	ID FROM REPORT -->	041M170201		041M170301		041M18A101		041M18A201		041M18A301		041M18B101	
	SAMPLE DATE ----->	01/15/96		01/15/96		12/15/95		12/15/95		12/14/95		12/14/95	
	DATE EXTRACTED -->	01/20/96		01/20/96		12/19/95		12/19/95		12/19/95		12/19/95	
	DATE ANALYZED --->	01/24/96		01/24/96		01/13/96		01/13/96		01/13/96		01/13/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM005	VAL	EM005	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL
121 14 2	2,4 Dinitrotoluene	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
84 66 2	Diethylphthalate	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
7005 72 3	4 Chlorophenylphenyl ether	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
86 73 7	Fluorene	19.	U	18.	U	110.	U	230.	U	160.	U	94.	U
100 01 6	4 Nitroaniline	970.	U	900.	U	5700.	U	11000.	U	7900.	U	4700.	U
534 52 1	2 Methyl 4,6 Dinitrophenol	970.	UJ	900.	UJ	5700.	U	11000.	U	7900.	U	4700.	U
86 30 6	N Nitrosodiphenylamine	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
101 55 3	4 Bromophenyl phenylether	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
118 74 1	Hexachlorobenzene	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
87 86 5	Pentachlorophenol	970.	U	900.	U	5700.	U	11000.	U	7900.	U	4700.	U
85 01 8	Phenanthrene	40.	U	37.	U	230.	U	470.	U	330.	U	190.	U
120-12-7	Anthracene	40.	U	37.	U	230.	U	470.	U	330.	U	190.	U
86-74-8	Carbazole	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
84-74-2	Di-n-butylphthalate	400.	U	370.	U	160.	J	430.	J	170.	J	1900.	U
206-44-0	Fluoranthene	40.	U	37.	U	230.	U	470.	U	330.	U	190.	U
129-00-0	Pyrene	40.	U	37.	U	230.	U	470.	U	330.	U	190.	U
85-68-7	Butylbenzylphthalate	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
91-94-1	3,3'-Dichlorobenzidine	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
56-55-3	Benzo(a)anthracene	40.	U	37.	U	230.	U	470.	U	330.	U	190.	U
218-01-9	Chrysene	40.	U	37.	U	230.	U	470.	U	330.	U	190.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	2300.		370.	U	2300.	U	4700.	U	3300.	U	1900.	U
117-84-0	Di-n-octylphthalate	400.	U	370.	U	2300.	U	4700.	UJ	3300.	U	1900.	U
205-99-2	Benzo(b)fluoranthene	40.	U	37.	U	230.	U	470.	UJ	330.	U	190.	U
207-08-9	Benzo(k)fluoranthene	40.	U	37.	U	230.	U	470.	UJ	330.	U	190.	U
50-32-8	Benzo(a)pyrene	40.	U	37.	U	230.	U	470.	UJ	330.	U	190.	U
193-39-5	Indeno(1,2,3-cd)pyrene	40.	U	37.	U	230.	U	470.	UJ	330.	U	190.	U
53-70-3	Dibenz(a,h)anthracene	40.	U	37.	U	230.	U	470.	UJ	330.	U	190.	U
191-24-2	Benzo(g,h,i)perylene	40.	U	37.	U	230.	U	470.	UJ	330.	U	190.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-1702-01		041-M-1703-01		041-M-18A1-01		041-M-18A2-01		041-M-18A3-01		041-M-18B1-01	
	ORIGINAL ID ----->	041M170201		041M170301		041M18A101		041M18A201		041M18A301		041M18B101	
	LAB SAMPLE ID --->	960025-04		960025-05		951050-18		951050-19		951050-05		951050-06	
	ID FROM REPORT -->	041M170201		041M170301		041M18A101		041M18A201		041M18A301		041M18B101	
	SAMPLE DATE ----->	01/15/96		01/15/96		12/15/95		12/15/95		12/14/95		12/14/95	
	DATE EXTRACTED -->	01/20/96		01/20/96		12/19/95		12/19/95		12/19/95		12/19/95	
	DATE ANALYZED --->	01/24/96		01/24/96		01/13/96		01/13/96		01/13/96		01/13/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM005	VAL	EM005	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL
108-95-2	Phenol	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
111-44-4	bis(2-Chloroethyl)ether	40.	U	37.	U	230.	U	470.	U	330.	U	190.	U
95-57-8	2-Chlorophenol	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
541-73-1	1,3-Dichlorobenzene	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
106-46-7	1,4-Dichlorobenzene	400.	U	370.	U	2300.	U	1100.	J	3300.	U	1900.	U
95-50-1	1,2-Dichlorobenzene	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
95-48-7	2-Methylphenol (o-Cresol)	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
106-44-5	4-Methylphenol (p-Cresol)	400.	U	370.	U	2300.	U	330.	J	170.	J	1900.	U
621-64-7	N-Nitroso-di-n-propylamine	40.	U	37.	U	230.	U	470.	U	330.	U	190.	U
67-72-1	Hexachloroethane	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
98-95-3	Nitrobenzene	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
78-59-1	Isophorone	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
88-75-5	2-Nitrophenol	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
105-67-9	2,4-Dimethylphenol	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
120-83-2	2,4-Dichlorophenol	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
120-82-1	1,2,4-Trichlorobenzene	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
91-20-3	Naphthalene	40.	U	37.	U	230.	U	300.	J	330.	U	190.	U
106-47-8	4-Chloroaniline	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
87-68-3	Hexachlorobutadiene	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
59-50-7	4-Chloro-3-methylphenol	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
91-57-6	2-Methylnaphthalene	40.	U	37.	U	230.	U	470.	U	330.	U	190.	U
77-47-4	Hexachlorocyclopentadiene	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
88-06-2	2,4,6-Trichlorophenol	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
95-95-4	2,4,5-Trichlorophenol	970.	U	900.	U	5700.	U	11000.	U	7900.	U	4700.	U
91-58-7	2-Chloronaphthalene	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
88-74-4	2-Nitroaniline	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
131-11-3	Dimethylphthalate	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
208-96-8	Acenaphthylene	40.	U	37.	U	230.	U	470.	U	330.	U	190.	U
606-20-2	2,6-Dinitrotoluene	400.	U	370.	U	2300.	U	4700.	U	3300.	U	1900.	U
99-09-2	3-Nitroaniline	970.	U	900.	U	5700.	U	11000.	U	7900.	U	4700.	U
83-32-9	Acenaphthene	19.	U	18.	U	110.	U	230.	U	160.	U	94.	U
51-28-5	2,4-Dinitrophenol	970.	UJ	900.	UJ	5700.	U	11000.	U	7900.	U	4700.	U
100-02-7	4-Nitrophenol	970.	U	900.	U	5700.	U	11000.	U	7900.	U	4700.	U
132-64-9	Dibenzofuran	400.	U	370.		2300.	U	4700.	U	3300.	U	1900.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-1503-01		041-M-1504-01		041-M-1601-01		041-M-1602-01		041-M-1603-01		041-M-1701-01	
	ORIGINAL ID ----->	041M150301		041M150401		041M160101		041M160201		041M160301		041M170101	
	LAB SAMPLE ID --->	951021-07		951021-08		951029-02		951029-03		951029-04		960025-03	
	ID FROM REPORT -->	041M150301		041M150401		041M160101		041M160201		041M160301		041M170101	
	SAMPLE DATE ----->	12/06/95		12/06/95		12/07/95		12/07/95		12/07/95		01/15/96	
	DATE EXTRACTED -->	12/12/95		12/12/95		12/17/95		12/17/95		12/17/95		01/20/96	
	DATE ANALYZED --->	12/30/95		12/28/95		12/28/95		12/29/95		12/29/95		01/26/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM0050	VAL	EM0050	VAL	EW0010	VAL	EW0010	VAL	EW0010	VAL	EM005	VAL
121-14-2	2,4-Dinitrotoluene	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
84-66-2	Diethylphthalate	2500.	U	1100.	U	400.	U	90.	J	1700.	U	450.	U
7005-72-3	4-Chlorophenylphenyl ether	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
86-73-7	Fluorene	120.	U	55.	U	20.	U	31.	U	83.	U	22.	U
100-01-6	4-Nitroaniline	6100.	U	2700.	U	980.	U	1500.	U	4100.	U	1100.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	6100.	U	2700.	U	980.	U	1500.	U	4100.	U	1100.	U
86-30-6	N-Nitrosodiphenylamine	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
101-55-3	4-Bromophenyl-phenylether	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
118-74-1	Hexachlorobenzene	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
87-86-5	Pentachlorophenol	6100.	U	2700.	U	980.	U	1500.	U	4100.	U	1100.	U
85-01-8	Phenanthrene	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
120-12-7	Anthracene	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
86-74-8	Carbazole	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
84-74-2	Di-n-butylphthalate	130.	J	1100.	U	400.	U	34.	J	1700.	U	450.	U
206-44-0	Fluoranthene	190.	J	94.	J	40.	U	58.	J	100.	J	45.	U
129-00-0	Pyrene	180.	J	120.		40.	U	45.	J	110.	J	45.	U
85-68-7	Butylbenzylphthalate	2500.	U	1100.	U	31.	J	640.	U	1700.	U	450.	U
91-94-1	3,3'-Dichlorobenzidine	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
56-55-3	Benzo(a)anthracene	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
218-01-9	Chrysene	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	2500.	U	220.	J	110.	J	180.	J	720.	J	450.	U
117-84-0	Di-n-octylphthalate	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
205-99-2	Benzo(b)fluoranthene	250.	J	79.	J	40.	U	64.	U	100.	J	45.	U
207-08-9	Benzo(k)fluoranthene	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
50-32-8	Benzo(a)pyrene	250.	U	59.	J	40.	U	64.	U	170.	U	45.	U
193-39-5	Indeno(1,2,3-cd)pyrene	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
53-70-3	Dibenz(a,h)anthracene	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
191-24-2	Benzo(g,h,i)perylene	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U

*** Validation Complete ***

SVOA															
	SAMPLE ID ------->	041-M-1503-01		041-M-1504-01		041-M-1601-01		041-M-1602-01		041-M-1603-01		041-M-1701-01	
	ORIGINAL ID ----->	041M150301		041M150401		041M160101		041M160201		041M160301		041M170101	
	LAB SAMPLE ID --->	951021-07		951021-08		951029-02		951029-03		951029-04		960025-03	
	ID FROM REPORT -->	041M150301		041M150401		041M160101		041M160201		041M160301		041M170101	
	SAMPLE DATE ----->	12/06/95		12/06/95		12/07/95		12/07/95		12/07/95		01/15/96	
	DATE EXTRACTED -->	12/12/95		12/12/95		12/17/95		12/17/95		12/17/95		01/20/96	
	DATE ANALYZED --->	12/30/95		12/28/95		12/28/95		12/29/95		12/29/95		01/26/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM0050	VAL	EM0050	VAL	EW0010	VAL	EW0010	VAL	EW0010	VAL	EM005	VAL
108-95-2	Phenol	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
111-44-4	bis(2-Chloroethyl)ether	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
95-57-8	2-Chlorophenol	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
541-73-1	1,3-Dichlorobenzene	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
106-46-7	1,4-Dichlorobenzene	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
95-50-1	1,2-Dichlorobenzene	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
95-48-7	2-Methylphenol (o-Cresol)	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2500.	U	82.	J	400.	U	640.	U	1700.	U	450.	U
106-44-5	4-Methylphenol (p-Cresol)	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
621-64-7	N-Nitroso-di-n-propylamine	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
67-72-1	Hexachloroethane	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
98-95-3	Nitrobenzene	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
78-59-1	Isophorone	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
88-75-5	2-Nitrophenol	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
105-67-9	2,4-Dimethylphenol	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
111-91-1	bis(2-Chloroethoxy)methane	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
120-83-2	2,4-Dichlorophenol	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
120-82-1	1,2,4-Trichlorobenzene	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
91-20-3	Naphthalene	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
106-47-8	4-Chloroaniline	2500.	U	1100.	UR	400.	UR	640.	UR	1700.	UR	450.	UJ
87-68-3	Hexachlorobutadiene	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
59-50-7	4-Chloro-3-methylphenol	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
91-57-6	2-Methylnaphthalene	250.	U	110.	U	40.	UJ	64.	U	170.	U	45.	U
77-47-4	Hexachlorocyclopentadiene	2500.	U	1100.	UJ	400.	U	640.	UJ	1700.	UJ	450.	U
88-06-2	2,4,6-Trichlorophenol	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
95-95-4	2,4,5-Trichlorophenol	6100.	U	2700.	U	980.	U	1500.	U	4100.	U	1100.	U
91-58-7	2-Chloronaphthalene	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
88-74-4	2-Nitroaniline	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
131-11-3	Dimethylphthalate	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
208-96-8	Acenaphthylene	250.	U	110.	U	40.	U	64.	U	170.	U	45.	U
606-20-2	2,6-Dinitrotoluene	2500.	U	1100.	U	400.	U	640.	U	1700.	U	450.	U
99-09-2	3-Nitroaniline	6100.	U	2700.	U	980.	U	1500.	U	4100.	U	1100.	U
83-32-9	Acenaphthene	120.	U	55.	U	20.	U	31.	U	83.	U	22.	U
51-28-5	2,4-Dinitrophenol	6100.	UJ	2700.	U	980.	U	1500.	U	4100.	U	1100.	U
100-02-7	4-Nitrophenol	6100.	U	2700.	U	980.	U	1500.	U	4100.	U	1100.	U
132-64-9	Dibenzofuran	2500.	U	1100.		400.	U	640.	U	1700.	U	450.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-10A3-01		041-M-1201-01		041-M-1202-01		041-M-1301-01		041-M-1501-01		041-M-1502-01	
	ORIGINAL ID ----->	041M10A301		041M120101		041M120201		041M130101		041M150101		041M150201	
	LAB SAMPLE ID --->	950979-01		950983-09		950991-10		950979-02		951021-05		951021-06	
	ID FROM REPORT -->	041M10A301		041M120101		041M120201		041M130101		041M150101		041M150201	
	SAMPLE DATE ----->	11/27/95		11/28/95		11/29/95		11/27/95		12/06/95		12/06/95	
	DATE EXTRACTED -->	11/30/95		11/30/95		12/02/95		11/30/95		12/12/95		12/12/95	
	DATE ANALYZED --->	12/05/95		12/07/95		12/09/95		12/05/95		12/28/95		12/28/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	041M10	VAL	Z53301	VAL	Z30301	VAL	041M10	VAL	EM0050	VAL	EM0050	VAL
121-14-2	2,4-Dinitrotoluene	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
84-66-2	Diethylphthalate	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
7005-72-3	4-Chlorophenylphenyl ether	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
86-73-7	Fluorene	19.	U	2000.	U	1300.		24.	U	140.	U	140.	U
100-01-6	4-Nitroaniline	970.	U	100000.	UJ	30000.	U	1200.	U	7200.	U	7200.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	970.	U	100000.	U	30000.	U	1200.	U	7200.	U	7200.	U
86-30-6	N-Nitrosodiphenylamine	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
101-55-3	4-Bromophenyl-phenylether	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
118-74-1	Hexachlorobenzene	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
87-86-5	Pentachlorophenol	970.	U	100000.	U	30000.	U	1200.	U	7200.	U	7200.	U
85-01-8	Phenanthrene	23.	J	4100.	U	2500.		50.	U	300.	U	300.	U
120-12-7	Anthracene	40.	U	4100.	U	1200.	U	50.	U	300.	U	300.	U
86-74-8	Carbazole	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
84-74-2	Di-n-butylphthalate	400.	U	41000.	U	12000.	U	26.	J	250.	J	190.	J
206-44-0	Fluoranthene	62.		4100.	U	1200.	U	29.	J	200.	J	240.	J
129-00-0	Pyrene	39.	J	4100.	U	1200.	U	50.	U	300.	U	210.	J
85-68-7	Butylbenzylphthalate	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
91-94-1	3,3'-Dichlorobenzidine	400.	U	41000.	UJ	12000.	U	500.	U	3000.	U	3000.	U
56-55-3	Benzo(a)anthracene	27.	J	4100.	U	1200.	U	50.	U	300.	U	300.	U
218-01-9	Chrysene	30.	J	4100.	U	1200.	U	50.	U	300.	U	300.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	52.	J	41000.	U	12000.	U	31.	J	230.	J	490.	J
117-84-0	Di-n-octylphthalate	400.	UJ	41000.	U	12000.	U	500.	UJ	3000.	U	3000.	U
205-99-2	Benzo(b)fluoranthene	40.	U	4100.	U	1200.	U	50.	U	300.	U	200.	J
207-08-9	Benzo(k)fluoranthene	40.	U	4100.	U	1200.	U	50.	U	300.	U	300.	U
50-32-8	Benzo(a)pyrene	27.	J	4100.	U	1200.	U	50.	U	300.	U	300.	U
193-39-5	Indeno(1,2,3-cd)pyrene	24.	J	4100.	U	1200.	U	50.	U	300.	U	300.	U
53-70-3	Dibenz(a,h)anthracene	40.	U	4100.	U	1200.	U	50.	U	300.	U	300.	U
191-24-2	Benzo(g,h,i)perylene	26.	J	4100.	U	1200.	U	50.	U	300.	U	300.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-10A3-01		041-M-1201-01		041-M-1202-01		041-M-1301-01		041-M-1501-01		041-M-1502-01	
	ORIGINAL ID ----->	041M10A301		041M120101		041M120201		041M130101		041M150101		041M150201	
	LAB SAMPLE ID --->	950979-01		950983-09		950991-10		950979-02		951021-05		951021-06	
	ID FROM REPORT -->	041M10A301		041M120101		041M120201		041M130101		041M150101		041M150201	
	SAMPLE DATE ----->	11/27/95		11/28/95		11/29/95		11/27/95		12/06/95		12/06/95	
	DATE EXTRACTED -->	11/30/95		11/30/95		12/02/95		11/30/95		12/12/95		12/12/95	
	DATE ANALYZED --->	12/05/95		12/07/95		12/09/95		12/05/95		12/28/95		12/28/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	041M10	VAL	Z53301	VAL	Z30301	VAL	041M10	VAL	EM0050	VAL	EM0050	VAL
108-95-2	Phenol	400.	U	41000.	U	12000.	U	500.	U	280.	J	3000.	U
111-44-4	bis(2-Chloroethyl)ether	40.	U	4100.	U	1200.	U	50.	U	300.	U	300.	U
95-57-8	2-Chlorophenol	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
541-73-1	1,3-Dichlorobenzene	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
106-46-7	1,4-Dichlorobenzene	31.	J	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
95-50-1	1,2-Dichlorobenzene	28.	J	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
95-48-7	2-Methylphenol (o-Cresol)	400.	U	41000.	U	12000.	U	500.	U	330.	J	3000.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400.	U	41000.	UR	12000.	U	500.	U	3000.	U	3000.	U
106-44-5	4-Methylphenol (p-Cresol)	400.	U	41000.	U	12000.	U	500.	U	4800.		3000.	U
621-64-7	N-Nitroso-di-n-propylamine	40.	U	4100.	U	1200.	U	50.	U	300.	U	300.	U
67-72-1	Hexachloroethane	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
98-95-3	Nitrobenzene	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
78-59-1	Isophorone	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
88-75-5	2-Nitrophenol	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
105-67-9	2,4-Dimethylphenol	400.	U	41000.	U	12000.	U	500.	U	630.	J	3000.	U
111-91-1	bis(2-Chloroethoxy)methane	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
120-83-2	2,4-Dichlorophenol	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
120-82-1	1,2,4-Trichlorobenzene	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
91-20-3	Naphthalene	40.	U	4100.	U	1300.		50.	U	300.	U	300.	U
106-47-8	4-Chloroaniline	400.	U	41000.	U	12000.	UR	500.	U	3000.	UR	3000.	UR
87-68-3	Hexachlorobutadiene	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
59-50-7	4-Chloro-3-methylphenol	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
91-57-6	2-Methylnaphthalene	40.	U	4100.	U	7100.		50.	U	300.	U	300.	U
77-47-4	Hexachlorocyclopentadiene	400.	U	41000.	UJ	12000.	UJ	500.	U	3000.	UJ	3000.	UJ
88-06-2	2,4,6-Trichlorophenol	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
95-95-4	2,4,5-Trichlorophenol	970.	U	100000.	U	30000.	U	1200.	U	7200.	U	7200.	U
91-58-7	2-Chloronaphthalene	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
88-74-4	2-Nitroaniline	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
131-11-3	Dimethylphthalate	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
208-96-8	Acenaphthylene	40.	U	4100.	U	1200.	U	50.	U	300.	U	300.	U
606-20-2	2,6-Dinitrotoluene	400.	U	41000.	U	12000.	U	500.	U	3000.	U	3000.	U
99-09-2	3-Nitroaniline	970.	U	100000.	UR	30000.	U	1200.	U	7200.	U	7200.	U
83-32-9	Acenaphthene	19.	U	2000.	U	600.	U	24.	U	140.	U	140.	U
51-28-5	2,4-Dinitrophenol	970.	U	100000.	UJ	30000.	U	1200.	U	7200.	U	7200.	U
100-02-7	4-Nitrophenol	970.	U	100000.	U	30000.	U	1200.	U	7200.	U	7200.	U
132-64-[illegible]	[illegible]enzofuran	400.	U	41000.	[illegible]	12000.	U	500.	U	3000.	U	3000.	U

*** Validation Complete ***

SVOA															
	SAMPLE ID ------->	041-M-0607-01		041-M-0608-01		041-M-0609-01		041-M-0611-01		041-M-10A1-01		041-M-10A2-01	
	ORIGINAL ID ----->	041M060701		041M060801		041M060901		041M061101		041M10A101		041M10A201	
	LAB SAMPLE ID --->	950940-01		950940-02		950940-03		950950-23		950983-14		950983-08	
	ID FROM REPORT -->	041M060701		041M060801		041M060901		041M061101		041M10A101		041M10A201	
	SAMPLE DATE ----->	11/14/95		11/14/95		11/14/95		11/16/95		11/28/95		11/28/95	
	DATE EXTRACTED -->	11/18/95		11/18/95		11/30/95		11/21/95		11/30/95		11/30/95	
	DATE ANALYZED --->	11/29/95		12/04/95		12/06/95		12/02/95		12/06/95		12/06/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	5A0101	VAL	Z53301	VAL	Z53301	VAL
121-14-2	2,4 Dinitrotoluene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
84-66-2	Diethylphthalate	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
7005-72-3	4 Chlorophenylphenyl ether	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
86-73-7	Fluorene	290.	U	19.	U	20.	U	19.	U	20.	U	19.	U
100-01-6	4 Nitroaniline	14000.	U	970.	UJ	1000.	U	960.	U	990.	U	960.	UJ
534-52-1	2 Methyl-4,6 Dinitrophenol	14000.	U	970.	U	1000.	U	960.	U	990.	U	960.	U
86-30-6	N Nitrosodiphenylamine	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
101-55-3	4-Bromophenyl-phenylether	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
118-74-1	Hexachlorobenzene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
87-86-5	Pentachlorophenol	14000.	U	970.	U	1000.	U	960.	U	990.	U	960.	U
85-01-8	Phenanthrene	590.	U	40.	U	42.	U	40.	U	22.	J	40.	U
120-12-7	Anthracene	590.	U	40.	U	42.	U	40.	U	22.	J	40.	U
86-74-8	Carbazole	5900.	U	400.	UJ	420.	U	400.	U	410.	U	400.	U
84-74-2	Di-n-butylphthalate	5900.	U	400.	U	45.	J	400.	U	410.	U	400.	U
206-44-0	Fluoranthene	590.	U	40.	U	42.	U	40.	U	140.		110.	
129-00-0	Pyrene	590.	U	40.	U	42.	U	40.	U	110.		89.	
85-68-7	Butylbenzylphthalate	5900.	U	24.	J	24.	J	400.	U	410.	UJ	35.	J
91-94-1	3,3'-Dichlorobenzidine	5900.	U	400.	U	420.	U	400.	U	410.	UJ	400.	UJ
56-55-3	Benzo(a)anthracene	590.	U	40.	U	42.	U	40.	U	87.		71.	
218-01-9	Chrysene	300.	J	40.	U	42.	U	40.	U	97.		79.	
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5900.	U	830.	U	420.	U	570.	U	410.	UJ	400.	UJ
117-84-0	Di-n-octylphthalate	5900.	UJ	400.	U	420.	U	400.	U	410.	U	400.	U
205-99-2	Benzo(b)fluoranthene	340.	J	40.	U	42.	U	40.	U	190.		150.	
207-08-9	Benzo(k)fluoranthene	590.	UJ	40.	U	42.	U	40.	U	74.		63.	
50-32-8	Benzo(a)pyrene	590.	UJ	40.	U	42.	U	23.	J	110.		88.	
193-39-5	Indeno(1,2,3-cd)pyrene	590.	UJ	40.	U	42.	U	40.	U	72.		66.	
53-70-3	Dibenz(a,h)anthracene	590.	UJ	40.	U	42.	U	40.	U	41.	U	40.	U
191-24-2	Benzo(g,h,i)perylene	590.	UJ	40.	U	42.	U	40.	U	71.		72.	

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-0607-01		041-M-0608-01		041-M-0609-01		041-M-0611-01		041-M-10A1-01		041-M-10A2-01	
	ORIGINAL ID ----->	041M060701		041M060801		041M060901		041M061101		041M10A101		041M10A201	
	LAB SAMPLE ID --->	950940-01		950940-02		950940-03		950950-23		950983-14		950983-08	
	ID FROM REPORT -->	041M060701		041M060801		041M060901		041M061101		041M10A101		041M10A201	
	SAMPLE DATE ----->	11/14/95		11/14/95		11/14/95		11/16/95		11/28/95		11/28/95	
	DATE EXTRACTED -->	11/18/95		11/18/95		11/30/95		11/21/95		11/30/95		11/30/95	
	DATE ANALYZED --->	11/29/95		12/04/95		12/06/95		12/02/95		12/06/95		12/06/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	5A0101	VAL	Z53301	VAL	Z53301	VAL
108-95-2	Phenol	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
111-44-4	bis(2-Chloroethyl)ether	590.	U	40.	U	42.	U	40.	U	41.	U	40.	U
95-57-8	2-Chlorophenol	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
541-73-1	1,3-Dichlorobenzene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
106-46-7	1,4-Dichlorobenzene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
95-50-1	1,2-Dichlorobenzene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
95-48-7	2-Methylphenol (o-Cresol)	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5900.	U	400.	UR	420.	U	400.	U	410.	UJ	400.	UJ
106-44-5	4-Methylphenol (p-Cresol)	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
621-64-7	N-Nitroso-di-n-propylamine	590.	U	40.	U	42.	U	40.	U	41.	U	40.	U
67-72-1	Hexachloroethane	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
98-95-3	Nitrobenzene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
78-59-1	Isophorone	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
88-75-5	2-Nitrophenol	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
105-67-9	2,4-Dimethylphenol	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
111-91-1	bis(2-Chloroethoxy)methane	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
120-83-2	2,4-Dichlorophenol	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
120-82-1	1,2,4-Trichlorobenzene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
91-20-3	Naphthalene	590.	U	40.	U	42.	U	40.	U	41.	U	40.	U
106-47-8	4-Chloroaniline	5900.	U	400.	UJ	420.	U	400.	U	410.	U	400.	U
87-68-3	Hexachlorobutadiene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
59-50-7	4-Chloro-3-methylphenol	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
91-57-6	2-Methylnaphthalene	590.	U	40.	U	42.	U	40.	U	41.	U	40.	U
77-47-4	Hexachlorocyclopentadiene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
88-06-2	2,4,6-Trichlorophenol	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
95-95-4	2,4,5-Trichlorophenol	14000.	U	970.	U	1000.	U	960.	U	990.	U	960.	U
91-58-7	2-Chloronaphthalene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
88-74-4	2-Nitroaniline	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
131-11-3	Dimethylphthalate	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
208-96-8	Acenaphthylene	590.	U	40.	U	42.	U	40.	U	33.	J	32.	J
606-20-2	2,6-Dinitrotoluene	5900.	U	400.	U	420.	U	400.	U	410.	U	400.	U
99-09-2	3-Nitroaniline	14000.	U	970.	UR	1000.	U	960.	U	990.	UR	960.	UR
83-32-9	Acenaphthene	290.	U	19.	U	20.	U	19.	U	20.	U	19.	U
51-28-5	2,4-Dinitrophenol	14000.	U	970.	U	1000.	U	960.	U	990.	U	960.	U
100-02-7	4-Nitrophenol	14000.	U	970.	U	1000.	U	960.	U	990.	UJ	960.	U
132-64-[illegible]	[illegible]enzofuran	5900.	U	400.	[illegible]	420.	U	400.	U	410.	U	400.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-04D5-01		041-M-0601-01		041-M-0602-01		041-M-0604-01		041-M-0605-01		041-M-0606-01	
	ORIGINAL ID ----->	041M04D501		041M060101		041M060201		041M060401		041M060501		041M060601	
	LAB SAMPLE ID --->	951012-13		950941-01		950941-02		950941-04		950950-20		950950-21	
	ID FROM REPORT -->	041M04D501		041M060101		041M060201		041M060401		041M060501		041M060601	
	SAMPLE DATE ----->	12/05/95		11/15/95		11/15/95		11/15/95		11/16/95		11/16/95	
	DATE EXTRACTED -->	12/07/95		11/18/95		11/18/95		11/18/95		11/21/95		11/21/95	
	DATE ANALYZED --->	12/28/95		11/27/95		11/26/95		11/28/95		12/06/95		12/03/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	030301	VAL	M06010	VAL	M06010	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL
121-14-2	2,4-Dinitrotoluene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
84-66-2	Diethylphthalate	410.	U	390.	U	410.	U	23.	J	400.	U	480.	U
7005-72-3	4-Chlorophenylphenyl ether	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
86-73-7	Fluorene	20.	U	19.	U	20.	U	20.	U	19.	U	23.	U
100-01-6	4-Nitroaniline	990.	UJ	950.	U	990.	U	980.	U	960.	U	1200.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	990.	U	950.	U	990.	U	980.	U	960.	U	1200.	U
86-30-6	N-Nitrosodiphenylamine	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
101-55-3	4-Bromophenyl-phenylether	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
118-74-1	Hexachlorobenzene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
87-86-5	Pentachlorophenol	990.	U	950.	U	990.	U	980.	U	960.	U	1200.	U
85-01-8	Phenanthrene	41.	U	51.		37.	J	41.	U	40.	U	48.	U
120-12-7	Anthracene	41.	U	39.	U	41.	U	41.	U	40.	U	48.	U
86-74-8	Carbazole	410.	UJ	390.	U	410.	U	410.	U	400.	U	480.	U
84-74-2	Di-n-butylphthalate	410.	U	29.	J	99.	J	56.	J	400.	U	480.	U
206-44-0	Fluoranthene	41.	U	88.		120.		42.		40.	U	67.	
129-00-0	Pyrene	41.	U	73.		100.		52.		40.	U	69.	
85-68-7	Butylbenzylphthalate	410.	U	24.	J	410.	U	30.	J	400.	U	27.	J
91-94-1	3,3'-Dichlorobenzidine	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
56-55-3	Benzo(a)anthracene	41.	U	34.	J	43.		41.	U	40.	U	40.	J
218-01-9	Chrysene	41.	U	55.		45.		21.	J	40.	U	48.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	64.	J	390.	U	410.	U	410.	U	400.	U	480.	U
117-84-0	Di-n-octylphthalate	410.	U	390.	U	410.	U	410.	U	400.	U	84.	J
205-99-2	Benzo(b)fluoranthene	41.	U	54.		66.		27.	J	40.	U	52.	
207-08-9	Benzo(k)fluoranthene	41.	U	21.	J	24.	J	41.	U	40.	U	48.	U
50-32-8	Benzo(a)pyrene	41.	U	33.	J	42.		41.	U	40.	U	32.	J
193-39-5	Indeno(1,2,3-cd)pyrene	41.	U	28.	J	27.	J	41.	U	40.	U	48.	U
53-70-3	Dibenz(a,h)anthracene	41.	U	39.	U	41.	U	41.	U	40.	U	48.	U
191-24-2	Benzo(g,h,i)perylene	41.	U	32.	J	29.	J	41.	U	40.	U	48.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-04D5-01		041-M-0601-01		041-M-0602-01		041-M-0604-01		041-M-0605-01		041-M-0606-01	
	ORIGINAL ID ----->	041M04D501		041M060101		041M060201		041M060401		041M060501		041M060601	
	LAB SAMPLE ID --->	951012-13		950941-01		950941-02		950941-04		950950-20		950950-21	
	ID FROM REPORT -->	041M04D501		041M060101		041M060201		041M060401		041M060501		041M060601	
	SAMPLE DATE ----->	12/05/95		11/15/95		11/15/95		11/15/95		11/16/95		11/16/95	
	DATE EXTRACTED -->	12/07/95		11/18/95		11/18/95		11/18/95		11/21/95		11/21/95	
	DATE ANALYZED --->	12/28/95		11/27/95		11/26/95		11/28/95		12/06/95		12/03/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	030301	VAL	M06010	VAL	M06010	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL
108-95-2	Phenol	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
111-44-4	bis(2-Chloroethyl)ether	41.	U	39.	U	41.	U	41.	U	40.	U	48.	U
95-57-8	2-Chlorophenol	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
541-73-1	1,3-Dichlorobenzene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
106-46-7	1,4-Dichlorobenzene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
95-50-1	1,2-Dichlorobenzene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
95-48-7	2-Methylphenol (o-Cresol)	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410.	U	390.	UR	410.	UJ	410.	UR	400.	U	480.	U
106-44-5	4-Methylphenol (p-Cresol)	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
621-64-7	N-Nitroso-di-n-propylamine	41.	U	39.	U	41.	U	41.	U	40.	U	48.	U
67-72-1	Hexachloroethane	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
98-95-3	Nitrobenzene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
78-59-1	Isophorone	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
88-75-5	2-Nitrophenol	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
105-67-9	2,4-Dimethylphenol	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
111-91-1	bis(2-Chloroethoxy)methane	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
120-83-2	2,4-Dichlorophenol	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
120-82-1	1,2,4-Trichlorobenzene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
91-20-3	Naphthalene	41.	U	39.	U	41.	U	41.	U	40.	U	48.	U
106-47-8	4-Chloroaniline	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
87-68-3	Hexachlorobutadiene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
59-50-7	4-Chloro-3-methylphenol	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
91-57-6	2-Methylnaphthalene	41.	U	39.	U	41.	U	41.	U	40.	U	48.	U
77-47-4	Hexachlorocyclopentadiene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
88-06-2	2,4,6-Trichlorophenol	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
95-95-4	2,4,5-Trichlorophenol	990.	U	950.	U	990.	U	980.	U	960.	U	1200.	U
91-58-7	2-Chloronaphthalene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
88-74-4	2-Nitroaniline	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
131-11-3	Dimethylphthalate	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
208-96-8	Acenaphthylene	41.	U	39.	U	41.	U	41.	U	40.	U	48.	U
606-20-2	2,6-Dinitrotoluene	410.	U	390.	U	410.	U	410.	U	400.	U	480.	U
99-09-2	3-Nitroaniline	990.	U	950.	U	990.	U	980.	U	960.	U	1200.	U
83-32-9	Acenaphthene	20.	U	19.	U	20.	U	34.		19.	U	23.	U
51-28-5	2,4-Dinitrophenol	990.	UJ	950.	U	990.	U	980.	U	960.	U	1200.	U
100-02-7	4-Nitrophenol	990.	UJ	950.	U	990.	UJ	980.	U	960.	U	1200.	U
132-64-[illegible]	[illegible]nzofuran	410.	U	390.		410.	U	410.	U	400.	U	480.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-0306-01		041-M-0307-01		041-M-04D1-01		041-M-04D2-01		041-M-04D3-01		041-M-04D4-01	
	ORIGINAL ID ----->	041M030601		041M030701		041M04D101		041M04D201		041M04D301		041M04D401	
	LAB SAMPLE ID --->	951012-04		951012-05		951012-09		951012-10		951012-11		951012-12	
	ID FROM REPORT -->	041M030601		041M030701		041M04D101		041M04D201		041M04D301		041M04D401	
	SAMPLE DATE ----->	12/04/95		12/04/95		12/05/95		12/05/95		12/05/95		12/05/95	
	DATE EXTRACTED -->	12/07/95		12/07/95		12/07/95		12/07/95		12/07/95		12/07/95	
	DATE ANALYZED --->	12/28/95		12/28/95		12/28/95		12/28/95		12/28/95		01/20/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL
121-14-2	2,4-Dinitrotoluene	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
84-66-2	Diethylphthalate	480.	U	1700.	U	940.	U	1300.	U	400.	U	71000.	J
7005-72-3	4-Chlorophenylphenyl ether	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
86-73-7	Fluorene	23.	U	83.	U	46.	U	64.	U	19.	U	620.	UJ
100-01-6	4-Nitroaniline	1200.	U	4200.	U	2300.	U	3200.	UJ	970.	UJ	31000.	UJ
534-52-1	2-Methyl-4,6-Dinitrophenol	1200.	U	4200.	U	2300.	U	3200.	U	970.	U	31000.	UJ
86-30-6	N-Nitrosodiphenylamine	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
101-55-3	4-Bromophenyl-phenylether	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
118-74-1	Hexachlorobenzene	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
87-86-5	Pentachlorophenol	1200.	U	4200.	U	2300.	U	3200.	U	970.	U	31000.	UJ
85-01-8	Phenanthrene	48.	U	170.	U	53.	J	80.	J	38.	J	1300.	UJ
120-12-7	Anthracene	48.	U	170.	U	94.	U	130.	U	40.	U	1300.	UJ
86-74-8	Carbazole	480.	UJ	1700.	UJ	66.	J	1300.	UJ	400.	UJ	13000.	UJ
84-74-2	Di-n-butylphthalate	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
206-44-0	Fluoranthene	48.	U	170.	U	280.		310.		110.		1300.	UJ
129-00-0	Pyrene	48.	U	170.	U	260.		410.		130.		1300.	UJ
85-68-7	Butylbenzylphthalate	480.	U	1700.	U	81.	J	68.	J	400.	U	13000.	UJ
91-94-1	3,3'-Dichlorobenzidine	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
56-55-3	Benzo(a)anthracene	48.	U	170.	U	130.		250.		88.		1300.	UJ
218-01-9	Chrysene	48.	U	170.	U	150.		240.		120.		1300.	UJ
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	88.	J	270.	J	170.	J	240.	J	61.	J	13000.	UJ
117-84-0	Di-n-octylphthalate	45.	J	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
205-99-2	Benzo(b)fluoranthene	48.	U	170.	U	240.		380.		160.		1300.	UJ
207-08-9	Benzo(k)fluoranthene	48.	U	170.	U	140.		230.		100.		1300.	UJ
50-32-8	Benzo(a)pyrene	48.	U	180.		190.		310.		120.		1300.	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	48.	U	170.	U	150.		240.		77.		1300.	UJ
53-70-3	Dibenz(a,h)anthracene	48.	U	170.	U	94.	U	130.	U	40.	U	1300.	UJ
191-24-2	Benzo(g,h,i)perylene	48.	U	170.	U	290.		390.		130.		1300.	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-0306-01		041-M-0307-01		041-M-04D1-01		041-M-04D2-01		041-M-04D3-01		041-M-04D4-01	
	ORIGINAL ID ----->	041M030601		041M030701		041M04D101		041M04D201		041M04D301		041M04D401	
	LAB SAMPLE ID --->	951012-04		951012-05		951012-09		951012-10		951012-11		951012-12	
	ID FROM REPORT -->	041M030601		041M030701		041M04D101		041M04D201		041M04D301		041M04D401	
	SAMPLE DATE ----->	12/04/95		12/04/95		12/05/95		12/05/95		12/05/95		12/05/95	
	DATE EXTRACTED -->	12/07/95		12/07/95		12/07/95		12/07/95		12/07/95		12/07/95	
	DATE ANALYZED --->	12/28/95		12/28/95		12/28/95		12/28/95		12/28/95		01/20/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL
108 95 2	Phenol	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
111 44 4	bis(2 Chloroethyl)ether	48.	U	170.	U	94.	U	130.	U	40.	U	1300.	UJ
95 57 8	2 Chlorophenol	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
541 73 1	1,3 Dichlorobenzene	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
106 46 7	1,4 Dichlorobenzene	58.	J	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
95 50 1	1,2 Dichlorobenzene	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
95 48 7	2 Methylphenol (o Cresol)	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
108 60 1	2,2'-oxybis(1-Chloropropane)	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
106 44 5	4 Methylphenol (p Cresol)	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
621 64 7	N Nitroso-di-n-propylamine	48.	U	170.	U	94.	U	130.	U	40.	U	1300.	UJ
67 72 1	Hexachloroethane	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
98-95-3	Nitrobenzene	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
78-59-1	Isophorone	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
88-75-5	2-Nitrophenol	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
105-67-9	2,4-Dimethylphenol	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
111-91-1	bis(2-Chloroethoxy)methane	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
120-83-2	2,4-Dichlorophenol	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
120-82-1	1,2,4-Trichlorobenzene	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
91-20-3	Naphthalene	48.	U	170.	U	94.	U	130.	U	40.	U	1300.	UJ
106-47-8	4-Chloroaniline	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
87-68-3	Hexachlorobutadiene	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
59-50-7	4-Chloro-3-methylphenol	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
91-57-6	2-Methylnaphthalene	48.	U	170.	U	94.	U	130.	U	40.	U	1300.	UJ
77-47-4	Hexachlorocyclopentadiene	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
88-06-2	2,4,6-Trichlorophenol	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
95-95-4	2,4,5-Trichlorophenol	1200.	U	4200.	U	2300.	U	3200.	U	970.	U	31000.	UJ
91-58-7	2-Chloronaphthalene	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
88-74-4	2-Nitroaniline	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
131-11-3	Dimethylphthalate	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
208-96-8	Acenaphthylene	48.	U	170.	U	94.	U	130.	U	40.	U	1300.	UJ
606-20-2	2,6-Dinitrotoluene	480.	U	1700.	U	940.	U	1300.	U	400.	U	13000.	UJ
99-09-2	3-Nitroaniline	1200.	U	4200.	U	2300.	U	3200.	U	970.	U	31000.	UJ
83-32-9	Acenaphthene	23.	U	83.	U	46.	U	64.	U	19.	U	620.	UJ
51-28-5	2,4-Dinitrophenol	1200.	U	4200.	U	2300.	U	3200.	UJ	970.	UJ	31000.	UJ
100-02-7	4-Nitrophenol	1200.	U	4200.	U	2300.	U	3200.	UJ	970.	UJ	31000.	UJ
132-64-9	[illegible]nzofuran	480.	U	1700.		940.	U	1300.	U	400.	U	[illegible]3000.	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	041-M-0104-01		041-M-0301-01		041-M-0302-01		041-M-0303-01		041-M-0304-01		041-M-0305-01	
	ORIGINAL ID ----->	041M010401		041M030101		041M030201		041M030301		041M030401		041M030501	
	LAB SAMPLE ID --->	960039-12		950998-15		950998-16		951012-01		951012-02		951012-03	
	ID FROM REPORT -->	041M010401		041M030101		041M030201		041M030301		041M030401		041M030501	
	SAMPLE DATE ----->	01/17/96		12/01/95		12/01/95		12/04/95		12/04/95		12/04/95	
	DATE EXTRACTED -->	01/22/96		12/05/95		12/05/95		12/07/95		12/07/95		12/07/95	
	DATE ANALYZED --->	01/31/96		12/22/95		12/20/95		01/04/96		12/30/95		12/28/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	63A401	VAL	EM0040	VAL	EM0040	VAL	030301	VAL	030301	VAL	030301	VAL
121-14-2	2,4-Dinitrotoluene	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
84-66-2	Diethylphthalate	11000.	U	400.	U	3000.	U	47.	J	460.	U	2100.	U
7005-72-3	4-Chlorophenylphenyl ether	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
86-73-7	Fluorene	530.	U	19.	U	140.	U	95.		23.	U	100.	U
100-01-6	4-Nitroaniline	27000.	U	960.	U	7200.	U	2100.	U	1100.	U	5000.	UJ
534-52-1	2-Methyl-4,6-Dinitrophenol	27000.	U	960.	U	7200.	U	2100.	U	1100.	U	5000.	U
86-30-6	N-Nitrosodiphenylamine	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
101-55-3	4-Bromophenyl-phenylether	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
118-74-1	Hexachlorobenzene	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
87-86-5	Pentachlorophenol	27000.	U	960.	U	7200.	U	2100.	U	1100.	U	5000.	U
85-01-8	Phenanthrene	4000.		24.	J	300.	U	87.	U	46.	U	210.	U
120-12-7	Anthracene	990.	J	40.	U	300.	U	87.	U	46.	U	210.	U
86-74-8	Carbazole	880.	J	400.	U	3000.	U	870.	U	460.	U	2100.	UJ
84-74-2	Di-n-butylphthalate	11000.	U	36.	J	3000.	U	77.	J	460.	U	2100.	U
206-44-0	Fluoranthene	7200.		46.		300.	U	87.	U	46.	U	210.	U
129-00-0	Pyrene	6200.		43.		300.	U	87.	U	46.	U	210.	U
85-68-7	Butylbenzylphthalate	11000.	U	23.	J	3000.	U	870.	U	460.	U	2100.	U
91-94-1	3,3'-Dichlorobenzidine	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
56-55-3	Benzo(a)anthracene	3800.		23.	J	300.	U	87.	U	46.	U	210.	U
218-01-9	Chrysene	4200.		32.	J	300.	U	87.	U	46.	U	210.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	3500.	J	400.	U	3000.	U	870.	U	76.	J	210.	J
117-84-0	Di-n-octylphthalate	11000.	U	400.	U	3000.	U	45.	J	460.	U	2100.	U
205-99-2	Benzo(b)fluoranthene	5400.		85.		300.	U	87.	U	46.	U	210.	U
207-08-9	Benzo(k)fluoranthene	1700.		27.	J	300.	U	87.	U	46.	U	210.	U
50-32-8	Benzo(a)pyrene	4300.		48.		300.	U	87.	U	46.	U	210.	U
193-39-5	Indeno(1,2,3-cd)pyrene	2000.		31.	J	300.	U	87.	U	46.	U	210.	U
53-70-3	Dibenz(a,h)anthracene	1100.	U	40.	U	300.	U	87.	U	46.	U	210.	U
191-24-2	Benzo(g,h,i)perylene	1900.		46.		300.	U	87.	U	46.	U	210.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	041-M-0104-01		041-M-0301-01		041-M-0302-01		041-M-0303-01		041-M-0304-01		041-M-0305-01	
	ORIGINAL ID ----->	041M010401		041M030101		041M030201		041M030301		041M030401		041M030501	
	LAB SAMPLE ID --->	960039-12		950998-15		950998-16		951012-01		951012-02		951012-03	
	ID FROM REPORT -->	041M010401		041M030101		041M030201		041M030301		041M030401		041M030501	
	SAMPLE DATE ----->	01/17/96		12/01/95		12/01/95		12/04/95		12/04/95		12/04/95	
	DATE EXTRACTED -->	01/22/96		12/05/95		12/05/95		12/07/95		12/07/95		12/07/95	
	DATE ANALYZED --->	01/31/96		12/22/95		12/20/95		01/04/96		12/30/95		12/28/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	63A401	VAL	EM0040	VAL	EM0040	VAL	030301	VAL	030301	VAL	030301	VAL
108-95-2	Phenol	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
111-44-4	bis(2-Chloroethyl)ether	1100.	U	40.	U	300.	U	87.	U	46.	U	210.	U
95-57-8	2-Chlorophenol	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
541-73-1	1,3-Dichlorobenzene	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
106-46-7	1,4-Dichlorobenzene	11000.	U	400.	U	1400.	J	1400.		160.	J	2100.	U
95-50-1	1,2-Dichlorobenzene	11000.	U	400.	U	410.	J	870.	U	460.	U	2100.	U
95-48-7	2-Methylphenol (o-Cresol)	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
106-44-5	4-Methylphenol (p-Cresol)	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
621-64-7	N-Nitroso-di-n-propylamine	1100.	U	40.	U	300.	U	87.	U	46.	U	210.	U
67-72-1	Hexachloroethane	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
98-95-3	Nitrobenzene	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
78-59-1	Isophorone	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
88-75-5	2-Nitrophenol	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
105-67-9	2,4-Dimethylphenol	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
111-91-1	bis(2-Chloroethoxy)methane	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
120-83-2	2,4-Dichlorophenol	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
120-82-1	1,2,4-Trichlorobenzene	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
91-20-3	Naphthalene	1100.	U	40.	U	300.	U	160.		46.	U	210.	U
106-47-8	4-Chloroaniline	11000.	U	400.	UR	3000.	UR	870.	UR	460.	U	2100.	U
87-68-3	Hexachlorobutadiene	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
59-50-7	4-Chloro-3-methylphenol	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
91-57-6	2-Methylnaphthalene	1100.	U	40.	U	300.	U	87.	U	46.	U	210.	U
77-47-4	Hexachlorocyclopentadiene	11000.	U	400.	UJ	3000.	UJ	870.	U	460.	U	2100.	U
88-06-2	2,4,6-Trichlorophenol	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
95-95-4	2,4,5-Trichlorophenol	27000.	U	960.	U	7200.	U	2100.	U	1100.	U	5000.	U
91-58-7	2-Chloronaphthalene	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
88-74-4	2-Nitroaniline	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
131-11-3	Dimethylphthalate	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
208-96-8	Acenaphthylene	1100.	U	40.	U	300.	U	87.	U	46.	U	210.	U
606-20-2	2,6-Dinitrotoluene	11000.	U	400.	U	3000.	U	870.	U	460.	U	2100.	U
99-09-2	3-Nitroaniline	27000.	U	960.	U	7200.	U	2100.	U	1100.	U	5000.	U
83-32-9	Acenaphthene	530.	U	19.	U	140.	U	98.		23.	U	100.	U
51-28-5	2,4-Dinitrophenol	27000.	U	960.	U	7200.	U	2100.	U	1100.	UJ	5000.	UJ
100-02-7	4-Nitrophenol	27000.	U	960.	U	7200.	U	2100.	U	1100.	U	5000.	UJ
132-64-9	nzofuran	11000.	U	400.		3000.	U	870.	U	460.	U	2100.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	033-W-0030-02		033-M-0040-01		033-W-0040-02		041-M-0101-01		041-M-0102-01		041-M-0103-01	
	ORIGINAL ID ----->	33W03002		33M04001		33W04002		041M010101		041M010201		041M010301	
	LAB SAMPLE ID --->	533147		533359		533149		960039-09		960039-10		960039-11	
	ID FROM REPORT -->	33W03002		33M04001		33W04002		041M010101		041M010201		041M010301	
	SAMPLE DATE ----->	01/20/93		01/19/93		01/20/93		01/17/96		01/17/96		01/18/96	
	DATE EXTRACTED -->							01/22/96		01/22/96		01/22/96	
	DATE ANALYZED --->	01/27/93		01/29/93		01/27/93		01/31/96		01/31/96		01/31/96	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	549	VAL	578	VAL	549	VAL	63A401	VAL	63A401	VAL	63A401	VAL
121-14-2	2,4-Dinitrotoluene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
84-66-2	Diethylphthalate	1.	U	420.	U	1.	U	450.	U	4000.	U	4200.	U
7005-72-3	4-Chlorophenylphenyl ether	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
86-73-7	Fluorene	10.	U	420.	U	10.	U	22.	U	190.	U	200.	U
100-01-6	4-Nitroaniline	25.	U	1000.	U	25.	U	1100.	U	9700.	U	10000.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	25.	U	1000.	U	25.	U	1100.	U	9700.	U	10000.	U
86-30-6	N-Nitrosodiphenylamine	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
101-55-3	4-Bromophenyl-phenylether	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
118-74-1	Hexachlorobenzene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
87-86-5	Pentachlorophenol	25.	U	1000.	U	25.	U	1100.	U	9700.	U	10000.	U
85-01-8	Phenanthrene	10.	U	420.	U	10.	U	45.	U	400.	U	420.	J
120-12-7	Anthracene	10.	U	420.	U	10.	U	45.	U	400.	U	420.	U
86-74-8	Carbazole	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
84-74-2	Di-n-butylphthalate	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
206-44-0	Fluoranthene	10.	U	43.	J	10.	U	45.	U	400.	U	1200.	
129-00-0	Pyrene	10.	U	420.	U	10.	U	45.	U	400.	U	930.	
85-68-7	Butylbenzylphthalate	4.	U	230.	U	4.	U	450.	U	4000.	U	4200.	U
91-94-1	3,3'-Dichlorobenzidine	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
56-55-3	Benzo(a)anthracene	10.	U	420.	U	10.	U	45.	U	400.	U	420.	J
218-01-9	Chrysene	10.	U	420.	U	10.	U	45.	U	400.	U	530.	
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	7.	U	420.	U	1.	U	41.	J	260.	J	680.	J
117-84-0	Di-n-octylphthalate	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
205-99-2	Benzo(b)fluoranthene	10.	U	420.	U	10.	U	45.	U	400.	U	600.	
207-08-9	Benzo(k)fluoranthene	10.	U	420.	U	10.	U	45.	U	400.	U	220.	J
50-32-8	Benzo(a)pyrene	10.	U	420.	U	10.	U	45.	U	400.	U	480.	
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U	420.	U	10.	U	45.	U	400.	U	220.	J
53-70-3	Dibenz(a,h)anthracene	10.	U	420.	U	10.	U	45.	U	400.	U	420.	U
191-24-2	Benzo(g,h,i)perylene	10.	U	420.	U	10.	U	45.	U	400.	U	250.	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	033-W-0030-02		033-M-0040-01		033-W-0040-02		041-M-0101-01		041-M-0102-01		041-M-0103-01	
	ORIGINAL ID ----->	33W03002		33M04001		33W04002		041M010101		041M010201		041M010301	
	LAB SAMPLE ID --->	533147		533359		533149		960039-09		960039-10		960039-11	
	ID FROM REPORT -->	33W03002		33M04001		33W04002		041M010101		041M010201		041M010301	
	SAMPLE DATE ----->	01/20/93		01/19/93		01/20/93		01/17/96		01/17/96		01/18/96	
	DATE EXTRACTED -->							01/22/96		01/22/96		01/22/96	
	DATE ANALYZED --->	01/27/93		01/29/93		01/27/93		01/31/96		01/31/96		01/31/96	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	549	VAL	578	VAL	549	VAL	63A401	VAL	63A401	VAL	63A401	VAL
108-95-2	Phenol	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U	420.	U	10.	U	45.	U	400.	U	420.	U
95-57-8	2-Chlorophenol	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
541-73-1	1,3-Dichlorobenzene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
106-46-7	1,4-Dichlorobenzene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
95-50-1	1,2-Dichlorobenzene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
95-48-7	2-Methylphenol (o-Cresol)	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
106-44-5	4-Methylphenol (p-Cresol)	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U	420.	U	10.	U	45.	U	400.	U	420.	U
67-72-1	Hexachloroethane	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
98-95-3	Nitrobenzene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
78-59-1	Isophorone	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
88-75-5	2-Nitrophenol	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
105-67-9	2,4-Dimethylphenol	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
120-83-2	2,4-Dichlorophenol	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
91-20-3	Naphthalene	10.	U	420.	U	10.	U	45.	U	400.	U	420.	U
106-47-8	4-Chloroaniline	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
87-68-3	Hexachlorobutadiene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
59-50-7	4-Chloro-3-methylphenol	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
91-57-6	2-Methylnaphthalene	10.	U	420.	U	10.	U	45.	U	400.	U	420.	U
77-47-4	Hexachlorocyclopentadiene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
88-06-2	2,4,6-Trichlorophenol	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
95-95-4	2,4,5-Trichlorophenol	25.	U	1000.	U	25.	U	1100.	U	9700.	U	10000.	U
91-58-7	2-Chloronaphthalene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
88-74-4	2-Nitroaniline	25.	U	1000.	U	25.	U	450.	U	4000.	U	4200.	U
131-11-3	Dimethylphthalate	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
208-96-8	Acenaphthylene	10.	U	420.	U	10.	U	45.	U	400.	U	420.	U
606-20-2	2,6-Dinitrotoluene	10.	U	420.	U	10.	U	450.	U	4000.	U	4200.	U
99-09-2	3-Nitroaniline	25.	U	1000.	U	25.	U	1100.	U	9700.	U	10000.	U
83-32-9	Acenaphthene	10.	U	420.	U	10.	U	22.	U	190.	U	200.	U
51-28-5	2,4-Dinitrophenol	25.	U	1000.	U	25.	U	1100.	U	9700.	U	10000.	U
100-02-7	4-Nitrophenol	25.	U	1000.	U	25.	U	1100.	U	9700.	U	10000.	U
132-64-[illegible]	[illegible]nzofuran	10.	U	420.		10.	U	450.	U	4000.	U	4200.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	010-M-0001-01		033-M-0010-01		033-W-0010-02		033-M-0020-01		033-W-0020-02		033-M-0030-01	
	ORIGINAL ID ----->	10M0101		33M01001		33W01002		33M02001		33W02002		33M03001	
	LAB SAMPLE ID --->	39496-34		533364		533140		533370		533144		533344	
	ID FROM REPORT -->	10M0101		33M01001		33W01002		33M02001		33W02002		33M03001	
	SAMPLE DATE ----->			01/19/93		01/20/93		01/19/93		01/20/93		01/19/93	
	DATE EXTRACTED -->	03/08/94											
	DATE ANALYZED --->	03/10/94		01/29/93		01/27/93		01/29/93		01/26/93		01/29/93	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/L		UG/KG		UG/L		UG/KG	
CAS #	Parameter	CT520	VAL	578	VAL	549	VAL	578	VAL	549	VAL	578	VAL
121-14-2	2,4-Dinitrotoluene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
84-66-2	Diethylphthalate	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
7005-72-3	4-Chlorophenylphenyl ether	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
86-73-7	Fluorene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
100-01-6	4-Nitroaniline	1000.	UJ	1000.	U	25.	U	1000.	U	25.	U	1000.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1000.	UJ	1000.	U	25.	U	1000.	U	25.	U	1000.	U
86-30-6	N-Nitrosodiphenylamine	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
101-55-3	4-Bromophenyl-phenylether	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
118-74-1	Hexachlorobenzene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
87-86-5	Pentachlorophenol	1000.	UJ	1000.	U	25.	U	1000.	U	25.	U	1000.	U
85-01-8	Phenanthrene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
120-12-7	Anthracene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
86-74-8	Carbazole	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
84-74-2	Di-n-butylphthalate	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
206-44-0	Fluoranthene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
129-00-0	Pyrene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
85-68-7	Butylbenzylphthalate	420.	UJ	140.	U	4.	U	140.	U	4.	U	180.	U
91-94-1	3,3'-Dichlorobenzidine	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
56-55-3	Benzo(a)anthracene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
218-01-9	Chrysene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	420.	UJ	59.	U	6.	U	150.	U	6.	U	410.	U
117-84-0	Di-n-octylphthalate	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
205-99-2	Benzo(b)fluoranthene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
207-08-9	Benzo(k)fluoranthene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
50-32-8	Benzo(a)pyrene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
193-39-5	Indeno(1,2,3-cd)pyrene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
53-70-3	Dibenz(a,h)anthracene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
191-24-2	Benzo(g,h,i)perylene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA															
	SAMPLE ID ------->	010-M-0001-01		033-M-0010-01		033-W-0010-02		033-M-0020-01		033-W-0020-02		033-M-0030-01	
	ORIGINAL ID ----->	10M0101		33M01001		33W01002		33M02001		33W02002		33M03001	
	LAB SAMPLE ID --->	39496-34		533364		533140		533370		533144		533344	
	ID FROM REPORT -->	10M0101		33M01001		33W01002		33M02001		33W02002		33M03001	
	SAMPLE DATE ----->			01/19/93		01/20/93		01/19/93		01/20/93		01/19/93	
	DATE EXTRACTED -->	03/08/94											
	DATE ANALYZED --->	03/10/94		01/29/93		01/27/93		01/29/93		01/26/93		01/29/93	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/L		UG/KG		UG/L		UG/KG	
CAS #	Parameter	CT520	VAL	578	VAL	549	VAL	578	VAL	549	VAL	578	VAL
108 95 2	Phenol	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
111 44 4	bis(2-Chloroethyl)ether	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
95 57 8	2 Chlorophenol	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
541 73 1	1,3-Dichlorobenzene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
106 46 7	1,4 Dichlorobenzene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
95 50 1	1,2 Dichlorobenzene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
95 48 7	2 Methylphenol (o-Cresol)	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
108 60 1	2,2'-oxybis(1-Chloropropane)	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
106 44 5	4 Methylphenol (p-Cresol)	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
621 64 7	N-Nitroso-di-n-propylamine	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
67-72-1	Hexachloroethane	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
98-95-3	Nitrobenzene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
78-59-1	Isophorone	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
88-75-5	2-Nitrophenol	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
105-67-9	2,4-Dimethylphenol	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
111-91-1	bis(2-Chloroethoxy)methane	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
120-83-2	2,4-Dichlorophenol	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
120-82-1	1,2,4-Trichlorobenzene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
91-20-3	Naphthalene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
106-47-8	4-Chloroaniline	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
87-68-3	Hexachlorobutadiene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
59-50-7	4-Chloro-3-methylphenol	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
91-57-6	2-Methylnaphthalene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
77-47-4	Hexachlorocyclopentadiene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
88-06-2	2,4,6-Trichlorophenol	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
95-95-4	2,4,5-Trichlorophenol	1000.	UJ	1000.	U	25.	U	1000.	U	25.	U	1000.	U
91-58-7	2-Chloronaphthalene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
88-74-4	2-Nitroaniline	1000.	UJ	1000.	U	25.	U	1000.	U	25.	U	1000.	U
131-11-3	Dimethylphthalate	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
208-96-8	Acenaphthylene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
606-20-2	2,6-Dinitrotoluene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
99-09-2	3-Nitroaniline	1000.	UJ	1000.	U	25.	U	1000.	U	25.	U	1000.	U
83-32-9	Acenaphthene	420.	UJ	430.	U	10.	U	430.	U	10.	U	410.	U
51-28-5	2,4-Dinitrophenol	1000.	UJ	1000.	U	25.	U	1000.	U	25.	U	1000.	U
100-02-7	4-Nitrophenol	1000.	UJ	1000.	U	25.	U	1000.	U	25.	U	1000.	U
132-64-[illegible]	[illegible]nzofuran	420.	UJ	430.		10.	U	430.	U	10.	U	410.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	001-M-0003-03		001-W-0003-03		001-M-0016-01		001-W-0016-01		001-M-0018-01		001-W-0018-01	
	ORIGINAL ID ----->	01M0303		01W0303		01M1601		01W1601		01M1801		01W1801	
	LAB SAMPLE ID --->	621861		621833		622183		622178		622184		622169	
	ID FROM REPORT -->	01M0303		01W0303		01M1601		01W1601		01M1801		01W1801	
	SAMPLE DATE ----->	06/28/94		06/28/94		06/29/94		06/29/94		06/29/94		06/29/94	
	DATE EXTRACTED -->	07/08/94		06/30/94		07/08/94		07/01/94		07/08/94		07/01/94	
	DATE ANALYZED --->	07/11/94		07/05/94		07/11/94		07/06/94		07/12/94		07/06/94	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	00011	VAL	00001	VAL	00011	VAL	00001	VAL	00011	VAL	00001	VAL
121-14-2	2,4-Dinitrotoluene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
84-66-2	Diethylphthalate	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
7005-72-3	4-Chlorophenylphenyl ether	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
86-73-7	Fluorene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
100-01-6	4-Nitroaniline	1000.	U	25.	U	1500.	U	25.	U	8800.	U	25.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1000.	U	25.	U	1500.	U	25.	U	8800.	U	25.	U
86-30-6	N-Nitrosodiphenylamine	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
101-55-3	4-Bromophenyl-phenylether	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
118-74-1	Hexachlorobenzene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
87-86-5	Pentachlorophenol	1000.	U	25.	U	1500.	U	25.	U	8800.	U	25.	U
85-01-8	Phenanthrene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
120-12-7	Anthracene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
86-74-8	Carbazole	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
84-74-2	Di-n-butylphthalate	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
206-44-0	Fluoranthene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
129-00-0	Pyrene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
85-68-7	Butylbenzylphthalate	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
91-94-1	3,3'-Dichlorobenzidine	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
56-55-3	Benzo(a)anthracene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
218-01-9	Chrysene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	430.	U	4.	U	620.	U	10.	U	3600.	U	5.	U
117-84-0	Di-n-octylphthalate	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
205-99-2	Benzo(b)fluoranthene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
207-08-9	Benzo(k)fluoranthene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
50-32-8	Benzo(a)pyrene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
53-70-3	Dibenz(a,h)anthracene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
191-24-2	Benzo(g,h,i)perylene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U

*** Validation Complete ***

SVOA													
	SAMPLE ID ------->	001-M-0003-03		001-W-0003-03		001-M-0016-01		001-W-0016-01		001-M-0018-01		001-W-0018-01	
	ORIGINAL ID ----->	01M0303		01W0303		01M1601		01W1601		01M1801		01W1801	
	LAB SAMPLE ID --->	621861		621833		622183		622178		622184		622169	
	ID FROM REPORT -->	01M0303		01W0303		01M1601		01W1601		01M1801		01W1801	
	SAMPLE DATE ----->	06/28/94		06/28/94		06/29/94		06/29/94		06/29/94		06/29/94	
	DATE EXTRACTED -->	07/08/94		06/30/94		07/08/94		07/01/94		07/08/94		07/01/94	
	DATE ANALYZED --->	07/11/94		07/05/94		07/11/94		07/06/94		07/12/94		07/06/94	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	00011	VAL	00001	VAL	00011	VAL	00001	VAL	00011	VAL	00001	VAL
108-95-2	Phenol	430.	U	10.	U	620.	U	10.	U	3600.	U	5.	U
111-44-4	bis(2-Chloroethyl)ether	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
95-57-8	2-Chlorophenol	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
541-73-1	1,3-Dichlorobenzene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
106-46-7	1,4-Dichlorobenzene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
95-50-1	1,2-Dichlorobenzene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
95-48-7	2-Methylphenol (o-Cresol)	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
106-44-5	4-Methylphenol (p-Cresol)	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
621-64-7	N-Nitroso-di-n-propylamine	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
67-72-1	Hexachloroethane	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
98-95-3	Nitrobenzene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
78-59-1	Isophorone	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
88-75-5	2-Nitrophenol	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
105-67-9	2,4-Dimethylphenol	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
111-91-1	bis(2-Chloroethoxy)methane	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
120-83-2	2,4-Dichlorophenol	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
120-82-1	1,2,4-Trichlorobenzene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
91-20-3	Naphthalene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
106-47-8	4-Chloroaniline	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
87-68-3	Hexachlorobutadiene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
59-50-7	4-Chloro-3-methylphenol	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
91-57-6	2-Methylnaphthalene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
77-47-4	Hexachlorocyclopentadiene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
88-06-2	2,4,6-Trichlorophenol	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
95-95-4	2,4,5-Trichlorophenol	1000.	U	25.	U	1500.	U	25.	U	8800.	U	25.	U
91-58-7	2-Chloronaphthalene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
88-74-4	2-Nitroaniline	1000.	U	25.	U	1500.	U	25.	U	8800.	U	25.	U
131-11-3	Dimethylphthalate	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
208-96-8	Acenaphthylene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
606-20-2	2,6-Dinitrotoluene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
99-09-2	3-Nitroaniline	1000.	U	25.	U	1500.	U	25.	U	8800.	U	25.	U
83-32-9	Acenaphthene	430.	U	10.	U	620.	U	10.	U	3600.	U	10.	U
51-28-5	2,4-Dinitrophenol	1000.	U	25.	U	1500.	U	25.	U	8800.	U	25.	U
100-02-7	4-Nitrophenol	1000.	U	25.	U	1500.	U	25.	U	8800.	U	25.	U
132-64-9	[illegible]enzofuran	430.	U	10.	[illegible]	620.	U	10.	U	3600.	U	10.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	001-M-0001-01		001-W-0001-01		001-M-0003-01		001-W-0003-01		001-M-0003-02		001-W-0003-02	
	ORIGINAL ID ----->	01M0101		01W0101		01M0301		01W0301		01M0302		01W0302	
	LAB SAMPLE ID --->	622182		622177		621841		621827		621859		621829	
	ID FROM REPORT -->	01M0101		01W0101		01M0301		01W0301		01M0302		01W0302	
	SAMPLE DATE ----->	06/29/94		06/29/94		06/28/94		06/28/94		06/28/94		06/28/94	
	DATE EXTRACTED -->	07/08/94		07/01/94		07/08/94		06/30/94		07/08/94		06/30/94	
	DATE ANALYZED --->	07/11/94		07/06/94		07/11/94		07/05/94		07/11/94		07/05/94	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	00011	VAL	00001	VAL	00011	VAL	00001	VAL	00011	VAL	00001	VAL
121-14-2	2,4-Dinitrotoluene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
84-66-2	Diethylphthalate	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
7005-72-3	4-Chlorophenylphenyl ether	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
86-73-7	Fluorene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
100-01-6	4-Nitroaniline	1500.	U	25.	U	1100.	U	25.	U	1200.	U	25.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1500.	U	25.	U	1100.	U	25.	U	1200.	U	25.	U
86-30-6	N-Nitrosodiphenylamine	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
101-55-3	4-Bromophenyl-phenylether	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
118-74-1	Hexachlorobenzene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
87-86-5	Pentachlorophenol	1500.	U	25.	U	1100.	U	25.	U	1200.	U	25.	U
85-01-8	Phenanthrene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
120-12-7	Anthracene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
86-74-8	Carbazole	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
84-74-2	Di-n-butylphthalate	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
206-44-0	Fluoranthene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
129-00-0	Pyrene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
85-68-7	Butylbenzylphthalate	640.	U	10.	U	180.	U	10.	U	54.	U	10.	U
91-94-1	3,3'-Dichlorobenzidine	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
56-55-3	Benzo(a)anthracene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
218-01-9	Chrysene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	640.	U	3.	U	380.	U	3.	U	480.	U	6.	U
117-84-0	Di-n-octylphthalate	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
205-99-2	Benzo(b)fluoranthene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
207-08-9	Benzo(k)fluoranthene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
50-32-8	Benzo(a)pyrene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
53-70-3	Dibenz(a,h)anthracene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
191-24-2	Benzo(g,h,i)perylene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

SVOA													
	SAMPLE ID ------->	001-M-0001-01		001-W-0001-01		001-M-0003-01		001-W-0003-01		001-M-0003-02		001-W-0003-02	
	ORIGINAL ID ----->	01M0101		01W0101		01M0301		01W0301		01M0302		01W0302	
	LAB SAMPLE ID --->	622182		622177		621841		621827		621859		621829	
	ID FROM REPORT -->	01M0101		01W0101		01M0301		01W0301		01M0302		01W0302	
	SAMPLE DATE ----->	06/29/94		06/29/94		06/28/94		06/28/94		06/28/94		06/28/94	
	DATE EXTRACTED -->	07/08/94		07/01/94		07/08/94		06/30/94		07/08/94		06/30/94	
	DATE ANALYZED --->	07/11/94		07/06/94		07/11/94		07/05/94		07/11/94		07/05/94	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	00011	VAL	00001	VAL	00011	VAL	00001	VAL	00011	VAL	00001	VAL
108-95-2	Phenol	640.	U	5.	U	55.	J	10.	U	480.	U	10.	U
111-44-4	bis(2-Chloroethyl)ether	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
95-57-8	2-Chlorophenol	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
541-73-1	1,3-Dichlorobenzene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
106-46-7	1,4-Dichlorobenzene	640.	U	10.	U	470.	U	2.	J	480.	U	2.	J
95-50-1	1,2-Dichlorobenzene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
95-48-7	2-Methylphenol (o-Cresol)	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
106-44-5	4-Methylphenol (p-Cresol)	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
621-64-7	N-Nitroso-di-n-propylamine	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
67-72-1	Hexachloroethane	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
98-95-3	Nitrobenzene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
78-59-1	Isophorone	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
88-75-5	2-Nitrophenol	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
105-67-9	2,4-Dimethylphenol	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
111-91-1	bis(2-Chloroethoxy)methane	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
120-83-2	2,4-Dichlorophenol	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
120-82-1	1,2,4-Trichlorobenzene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
91-20-3	Naphthalene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
106-47-8	4-Chloroaniline	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
87-68-3	Hexachlorobutadiene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
59-50-7	4-Chloro-3-methylphenol	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
91-57-6	2-Methylnaphthalene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
77-47-4	Hexachlorocyclopentadiene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
88-06-2	2,4,6-Trichlorophenol	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
95-95-4	2,4,5-Trichlorophenol	1500.	U	25.	U	1100.	U	25.	U	1200.	U	25.	U
91-58-7	2-Chloronaphthalene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
88-74-4	2-Nitroaniline	1500.	U	25.	U	1100.	U	25.	U	1200.	U	25.	U
131-11-3	Dimethylphthalate	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
208-96-8	Acenaphthylene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
606-20-2	2,6-Dinitrotoluene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
99-09-2	3-Nitroaniline	1500.	U	25.	U	1100.	U	25.	U	1200.	U	25.	U
83-32-9	Acenaphthene	640.	U	10.	U	470.	U	10.	U	480.	U	10.	U
51-28-5	2,4-Dinitrophenol	1500.	U	25.	U	1100.	U	25.	U	1200.	U	25.	U
100-02-7	4-Nitrophenol	1500.	U	25.	U	1100.	U	25.	U	1200.	U	25.	U
132-64-9	nzofuran	640.	U	10.		470.	U	10.	U	480.	U	10.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-W-W102-01		041-W-W103-01		041-M-W201-01		041-M-W202-01		041-W-W202-01		041-M-W203-01	
	ORIGINAL ID ----->	041WW10201		041WW10301		041MW20101		041MW20201		041WW20201		041MW20301	
	LAB SAMPLE ID --->	960043-18		960043-19		960055-14		960055-15		960055-18		960055-16	
	ID FROM REPORT -->	041WW10201		041WW10301		041MW20101		041MW20201		041WW20201		041MW20301	
	SAMPLE DATE ----->	01/22/96		01/22/96		01/24/96		01/24/96		01/24/96		01/24/96	
	DATE EXTRACTED -->	01/24/96		01/24/96		01/30/96		01/30/96		01/26/96		01/30/96	
	DATE ANALYZED --->	02/10/96		02/10/96		02/14/96		02/14/96		02/14/96		02/14/96	
	MATRIX ---------->	Water		Water		Sediment		Sediment		Water		Sediment	
	UNITS ---------->	UG/L		UG/L		UG/KG		UG/KG		UG/L		UG/KG	
CAS #	Parameter	M00901	VAL	M00901	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL
319-84-6	alpha-BHC	0.05	UJ	0.05	U	0.11	U	0.1	U	0.05	UJ	0.46	U
319-85-7	beta-BHC	0.05	UJ	0.05	U	0.11	U	0.1	U	0.05	UJ	0.46	U
319-86-8	delta-BHC	0.05	UJ	0.05	U	0.63		0.1	U	0.05	UJ	0.46	U
58-89-9	gamma-BHC (Lindane)	0.05	UJ	0.05	U	0.11	U	0.1	U	0.05	UJ	0.46	U
76-44-8	Heptachlor	0.05	UJ	0.05	U	0.11	U	0.1	U	0.05	UJ	0.46	U
309-00-2	Aldrin	0.05	UJ	0.05	U	0.23	J	0.1	U	0.05	UJ	0.46	U
1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	U	0.11	U	0.1	U	0.05	UJ	0.46	U
959-98-8	Endosulfan I	0.05	UJ	0.05	U	0.11	U	0.1	U	0.05	UJ	0.46	U
60-57-1	Dieldrin	0.1	UJ	0.1	U	0.34	J	0.21	U	0.1	UJ	0.91	U
72-55-9	4,4'-DDE	0.1	UJ	0.1	U	2.4	J	0.38	J	0.1	UJ	0.91	U
72-20-8	Endrin	0.1	UJ	0.1	U	0.77	J	0.21	U	0.1	UJ	2.5	J
33213-65-9	Endosulfan II	0.1	UJ	0.1	U	0.22	U	0.21	U	0.1	UJ	0.91	U
72-54-8	4,4'-DDD	0.1	UJ	0.1	U	5.8	D	0.86		0.1	UJ	0.91	U
1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	U	0.22	U	0.21	U	0.1	UJ	0.91	U
50-29-3	4,4'-DDT	0.1	UJ	0.1	U	3.5	J	0.28	J	0.1	UJ	0.91	U
72-43-5	Methoxychlor	0.5	UJ	0.5	U	1.1	U	1.	U	0.5	UJ	4.6	U
53494-70-5	Endrin ketone	0.1	UJ	0.1	U	0.22	U	0.21	U	0.1	UJ	0.91	U
7421-93-4	Endrin aldehyde	0.1	UJ	0.1	U	0.22	U	0.21	U	0.1	UJ	0.91	U
5103-71-9	alpha-Chlordane	0.25	J	0.05	U	0.14	J	0.22		0.05	UJ	0.46	U
5103-74-2	gamma-Chlordane	0.05	UJ	0.05	U	0.11	U	0.1	U	0.05	UJ	0.46	U
8001-35-2	Toxaphene	5.	UJ	5.	U	22.	U	21.	U	5.	UJ	93.	U
12674-11-2	Aroclor-1016	1.	UJ	1.	U	2.2	U	2.1	U	1.	UJ	9.1	U
11104-28-2	Aroclor-1221	2.	UJ	2.	U	4.3	U	4.1	U	2.	UJ	18.	U
11141-16-5	Aroclor-1232	1.	UJ	1.	U	2.2	U	2.1	U	1.	UJ	9.1	U
53469-21-9	Aroclor-1242	1.	UJ	1.	U	2.2	U	2.1	U	1.	UJ	9.1	U
12672-29-6	Aroclor-1248	1.	UJ	1.	U	2.2	U	2.1	U	1.	UJ	9.1	U
11097-69-1	Aroclor-1254	1.	UJ	1.	U	2.2	U	2.1	U	1.	UJ	9.1	U
11096-82-5	Aroclor-1260	1.	UJ	1.	U	1.7	J	3.8	J	1.	UJ	5.6	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST															
	SAMPLE ID ------->	041-M-7201-01		041-W-7201-01		041-M-7202-01		041-M-7901-01		041-M-7903-01		041-W-W101-01	
	ORIGINAL ID ----->	041M720101		041W720101		041MZ20201		041M790101		041M790301		041WW10101	
	LAB SAMPLE ID --->	950991-12		950991-09		950991-13		960064-04		960064-05		960043-17	
	ID FROM REPORT -->	041M720101		041W720101		041MZ20201		041M790101		041M790301		041WW10101	
	SAMPLE DATE ----->	11/29/95		11/29/95		11/29/95		01/26/96		01/26/96		01/22/96	
	DATE EXTRACTED -->	12/02/95		12/02/95		12/02/95		02/03/96		02/03/96		01/24/96	
	DATE ANALYZED --->	01/05/96		01/05/96		01/05/96		02/14/96		02/14/96		02/08/96	
	MATRIX ---------->	Sediment		Water		Sediment		Sediment		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/KG		UG/KG		UG/L	
CAS #	Parameter	Z30301	VAL	Z30301	VAL	Z30301	VAL	EM0060	VAL	EM0060	VAL	M00901	VAL
319 84 6	alpha BHC	0.11	U	0.05	U	0.1	U	0.22	U	0.11	U	0.05	U
319 85 7	beta BHC	0.11	U	0.05	U	0.1	U	0.22	U	0.11	U	0.05	U
319 86 8	delta BHC	0.11	U	0.05	U	0.1	U	0.29	J	0.11	U	0.05	U
58 89 9	gamma BHC (Lindane)	0.11	U	0.05	U	0.1	U	0.22	U	0.11	U	0.05	U
76 44 8	Heptachlor	0.11	U	0.05	U	0.1	U	3.	J	0.11	U	0.05	U
309 00 2	Aldrin	0.11	U	0.05	U	0.1	U	0.22	U	0.11	U	0.05	U
1024 57 3	Heptachlor epoxide	0.11	U	0.05	U	0.1	U	1.3	J	0.11	U	0.05	U
959 98 8	Endosulfan I	0.23	U	0.05	U	0.21	U	0.22	U	0.11	U	0.05	U
60 57 1	Dieldrin	0.23	U	0.1	U	0.21	U	3.5	J	0.22	U	0.1	U
72 55 9	4,4' DDE	0.24		0.1	U	0.21	U	1.3	J	0.22	U	0.1	U
72 20 8	Endrin	0.23	U	0.1	U	0.21	U	6.2	J	0.22	U	0.1	U
33213 65 9	Endosulfan II	0.23	U	0.1	U	0.21	U	0.46	U	0.22	U	0.1	U
72-54-8	4,4'-DDD	0.23	U	0.1	U	0.2	J	14.	DJ	0.22	U	0.1	U
1031-07-8	Endosulfan sulfate	0.23	U	0.1	U	0.21	U	0.46	U	0.22	U	0.1	U
50-29-3	4,4'-DDT	0.26	J	0.1	UJ	0.21	UJ	3.5	J	0.22	U	0.1	U
72-43-5	Methoxychlor	1.1	UJ	0.5	UJ	1.	UJ	2.2	U	1.1	U	0.5	U
53494-70-5	Endrin ketone	0.23	U	0.1	U	0.21	U	0.46	U	0.22	U	0.1	U
7421-93-4	Endrin aldehyde	0.23	U	0.1	U	0.21	U	0.74	J	0.22	U	0.1	U
5103-71-9	alpha-Chlordane	0.11	U	0.05	U	0.1	U	38.	DJ	0.11	U	0.05	U
5103-74-2	gamma-Chlordane	0.11	U	0.05	U	0.1	U	45.		0.11	U	0.05	U
8001-35-2	Toxaphene	11.	U	5.	U	10.	U	46.	U	22.	U	5.	U
12674-11-2	Aroclor-1016	2.3	U	1.	U	2.1	U	4.6	U	2.2	U	1.	U
11104-28-2	Aroclor-1221	4.5	U	2.	U	4.1	U	8.9	U	4.2	U	2.	U
11141-16-5	Aroclor-1232	2.3	U	1.	U	2.1	U	4.6	U	2.2	U	1.	U
53469-21-9	Aroclor-1242	2.3	U	1.	U	2.1	U	4.6	U	2.2	U	1.	U
12672-29-6	Aroclor-1248	2.3	U	1.	U	2.1	U	4.6	U	2.2	U	1.	U
11097-69-1	Aroclor-1254	2.3	U	1.	U	2.1	U	4.6	U	2.2	U	1.	U
11096-82-5	Aroclor-1260	2.3	U	1.	U	2.1	U	4.6	U	2.2	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST																	
	SAMPLE ID ------->	041-M-6419-01		041-M-6420-01		041-M-6421-01		041-M-6422-01		041-M-6423-01		041-M-6424-01	
	ORIGINAL ID ----->	041M641901		041M642001		041M642101		041M642201		041M642301		041M642401	
	LAB SAMPLE ID --->	960087-02		950950-17		950950-18		950952-10		950952-11		950952-12	
	ID FROM REPORT -->	041M641901		041M642001		041M642101		041M642201		041M642301		041M642401	
	SAMPLE DATE ----->	02/01/96		11/16/95		11/16/95		11/17/95		11/17/95		11/17/95	
	DATE EXTRACTED -->	02/11/96		11/21/95		11/21/95		11/21/95		11/21/95		11/21/95	
	DATE ANALYZED --->	03/05/96		12/17/95		12/17/95		12/18/95		12/18/95		12/18/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	640801	VAL	5A0101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL	Z42101	VAL
319-84-6	alpha-BHC	0.52	U	0.2	U	0.14	U	0.12	U	0.11	U	0.15	J
319-85-7	beta-BHC	0.52	U	0.11	U	0.1	U	0.12	U	0.11	U	0.11	UJ
319-86-8	delta-BHC	0.52	U	0.11	U	0.1	U	0.12	U	0.11	U	0.11	UJ
58-89-9	gamma-BHC (Lindane)	0.52	U	0.11	U	0.1	U	0.12	U	0.11	U	0.11	UJ
76-44-8	Heptachlor	0.52	U	0.11	U	0.1	U	0.12	U	0.11	U	0.11	UJ
309-00-2	Aldrin	0.8	J	0.11	U	0.1	U	0.12	U	0.11	U	0.11	UJ
1024-57-3	Heptachlor epoxide	0.52	U	0.11	U	0.1	U	0.12	U	0.11	U	0.11	UJ
959-98-8	Endosulfan I	0.52	U	0.19	U	0.2	U	0.24	U	0.22	U	0.23	UJ
60-57-1	Dieldrin	1.1	U	0.21	U	0.21	U	0.24	U	0.22	U	0.23	UJ
72-55-9	4,4'-DDE	1.3	J	0.21	U	0.21	U	0.24	U	0.22	U	0.23	UJ
72-20-8	Endrin	1.1	U	0.21	U	0.21	U	0.24	U	0.22	U	0.23	UJ
33213-65-9	Endosulfan II	1.7	J	0.21	U	0.21	U	0.24	U	0.22	U	0.23	UJ
72-54-8	4,4'-DDD	1.1	J	0.21	U	0.21	U	0.24	U	0.22	U	0.23	UJ
1031-07-8	Endosulfan sulfate	1.1	U	0.21	U	0.21	U	0.24	U	0.22	U	0.23	UJ
50-29-3	4,4'-DDT	1.1	U	0.21	U	0.21	U	0.24	U	0.22	U	0.23	UJ
72-43-5	Methoxychlor	5.2	U	1.1	U	1.	U	1.2	U	1.1	U	1.1	UJ
53494-70-5	Endrin ketone	1.1	U	0.21	U	0.21	U	0.24	U	0.22	U	0.23	UJ
7421-93-4	Endrin aldehyde	1.1	U	0.21	U	0.21	U	0.24	U	0.22	U	0.23	UJ
5103-71-9	alpha-Chlordane	0.52	U	0.11	U	0.1	U	0.12	U	0.11	U	0.11	UJ
5103-74-2	gamma-Chlordane	0.52	U	0.11	U	0.1	U	0.12	U	0.11	U	0.11	UJ
8001-35-2	Toxaphene	110.	U	22.	U	21.	U	24.	U	22.	U	23.	UJ
12674-11-2	Aroclor-1016	11.	U	2.1	U	2.1	U	4.6	U	4.2	U	4.4	UJ
11104-28-2	Aroclor-1221	21.	U	4.3	U	4.2	U	9.4	U	8.5	U	9.	UJ
11141-16-5	Aroclor-1232	11.	U	2.1	U	2.1	U	4.6	U	4.2	U	4.4	UJ
53469-21-9	Aroclor-1242	11.	U	2.1	U	2.1	U	4.6	U	4.2	U	4.4	UJ
12672-29-6	Aroclor-1248	11.	U	2.1	U	2.1	U	4.6	U	4.2	U	4.4	UJ
11097-69-1	Aroclor-1254	11.	U	2.1	U	2.1	U	4.6	U	4.2	U	4.4	UJ
11096-82-5	Aroclor-1260	50.	J	1.9	J	2.1	U	4.6	U	4.2	U	4.4	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-M-6413-01		041-M-6414-01		041-M-6415-01		041-M-6416-01		041-M-6417-01		041-M-6418-01	
	ORIGINAL ID ----->	041M641301		041M641401		041M641501		041M641601		041M641701		041M641801	
	LAB SAMPLE ID --->	950950-13		950950-14		950941-19		950950-15		950950-16		960087-04	
	ID FROM REPORT -->	041M641301		041M641401		041M641501		041M641601		041M641701		041M641801	
	SAMPLE DATE ----->	11/16/95		11/16/95		11/15/95		11/16/95		11/16/95		02/06/96	
	DATE EXTRACTED -->	11/21/95		11/21/95		11/18/95		11/21/95		11/21/95		02/11/96	
	DATE ANALYZED --->	12/17/95		12/02/95		12/13/95		12/17/95		12/17/95		03/05/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL	640801	VAL
319-84-6	alpha-BHC	0.66	J	0.94	J	0.11	UJ	0.64	J	0.36	U	0.11	U
319-85-7	beta-BHC	0.46	UJ	0.52	U	0.11	UJ	0.49	U	0.15	U	0.11	U
319-86-8	delta-BHC	0.46	UJ	0.52	U	0.11	UJ	0.49	U	0.15	U	0.11	U
58-89-9	gamma-BHC (Lindane)	0.46	UJ	0.52	U	0.11	UJ	0.49	U	0.15	U	0.18	J
76-44-8	Heptachlor	0.46	UJ	0.52	U	0.11	UJ	0.49	U	0.15	U	0.11	U
309-00-2	Aldrin	0.46	UJ	0.52	U	0.11	UJ	0.49	U	0.15	U	0.11	U
1024-57-3	Heptachlor epoxide	0.46	UJ	0.52	U	0.11	UJ	0.49	U	0.15	U	0.11	U
959-98-8	Endosulfan I	0.46	UJ	0.76	J	0.22	UJ	0.54	U	0.2	U	0.11	U
60-57-1	Dieldrin	1.4	J	1.	U	0.22	UJ	0.97	U	0.31	U	0.22	U
72-55-9	4,4'-DDE	1.4	J	1.	U	0.43	J	0.97	U	0.31	U	0.22	U
72-20-8	Endrin	0.92	UJ	1.	U	0.22	UJ	0.97	U	0.31	U	0.22	U
33213-65-9	Endosulfan II	0.92	UJ	1.	U	0.22	UJ	0.97	U	0.31	U	0.22	UJ
72-54-8	4,4'-DDD	0.92	UJ	1.	U	0.2	J	0.97	U	0.31	U	0.22	U
1031-07-8	Endosulfan sulfate	0.92	UJ	1.	U	0.22	UJ	0.97	U	0.31	U	0.22	U
50-29-3	4,4'-DDT	0.92	UJ	1.	U	0.6	J	0.97	U	0.31	U	0.22	U
72-43-5	Methoxychlor	4.6	UJ	5.2	U	1.1	UJ	4.9	U	1.5	U	1.1	U
53494-70-5	Endrin ketone	0.92	UJ	1.	U	0.22	UJ	0.97	U	0.31	U	0.22	U
7421-93-4	Endrin aldehyde	0.92	UJ	1.	U	0.22	UJ	0.97	U	0.31	U	0.22	U
5103-71-9	alpha-Chlordane	0.46	UJ	0.52	U	0.11	UJ	0.49	U	0.15	U	0.11	U
5103-74-2	gamma-Chlordane	0.46	UJ	0.52	U	0.11	UJ	0.49	U	0.15	U	0.11	U
8001-35-2	Toxaphene	94.	UJ	110.	U	22.	UJ	99.	U	32.	U	22.	U
12674-11-2	Aroclor-1016	9.2	UJ	10.	U	4.3	UJ	9.7	U	3.1	U	2.2	U
11104-28-2	Aroclor-1221	18.	UJ	21.	U	8.8	UJ	19.	U	6.2	U	4.3	U
11141-16-5	Aroclor-1232	9.2	UJ	10.	U	4.3	UJ	9.7	U	3.1	U	2.2	U
53469-21-9	Aroclor-1242	9.2	UJ	10.	U	4.3	UJ	9.7	U	3.1	U	2.2	U
12672-29-6	Aroclor-1248	9.2	UJ	10.	U	4.3	UJ	9.7	U	3.1	U	2.2	U
11097-69-1	Aroclor-1254	9.2	UJ	10.	U	3.3	J	9.7	U	3.1	U	2.2	U
11096-82-5	Aroclor-1260	27.	J	16.	J	4.3	UJ	16.	J	4.8	J	1.3	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST															
	SAMPLE ID ------->	041-M-6407-01		041-M-6408-01		041-M-6409-01		041-M-6410-01		041-M-6411-01		041-M-6412-01	
	ORIGINAL ID ----->	041M640701		041M640801		041M640901		041M641001		041M641101		041M641201	
	LAB SAMPLE ID --->	950941-16		960087-01		950941-17		950950-11		950950-12		950941-18	
	ID FROM REPORT -->	041M640701		041M640801		041M640901		041M641001		041M641101		041M641201	
	SAMPLE DATE ----->	11/15/95		02/01/96		11/15/95		11/16/95		11/16/95		11/15/95	
	DATE EXTRACTED -->	11/18/95		02/11/96		11/18/95		11/21/95		11/21/95		11/18/95	
	DATE ANALYZED --->	12/19/95		03/05/96		12/19/95		12/17/95		12/17/95		12/19/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06010	VAL	640801	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL	M06010	VAL
319-84-6	alpha-BHC	0.22	J	0.13	U	0.37	J	0.49	U	0.45	U	0.19	J
319-85-7	beta-BHC	0.11	U	0.13	U	0.1	U	0.49	U	0.3	U	0.1	U
319-86-8	delta-BHC	0.11	U	0.13	U	0.1	U	0.49	U	0.3	U	0.1	U
58-89-9	gamma-BHC (Lindane)	0.11	U	0.13	U	0.28	J	0.49	U	0.3	U	0.28	
76-44-8	Heptachlor	0.11	U	0.13	U	0.1	U	0.49	U	0.3	U	0.1	U
309-00-2	Aldrin	0.24	J	0.17	J	0.1	U	0.49	U	0.3	U	0.1	U
1024-57-3	Heptachlor epoxide	0.11	U	0.13	U	0.1	U	0.49	U	0.3	U	0.1	U
959-98-8	Endosulfan I	0.23	U	0.13	U	0.21	U	0.49	U	0.3	U	0.21	U
60-57-1	Dieldrin	0.23	U	0.26	U	0.21	U	1.5	J	1.7	J	0.21	U
72-55-9	4,4'-DDE	0.61		2.4		0.35		2.5	J	2.	J	0.21	U
72-20-8	Endrin	0.23	U	0.46	J	0.21	U	0.97	U	0.59	U	0.21	U
33213-65-9	Endosulfan II	0.23	U	0.26	UJ	0.21	U	0.97	U	0.59	U	0.21	U
72-54-8	4,4'-DDD	12.	D	2.2		0.31	J	2.2	J	0.68	J	0.26	J
1031-07-8	Endosulfan sulfate	0.23	U	0.26	U	0.21	U	0.97	U	0.59	U	0.21	U
50-29-3	4,4'-DDT	0.23	U	0.66	J	0.21	U	0.97	U	0.59	U	0.21	U
72-43-5	Methoxychlor	1.1	U	1.3	U	1.	U	4.9	U	3.	U	1.	U
53494-70-5	Endrin ketone	0.23	U	0.26	U	0.21	U	0.97	U	0.59	U	0.21	U
7421-93-4	Endrin aldehyde	0.23	U	0.29	J	0.21	U	0.97	U	0.59	U	0.21	U
5103-71-9	alpha-Chlordane	0.11	U	0.28	J	0.1	U	0.49	U	0.3	U	0.1	U
5103-74-2	gamma-Chlordane	0.11	U	0.13	U	0.1	U	0.65	J	0.3	U	0.1	U
8001-35-2	Toxaphene	23.	U	26.	U	21.	U	99.	U	60.	U	21.	U
12674-11-2	Aroclor-1016	4.4	U	2.6	U	4.1	U	9.7	U	5.9	U	4.1	U
11104-28-2	Aroclor-1221	8.9	U	5.1	U	8.3	U	19.	U	12.	U	8.3	U
11141-16-5	Aroclor-1232	4.4	U	2.6	U	4.1	U	9.7	U	5.9	U	4.1	U
53469-21-9	Aroclor-1242	4.4	U	2.6	U	4.1	U	9.7	U	5.9	U	4.1	U
12672-29-6	Aroclor-1248	4.4	U	2.6	U	4.1	U	9.7	U	5.9	U	4.1	U
11097-69-1	Aroclor-1254	3.3	J	2.6	U	1.3	J	9.7	U	5.9	U	1.7	J
11096-82-5	Aroclor-1260	4.4	U	11.		4.1	U	24.	J	29.		4.1	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST															
	SAMPLE ID ------->	041-M-6401-01		041-M-6402-01		041-M-6403-01		041-M-6404-01		041-M-6405-01		041-M-6406-01	
	ORIGINAL ID ----->	041M640101		041M640201		041M640301		041M640401		041M640501		041M640601	
	LAB SAMPLE ID --->	960087-05		950941-12		950941-13		960087-06		950941-14		950941-15	
	ID FROM REPORT -->	041M640101		041M640201		041M640301		041M640401		041M640501		041M640601	
	SAMPLE DATE ----->	02/09/96		11/15/95		11/15/95		02/09/96		11/15/95		11/15/95	
	DATE EXTRACTED -->	02/12/96		11/18/95		11/18/95		02/12/96		11/18/95		11/18/95	
	DATE ANALYZED --->	03/05/96		12/17/95		12/17/95		03/05/96		12/17/95		12/17/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	640801	VAL	M06010	VAL	M06010	VAL	640801	VAL	M06010	VAL	M06010	VAL
319-84-6	alpha-BHC	0.12	J	1.6	U	3.4	U	0.92	U	0.59	J	0.69	U
319-85-7	beta-BHC	0.11	U	1.6	U	3.4	U	0.92	U	0.17	U	0.69	U
319-86-8	delta-BHC	0.11	U	1.6	U	3.4	U	0.92	U	0.17	U	0.69	U
58-89-9	gamma-BHC (Lindane)	0.13	J	1.6	U	3.4	U	1.6	J	0.17	U	0.69	U
76-44-8	Heptachlor	0.12	J	1.6	U	3.4	U	0.92	U	0.17	U	0.69	U
309-00-2	Aldrin	0.11	U	1.6	U	4.	J	0.92	U	2.6		1.7	
1024-57-3	Heptachlor epoxide	0.11	U	1.6	U	3.4	U	0.92	U	0.17	U	0.69	U
959-98-8	Endosulfan I	0.11	U	3.3	U	7.	U	0.92	U	0.35	U	1.4	U
60-57-1	Dieldrin	0.23	U	3.3	J	7.	U	1.9	U	0.79	J	1.4	U
72-55-9	4,4'-DDE	3.7	J	72.	DJ	78.		18.		27.	DJ	16.	J
72-20-8	Endrin	8.	DJ	3.8	J	7.	U	5.5	J	1.3	J	1.4	U
33213-65-9	Endosulfan II	0.23	UJ	3.3	U	7.	U	1.9	UJ	0.35	U	1.4	U
72-54-8	4,4'-DDD	12.	DJ	140.	D	44.	J	16.		29.	J	30.	
1031-07-8	Endosulfan sulfate	0.23	U	3.3	U	7.	U	1.9	U	0.35	U	1.4	U
50-29-3	4,4'-DDT	14.	DJ	3.3	U	14.	J	1.9	U	0.74	J	1.4	J
72-43-5	Methoxychlor	1.1	U	16.	U	34.	U	9.2	U	1.7	U	6.9	U
53494-70-5	Endrin ketone	0.23	U	3.3	U	7.	U	1.9	U	0.35	U	1.4	U
7421-93-4	Endrin aldehyde	0.23	U	3.3	U	7.	U	1.9	U	0.35	U	1.4	U
5103-71-9	alpha-Chlordane	0.11	U	7.1		10.	J	0.92	U	0.48	J	0.69	U
5103-74-2	gamma-Chlordane	0.11	U	3.7	J	8.5	J	0.92	U	1.1	J	0.81	J
8001-35-2	Toxaphene	23.	U	330.	U	700.	U	190.	U	35.	U	140.	U
12674-11-2	Aroclor-1016	2.3	U	65.	U	140.	U	19.	U	6.8	U	27.	U
11104-28-2	Aroclor-1221	4.5	U	130.	U	280.	U	36.	U	14.	U	55.	U
11141-16-5	Aroclor-1232	2.3	U	65.	U	140.	U	19.	U	6.8	U	27.	U
53469-21-9	Aroclor-1242	2.3	U	65.	U	140.	U	19.	U	6.8	U	27.	U
12672-29-6	Aroclor-1248	2.3	U	65.	U	140.	U	19.	U	6.8	U	27.	U
11097-69-1	Aroclor-1254	2.3	U	370.	J	150.		19.	U	58.		56.	
11096-82-5	Aroclor-1260	12.	J	65.	U	140.	U	23.	J	6.8	U	27.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-M-63B1-01		041-M-63B2-01		041-W-63B2-01		041-M-63B3-01		041-M-63B4-01		041-W-63B4-01	
	ORIGINAL ID ----->	041M63B101		041M63B201		041W63B201		041M63B301		041M63B401		041W63B401	
	LAB SAMPLE ID --->	960039-03		960039-04		960039-08		960039-05		960055-11		960055-17	
	ID FROM REPORT -->	041M63B101		041M63B201		041W63B201		041M63B301		041M63B401		041W63B401	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/18/96		01/18/96		01/24/96		01/24/96	
	DATE EXTRACTED -->	01/22/96		01/22/96		01/21/96		01/22/96		01/30/96		01/26/96	
	DATE ANALYZED --->	02/08/96		02/08/96		02/07/96		02/08/96		02/14/96		02/14/96	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Sediment		Water	
	UNITS ---------->	UG/KG		UG/KG		UG/L		UG/KG		UG/KG		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	63A401	VAL	63A401	VAL	M52A10	VAL	M52A10	VAL
319-84-6	alpha-BHC	0.18	UR	0.12	U	0.05	U	0.11	U	0.11	U	0.05	U
319-85-7	beta-BHC	0.18	UR	0.12	U	0.05	U	0.11	U	0.11	U	0.05	U
319-86-8	delta-BHC	0.18	UR	0.12	U	0.05	U	0.11	U	0.11	U	0.05	U
58-89-9	gamma-BHC (Lindane)	0.18	UR	0.12	U	0.05	U	0.11	U	0.11	U	0.05	U
76-44-8	Heptachlor	0.18	UR	0.12	U	0.05	U	0.11	U	0.11	U	0.05	U
309-00-2	Aldrin	0.18	UR	0.12	U	0.05	U	0.11	U	0.11	U	0.05	U
1024-57-3	Heptachlor epoxide	0.18	UR	0.12	U	0.05	U	0.11	U	0.11	U	0.05	U
959-98-8	Endosulfan I	0.18	UR	0.12	U	0.05	U	0.11	U	0.11	U	0.05	U
60-57-1	Dieldrin	0.36	UR	0.23	U	0.1	U	0.21	U	0.22	U	0.1	U
72-55-9	4,4'-DDE	0.36	J	0.27	J	0.1	U	0.21	U	0.37	J	0.1	U
72-20-8	Endrin	0.36	UR	0.23	U	0.1	U	0.21	U	0.22	U	0.1	U
33213-65-9	Endosulfan II	0.36	UR	0.23	U	0.1	U	0.21	U	0.22	U	0.1	U
72-54-8	4,4'-DDD	0.36	UR	0.34	J	0.1	U	0.21	U	0.23	J	0.1	U
1031-07-8	Endosulfan sulfate	0.36	UR	0.98	J	0.1	U	0.21	U	0.22	U	0.1	U
50-29-3	4,4'-DDT	0.36	UR	0.23	U	0.1	U	0.21	U	0.22	U	0.1	U
72-43-5	Methoxychlor	1.8	UR	1.2	U	0.5	U	1.1	U	1.1	U	0.5	U
53494-70-5	Endrin ketone	0.36	UR	0.23	U	0.1	U	0.21	U	0.22	U	0.1	U
7421-93-4	Endrin aldehyde	0.36	UR	0.23	U	0.1	U	0.21	U	0.22	U	0.1	U
5103-71-9	alpha-Chlordane	0.18	UR	0.12	U	0.05	U	0.11	U	0.11	U	0.05	U
5103-74-2	gamma-Chlordane	0.18	UR	0.12	U	0.05	U	0.11	U	0.11	U	0.05	U
8001-35-2	Toxaphene	37.	UR	24.	U	5.	U	21.	U	23.	U	5.	U
12674-11-2	Aroclor-1016	3.6	UR	2.3	U	1.	U	2.1	U	2.2	U	1.	U
11104-28-2	Aroclor-1221	7.2	UR	4.7	U	2.	U	4.2	U	4.4	U	2.	U
11141-16-5	Aroclor-1232	3.6	UR	2.3	U	1.	U	2.1	U	2.2	U	1.	U
53469-21-9	Aroclor-1242	3.6	UR	2.3	U	1.	U	2.1	U	2.2	U	1.	U
12672-29-6	Aroclor-1248	3.6	UR	2.3	U	1.	U	2.1	U	2.2	U	1.	U
11097-69-1	Aroclor-1254	3.6	UR	2.3	U	1.	U	2.1	U	2.2	U	1.	U
11096-82-5	Aroclor-1260	6.3	J	1.5	J	1.	U	1.2	J	3.		1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-M-63A1-01		041-M-63A2-01		041-W-63A2-01		041-M-63A3-01		041-M-63A4-01		041-M-63A5-01	
	ORIGINAL ID ----->	041M63A101		041M63A201		041W63A201		041M63A301		041M63A401		041M63A501	
	LAB SAMPLE ID --->	960025-18		960025-19		960039-07		960025-20		960039-01		960039-02	
	ID FROM REPORT -->	041M63A101		041M63A201		041W63A201		041M63A301		041M63A401		041M63A501	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/18/96		01/18/96		01/18/96		01/18/96	
	DATE EXTRACTED -->	01/20/96		01/20/96		01/21/96		01/20/96		01/22/96		01/22/96	
	DATE ANALYZED --->	02/06/96		02/06/96		02/07/96		02/06/96		02/09/96		02/08/96	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM005	VAL	EM005	VAL	63A401	VAL	EM005	VAL	63A401	VAL	63A401	VAL
319-84-6	alpha BHC	0.098	UJ	0.11	UJ	0.05	U	0.19	UJ	0.13	UJ	0.1	U
319-85-7	beta-BHC	0.098	U	0.11	U	0.05	U	0.19	U	0.13	UJ	0.1	U
319-86-8	delta BHC	0.098	U	0.24	J	0.05	U	0.19	U	0.13	UJ	0.1	U
58-89-9	gamma-BHC (Lindane)	0.098	U	0.21	J	0.05	U	0.19	U	0.13	UJ	0.1	U
76-44-8	Heptachlor	0.098	U	0.11	U	0.05	U	0.19	U	0.13	UJ	0.1	U
309-00-2	Aldrin	0.098	U	0.11	U	0.05	U	0.19	U	0.13	UJ	0.1	U
1024-57-3	Heptachlor epoxide	0.098	U	0.11	U	0.05	U	0.19	U	0.13	UJ	0.1	U
959-98-8	Endosulfan I	0.098	U	0.11	U	0.05	U	0.19	U	0.13	UJ	0.1	U
60-57-1	Dieldrin	0.2	U	0.22	U	0.1	U	4.1	J	0.26	UJ	0.21	U
72-55-9	4,4'-DDE	0.2	U	0.95		0.1	U	0.38	U	0.26	UJ	0.21	U
72-20-8	Endrin	0.2	U	0.22	U	0.1	U	2.7	J	0.26	UJ	0.21	U
33213-65-9	Endosulfan II	0.2	U	0.22	U	0.1	U	0.38	U	0.26	UJ	0.21	U
72-54-8	4,4'-DDD	0.2	U	1.3	J	0.1	U	5.6	DJ	0.32	J	0.21	U
1031-07-8	Endosulfan sulfate	0.2	U	0.22	U	0.1	U	1.4	J	1.4	J	0.21	U
50-29-3	4,4'-DDT	0.2	U	0.29	J	0.1	U	1.1	J	0.78	J	0.21	U
72-43-5	Methoxychlor	0.98	U	1.1	U	0.5	U	1.9	U	1.3	UJ	1.	U
53494-70-5	Endrin ketone	0.2	U	0.22	U	0.1	U	0.38	U	0.26	UJ	0.21	U
7421-93-4	Endrin aldehyde	0.2	U	0.22	U	0.1	U	0.38	U	0.26	UJ	0.21	U
5103-71-9	alpha-Chlordane	0.098	U	0.11	U	0.05	U	1.	J	0.13	UJ	0.1	U
5103-74-2	gamma-Chlordane	0.098	U	0.11	U	0.05	U	1.4		0.13	UJ	0.1	U
8001-35-2	Toxaphene	20.	U	22.	U	5.	U	38.	U	27.	UJ	21.	U
12674-11-2	Aroclor-1016	2.	U	2.2	U	1.	U	3.8	U	2.6	UJ	2.1	U
11104-28-2	Aroclor-1221	3.9	U	4.2	U	2.	U	7.4	U	5.2	UJ	4.1	U
11141-16-5	Aroclor-1232	2.	U	2.2	U	1.	U	3.8	U	2.6	UJ	2.1	U
53469-21-9	Aroclor-1242	2.	U	2.2	U	1.	U	3.8	U	2.6	UJ	2.1	U
12672-29-6	Aroclor-1248	2.	U	2.2	U	1.	U	3.8	U	2.6	UJ	2.1	U
11097-69-1	Aroclor-1254	2.	U	2.2	U	1.	U	3.8	U	2.6	UJ	2.1	U
11096-82-5	Aroclor-1260	2.	U	14.		1.	U	260.	DJ	1.1	J	3.8	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST															
	SAMPLE ID ------->	041-W-5A06-01		041-M-5A07-01		041-W-5A07-01		041-M-5B01-01		041-M-5B02-01		041-W-5B02-01	
	ORIGINAL ID ----->	041W5A0601		041M5A0701		041W5A0701		041M5B0101		041M5B0201		041W5B0201	
	LAB SAMPLE ID --->	950952-14		950950-05		950950-10		950952-08		950952-09		950952-15	
	ID FROM REPORT -->	041W5A0601		041M5A0701		041W5A0701		041M5B0101		041M5B0201		041W5B0201	
	SAMPLE DATE ----->	11/17/95		11/16/95		11/16/95		11/17/95		11/17/95		11/17/95	
	DATE EXTRACTED -->	11/20/95		11/21/95		11/18/95		11/21/95		11/21/95		11/20/95	
	DATE ANALYZED --->	12/18/95		12/16/95		12/17/95		12/18/95		12/18/95		12/18/95	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Water	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/KG		UG/L	
CAS #	Parameter	Z42101	VAL	5A0101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL	Z42101	VAL
319-84-6	alpha-BHC	0.05	U	0.45	U	0.05	U	0.3	J	1.8		0.05	U
319-85-7	beta-BHC	0.05	U	0.1	U	0.05	U	0.1	U	0.36	U	0.05	U
319-86-8	delta-BHC	0.05	U	0.1	U	0.05	U	0.1	U	0.36	U	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U	0.1	U	0.05	U	0.1	U	0.36	U	0.05	U
76-44-8	Heptachlor	0.05	U	0.1	U	0.05	U	0.1	U	0.36	U	0.05	U
309-00-2	Aldrin	0.05	U	0.1	U	0.05	U	0.1	U	0.36	U	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U	0.1	U	0.05	U	0.1	U	0.36	U	0.05	U
959-98-8	Endosulfan I	0.05	U	0.1	U	0.05	U	0.21	U	0.73	U	0.05	U
60-57-1	Dieldrin	0.1	U	0.2	U	0.1	U	0.42	J	7.1	J	0.1	U
72-55-9	4,4'-DDE	0.1	U	0.2	U	0.1	U	0.32	J	3.9		0.1	U
72-20-8	Endrin	0.1	U	0.2	U	0.1	U	0.21	U	0.73	U	0.1	U
33213-65-9	Endosulfan II	0.1	U	0.2	U	0.1	U	0.21	U	0.73	U	0.1	U
72-54-8	4,4'-DDD	0.1	U	0.23	J	0.1	U	0.21	U	2.2	J	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U	0.2	U	0.1	U	0.21	U	0.73	U	0.1	U
50-29-3	4,4'-DDT	0.1	U	0.2	U	0.1	U	0.21	U	0.73	U	0.1	U
72-43-5	Methoxychlor	0.5	U	1.	U	0.5	U	1.	U	3.6	U	0.5	U
53494-70-5	Endrin ketone	0.1	U	0.26		0.1	U	0.21	U	0.73	U	0.1	U
7421-93-4	Endrin aldehyde	0.1	U	0.2	U	0.1	U	0.21	U	0.73	U	0.1	U
5103-71-9	alpha-Chlordane	0.05	U	0.1	U	0.05	U	0.19	J	1.2	J	0.05	U
5103-74-2	gamma-Chlordane	0.05	U	0.23	J	0.05	U	0.1	U	1.	J	0.05	U
8001-35-2	Toxaphene	5.	U	20.	U	5.	U	21.	U	73.	U	5.	U
12674-11-2	Aroclor-1016	1.	U	2.	U	1.	U	4.1	U	14.	U	1.	U
11104-28-2	Aroclor-1221	2.	U	4.	U	2.	U	8.4	U	29.	U	2.	U
11141-16-5	Aroclor-1232	1.	U	2.	U	1.	U	4.1	U	14.	U	1.	U
53469-21-9	Aroclor-1242	1.	U	2.	U	1.	U	4.1	U	14.	U	1.	U
12672-29-6	Aroclor-1248	1.	U	2.	U	1.	U	4.1	U	14.	U	1.	U
11097-69-1	Aroclor-1254	1.	U	2.	U	1.	U	8.7	J	53.		1.	U
11096-82-5	Aroclor-1260	1.	U	2.6	J	1.	U	4.1	U	14.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-M-5A03-01		041-M-5A04-01		041-W-5A04-01		041-M-5A05-01		041-W-5A05-01		041-M-5A06-01	
	ORIGINAL ID ----->	041M5A0301		041M5A0401		041W5A0401		041M5A0501		041W5A0501		041M5A0601	
	LAB SAMPLE ID --->	950950-03		950950-04		950950-09		950979-03		950979-06		950952-07	
	ID FROM REPORT -->	041M5A0301		041M5A0401		041W5A0401		041M5A0501		041W5A0501		041M5A0601	
	SAMPLE DATE ----->	11/16/95		11/16/95		11/16/95		11/27/95		11/27/95		11/17/95	
	DATE EXTRACTED -->	11/21/95		11/21/95		11/18/95		11/30/95		11/29/95		11/21/95	
	DATE ANALYZED --->	12/16/95		12/16/95		12/17/95		01/05/96		01/04/96		12/18/95	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/L		UG/KG		UG/L		UG/KG	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	5A0101	VAL	041M10	VAL	041M10	VAL	Z42101	VAL
319-84-6	alpha-BHC	0.31	UJ	0.36	UJ	0.05	U	0.39	UJ	0.05	U	0.34	J
319-85-7	beta-BHC	0.31	UJ	0.36	UJ	0.05	U	0.39	UJ	0.05	U	0.11	U
319-86-8	delta-BHC	0.31	UJ	0.36	UJ	0.05	U	0.39	UJ	0.05	U	0.11	U
58-89-9	gamma-BHC (Lindane)	0.31	UJ	0.36	UJ	0.05	U	0.39	UJ	0.05	U	0.11	U
76-44-8	Heptachlor	0.31	UJ	0.36	UJ	0.05	U	0.39	UJ	0.05	U	0.11	U
309-00-2	Aldrin	0.31	UJ	0.36	UJ	0.05	U	0.39	UJ	0.05	U	0.11	U
1024-57-3	Heptachlor epoxide	0.31	UJ	0.36	UJ	0.05	U	0.39	UJ	0.05	U	0.11	U
959-98-8	Endosulfan I	0.31	UJ	0.49	U	0.05	U	0.81	UJ	0.05	U	0.23	U
60-57-1	Dieldrin	0.61	UJ	0.72	UJ	0.1	U	0.81	UJ	0.1	U	0.85	J
72-55-9	4,4'-DDE	0.61	UJ	1.7	J	0.1	U	120.	D	0.1	U	1.2	
72-20-8	Endrin	0.61	UJ	0.72	UJ	0.1	U	1.1	J	0.1	U	0.23	U
33213-65-9	Endosulfan II	0.61	UJ	0.72	UJ	0.1	U	1.7	J	0.1	U	0.23	U
72-54-8	4,4'-DDD	0.84	J	2.3	J	0.1	U	0.81	UJ	0.1	U	0.23	U
1031-07-8	Endosulfan sulfate	0.61	UJ	0.72	UJ	0.1	U	0.81	UJ	0.1	U	0.23	U
50-29-3	4,4'-DDT	0.61	UJ	1.3	J	0.1	U	5.	J	0.1	U	0.23	U
72-43-5	Methoxychlor	3.1	UJ	3.6	UJ	0.5	U	3.9	UJ	0.5	U	1.1	U
53494-70-5	Endrin ketone	0.61	UJ	0.72	UJ	0.1	U	0.81	UJ	0.1	U	0.23	U
7421-93-4	Endrin aldehyde	0.61	UJ	0.72	UJ	0.1	U	0.72	J	0.1	U	0.23	U
5103-71-9	alpha-Chlordane	0.31	UJ	0.36	UJ	0.05	U	1.6	J	0.05	U	0.11	U
5103-74-2	gamma-Chlordane	0.31	UJ	0.36	UJ	0.05	U	1.3	J	0.05	U	0.11	U
8001-35-2	Toxaphene	63.	UJ	74.	UJ	5.	U	39.	UJ	5.	U	23.	U
12674-11-2	Aroclor-1016	6.1	UJ	7.2	UJ	1.	U	8.1	UJ	1.	U	4.5	U
11104-28-2	Aroclor-1221	12.	UJ	14.	UJ	2.	U	16.	UJ	2.	U	9.2	U
11141-16-5	Aroclor-1232	6.1	UJ	7.2	UJ	1.	U	8.1	UJ	1.	U	4.5	U
53469-21-9	Aroclor-1242	6.1	UJ	7.2	UJ	1.	U	8.1	UJ	1.	U	4.5	U
12672-29-6	Aroclor-1248	6.1	UJ	7.2	UJ	1.	U	8.1	UJ	1.	U	4.5	U
11097-69-1	Aroclor-1254	6.1	UJ	7.2	UJ	1.	U	8.1	UJ	1.	U	14.	
11096-82-5	Aroclor-1260	6.1	UJ	7.2	UJ	1.	U	100.	DJ	1.	U	4.5	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST															
	SAMPLE ID ------->	041-M-5801-01		041-W-5801-01		041-M-5A01-01		041-W-5A01-01		041-M-5A02-01		041-W-5A02-01	
	ORIGINAL ID ----->	041M580101		041W580101		041M5A0101		041W5A0101		041M5A0201		041W5A0201	
	LAB SAMPLE ID --->	960055-10		960055-21		950950-01		950950-07		950950-02		950950-08	
	ID FROM REPORT -->	041M580101		041W580101		041M5A0101		041W5A0101		041M5A0201		041W5A0201	
	SAMPLE DATE ----->	01/24/96		01/24/96		11/16/95		11/16/95		11/16/95		11/16/95	
	DATE EXTRACTED -->	01/30/96		01/26/96		11/21/95		11/18/95		11/21/95		11/18/95	
	DATE ANALYZED --->	02/14/96		02/14/96		12/16/95		12/16/95		12/16/95		12/16/95	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL
319-84-6	alpha-BHC	0.12	U	0.05	U	0.64	J	0.05	U	0.16	UJ	0.05	U
319-85-7	beta-BHC	0.12	U	0.05	U	0.3	UJ	0.05	U	0.16	UJ	0.05	U
319-86-8	delta-BHC	0.12	U	0.05	U	0.3	UJ	0.05	U	0.16	UJ	0.05	U
58-89-9	gamma-BHC (Lindane)	0.12	U	0.05	U	0.3	UJ	0.05	U	0.16	UJ	0.05	U
76-44-8	Heptachlor	0.12	U	0.05	U	0.3	UJ	0.05	U	0.16	UJ	0.05	U
309-00-2	Aldrin	0.12	U	0.05	U	0.3	UJ	0.05	U	0.16	UJ	0.05	U
1024-57-3	Heptachlor epoxide	0.12	U	0.05	U	0.3	UJ	0.05	U	0.16	UJ	0.05	U
959-98-8	Endosulfan I	0.12	U	0.05	U	0.3	UJ	0.029	J	0.19	U	0.05	U
60-57-1	Dieldrin	0.23	U	0.1	U	2.5	J	0.1	U	0.32	UJ	0.1	U
72-55-9	4,4'-DDE	0.23	U	0.1	U	0.87	J	0.1	U	1.4	J	0.1	U
72-20-8	Endrin	0.23	U	0.1	U	0.59	UJ	0.1	U	0.32	UJ	0.1	U
33213-65-9	Endosulfan II	0.23	U	0.1	U	0.59	UJ	0.1	U	0.32	UJ	0.1	U
72-54-8	4,4'-DDD	0.23	U	0.1	U	0.64	J	0.1	U	1.5	J	0.1	U
1031-07-8	Endosulfan sulfate	0.23	U	0.1	U	0.59	UJ	0.1	U	0.32	UJ	0.1	U
50-29-3	4,4'-DDT	0.23	U	0.1	U	0.78	J	0.1	U	0.32	UJ	0.1	U
72-43-5	Methoxychlor	1.2	U	0.5	U	3.	UJ	0.5	U	1.6	UJ	0.5	U
53494-70-5	Endrin ketone	0.23	U	0.1	U	0.59	UJ	0.1	U	0.32	UJ	0.1	U
7421-93-4	Endrin aldehyde	0.23	U	0.1	U	0.59	UJ	0.1	U	0.32	UJ	0.1	U
5103-71-9	alpha-Chlordane	0.12	U	0.05	U	0.33	J	0.05	U	0.16	UJ	0.05	U
5103-74-2	gamma-Chlordane	0.12	U	0.05	U	0.3	UJ	0.05	U	0.16	UJ	0.05	U
8001-35-2	Toxaphene	24.	U	5.	U	61.	UJ	5.	U	33.	UJ	5.	U
12674-11-2	Aroclor-1016	2.3	U	1.	U	5.9	UJ	1.	U	3.2	UJ	1.	U
11104-28-2	Aroclor-1221	4.6	U	2.	U	12.	UJ	2.	U	6.4	UJ	2.	U
11141-16-5	Aroclor-1232	2.3	U	1.	U	5.9	UJ	1.	U	3.2	UJ	1.	U
53469-21-9	Aroclor-1242	2.3	U	1.	U	5.9	UJ	1.	U	3.2	UJ	1.	U
12672-29-6	Aroclor-1248	2.3	U	1.	U	5.9	UJ	1.	U	3.2	UJ	1.	U
11097-69-1	Aroclor-1254	2.3	U	1.	U	5.9	UJ	1.	U	3.2	UJ	1.	U
11096-82-5	Aroclor-1260	0.66	J	1.	U	16.	J	1.	U	3.2	UJ	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-M-52E3-01		041-W-52E3-01		041-M-56A1-01		041-W-56A1-01		041-M-5701-01		041-W-5701-01	
	ORIGINAL ID ----->	041M52E301		041W52E301		041M56A101		041W56A101		041M570101		041W570101	
	LAB SAMPLE ID --->	960055-08		960055-07		960055-09		960055-20		950991-11		950991-15	
	ID FROM REPORT -->	041M52E301		041W52E301		041M56A101		041W56A101		041M570101		041W570101	
	SAMPLE DATE ----->	01/24/96		01/23/96		01/24/96		01/24/96		11/29/95		11/29/95	
	DATE EXTRACTED -->	01/30/96		01/26/96		01/30/96		01/26/96		12/02/95		12/02/95	
	DATE ANALYZED --->	02/15/96		02/13/96		02/14/96		02/14/96		01/05/96		01/05/96	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	Z30301	VAL	Z30301	VAL
319-84-6	alpha-BHC	0.14	J	0.05	UJ	0.13	U	0.05	UJ	0.18	U	0.05	U
319-85-7	beta-BHC	0.12	U	0.05	UJ	0.13	U	0.05	UJ	0.19	J	0.05	U
319-86-8	delta-BHC	0.12	U	0.05	UJ	0.13	U	0.05	UJ	0.18	U	0.05	U
58-89-9	gamma-BHC (Lindane)	0.12	U	0.05	UJ	0.4	J	0.05	UJ	0.4	J	0.05	U
76-44-8	Heptachlor	0.12	U	0.05	UJ	0.13	U	0.05	UJ	0.18	U	0.05	U
309-00-2	Aldrin	0.12	U	0.05	UJ	0.13	U	0.05	UJ	0.2	J	0.05	U
1024-57-3	Heptachlor epoxide	0.12	U	0.05	UJ	0.13	U	0.05	UJ	0.18	U	0.05	U
959-98-8	Endosulfan I	0.39	J	0.05	UJ	0.13	U	0.05	UJ	0.37	U	0.05	U
60-57-1	Dieldrin	0.24	U	0.1	UJ	0.27	U	0.1	UJ	0.37	U	0.1	U
72-55-9	4,4'-DDE	0.24	U	0.1	UJ	5.3	DJ	0.1	UJ	7.2	J	0.1	U
72-20-8	Endrin	0.24	U	0.1	UJ	0.39	J	0.1	UJ	0.37	U	0.1	U
33213-65-9	Endosulfan II	0.24	U	0.1	UJ	0.27	U	0.1	UJ	0.37	U	0.1	U
72-54-8	4,4'-DDD	0.24	U	0.1	UJ	53.	D	0.1	UJ	3.3	J	0.1	U
1031-07-8	Endosulfan sulfate	1.2	J	0.1	UJ	0.27	U	0.1	UJ	0.37	U	0.1	U
50-29-3	4,4'-DDT	0.24	U	0.1	UJ	2.8		0.1	UJ	1.2	J	0.1	UJ
72-43-5	Methoxychlor	1.2	U	0.5	UJ	1.3	U	0.5	UJ	1.8	UJ	0.5	UJ
53494-70-5	Endrin ketone	0.24	U	0.1	UJ	0.27	U	0.1	UJ	0.37	U	0.1	U
7421-93-4	Endrin aldehyde	0.24	U	0.1	UJ	0.27	U	0.1	UJ	0.37	U	0.1	U
5103-71-9	alpha-Chlordane	0.12	U	0.05	UJ	0.13	U	0.05	UJ	0.18	U	0.05	U
5103-74-2	gamma-Chlordane	0.12	U	0.05	UJ	0.13	U	0.05	UJ	0.18	U	0.05	U
8001-35-2	Toxaphene	25.	U	5.	UJ	27.	U	5.	UJ	18.	U	5.	U
12674-11-2	Aroclor-1016	2.4	U	1.	UJ	2.7	U	1.	UJ	3.7	U	1.	U
11104-28-2	Aroclor-1221	4.9	U	2.	UJ	5.4	U	2.	UJ	7.1	U	2.	U
11141-16-5	Aroclor-1232	2.4	U	1.	UJ	2.7	U	1.	UJ	3.7	U	1.	U
53469-21-9	Aroclor-1242	2.4	U	1.	UJ	2.7	U	1.	UJ	3.7	U	1.	U
12672-29-6	Aroclor-1248	2.4	U	1.	UJ	2.7	U	1.	UJ	3.7	U	1.	U
11097-69-1	Aroclor-1254	2.4	U	1.	UJ	2.7	U	1.	UJ	3.7	U	1.	U
11096-82-5	Aroclor-1260	2.4	U	1.	UJ	2.7	U	1.	UJ	3.7		1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-W-4903-01		041-M-52A1-01		041-W-52A1-01		041-M-52D1-01		041-M-52E1-01		041-M-52E2-01	
	ORIGINAL ID ----->	041W490301		041M52A101		041W52A101		041M52D101		041M52E101		041M52E201	
	LAB SAMPLE ID --->	960043-16		960055-01		960055-06		960055-02		960055-03		960055-04	
	ID FROM REPORT -->	041W490301		041M52A101		041W52A101		041M52D101		041M52E101		041M52E201	
	SAMPLE DATE ----->	01/22/96		01/23/96		01/23/96		01/23/96		01/23/96		01/23/96	
	DATE EXTRACTED -->	01/24/96		01/30/96		01/26/96		01/30/96		01/30/96		01/30/96	
	DATE ANALYZED --->	02/08/96		02/14/96		02/13/96		02/14/96		02/15/96		02/15/96	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M00901	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL
319-84-6	alpha-BHC	0.05	U	0.69	U	0.05	U	0.21	U	0.13	U	0.22	U
319-85-7	beta-BHC	0.05	U	0.69	U	0.05	U	0.21	U	0.13	U	0.22	U
319-86-8	delta-BHC	0.05	U	0.69	U	0.05	U	0.61	J	0.13	U	0.22	U
58-89-9	gamma-BHC (Lindane)	0.05	U	0.69	U	0.05	U	0.21	U	0.43	J	0.22	U
76-44-8	Heptachlor	0.05	U	0.69	U	0.05	U	0.21	U	0.13	U	0.22	U
309-00-2	Aldrin	0.05	U	2.8	J	0.05	U	0.21	U	0.13	U	0.22	U
1024-57-3	Heptachlor epoxide	0.05	U	0.69	U	0.05	U	0.21	U	0.13	U	0.22	U
959-98-8	Endosulfan I	0.05	U	5.7	J	0.05	U	0.21	U	0.13	U	0.22	U
60-57-1	Dieldrin	0.1	U	9.5	J	0.1	U	0.43	U	0.26	U	0.45	U
72-55-9	4,4'-DDE	0.1	U	1.4	U	0.1	U	0.43	U	7.	D	0.45	U
72-20-8	Endrin	0.1	U	1.4	U	0.1	U	2.4	J	0.26	U	1.7	J
33213-65-9	Endosulfan II	0.1	U	1.4	U	0.1	U	0.43	U	0.26	U	0.45	U
72-54-8	4,4'-DDD	0.1	U	1.4	U	0.1	U	0.45	J	6.1	DJ	0.51	J
1031-07-8	Endosulfan sulfate	0.1	U	1.4	U	0.1	U	0.43	U	0.26	U	0.45	U
50-29-3	4,4'-DDT	0.1	U	1.4	U	0.1	U	0.43	U	1.3		0.45	U
72-43-5	Methoxychlor	0.5	U	6.9	U	0.5	U	2.1	U	1.3	U	2.2	U
53494-70-5	Endrin ketone	0.1	U	1.4	U	0.1	U	0.43	U	0.26	U	0.45	U
7421-93-4	Endrin aldehyde	0.1	U	1.4	U	0.1	U	0.43	U	0.26	U	0.45	U
5103-71-9	alpha-Chlordane	0.05	U	0.69	U	0.05	U	0.21	U	0.13	U	0.34	J
5103-74-2	gamma-Chlordane	0.05	U	0.91	J	0.05	U	0.21	U	0.13	U	0.22	U
8001-35-2	Toxaphene	5.	U	140.	U	5.	U	43.	U	27.	U	46.	U
12674-11-2	Aroclor-1016	1.	U	14.	U	1.	U	4.3	U	2.6	U	4.5	U
11104-28-2	Aroclor-1221	2.	U	28.	U	2.	U	8.5	U	5.3	U	9.	U
11141-16-5	Aroclor-1232	1.	U	14.	U	1.	U	4.3	U	2.6	U	4.5	U
53469-21-9	Aroclor-1242	1.	U	14.	U	1.	U	4.3	U	2.6	U	4.5	U
12672-29-6	Aroclor-1248	1.	U	14.	U	1.	U	4.3	U	2.6	U	4.5	U
11097-69-1	Aroclor-1254	1.	U	14.	U	1.	U	4.3	U	2.6	U	4.5	U
11096-82-5	Aroclor-1260	1.	U	14.	U	1.	U	3.7	J	2.6	U	3.3	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-M-4801-01		041-W-4801-01		041-M-4901-01		041-W-4901-01		041-M-4902-01		041-M-4903-01	
	ORIGINAL ID ----->	041M480101		041W480101		041M490101		041W490101		041M490201		041M490301	
	LAB SAMPLE ID --->	960043-10		960043-14		960025-14		960043-15		960025-15		960025-16	
	ID FROM REPORT -->	041M480101		041W480101		041M490101		041W490101		041M490201		041M490301	
	SAMPLE DATE ----->	01/22/96		01/22/96		01/16/96		01/22/96		01/16/96		01/16/96	
	DATE EXTRACTED -->	01/24/96		01/24/96		01/20/96		01/24/96		01/20/96		01/20/96	
	DATE ANALYZED --->	02/12/96		02/08/96		02/05/96		02/08/96		02/06/96		02/06/96	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/KG	
CAS #	Parameter	M00901	VAL	M00901	VAL	EM005	VAL	M00901	VAL	EM005	VAL	EM005	VAL
319 84 6	alpha BHC	10.	U	0.05	U	1.	UJ	0.05	U	0.62	UJ	0.12	UJ
319 85 7	beta BHC	10.	U	0.05	U	1.	U	0.05	U	0.62	U	0.12	U
319 86 8	delta BHC	10.	U	0.05	U	1.	U	0.05	U	0.62	U	0.12	U
58 89 9	gamma BHC (Lindane)	10.	U	0.05	U	1.	U	0.05	U	0.62	U	0.12	U
76 44 8	Heptachlor	10.	U	0.05	U	1.	U	0.05	U	0.62	U	0.12	U
309 00 2	Aldrin	10.	U	0.05	U	1.	U	0.05	U	0.62	U	0.12	U
1024 57 3	Heptachlor epoxide	10.	U	0.05	U	1.	U	0.05	U	1.1	J	0.12	U
959 98 8	Endosulfan I	10.	U	0.05	U	1.	U	0.05	U	0.62	U	0.12	U
60 57 1	Dieldrin	21.	U	0.1	U	2.1	U	0.1	U	1.3	U	0.24	U
72 55 9	4,4' DDE	620.	DJ	0.1	U	18.		0.1	U	9.2		0.24	U
72 20 8	Endrin	21.	U	0.1	U	2.1	U	0.1	U	1.3	U	0.24	U
33213-65-9	Endosulfan II	21.	U	0.1	U	2.1	U	0.1	U	1.3	U	0.24	U
72-54-8	4,4'-DDD	2600.	DJ	0.1	U	94.	DJ	0.1	U	59.	DJ	0.24	U
1031-07-8	Endosulfan sulfate	21.	U	0.1	U	2.1	U	0.1	U	1.3	U	0.24	U
50-29-3	4,4'-DDT	240.	J	0.1	U	1.2	J	0.1	U	3.	J	0.24	U
72-43-5	Methoxychlor	100.	U	0.5	U	10.	U	0.5	U	6.2	U	1.2	U
53494-70-5	Endrin ketone	21.	U	0.1	U	2.1	U	0.1	U	1.3	U	0.24	U
7421-93-4	Endrin aldehyde	21.	U	0.1	U	2.1	U	0.1	U	1.3	U	0.24	U
5103-71-9	alpha-Chlordane	10.	U	0.05	U	1.	U	0.05	U	0.62	U	0.12	U
5103-74-2	gamma-Chlordane	10.	U	0.05	U	1.	U	0.05	U	0.62	U	0.12	U
8001-35-2	Toxaphene	2100.	U	5.	U	210.	U	5.	U	130.	U	24.	U
12674-11-2	Aroclor-1016	210.	U	1.	U	21.	U	1.	U	13.	U	2.4	U
11104-28-2	Aroclor-1221	410.	U	2.	U	40.	U	2.	U	25.	U	4.6	U
11141-16-5	Aroclor-1232	210.	U	1.	U	21.	U	1.	U	13.	U	2.4	U
53469-21-9	Aroclor-1242	210.	U	1.	U	21.	U	1.	U	13.	U	2.4	U
12672-29-6	Aroclor-1248	210.	U	1.	U	21.	U	1.	U	13.	U	2.4	U
11097-69-1	Aroclor-1254	210.	U	1.	U	21.	U	1.	U	13.	U	2.4	U
11096-82-5	Aroclor-1260	210.	U	1.	U	21.	U	1.	U	13.	U	2.4	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST																	
	SAMPLE ID ------->	041-W-3203-01		041-M-3301-01		041-W-3301-01		041-M-3302-01		041-M-3303-01		041-W-3303-01	
	ORIGINAL ID ----->	041W320301		041M330101		041W330101		041M330201		041M330301		041W330301	
	LAB SAMPLE ID --->	950940-09		950940-12		950940-15		950940-13		950940-14		950940-16	
	ID FROM REPORT -->	041W320301		041M330101		041W330101		041M330201		041M330301		041W330301	
	SAMPLE DATE ----->	11/14/95		11/13/95		11/13/95		11/13/95		11/13/95		11/13/95	
	DATE EXTRACTED -->	11/16/95		11/18/95		11/16/95		11/18/95		11/18/95		11/16/95	
	DATE ANALYZED --->	12/05/95		12/05/95		12/05/95		12/05/95		12/05/95		12/05/95	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Water	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/KG		UG/L	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
319-84-6	alpha-BHC	0.05	UJ	0.3	J	0.05	UJ	0.39	J	0.11	UJ	0.05	UJ
319-85-7	beta-BHC	0.05	U	0.19	UJ	0.05	U	0.57	J	0.11	U	0.05	U
319-86-8	delta-BHC	0.05	UJ	0.19	UJ	0.05	UJ	0.21	UJ	0.13	J	0.05	UJ
58-89-9	gamma-BHC (Lindane)	0.05	U	0.19	UJ	0.05	U	0.21	U	0.11	U	0.05	U
76-44-8	Heptachlor	0.05	U	0.19	UJ	0.05	U	0.21	U	0.11	U	0.05	U
309-00-2	Aldrin	0.05	U	0.19	UJ	0.05	U	0.44	J	0.18	J	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U	0.19	UJ	0.05	U	0.21	U	0.11	U	0.05	U
959-98-8	Endosulfan I	0.05	U	0.39	UJ	0.05	U	0.42	U	0.22	U	0.05	U
60-57-1	Dieldrin	0.1	U	0.39	UJ	0.1	U	0.42	U	0.22	U	0.1	U
72-55-9	4,4'-DDE	0.1	U	3.1	J	0.1	U	0.42	U	0.22	U	0.1	U
72-20-8	Endrin	0.1	U	0.39	UJ	0.1	U	0.42	U	0.22	U	0.1	U
33213-65-9	Endosulfan II	0.1	U	0.39	UJ	0.1	U	0.42	U	0.22	U	0.1	U
72-54-8	4,4'-DDD	0.1	U	0.39	UJ	0.1	U	0.42	U	0.22	U	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U	0.39	UJ	0.1	U	0.42	U	0.22	U	0.1	U
50-29-3	4,4'-DDT	0.1	U	0.39	UJ	0.1	U	0.42	U	0.22	U	0.1	U
72-43-5	Methoxychlor	0.5	U	1.9	UJ	0.5	U	2.1	U	1.1	U	0.5	U
53494-70-5	Endrin ketone	0.1	U	0.39	UJ	0.1	U	0.42	U	0.22	U	0.1	U
7421-93-4	Endrin aldehyde	0.1	U	0.39	UJ	0.1	U	0.42	U	0.22	U	0.1	U
5103-71-9	alpha-Chlordane	0.05	U	0.19	UJ	0.05	U	0.7	J	0.35	J	0.05	U
5103-74-2	gamma-Chlordane	0.05	U	0.19	UJ	0.05	U	0.21	U	0.11	U	0.05	U
8001-35-2	Toxaphene	5.	U	39.	UJ	5.	U	42.	U	22.	U	5.	U
12674-11-2	Aroclor-1016	1.	U	7.6	UJ	1.	U	8.2	U	4.2	U	1.	U
11104-28-2	Aroclor-1221	2.	U	15.	UJ	2.	U	17.	U	8.6	U	2.	U
11141-16-5	Aroclor-1232	1.	U	7.6	UJ	1.	U	8.2	U	4.2	U	1.	U
53469-21-9	Aroclor-1242	1.	U	7.6	UJ	1.	U	8.2	U	4.2	U	1.	U
12672-29-6	Aroclor-1248	1.	U	7.6	UJ	1.	U	8.2	U	4.2	U	1.	U
11097-69-1	Aroclor-1254	1.	U	7.6	UJ	1.	U	12.	J	2.4	J	1.	U
11096-82-5	Aroclor-1260	1.	U	7.6	UJ	1.	U	8.2	U	4.2	U	1.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-M-2702-01		041-W-2702-01		041-M-3201-01		041-W-3201-01		041-M-3202-01		041-M-3203-01	
	ORIGINAL ID ----->	041M270201		041W270201		041M320101		041W320101		041M320201		041M320301	
	LAB SAMPLE ID --->	950941-09		950940-22		950940-04		950940-08		950940-05		950940-06	
	ID FROM REPORT -->	041M270201		041W270201		041M320101		041W320101		041M320201		041M320301	
	SAMPLE DATE ----->	11/15/95		11/15/95		11/14/95		11/14/95		11/14/95		11/14/95	
	DATE EXTRACTED -->	11/18/95		11/18/95		11/18/95		11/16/95		11/18/95		11/18/95	
	DATE ANALYZED --->	12/13/95		12/05/95		12/05/95		12/04/95		12/05/95		12/05/95	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/KG	
CAS #	Parameter	M06010	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
319-84-6	alpha-BHC	1.3	J	0.05	UJ	5.2	J	0.05	UJ	1.4	J	0.75	UJ
319-85-7	beta-BHC	0.34	U	0.05	U	2.1	U	0.05	U	1.	UJ	0.75	UJ
319-86-8	delta-BHC	0.34	U	0.05	UJ	2.1	UJ	0.05	UJ	1.	UJ	0.75	UJ
58-89-9	gamma-BHC (Lindane)	0.34	U	0.05	U	2.1	U	0.05	U	1.4	J	0.75	UJ
76-44-8	Heptachlor	0.34	U	0.05	U	2.1	U	0.05	U	1.	UJ	0.75	UJ
309-00-2	Aldrin	0.34	U	0.05	U	2.1	U	0.05	U	1.	UJ	0.75	UJ
1024-57-3	Heptachlor epoxide	0.34	U	0.05	U	2.1	U	0.05	U	1.	UJ	0.75	UJ
959-98-8	Endosulfan I	0.7	U	0.05	U	4.2	U	0.05	U	2.1	UJ	1.5	UJ
60-57-1	Dieldrin	0.7	U	0.1	U	13.		0.1	U	2.1	UJ	1.5	UJ
72-55-9	4,4'-DDE	1.8	J	0.1	U	37.	J	0.1	U	2.1	UJ	2.2	J
72-20-8	Endrin	0.7	U	0.1	U	15.		0.1	U	2.1	UJ	1.5	UJ
33213-65-9	Endosulfan II	0.7	U	0.1	U	4.2	U	0.1	U	2.1	UJ	1.5	UJ
72-54-8	4,4'-DDD	0.7	U	0.1	U	24.	J	0.1	U	2.1	UJ	3.3	J
1031-07-8	Endosulfan sulfate	0.7	U	0.1	U	4.2	U	0.1	U	2.1	UJ	1.5	UJ
50-29-3	4,4'-DDT	1.9	J	0.1	U	13.	J	0.1	U	2.1	UJ	1.5	UJ
72-43-5	Methoxychlor	3.4	U	0.5	U	21.	U	0.5	U	10.	UJ	7.5	UJ
53494-70-5	Endrin ketone	0.7	U	0.1	U	4.2	U	0.1	U	2.1	UJ	1.5	UJ
7421-93-4	Endrin aldehyde	0.7	U	0.1	U	4.2	U	0.1	U	2.1	UJ	4.2	J
5103-71-9	alpha-Chlordane	0.34	U	0.05	U	12.	J	0.05	U	1.	UJ	0.75	UJ
5103-74-2	gamma-Chlordane	0.34	U	0.05	U	5.9	J	0.05	U	1.	UJ	0.75	UJ
8001-35-2	Toxaphene	70.	U	5.	U	420.	U	5.	U	210.	UJ	150.	UJ
12674-11-2	Aroclor-1016	14.	U	1.	U	82.	U	1.	U	41.	UJ	30.	UJ
11104-28-2	Aroclor-1221	28.	U	2.	U	170.	U	2.	U	84.	UJ	61.	UJ
11141-16-5	Aroclor-1232	14.	U	1.	U	82.	U	1.	U	41.	UJ	30.	UJ
53469-21-9	Aroclor-1242	14.	U	1.	U	82.	U	1.	U	41.	UJ	30.	UJ
12672-29-6	Aroclor-1248	14.	U	1.	U	82.	U	1.	U	41.	UJ	30.	UJ
11097-69-1	Aroclor-1254	14.	U	1.	U	210.		1.	U	41.	UJ	30.	UJ
11096-82-5	Aroclor-1260	14.	U	1.	U	82.	U	1.	U	41.	UJ	30.	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST															
	SAMPLE ID ------->	041-M-2501-01		041-W-2501-01		041-M-2502-01		041-M-2503-01		041-W-2503-01		041-M-2701-01	
	ORIGINAL ID ----->	041M250101		041W250101		041M250201		041M250301		041W250301		041M270101	
	LAB SAMPLE ID --->	950941-05		950940-20		950941-06		950941-07		950940-21		950941-08	
	ID FROM REPORT -->	041M250101		041W250101		041M250201		041M250301		041W250301		041M270101	
	SAMPLE DATE ----->	11/15/95		11/15/95		11/15/95		11/15/95		11/15/95		11/15/95	
	DATE EXTRACTED -->	11/18/95		11/18/95		12/13/95		11/18/95		11/18/95		11/18/95	
	DATE ANALYZED --->	12/13/95		12/05/95		12/19/95		12/19/95		12/05/95		12/13/95	
	MATRIX ---------->	Sediment		Water		Sediment		Sediment		Water		Sediment	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/KG		UG/L		UG/KG	
CAS #	Parameter	M06010	VAL	M06070	VAL	M06010	VAL	M06010	VAL	M06070	VAL	M06010	VAL
319-84-6	alpha-BHC	0.82	UJ	0.05	UJ	0.59	U	0.67	J	0.05	UJ	0.49	J
319-85-7	beta-BHC	0.82	U	0.05	U	0.59	U	0.26	U	0.05	U	0.2	UJ
319-86-8	delta-BHC	0.82	U	0.05	UJ	0.59	U	0.26	U	0.05	UJ	0.2	UJ
58-89-9	gamma-BHC (Lindane)	0.82	U	0.05	U	0.59	U	1.3	J	0.05	U	0.2	UJ
76-44-8	Heptachlor	0.82	U	0.05	U	0.59	U	0.26	U	0.05	U	0.2	UJ
309-00-2	Aldrin	0.82	U	0.05	U	1.4	J	0.28	J	0.05	U	0.2	UJ
1024-57-3	Heptachlor epoxide	0.82	U	0.05	U	0.59	U	0.26	U	0.05	U	0.2	UJ
959-98-8	Endosulfan I	1.7	U	0.05	U	1.2	U	0.53	U	0.05	U	0.41	UJ
60-57-1	Dieldrin	1.7	U	0.1	U	1.2	U	0.53	U	0.1	U	0.41	UJ
72-55-9	4,4'-DDE	1.7	U	0.1	U	2.	J	1.3	J	0.1	U	2.7	J
72-20-8	Endrin	1.7	U	0.1	U	1.9	J	0.84	J	0.1	U	0.41	UJ
33213-65-9	Endosulfan II	1.7	U	0.1	U	1.2	U	0.53	U	0.1	U	0.41	UJ
72-54-8	4,4'-DDD	1.7	U	0.1	U	1.2	U	0.53	U	0.1	U	0.41	UJ
1031-07-8	Endosulfan sulfate	1.7	U	0.1	U	1.2	U	0.53	U	0.1	U	0.41	UJ
50-29-3	4,4'-DDT	1.8	J	0.1	U	1.2	U	0.53	U	0.1	U	0.41	UJ
72-43-5	Methoxychlor	8.2	U	0.5	U	5.9	U	2.6	U	0.5	U	2.	UJ
53494-70-5	Endrin ketone	1.7	U	0.1	U	1.2	U	0.53	U	0.1	U	0.41	UJ
7421-93-4	Endrin aldehyde	1.7	U	0.1	U	1.2	U	0.53	U	0.1	U	0.41	UJ
5103-71-9	alpha-Chlordane	0.82	U	0.05	U	0.88	J	0.56	J	0.05	U	0.49	J
5103-74-2	gamma-Chlordane	0.82	U	0.05	U	0.59	U	0.26	U	0.05	U	0.2	UJ
8001-35-2	Toxaphene	170.	U	5.	U	120.	U	53.	U	5.	U	41.	UJ
12674-11-2	Aroclor-1016	33.	U	1.	U	23.	U	10.	U	1.	U	7.9	UJ
11104-28-2	Aroclor-1221	66.	U	2.	U	48.	U	21.	U	2.	U	16.	UJ
11141-16-5	Aroclor-1232	33.	U	1.	U	23.	U	10.	U	1.	U	7.9	UJ
53469-21-9	Aroclor-1242	33.	U	1.	U	23.	U	10.	U	1.	U	7.9	UJ
12672-29-6	Aroclor-1248	33.	U	1.	U	23.	U	10.	U	1.	U	7.9	UJ
11097-69-1	Aroclor-1254	17.	J	1.	U	11.	J	4.3	J	1.	U	7.9	UJ
11096-82-5	Aroclor-1260	33.	U	1.	U	23.	U	10.	U	1.	U	7.9	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-W-18B1-01		041-W-1901-01		041-W-1903-01		041-M-19A1-01		041-M-19A2-01		041-M-19B1-01	
	ORIGINAL ID ----->	041W18B101		041W190101		041W190301		041M19A101		041M19A201		041M19B101	
	LAB SAMPLE ID --->	951050-08		960039-15		960039-16		960025-11		960025-12		960025-13	
	ID FROM REPORT -->	041W18B101		041W190101		041W190301		041M19A101		041M19A201		041M19B101	
	SAMPLE DATE ----->	12/14/95		01/17/96		01/17/96		01/16/96		01/16/96		01/16/96	
	DATE EXTRACTED -->	12/18/95		01/21/96		01/21/96		01/20/96		01/20/96		01/20/96	
	DATE ANALYZED --->	01/25/96		02/07/96		02/07/96		02/06/96		02/06/96		02/06/96	
	MATRIX ---------->	Water		Water		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	EM0060	VAL	63A401	VAL	63A401	VAL	EM005	VAL	EM005	VAL	EM005	VAL
319-84-6	alpha-BHC	0.05	U	0.05	U	0.05	U	0.68	UJ	0.1	UJ	0.11	UJ
319-85-7	beta-BHC	0.05	U	0.05	U	0.05	U	0.68	U	0.1	U	0.11	U
319-86-8	delta-BHC	0.05	U	0.05	U	0.05	U	0.68	U	0.11	J	0.31	J
58-89-9	gamma-BHC (Lindane)	0.05	U	0.05	U	0.05	U	0.68	U	0.1	U	0.11	U
76-44-8	Heptachlor	0.05	U	0.05	U	0.05	U	0.68	U	0.1	U	0.11	U
309-00-2	Aldrin	0.05	U	0.05	U	0.05	U	0.68	U	0.1	U	0.11	U
1024-57-3	Heptachlor epoxide	0.05	U	0.05	U	0.05	U	26.	DJ	0.1	U	0.22	J
959-98-8	Endosulfan I	0.05	U	0.05	U	0.05	U	5.3	J	0.1	U	0.11	U
60-57-1	Dieldrin	0.1	U	0.1	U	0.1	U	1.4	U	0.2	J	0.21	J
72-55-9	4,4'-DDE	0.1	U	0.1	U	0.1	U	1.4	U	0.55		1.2	
72-20-8	Endrin	0.1	U	0.1	U	0.1	U	1.4	U	0.21	U	0.27	J
33213-65-9	Endosulfan II	0.1	U	0.1	U	0.1	U	1.4	U	0.21	U	0.22	U
72-54-8	4,4'-DDD	0.1	U	0.1	U	0.1	U	1.4	U	0.21	U	0.71	
1031-07-8	Endosulfan sulfate	0.1	U	0.1	U	0.1	U	1.4	U	0.21	U	0.22	U
50-29-3	4,4'-DDT	0.1	U	0.1	U	0.1	U	1.4	U	0.21	U	0.34	J
72-43-5	Methoxychlor	0.5	U	0.5	U	0.5	U	6.8	U	1.	U	1.1	U
53494-70-5	Endrin ketone	0.1	U	0.1	U	0.1	U	1.4	U	0.21	U	0.22	U
7421-93-4	Endrin aldehyde	0.1	U	0.1	U	0.1	U	1.4	U	0.21	U	0.22	U
5103-71-9	alpha-Chlordane	0.05	U	0.05	U	0.05	U	0.68	U	0.1	U	0.11	U
5103-74-2	gamma-Chlordane	0.05	U	0.05	U	0.05	U	1.3	J	0.1	U	0.11	U
8001-35-2	Toxaphene	5.	U	5.	U	5.	U	140.	U	21.	U	22.	U
12674-11-2	Aroclor-1016	1.	U	1.	U	1.	U	14.	U	2.1	U	2.2	U
11104-28-2	Aroclor-1221	2.	U	2.	U	2.	U	27.	U	4.	U	4.2	U
11141-16-5	Aroclor-1232	1.	U	1.	U	1.	U	14.	U	2.1	U	2.2	U
53469-21-9	Aroclor-1242	1.	U	1.	U	1.	U	14.	U	2.1	U	2.2	U
12672-29-6	Aroclor-1248	1.	U	1.	U	1.	U	14.	U	2.1	U	2.2	U
11097-69-1	Aroclor-1254	1.	U	1.	U	1.	U	14.	U	2.1	U	2.2	U
11096-82-5	Aroclor-1260	1.	U	1.	U	1.	U	14.	U	1.1	J	4.2	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST																			
		SAMPLE ID ------->	041-M-1703-01		041-M-18A1-01		041-M-18A2-01		041-W-18A2-01		041-M-18A3-01		041-M-18B1-01	
		ORIGINAL ID ----->	041M170301		041M18A101		041M18A201		041W18A201		041M18A301		041M18B101	
		LAB SAMPLE ID --->	960025-05		951050-18		951050-19		951050-21		951050-05		951050-06	
		ID FROM REPORT -->	041M170301		041M18A101		041M18A201		041W18A201		041M18A301		041M18B101	
		SAMPLE DATE ----->	01/15/96		12/15/95		12/15/95		12/15/95		12/14/95		12/14/95	
		DATE EXTRACTED -->	01/20/96		12/19/95		12/19/95		12/20/95		12/19/95		12/19/95	
		DATE ANALYZED --->	02/06/96		01/27/96		01/25/96		01/25/96		01/25/96		01/26/96	
		MATRIX ---------->	Sediment		Sediment		Sediment		Water		Sediment		Sediment	
		UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/L		UG/KG		UG/KG	
CAS #	Parameter		EM005	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL	EMD060	VAL
319-84-6	alpha-BHC		0.094	UJ	2.9	UJ	1.2	UJ	0.05	U	0.82	UJ	24.	UJ
319-85-7	beta-BHC		0.094	U	2.9	U	1.3	J	0.05	U	0.82	U	24.	U
319-86-8	delta-BHC		0.094	U	2.9	U	1.2	U	0.05	U	0.82	U	24.	U
58-89-9	gamma-BHC (Lindane)		0.51		2.9	U	1.2	U	0.05	U	0.82	U	24.	U
76-44-8	Heptachlor		0.094	U	2.9	U	1.2	U	0.05	U	0.82	U	24.	U
309-00-2	Aldrin		0.094	U	2.9	U	3.7		0.05	U	0.82	U	24.	U
1024-57-3	Heptachlor epoxide		0.094	U	2.9	U	1.2	U	0.05	U	0.82	U	24.	U
959-98-8	Endosulfan I		0.094	U	2.9	U	1.2	U	0.05	U	0.82	U	24.	U
60-57-1	Dieldrin		0.19	U	6.	U	2.4	U	0.1	U	1.7	U	50.	U
72-55-9	4,4'-DDE		0.19	U	270.	D	57.	DJ	0.1	U	14.	J	50.	U
72-20-8	Endrin		0.19	U	6.	U	2.4	U	0.1	U	1.7	U	50.	U
33213-65-9	Endosulfan II		0.19	U	6.	U	2.4	U	0.1	U	1.7	U	50.	U
72-54-8	4,4'-DDD		0.19	U	930.	D	49.	DJ	0.1	U	16.		280.	D
1031-07-8	Endosulfan sulfate		0.19	U	6.	U	2.4	U	0.1	U	1.7	U	50.	U
50-29-3	4,4'-DDT		0.19	U	1200.	D	310.	D	0.1	U	1.9	J	1800.	D
72-43-5	Methoxychlor		0.94	U	29.	U	12.	U	0.5	U	8.2	U	240.	U
53494-70-5	Endrin ketone		0.19	U	6.	U	6.5	J	0.1	U	1.7	U	50.	U
7421-93-4	Endrin aldehyde		0.19	U	6.	U	2.4	U	0.1	U	1.7	U	50.	U
5103-71-9	alpha-Chlordane		0.094	U	2.9	U	4.8	J	0.05	U	0.82	U	24.	U
5103-74-2	gamma-Chlordane		0.094	U	2.9	U	1.2	U	0.05	U	0.82	U	24.	U
8001-35-2	Toxaphene		19.	U	290.	U	120.	U	5.	U	82.	U	2400.	U
12674-11-2	Aroclor-1016		1.9	U	60.	U	24.	U	1.	U	17.	U	500.	U
11104-28-2	Aroclor-1221		3.7	U	120.	U	47.	U	2.	U	33.	U	500.	U
11141-16-5	Aroclor-1232		1.9	U	60.	U	24.	U	1.	U	17.	U	500.	U
53469-21-9	Aroclor-1242		1.9	U	60.	U	24.	U	1.	U	17.	U	500.	U
12672-29-6	Aroclor-1248		1.9	U	60.	U	24.	U	1.	U	17.	U	500.	U
11097-69-1	Aroclor-1254		1.9	U	60.	U	24.	U	1.	U	17.	U	500.	U
11096-82-5	Aroclor-1260		0.7	J	60.	U	24.	U	1.	U	17.	U	500.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-M-1602-01		041-W-1602-01		041-M-1603-01		041-M-1701-01		041-W-1701-01		041-M-1702-01	
	ORIGINAL ID ----->	041M160201		041W160201		041M160301		041M170101		041W170101		041M170201	
	LAB SAMPLE ID --->	951029-03		951029-07		951029-04		960025-03		960025-09		960025-04	
	ID FROM REPORT -->	041M160201		041W160201		041M160301		041M170101		041W170101		041M170201	
	SAMPLE DATE ----->	12/07/95		12/07/95		12/07/95		01/15/96		01/15/96		01/15/96	
	DATE EXTRACTED -->	12/17/95		12/12/95		12/17/95		01/20/96		01/18/96		01/20/96	
	DATE ANALYZED --->	01/23/96		01/24/96		01/24/96		02/06/96		02/04/96		02/06/96	
	MATRIX ---------->	Sediment		Water		Sediment		Sediment		Water		Sediment	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/KG		UG/L		UG/KG	
CAS #	Parameter	EW0010	VAL	EW0010	VAL	EW0010	VAL	EM005	VAL	EM005	VAL	EM005	VAL
319 84 6	alpha-BHC	0.16	U	0.05	U	0.43	U	0.11	UJ	0.05	UJ	0.1	UJ
319 85 7	beta-BHC	0.16	U	0.05	U	0.43	U	0.11	U	0.05	U	0.1	U
319 86 8	delta BHC	0.16	U	0.05	U	0.43	U	0.11	U	0.05	U	0.1	U
58 89 9	gamma BHC (Lindane)	0.16	U	0.05	U	0.43	U	0.11	U	0.05	U	0.2	J
76 44 8	Heptachlor	0.16	U	0.05	U	0.43	U	0.11	U	0.05	U	0.1	U
309 00 2	Aldrin	0.16	U	0.05	U	0.43	U	0.11	U	0.05	U	0.1	U
1024 57 3	Heptachlor epoxide	0.16	U	0.05	U	0.43	U	0.11	U	0.05	U	0.1	U
959-98-8	Endosulfan I	0.16	U	0.05	U	0.43	U	0.11	U	0.05	U	0.1	U
60 57 1	Dieldrin	0.35	J	0.1	U	4.2	J	0.23	U	0.1	U	0.21	U
72-55-9	4,4'-DDE	3.1	J	0.1	U	26.	J	0.3		0.1	U	0.21	U
72-20-8	Endrin	0.33	U	0.1	U	0.88	U	0.23	U	0.1	U	0.21	U
33213-65-9	Endosulfan II	0.33	U	0.1	U	0.88	U	0.23	U	0.1	U	0.21	U
72-54-8	4,4'-DDD	1.5	J	0.1	U	4.8	J	0.23	J	0.1	U	0.21	U
1031-07-8	Endosulfan sulfate	0.33	U	0.1	U	0.88	U	0.23	U	0.1	U	0.21	U
50-29-3	4,4'-DDT	0.33	U	0.1	U	2.8	J	0.23	U	0.1	U	0.21	U
72-43-5	Methoxychlor	1.6	U	0.5	U	4.3	U	1.1	U	0.5	U	1.	U
53494-70-5	Endrin ketone	0.33	U	0.1	U	0.88	U	0.23	U	0.1	U	0.21	U
7421-93-4	Endrin aldehyde	0.33	U	0.1	U	0.88	U	0.23	U	0.1	U	0.21	U
5103-71-9	alpha-Chlordane	0.16	U	0.05	U	0.47	J	0.11	U	0.05	U	0.1	U
5103-74-2	gamma-Chlordane	0.16	U	0.05	U	0.43	U	0.11	U	0.05	U	0.1	U
8001-35-2	Toxaphene	16.	U	5.	U	43.	U	23.	U	5.	U	21.	U
12674-11-2	Aroclor-1016	3.3	U	1.	U	8.8	U	2.3	U	1.	U	2.1	U
11104-28-2	Aroclor-1221	6.4	U	2.	U	17.	U	4.5	U	2.	U	4.	U
11141-16-5	Aroclor-1232	3.3	U	1.	U	8.8	U	2.3	U	1.	U	2.1	U
53469-21-9	Aroclor-1242	3.3	U	1.	U	8.8	U	2.3	U	1.	U	2.1	U
12672-29-6	Aroclor-1248	3.3	U	1.	U	8.8	U	2.3	U	1.	U	2.1	U
11097-69-1	Aroclor-1254	11.	J	1.	U	78.	J	2.3	U	1.	U	2.1	U
11096-82-5	Aroclor-1260	3.3	U	1.	U	8.8	U	2.8		1.	U	0.87	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST															
	SAMPLE ID ------->	041-M-1502-01		041-W-1502-01		041-M-1503-01		041-M-1504-01		041-M-1601-01		041-W-1601-01	
	ORIGINAL ID ----->	041M150201		041W150201		041M150301		041M150401		041M160101		041W160101	
	LAB SAMPLE ID --->	951021-06		951021-11		951021-07		951021-08		951029-02		951029-06	
	ID FROM REPORT -->	041M150201		041W150201		041M150301		041M150401		041M160101		041W160101	
	SAMPLE DATE ----->	12/06/95		12/06/95		12/06/95		12/06/95		12/07/95		12/07/95	
	DATE EXTRACTED -->	12/12/96		12/11/96		12/12/96		12/12/96		12/17/95		12/12/95	
	DATE ANALYZED --->	01/24/96		01/24/96		01/25/96		01/25/96		01/23/96		01/24/96	
	MATRIX ---------->	Sediment		Water		Sediment		Sediment		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/KG		UG/KG		UG/L	
CAS #	Parameter	EM0050	VAL	EM0050	VAL	EM0050	VAL	EM0050	VAL	EW0010	VAL	EW0010	VAL
319-84-6	alpha-BHC	0.75	UJ	0.05	UJ	0.63	UJ	0.29	UJ	0.1	U	0.05	U
319-85-7	beta-BHC	1.4	J	0.05	U	0.63	U	0.29	U	0.1	U	0.05	U
319-86-8	delta-BHC	0.75	U	0.05	U	5.5	J	0.29	U	0.1	U	0.05	U
58-89-9	gamma-BHC (Lindane)	0.75	U	0.05	U	0.63	U	0.29	U	0.1	U	0.05	U
76-44-8	Heptachlor	1.1	J	0.05	U	0.63	U	0.29	U	0.1	U	0.05	U
309-00-2	Aldrin	0.75	U	0.05	U	0.63	U	0.29	U	0.1	U	0.05	U
1024-57-3	Heptachlor epoxide	0.75	U	0.05	U	0.63	U	0.29	U	0.1	U	0.05	U
959-98-8	Endosulfan I	0.75	U	0.05	U	1.7	J	0.29	U	0.1	U	0.05	U
60-57-1	Dieldrin	1.5	U	0.1	U	1.3	U	0.59	U	0.21	U	0.1	U
72-55-9	4,4'-DDE	110.	DJ	0.1	U	69.	DJ	10.	J	0.3	J	0.1	U
72-20-8	Endrin	16.	J	0.1	U	1.3	U	1.5	J	0.21	U	0.1	U
33213-65-9	Endosulfan II	1.5	U	0.1	U	1.3	U	0.59	U	0.21	U	0.1	U
72-54-8	4,4'-DDD	62.	DJ	0.1	U	200.	DJ	1.3	J	0.27	J	0.1	U
1031-07-8	Endosulfan sulfate	1.5	U	0.1	U	1.3	U	0.59	U	0.21	U	0.1	U
50-29-3	4,4'-DDT	4.3	J	0.1	U	16.	J	0.59	U	0.21	U	0.1	U
72-43-5	Methoxychlor	7.5	U	0.5	U	6.3	U	2.9	U	1.	U	0.5	U
53494-70-5	Endrin ketone	1.5	U	0.1	U	1.3	U	0.59	U	0.21	U	0.1	U
7421-93-4	Endrin aldehyde	1.5	U	0.1	U	1.3	J	0.59	U	0.21	U	0.1	U
5103-71-9	alpha-Chlordane	1.4	J	0.05	U	0.63	U	0.29	U	0.1	U	0.05	U
5103-74-2	gamma-Chlordane	0.75	U	0.05	U	0.63	U	0.29	U	0.1	U	0.05	U
8001-35-2	Toxaphene	75.	U	5.	U	63.	U	29.	U	10.	U	5.	U
12674-11-2	Aroclor-1016	15.	U	1.	U	13.	U	5.9	U	2.1	U	1.	U
11104-28-2	Aroclor-1221	30.	U	2.	U	25.	U	11.	U	4.	U	2.	U
11141-16-5	Aroclor-1232	15.	U	1.	U	13.	U	5.9	U	2.1	U	1.	U
53469-21-9	Aroclor-1242	15.	U	1.	U	13.	U	5.9	U	2.1	U	1.	U
12672-29-6	Aroclor-1248	15.	U	1.	U	13.	U	5.9	U	2.1	U	1.	U
11097-69-1	Aroclor-1254	15.	U	1.	U	13.	U	5.9	U	2.1	J	1.	U
11096-82-5	Aroclor-1260	24.	J	1.	U	32.	J	5.9	U	2.1	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-W-1201-01		041-M-1202-01		041-M-1301-01		041-W-1301-01		041-M-1501-01		041-W-1501-01	
	ORIGINAL ID ----->	041W120101		041M120201		041M130101		041W130101		041M150101		041W150101	
	LAB SAMPLE ID --->	950983-11		950991-10		950979-02		950979-05		951021-05		951021-10	
	ID FROM REPORT -->	041W120101		041M120201		041M130101		041W130101		041M150101		041W150101	
	SAMPLE DATE ----->	11/28/95		11/29/95		11/27/95		11/27/95		12/06/95		12/06/95	
	DATE EXTRACTED -->	12/01/95		12/02/95		11/30/95		11/29/95		12/12/96		12/11/96	
	DATE ANALYZED --->	01/10/96		01/05/96		01/05/96		01/05/96		01/24/96		01/24/96	
	MATRIX ---------->	Water		Sediment		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/L		UG/KG		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	Z53301	VAL	Z30301	VAL	041M10	VAL	041M10	VAL	EM0050	VAL	EM0050	VAL
319-84-6	alpha-BHC	0.05	U	0.16	U	0.12	UJ	0.05	UR	0.75	UJ	0.05	UJ
319-85-7	beta-BHC	0.05	U	0.16	U	0.12	UJ	0.05	UR	0.94	J	0.05	U
319-86-8	delta-BHC	0.05	U	0.16	U	0.12	UJ	0.05	UR	0.75	U	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U	0.16	U	0.12	UJ	0.05	UR	0.75	U	0.05	U
76-44-8	Heptachlor	0.05	U	0.16	U	0.12	UJ	0.05	UR	0.75	U	0.05	U
309-00-2	Aldrin	0.05	U	0.16	U	0.12	UJ	0.05	UR	0.75	U	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U	0.16	U	0.12	UJ	0.05	UR	0.75	U	0.05	U
959-98-8	Endosulfan I	0.05	U	0.4	J	0.26	UJ	0.05	UR	0.75	U	0.05	U
60-57-1	Dieldrin	0.1	U	0.31	J	0.3	J	0.1	UR	1.5	U	0.1	U
72-55-9	4,4'-DDE	0.1	U	0.97		1.9	J	0.1	UR	340.	DJ	0.063	J
72-20-8	Endrin	0.1	U	0.32	U	0.26	UJ	0.1	UR	2.5	J	0.1	U
33213-65-9	Endosulfan II	0.1	U	0.32	U	0.26	UJ	0.1	UR	1.5	U	0.1	U
72-54-8	4,4'-DDD	0.1	U	0.32	U	0.26	UJ	0.1	UR	85.	DJ	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U	3.2	J	0.26	UJ	0.1	UR	1.5	U	0.1	U
50-29-3	4,4'-DDT	0.1	UJ	0.32	UJ	1.4	J	0.1	UR	9.9	J	0.1	U
72-43-5	Methoxychlor	0.5	U	1.6	UJ	1.2	UJ	0.5	UR	7.5	U	0.5	U
53494-70-5	Endrin ketone	0.1	U	0.32	U	0.26	UJ	0.1	UR	1.9	J	0.1	U
7421-93-4	Endrin aldehyde	0.1	U	0.28	J	0.26	UJ	0.1	UR	7.3	J	0.1	U
5103-71-9	alpha-Chlordane	0.05	U	0.16	U	0.12	UJ	0.05	UR	0.75	U	0.05	U
5103-74-2	gamma-Chlordane	0.05	U	0.16	U	0.12	UJ	0.05	UR	0.75	U	0.05	U
8001-35-2	Toxaphene	5.	U	16.	U	12.	UJ	5.	UR	75.	U	5.	U
12674-11-2	Aroclor-1016	1.	U	3.2	U	2.6	UJ	1.	UR	15.	U	1.	U
11104-28-2	Aroclor-1221	2.	U	6.2	U	5.	UJ	2.	UR	30.	U	2.	U
11141-16-5	Aroclor-1232	1.	U	3.2	U	2.6	UJ	1.	UR	15.	U	1.	U
53469-21-9	Aroclor-1242	1.	U	3.2	U	2.6	UJ	1.	UR	15.	U	1.	U
12672-29-6	Aroclor-1248	1.	U	3.2	U	2.6	UJ	1.	UR	15.	U	1.	U
11097-69-1	Aroclor-1254	1.	U	3.2	U	2.6	UJ	1.	UR	15.	U	1.	U
11096-82-5	Aroclor-1260	1.	U	3.2	U	2.6	UJ	1.	UR	14.	J	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST															
	SAMPLE ID ------->	041-M-0609-01		041-M-0611-01		041-M-10A1-01		041-M-10A2-01		041-M-10A3-01		041-M-1201-01	
	ORIGINAL ID ----->	041M060901		041M061101		041M10A101		041M10A201		041M10A301		041M120101	
	LAB SAMPLE ID --->	950940-03		950950-23		950983-14		950983-08		950979-01		950983-09	
	ID FROM REPORT -->	041M060901		041M061101		041M10A101		041M10A201		041M10A301		041M120101	
	SAMPLE DATE ----->	11/14/95		11/16/95		11/28/95		11/28/95		11/27/95		11/28/95	
	DATE EXTRACTED -->	11/18/95		11/21/95		11/30/95		11/30/95		11/30/95		11/30/95	
	DATE ANALYZED --->	12/05/95		12/17/95		01/11/96		01/11/96		01/05/96		01/11/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	M06070	VAL	5A0101	VAL	Z53301	VAL	Z53301	VAL	041M10	VAL	Z53301	VAL
319-84-6	alpha-BHC	0.11	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
319-85-7	beta-BHC	0.11	U	0.1	U	0.1	U	0.1	U	0.1	U	0.89	J
319-86-8	delta-BHC	0.11	U	0.1	U	0.1	U	0.1	U	0.1	U	1.1	J
58-89-9	gamma-BHC (Lindane)	0.11	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
76-44-8	Heptachlor	0.11	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
309-00-2	Aldrin	0.11	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
1024-57-3	Heptachlor epoxide	0.11	U	0.1	U	0.1	U	0.12	J	0.1	U	0.1	U
959-98-8	Endosulfan I	0.22	U	0.1	U	0.21	U	0.21	U	0.21	U	1.2	J
60-57-1	Dieldrin	0.22	U	0.3	J	0.21	U	0.21	U	0.21	U	0.21	U
72-55-9	4,4'-DDE	0.22	U	0.29		0.21	U	0.25	J	2.3		0.21	U
72-20-8	Endrin	0.22	U	0.2	U	0.21	U	0.21	U	0.21	U	0.21	U
33213-65-9	Endosulfan II	0.22	U	0.2	U	0.21	U	0.21	U	0.21	U	0.21	U
72-54-8	4,4'-DDD	0.25	J	0.21	J	0.21	U	0.21	U	0.21	U	0.21	U
1031-07-8	Endosulfan sulfate	0.22	U	0.2	U	0.21	U	0.21	U	0.21	U	0.21	U
50-29-3	4,4'-DDT	0.74		0.2	U	0.21	UJ	0.53	J	0.25	J	0.21	UJ
72-43-5	Methoxychlor	1.1	U	1.	U	1.	U	1.	U	1.	U	1.	U
53494-70-5	Endrin ketone	0.22	U	0.2	U	0.21	U	0.21	U	0.21	U	13.	DJ
7421-93-4	Endrin aldehyde	0.22	U	0.2	U	0.21	U	0.21	U	0.21	U	0.21	U
5103-71-9	alpha-Chlordane	0.15	J	0.1	U	0.19	J	0.1	U	0.15	J	0.1	U
5103-74-2	gamma-Chlordane	0.11	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
8001-35-2	Toxaphene	22.	U	20.	U	10.	U	10.	U	10.	U	10.	U
12674-11-2	Aroclor-1016	4.2	U	2.	U	2.1	U	2.1	U	2.1	U	2.1	U
11104-28-2	Aroclor-1221	8.6	U	4.	U	4.1	U	4.	U	4.	U	4.1	U
11141-16-5	Aroclor-1232	4.2	U	2.	U	2.1	U	2.1	U	2.1	U	2.1	U
53469-21-9	Aroclor-1242	4.2	U	2.	U	2.1	U	2.1	U	2.1	U	2.1	U
12672-29-6	Aroclor-1248	4.2	U	2.	U	2.1	U	2.1	U	2.1	U	2.1	U
11097-69-1	Aroclor-1254	4.2	U	2.	U	2.1	U	2.1	U	2.1	U	2.1	U
11096-82-5	Aroclor-1260	4.2	U	3.8	J	2.1	U	2.1	U	2.1	U	2.1	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-M-0604-01		041-M-0605-01		041-M-0606-01		041-M-0607-01		041-W-0607-01		041-M-0608-01	
	ORIGINAL ID ----->	041M060401		041M060501		041M060601		041M060701		041W060701		041M060801	
	LAB SAMPLE ID --->	950941-04		950950-20		950950-21		950940-01		950940-07		950940-02	
	ID FROM REPORT -->	041M060401		041M060501		041M060601		041M060701		041W060701		041M060801	
	SAMPLE DATE ----->	11/15/95		11/16/95		11/16/95		11/14/95		11/14/95		11/14/95	
	DATE EXTRACTED -->	11/22/95		11/21/95		11/21/95		12/06/95		11/16/95		11/18/95	
	DATE ANALYZED --->	12/17/95		12/17/95		12/17/95		12/13/95		12/04/95		12/05/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Water		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/L		UG/KG	
CAS #	Parameter	M06010	VAL	5A0101	VAL	5A0101	VAL	M06070	VAL	M06070	VAL	M06070	VAL
319-84-6	alpha-BHC	0.51	U	0.17	U	0.31	U	0.73	UJ	0.05	UJ	0.6	J
319-85-7	beta-BHC	0.51	U	0.1	U	0.12	U	1.5	J	0.05	U	0.1	U
319-86-8	delta-BHC	0.51	U	0.1	U	0.12	U	0.73	U	0.05	UJ	0.1	UJ
58-89-9	gamma-BHC (Lindane)	0.51	U	0.1	U	0.12	U	0.73	UJ	0.05	U	0.1	U
76-44-8	Heptachlor	0.51	U	0.1	U	0.12	U	0.73	UJ	0.05	U	0.1	U
309-00-2	Aldrin	0.51	U	0.1	U	0.55	J	1.1	J	0.05	U	0.54	
1024-57-3	Heptachlor epoxide	0.51	U	0.1	U	0.12	U	0.73	UJ	0.05	U	0.1	U
959-98-8	Endosulfan I	1.	U	0.1	U	0.12	U	1.5	UJ	0.05	U	0.21	U
60-57-1	Dieldrin	1.	U	0.6	J	4.7		10.	J	0.1	U	5.6	
72-55-9	4,4'-DDE	4.3		2.8	J	8.	D	34.	J	0.1	U	8.4	D
72-20-8	Endrin	1.	U	0.2	U	0.24	U	3.6	J	0.1	U	1.8	J
33213-65-9	Endosulfan II	1.	U	0.2	U	0.24	U	1.5	UJ	0.1	U	0.21	U
72-54-8	4,4'-DDD	2.3	J	2.2		8.3	D	22.	J	0.1	U	6.4	D
1031-07-8	Endosulfan sulfate	1.	U	0.2	U	0.24	U	1.5	UJ	0.1	U	0.21	U
50-29-3	4,4'-DDT	2.	J	2.2		4.8	J	11.	J	0.1	U	4.5	J
72-43-5	Methoxychlor	5.1	U	1.	U	1.2	U	7.3	UJ	0.5	U	1.	U
53494-70-5	Endrin ketone	1.	U	0.2	U	0.24	U	1.5	UJ	0.1	U	0.21	U
7421-93-4	Endrin aldehyde	1.	U	0.2	U	0.24	U	1.5	UJ	0.1	U	0.48	J
5103-71-9	alpha-Chlordane	0.51	U	0.1	U	0.25	J	1.5	J	0.05	U	1.2	
5103-74-2	gamma-Chlordane	0.51	U	0.1	U	0.19	J	1.2	J	0.05	U	0.44	J
8001-35-2	Toxaphene	100.	U	20.	U	25.	U	150.	UJ	5.	U	21.	U
12674-11-2	Aroclor-1016	20.	U	2.	U	2.4	U	29.	UJ	1.	U	4.	U
11104-28-2	Aroclor-1221	41.	U	4.	U	4.8	U	59.	UJ	2.	U	8.1	U
11141-16-5	Aroclor-1232	20.	U	2.	U	2.4	U	29.	UJ	1.	U	4.	U
53469-21-9	Aroclor-1242	20.	U	2.	U	2.4	U	29.	UJ	1.	U	4.	U
12672-29-6	Aroclor-1248	20.	U	2.	U	2.4	U	29.	UJ	1.	U	4.	U
11097-69-1	Aroclor-1254	20.	U	2.	U	2.4	U	29.	UJ	1.	U	4.	U
11096-82-5	Aroclor-1260	20.	U	2.	U	4.1	J	29.	UJ	1.	U	4.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST																	
	SAMPLE ID ------->	041-W-04D4-01		041-M-04D5-01		041-M-0601-01		041-M-0602-01		041-M-0603-01		041-W-0603-01	
	ORIGINAL ID ----->	041W04D401		041M04D501		041M060101		041M060201		041M060301		041W060301	
	LAB SAMPLE ID --->	960025-08		951012-13		950941-01		950941-02		950941-03		950940-19	
	ID FROM REPORT -->	041W04D401		041M04D501		041M060101		041M060201		041M060301		041W060301	
	SAMPLE DATE ----->	01/15/96		12/05/95		11/15/95		11/15/95		11/15/95		11/15/95	
	DATE EXTRACTED -->	01/18/96		12/07/95		11/18/95		11/18/95		11/18/95		11/18/95	
	DATE ANALYZED --->	02/04/96		01/14/96		12/17/95		12/19/95		12/17/95		12/05/95	
	MATRIX ---------->	Water		Sediment		Sediment		Sediment		Sediment		Water	
	UNITS ---------->	UG/L		UG/KG		UG/KG		UG/KG		UG/KG		UG/L	
CAS #	Parameter	EM005	VAL	030301	VAL	M06010	VAL	M06010	VAL	M06010	VAL	M06070	VAL
319-84-6	alpha-BHC	0.05	UJ	0.011	UJ	0.98	U	0.48	J	0.37	U	0.05	U
319-85-7	beta-BHC	0.05	U	0.011	U	0.98	U	0.16	J	2.8	J	0.05	U
319-86-8	delta-BHC	0.05	U	0.011	UJ	0.98	U	0.1	UJ	0.37	U	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U	0.011	U	0.98	U	0.1	UJ	0.37	U	0.05	U
76-44-8	Heptachlor	0.05	U	0.011	U	0.98	U	0.1	UJ	0.37	U	0.05	U
309-00-2	Aldrin	0.05	U	0.011	U	0.98	U	0.23	J	0.53	J	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U	0.011	U	0.98	U	0.1	UJ	0.37	U	0.05	U
959-98-8	Endosulfan I	0.05	U	0.011	U	2.	U	0.21	UJ	0.77	U	0.05	U
60-57-1	Dieldrin	0.1	U	0.21	U	2.1	J	0.21	UJ	4.	J	0.1	U
72-55-9	4,4'-DDE	0.1	U	0.32		110.	D	2.8	J	33.	DJ	0.1	U
72-20-8	Endrin	0.1	U	0.21	U	2.1	J	0.21	UJ	2.5	J	0.1	U
33213-65-9	Endosulfan II	0.1	U	0.21	U	2.	U	0.21	UJ	0.77	U	0.1	U
72-54-8	4,4'-DDD	0.1	U	0.21	U	23.	J	3.1	J	40.	DJ	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U	0.21	U	2.	U	0.21	UJ	0.77	U	0.1	U
50-29-3	4,4'-DDT	0.1	U	0.21	U	260.	DJ	0.35	J	52.	D	0.1	U
72-43-5	Methoxychlor	0.5	U	1.1	U	9.8	U	1.	UJ	3.7	U	0.5	U
53494-70-5	Endrin ketone	0.1	U	0.21	U	2.	U	0.21	UJ	0.77	U	0.1	U
7421-93-4	Endrin aldehyde	0.1	U	0.21	U	2.	U	0.21	UJ	0.77	U	0.1	U
5103-71-9	alpha-Chlordane	0.05	U	0.011	U	0.98	U	0.23	J	1.7	J	0.05	U
5103-74-2	gamma-Chlordane	0.05	U	0.011	U	0.98	U	0.2	J	0.8	J	0.05	U
8001-35-2	Toxaphene	5.	U	21.	U	200.	U	21.	UJ	77.	UR	5.	U
12674-11-2	Aroclor-1016	1.	U	2.1	U	39.	U	4.1	UJ	15.	U	1.	U
11104-28-2	Aroclor-1221	2.	U	4.1	U	79.	U	8.3	UJ	30.	U	2.	U
11141-16-5	Aroclor-1232	1.	U	2.1	U	39.	U	4.1	UJ	15.	U	1.	U
53469-21-9	Aroclor-1242	1.	U	2.1	U	39.	U	4.1	UJ	15.	U	1.	U
12672-29-6	Aroclor-1248	1.	U	0.62	J	39.	U	4.1	UJ	15.	U	1.	U
11097-69-1	Aroclor-1254	1.	U	1.7	J	39.	U	9.5	J	15.	U	1.	U
11096-82-5	Aroclor-1260	1.	U	2.1	U	39.	U	4.1	UJ	15.	U	1.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST																			
	SAMPLE ID ------->	041-M-0307-01		041-M-04D1-01		041-W-04D1-01		041-M-04D2-01		041-M-04D3-01		041-M-04D4-01	
	ORIGINAL ID ----->	041M030701		041M04D101		041W04D101		041M04D201		041M04D301		041M04D401	
	LAB SAMPLE ID --->	951012-05		951012-09		960025-07		951012-10		951012-11		951012-12	
	ID FROM REPORT -->	041M030701		041M04D101		041W04D101		041M04D201		041M04D301		041M04D401	
	SAMPLE DATE ----->	12/04/95		12/05/95		01/15/96		12/05/95		12/05/95		12/05/95	
	DATE EXTRACTED -->	12/07/95		12/07/95		01/18/96		12/07/95		12/07/95		12/07/95	
	DATE ANALYZED --->	01/14/96		01/15/96		02/04/96		01/15/96		01/15/96		01/15/96	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	030301	VAL	030301	VAL	EM005	VAL	030301	VAL	030301	VAL	030301	VAL
319 84 6	alpha BHC	0.044	UJ	0.46	J	0.05	UJ	0.034	UJ	0.94	J	0.039	UJ
319 85 7	beta BHC	0.044	U	0.024	UJ	0.05	U	0.034	UJ	0.01	U	0.039	U
319 86 8	delta BHC	0.044	UJ	16.	DJ	0.05	U	3.	J	0.11	J	10.	DJ
58 89 9	gamma BHC (Lindane)	0.044	U	0.024	UJ	0.05	U	0.034	UJ	0.01	U	0.039	U
76 44 8	Heptachlor	0.044	U	0.024	UJ	0.05	U	0.034	UJ	0.01	U	0.039	U
309 00 2	Aldrin	0.044	U	0.024	UJ	0.05	U	0.034	UJ	0.01	U	0.039	U
1024 57 3	Heptachlor epoxide	0.044	U	0.024	UJ	0.05	U	0.034	UJ	0.01	U	0.039	U
959 98 8	Endosulfan I	0.044	U	0.024	UJ	0.05	U	0.034	UJ	0.01	U	0.039	U
60 57 1	Dieldrin	0.88	U	0.78	J	0.1	U	0.68	UJ	0.21	U	1.1	J
72 55 9	4,4' DDE	0.88	U	46.	DJ	0.1	U	29.	DJ	0.72	J	65.	DJ
72 20 8	Endrin	0.88	U	0.48	UJ	0.1	U	0.68	UJ	0.21	U	0.77	U
33213 65 9	Endosulfan II	0.88	U	0.48	UJ	0.1	U	0.68	UJ	0.21	U	0.77	U
72-54-8	4,4'-DDD	6.8	J	33.	DJ	0.1	U	15.	DJ	0.21	U	110.	D
1031-07-8	Endosulfan sulfate	1.7	J	0.63	J	0.1	U	0.68	UJ	0.21	U	0.77	U
50-29-3	4,4'-DDT	0.94	J	2.9	J	0.1	U	2.2	J	1.5	J	3.9	J
72-43-5	Methoxychlor	4.4	U	2.4	UJ	0.5	U	3.4	UJ	1.	U	3.9	U
53494-70-5	Endrin ketone	0.88	U	0.48	UJ	0.1	U	0.68	UJ	0.21	U	0.77	U
7421-93-4	Endrin aldehyde	0.88	U	0.48	UJ	0.1	U	0.68	UJ	0.21	U	0.77	U
5103-71-9	alpha-Chlordane	0.45	J	1.5	J	0.05	U	1.	J	0.01	U	1.4	J
5103-74-2	gamma-Chlordane	0.044	U	0.024	UJ	0.05	U	0.034	UJ	0.01	U	0.039	U
8001-35-2	Toxaphene	88.	U	48.	UJ	5.	U	68.	UJ	21.	U	77.	U
12674-11-2	Aroclor-1016	8.8	U	4.8	UJ	1.	U	6.8	UJ	2.1	U	7.7	U
11104-28-2	Aroclor-1221	17.	U	9.4	UJ	2.	U	13.	UJ	4.	U	15.	U
11141-16-5	Aroclor-1232	8.8	U	4.8	UJ	1.	U	6.8	UJ	2.1	U	7.7	U
53469-21-9	Aroclor-1242	8.8	U	4.8	UJ	1.	U	6.8	UJ	2.1	U	7.7	U
12672-29-6	Aroclor-1248	8.8	U	4.8	UJ	1.	U	6.8	UJ	2.1	U	7.7	U
11097-69-1	Aroclor-1254	8.8	U	4.8	UJ	1.	U	42.	J	2.1	U	7.7	U
11096-82-5	Aroclor-1260	8.8	U	50.	J	1.	U	6.8	UJ	2.1	U	7.7	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-M-0303-01		041-W-0303-01		041-M-0304-01		041-W-0304-01		041-M-0305-01		041-M-0306-01	
	ORIGINAL ID ----->	041M030301		041W030301		041M030401		041W030401		041M030501		041M030601	
	LAB SAMPLE ID --->	951012-01		951012-07		951012-02		951012-08		951012-03		951012-04	
	ID FROM REPORT -->	041M030301		041W030301		041M030401		041W030401		041M030501		041M030601	
	SAMPLE DATE ----->	12/04/95		12/04/95		12/04/95		12/04/95		12/04/95		12/04/95	
	DATE EXTRACTED -->	12/07/95		12/07/95		12/07/95		12/07/95		12/07/95		12/07/95	
	DATE ANALYZED --->	01/14/96		01/14/96		01/14/96		01/14/96		01/14/96		01/15/96	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/KG	
CAS #	Parameter	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL	030301	VAL
319-84-6	alpha-BHC	0.45	J	0.05	UJ	0.012	UJ	0.05	UJ	1.2	J	0.19	J
319-85-7	beta-BHC	0.7	J	0.05	U	0.012	U	0.05	U	0.053	U	0.013	U
319-86-8	delta-BHC	0.022	UJ	0.05	UJ	0.18	J	0.05	UJ	0.053	UJ	0.013	UJ
58-89-9	gamma-BHC (Lindane)	0.022	UJ	0.05	U	0.012	U	0.05	U	0.053	U	0.013	U
76-44-8	Heptachlor	0.022	UJ	0.05	U	0.012	U	0.05	U	0.053	U	0.013	U
309-00-2	Aldrin	0.7	J	0.05	U	0.23	J	0.05	U	0.053	U	0.013	U
1024-57-3	Heptachlor epoxide	0.022	UJ	0.05	U	0.012	U	0.05	U	0.053	U	0.013	U
959-98-8	Endosulfan I	0.022	UJ	0.05	U	0.012	U	0.05	U	0.053	U	0.013	U
60-57-1	Dieldrin	0.45	UJ	0.1	U	0.24	U	0.1	U	1.1	U	0.25	U
72-55-9	4,4'-DDE	0.84	J	0.1	U	0.9		0.1	U	1.1	U	2.5	J
72-20-8	Endrin	1.8	J	0.1	U	0.24	U	0.1	U	1.3	J	0.25	U
33213-65-9	Endosulfan II	0.45	UJ	0.1	U	0.24	U	0.1	U	1.1	U	0.25	U
72-54-8	4,4'-DDD	1.3	J	0.1	U	1.6	J	0.1	U	3.5	J	7.7	D
1031-07-8	Endosulfan sulfate	0.45	UJ	0.1	U	0.24	U	0.1	U	1.1	U	0.25	U
50-29-3	4,4'-DDT	0.48	J	0.1	U	0.32	J	0.1	U	1.1	U	1.9	J
72-43-5	Methoxychlor	2.2	UJ	0.5	U	1.2	U	0.5	U	5.3	U	1.3	U
53494-70-5	Endrin ketone	0.45	UJ	0.1	U	0.24	U	0.1	U	1.4	J	0.25	U
7421-93-4	Endrin aldehyde	0.45	UJ	0.1	U	0.24	U	0.1	U	1.1	U	0.25	U
5103-71-9	alpha-Chlordane	0.022	UJ	0.05	U	0.17	J	0.05	U	0.053	U	0.69	J
5103-74-2	gamma-Chlordane	0.022	UJ	0.05	U	0.11		0.05	U	0.053	U	0.54	
8001-35-2	Toxaphene	45.	UJ	5.	U	24.	U	5.	U	110.	U	25.	U
12674-11-2	Aroclor-1016	4.5	UJ	1.	U	2.4	U	1.	U	11.	U	2.5	U
11104-28-2	Aroclor-1221	8.7	UJ	2.	U	4.6	U	2.	U	20.	U	4.9	U
11141-16-5	Aroclor-1232	4.5	UJ	1.	U	2.4	U	1.	U	11.	U	2.5	U
53469-21-9	Aroclor-1242	4.5	UJ	1.	U	2.4	U	1.	U	11.	U	2.5	U
12672-29-6	Aroclor-1248	4.5	UJ	1.	U	2.4	U	1.	U	11.	U	2.5	U
11097-69-1	Aroclor-1254	4.5	UJ	1.	U	2.4	U	1.	U	11.	U	2.5	U
11096-82-5	Aroclor-1260	4.5	UJ	1.	U	2.4	U	1.	U	11.	U	2.5	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	041-W-0103-01		041-M-0104-01		041-M-0301-01		041-W-0301-01		041-M-0302-01		041-W-0302-01	
	ORIGINAL ID ----->	041W010301		041M010401		041M030101		041W030101		041M030201		041W030201	
	LAB SAMPLE ID --->	960039-14		960039-12		950998-15		950998-20		950998-16		950998-21	
	ID FROM REPORT -->	041W010301		041M010401		041M030101		041W030101		041M030201		041W030201	
	SAMPLE DATE ----->	01/17/96		01/17/96		12/01/95		12/01/95		12/01/95		12/01/95	
	DATE EXTRACTED -->	01/21/96		01/22/96		12/05/95		12/06/95		12/05/95		12/06/95	
	DATE ANALYZED --->	02/07/96		02/09/96		01/17/96		01/16/96		01/16/96		01/16/96	
	MATRIX ---------->	Water		Sediment		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/L		UG/KG		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	EM0040	VAL	EM0040	VAL	EM0040	VAL	EM0040	VAL
319-84-6	alpha-BHC	0.05	U	0.14	UR	0.2	UJ	0.05	UJ	0.74	UJ	0.05	UR
319-85-7	beta-BHC	0.05	U	0.14	UR	0.2	U	0.05	U	0.74	U	0.05	UR
319-86-8	delta-BHC	0.05	U	0.14	UR	0.25	J	0.05	UJ	0.74	UJ	0.05	UR
58-89-9	gamma-BHC (Lindane)	0.05	U	0.14	UR	0.2	U	0.05	U	0.74	U	0.05	UR
76-44-8	Heptachlor	0.05	U	0.14	UR	0.2	U	0.05	U	0.74	U	0.05	UR
309-00-2	Aldrin	0.05	U	0.14	UR	0.2	U	0.05	U	1.	J	0.05	UR
1024-57-3	Heptachlor epoxide	0.05	U	0.14	UR	0.2	U	0.05	U	0.74	U	0.05	UR
959-98-8	Endosulfan I	0.05	U	0.14	UR	0.4	U	0.05	U	1.5	U	0.05	UR
60-57-1	Dieldrin	0.1	U	0.27	UR	0.4	U	0.1	U	6.	J	0.1	UR
72-55-9	4,4'-DDE	0.1	U	4.5	DJ	21.	DJ	0.1	U	1.5	U	0.1	UR
72-20-8	Endrin	0.1	U	0.27	UR	0.98	J	0.1	U	1.5	U	0.1	UR
33213-65-9	Endosulfan II	0.1	U	0.27	UR	0.4	U	0.1	U	1.5	U	0.1	UR
72-54-8	4,4'-DDD	0.1	U	25.	DJ	14.	DJ	0.1	U	31.	D	0.1	UR
1031-07-8	Endosulfan sulfate	0.1	U	1.6	J	0.4	U	0.1	U	1.5	J	0.1	UR
50-29-3	4,4'-DDT	0.1	U	10.	DJ	7.5	DJ	0.1	U	1.4	J	0.1	UR
72-43-5	Methoxychlor	0.5	U	6.6	J	2.	U	0.5	U	7.4	U	0.5	UR
53494-70-5	Endrin ketone	0.1	U	0.27	UR	0.4	U	0.1	U	1.5	U	0.25	J
7421-93-4	Endrin aldehyde	0.1	U	0.27	UR	0.4	U	0.1	U	1.5	U	0.1	UR
5103-71-9	alpha-Chlordane	0.05	U	6.2	DJ	0.68	J	0.05	U	0.79	J	0.05	UR
5103-74-2	gamma-Chlordane	0.05	U	9.5	DJ	0.2	U	0.05	U	1.7	J	0.05	UR
8001-35-2	Toxaphene	5.	U	28.	UR	20.	U	5.	U	74.	U	5.	UR
12674-11-2	Aroclor-1016	1.	U	2.7	UR	4.	U	1.	U	15.	U	1.	UR
11104-28-2	Aroclor-1221	2.	U	5.5	UR	7.8	U	2.	U	30.	U	2.	UR
11141-16-5	Aroclor-1232	1.	U	2.7	UR	4.	U	1.	U	15.	U	1.	UR
53469-21-9	Aroclor-1242	1.	U	2.7	UR	4.	U	1.	U	15.	U	1.	UR
12672-29-6	Aroclor-1248	1.	U	2.7	UR	4.	U	1.	U	15.	U	1.	UR
11097-69-1	Aroclor-1254	1.	U	2.7	UR	4.	U	1.	U	15.	U	1.	UR
11096-82-5	Aroclor-1260	1.	U	140.	DJ	4.	U	1.	U	350.	DJ	0.5	J

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	033-W-0030-02		033-M-0040-01		033-W-0040-02		041-M-0101-01		041-M-0102-01		041-M-0103-01	
	ORIGINAL ID ----->	33W03002		33M04001		33W04002		041M010101		041M010201		041M010301	
	LAB SAMPLE ID --->	533147		533359		533149		960039-09		960039-10		960039-11	
	ID FROM REPORT -->	33W03002		33M04001		33W04002		041M010101		041M010201		041M010301	
	SAMPLE DATE ----->	01/20/93		01/19/93		01/20/93		01/17/96		01/17/96		01/18/96	
	DATE EXTRACTED -->							01/22/96		01/22/96		01/22/96	
	DATE ANALYZED --->	01/27/93		01/30/93		01/27/93		02/08/96		02/08/96		02/09/96	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	549	VAL	578	VAL	549	VAL	63A401	VAL	63A401	VAL	63A401	VAL
319-84-6	alpha-BHC	0.0027	J	2.2	U	0.05	U	0.11	UJ	0.2	UJ	0.11	UJ
319-85-7	beta-BHC	0.05	U	2.2	U	0.05	U	0.11	UJ	0.2	UJ	0.11	UJ
319-86-8	delta-BHC	0.05	U	2.2	U	0.05	U	0.11	UJ	0.2	UJ	0.11	UJ
58-89-9	gamma-BHC (Lindane)	0.05	U	2.2	U	0.05	U	0.11	UJ	0.2	UJ	0.11	UJ
76-44-8	Heptachlor	0.05	U	0.099	J	0.05	U	0.11	UJ	0.2	UJ	0.11	UJ
309-00-2	Aldrin	0.05	U	2.2	U	0.05	U	0.11	UJ	0.2	UJ	0.11	UJ
1024-57-3	Heptachlor epoxide	0.0013	J	2.2	U	0.05	U	0.11	UJ	0.2	UJ	0.11	UJ
959-98-8	Endosulfan I	0.05	U	0.13	J	0.05	U	0.11	UJ	0.2	UJ	0.11	UJ
60-57-1	Dieldrin	0.1	U	0.39	J	0.1	U	0.23	UJ	6.9	J	0.21	UJ
72-55-9	4,4'-DDE	0.045	J	18.	J	0.011	J	0.23	UJ	8.6	J	0.48	J
72-20-8	Endrin	0.1	U	0.41	J	0.1	U	0.23	UJ	0.41	UJ	0.21	UJ
33213-65-9	Endosulfan II	0.1	U	4.3	U	0.1	U	0.23	UJ	0.41	UJ	0.21	UJ
72-54-8	4,4'-DDD	0.11	J	25.	J	0.041	J	0.23	UJ	7.9	J	5.	DJ
1031-07-8	Endosulfan sulfate	0.1	U	4.3	U	0.1	U	0.23	UJ	0.41	UJ	0.45	J
50-29-3	4,4'-DDT	0.047	J	7.8		0.008	J	0.23	UJ	1.1	J	1.4	J
72-43-5	Methoxychlor	0.5	U	22.	U	0.5	U	1.1	UJ	2.	UJ	1.1	UJ
53494-70-5	Endrin ketone	0.1	U	4.3	U	0.1	U	0.23	UJ	0.41	UJ	0.21	UJ
7421-93-4	Endrin aldehyde	0.1	U	0.53	J	0.1	U	0.23	UJ	0.41	UJ	1.5	J
5103-71-9	alpha-Chlordane	0.0013	J	0.13	J	0.05	U	0.11	UJ	2.7	J	1.1	J
5103-74-2	gamma-Chlordane	0.05	U	0.27	J	0.003	J	0.11	UJ	1.9	J	3.3	DJ
8001-35-2	Toxaphene	5.	U	220.	U	5.	U	23.	UJ	41.	UJ	22.	UJ
12674-11-2	Aroclor-1016	1.	U	43.	U	1.	U	2.3	UJ	4.1	UJ	2.1	UJ
11104-28-2	Aroclor-1221	2.	U	86.	U	2.	U	4.6	UJ	8.1	UJ	4.2	UJ
11141-16-5	Aroclor-1232	1.	U	43.	U	1.	U	2.3	UJ	4.1	UJ	2.1	UJ
53469-21-9	Aroclor-1242	1.	U	43.	U	1.	U	2.3	UJ	4.1	UJ	2.1	UJ
12672-29-6	Aroclor-1248	1.	U	43.	U	1.	U	2.3	UJ	4.1	UJ	2.1	UJ
11097-69-1	Aroclor-1254	1.	U	43.	U	1.	U	2.3	UJ	4.1	UJ	2.1	UJ
11096-82-5	Aroclor-1260	1.	U	43.	U	1.	U	2.3	UJ	7.7	J	110.	DJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	010-M-0001-01		033-M-0010-01		033-W-0010-02		033-M-0020-01		033-W-0020-02		033-M-0030-01	
	ORIGINAL ID ----->	10M0101		33M01001		33W01002		33M02001		33W02002		33M03001	
	LAB SAMPLE ID --->	39496-34		533364		533140		533370		533144		533344	
	ID FROM REPORT -->	10M0101		33M01001		33W01002		33M02001		33W02002		33M03001	
	SAMPLE DATE ----->			01/19/93		01/20/93		01/19/93		01/20/93		01/19/93	
	DATE EXTRACTED -->	03/07/94											
	DATE ANALYZED --->	03/12/94		01/30/93		01/27/93		01/30/93		01/27/93		01/30/93	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	UG/KG		UG/KG		UG/L		UG/KG		UG/L		UG/KG	
CAS #	Parameter	CT520	VAL	578	VAL	549	VAL	578	VAL	549	VAL	578	VAL
319-84-6	alpha-BHC	2.2	UJ	2.3	U	0.05	U	2.2	U	0.0043	J	2.1	U
319-85-7	beta-BHC	2.2	UJ	2.3	U	0.05	U	2.2	U	0.05	U	2.1	U
319-86-8	delta-BHC	2.2	UJ	0.88	J	0.05	U	0.42	J	0.05	U	0.38	J
58-89-9	gamma-BHC (Lindane)	2.2	UJ	0.074	J	0.05	U	0.12	J	0.05	U	2.1	U
76-44-8	Heptachlor	2.2	UJ	0.11	J	0.0014	J	0.12	J	0.05	U	0.23	J
309-00-2	Aldrin	2.2	UJ	2.3	U	0.05	U	0.12	J	0.05	U	0.078	J
1024-57-3	Heptachlor epoxide	2.2	UJ	0.84	J	0.05	U	0.1	J	0.05	U	2.1	U
959-98-8	Endosulfan I	2.2	UJ	2.3	U	0.05	U	0.21	J	0.05	U	0.15	J
60-57-1	Dieldrin	4.2	UJ	4.4	U	0.1	U	4.3	U	0.1	U	4.2	U
72-55-9	4,4'-DDE	29.	J	21.	J	0.0021	J	54.	J	0.014	J	96.	J
72-20-8	Endrin	4.2	UJ	4.4	U	0.1	U	4.3	U	0.1	U	2.3	J
33213-65-9	Endosulfan II	4.2	UJ	4.4	U	0.1	U	4.3	U	0.1	U	4.2	U
72-54-8	4,4'-DDD	37.	J	37.	J	0.1	U	36.		0.1	U	120.	J
1031-07-8	Endosulfan sulfate	4.2	UJ	4.4	U	0.1	U	4.3	U	0.1	U	4.2	U
50-29-3	4,4'-DDT	11.	J	6.2	J	0.1	U	8.8	J	0.1	U	48.	J
72-43-5	Methoxychlor	22.	UJ	23.	U	0.5	U	22.	U	0.5	U	21.	U
53494-70-5	Endrin ketone	4.2	UJ	4.4	U	0.1	U	4.3	U	0.1	U	4.2	U
7421-93-4	Endrin aldehyde	4.2	UJ	4.4	U	0.1	U	4.3	U	0.1	U	4.2	U
5103-71-9	alpha-Chlordane	2.2	UJ	0.96	J	0.05	U	0.26	J	0.05	U	0.21	J
5103-74-2	gamma-Chlordane	2.2	UJ	0.82	J	0.0034	J	0.52	J	0.05	U	2.1	U
8001-35-2	Toxaphene	220.	UJ	230.	U	5.	U	220.	U	5.	U	210.	U
12674-11-2	Aroclor-1016	42.	UJ	44.	U	1.	U	43.	U	1.	U	42.	U
11104-28-2	Aroclor-1221	86.	UJ	89.	U	2.	U	87.	U	2.	U	85.	U
11141-16-5	Aroclor-1232	42.	UJ	44.	U	1.	U	43.	U	1.	U	42.	U
53469-21-9	Aroclor-1242	42.	UJ	44.	U	1.	U	43.	U	1.	U	42.	U
12672-29-6	Aroclor-1248	42.	UJ	44.	U	1.	U	43.	U	1.	U	42.	U
11097-69-1	Aroclor-1254	42.	UJ	44.	U	1.	U	43.	U	1.	U	42.	U
11096-82-5	Aroclor-1260	42.	UJ	49.	J	1.	U	12.	J	1.	U	42.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	001-M-0003-03		001-W-0003-03		001-M-0016-01		001-W-0016-01		001-M-0018-01		001-W-0018-01	
	ORIGINAL ID ----->	01M0303		01W0303		01M1601		01W1601		01M1801		01W1801	
	LAB SAMPLE ID --->	621861 D50		621833		622183		622178		622184		622169	
	ID FROM REPORT -->	01M0303		01W0303		01M1601		01W1601		01M1801		01W1801	
	SAMPLE DATE ----->	06/28/94		06/28/94		06/29/94		06/29/94		06/29/94		06/29/94	
	DATE EXTRACTED -->	07/08/94		07/01/94		07/08/94		07/05/94		07/08/94		07/05/94	
	DATE ANALYZED --->	07/18/94		07/05/94		07/18/94		07/07/94		07/18/94		07/07/94	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	00011	VAL	00001	VAL	00011	VAL	00001	VAL	00011	VAL	00001	VAL
319-84-6	alpha-BHC	11.	U	0.05	U	3.2	U	0.05	U	19.	U	0.05	U
319-85-7	beta-BHC	11.	U	0.05	U	3.2	U	0.05	U	19.	U	0.05	U
319-86-8	delta-BHC	11.	U	0.05	U	3.2	U	0.05	U	19.	U	0.05	U
58-89-9	gamma-BHC (Lindane)	11.	U	0.05	U	3.2	U	0.05	U	19.	U	0.05	U
76-44-8	Heptachlor	11.	U	0.05	U	3.2	U	0.05	U	19.	U	0.05	U
309-00-2	Aldrin	11.	U	0.05	U	3.2	U	0.05	U	19.	U	0.05	U
1024-57-3	Heptachlor epoxide	11.	U	0.05	U	3.2	U	0.05	U	19.	U	0.05	U
959-98-8	Endosulfan I	11.	U	0.05	U	3.2	U	0.05	U	19.	U	0.05	U
60-57-1	Dieldrin	22.	U	0.1	U	6.1	U	0.1	U	37.	U	0.1	U
72-55-9	4,4'-DDE	120.	J	0.1	U	6.1	U	0.1	U	150.		0.1	U
72-20-8	Endrin	22.	U	0.1	U	6.1	U	0.1	U	13.	J	0.1	U
33213-65-9	Endosulfan II	22.	U	0.1	U	6.1	U	0.1	U	37.	U	0.1	U
72-54-8	4,4'-DDD	400.	J	0.1	U	0.41	J	0.1	U	150.		0.1	U
1031-07-8	Endosulfan sulfate	22.	U	0.1	U	6.1	U	0.1	U	37.	U	0.1	U
50-29-3	4,4'-DDT	220.		0.1	U	6.1	U	0.1	U	37.	U	0.1	U
72-43-5	Methoxychlor	110.	U	0.5	U	32.	U	0.5	U	190.	U	0.5	U
53494-70-5	Endrin ketone	22.	U	0.1	U	6.1	U	0.1	U	37.	U	0.1	U
7421-93-4	Endrin aldehyde	22.	U	0.1	U	6.1	U	0.1	U	37.	U	0.1	U
5103-71-9	alpha-Chlordane	2.2	J	0.05	U	3.2	U	0.05	U	12.	J	0.05	U
5103-74-2	gamma-Chlordane	11.	U	0.05	U	3.2	U	0.05	U	9.5	J	0.05	U
8001-35-2	Toxaphene	1100.	U	5.	U	320.	U	5.	U	1900.	U	5.	U
12674-11-2	Aroclor-1016	220.	U	1.	U	61.	U	1.	U	370.	U	1.	U
11104-28-2	Aroclor-1221	440.	U	2.	U	120.	U	2.	U	740.	U	2.	U
11141-16-5	Aroclor-1232	220.	U	1.	U	61.	U	1.	U	370.	U	1.	U
53469-21-9	Aroclor-1242	220.	U	1.	U	61.	U	1.	U	370.	U	1.	U
12672-29-6	Aroclor-1248	220.	U	1.	U	61.	U	1.	U	370.	U	1.	U
11097-69-1	Aroclor-1254	220.	U	1.	U	61.	U	1.	U	370.	U	1.	U
11096-82-5	Aroclor-1260	220.	U	1.	U	61.	U	1.	U	370.	U	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

PEST													
	SAMPLE ID ------->	001-M-0001-01		001-W-0001-01		001-M-0003-01		001-W-0003-01		001-M-0003-02		001-W-0003-02	
	ORIGINAL ID ----->	01M0101		01W0101		01M0301		01W0301		01M0302		01W0302	
	LAB SAMPLE ID --->	622182		622177		621841		621827		621859		621829	
	ID FROM REPORT -->	01M0101		01W0101		01M0301		01W0301		01M0302		01W0302	
	SAMPLE DATE ----->	06/29/94		06/29/94		06/28/94		06/28/94		06/28/94		06/28/94	
	DATE EXTRACTED -->	07/08/94		07/05/94		07/08/94		07/01/94		07/08/94		07/01/94	
	DATE ANALYZED --->	07/18/94		07/07/94		07/18/94		07/05/94		07/19/94		07/05/94	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L	
CAS #	Parameter	00011	VAL	00001	VAL	00011	VAL	00001	VAL	00011	VAL	00001	VAL
319-84-6	alpha-BHC	3.3	U	0.05	U	2.4	U	0.05	U	2.5	U	0.05	U
319-85-7	beta-BHC	3.3	U	0.05	U	2.4	U	0.05	U	2.5	U	0.05	U
319-86-8	delta-BHC	3.3	U	0.05	U	2.4	U	0.05	U	2.5	U	0.05	U
58-89-9	gamma-BHC (Lindane)	3.3	U	0.05	U	2.4	U	0.05	U	2.5	U	0.05	U
76-44-8	Heptachlor	3.3	U	0.05	U	2.4	U	0.05	U	2.5	U	0.05	U
309-00-2	Aldrin	3.3	U	0.05	U	2.4	U	0.05	U	2.5	U	0.05	U
1024-57-3	Heptachlor epoxide	3.3	U	0.05	U	2.4	U	0.05	U	2.5	U	0.05	U
959-98-8	Endosulfan I	3.3	U	0.05	U	2.4	U	0.05	U	2.5	U	0.05	U
60-57-1	Dieldrin	3.7	J	0.1	U	4.7	U	0.1	U	4.8	U	0.1	U
72-55-9	4,4'-DDE	5.8	J	0.1	U	3.4	J	0.1	U	2.5	J	0.1	U
72-20-8	Endrin	6.4	U	0.1	U	0.53	J	0.1	U	4.8	U	0.1	U
33213-65-9	Endosulfan II	6.4	U	0.1	U	4.7	U	0.1	U	4.8	U	0.1	U
72-54-8	4,4'-DDD	3.1	J	0.1	U	19.		0.1	U	6.2		0.1	U
1031-07-8	Endosulfan sulfate	6.4	U	0.1	U	4.7	U	0.1	U	4.8	U	0.1	U
50-29-3	4,4'-DDT	1.2	J	0.1	U	9.9		0.1	U	1.3	J	0.1	U
72-43-5	Methoxychlor	33.	U	0.5	U	24.	U	0.5	U	25.	U	0.5	U
53494-70-5	Endrin ketone	6.4	U	0.1	U	4.7	U	0.1	U	4.8	U	0.1	U
7421-93-4	Endrin aldehyde	6.4	U	0.1	U	4.7	U	0.1	U	4.8	U	0.1	U
5103-71-9	alpha-Chlordane	3.3	U	0.05	U	0.56	J	0.05	U	0.51	J	0.05	U
5103-74-2	gamma-Chlordane	3.3	U	0.05	U	2.4	U	0.05	U	2.5	U	0.05	U
8001-35-2	Toxaphene	330.	U	5.	U	240.	U	5.	U	250.	U	5.	U
12674-11-2	Aroclor-1016	64.	U	1.	U	47.	U	1.	U	48.	U	1.	U
11104-28-2	Aroclor-1221	130.	U	2.	U	96.	U	2.	U	97.	U	2.	U
11141-16-5	Aroclor-1232	64.	U	1.	U	47.	U	1.	U	48.	U	1.	U
53469-21-9	Aroclor-1242	64.	U	1.	U	47.	U	1.	U	48.	U	1.	U
12672-29-6	Aroclor-1248	64.	U	1.	U	47.	U	1.	U	48.	U	1.	U
11097-69-1	Aroclor-1254	64.	U	1.	U	47.	U	1.	U	48.	U	1.	U
11096-82-5	Aroclor-1260	64.	U	1.	U	47.	U	1.	U	48.	U	1.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-W-W102-01		041-W-W103-01		041-M-W201-01		041-M-W202-01		041-W-W202-01		041-M-W203-01	
	ORIGINAL ID ----->	041WW10201		041WW10301		041MW20101		041MW20201		041WW20201		041MW20301	
	LAB SAMPLE ID --->	960043-18		960043-19		960055-14		960055-15		960055-18		960055-16	
	ID FROM REPORT -->	041WW10201		041WW10301		041MW20101		041MW20201		041WW20201		041MW20301	
	SAMPLE DATE ----->	01/22/96		01/22/96		01/24/96		01/24/96		01/24/96		01/24/96	
	DATE EXTRACTED -->	01/30/96		01/30/96		02/03/96		02/03/96		02/03/96		02/03/96	
	DATE ANALYZED --->	02/01/96		02/01/96		02/05/96		02/05/96		02/05/96		02/05/96	
	MATRIX ---------->	Water		Water		Sediment		Sediment		Water		Sediment	
	UNITS ---------->	UG/L		UG/L		MG/KG		MG/KG		UG/L		MG/KG	
CAS #	Parameter	M00901	VAL	M00901	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL
7429-90-5	Aluminum	2270.	J	1280.	U	3540.		607.		213.		6700.	
7440-36-0	Antimony	2.	U	2.	UJ	0.14	UJ	0.14	UJ	2.	UJ	3.1	UJ
7440-38-2	Arsenic	2.	U	4.5	U	0.5	J	0.14	U	2.	U	14.1	
7440-39-3	Barium	57.8	J	7.3	U	11.5	J	1.	J	8.2	J	6.3	J
7440-41-7	Beryllium	1.	U	1.	U	0.08	J	0.07	U	1.	U	0.35	J
7440-43-9	Cadmium	2.	U	2.	U	0.18	J	0.14	U	2.	UJ	0.62	UJ
7440-70-2	Calcium	4730.	J	3260.	J	285.	J	334.	J	15000.		1250.	J
7440-47-3	Chromium	5.	U	5.	U	5.4		0.76		5.	U	10.2	
7440-48-4	Cobalt	2.	U	2.	U	0.24	J	0.14	U	2.	U	3.3	J
7440-50-8	Copper	6.6	J	4.	U	3.2		1.3	J	6.8	J	4.7	J
7439-89-6	Iron	2790.		610.		808.		209.		309.		5130.	
7439-92-1	Lead	9.5		4.7		17.1		2.3		2.	U	9.1	
7439-95-4	Magnesium	834.	J	736.	J	155.	J	93.5	J	1450.	J	1660.	
7439-96-5	Manganese	7.4	J	5.7	J	3.		1.2		17.2		6.	
7439-97-6	Mercury	0.13	U	0.13	U	0.07	U	0.05	U	0.13	U	0.27	U
7440-02-0	Nickel	9.	U	9.	U	1.3	J	0.8	J	9.	U	9.2	J
7440-09-7	Potassium	1410.	J	361.	J	88.	J	32.	J	1870.	J	503.	J
7782-49-2	Selenium	4.	U	4.	U	1.6	J	0.46	J	4.	U	1.3	J
7440-22-4	Silver	5.	U	5.	U	0.36	U	0.35	U	5.	U	1.5	U
7440-23-5	Sodium	3840.	U	3620.	U	6.3	U	254.	J	5260.		2430.	
7440-28-0	Thallium	4.	U	4.	U	0.29	U	0.28	U	4.	U	1.2	U
7440-62-2	Vanadium	10.8	J	3.3	J	5.8		1.2	J	2.	U	27.	
7440-66-6	Zinc	45.4	U	64.8	U	7.7		4.9		8.8	J	10.4	
57-12-5	Cyanide (CN)	5.	U	5.	U	0.7	U	0.65	U	5.	U	2.9	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-7201-01		041-W-7201-01		041-M-7202-01		041-M-7901-01		041-M-7903-01		041-W-W101-01	
	ORIGINAL ID ----->	041M720101		041W720101		041MZ20201		041M790101		041M790301		041WW10101	
	LAB SAMPLE ID --->	950991-12		950991-09		950991-13		960064-04		960064-05		960043-17	
	ID FROM REPORT -->	041M720101		041W720101		041MZ20201		041M790101		041M790301		041WW10101	
	SAMPLE DATE ----->	11/29/95		11/29/95		11/29/95		01/26/96		01/26/96		01/22/96	
	DATE EXTRACTED -->	01/10/96		01/10/96		01/10/96		02/04/96		02/04/96		01/30/96	
	DATE ANALYZED --->	01/11/96		01/11/96		01/11/96		02/05/96		02/05/96		02/01/96	
	MATRIX ---------->	Sediment		Water		Sediment		Sediment		Sediment		Water	
	UNITS ---------->	MG/KG		UG/L		MG/KG		MG/KG		MG/KG		UG/L	
CAS #	Parameter	Z30301	VAL	Z30301	VAL	Z30301	VAL	EM0060	VAL	EM0060	VAL	M00901	VAL
7429-90-5	Aluminum	2450.		895.		736.		13600.		723.		1840.	J
7440-36-0	Antimony	0.13	UR	2.	UR	0.13	UR	0.28	U	0.14	UJ	2.	UJ
7440-38-2	Arsenic	0.86		2.	U	0.28	J	1.9	J	0.14	UJ	2.3	U
7440-39-3	Barium	2.3	J	8.8	J	1.3	J	30.6		2.9	J	12.2	U
7440-41-7	Beryllium	0.07	U	1.	U	0.06	U	0.17	J	0.07	U	1.	U
7440-43-9	Cadmium	0.27	J	3.	U	0.19	U	0.28	U	0.14	U	2.	U
7440-70-2	Calcium	43.1	J	11000.		23.2	J	2140.		66.4	U	6790.	J
7440-47-3	Chromium	3.2	J	8.	U	0.85	J	15.		0.87		5.	U
7440-48-4	Cobalt	0.2	U	3.	U	0.19	U	1.	J	0.14	U	2.	U
7440-50-8	Copper	38.9		5.2	J	1.2	J	6.		0.64	J	7.8	J
7439-89-6	Iron	1510.		559.		397.		9520.		756.		2580.	
7439-92-1	Lead	17.5		1.	U	1.8		42.7		2.		56.4	
7439-95-4	Magnesium	50.	J	1140.	J	20.3	J	561.	J	40.	J	1020.	J
7439-96-5	Manganese	10.7		6.1	J	1.3		95.4		5.7		27.4	
7439-97-6	Mercury	0.06	U	0.13	U	0.05	U	0.12	U	0.06	U	0.13	U
7440-02-0	Nickel	1.4	J	12.	U	0.76	U	4.4	J	0.61	U	9.	U
7440-09-7	Potassium	29.7	J	597.	J	8.4	J	374.	J	32.6	J	741.	J
7782-49-2	Selenium	0.26	J	3.	U	0.19	U	0.78		0.27	U	4.	U
7440-22-4	Silver	0.26	U	4.4	J	0.25	U	0.7	U	0.34	U	5.	U
7440-23-5	Sodium	8.7	J	3870.	J	3.	J	217.	J	8.5	U	4240.	U
7440-28-0	Thallium	0.2	UJ	5.3	J	0.19	UJ	1.3	J	0.27	U	4.	U
7440-62-2	Vanadium	3.8		3.	J	1.2	J	20.5		1.5	J	2.9	J
7440-66-6	Zinc	10.7		9.	J	3.3		44.7		3.2	U	21.	U
57-12-5	Cyanide (CN)	0.64	U	5.	U	0.62	U	1.3	U	0.63	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL																		
	SAMPLE ID ------->	041-M-6419-01		041-M-6420-01		041-M-6421-01		041-M-6422-01		041-M-6423-01		041-M-6424-01	
	ORIGINAL ID ----->	041M641901		041M642001		041M642101		041M642201		041M642301		041M642401	
	LAB SAMPLE ID --->	960087-02		950950-17		950950-18		950952-10		950952-11		950952-12	
	ID FROM REPORT -->	041M641901		041M642001		041M642101		041M642201		041M642301		041M642401	
	SAMPLE DATE ----->	02/01/96		11/16/95		11/16/95		11/17/95		11/17/95		11/17/95	
	DATE EXTRACTED -->	02/13/96		12/20/95		12/20/95		12/27/95		12/27/95		12/27/95	
	DATE ANALYZED --->	02/13/96		12/27/95		12/27/95		12/27/95		12/27/95		12/27/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	640801	VAL	5A0101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL	Z42101	VAL
7429-90-5	Aluminum	26100.		951.		75.5		793.		1020.		28.9	
7440-36-0	Antimony	0.67	UR	0.13	UJ	0.19	J	0.26	UR	0.14	UR	0.14	UR
7440-38-2	Arsenic	17.		0.8		0.14	U	0.26	UJ	0.88	J	0.14	UJ
7440-39-3	Barium	22.	J	1.	J	0.28	U	2.	J	1.2	J	0.16	U
7440-41-7	Beryllium	1.3	J	0.07	U	0.07	U	0.13	U	0.07	U	0.07	U
7440-43-9	Cadmium	14.8		0.56		0.21	U	1.6		0.44		0.2	U
7440-70-2	Calcium	3520.		329.		124.	J	185.	J	290.	J	64.4	J
7440-47-3	Chromium	638.		13.8		1.2		21.3		19.4		0.55	J
7440-48-4	Cobalt	4.7	J	0.2	UJ	0.21	UJ	0.38	U	0.21	U	0.2	U
7440-50-8	Copper	121.		4.3		0.74	J	7.2		4.4		0.57	U
7439-89-6	Iron	35000.		1370.		77.2		689.		1740.		26.	
7439-92-1	Lead	224.		7.5		0.65		36.3	J	8.8	J	0.29	UJ
7439-95-4	Magnesium	9200.		412.		195.	J	47.1	J	509.		137.	J
7439-96-5	Manganese	195.		11.1		0.61	J	3.2		16.1		0.12	J
7439-97-6	Mercury	0.66		0.05	U	0.06	U	0.15	J	0.07	U	0.3	
7440-02-0	Nickel	15.9		0.78	U	0.82	U	3.9	J	0.96	J	0.81	U
7440-09-7	Potassium	3560.		167.	J	65.1	J	19.9	J	184.	J	55.	J
7782-49-2	Selenium	1.7		0.2	U	0.21	U	0.38	U	0.21	U	0.2	U
7440-22-4	Silver	1.7	U	0.26	U	0.27	U	0.72	J	0.29	UJ	0.27	UJ
7440-23-5	Sodium	30200.		1560.		1420.		5.	U	1880.		1050.	
7440-28-0	Thallium	1.3	UJ	0.2	U	0.21	U	0.38	U	0.21	U	0.2	U
7440-62-2	Vanadium	41.3		2.1	J	0.42	J	1.5	U	2.4	J	0.21	U
7440-66-6	Zinc	308.		15.8		2.2		21.3		18.8		1.4	U
57-12-5	Cyanide (CN)	3.	U	0.63	U	0.65	U	1.2	U	0.71	U	0.67	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL																		
	SAMPLE ID ------->	041-M-6413-01		041-M-6414-01		041-M-6415-01		041-M-6416-01		041-M-6417-01		041-M-6418-01	
	ORIGINAL ID ----->	041M641301		041M641401		041M641501		041M641601		041M641701		041M641801	
	LAB SAMPLE ID --->	950950-13		950950-14		950941-19		950950-15		950950-16		960087-04	
	ID FROM REPORT -->	041M641301		041M641401		041M641501		041M641601		041M641701		041M641801	
	SAMPLE DATE ----->	11/16/95		11/16/95		11/15/95		11/16/95		11/16/95		02/06/96	
	DATE EXTRACTED -->	12/20/95		12/20/95		12/19/95		12/20/95		12/20/95		02/13/96	
	DATE ANALYZED --->	12/27/95		12/27/95		12/26/95		12/27/95		12/27/95		02/13/96	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	5A0101	VAL	5A0101	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL	640801	VAL
7429-90-5	Aluminum	23600.		21200.		364.	J	26800.		4000.		225.	
7440-36-0	Antimony	0.86	J	3.2	UJ	0.13	UR	0.57	U	0.93	U	0.13	UR
7440-38-2	Arsenic	15.3		16.1		0.16	J	18.7		3.3		0.19	J
7440-39-3	Barium	20.5	J	18.6	J	0.63	J	23.6	J	4.	J	0.38	J
7440-41-7	Beryllium	1.1	J	1.1	J	0.07	U	1.3	J	0.18	J	0.06	U
7440-43-9	Cadmium	16.9		17.2		0.21	J	19.		2.4		0.19	J
7440-70-2	Calcium	3570.		3590.		179.	J	4040.		6630.		195.	J
7440-47-3	Chromium	699.		631.		9.4		756.		78.2		5.2	
7440-48-4	Cobalt	3.2	J	3.6	J	0.2	U	3.5	J	0.68	J	0.13	J
7440-50-8	Copper	102.		83.9		2.6	J	119.		16.3		1.5	U
7439-89-6	Iron	32900.		33100.		465.	J	38200.		5970.		339.	
7439-92-1	Lead	231.		205.		5.7	J	249.		31.9		2.6	
7439-95-4	Magnesium	8820.		8730.		165.	J	9390.		1680.		186.	J
7439-96-5	Manganese	183.		186.		1.6		203.		46.9		1.2	
7439-97-6	Mercury	0.46	J	0.41	J	0.06	U	0.49	J	0.08	U	0.06	U
7440-02-0	Nickel	13.4		15.1		0.79	U	18.6		2.2	J	0.57	U
7440-09-7	Potassium	3110.		3050.		71.1	J	3530.		529.		73.6	J
7782-49-2	Selenium	1.2	J	2.		0.2	U	2.4		0.35	J	0.26	U
7440-22-4	Silver	1.3	U	1.3	U	0.26	UJ	1.1	U	0.37	U	0.32	U
7440-23-5	Sodium	29800.		30200.		723.	J	28300.		4840.		1150.	
7440-28-0	Thallium	0.94	U	0.96	U	0.2	U	0.86	U	0.28	U	0.26	UJ
7440-62-2	Vanadium	36.7		38.		0.76	J	43.4		7.3		0.61	J
7440-66-6	Zinc	268.		260.		4.4	J	300.		52.4		2.6	
57-12-5	Cyanide (CN)	3.	U	3.2	U	0.66	U	2.8	U	0.86	U	0.61	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL																		
		SAMPLE ID ------->	041-M-6407-01		041-M-6408-01		041-M-6409-01		041-M-6410-01		041-M-6411-01		041-M-6412-01	
		ORIGINAL ID ----->	041M640701		041M640801		041M640901		041M641001		041M641101		041M641201	
		LAB SAMPLE ID --->	950941-16		960087-01		950941-17		950950-11		950950-12		950941-18	
		ID FROM REPORT -->	041M640701		041M640801		041M640901		041M641001		041M641101		041M641201	
		SAMPLE DATE ----->	11/15/95		02/01/96		11/15/95		11/16/95		11/16/95		11/15/95	
		DATE EXTRACTED -->	12/19/95		02/13/96		12/19/95		12/20/95		12/20/95		12/19/95	
		DATE ANALYZED --->	12/20/95		02/13/96		12/20/95		12/27/95		12/27/95		12/20/95	
		MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
		UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter		M06010	VAL	640801	VAL	M06010	VAL	5A0101	VAL	5A0101	VAL	M06010	VAL
7429-90-5	Aluminum		334.	J	846.		221.	J	25600.		17300.		216.	J
7440-36-0	Antimony		0.13	UR	0.14	UR	0.12	UR	0.61	UJ	0.4	UJ	0.12	UR
7440-38-2	Arsenic		0.26	J	0.59	J	0.12	U	16.2		10.8		0.12	U
7440-39-3	Barium		5.6	J	1.1	J	0.37	J	24.9	J	15.4	J	0.35	J
7440-41-7	Beryllium		0.07	U	0.07	U	0.06	U	1.1	J	0.77	J	0.06	U
7440-43-9	Cadmium		0.53		1.2		0.38		23.2		20.1		0.27	J
7440-70-2	Calcium		159.	J	400.		75.	J	4250.		2400.		87.9	J
7440-47-3	Chromium		19.		32.3		9.4		806.		659.		7.2	
7440-48-4	Cobalt		0.23	J	0.15	J	0.19	U	4.1	J	3.3	J	0.18	U
7440-50-8	Copper		17.6	J	6.9		1.8	J	140.		66.4		1.9	J
7439-89-6	Iron		967.	J	1190.		346.	J	34600.		24100.		341.	J
7439-92-1	Lead		12.2	J	17.6		6.1	J	324.		221.		3.6	J
7439-95-4	Magnesium		152.	J	413.		97.7	J	8310.		5550.		155.	J
7439-96-5	Manganese		3.2		9.4		1.3		171.		168.		1.2	
7439-97-6	Mercury		0.1	J	0.06	U	0.05	U	0.5	J	0.3	J	0.05	U
7440-02-0	Nickel		0.98	J	0.79	J	0.74	U	20.1		12.9		0.73	U
7440-09-7	Potassium		57.2	J	152.	J	38.	J	3040.		2040.		62.5	J
7782-49-2	Selenium		0.2	U	0.29	U	0.19	U	2.1		1.5		0.18	U
7440-22-4	Silver		0.26	UJ	0.36	U	0.25	UJ	1.2	U	0.8	U	0.24	UJ
7440-23-5	Sodium		396.	J	1780.		409.	J	23500.		16800.		863.	J
7440-28-0	Thallium		0.2	U	0.29	UJ	0.19	U	0.92	U	0.6	U	0.18	U
7440-62-2	Vanadium		0.83	J	1.7	J	0.44	J	40.2		28.2		0.46	J
7440-66-6	Zinc		14.7	J	21.1		4.2	J	377.		192.		4.2	J
57-12-5	Cyanide (CN)		0.63	U	0.66	U	0.59	U	3.	U	1.9	U	0.62	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-6401-01		041-M-6402-01		041-M-6403-01		041-M-6404-01		041-M-6405-01		041-M-6406-01	
	ORIGINAL ID ----->	041M640101		041M640201		041M640301		041M640401		041M640501		041M640601	
	LAB SAMPLE ID --->	960087-05		950941-12		950941-13		960087-06		950941-14		950941-15	
	ID FROM REPORT -->	041M640101		041M640201		041M640301		041M640401		041M640501		041M640601	
	SAMPLE DATE ----->	02/09/96		11/15/95		11/15/95		02/09/96		11/15/95		11/15/95	
	DATE EXTRACTED -->	02/13/96		12/19/95		12/19/95		02/13/96		12/19/95		12/19/95	
	DATE ANALYZED --->	02/13/96		12/20/95		12/20/95		02/13/96		12/20/95		12/20/95	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	640801	VAL	M06010	VAL	M06010	VAL	640801	VAL	M06010	VAL	M06010	VAL
7429-90-5	Aluminum	2300.		3770.	J	11200.	J	5350.		3710.	J	2410.	J
7440-36-0	Antimony	0.14	UR	0.33	J	0.75	UR	10.8	J	2.5	UR	0.17	UR
7440-38-2	Arsenic	0.78	J	9.8		11.2		3.	J	6.1		1.6	
7440-39-3	Barium	4.4	J	7.2	J	1280.		7.7	J	15.5	J	4.3	J
7440-41-7	Beryllium	0.07	U	0.2	J	0.57	J	0.44	U	0.25	U	0.11	J
7440-43-9	Cadmium	1.6		18.9		38.6		2.8		18.5		8.8	
7440-70-2	Calcium	472.		850.	J	5900.	J	4600.		1780.	J	3430.	J
7440-47-3	Chromium	11.1		1600.		1800.		1610.		466.		324.	
7440-48-4	Cobalt	0.36	J	1.4	J	6.1	J	0.87	U	2.2	J	0.91	J
7440-50-8	Copper	4.3		39.8	J	255.	J	23.8		88.6	J	29.4	J
7439-89-6	Iron	1130.		7340.	J	25900.	J	2790.		10500.	J	3810.	J
7439-92-1	Lead	38.		346.	J	634.	J	146.		262.	J	156.	J
7439-95-4	Magnesium	134.	J	854.		5100.		3310.		2050.		919.	
7439-96-5	Manganese	7.5		24.5		125.		15.		43.6		15.2	
7439-97-6	Mercury	0.06	U	0.17		0.88		0.43	J	0.27	J	0.12	J
7440-02-0	Nickel	0.79	J	4.6		27.1		5.3	J	8.1	J	3.	J
7440-09-7	Potassium	37.8	J	250.	J	1220.	J	491.	J	501.	J	259.	J
7782-49-2	Selenium	0.29	U	0.67	J	3.1	J	1.7	U	0.88	J	0.34	J
7440-22-4	Silver	0.36	U	0.42	J	5.1	J	2.2	U	1.	UJ	0.37	J
7440-23-5	Sodium	43.8	J	421.	J	6410.	J	5460.		4980.	J	2820.	J
7440-28-0	Thallium	0.29	UJ	0.65	J	1.2	J	1.7	UJ	0.76	U	0.26	U
7440-62-2	Vanadium	3.4	J	6.2		28.9		20.9	J	9.8	J	4.3	
7440-66-6	Zinc	22.5		145.	J	481.	J	31.8		290.	J	105.	J
57-12-5	Cyanide (CN)	0.69	U	0.8	U	3.8	U	4.1	U	2.5	U	0.88	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-63B1-01		041-M-63B2-01		041-W-63B2-01		041-M-63B3-01		041-M-63B4-01		041-W-63B4-01	
	ORIGINAL ID ----->	041M63B101		041M63B201		041W63B201		041M63B301		041M63B401		041W63B401	
	LAB SAMPLE ID --->	960039-03		960039-04		960039-08		960039-05		960055-11		960055-17	
	ID FROM REPORT -->	041M63B101		041M63B201		041W63B201		041M63B301		041M63B401		041W63B401	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/18/96		01/18/96		01/24/96		01/24/96	
	DATE EXTRACTED -->	01/21/96		01/21/96		01/21/96		01/21/96		02/03/96		02/03/96	
	DATE ANALYZED --->	01/22/96		01/22/96		01/22/96		01/22/96		02/05/96		02/05/96	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Sediment		Water	
	UNITS ---------->	MG/KG		MG/KG		UG/L		MG/KG		MG/KG		UG/L	
CAS #	Parameter	63A401	VAL	63A401	VAL	63A401	VAL	63A401	VAL	M52A10	VAL	M52A10	VAL
7429-90-5	Aluminum	1960.	J	374.	J	1300.		101.	J	165.		157.	J
7440-36-0	Antimony	0.77	UJ	0.25	J	10.	U	0.13	UJ	0.13	UJ	2.	UJ
7440-38-2	Arsenic	0.43	J	0.24	J	3.1	J	0.13	U	0.13	U	2.	U
7440-39-3	Barium	4.	J	1.2	J	53.	J	0.71	J	0.88	J	44.7	J
7440-41-7	Beryllium	0.1	J	0.08	U	1.	U	0.06	U	0.07	U	1.	U
7440-43-9	Cadmium	0.15	U	0.15	U	2.	U	0.13	U	0.13	U	2.	UJ
7440-70-2	Calcium	3230.	J	1180.	J	39000.		661.	J	191.	J	37800.	
7440-47-3	Chromium	5.2		1.3		5.	U	0.34	J	0.91		5.	U
7440-48-4	Cobalt	0.42	J	0.2	J	2.	U	0.13	U	0.13	U	2.	U
7440-50-8	Copper	4.4		1.1	J	4.	U	0.35	J	0.9	J	4.	U
7439-89-6	Iron	1290.		616.		1560.		112.		241.		206.	
7439-92-1	Lead	13.		1.8		5.3		0.95		1.9		2.	U
7439-95-4	Magnesium	410.		124.	J	10600.		33.6	J	38.3	J	10100.	
7439-96-5	Manganese	7.1		3.9		40.1		1.1		0.88	J	21.4	
7439-97-6	Mercury	0.07	U	0.06	U	0.13	U	0.05	U	0.05	U	0.13	U
7440-02-0	Nickel	0.88	J	0.68	U	9.	U	0.57	U	0.59	U	9.	U
7440-09-7	Potassium	121.	J	38.8	J	7720.		10.3	J	19.5	J	7900.	
7782-49-2	Selenium	0.4		0.3	U	4.	U	0.25	U	0.26	UJ	4.	U
7440-22-4	Silver	0.39	U	0.38	U	5.	U	0.31	U	0.33	U	5.	U
7440-23-5	Sodium	129.	J	71.3	J	71700.		51.5	J	28.4	J	64400.	
7440-28-0	Thallium	0.31	U	0.3	U	4.	U	0.25	U	0.26	U	4.	U
7440-62-2	Vanadium	3.9		1.2	J	3.5	J	0.35	J	0.53	J	2.	U
7440-66-6	Zinc	13.		2.6		13.7	J	0.79	J	1.6		4.8	J
57-12-5	Cyanide (CN)	0.68	U	0.7	U	5.	U	0.62	U	0.66	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-63A1-01		041-M-63A2-01		041-W-63A2-01		041-M-63A3-01		041-M-63A4-01		041-M-63A5-01	
	ORIGINAL ID ----->	041M63A101		041M63A201		041W63A201		041M63A301		041M63A401		041M63A501	
	LAB SAMPLE ID --->	960025-18		960025-19		960039-07		960025-20		960039-01		960039-02	
	ID FROM REPORT -->	041M63A101		041M63A201		041W63A201		041M63A301		041M63A401		041M63A501	
	SAMPLE DATE ----->	01/18/96		01/18/96		01/18/96		01/18/96		01/18/96		01/18/96	
	DATE EXTRACTED -->	01/20/96		01/20/96		01/21/96		01/20/96		01/21/96		01/30/96	
	DATE ANALYZED --->	01/22/96		01/22/96		01/22/96		01/22/96		01/22/96		01/22/96	
	MATRIX ---------->	Sediment		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		UG/L		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	EM005	VAL	EM005	VAL	63A401	VAL	EM005	VAL	63A401	VAL	63A401	VAL
7429-90-5	Aluminum	180.		238.		2080.		5500.		4390.	J	225.	J
7440-36-0	Antimony	0.13	UJ	0.65	UJ	2.	UJ	0.17	UJ	0.29	J	0.13	UJ
7440-38-2	Arsenic	0.22	J	0.15	J	5.	J	1.4		1.3		0.19	J
7440-39-3	Barium	0.39	J	0.47	J	53.3	J	16.3	J	7.8	J	0.44	J
7440-41-7	Beryllium	0.06	U	0.07	U	1.	U	0.09	U	0.07	U	0.07	U
7440-43-9	Cadmium	0.17	U	0.37	U	2.	U	7.7		0.7		0.15	J
7440-70-2	Calcium	1170.		1460.		38700.		2080.		4040.	J	2770.	J
7440-47-3	Chromium	0.51	J	2.2		5.	U	92.5		6.2		2.	
7440-48-4	Cobalt	0.13	U	0.13	U	2.	U	0.37	J	0.26	J	0.13	U
7440-50-8	Copper	0.38	J	1.2	J	5.	J	15.1		4.		3.2	
7439-89-6	Iron	293.		403.		483.		5000.		2940.		411.	
7439-92-1	Lead	0.93		3.1		299.		106.		32.1		2.1	
7439-95-4	Magnesium	112.	J	159.	J	5740.		278.	J	213.	J	100.	J
7439-96-5	Manganese	1.9		2.1		28.3		17.6		44.5		1.7	
7439-97-6	Mercury	0.05	U	0.05	U	0.13	U	0.14	J	0.07	U	0.05	U
7440-02-0	Nickel	0.57	U	0.58	U	9.	U	5.1		0.97	J	0.59	U
7440-09-7	Potassium	34.3	J	42.3	J	14700.		76.4	J	73.3	J	22.	J
7782-49-2	Selenium	0.25	UJ	0.26	UJ	8.		0.35	UJ	0.28	U	0.26	U
7440-22-4	Silver	0.32	U	0.32	U	5.	U	0.46	J	0.35	U	0.33	U
7440-23-5	Sodium	593.		884.		28300.		33.8	J	34.6	J	76.1	J
7440-28-0	Thallium	0.25	U	0.26	U	4.	U	0.35	U	0.28	U	0.26	U
7440-62-2	Vanadium	0.59	J	0.6	J	4.1	J	14.4		7.7		0.55	J
7440-66-6	Zinc	1.5		4.9		19.3	J	88.9		25.4		9.5	
57-12-5	Cyanide (CN)	0.61	U	0.62	U	5.	U	0.85	U	0.68	U	0.61	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-W-5A06-01		041-M-5A07-01		041-W-5A07-01		041-M-5B01-01		041-M-5B02-01		041-W-5B02-01	
	ORIGINAL ID ----->	041W5A0601		041M5A0701		041W5A0701		041M5B0101		041M5B0201		041W5B0201	
	LAB SAMPLE ID --->	950952-14		950950-05		950950-10		950952-08		950952-09		950952-15	
	ID FROM REPORT -->	041W5A0601		041M5A0701		041W5A0701		041M5B0101		041M5B0201		041W5B0201	
	SAMPLE DATE ----->	11/17/95		11/16/95		11/16/95		11/17/95		11/17/95		11/17/95	
	DATE EXTRACTED -->	12/27/96		12/20/95		12/20/95		12/27/95		12/27/95		12/27/96	
	DATE ANALYZED --->	12/27/95		12/27/95		12/27/95		12/27/95		12/27/95		12/27/95	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Water	
	UNITS ---------->	UG/L		MG/KG		UG/L		MG/KG		MG/KG		UG/L	
CAS #	Parameter	Z42101	VAL	5A0101	VAL	5A0101	VAL	Z42101	VAL	Z42101	VAL	Z42101	VAL
7429-90-5	Aluminum	140.	U	1040.		153.	J	491.		10500.		2060.	
7440-36-0	Antimony	2.	U	1.1	J	2.	UJ	0.14	UR	3.9	UR	2.	UJ
7440-38-2	Arsenic	2.	UJ	0.78		2.	U	0.14	UJ	1.3	J	2.	UJ
7440-39-3	Barium	28.3	J	5.5	J	27.8	J	1.3	J	30.2	J	27.8	J
7440-41-7	Beryllium	1.	U	0.06	U	1.	U	0.07	U	0.48	J	1.	U
7440-43-9	Cadmium	3.	U	0.27	J	3.	U	0.3	J	220.		19.	
7440-70-2	Calcium	5460.		71000.		15200.		109.	J	4400.	J	15600.	
7440-47-3	Chromium	8.	UJ	2.8		8.	U	7.9		416.		40.8	J
7440-48-4	Cobalt	3.	U	0.3	J	3.	UJ	0.2	U	5.3	J	3.9	J
7440-50-8	Copper	7.2	J	13.1		21.3	J	3.1	U	268.		52.7	
7439-89-6	Iron	357.		1440.		950.	J	306.		3290.		2890.	
7439-92-1	Lead	1.4	U	11.5		2.8	J	17.9	J	481.	J	94.1	
7439-95-4	Magnesium	2090.	J	5960.		2200.	J	27.1	J	668.	J	3250.	J
7439-96-5	Manganese	20.5		30.5		51.1		1.4		42.7		109.	
7439-97-6	Mercury	0.13	U	0.05	U	0.13	U	0.05	U	0.68		0.14	J
7440-02-0	Nickel	12.	U	2.	J	12.	U	2.2	J	93.9		26.2	U
7440-09-7	Potassium	1050.	J	38.8	J	1540.	J	10.5	J	247.	J	2160.	J
7782-49-2	Selenium	3.	U	0.18	U	3.	U	0.2	U	3.6		3.	U
7440-22-4	Silver	4.	UJ	0.24	U	4.	U	0.27	UJ	5.2	J	4.	UJ
7440-23-5	Sodium	13500.		52.	J	10400.		2.6	U	95.2	J	12600.	
7440-28-0	Thallium	3.	U	0.18	U	3.	U	0.2	U	1.2	U	3.	U
7440-62-2	Vanadium	4.8	J	2.2	J	3.4	U	0.83	U	18.8	J	5.2	J
7440-66-6	Zinc	236.		54.7		102.		9.8		1160.		189.	
57-12-5	Cyanide (CN)	5.	U	0.6	U	5.	U	0.65	U	3.7	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL																		
		SAMPLE ID ------->	041-M-5A03-01		041-M-5A04-01		041-W-5A04-01		041-M-5A05-01		041-W-5A05-01		041-M-5A06-01	
		ORIGINAL ID ----->	041M5A0301		041M5A0401		041W5A0401		041M5A0501		041W5A0501		041M5A0601	
		LAB SAMPLE ID --->	950950-03		950950-04		950950-09		950979-03		950979-06		950952-07	
		ID FROM REPORT -->	041M5A0301		041M5A0401		041W5A0401		041M5A0501		041W5A0501		041M5A0601	
		SAMPLE DATE ----->	11/16/95		11/16/95		11/16/95		11/27/95		11/27/95		11/17/95	
		DATE EXTRACTED -->	12/20/95		12/20/95		12/20/95		01/04/96		01/04/96		12/27/95	
		DATE ANALYZED --->	12/27/95		12/27/95		12/27/95		01/05/96		01/05/96		12/27/95	
		MATRIX ---------->	Sediment		Sediment		Water		Sediment		Water		Sediment	
		UNITS ---------->	MG/KG		MG/KG		UG/L		MG/KG		UG/L		MG/KG	
CAS #	Parameter		5A0101	VAL	5A0101	VAL	5A0101	VAL	041M10	VAL	041M10	VAL	Z42101	VAL
7429-90-5	Aluminum		13000.		8470.		621.		11300.		206.		699.	
7440-36-0	Antimony		0.38	U	4.4	UJ	2.	UJ	4.5	J	3.1	J	0.28	J
7440-38-2	Arsenic		2.6		1.2	J	2.	U	3.2		2.	U	0.15	UJ
7440-39-3	Barium		33.4	J	27.2	J	17.4	J	50.8	J	31.2	J	4.1	J
7440-41-7	Beryllium		0.27	J	0.44	U	1.	U	0.45	J	1.	UJ	0.07	U
7440-43-9	Cadmium		7.7		4.2		3.	U	10.1		3.	U	0.56	
7440-70-2	Calcium		3390.		7690.		12000.		5040.	J	28600.		351.	J
7440-47-3	Chromium		69.3		33.7		8.	U	115.		11.4		20.6	
7440-48-4	Cobalt		7.2	J	1.3	UJ	3.	UJ	13.4	J	3.	U	0.72	J
7440-50-8	Copper		28.5		68.9		18.5	U	317.		19.6	J	16.2	
7439-89-6	Iron		9210.		2120.		1170.	J	6440.		1710.		616.	
7439-92-1	Lead		111.		169.		20.3	J	383.	J	10.		48.6	J
7439-95-4	Magnesium		469.	J	1340.	J	2750.	J	490.	J	6710.		44.4	J
7439-96-5	Manganese		55.5		24.8		60.9		73.6		50.1		11.8	
7439-97-6	Mercury		0.37		0.54	J	0.13	U	0.84		0.13	U	0.25	
7440-02-0	Nickel		16.		5.3	U	12.	U	25.2		12.	U	1.3	J
7440-09-7	Potassium		275.	J	365.	J	2010.	J	92.6	J	5580.		20.3	J
7782-49-2	Selenium		1.6		1.8	J	3.	U	2.6	J	3.	U	0.22	U
7440-22-4	Silver		0.76	U	1.8	U	4.	U	1.1	UJ	4.	U	0.42	J
7440-23-5	Sodium		47.2	J	122.	J	9220.		17.5	J	21300.		8.6	J
7440-28-0	Thallium		0.57	U	1.3	U	3.	U	0.85	UJ	3.	U	0.22	U
7440-62-2	Vanadium		13.1		16.9	J	2.3	U	18.8		2.	U	1.1	U
7440-66-6	Zinc		96.9		91.7		45.7	U	591.		55.8		51.3	
57-12-5	Cyanide (CN)		1.9	U	4.2	U	5.	U	2.6	U	5.	U	0.68	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-5801-01		041-W-5801-01		041-M-5A01-01		041-W-5A01-01		041-M-5A02-01		041-W-5A02-01	
	ORIGINAL ID ----->	041M580101		041W580101		041M5A0101		041W5A0101		041M5A0201		041W5A0201	
	LAB SAMPLE ID --->	960055-10		960055-21		950950-01		950950-07		950950-02		950950-08	
	ID FROM REPORT -->	041M580101		041W580101		041M5A0101		041W5A0101		041M5A0201		041W5A0201	
	SAMPLE DATE ----->	01/24/96		01/24/96		11/16/95		11/16/95		11/16/95		11/16/95	
	DATE EXTRACTED -->	02/03/96		02/04/96		12/20/95		12/20/95		12/20/95		12/20/95	
	DATE ANALYZED --->	02/05/96		02/05/96		12/27/95		12/27/95		12/27/95		12/27/95	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	MG/KG		UG/L		MG/KG		UG/L		MG/KG		UG/L	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL	5A0101	VAL
7429-90-5	Aluminum	1360.		1090.		18700.		259.		3630.		945.	
7440-36-0	Antimony	0.15	UJ	2.	UJ	10.	J	2.	UJ	2.5	J	2.	UJ
7440-38-2	Arsenic	0.27	J	3.1	J	2.5	J	2.	U	2.5		2.	U
7440-39-3	Barium	1.2	J	3.4	J	150.		41.4	J	9.5	J	13.6	J
7440-41-7	Beryllium	0.07	U	1.	U	0.83	J	1.	U	0.2	U	1.	U
7440-43-9	Cadmium	0.15	U	2.	UJ	11.2		3.	U	7.6		3.2	J
7440-70-2	Calcium	230.	J	9230.		7660.		22000.		3190.		10600.	
7440-47-3	Chromium	1.2		5.	U	81.1		8.	U	38.9		8.	U
7440-48-4	Cobalt	0.15	U	2.	U	6.4	J	3.		1.5	J	3.	UJ
7440-50-8	Copper	1.8		5.2	J	156.		10.8	U	13.1		4.4	U
7439-89-6	Iron	548.		4070.		9830.		1350.	J	3120.		1150.	J
7439-92-1	Lead	7.8		7.4		427.		13.3	J	64.6		10.5	J
7439-95-4	Magnesium	70.	J	4110.	J	815.	J	3470.	J	193.	J	2590.	J
7439-96-5	Manganese	1.2		4.9	U	205.		80.		16.6		28.8	
7439-97-6	Mercury	0.06	U	0.13	U	1.		0.13	U	0.17	U	0.13	U
7440-02-0	Nickel	1.2	J	9.	U	23.5		12.	U	5.8	J	12.	U
7440-09-7	Potassium	41.2	J	1420.	J	413.	J	3680.	J	92.2	J	2130.	J
7782-49-2	Selenium	0.41	J	4.	U	1.7		3.	U	1.5		3.	U
7440-22-4	Silver	0.36	U	5.	U	1.2	U	4.	U	1.1	J	4.	U
7440-23-5	Sodium	22.7	U	11400.		111.	J	11300.		28.6	J	7710.	
7440-28-0	Thallium	0.29	U	4.	U	1.4	J	3.5	J	0.59	U	3.	U
7440-62-2	Vanadium	2.5	J	10.6	J	24.		2.	U	6.6	J	3.	U
7440-66-6	Zinc	2.3		4.	U	2290.		99.4		39.3		27.2	U
57-12-5	Cyanide (CN)	0.71	U	5.	U	3.	U	5.	U	1.9	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-52E3-01		041-W-52E3-01		041-M-56A1-01		041-W-56A1-01		041-M-5701-01		041-W-5701-01	
	ORIGINAL ID ----->	041M52E301		041W52E301		041M56A101		041W56A101		041M570101		041W570101	
	LAB SAMPLE ID --->	960055-08		960055-07		960055-09		960055-20		950991-11		950991-15	
	ID FROM REPORT -->	041M52E301		041W52E301		041M56A101		041W56A101		041M570101		041W570101	
	SAMPLE DATE ----->	01/24/96		01/23/96		01/24/96		01/24/96		11/29/95		11/29/95	
	DATE EXTRACTED -->	02/03/96		02/03/96		02/03/96		02/03/96		01/10/96		01/10/96	
	DATE ANALYZED --->	02/05/96		02/05/96		02/05/96		02/05/96		01/11/96		01/11/96	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Water	
	UNITS ---------->	MG/KG		UG/L		MG/KG		UG/L		MG/KG		UG/L	
CAS #	Parameter	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	Z30301	VAL	Z30301	VAL
7429-90-5	Aluminum	3060.		2580.		2560.		596.		5520.		7390.	
7440-36-0	Antimony	0.15	UJ	10.	UJ	0.15	UJ	2.	UJ	0.2	UR	0.2	UR
7440-38-2	Arsenic	0.31	J	2.	U	0.33	J	2.	U	1.6		0.2	U
7440-39-3	Barium	3.4	J	4.9	J	3.3	J	4.4	J	11.3	J	25.3	J
7440-41-7	Beryllium	0.07	U	1.	U	0.08	U	1.	U	0.1	U	0.1	U
7440-43-9	Cadmium	0.15	U	2.	UJ	0.15	U	2.	UJ	0.31	U	0.3	U
7440-70-2	Calcium	526.		10800.		682.		12700.		2720.		19400.	
7440-47-3	Chromium	2.9		5.	U	3.1		5.	U	4.8	J	8.	U
7440-48-4	Cobalt	0.21	J	2.	U	0.3	J	2.	U	0.45	J	3.	U
7440-50-8	Copper	1.7	J	4.	U	3.1		4.	U	4.9		7.2	J
7439-89-6	Iron	1680.		1220.		1210.		682.		3790.		7360.	
7439-92-1	Lead	2.6		2.	U	9.4		2.	U	17.7		16.9	
7439-95-4	Magnesium	110.	J	854.	J	82.1	J	1710.	J	214.	J	1570.	J
7439-96-5	Manganese	8.5		8.2	J	3.2		11.2	J	15.8		134.	
7439-97-6	Mercury	0.06	U	0.13	U	0.07	U	0.13	U	0.14	J	0.13	U
7440-02-0	Nickel	1.6	J	9.	U	1.4	J	9.	U	2.	J	12.	U
7440-09-7	Potassium	84.3	J	349.	J	52.	J	676.	J	117.	J	1040.	J
7782-49-2	Selenium	0.73	J	4.	U	2.4	J	4.	U	1.6		3.	U
7440-22-4	Silver	0.37	U	5.	U	0.38	U	5.	U	0.41	U	4.	U
7440-23-5	Sodium	14.6	U	2670.	J	13.9	U	9730.		48.8	J	6470.	
7440-28-0	Thallium	0.3	U	4.	U	0.3	U	4.	U	0.31	UJ	3.	UJ
7440-62-2	Vanadium	4.4		2.7	J	4.		2.	U	9.2		12.2	J
7440-66-6	Zinc	25.5		12.4	J	5.9		4.	U	14.7		17.5	J
57-12-5	Cyanide (CN)	0.7	U	5.	U	0.75	U	5.	U	0.95	U	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-W-4903-01		041-M-52A1-01		041-W-52A1-01		041-M-52D1-01		041-M-52E1-01		041-M-52E2-01	
	ORIGINAL ID ----->	041W490301		041M52A101		041W52A101		041M52D101		041M52E101		041M52E201	
	LAB SAMPLE ID --->	960043-16		960055-01		960055-06		960055-02		960055-03		960055-04	
	ID FROM REPORT -->	041W490301		041M52A101		041W52A101		041M52D101		041M52E101		041M52E201	
	SAMPLE DATE ----->	01/22/96		01/23/96		01/23/96		01/23/96		01/23/96		01/23/96	
	DATE EXTRACTED -->	01/30/96		01/31/96		02/03/96		02/03/96		01/31/96		02/03/96	
	DATE ANALYZED --->	02/01/96		02/01/96		02/05/96		02/05/96		02/01/96		02/05/96	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		MG/KG		UG/L		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	M00901	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL	M52A10	VAL
7429-90-5	Aluminum	1800.	J	6230.		116.	J	667.		1140.		4210.	
7440-36-0	Antimony	2.	U	0.86	UJ	2.	UJ	0.22	UJ	0.18	UJ	4.2	UJ
7440-38-2	Arsenic	2.	U	0.86	U	2.	U	0.22	U	0.18	U	0.84	U
7440-39-3	Barium	7.2	U	43.3	J	6.6	J	6.4	J	2.2	J	19.6	J
7440-41-7	Beryllium	1.	U	0.68	J	1.	U	0.11	U	0.09	U	0.42	U
7440-43-9	Cadmium	2.	U	0.86	U	2.	UJ	0.22	U	0.18	U	0.84	U
7440-70-2	Calcium	692.	J	1450.	J	808.	J	1310.		2530.		3670.	
7440-47-3	Chromium	5.	U	4.2	J	5.	U	1.2		1.6		6.7	
7440-48-4	Cobalt	2.	U	1.4	J	2.	U	0.22	U	0.25	J	0.84	U
7440-50-8	Copper	4.	U	3.9	J	6.4	J	0.92	J	2.	J	6.4	J
7439-89-6	Iron	821.		361.		86.2	U	362.		1090.		2300.	
7439-92-1	Lead	3.1		7.1		2.	U	3.7		5.7		17.7	
7439-95-4	Magnesium	1100.	J	1280.	J	912.	J	176.	J	449.	J	1050.	J
7439-96-5	Manganese	7.4	J	15.8		10.5	J	2.		6.7		12.4	
7439-97-6	Mercury	0.13	U	0.38	U	0.13	U	0.1	U	0.08	U	0.37	U
7440-02-0	Nickel	9.	U	3.9	U	9.	U	1.6	J	0.99	J	5.2	J
7440-09-7	Potassium	116.	U	84.5	J	589.	J	22.2	J	51.3	J	160.	J
7782-49-2	Selenium	4.	U	10.2	J	4.	U	0.82	J	0.37	UJ	3.	J
7440-22-4	Silver	5.	U	2.2	U	5.	U	0.55	U	0.46	U	2.1	U
7440-23-5	Sodium	13100.		143.	J	5260.		23.2	U	61.1	J	169.	J
7440-28-0	Thallium	4.	U	1.7	U	4.	U	0.44	U	0.37	U	1.7	U
7440-62-2	Vanadium	2.3	J	6.6	J	2.	U	1.1	J	1.9	J	6.5	J
7440-66-6	Zinc	36.5	U	1.7	U	4.	U	3.2		5.3		10.7	
57-12-5	Cyanide (CN)	5.	U	4.2	U	5.	U	1.1	U	0.93	U	4.1	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-M-4801-01		041-W-4801-01		041-M-4901-01		041-W-4901-01		041-M-4902-01		041-M-4903-01	
	ORIGINAL ID ----->	041M480101		041W480101		041M490101		041W490101		041M490201		041M490301	
	LAB SAMPLE ID --->	960043-10		960043-14		960025-14		960043-15		960025-15		960025-16	
	ID FROM REPORT -->	041M480101		041W480101		041M490101		041W490101		041M490201		041M490301	
	SAMPLE DATE ----->	01/22/96		01/22/96		01/16/96		01/22/96		01/16/96		01/16/96	
	DATE EXTRACTED -->	01/30/96		01/30/96		01/20/96		01/30/96		01/20/96		01/20/96	
	DATE ANALYZED --->	02/01/96		02/01/96		01/22/96		02/01/96		01/22/96		01/22/96	
	MATRIX ---------->	Sediment		Water		Sediment		Water		Sediment		Sediment	
	UNITS ---------->	MG/KG		UG/L		MG/KG		UG/L		MG/KG		MG/KG	
CAS #	Parameter	M00901	VAL	M00901	VAL	EM005	VAL	M00901	VAL	EM005	VAL	EM005	VAL
7429-90-5	Aluminum	1400.		356.	U	3000.		725.	U	3560.		1500.	
7440-36-0	Antimony	0.19	UJ	2.	UJ	0.14	UJ	2.	U	0.15	UJ	0.14	UJ
7440-38-2	Arsenic	0.55	J	2.7	U	0.14	U	5.4	U	0.21	J	0.14	U
7440-39-3	Barium	3.5	J	5.2	U	5.6	J	4.1	U	5.6	J	1.7	J
7440-41-7	Beryllium	0.09	U	1.	U	0.07	U	1.	U	0.07	U	0.07	U
7440-43-9	Cadmium	0.3	J	2.	U	0.15	U	2.	U	0.15	U	0.2	U
7440-70-2	Calcium	499.		977.	J	385.		4500.	J	1630.		14.4	J
7440-47-3	Chromium	1.1		5.	U	2.5		5.	U	2.6		0.99	
7440-48-4	Cobalt	0.19	U	2.	U	0.2	J	2.	U	0.17	J	0.15	J
7440-50-8	Copper	1.1	J	4.	U	1.6	J	4.	U	1.2	J	0.49	J
7439-89-6	Iron	290.		285.		407.		73.	J	707.		548.	
7439-92-1	Lead	17.4		2.	U	7.2		2.	U	6.8		2.7	
7439-95-4	Magnesium	84.9	J	1020.	J	79.1	J	733.	J	123.	J	43.3	J
7439-96-5	Manganese	1.5		2.9	J	2.2		1.9	J	7.		0.94	J
7439-97-6	Mercury	0.08	U	0.13	U	0.06	J	0.13	U	0.06	U	0.06	U
7440-02-0	Nickel	0.85	U	9.	U	0.65	U	9.	U	0.91	J	0.64	U
7440-09-7	Potassium	14.4	J	116.	U	59.7	J	180.	J	66.	J	26.2	J
7782-49-2	Selenium	0.71		4.	U	0.29	UJ	4.	U	0.29	UJ	0.28	UJ
7440-22-4	Silver	0.47	U	5.	U	0.36	U	5.	U	0.37	U	0.35	U
7440-23-5	Sodium	96.3	U	7480.		17.9	J	6750.		30.4	J	18.2	J
7440-28-0	Thallium	0.38	UJ	4.	U	0.29	U	4.	U	0.29	U	0.28	U
7440-62-2	Vanadium	2.4	J	2.	U	2.8	J	2.3	J	3.	J	2.1	J
7440-66-6	Zinc	6.3		38.1	U	7.6		15.7	U	6.5		0.96	J
57-12-5	Cyanide (CN)	0.88	U	5.	U	0.68	U	5.	U	0.66	U	0.68	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, RI
PHASE IIA

METAL													
	SAMPLE ID ------->	041-W-3203-01		041-M-3301-01		041-W-3301-01		041-M-3302-01		041-M-3303-01		041-W-3303-01	
	ORIGINAL ID ----->	041W320301		041M330101		041W330101		041M330201		041M330301		041W330301	
	LAB SAMPLE ID --->	950940-09		950940-12		950940-15		950940-13		950940-14		950940-16	
	ID FROM REPORT -->	041W320301		041M330101		041W330101		041M330201		041M330301		041W330301	
	SAMPLE DATE ----->	11/14/95		11/13/95		11/13/95		11/13/95		11/13/95		11/13/95	
	DATE EXTRACTED -->	12/10/95		12/10/95		12/10/95		12/10/95		12/10/95		12/10/95	
	DATE ANALYZED --->	12/11/95		12/11/95		12/11/95		12/11/95		12/11/95		12/11/95	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Sediment		Water	
	UNITS ---------->	UG/L		MG/KG		UG/L		MG/KG		MG/KG		UG/L	
CAS #	Parameter	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL	M06070	VAL
7429-90-5	Aluminum	138.	U	2460.		151.	U	1520.		135.		135.	U
7440-36-0	Antimony	10.	U	0.36	UJ	10.	UJ	0.28	UJ	0.13	UJ	2.	UJ
7440-38-2	Arsenic	2.	U	1.8		2.	U	1.4	J	0.13	U	2.	U
7440-39-3	Barium	5.2	U	2.6	J	6.7	U	1.3	J	0.3	J	5.	U
7440-41-7	Beryllium	1.	U	0.18	U	1.	U	0.14	U	0.06	U	1.	U
7440-43-9	Cadmium	3.	U	0.54	U	3.	U	0.42	U	0.19	U	3.	U
7440-70-2	Calcium	2260.	J	1470.		14100.		1160.		116.	J	21700.	
7440-47-3	Chromium	8.	U	5.5		8.	U	3.5		0.51	U	8.	U
7440-48-4	Cobalt	3.	U	0.99	J	3.	U	0.42	U	0.19	U	3.	U
7440-50-8	Copper	4.	U	8.1		4.	U	4.9		0.49	J	4.	U
7439-89-6	Iron	191.		2120.		189.		1620.		151.		183.	
7439-92-1	Lead	1.	U	13.3		1.	U	11.9		0.69		1.	U
7439-95-4	Magnesium	4570.	J	2420.		40100.		1480.		189.	J	64600.	
7439-96-5	Manganese	9.3	J	8.2		8.2	J	5.5		0.62	J	6.3	J
7439-97-6	Mercury	0.13	U	0.14	U	0.13	U	0.12	U	0.06	U	0.16	J
7440-02-0	Nickel	12.	U	3.	J	12.	U	1.7	U	0.76	U	12.	U
7440-09-7	Potassium	1780.	J	698.	J	12300.		386.	J	70.3	J	20900.	
7782-49-2	Selenium	3.	U	0.54	U	3.	U	0.66	J	0.19	U	3.	U
7440-22-4	Silver	4.	U	0.72	U	4.	U	0.56	U	0.25	U	4.	U
7440-23-5	Sodium	44400.		10100.		315000.		5740.		979.		547000.	
7440-28-0	Thallium	3.	U	0.54	U	3.	U	0.42	U	0.19	U	3.	U
7440-62-2	Vanadium	2.	U	4.7	J	2.	U	4.3	J	0.38	J	2.	U
7440-66-6	Zinc	5.4	U	14.		4.2	U	8.3		1.4	U	4.4	U
57-12-5	Cyanide (CN)	5.	U	1.7	U	5.	U	1.4	U	0.63	U	5.	U

*** Validation Complete ***

Appendix B
Phase IIB/III Surface Water, Sediment and Biota Analytical Results

Phase IIB/III Sample Identification Format

The samples were identified in accordance with the following format:

Format: 1 2 3 4 5 6 7 8 9 0

1 2 3 The first three digits are for the site where the sample was collected. Phase IIB/III samples all begin with 041 to identify Site 41.

4 This digit represents the matrix of the sample. Sediment is designated with an "M," surface water is designated with a "W, " and biota is designated with a "J."

5 6 7 8 The fifth and sixth characters referred to the wetland number, and the seventh and eighth characters referred to the sample number within that wetland. For example, sediment sample location 2 within Wetland 3 was designated "041M030201." For wetland numbers three characters long (18A, 18B, etc.), the wetland number was given in the fifth, sixth, and seventh characters. For example, sediment sample location 3 in Wetland 18A was designated "041M18A301."

9 0 Because all sediment samples were collected from the upper interval and all surface water samples were collected during sampling event 1, the last two characters are "-01."

Validation Qualifiers

U **Undetected** — The analyte was analyzed for but not detected, or was also found in an associated blank at a concentration less than 10 times the blank concentration for common organic laboratory contaminants or five times the blank concentration for other target analytes or elements. The associated value shown is the quantitative limit.

J **Estimated Value** — At least one QC parameter was outside control limits.

NJ **Presumptive Identification** — NJ is used for pesticide/PCB analysis when the percent difference exceeds the QC limits by 100% or more. It indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification at an estimated concentration. This qualifier is used for pesticide/PCB validation only.

UJ **Undetected and Estimated** — The analyte was analyzed for, but not detected above the listed estimated quantitation limit; the quantitation limit is estimated because one or more QC parameters were outside control limits.

D **Diluted Result** — The compound was reanalyzed at a secondary dilution factor. If one or more compounds are outside the calibration range during an initial analysis, the laboratory flags the analyte "**E**." When diluted, the sample results are flagged "**D**." Generally, values from the initial analysis will be used, except where the value exceeded the calibration range. In this case, the initial analysis value will be substituted by the diluted value to ensure the most representative data. The "**D**" flag will remain on the value to alert the data user that a secondary dilution value was used.

R/UR **Unusable Data** — One or more QC parameters grossly exceeded control limits.

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

GRAIN SIZE							
	SAMPLE ID ------->	041-M-0302-01	041-M-0307-01	041-M-1603-01	041-M-18B1-01	041-M-3301-01	041-M-3302-01
	ORIGINAL ID ----->	041M030201	041M030701	041M160301	041M18B101	041M330101	041M330201
	LAB SAMPLE ID --->	S774823A*3	S774823A*4	S775003A*1	S774881*2	S774823A*1	S774823A*2
	ID FROM REPORT -->	041M030201	041M030701	041M160301	041M18B101	041M330101	041M330201
	SAMPLE DATE ----->	08/27/97	08/27/97	09/04/97	08/29/97	08/27/97	08/27/97
	DATE ANALYZED --->	09/26/97	09/26/97	09/26/97	09/26/97	09/26/97	09/26/97
	MATRIX ---------->	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
	UNITS ---------->	%	%	%	%	%	%
CAS #	Parameter	PEN12	PEN12	PEN13	PEN12	PEN12	PEN12
9999900-32-6	Seive Size #4	95.8	98.1	100.	90.6	99.9	99.9
9999900-32-7	Seive Size #10	91.1	97.2	100.	87.	97.	98.7
9999900-32-8	Seive Size #20	78.2	95.2	99.8	79.9	96.1	94.8
9999900-32-9	Seive Size #40	63.7	80.3	90.2	69.9	88.4	80.1
9999900-33-0	Seive Size #60	45.3	31.8	58.6	45.9	40.9	21.6
9999900-33-1	Seive Size #100	37.	17.5	36.1	32.8	17.5	5.5
9999900-33-2	Seive Size #200	32.9	14.	32.2	27.3	16.7	4.9

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

GRAIN SIZE							
	SAMPLE ID ------->	041-M-5A04-01.	041-M-5A05-01	041-M-5A06-01	041-M-6404-01	041-M-6405-01	041-M-6406-01
	ORIGINAL ID ----->	041M5A0401	041M5A0501	041M5A0601	041M640401	041M640501	041M640601
	LAB SAMPLE ID --->	S774839*1	S774839*2	S774839*3	S775003A*3	S775003A*2	S774999*2
	ID FROM REPORT -->	041M5A0401	041M5A0501	041M5A0601	041M640401	041M640501	041M640601
	SAMPLE DATE ----->	08/28/97	08/28/97	08/28/97	09/04/97	09/04/97	09/03/97
	DATE ANALYZED --->	09/26/97	09/26/97	09/26/97	09/26/97	09/26/97	09/26/97
	MATRIX ---------->	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
	UNITS ---------->	%	%	%	%	%	%
CAS #	Parameter	PEN12	PEN12	PEN12	PEN13	PEN13	PEN13
9999900-32-6	Seive Size #4	99.7	98.8	98.	98.6	99.6	100.
9999900-32-7	Seive Size #10	99.3	97.4	97.2	96.4	98.3	98.9
9999900-32-8	Seive Size #20	98.3	95.1	95.6	93.1	96.7	97.2
9999900-32-9	Seive Size #40	80.4	75.7	77.8	85.8	92.3	92.5
9999900-33-0	Seive Size #60	23.8	21.5	19.3	63.4	77.3	73.1
9999900-33-1	Seive Size #100	7.2	7.7	5.2	41.7	61.4	51.3
9999900-33-2	Seive Size #200	4.5	5.	3.7	35.1	53.3	43.4

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

GRAIN SIZE

SAMPLE ID -------->	041-M-7501-01
ORIGINAL ID ----->	041M750101
LAB SAMPLE ID --->	S774839*4
ID FROM REPORT -->	041M750101
SAMPLE DATE ----->	08/28/97
DATE ANALYZED --->	09/26/97
MATRIX ---------->	Sediment
UNITS ---------->	%

CAS #	Parameter	PEN12
9999900-32-6	Seive Size #4	100.
9999900-32-7	Seive Size #10	99.9
9999900-32-8	Seive Size #20	99.6
9999900-32-9	Seive Size #40	91.
9999900-33-0	Seive Size #60	48.5
9999900-33-1	Seive Size #100	25.8
9999900-33-2	Seive Size #200	24.6

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

METAL															
	SAMPLE ID ------->	041-W-0301-01		041-M-0302-01		041-M-0307-01		041-M-1603-01		041-M-18B1-01		041-M-3301-01	
	ORIGINAL ID ----->	041W030101		041M030201		041M030701		041M160301		041M18B101		041M330101	
	LAB SAMPLE ID --->	S774785*1		S774823A*3		S774823A*4		S775003A*1		S774881*2		S774823A*1	
	ID FROM REPORT -->	041W030101		041M030201		041M030701		041M160301		041M18B101		041M330101	
	SAMPLE DATE ----->	08/26/97		08/27/97		08/27/97		09/04/97		08/29/97		08/27/97	
	DATE EXTRACTED -->	09/09/97		09/08/97		09/08/97		09/10/97		09/08/97		09/08/97	
	DATE ANALYZED --->	09/10/97		09/09/97		09/09/97		09/15/97		09/09/97		09/09/97	
	MATRIX ---------->	Water		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN12	VAL	PEN13	VAL	PEN12	VAL	PEN12	VAL
7429-90-5	Aluminum	59.1	J	2950.		1630.		5320.	J	605.		705.	
7440-36-0	Antimony	2.6	J	4.9	UJ	2.1	UJ	2.6	U	2.	UJ	1.7	UJ
7440-38-2	Arsenic	2.2	UJ	14.6		4.2	J	5.5		13.8		0.49	UJ
7440-39-3	Barium	37.2		87.		18.7		4.7		1.8	J	0.69	J
7440-41-7	Beryllium	0.23	U	0.15	U	0.06	U	0.26		0.07	J	0.05	U
7440-43-9	Cadmium	0.58	U	2.	UJ	9.3		0.91		0.4	UJ	0.07	UJ
7440-70-2	Calcium	34000.		5980.		953.		962.		1050.		236.	
7440-47-3	Chromium	1.	UJ	12.1		19.		24.6		3.6		1.6	
7440-48-4	Cobalt	0.53	UJ	0.65	UJ	0.57	J	0.86	J	0.27	UJ	0.23	UJ
7440-50-8	Copper	1.7	U	2.	U	4.		16.		1.7		2.4	
7439-89-6	Iron	19600.		246000.		67100.		17000.		20800.		862.	
7439-92-1	Lead	1.2	U	20.6		35.6		29.4		5.9		4.4	
7439-95-4	Magnesium	2670.		150.	J	70.5	J	2410.		869.		328.	
7439-96-5	Manganese	231.		236.		42.6		39.		10.8		2.5	
7439-97-6	Mercury	0.05	U	0.1	J	0.06	J	0.07	J	0.02	U	0.06	
7440-02-0	Nickel	1.2	U	1.4	U	3.1		4.4		0.55	U	0.93	
7440-09-7	Potassium	1730.		56.8	J	35.	J	1060.		220.		102.	
7782-49-2	Selenium	2.6	U	5.4		2.	J	1.	J	0.74	J	0.39	J
7440-22-4	Silver	0.03	U	0.3	UJ	0.42	J	0.34	J	0.12	UJ	0.1	UJ
7440-23-5	Sodium	7570.		56.8	J	16.3	J	8450.		3750.		1060.	
7440-28-0	Thallium	1.2	U	2.	U	0.82	U	1.	UJ	0.8	U	0.68	U
7440-62-2	Vanadium	0.77	UJ	13.5		6.4		15.3		6.3		1.5	J
7440-66-6	Zinc	3.7	U	45.8		234.		68.5		5.7		6.5	
57-12-5	Cyanide (CN)	1.4	UJ	3.	UJ	2.6	J	NR		1.2	UJ	1.	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

METAL													
	SAMPLE ID ------->	041-W-3301-01		041-M-3302-01		041-W-3302-01		041-M-5A04-01		041-W-5A04-01		041-M-5A05-01	
	ORIGINAL ID ----->	041W330101		041M330201		041W330201		041M5A0401		041W5A0401		041M5A0501	
	LAB SAMPLE ID --->	S774823*1		S774823A*2		S774823*2		S774839*1		S774785*2		S774839*2	
	ID FROM REPORT -->	041W330101		041M330201		041W330201		041M5A0401		041W5A0401		041M5A0501	
	SAMPLE DATE ----->	08/27/97		08/27/97		08/27/97		08/28/97		08/26/97		08/28/97	
	DATE EXTRACTED -->	09/09/97		09/08/97		09/09/97		09/08/97		09/09/97		09/08/97	
	DATE ANALYZED --->	09/10/97		09/09/97		09/10/97		09/09/97		09/10/97		09/09/97	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	UG/L		MG/KG		UG/L		MG/KG		UG/L		MG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN12	VAL
7429-90-5	Aluminum	169.		748.		162.		2480.		124.		1590.	
7440-36-0	Antimony	3.1	J	2.1	UJ	2.6	U	1.5	UJ	2.6	U	27.7	J
7440-38-2	Arsenic	2.2	UJ	0.59	UJ	2.2	UJ	0.52	J	2.2	UJ	0.45	UJ
7440-39-3	Barium	10.7		0.89	J	7.2	J	12.5		22.3		17.2	
7440-41-7	Beryllium	0.45	U	0.08	J	0.28	U	0.2		0.26	U	0.13	J
7440-43-9	Cadmium	0.58	U	0.08	UJ	0.58	U	0.42	J	0.58	U	3.2	
7440-70-2	Calcium	100000.		853.		18800.		3120.		12600.		3660.	
7440-47-3	Chromium	0.88	UJ	1.7		0.88	UJ	4.1		0.88	UJ	50.1	
7440-48-4	Cobalt	0.53	UJ	0.27	UJ	0.53	UJ	1.6	J	0.53	UJ	1.6	J
7440-50-8	Copper	2.4	J	2.6		1.7	U	21.5		4.1	J	108.	
7439-89-6	Iron	89.7	J	517.		102.	J	1090.		756.		3020.	
7439-92-1	Lead	1.2	U	6.6		1.2	U	54.5		9.		258.	
7439-95-4	Magnesium	322000.		943.		55600.		651.		3940.		690.	
7439-96-5	Manganese	2.2	U	2.	J	9.3	J	15.4		124.		21.3	
7439-97-6	Mercury	0.05	U	0.02	U	0.05	U	0.13		0.05	U	0.09	
7440-02-0	Nickel	1.2	U	0.91	J	1.2	U	2.5		1.2	U	7.5	
7440-09-7	Potassium	155000.		194.		23300.		93.2		3400.		54.	
7782-49-2	Selenium	2.6	U	0.38	J	2.6	U	0.26	U	2.6	U	0.6	J
7440-22-4	Silver	0.03	UJ	0.13	UJ	0.03	U	0.09	UJ	0.03	U	0.15	J
7440-23-5	Sodium	2760000.		2920.		462000.		35.	J	9590.		25.5	
7440-28-0	Thallium	1.2	UJ	0.82	U	1.2	U	0.59	U	1.2	U	0.62	U
7440-62-2	Vanadium	0.83	J	2.2		0.77	UJ	4.2		1.1	J	3.6	
7440-66-6	Zinc	3.7	U	3.7	J	3.7	U	77.1		23.2		394.	
57-12-5	Cyanide (CN)	1.4	UJ	1.2	UJ	1.4	UJ	0.9	UJ	1.4	UJ	0.94	UJ

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

METAL													
	SAMPLE ID ------->	041-W-5A05-01		041-M-5A06-01		041-W-5A06-01		041-R-5A06-01		041-W-6401-01		041-M-6404-01	
	ORIGINAL ID ----->	041W5A0501		041M5A0601		041W5A0601		041R5A0601		041W640101		041M640401	
	LAB SAMPLE ID --->	S774785*3		S774839*3		S774785*4		S774785*5		S775003*2		S775003A*3	
	ID FROM REPORT -->	041W5A0501		041M5A0601		041W5A0601		041R5A0601		041W640101		041M640401	
	SAMPLE DATE ----->	08/26/97		08/28/97		08/26/97		08/26/97		09/04/97		09/04/97	
	DATE EXTRACTED -->	09/09/97		09/08/97		09/09/97		09/09/97		09/15/97		09/10/97	
	DATE ANALYZED --->	09/10/97		09/09/97		09/10/97		09/10/97		09/17/97		09/15/97	
	MATRIX ---------->	Water		Sediment		Water		Water		Water		Sediment	
	UNITS ---------->	UG/L		MG/KG		UG/L		UG/L		UG/L		MG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN11	VAL	PEN14	VAL	PEN13	VAL
7429-90-5	Aluminum	668.		821.		124.		122.		144.	U	8890.	J
7440-36-0	Antimony	94.3		2.	J	2.6	U	2.6	U	3.8	J	4.	U
7440-38-2	Arsenic	2.2	UJ	0.46	UJ	2.2	UJ	2.2	UJ	2.2	U	7.	
7440-39-3	Barium	28.		6.9		23.7		24.1		36.4		17.1	
7440-41-7	Beryllium	0.23	U	0.05	U	0.19	U	0.19	U	0.19	U	0.3	J
7440-43-9	Cadmium	1.2		1.2		0.58	U	0.58	U	0.84	J	20.2	
7440-70-2	Calcium	10100.		495.		9160.		9140.		99000.		3210.	
7440-47-3	Chromium	12.		24.4		0.88	UJ	1.7	UJ	8.5	J	774.	
7440-48-4	Cobalt	3.2	J	0.94	J	2.	J	4.2	J	0.53	U	3.	
7440-50-8	Copper	42.8		25.6		1.7	U	2.	J	5.8		102.	
7439-89-6	Iron	1090.		546.		2500.		2340.		829.		13600.	
7439-92-1	Lead	91.4		75.5		5.5	U	7.2		5.8		346.	
7439-95-4	Magnesium	1520.		56.1	J	2270.		2280.		274000.		4190.	
7439-96-5	Manganese	198.		8.6		175.		223.		37.1		44.9	
7439-97-6	Mercury	0.09	U	0.06		0.05	U	0.05	U	0.05	UJ	0.26	
7440-02-0	Nickel	5.3	U	1.8		1.2	U	1.6	U	2.6	J	9.8	
7440-09-7	Potassium	1330.		16.8	U	1190.		1180.		113000.	J	1350.	
7782-49-2	Selenium	2.6	U	0.28	U	2.6	U	2.6	U	2.6	U	1.6	J
7440-22-4	Silver	0.1	J	0.1	UJ	0.03	U	0.03	U	0.05	J	2.	J
7440-23-5	Sodium	4450.		14.6	J	8960.		8840.		2290000.		18300.	
7440-28-0	Thallium	1.2	U	0.63	U	1.2	U	1.2	U	1.2	UJ	1.6	UJ
7440-62-2	Vanadium	3.4	J	1.8		0.77	UJ	0.77	UJ	3.5	U	18.4	
7440-66-6	Zinc	338.		103.		15.4	J	20.5		24.1	J	468.	
57-12-5	Cyanide (CN)	1.4	UJ	0.96	UJ	1.4	UJ	1.4	UJ	1.4	U	NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

METAL													
	SAMPLE ID ------->	041-M-6405-01.		041-W-6405-01		041-R-6405-01		041-M-6406-01		041-M-7501-01		041-N-7501-01	
	ORIGINAL ID ----->	041M640501		041W640501		041R640501		041M640601		041M750101		041N750101	
	LAB SAMPLE ID --->	S775003A*2		S775003*1		S775003*3		S774999*2		S774839*4		S774839*6	
	ID FROM REPORT -->	041M640501		041W640501		041R640501		041M640601		041M750101		041N750101	
	SAMPLE DATE ----->	09/04/97		09/04/97		09/04/97		09/03/97		08/28/97		08/28/97	
	DATE EXTRACTED -->	09/10/97		09/15/97		09/15/97		09/10/97		09/08/97		09/08/97	
	DATE ANALYZED --->	09/15/97		09/17/97		09/17/97		09/15/97		09/09/97		09/09/97	
	MATRIX ---------->	Sediment		Water		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		UG/L		UG/L		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	PEN13	VAL	PEN14	VAL	PEN14	VAL	PEN13	VAL	PEN12	VAL	PEN12	VAL
7429-90-5	Aluminum	7600.	J	298.		287.		8900.	J	1350.		1510.	
7440-36-0	Antimony	2.5	J	2.6	U	2.6	U	3.2	U	1.6	UJ	1.6	UJ
7440-38-2	Arsenic	6.9		2.2	U	2.9	J	7.8		0.47	UJ	0.46	UJ
7440-39-3	Barium	17.		33.6		30.7		15.2		4.		5.1	
7440-41-7	Beryllium	0.34		0.19	U	0.19	U	0.34		0.05	U	0.06	J
7440-43-9	Cadmium	17.7		0.58	UJ	0.58	UJ	21.		0.07	UJ	0.06	UJ
7440-70-2	Calcium	2660.		137000.		153000.		2970.		1300.		1180.	
7440-47-3	Chromium	592.		12.5		14.		868.		2.1		1.9	
7440-48-4	Cobalt	3.4		0.53	U	0.78	J	2.7		0.22	UJ	0.21	UJ
7440-50-8	Copper	146.		4.2	J	4.5	J	115.		0.82	J	1.2	
7439-89-6	Iron	13300.		702.		645.		12100.		681.		1100.	
7439-92-1	Lead	330.		8.6		7.		339.		6.5		9.1	
7439-95-4	Magnesium	3230.		421000.		475000.		3530.		100.		86.2	
7439-96-5	Manganese	65.8		28.3		24.7		48.8		4.4		4.9	
7439-97-6	Mercury	0.26		0.06	J	0.05	UJ	0.25		0.04	J	0.05	J
7440-02-0	Nickel	12.3		1.2	UJ	1.2	UJ	11.3		0.49	J	0.44	U
7440-09-7	Potassium	1090.		205000.	J	209000.	J	1150.		27.9	J	32.8	J
7782-49-2	Selenium	1.5	J	2.6	U	2.6	U	1.3	J	1.	J	0.58	J
7440-22-4	Silver	3.		0.04	J	0.04	J	1.9	J	0.1	UJ	0.1	UJ
7440-23-5	Sodium	10100.		3600000.		3460000.		13800.		30.2	J	29.1	J
7440-28-0	Thallium	1.	UJ	1.2	UJ	1.2	UJ	1.3	UJ	0.65	U	0.64	U
7440-62-2	Vanadium	15.9		1.9	U	2.5	U	17.3		2.		2.7	
7440-66-6	Zinc	306.		10.1	J	7.2	J	330.		17.5		28.6	
57-12-5	Cyanide (CN)	NR		1.4	U	1.4	U	NR		0.99	UJ	0.97	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

METAL

SAMPLE ID -------->	041-W-7501-01
ORIGINAL ID ----->	041W750101
LAB SAMPLE ID --->	S774785*6
ID FROM REPORT -->	041W750101
SAMPLE DATE ----->	08/26/97
DATE EXTRACTED -->	09/09/97
DATE ANALYZED --->	09/10/97
MATRIX ---------->	Water
UNITS ---------->	UG/L

CAS #	Parameter	PEN11	VAL
7429-90-5	Aluminum	355.	
7440-36-0	Antimony	2.6	U
7440-38-2	Arsenic	2.2	UJ
7440-39-3	Barium	5.2	J
7440-41-7	Beryllium	0.19	U
7440-43-9	Cadmium	0.58	U
7440-70-2	Calcium	6960.	
7440-47-3	Chromium	1.3	UJ
7440-48-4	Cobalt	0.53	UJ
7440-50-8	Copper	1.7	U
7439-89-6	Iron	1490.	
7439-92-1	Lead	3.2	U
7439-95-4	Magnesium	1560.	
7439-96-5	Manganese	34.9	
7439-97-6	Mercury	0.05	U
7440-02-0	Nickel	1.2	U
7440-09-7	Potassium	1790.	
7782-49-2	Selenium	2.6	U
7440-22-4	Silver	0.03	U
7440-23-5	Sodium	12400.	
7440-28-0	Thallium	1.2	U
7440-62-2	Vanadium	1.8	J
7440-66-6	Zinc	5.8	J
57-12-5	Cyanide (CN)	1.4	UJ

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

PEST															
	SAMPLE ID ------->	041-W-0301-01		041-M-0302-01		041-M-0307-01		041-M-1603-01		041-M-18B1-01		041-M-3301-01	
	ORIGINAL ID ----->	041W030101		041M030201		041M030701		041M160301		041M18B101		041M330101	
	LAB SAMPLE ID --->	S774785*1		S774823A*3		S774823A*4		S775003A*1		S774881*2		S774823A*1	
	ID FROM REPORT -->	041W030101		041M030201		041M030701		041M160301		041M18B101		041M330101	
	SAMPLE DATE ----->	08/26/97		08/27/97		08/27/97		09/04/97		08/29/97		08/27/97	
	DATE EXTRACTED -->	08/29/97		09/05/97		09/05/97		09/10/97		09/05/97		09/05/97	
	DATE ANALYZED --->	09/08/97		09/11/97		09/10/97		09/12/97		09/12/97		09/12/97	
	MATRIX ---------->	Water		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN12	VAL	PEN13	VAL	PEN12	VAL	PEN12	VAL
319-84-6	alpha-BHC	0.05	U	8.5	U	3.6	U	4.5	U	3.5	U	2.9	U
319-85-7	beta-BHC	0.05	U	8.5	U	3.6	U	4.5	U	3.5	U	2.9	U
319-86-8	delta-BHC	0.05	U	8.5	U	3.6	U	4.5	U	3.5	U	2.9	U
58-89-9	gamma-BHC (Lindane)	0.05	U	4.7	U	3.6	U	4.5	U	3.5	U	2.9	U
76-44-8	Heptachlor	0.05	U	8.5	U	3.6	U	4.5	U	3.5	U	2.9	U
309-00-2	Aldrin	0.05	U	8.5	U	3.6	U	4.5	U	3.5	U	2.9	U
1024-57-3	Heptachlor epoxide	0.05	U	8.5	U	3.6	U	4.5	U	3.5	U	2.9	U
959-98-8	Endosulfan I	0.05	U	8.5	U	3.6	U	4.5	U	3.5	U	2.9	U
60-57-1	Dieldrin	0.1	U	16.	U	4.1	U	8.7	U	6.7	U	5.7	U
72-55-9	4,4'-DDE	0.1	U	16.	U	11.		4.8	J	6.1	J	5.7	U
72-20-8	Endrin	0.1	U	2.8	J	7.	U	1.3	J	6.7	U	5.7	U
33213-65-9	Endosulfan II	0.1	U	16.	U	7.	U	8.7	U	6.7	U	5.7	U
72-54-8	4,4'-DDD	0.1	U	14.	J	49.		6.9	J	36.		5.7	U
1031-07-8	Endosulfan sulfate	0.1	U	16.	U	7.2	J	8.7	U	6.7	U	5.7	U
50-29-3	4,4'-DDT	0.1	U	3.7	J	9.3		16.		110.	D	5.7	U
72-43-5	Methoxychlor	0.5	U	6.4	U	36.	U	45.	U	35.	U	29.	U
53494-70-5	Endrin ketone	0.1	U	16.	U	7.	U	8.7	U	6.7	U	5.7	U
7421-93-4	Endrin aldehyde	0.1	U	16.	U	7.	U	8.7	U	6.7	U	5.7	U
5103-71-9	alpha-Chlordane	0.05	U	8.5	U	3.6	U	4.5	U	3.5	U	2.9	U
5103-74-2	gamma-Chlordane	0.05	U	8.5	U	0.74	J	4.5	U	3.5	U	2.9	U
8001-35-2	Toxaphene	5.	U	850.	U	360.	U	450.	U	350.	U	290.	U
12674-11-2	Aroclor-1016	1.	U	160.	U	70.	U	87.	U	67.	U	57.	U
11104-28-2	Aroclor-1221	2.	U	340.	U	140.	U	180.	U	140.	U	120.	U
11141-16-5	Aroclor-1232	1.	U	160.	U	70.	U	87.	U	67.	U	57.	U
53469-21-9	Aroclor-1242	1.	U	160.	U	70.	U	87.	U	67.	U	57.	U
12672-29-6	Aroclor-1248	1.	U	160.	U	70.	U	87.	U	67.	U	57.	U
11097-69-1	Aroclor-1254	1.	U	160.	U	70.	U	87.	U	67.	U	57.	U
11096-82-5	Aroclor-1260	1.	U	160.	U	70.	U	87.	U	67.	U	57.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

PEST													
	SAMPLE ID ------->	041-W-3301-01		041-M-3302-01		041-W-3302-01		041-M-5A04-01		041-W-5A04-01		041-M-5A05-01	
	ORIGINAL ID ----->	041W330101		041M330201		041W330201		041M5A0401		041W5A0401		041M5A0501	
	LAB SAMPLE ID --->	S774823*1		S774823A*2		S774823*2		S774839*1		S774785*2		S774839*2	
	ID FROM REPORT -->	041W330101		041M330201		041W330201		041M5A0401		041W5A0401		041M5A0501	
	SAMPLE DATE ----->	08/27/97		08/27/97		08/27/97		08/28/97		08/26/97		08/28/97	
	DATE EXTRACTED -->	08/29/97		09/05/97		08/29/97		09/05/97		08/29/97		09/05/97	
	DATE ANALYZED --->	09/08/97		09/11/97		09/08/97		09/11/97		09/17/97		09/12/97	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/L		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN12	VAL
319-84-6	alpha-BHC	0.05	U	3.6	U	0.05	U	2.6	U	0.05	U	54.	U
319-85-7	beta-BHC	0.05	U	3.6	U	0.05	U	2.6	U	0.05	U	54.	U
319-86-8	delta-BHC	0.05	U	3.6	U	0.05	U	2.6	U	0.05	U	54.	U
58-89-9	gamma-BHC (Lindane)	0.05	U	1.1	J	0.05	U	0.24	J	0.05	U	54.	U
76-44-8	Heptachlor	0.05	U	3.6	U	0.05	U	2.6	U	0.05	U	54.	U
309-00-2	Aldrin	0.05	U	3.6	U	0.05	U	2.6	U	0.05	U	54.	U
1024-57-3	Heptachlor epoxide	0.05	U	3.6	U	0.05	U	2.6	U	0.05	U	54.	U
959-98-8	Endosulfan I	0.05	U	3.6	U	0.05	U	5.2		0.05	U	54.	U
60-57-1	Dieldrin	0.004	J	0.74	U	0.1	U	2.9	U	0.1	U	100.	U
72-55-9	4,4'-DDE	0.1	U	7.	U	0.1	U	57.	D	0.1	U	100.	U
72-20-8	Endrin	0.1	U	7.	U	0.1	U	0.69	U	0.1	U	2.4	U
33213-65-9	Endosulfan II	0.1	U	7.	U	0.1	U	5.	U	0.1	U	100.	U
72-54-8	4,4'-DDD	0.1	U	2.	J	0.1	U	100.	D	0.1	U	100.	U
1031-07-8	Endosulfan sulfate	0.1	U	7.	U	0.1	U	2.3	J	0.1	U	100.	U
50-29-3	4,4'-DDT	0.1	U	7.	U	0.1	U	7.2		0.1	U	100.	U
72-43-5	Methoxychlor	0.5	U	2.	U	0.5	U	1.1	U	0.5	U	540.	U
53494-70-5	Endrin ketone	0.1	U	7.	U	0.1	U	5.	U	0.1	U	100.	U
7421-93-4	Endrin aldehyde	0.1	U	7.	U	0.1	U	0.56	U	0.1	U	100.	U
5103-71-9	alpha-Chlordane	0.05	U	3.6	U	0.05	U	4.5		0.05	U	54.	U
5103-74-2	gamma-Chlordane	0.05	U	3.6	U	0.05	U	7.9	J	0.05	U	54.	U
8001-35-2	Toxaphene	5.	U	360.	U	5.	U	260.	U	5.	U	5400.	U
12674-11-2	Aroclor-1016	1.	U	70.	U	1.	U	50.	U	1.	U	1000.	U
11104-28-2	Aroclor-1221	2.	U	140.	U	2.	U	100.	U	2.	U	2100.	U
11141-16-5	Aroclor-1232	1.	U	70.	U	1.	U	50.	U	1.	U	1000.	U
53469-21-9	Aroclor-1242	1.	U	70.	U	1.	U	50.	U	1.	U	1000.	U
12672-29-6	Aroclor-1248	1.	U	70.	U	1.	U	50.	U	1.	U	1000.	U
11097-69-1	Aroclor-1254	1.	U	70.	U	1.	U	50.	U	1.	U	1000.	U
11096-82-5	Aroclor-1260	1.	U	70.	U	1.	U	50.	U	1.	U	1000.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

PEST													
	SAMPLE ID ------->	041-W-5A05-01		041-M-5A06-01		041-W-5A06-01		041-R-5A06-01		041-W-6401-01		041-M-6404-01	
	ORIGINAL ID ----->	041W5A0501		041M5A0601		041W5A0601		041R5A0601		041W640101		041M640401	
	LAB SAMPLE ID --->	S774785*3		S774839*3		S774785*4		S774785*5		S775003*2		S775003A*3	
	ID FROM REPORT -->	041W5A0501		041M5A0601		041W5A0601		041R5A0601		041W640101		041M640401	
	SAMPLE DATE ----->	08/26/97		08/28/97		08/26/97		08/26/97		09/04/97		09/04/97	
	DATE EXTRACTED -->	08/29/97		09/05/97		08/29/97		08/29/97		09/10/97		09/10/97	
	DATE ANALYZED --->	09/12/97		09/11/97		09/06/97		09/12/97		09/12/97		09/17/97	
	MATRIX ---------->	Water		Sediment		Water		Water		Water		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/L		UG/L		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN11	VAL	PEN14	VAL	PEN13	VAL
319-84-6	alpha-BHC	0.05	U	2.8	U	0.05	U	0.0059	U	0.05	U	14.	U
319-85-7	beta-BHC	0.0062	U	2.8	U	0.05	U	0.05	U	0.0072	J	14.	U
319-86-8	delta-BHC	0.05	U	2.8	U	0.05	U	0.05	U	0.05	U	0.69	NJ
58-89-9	gamma-BHC (Lindane)	0.0047	U	2.8	U	0.05	U	0.05	U	0.0025	U	14.	U
76-44-8	Heptachlor	0.05	U	2.8	U	0.05	U	0.05	U	0.05	U	14.	U
309-00-2	Aldrin	0.05	U	2.8	U	0.05	U	0.05	U	0.05	U	1.3	U
1024-57-3	Heptachlor epoxide	0.05	U	2.8	U	0.05	U	0.05	U	0.05	U	14.	U
959-98-8	Endosulfan I	0.05	U	0.3	U	0.05	U	0.05	U	0.05	U	2.4	J
60-57-1	Dieldrin	0.0028	U	1.4	J	0.1	U	0.1	U	0.1	U	20.	J
72-55-9	4,4'-DDE	0.1	U	3.6	J	0.1	U	0.1	U	0.1	U	89.	
72-20-8	Endrin	0.1	U	1.1	J	0.1	U	0.1	U	0.1	U	26.	U
33213-65-9	Endosulfan II	0.1	U	5.4	U	0.1	U	0.1	U	0.1	U	26.	U
72-54-8	4,4'-DDD	0.1	U	1.3	J	0.1	U	0.1	U	0.1	U	89.	
1031-07-8	Endosulfan sulfate	0.1	U	0.66	J	0.1	U	0.1	U	0.1	U	26.	U
50-29-3	4,4'-DDT	0.1	U	3.2	J	0.1	U	0.1	U	0.1	U	18.	J
72-43-5	Methoxychlor	0.5	U	0.66	U	0.5	U	0.5	U	0.5	U	140.	U
53494-70-5	Endrin ketone	0.1	U	5.4	U	0.1	U	0.1	U	0.1	U	26.	U
7421-93-4	Endrin aldehyde	0.1	U	5.4	U	0.1	U	0.1	U	0.1	U	26.	U
5103-71-9	alpha-Chlordane	0.05	U	0.26	U	0.05	U	0.05	U	0.05	U	3.7	J
5103-74-2	gamma-Chlordane	0.05	U	0.14	U	0.0073	U	0.05	U	0.05	U	16.	U
8001-35-2	Toxaphene	5.	U	280.	U	5.	U	5.	U	5.	U	1400.	U
12674-11-2	Aroclor-1016	1.	U	54.	U	1.	U	1.	U	1.	U	260.	U
11104-28-2	Aroclor-1221	2.	U	110.	U	2.	U	2.	U	2.	U	540.	U
11141-16-5	Aroclor-1232	1.	U	54.	U	1.	U	1.	U	1.	U	260.	U
53469-21-9	Aroclor-1242	1.	U	54.	U	1.	U	1.	U	1.	U	260.	U
12672-29-6	Aroclor-1248	1.	U	54.	U	1.	U	1.	U	1.	U	260.	U
11097-69-1	Aroclor-1254	1.	U	54.	U	1.	U	1.	U	1.	U	260.	U
11096-82-5	Aroclor-1260	1.	U	54.	U	1.	U	1.	U	1.	U	300.	

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

PEST													
	SAMPLE ID ------->	041-M-6405-01		041-W-6405-01		041-R-6405-01		041-M-6406-01		041-M-7501-01		041-N-7501-01	
	ORIGINAL ID ----->	041M640501		041W640501		041R640501		041M640601		041M750101		041N750101	
	LAB SAMPLE ID --->	S775003A*2		S775003*1		S775003*3		S774999*2		S774839*4		S774839*6	
	ID FROM REPORT -->	041M640501		041W640501		041R640501		041M640601		041M750101		041N750101	
	SAMPLE DATE ----->	09/04/97		09/04/97		09/04/97		09/03/97		08/28/97		08/28/97	
	DATE EXTRACTED -->	09/10/97		09/10/97		09/10/97		09/10/97		09/05/97		09/05/97	
	DATE ANALYZED --->	09/17/97		09/12/97		09/12/97		09/17/97		09/10/97		09/11/97	
	MATRIX ---------->	Sediment		Water		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/L		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN13	VAL	PEN14	VAL	PEN14	VAL	PEN13	VAL	PEN12	VAL	PEN12	VAL
319-84-6	alpha-BHC	8.9	U	0.05	U	0.05	U	5.7	U	2.8	U	2.8	U
319-85-7	beta-BHC	8.9	U	0.0062	U	0.017	J	5.7	U	2.8	U	2.8	U
319-86-8	delta-BHC	8.9	U	0.05	U	0.05	U	0.94	NJ	2.8	U	2.8	U
58-89-9	gamma-BHC (Lindane)	8.9	U	0.0039	U	0.0035	U	0.95	U	2.5	J	2.1	J
76-44-8	Heptachlor	8.9	U	0.05	U	0.05	U	5.7	U	2.8	U	2.8	U
309-00-2	Aldrin	0.91	U	0.05	U	0.05	U	1.7	U	2.8	U	2.8	U
1024-57-3	Heptachlor epoxide	1.9	U	0.05	U	0.05	U	0.98	U	2.8	U	2.8	U
959-98-8	Endosulfan I	0.86	U	0.05	U	0.05	U	1.3	J	2.8	U	2.8	U
60-57-1	Dieldrin	17.	J	0.1	U	0.1	U	7.7	J	0.57	U	0.56	U
72-55-9	4,4'-DDE	33.		0.1	U	0.1	U	44.		5.7		6.4	
72-20-8	Endrin	17.	U	0.1	U	0.1	U	11.	U	5.5	U	5.4	U
33213-65-9	Endosulfan II	17.	U	0.1	U	0.1	U	11.	U	5.5	U	5.4	U
72-54-8	4,4'-DDD	30.		0.1	U	0.1	U	53.		8.3		10.	
1031-07-8	Endosulfan sulfate	17.	U	0.1	U	0.1	U	11.	U	5.5	U	5.4	U
50-29-3	4,4'-DDT	7.7	U	0.1	U	0.1	U	19.		2.	J	1.5	J
72-43-5	Methoxychlor	89.	U	0.5	U	0.5	U	57.	U	3.7	U	1.5	U
53494-70-5	Endrin ketone	17.	U	0.1	U	0.1	U	11.	U	5.5	U	5.4	U
7421-93-4	Endrin aldehyde	17.	U	0.1	U	0.1	U	11.	U	0.47	U	5.4	U
5103-71-9	alpha-Chlordane	2.9	J	0.05	U	0.05	U	2.4	U	2.8	U	2.8	U
5103-74-2	gamma-Chlordane	3.5	U	0.05	U	0.05	U	3.6	U	0.3	U	0.41	U
8001-35-2	Toxaphene	890.	U	5.	U	5.	U	570.	U	280.	U	280.	U
12674-11-2	Aroclor-1016	170.	U	1.	U	1.	U	110.	U	55.	U	54.	U
11104-28-2	Aroclor-1221	350.	U	2.	U	2.	U	220.	U	110.	U	110.	U
11141-16-5	Aroclor-1232	170.	U	1.	U	1.	U	110.	U	55.	U	54.	U
53469-21-9	Aroclor-1242	170.	U	1.	U	1.	U	110.	U	55.	U	54.	U
12672-29-6	Aroclor-1248	170.	U	1.	U	1.	U	110.	U	55.	U	54.	U
11097-69-1	Aroclor-1254	170.	U	1.	U	1.	U	110.	U	55.	U	54.	U
11096-82-5	Aroclor-1260	280.		1.	U	1.	U	180.		55.	U	54.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

PEST			
	SAMPLE ID ------->	041-W-7501-01	
	ORIGINAL ID ----->	041W750101	
	LAB SAMPLE ID --->	S774785*6	
	ID FROM REPORT -->	041W750101	
	SAMPLE DATE ----->	08/26/97	
	DATE EXTRACTED -->	08/29/97	
	DATE ANALYZED --->	09/12/97	
	MATRIX ---------->	Water	
	UNITS ---------->	UG/L	

CAS #	Parameter	PEN11	VAL
319-84-6	alpha-BHC	0.05	UR
319-85-7	beta-BHC	0.05	UR
319-86-8	delta-BHC	0.05	UR
58-89-9	gamma-BHC (Lindane)	0.05	UR
76-44-8	Heptachlor	0.05	UR
309-00-2	Aldrin	0.05	UR
1024-57-3	Heptachlor epoxide	0.05	UR
959-98-8	Endosulfan I	0.05	UR
60-57-1	Dieldrin	0.0031	J
72-55-9	4,4'-DDE	0.0029	UR
72-20-8	Endrin	0.1	UR
33213-65-9	Endosulfan II	0.1	UR
72-54-8	4,4'-DDD	0.1	UR
1031-07-8	Endosulfan sulfate	0.1	UR
50-29-3	4,4'-DDT	0.1	UR
72-43-5	Methoxychlor	0.5	UR
53494-70-5	Endrin ketone	0.1	UR
7421-93-4	Endrin aldehyde	0.1	UR
5103-71-9	alpha-Chlordane	0.05	UR
5103-74-2	gamma-Chlordane	0.05	UR
8001-35-2	Toxaphene	5.	UR
12674-11-2	Aroclor-1016	1.	UR
11104-28-2	Aroclor-1221	2.	UR
11141-16-5	Aroclor-1232	1.	UR
53469-21-9	Aroclor-1242	1.	UR
12672-29-6	Aroclor-1248	1.	UR
11097-69-1	Aroclor-1254	1.	UR
11096-82-5	Aroclor-1260	1.	UR

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

SVOA															
	SAMPLE ID ------->	041-W-0301-01		041-M-0302-01		041-M-0307-01		041-M-1603-01		041-M-18B1-01		041-M-3301-01	
	ORIGINAL ID ----->	041W030101		041M030201		041M030701		041M160301		041M18B101		041M330101	
	LAB SAMPLE ID --->	S774785*1		S774823A*3		S774823A*4		S775003A*1		S774881*2		S774823A*1	
	ID FROM REPORT -->	041W030101		041M030201		G41M030701		041M160301		041M18B101		041M330101	
	SAMPLE DATE ----->	08/26/97		08/27/97		08/27/97		09/04/97		08/29/97		08/27/97	
	DATE EXTRACTED -->	08/29/97		09/05/97		09/05/97		09/10/97		09/05/97		09/05/97	
	DATE ANALYZED --->	09/03/97		09/09/97		09/09/97		09/11/97		09/09/97		09/08/97	
	MATRIX ---------->	Water		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN12	VAL	PEN13	VAL	PEN12	VAL	PEN12	VAL
108-95-2	Phenol	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
111-44-4	bis(2-Chloroethyl)ether	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
95-57-8	2-Chlorophenol	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
541-73-1	1,3-Dichlorobenzene	10.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
106-46-7	1,4-Dichlorobenzene	10.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
95-50-1	1,2-Dichlorobenzene	10.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
95-48-7	2-Methylphenol (o-Cresol)	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	1600.	U	700.	U	870.	UJ	670.	U	570.	U
9999900-32-2	3-Methylphenol/4-Methylphenol	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
67-72-1	Hexachloroethane	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
98-95-3	Nitrobenzene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
78-59-1	Isophorone	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
88-75-5	2-Nitrophenol	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
105-67-9	2,4-Dimethylphenol	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
120-83-2	2,4-Dichlorophenol	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
91-20-3	Naphthalene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
106-47-8	4-Chloroaniline	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
87-68-3	Hexachlorobutadiene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
91-57-6	2-Methylnaphthalene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
77-47-4	Hexachlorocyclopentadiene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
88-06-2	2,4,6-Trichlorophenol	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
91-58-7	2-Chloronaphthalene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
88-74-4	2-Nitroaniline	20.	U	4000.	U	1700.	U	2100.	U	1600.	U	1400.	U
131-11-3	Dimethylphthalate	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
208-96-8	Acenaphthylene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
606-20-2	2,6-Dinitrotoluene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
99-09-2	3-Nitroaniline	20.	U	4000.	U	1700.	U	2100.	U	1600.	U	1400.	U
83-32-9	Acenaphthene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
51-28-5	2,4-Dinitrophenol	20.	UJ	4000.	U	1700.	U	2100.	U	1600.	U	1400.	U
100-02-7	4-Nitrophenol	20.	U	4000.	U	1700.	U	2100.	U	1600.	U	1400.	U
132-64-[illegible]	[illegible]nzofuran	5.	U	1600.		700.	U	870.	U	670.	U	570.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

SVOA													
	SAMPLE ID ------->	041-W-0301-01		041-M-0302-01		041-M-0307-01		041-M-1603-01		041-M-18B1-01		041-M-3301-01	
	ORIGINAL ID ----->	041W030101		041M030201		041M030701		041M160301		041M18B101		041M330101	
	LAB SAMPLE ID --->	S774785*1		S774823A*3		S774823A*4		S775003A*1		S774881*2		S774823A*1	
	ID FROM REPORT -->	041W030101		041M030201		041M030701		041M160301		041M18B101		041M330101	
	SAMPLE DATE ----->	08/26/97		08/27/97		08/27/97		09/04/97		08/29/97		08/27/97	
	DATE EXTRACTED -->	08/29/97		09/05/97		09/05/97		09/10/97		09/05/97		09/05/97	
	DATE ANALYZED --->	09/03/97		09/09/97		09/09/97		09/11/97		09/09/97		09/08/97	
	MATRIX ---------->	Water		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN12	VAL	PEN13	VAL	PEN12	VAL	PEN12	VAL
121-14-2	2,4-Dinitrotoluene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
84-66-2	Diethylphthalate	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
7005-72-3	4-Chlorophenylphenyl ether	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
86-73-7	Fluorene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
100-01-6	4-Nitroaniline	20.	U	4000.	U	1700.	U	2100.	U	1600.	U	1400.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	UJ	4000.	U	1700.	U	2100.	U	1600.	U	1400.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
118-74-1	Hexachlorobenzene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
87-86-5	Pentachlorophenol	20.	U	4000.	U	1700.	U	2100.	U	1600.	U	1400.	U
85-01-8	Phenanthrene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
120-12-7	Anthracene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
86-74-8	Carbazole	10.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
84-74-2	Di-n-butylphthalate	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
206-44-0	Fluoranthene	5.	U	1600.	U	700.	U	32.	J	670.	U	570.	U
129-00-0	Pyrene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
85-68-7	Butylbenzylphthalate	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U	3300.	U	1400.	U	1700.	UJ	1300.	U	1100.	U
56-55-3	Benzo(a)anthracene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
218-01-9	Chrysene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	1600.	U	500.	J	870.	U	670.	U	570.	U
117-84-0	Di-n-octylphthalate	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
205-99-2	Benzo(b)fluoranthene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
207-08-9	Benzo(k)fluoranthene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
50-32-8	Benzo(a)pyrene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
53-70-3	Dibenz(a,h)anthracene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U
191-24-2	Benzo(g,h,i)perylene	5.	U	1600.	U	700.	U	870.	U	670.	U	570.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

SVOA													
	SAMPLE ID ------->	041-W-3301-01		041-M-3302-01		041-W-3302-01		041-M-5A04-01		041-W-5A04-01		041-M-5A05-01	
	ORIGINAL ID ----->	041W330101		041M330201		041W330201		041M5A0401		041W5A0401		041M5A0501	
	LAB SAMPLE ID --->	S774823*1		S774823A*2		S774823*2		S774839*1		S774785*2		S774839*2	
	ID FROM REPORT -->	041W330101		041M330201		041W330201		041M5A0401		041W5A0401		041M5A0501	
	SAMPLE DATE ----->	08/27/97		08/27/97		08/27/97		08/28/97		08/26/97		08/28/97	
	DATE EXTRACTED -->	08/29/97		09/05/97		08/29/97		09/05/97		08/29/97		09/05/97	
	DATE ANALYZED --->	09/03/97		09/08/97		09/03/97		09/09/97		09/03/97		09/09/97	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/L		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN12	VAL
108-95-2	Phenol	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
111-44-4	bis(2-Chloroethyl)ether	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
95-57-8	2-Chlorophenol	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
541-73-1	1,3-Dichlorobenzene	10.	U	700.	U	10.	U	500.	U	10.	U	520.	U
106-46-7	1,4-Dichlorobenzene	10.	U	700.	U	10.	U	500.	U	10.	U	520.	U
95-50-1	1,2-Dichlorobenzene	10.	U	700.	U	10.	U	500.	U	10.	U	520.	U
95-48-7	2-Methylphenol (o-Cresol)	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
9999900-32-2	3-Methylphenol/4-Methylphenol	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
67-72-1	Hexachloroethane	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
98-95-3	Nitrobenzene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
78-59-1	Isophorone	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
88-75-5	2-Nitrophenol	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
105-67-9	2,4-Dimethylphenol	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
120-83-2	2,4-Dichlorophenol	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U	700.	U	10.	U	500.	U	10.	U	520.	U
91-20-3	Naphthalene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
106-47-8	4-Chloroaniline	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
87-68-3	Hexachlorobutadiene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
91-57-6	2-Methylnaphthalene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
77-47-4	Hexachlorocyclopentadiene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
88-06-2	2,4,6-Trichlorophenol	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	700.	U	20.	U	500.	U	20.	U	520.	U
91-58-7	2-Chloronaphthalene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
88-74-4	2-Nitroaniline	20.	U	1700.	U	20.	U	1200.	U	20.	U	1300.	U
131-11-3	Dimethylphthalate	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
208-96-8	Acenaphthylene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
606-20-2	2,6-Dinitrotoluene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
99-09-2	3-Nitroaniline	20.	U	1700.	U	20.	U	1200.	U	20.	U	1300.	U
83-32-9	Acenaphthene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
51-28-5	2,4-Dinitrophenol	20.	UJ	1700.	U	20.	UJ	1200.	U	20.	UJ	1300.	U
100-02-7	4-Nitrophenol	20.	U	1700.	U	20.	U	1200.	U	20.	U	1300.	U
132-64-9	enzofuran	5.	U	700.		5.	U	500.	U	5.	U	520.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

SVOA													
	SAMPLE ID ------->	041-W-3301-01		041-M-3302-01		041-W-3302-01		041-M-5A04-01		041-W-5A04-01		041-M-5A05-01	
	ORIGINAL ID ----->	041W330101		041M330201		041W330201		041M5A0401		041W5A0401		041M5A0501	
	LAB SAMPLE ID --->	S774823*1		S774823A*2		S774823*2		S774839*1		S774785*2		S774839*2	
	ID FROM REPORT -->	041W330101		041M330201		041W330201		041M5A0401		041W5A0401		041M5A0501	
	SAMPLE DATE ----->	08/27/97		08/27/97		08/27/97		08/28/97		08/26/97		08/28/97	
	DATE EXTRACTED -->	08/29/97		09/05/97		08/29/97		09/05/97		08/29/97		09/05/97	
	DATE ANALYZED --->	09/03/97		09/08/97		09/03/97		09/09/97		09/03/97		09/09/97	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/L		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN12	VAL
121-14-2	2,4-Dinitrotoluene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
84-66-2	Diethylphthalate	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
7005-72-3	4-Chlorophenylphenyl ether	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
86-73-7	Fluorene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
100-01-6	4-Nitroaniline	20.	U	1700.	U	20.	U	1200.	U	20.	U	1300.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	UJ	1700.	U	20.	UJ	1200.	U	20.	UJ	1300.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
118-74-1	Hexachlorobenzene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
87-86-5	Pentachlorophenol	20.	U	1700.	U	20.	U	1200.	U	20.	U	1300.	U
85-01-8	Phenanthrene	5.	U	700.	U	5.	U	97.	J	5.	U	28.	J
120-12-7	Anthracene	5.	U	700.	U	5.	U	16.	J	5.	U	520.	U
86-74-8	Carbazole	10.	U	700.	U	10.	U	500.	U	10.	U	520.	U
84-74-2	Di-n-butylphthalate	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
206-44-0	Fluoranthene	5.	U	700.	U	5.	U	260.	J	5.	U	72.	J
129-00-0	Pyrene	5.	U	18.	J	5.	U	300.	J	5.	U	87.	J
85-68-7	Butylbenzylphthalate	5.	U	700.	U	5.	U	500.	U	5.	U	140.	J
91-94-1	3,3'-Dichlorobenzidine	20.	U	1400.	U	20.	U	1000.	U	20.	U	1000.	U
56-55-3	Benzo(a)anthracene	5.	U	700.	U	5.	U	100.	J	5.	U	41.	J
218-01-9	Chrysene	5.	U	700.	U	5.	U	170.	J	5.	U	58.	J
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	700.	U	5.	U	210.	J	5.	U	950.	
117-84-0	Di-n-octylphthalate	5.	U	700.	U	5.	U	500.	U	5.	U	290.	J
205-99-2	Benzo(b)fluoranthene	5.	U	700.	U	5.	U	120.	J	5.	U	62.	J
207-08-9	Benzo(k)fluoranthene	5.	U	700.	U	5.	U	110.	J	5.	U	520.	U
50-32-8	Benzo(a)pyrene	5.	U	700.	U	5.	U	140.	J	5.	U	52.	J
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
53-70-3	Dibenz(a,h)anthracene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U
191-24-2	Benzo(g,h,i)perylene	5.	U	700.	U	5.	U	500.	U	5.	U	520.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

SVOA													
	SAMPLE ID ------->	041-W-5A05-01		041-M-5A06-01		041-W-5A06-01		041-R-5A06-01		041-W-6401-01		041-M-6404-01	
	ORIGINAL ID ----->	041W5A0501		041M5A0601		041W5A0601		041R5A0601		041W640101		041M640401	
	LAB SAMPLE ID --->	S774785*3		S774839*3		S774785*4		S774785*5		S775003*2		S775003A*3	
	ID FROM REPORT -->	041W5A0501		041M5A0601		041W5A0601		041R5A0601		041W640101		041M640401	
	SAMPLE DATE ----->	08/26/97		08/28/97		08/26/97		08/26/97		09/04/97		09/04/97	
	DATE EXTRACTED -->	08/29/97		09/05/97		08/29/97		08/29/97		09/10/97		09/10/97	
	DATE ANALYZED --->	09/03/97		09/09/97		09/03/97		09/03/97		09/12/97		09/13/97	
	MATRIX ---------->	Water		Sediment		Water		Water		Water		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/L		UG/L		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN11	VAL	PEN14	VAL	PEN13	VAL
108-95-2	Phenol	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
111-44-4	bis(2-Chloroethyl)ether	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
95-57-8	2-Chlorophenol	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
541-73-1	1,3-Dichlorobenzene	10.	U	540.	U	10.	U	10.	U	10.	U	1300.	U
106-46-7	1,4-Dichlorobenzene	10.	U	540.	U	10.	U	10.	U	10.	U	1300.	U
95-50-1	1,2-Dichlorobenzene	10.	U	540.	U	10.	U	10.	U	10.	U	1300.	U
95-48-7	2-Methylphenol (o-Cresol)	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
9999900-32-2	3-Methylphenol/4-Methylphenol	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
67-72-1	Hexachloroethane	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
98-95-3	Nitrobenzene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
78-59-1	Isophorone	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
88-75-5	2-Nitrophenol	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
105-67-9	2,4-Dimethylphenol	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
120-83-2	2,4-Dichlorophenol	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U	540.	U	10.	U	10.	U	10.	U	1300.	U
91-20-3	Naphthalene	5.	U	540.	U	5.	U	5.	U	5.	U	110.	J
106-47-8	4-Chloroaniline	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
87-68-3	Hexachlorobutadiene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
59-50-7	4-Chloro-3-methylphenol	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
91-57-6	2-Methylnaphthalene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
77-47-4	Hexachlorocyclopentadiene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
88-06-2	2,4,6-Trichlorophenol	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
95-95-4	2,4,5-Trichlorophenol	20.	U	540.	U	20.	U	20.	U	20.	U	1300.	U
91-58-7	2-Chloronaphthalene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
88-74-4	2-Nitroaniline	20.	U	1300.	U	20.	U	20.	U	20.	U	3200.	U
131-11-3	Dimethylphthalate	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
208-96-8	Acenaphthylene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
606-20-2	2,6-Dinitrotoluene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
99-09-2	3-Nitroaniline	20.	U	1300.	U	20.	U	20.	U	20.	U	3200.	U
83-32-9	Acenaphthene	5.	U	540.	U	5.	U	5.	U	5.	U	260.	J
51-28-5	2,4-Dinitrophenol	20.	UJ	1300.	U	20.	UJ	20.	UJ	20.	U	3200.	U
100-02-7	4-Nitrophenol	20.	U	1300.	U	20.	U	20.	U	20.	U	3200.	U
132-64-9	enzofuran	5.	U	540.		5.	U	5.	U	5.	U	1300.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

SVOA															
	SAMPLE ID ------->	041-W-5A05-01		041-M-5A06-01		041-W-5A06-01		041-R-5A06-01		041-W-6401-01		041-M-6404-01	
	ORIGINAL ID ----->	041W5A0501		041M5A0601		041W5A0601		041R5A0601		041W640101		041M640401	
	LAB SAMPLE ID --->	S774785*3		S774839*3		S774785*4		S774785*5		S775003*2		S775003A*3	
	ID FROM REPORT -->	041W5A0501		041M5A0601		041W5A0601		041R5A0601		041W640101		041M640401	
	SAMPLE DATE ----->	08/26/97		08/28/97		08/26/97		08/26/97		09/04/97		09/04/97	
	DATE EXTRACTED -->	08/29/97		09/05/97		08/29/97		08/29/97		09/10/97		09/10/97	
	DATE ANALYZED --->	09/03/97		09/09/97		09/03/97		09/03/97		09/12/97		09/13/97	
	MATRIX ---------->	Water		Sediment		Water		Water		Water		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/L		UG/L		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN11	VAL	PEN14	VAL	PEN13	VAL
121-14-2	2,4-Dinitrotoluene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
84-66-2	Diethylphthalate	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
7005-72-3	4-Chlorophenylphenyl ether	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
86-73-7	Fluorene	5.	U	540.	U	5.	U	5.	U	5.	U	210.	J
100-01-6	4-Nitroaniline	20.	U	1300.	U	20.	U	20.	U	20.	U	3200.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	UJ	1300.	U	20.	UJ	20.	UJ	20.	U	3200.	U
86-30-6	N-Nitrosodiphenylamine	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
101-55-3	4-Bromophenyl-phenylether	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
118-74-1	Hexachlorobenzene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
87-86-5	Pentachlorophenol	20.	U	1300.	U	20.	U	20.	U	20.	U	3200.	U
85-01-8	Phenanthrene	5.	U	540.	U	5.	U	5.	U	5.	U	1800.	
120-12-7	Anthracene	5.	U	540.	U	5.	U	5.	U	5.	U	310.	J
86-74-8	Carbazole	10.	U	540.	U	10.	U	10.	U	10.	U	320.	J
84-74-2	Di-n-butylphthalate	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	U
206-44-0	Fluoranthene	5.	U	16.	J	5.	U	5.	U	5.	U	2700.	
129-00-0	Pyrene	5.	U	540.	U	5.	U	5.	U	5.	U	3100.	J
85-68-7	Butylbenzylphthalate	5.	U	540.	U	5.	U	5.	U	5.	U	710.	J
91-94-1	3,3'-Dichlorobenzidine	20.	U	1100.	U	20.	U	20.	U	20.	U	2600.	U
56-55-3	Benzo(a)anthracene	5.	U	540.	U	5.	U	5.	U	5.	U	1100.	J
218-01-9	Chrysene	5.	U	540.	U	5.	U	5.	U	5.	U	1200.	J
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U	540.	U	5.	U	5.	U	5.	U	3300.	
117-84-0	Di-n-octylphthalate	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	UJ
205-99-2	Benzo(b)fluoranthene	5.	U	540.	U	5.	U	5.	U	5.	U	1100.	J
207-08-9	Benzo(k)fluoranthene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	J
50-32-8	Benzo(a)pyrene	5.	U	540.	U	5.	U	5.	U	5.	U	1000.	J
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U	540.	U	5.	U	5.	U	5.	U	680.	J
53-70-3	Dibenz(a,h)anthracene	5.	U	540.	U	5.	U	5.	U	5.	U	1300.	UJ
191-24-2	Benzo(g,h,i)perylene	5.	U	540.	U	5.	U	5.	U	5.	U	470.	J

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

SVOA													
	SAMPLE ID ------->	041-M-6405-01		041-W-6405-01		041-R-6405-01		041-M-6406-01		041-M-7501-01		041-N-7501-01	
	ORIGINAL ID ----->	041M640501		041W640501		041R640501		041M640601		041M750101		041N750101	
	LAB SAMPLE ID --->	S775003A*2		S775003*1		S775003*3		S774999*2		S774839*4		S774839*6	
	ID FROM REPORT -->	041M640501		041W640501		041R640501		041M640601		041M750101		041N750101	
	SAMPLE DATE ----->	09/04/97		09/04/97		09/04/97		09/03/97		08/28/97		08/28/97	
	DATE EXTRACTED -->	09/10/97		09/10/97		09/10/97		09/10/97		09/05/97		09/05/97	
	DATE ANALYZED --->	09/13/97		09/12/97		09/12/97		09/13/97		09/09/97		09/09/97	
	MATRIX ---------->	Sediment		Water		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/L		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN13	VAL	PEN14	VAL	PEN14	VAL	PEN13	VAL	PEN12	VAL	PEN12	VAL
108-95-2	Phenol	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
111-44-4	bis(2-Chloroethyl)ether	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
95-57-8	2-Chlorophenol	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
541-73-1	1,3-Dichlorobenzene	870.	U	10.	U	10.	U	1100.	U	550.	U	540.	U
106-46-7	1,4-Dichlorobenzene	870.	U	10.	U	10.	U	1100.	U	550.	U	540.	U
95-50-1	1,2-Dichlorobenzene	870.	U	10.	U	10.	U	1100.	U	550.	U	540.	U
95-48-7	2-Methylphenol (o-Cresol)	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
9999900-32-2	3-Methylphenol/4-Methylphenol	870.	U	5.	U	5.	U	1100.	U	22.	J	10.	J
621-64-7	N-Nitroso-di-n-propylamine	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
67-72-1	Hexachloroethane	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
98-95-3	Nitrobenzene	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
78-59-1	Isophorone	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
88-75-5	2-Nitrophenol	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
105-67-9	2,4-Dimethylphenol	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
120-83-2	2,4-Dichlorophenol	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
120-82-1	1,2,4-Trichlorobenzene	870.	U	10.	U	10.	U	1100.	U	550.	U	540.	U
91-20-3	Naphthalene	110.	J	5.	U	5.	U	310.	J	550.	U	540.	U
106-47-8	4-Chloroaniline	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
87-68-3	Hexachlorobutadiene	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
111-91-1	bis(2-Chloroethoxy)methane	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
59-50-7	4-Chloro-3-methylphenol	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
91-57-6	2-Methylnaphthalene	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
77-47-4	Hexachlorocyclopentadiene	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
88-06-2	2,4,6-Trichlorophenol	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
95-95-4	2,4,5-Trichlorophenol	870.	U	20.	U	20.	U	1100.	U	550.	U	540.	U
91-58-7	2-Chloronaphthalene	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
88-74-4	2-Nitroaniline	2100.	U	20.	U	20.	U	2700.	U	1300.	U	1300.	U
131-11-3	Dimethylphthalate	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
208-96-8	Acenaphthylene	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
606-20-2	2,6-Dinitrotoluene	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
99-09-2	3-Nitroaniline	2100.	U	20.	U	20.	U	2700.	U	1300.	U	1300.	U
83-32-9	Acenaphthene	310.	J	5.	U	5.	U	750.	J	550.	U	540.	U
51-28-5	2,4-Dinitrophenol	2100.	U	20.	U	20.	U	2700.	U	1300.	U	1300.	U
100-02-7	4-Nitrophenol	2100.	U	20.	U	20.	U	2700.	U	1300.	U	1300.	U
132-64-9	[illegible]enzofuran	130.	J	5.	[illegible]	5.	U	350.	J	550.	U	540.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

SVOA													
	SAMPLE ID ------->	041-M-6405-01		041-W-6405-01		041-R-6405-01		041-M-6406-01		041-M-7501-01		041-N-7501-01	
	ORIGINAL ID ----->	041M640501		041W640501		041R640501		041M640601		041M750101		041N750101	
	LAB SAMPLE ID --->	S775003A*2		S775003*1		S775003*3		S774999*2		S774839*4		S774839*6	
	ID FROM REPORT -->	041M640501		041W640501		041R640501		041M640601		041M750101		041N750101	
	SAMPLE DATE ----->	09/04/97		09/04/97		09/04/97		09/03/97		08/28/97		08/28/97	
	DATE EXTRACTED -->	09/10/97		09/10/97		09/10/97		09/10/97		09/05/97		09/05/97	
	DATE ANALYZED --->	09/13/97		09/12/97		09/12/97		09/13/97		09/09/97		09/09/97	
	MATRIX ---------->	Sediment		Water		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/L		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN13	VAL	PEN14	VAL	PEN14	VAL	PEN13	VAL	PEN12	VAL	PEN12	VAL
121-14-2	2,4-Dinitrotoluene	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
84-66-2	Diethylphthalate	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
7005-72-3	4-Chlorophenylphenyl ether	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
86-73-7	Fluorene	290.	J	5.	U	5.	U	750.	J	550.	U	540.	U
100-01-6	4-Nitroaniline	2100.	U	20.	U	20.	U	2700.	U	1300.	U	1300.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	2100.	U	20.	U	20.	U	2700.	U	1300.	U	1300.	U
86-30-6	N-Nitrosodiphenylamine	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
101-55-3	4-Bromophenyl-phenylether	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
118-74-1	Hexachlorobenzene	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
87-86-5	Pentachlorophenol	2100.	U	20.	U	20.	U	2700.	U	1300.	U	1300.	U
85-01-8	Phenanthrene	2000.		5.	U	5.	U	4300.		550.	U	540.	U
120-12-7	Anthracene	340.	J	5.	U	5.	U	1000.	J	550.	U	540.	U
86-74-8	Carbazole	350.	J	10.	U	10.	U	800.	J	550.	U	540.	U
84-74-2	Di-n-butylphthalate	870.	U	5.	U	5.	U	1100.	U	550.	U	540.	U
206-44-0	Fluoranthene	2800.		5.	U	5.	U	5000.		550.	U	540.	U
129-00-0	Pyrene	3000.	J	5.	U	5.	U	4800.	J	550.	U	540.	U
85-68-7	Butylbenzylphthalate	240.	J	5.	U	5.	U	330.	J	550.	U	540.	U
91-94-1	3,3'-Dichlorobenzidine	1700.	U	20.	U	20.	U	2200.	U	1100.	U	1100.	U
56-55-3	Benzo(a)anthracene	1300.		5.	U	5.	U	2100.		550.	U	540.	U
218-01-9	Chrysene	1300.		5.	U	5.	U	2100.		550.	U	540.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	2000.		5.	U	5.	U	3900.		550.	U	540.	U
117-84-0	Di-n-octylphthalate	870.	UJ	5.	U	5.	U	1100.	U	550.	U	540.	U
205-99-2	Benzo(b)fluoranthene	1400.	J	5.	U	5.	U	1800.		550.	U	540.	U
207-08-9	Benzo(k)fluoranthene	1300.	J	5.	U	5.	U	1900.		550.	U	540.	U
50-32-8	Benzo(a)pyrene	1200.	J	5.	U	5.	U	1700.		550.	U	540.	U
193-39-5	Indeno(1,2,3-cd)pyrene	820.	J	5.	U	5.	U	1000.	J	550.	U	540.	U
53-70-3	Dibenz(a,h)anthracene	870.	UJ	5.	U	5.	U	1100.	U	550.	U	540.	U
191-24-2	Benzo(g,h,i)perylene	880.	J	5.	U	5.	U	980.	J	550.	U	540.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

SVOA

SAMPLE ID -------->	041-W-7501-01
ORIGINAL ID ----->	041W750101
LAB SAMPLE ID --->	S774785*6
ID FROM REPORT -->	041W750101
SAMPLE DATE ----->	08/26/97
DATE EXTRACTED -->	08/29/97
DATE ANALYZED --->	09/03/97
MATRIX ---------->	Water
UNITS ---------->	UG/L

CAS #	Parameter	PEN11	VAL
108-95-2	Phenol	5.	U
111-44-4	bis(2-Chloroethyl)ether	5.	U
95-57-8	2-Chlorophenol	5.	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 (o-Cresol)	5.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.	U
9999900-32-2	3-Methylphenol/4-Methylphenol	5.	U
621-64-7	N-Nitroso-di-n-propylamine	5.	U
67-72-1	Hexachloroethane	5.	U
98-95-3	Nitrobenzene	5.	U
78-59-1	Isophorone	5.	U
88-75-5	2-Nitrophenol	5.	U
105-67-9	2,4-Dimethylphenol	5.	U
120-83-2	2,4-Dichlorophenol	5.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	5.	U
106-47-8	4-Chloroaniline	5.	U
87-68-3	Hexachlorobutadiene	5.	U
111-91-1	bis(2-Chloroethoxy)methane	5.	U
59-50-7	4-Chloro-3-methylphenol	5.	U
91-57-6	2-Methylnaphthalene	5.	U
77-47-4	Hexachlorocyclopentadiene	5.	U
88-06-2	2,4,6-Trichlorophenol	5.	U
95-95-4	2,4,5-Trichlorophenol	20.	U
91-58-7	2-Chloronaphthalene	5.	U
88-74-4	2-Nitroaniline	20.	U
131-11-3	Dimethylphthalate	5.	U
208-96-8	Acenaphthylene	5.	U
606-20-2	2,6-Dinitrotoluene	5.	U
99-09-2	3-Nitroaniline	20.	U
83-32-9	Acenaphthene	5.	U
51-28-5	2,4-Dinitrophenol	20.	UJ
100-02-7	4-Nitrophenol	20.	U
132-64-9	nzofuran	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

SVOA

SAMPLE ID -------->	041-W-7501-01
ORIGINAL ID ----->	041W750101
LAB SAMPLE ID --->	S774785*6
ID FROM REPORT -->	041W750101
SAMPLE DATE ----->	08/26/97
DATE EXTRACTED -->	08/29/97
DATE ANALYZED --->	09/03/97
MATRIX ---------->	Water
UNITS ---------->	UG/L

CAS #	Parameter	PEN11	VAL
121-14-2	2,4-Dinitrotoluene	5.	U
84-66-2	Diethylphthalate	5.	U
7005-72-3	4-Chlorophenylphenyl ether	5.	U
86-73-7	Fluorene	5.	U
100-01-6	4-Nitroaniline	20.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	20.	UJ
86-30-6	N-Nitrosodiphenylamine	5.	U
101-55-3	4-Bromophenyl-phenylether	5.	U
118-74-1	Hexachlorobenzene	5.	U
87-86-5	Pentachlorophenol	20.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	10.	U
84-74-2	Di-n-butylphthalate	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
85-68-7	Butylbenzylphthalate	5.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	5.	U
117-84-0	Di-n-octylphthalate	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenz(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

TOC													
	SAMPLE ID ------->	041-M-0302-01		041-M-0307-01		041-M-1603-01		041-M-18B1-01		041-M-3301-01		041-M-3302-01	
	ORIGINAL ID ----->	041M030201		041M030701		041M160301		041M18B101		041M330101		041M330201	
	LAB SAMPLE ID --->	S774823A*3		S774823A*4		S775003A*1		S774881*2		S774823A*1		S774823A*2	
	ID FROM REPORT -->	041M030201		041M030701		041M160301		041M18B101		041M330101		041M330201	
	SAMPLE DATE ----->	08/27/97		08/27/97		09/04/97		08/29/97		08/27/97		08/27/97	
	DATE EXTRACTED -->	09/09/97		09/09/97		09/12/97		09/09/97		09/09/97		09/09/97	
	DATE ANALYZED --->	09/09/97		09/09/97		09/12/97		09/09/97		09/09/97		09/09/97	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	PEN12	VAL	PEN12	VAL	PEN13	VAL	PEN12	VAL	PEN12	VAL	PEN12	VAL
9999900-01-4	Total Organic Carbon (TOC)	100000.		12000.		17000.		9000.		11000.		34000.	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

TOC													
	SAMPLE ID ------->	041-M-5A04-01		041-M-5A05-01		041-M-5A06-01		041-M-6404-01		041-M-6405-01		041-M-6406-01	
	ORIGINAL ID ----->	041M5A0401		041M5A0501		041M5A0601		041M640401		041M640501		041M640601	
	LAB SAMPLE ID --->	S774839*1		S774839*2		S774839*3		S775003A*3		S775003A*2		S774999*2	
	ID FROM REPORT -->	041M5A0401		041M5A0501		041M5A0601		041M640401		041M640501		041M640601	
	SAMPLE DATE ----->	08/28/97		08/28/97		08/28/97		09/04/97		09/04/97		09/03/97	
	DATE EXTRACTED -->	09/09/97		09/09/97		09/09/97		09/12/97		09/12/97		09/12/97	
	DATE ANALYZED --->	09/09/97		09/09/97		09/09/97		09/12/97		09/12/97		09/12/97	
	MATRIX ---------->	Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	PEN12	VAL	PEN12	VAL	PEN12	VAL	PEN13	VAL	PEN13	VAL	PEN13	VAL
9999900-01-4	Total Organic Carbon (TOC)	7000.		7400.		10000.		70000.		60000.		86000.	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

TOC							
	SAMPLE ID ------->	041-M-7501-01	041-N-7501-01				
	ORIGINAL ID ----->	041M750101	041N750101				
	LAB SAMPLE ID --->	S774839*4	S774839*6				
	ID FROM REPORT -->	041M750101	041N750101				
	SAMPLE DATE ----->	08/28/97	08/28/97				
	DATE EXTRACTED -->	09/09/97	09/09/97				
	DATE ANALYZED --->	09/09/97	09/09/97				
	MATRIX ---------->	Sediment	Sediment				
	UNITS ---------->	MG/KG	MG/KG				
CAS #	Parameter	PEN12 VAL	PEN12 VAL				
9999900-01-4	Total Organic Carbon (TOC)	41000.	43000.				

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

VOA													
	SAMPLE ID ------->	041-W-0301-01		041-M-0302-01 RE		041-M-0307-01		041-M-1603-01		041-M-1881-01		041-M-3301-01 RE	
	ORIGINAL ID ----->	041W030101		041M030201		041M030701		041M160301		041M188101		041M330101	
	LAB SAMPLE ID --->	S774785*1		S774823A*3*R		S774823A*4		S775003A*1		S774881*2		S774823A*1*R	
	ID FROM REPORT -->	041W030101		041M030201		041M030701		041M160301		041M188101		041M330101	
	SAMPLE DATE ----->	08/26/97		08/27/97		08/27/97		09/04/97		08/29/97		08/27/97	
	DATE ANALYZED --->	09/09/97		09/02/97		09/03/97		09/09/97		09/05/97		09/02/97	
	MATRIX ---------->	Water		Sediment		Sediment		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN12	VAL	PEN13	VAL	PEN12	VAL	PEN12	VAL
74-87-3	Chloromethane	1.	U	50.	U	21.	U	26.	U	20.	U	17.	U
75-01-4	Vinyl chloride	1.	U	50.	U	21.	U	26.	U	20.	U	17.	U
74-83-9	Bromomethane	1.	U	50.	U	21.	U	26.	U	20.	U	17.	U
75-00-3	Chloroethane	1.	U	50.	U	21.	U	26.	U	20.	U	17.	U
75-35-4	1,1-Dichloroethene	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
75-09-2	Methylene chloride	5.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
75-34-3	1,1-Dichloroethane	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
67-66-3	Chloroform	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
71-55-6	1,1,1-Trichloroethane	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
56-23-5	Carbon tetrachloride	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
71-43-2	Benzene	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
107-06-2	1,2-Dichloroethane	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
79-01-6	Trichloroethene	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
78-87-5	1,2-Dichloropropane	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
75-27-4	Bromodichloromethane	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
108-88-3	Toluene	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
79-00-5	1,1,2-Trichloroethane	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
127-18-4	Tetrachloroethene	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
124-48-1	Dibromochloromethane	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
108-90-7	Chlorobenzene	0.82	J	25.	U	11.	U	13.	U	10.	U	8.6	U
100-41-4	Ethylbenzene	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
100-42-5	Styrene	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
75-25-2	Bromoform	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
67-64-1	Acetone	28.		770.	J	240.		26.	U	53.		17.	U
75-15-0	Carbon disulfide	1.	U	17.	J	11.	U	13.	U	10.	U	8.6	U
78-93-3	2-Butanone (MEK)	10.	U	120.		38.		26.	U	20.	U	17.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U	50.	U	21.	U	26.	U	20.	U	17.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
10061-02-6	trans-1,3-Dichloropropene	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
591-78-6	2-Hexanone	10.	U	50.	U	21.	U	26.	U	20.	U	17.	U
1330-20-7	Xylene (Total)	2.	U	25.	U	11.	U	13.	U	10.	U	8.6	U
540-59-0	1,2-Dichloroethene (total)	1.	U	25.	U	11.	U	13.	U	10.	U	8.6	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

VOA													
	SAMPLE ID ------->	041-W-3301-01		041-M-3302-01		041-W-3302-01		041-M-5A04-01		041-W-5A04-01		041-M-5A05-01	
	ORIGINAL ID ----->	041W330101		041M330201		041W330201		041M5A0401		041W5A0401		041M5A0501	
	LAB SAMPLE ID --->	S774823*1		S774823A*2		S774823*2		S774839*1		S774785*2		S774839*2	
	ID FROM REPORT -->	041W330101		041M330201		041W330201		041M5A0401		041W5A0401		041M5A0501	
	SAMPLE DATE ----->	08/27/97		08/27/97		08/27/97		08/28/97		08/26/97		08/28/97	
	DATE ANALYZED --->	09/09/97		09/03/97		09/09/97		09/03/97		09/09/97		09/03/97	
	MATRIX ---------->	Water		Sediment		Water		Sediment		Water		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/KG		UG/L		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN12	VAL
74-87-3	Chloromethane	1.	U	21.	U	1.	U	15.	U	1.	U	16.	U
75-01-4	Vinyl chloride	1.	U	21.	U	1.	U	15.	U	1.	U	16.	U
74-83-9	Bromomethane	1.	U	21.	U	1.	U	15.	U	1.	U	16.	U
75-00-3	Chloroethane	1.	U	21.	U	1.	U	15.	U	1.	U	16.	U
75-35-4	1,1-Dichloroethene	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
75-09-2	Methylene chloride	5.	U	11.	U	5.	U	7.6	U	5.	U	7.9	U
75-34-3	1,1-Dichloroethane	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
67-66-3	Chloroform	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
71-55-6	1,1,1-Trichloroethane	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
56-23-5	Carbon tetrachloride	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
71-43-2	Benzene	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
107-06-2	1,2-Dichloroethane	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
79-01-6	Trichloroethene	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
78-87-5	1,2-Dichloropropane	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
75-27-4	Bromodichloromethane	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
108-88-3	Toluene	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
79-00-5	1,1,2-Trichloroethane	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
127-18-4	Tetrachloroethene	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
124-48-1	Dibromochloromethane	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
108-90-7	Chlorobenzene	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
100-41-4	Ethylbenzene	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
100-42-5	Styrene	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
75-25-2	Bromoform	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
67-64-1	Acetone	13.	J	21.	U	25.	U	15.	U	25.	U	16.	U
75-15-0	Carbon disulfide	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
78-93-3	2-Butanone (MEK)	10.	U	21.	U	10.	U	15.	U	10.	U	16.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U	21.	U	10.	U	15.	U	10.	U	16.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
10061-02-6	trans-1,3-Dichloropropene	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U
591-78-6	2-Hexanone	10.	U	21.	U	10.	U	15.	U	10.	U	16.	U
1330-20-7	Xylene (Total)	2.	U	11.	U	2.	U	7.6	U	2.	U	7.9	U
540-59-0	1,2-Dichloroethene (total)	1.	U	11.	U	1.	U	7.6	U	1.	U	7.9	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

VOA													
	SAMPLE ID ------->	041-W-5A05-01		041-M-5A06-01		041-W-5A06-01		041-R-5A06-01		041-W-6401-01		041-M-6404-01	
	ORIGINAL ID ----->	041W5A0501		041M5A0601		041W5A0601		041R5A0601		041W640101		041M640401	
	LAB SAMPLE ID --->	S774785*3		S774839*3		S774785*4		S774785*5		S775003*2		S775003A*3	
	ID FROM REPORT -->	041W5A0501		041M5A0601		041W5A0601		041R5A0601		041W640101		041M640401	
	SAMPLE DATE ----->	08/26/97		08/28/97		08/26/97		08/26/97		09/04/97		09/04/97	
	DATE ANALYZED --->	09/09/97		09/03/97		09/09/97		09/09/97		09/09/97		09/09/97	
	MATRIX ---------->	Water		Sediment		Water		Water		Water		Sediment	
	UNITS ---------->	UG/L		UG/KG		UG/L		UG/L		UG/L		UG/KG	
CAS #	Parameter	PEN11	VAL	PEN12	VAL	PEN11	VAL	PEN11	VAL	PEN14	VAL	PEN13	VAL
74-87-3	Chloromethane	1.	U	16.	U	1.	U	1.	U	1.	U	40.	U
75-01-4	Vinyl chloride	1.	U	16.	U	1.	U	1.	U	1.	U	40.	U
74-83-9	Bromomethane	1.	U	16.	U	1.	U	1.	U	1.	U	40.	U
75-00-3	Chloroethane	1.	U	16.	U	1.	U	1.	U	1.	U	40.	U
75-35-4	1,1-Dichloroethene	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
75-09-2	Methylene chloride	5.	U	8.2	U	5.	U	5.	U	5.	U	20.	U
75-34-3	1,1-Dichloroethane	1.	U	8.2	U	1.	U	1.	U	0.9	J	20.	U
67-66-3	Chloroform	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
71-55-6	1,1,1-Trichloroethane	1.	U	8.2	U	1.	U	1.	U	0.21	J	20.	U
56-23-5	Carbon tetrachloride	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
71-43-2	Benzene	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
107-06-2	1,2-Dichloroethane	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
79-01-6	Trichloroethene	1.	U	8.2	U	1.	U	1.	U	0.34	J	20.	U
78-87-5	1,2-Dichloropropane	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
75-27-4	Bromodichloromethane	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
108-88-3	Toluene	0.41	J	8.2	U	1.	U	1.	U	1.	U	20.	U
79-00-5	1,1,2-Trichloroethane	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
127-18-4	Tetrachloroethene	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
124-48-1	Dibromochloromethane	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
108-90-7	Chlorobenzene	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
100-41-4	Ethylbenzene	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
100-42-5	Styrene	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
75-25-2	Bromoform	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
67-64-1	Acetone	25.	U	16.	U	23.	J	24.	J	24.	J	32.	J
75-15-0	Carbon disulfide	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
78-93-3	2-Butanone (MEK)	10.	U	16.	U	10.	U	10.	U	10.	U	40.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U	16.	U	10.	U	10.	U	10.	U	40.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U	8.2	U	1.	U	1.	U	1.	U	20.	U
591-78-6	2-Hexanone	10.	U	16.	U	10.	U	10.	U	10.	U	40.	U
1330-20-7	Xylene (Total)	2.	U	8.2	U	2.	U	2.	U	2.	U	20.	U
540-59-0	1,2-Dichloroethene (total)	1.	U	8.2	U	1.1		1.		0.59	J	20.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

VOA													
	SAMPLE ID ------->	041-M-6405-01 RE		041-W-6405-01		041-R-6405-01		041-M-6406-01		041-M-7501-01		041-N-7501-01	
	ORIGINAL ID ----->	041M640501		041W640501		041R640501		041M640601		041M750101		041N750101	
	LAB SAMPLE ID --->	S775003A*2*R		S775003*1		S775003*3		S774962*2		S774839*4		S774839*6	
	ID FROM REPORT -->	041M640501		041W640501		041R640501		041M640601		041M750101		041N750101	
	SAMPLE DATE ----->	09/04/97		09/04/97		09/04/97		09/03/97		08/28/97		08/28/97	
	DATE ANALYZED --->	09/09/97		09/09/97		09/09/97		09/08/97		09/03/97		09/03/97	
	MATRIX ---------->	Sediment		Water		Water		Sediment		Sediment		Sediment	
	UNITS ---------->	UG/KG		UG/L		UG/L		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN13	VAL	PEN14	VAL	PEN14	VAL	PEN12	VAL	PEN12	VAL	PEN12	VAL
74-87-3	Chloromethane	26.	U	1.	U	1.	U	59.	U	17.	U	16.	U
75-01-4	Vinyl chloride	26.	U	1.	U	1.	U	59.	U	17.	U	16.	U
74-83-9	Bromomethane	26.	U	1.	U	1.	U	59.	U	17.	U	16.	U
75-00-3	Chloroethane	26.	U	1.	U	1.	U	59.	U	17.	U	16.	U
75-35-4	1,1-Dichloroethene	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
75-09-2	Methylene chloride	13.	U	5.	U	5.	U	29.	U	8.3	U	8.2	U
75-34-3	1,1-Dichloroethane	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
67-66-3	Chloroform	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
71-55-6	1,1,1-Trichloroethane	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
56-23-5	Carbon tetrachloride	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
71-43-2	Benzene	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
107-06-2	1,2-Dichloroethane	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
79-01-6	Trichloroethene	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
78-87-5	1,2-Dichloropropane	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
75-27-4	Bromodichloromethane	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
108-88-3	Toluene	13.	U	0.36	J	0.33	J	29.	U	8.3	U	8.2	U
79-00-5	1,1,2-Trichloroethane	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
127-18-4	Tetrachloroethene	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
124-48-1	Dibromochloromethane	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
108-90-7	Chlorobenzene	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
100-41-4	Ethylbenzene	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
100-42-5	Styrene	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
75-25-2	Bromoform	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
79-34-5	1,1,2,2-Tetrachloroethane	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
67-64-1	Acetone	32.	J	25.	U	25.	U	59.	U	16.	J	16.	U
75-15-0	Carbon disulfide	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
78-93-3	2-Butanone (MEK)	26.	U	10.	U	10.	U	59.	U	17.	U	16.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	26.	U	10.	U	10.	U	59.	U	17.	U	16.	U
10061-01-5	cis-1,3-Dichloropropene	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
10061-02-6	trans-1,3-Dichloropropene	13.	U	1.	U	1.	U	29.	U	8.3	U	8.2	U
591-78-6	2-Hexanone	26.	U	10.	U	10.	U	59.	U	17.	U	16.	U
1330-20-7	Xylene (Total)	13.	U	2.	U	2.	U	29.	U	8.3	U	8.2	U
540-59-0	1,2-Dichloroethene (total)	13.	U	0.21	J	1.	U	29.	U	8.3	U	8.2	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
SURFACE WATER AND SEDIMENT RESULTS

VOA

SAMPLE ID -------->	041-W-7501-01
ORIGINAL ID ----->	041W750101
LAB SAMPLE ID --->	S774785*6
ID FROM REPORT -->	041W750101
SAMPLE DATE ----->	08/26/97
DATE ANALYZED --->	09/09/97
MATRIX ---------->	Water
UNITS ---------->	UG/L

CAS #	Parameter	PEN11	VAL
74-87-3	Chloromethane	1.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-35-4	1,1-Dichloroethene	1.	U
75-09-2	Methylene chloride	5.	U
75-34-3	1,1-Dichloroethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-Trichloroethane	1.	U
56-23-5	Carbon tetrachloride	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
75-27-4	Bromodichloromethane	1.	U
108-88-3	Toluene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
127-18-4	Tetrachloroethene	1.	U
124-48-1	Dibromochloromethane	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
67-64-1	Acetone	25.	U
75-15-0	Carbon disulfide	1.	U
78-93-3	2-Butanone (MEK)	10.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
591-78-6	2-Hexanone	10.	U
1330-20-7	Xylene (Total)	2.	U
540-59-0	1,2-Dichloroethene (total)	1.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
BIOTA SAMPLE RESULTS

LIPIDS							
	SAMPLE ID ------->	041-J-18B1-01	041-J-3301-01	041-J-3302-01	041-J-6401-01	041-J-6406-01	041-J-7501-01
	ORIGINAL ID ----->	041J18B101	041J330101	041J330201	041J640101	041J640601	041J750101
	LAB SAMPLE ID --->	S775281*3	S775281*7	S775281*6	S775281*4	S775281*5	S775281*8
	ID FROM REPORT -->	041J18B101	041J330101	041J330201	041J640101	041J640601	041J750101
	SAMPLE DATE ----->	09/04/97	09/05/97	09/02/97	09/08/97	09/04/97	09/05/97
	DATE ANALYZED --->	09/25/97	09/25/97	09/25/97	09/25/97	09/25/97	09/25/97
	MATRIX ---------->	~~Soil~~ AN BIOTA	~~Soil~~ AN BIOTA	~~Soil~~ AN BIOTA	~~Soil~~ AN BIOTA	~~Soil~~ AN BIOTA	~~Soil~~ AN BIOTA
	UNITS ---------->	%	%	%	%	%	%
CAS #	Parameter	PEN15	PEN15	PEN15	PEN15	PEN15	PEN15
9999000-88-4	% LIPIDS	1.2 %	1. %	0.59 %	0.49 %	0.7 %	2.2 %

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
BIOTA SAMPLE RESULTS

METAL													
	SAMPLE ID ------->	041-J-18B1-01		041-J-3301-01		041-J-3302-01		041-J-6401-01		041-J-6406-01		041-J-7501-01	
	ORIGINAL ID ----->	041J18B101		041J330101		041J330201		041J640101		041J640601		041J750101	
	LAB SAMPLE ID --->	S775281*3		S775281*7		S775281*6		S775281*4		S775281*5		S775281*8	
	ID FROM REPORT -->	041J18B101		041J330101		041J330201		041J640101		041J640601		041J750101	
	SAMPLE DATE ----->	09/04/97		09/05/97		09/02/97		09/08/97		09/04/97		09/05/97	
	DATE EXTRACTED -->	09/24/97		09/24/97		09/24/97		09/24/97		09/24/97		09/24/97	
	DATE ANALYZED --->	09/26/97		09/26/97		09/26/97		09/26/97		09/26/97		09/26/97	
	MATRIX ---------->	~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN15	VAL	PEN15	VAL	PEN15	VAL	PEN15	VAL	PEN15	VAL	PEN15	VAL
7429-90-5	Aluminum	5.9	J	8.1	J	33.6		16.9		17.1		18.4	
7440-36-0	Antimony	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U	0.98	U
7440-38-2	Arsenic	0.28	UJ	0.4	J	0.72	J	0.44	J	0.39	J	0.28	UJ
7440-39-3	Barium	NR		NR		NR		NR		NR		NR	
7440-41-7	Beryllium	NR		NR		NR		NR		NR		NR	
7440-43-9	Cadmium	NR		NR		NR		NR		NR		NR	
7440-70-2	Calcium	NR		NR		NR		NR		NR		NR	
7440-47-3	Chromium	0.45		0.42		0.69		0.69		1.1		0.41	
7440-48-4	Cobalt	0.13	UJ	0.13	UJ	0.13	UJ	0.13	UJ	0.13	UJ	0.13	UJ
7440-50-8	Copper	2.3	J	1.1	J	1.3	J	1.2	J	2.	J	0.74	J
7439-89-6	Iron	40.2	J	20.7	J	42.1	J	34.9	J	51.8	J	45.3	J
7439-92-1	Lead	0.4	U	0.43	J	0.47	J	1.9		2.5		0.4	J
7439-95-4	Magnesium	NR		NR		NR		NR		NR		NR	
7439-96-5	Manganese	3.1	J	15.7	J	21.6	J	4.	J	4.9	J	7.	J
7439-97-6	Mercury	NR		NR		NR		NR		NR		NR	
7440-02-0	Nickel	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U
7440-09-7	Potassium	NR		NR		NR		NR		NR		NR	
7782-49-2	Selenium	1.1	U	0.87	U	1.	U	0.81	U	0.91	U	0.87	U
7440-22-4	Silver	0.06	UJ	0.06	UJ	0.06	UJ	0.06	UJ	0.06	UJ	0.06	UJ
7440-23-5	Sodium	NR		NR		NR		NR		NR		NR	
7440-28-0	Thallium	0.39	UJ	0.39	UJ	0.39	UJ	0.39	UJ	0.39	UJ	0.39	UJ
7440-62-2	Vanadium	0.19	U	0.54	J	1.1		0.28	J	0.25	J	0.19	U
7440-66-6	Zinc	33.9		35.4		48.7		33.2		30.1		97.2	
57-12-5	Cyanide (CN)	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
BIOTA SAMPLE RESULTS

PEST													
	SAMPLE ID ------->	041-J-18B1-01		041-J-3301-01		041-J-3302-01		041-J-6401-01		041-J-6406-01		041-J-7501-01	
	ORIGINAL ID ----->	041J18B101		041J330101		041J330201		041J640101		041J640601		041J750101	
	LAB SAMPLE ID --->	S775281*3		S775281*7		S775281*6		S775281*4		S775281*5		S775281*8	
	ID FROM REPORT -->	041J18B101		041J330101		041J330201		041J640101		041J640601		041J750101	
	SAMPLE DATE ----->	09/04/97		09/05/97		09/02/97		09/08/97		09/04/97		09/05/97	
	DATE EXTRACTED -->	09/23/97		09/23/97		09/23/97		09/23/97		09/23/97		09/23/97	
	DATE ANALYZED --->	10/03/97		10/02/97		10/02/97		10/02/97		10/03/97		10/03/97	
	MATRIX ---------->	~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN15	VAL	PEN15	VAL	PEN15	VAL	PEN15	VAL	PEN15	VAL	PEN15	VAL
319-84-6	alpha-BHC	17.	U	1.8	U	1.7	U	1.7	U	3.4	U	46.	U
319-85-7	beta-BHC	17.	U	1.8	U	1.7	U	1.7	U	3.4	U	46.	U
319-86-8	delta-BHC	17.	U	1.8	U	1.7	U	1.7	U	3.4	U	46.	U
58-89-9	gamma-BHC (Lindane)	17.	U	1.8	U	1.7	U	0.44	J	0.61	J	46.	U
76-44-8	Heptachlor	17.	U	0.72	J	1.7	U	1.7	U	3.4	U	46.	U
309-00-2	Aldrin	17.	U	0.21	U	1.7	U	0.38	J	3.4	U	46.	U
1024-57-3	Heptachlor epoxide	17.	U	1.8	U	1.7	U	1.7	U	0.4	J	46.	U
959-98-8	Endosulfan I	17.	U	0.54	U	1.7	U	0.19	J	1.2	J	90.	U
60-57-1	Dieldrin	33.	U	0.22	U	0.26	U	0.66	J	0.8	U	90.	U
72-55-9	4,4'-DDE	61.		1.8	J	1.5	J	9.6		13.		150.	
72-20-8	Endrin	33.	U	3.5	U	3.3	U	3.3	U	6.6	U	90.	U
33213-65-9	Endosulfan II	33.	U	3.5	U	3.3	U	3.3	U	6.6	U	90.	U
72-54-8	4,4'-DDD	68.		3.5	U	0.14	U	4.9		4.8	J	110.	
1031-07-8	Endosulfan sulfate	33.	U	3.5	U	3.3	U	3.3	U	6.6	U	90.	U
50-29-3	4,4'-DDT	7.7	U	5.2		1.4	J	2.8	J	8.1		2.7	U
72-43-5	Methoxychlor	170.	U	18.	U	17.	U	17.	U	34.	U	460.	U
53494-70-5	Endrin ketone	33.	U	0.75	J	3.3	U	3.3	U	6.6	U	90.	U
7421-93-4	Endrin aldehyde	33.	U	1.4	U	1.4	J	3.3	U	6.6	U	90.	U
5103-71-9	alpha-Chlordane	1.4	J	0.55	U	1.7	U	0.39	U	1.2	J	46.	U
5103-74-2	gamma-Chlordane	17.	U	1.1	J	0.29	U	0.67	U	1.9	J	46.	U
8001-35-2	Toxaphene	1700.	U	180.	U	170.	U	170.	U	340.	U	4600.	U
12674-11-2	Aroclor-1016	330.	U	35.	U	33.	U	334.		66.	U	900.	U
11104-28-2	Aroclor-1221	670.	U	72.	U	67.	U	67.	U	130.	U	1800.	U
11141-16-5	Aroclor-1232	330.	U	35.	U	33.	U	33.	U	66.	U	900.	U
53469-21-9	Aroclor-1242	330.	U	35.	U	33.	U	33.	U	66.	U	900.	U
12672-29-6	Aroclor-1248	330.	U	35.	U	33.	U	33.	U	66.	U	900.	U
11097-69-1	Aroclor-1254	330.	U	35.	U	33.	U	33.	U	66.	U	900.	U
11096-82-5	Aroclor-1260	87.	J	35.	U	33.	U	26.	J	41.	J	900.	U

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
BIOTA SAMPLE RESULTS

SVOA											
	SAMPLE ID ------->	041-J-18B1-01		041-J-3302-01		041-J-6401-01		041-J-6406-01		041-J-7501-01	
	ORIGINAL ID ----->	041J18B101		041J330201		041J640101		041J640601		041J750101	
	LAB SAMPLE ID --->	S775281*3		S775281*6		S775281*4		S775281*5		S775281*8	
	ID FROM REPORT -->	041J18B101		041J330201		041J640101		041J640601		041J750101	
	SAMPLE DATE ----->	09/04/97		09/02/97		09/08/97		09/04/97		09/05/97	
	DATE EXTRACTED -->	09/23/97		09/23/97		09/23/97		09/23/97		09/23/97	
	DATE ANALYZED --->	09/29/97		09/29/97		09/29/97		09/27/97		09/27/97	
	MATRIX ---------->	~~Soil~~ AN BIOTA		~~Soil~~ AN BIOTA		~~Soil~~ AN BIOTA		~~Soil~~ AN BIOTA		~~Soil~~ AN BIOTA	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN15	VAL	PEN15	VAL	PEN15	VAL	PEN15	VAL	PEN15	VAL
108-95-2	Phenol	330.	U	330.	U	330.	U	330.	U	330.	U
111-44-4	bis(2-Chloroethyl)ether	330.	UJ	330.	UJ	330.	UJ	330.	UJ	330.	UJ
95-57-8	2-Chlorophenol	330.	U	330.	U	330.	U	330.	U	330.	U
541-73-1	1,3-Dichlorobenzene	330.	U	330.	U	330.	U	330.	U	330.	U
106-46-7	1,4-Dichlorobenzene	330.	U	330.	U	330.	U	330.	U	330.	U
95-50-1	1,2-Dichlorobenzene	330.	U	330.	U	330.	U	330.	U	330.	U
95-48-7	2-Methylphenol (o-Cresol)	330.	U	330.	U	330.	U	330.	U	330.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330.	U	330.	U	330.	U	330.	U	330.	U
9999900-32-2	3-Methylphenol/4-Methylphenol	330.	U	330.	U	330.	U	330.	U	140.	J
621-64-7	N-Nitroso-di-n-propylamine	330.	U	330.	U	330.	U	330.	U	330.	U
67-72-1	Hexachloroethane	330.	U	330.	U	330.	U	330.	U	330.	U
98-95-3	Nitrobenzene	330.	U	330.	U	330.	U	330.	U	330.	U
78-59-1	Isophorone	330.	U	330.	U	330.	U	330.	U	330.	U
88-75-5	2-Nitrophenol	330.	U	330.	U	330.	U	330.	U	330.	U
105-67-9	2,4-Dimethylphenol	330.	U	330.	U	330.	U	330.	U	330.	U
120-83-2	2,4-Dichlorophenol	330.	U	330.	U	330.	U	330.	U	330.	U
120-82-1	1,2,4-Trichlorobenzene	330.	U	330.	U	330.	U	330.	U	330.	U
91-20-3	Naphthalene	330.	U	330.	U	330.	U	330.	U	330.	U
106-47-8	4-Chloroaniline	660.	U	660.	U	660.	U	660.	U	660.	U
87-68-3	Hexachlorobutadiene	330.	U	330.	U	330.	U	330.	U	330.	U
111-91-1	bis(2-Chloroethoxy)methane	330.	U	330.	U	330.	U	330.	U	330.	U
59-50-7	4-Chloro-3-methylphenol	330.	U	330.	U	330.	U	330.	U	330.	U
91-57-6	2-Methylnaphthalene	330.	U	330.	U	330.	U	330.	U	330.	U
77-47-4	Hexachlorocyclopentadiene	330.	U	330.	U	330.	U	330.	U	330.	U
88-06-2	2,4,6-Trichlorophenol	330.	U	330.	U	330.	U	330.	U	330.	U
95-95-4	2,4,5-Trichlorophenol	330.	U	330.	U	330.	U	330.	U	330.	U
91-58-7	2-Chloronaphthalene	330.	U	330.	U	330.	U	330.	U	330.	U
88-74-4	2-Nitroaniline	1700.	U	1700.	U	1700.	U	1700.	U	1700.	U
131-11-3	Dimethylphthalate	330.	U	330.	U	330.	U	330.	U	330.	U
208-96-8	Acenaphthylene	330.	U	330.	U	330.	U	330.	U	330.	U
606-20-2	2,6-Dinitrotoluene	330.	U	330.	U	330.	U	330.	U	330.	U
99-09-2	3-Nitroaniline	1700.	U	1700.	U	1700.	U	1700.	U	1700.	U
83-32-9	Acenaphthene	330.	U	330.	U	330.	U	330.	U	330.	U
51-28-5	2,4-Dinitrophenol	1700.	U	1700.	U	1700.	U	1700.	U	1700.	U
100-02-7	4-Nitrophenol	1700.	U	1700.	U	1700.	U	1700.	U	1700.	U
132-64-9	nzofuran	330.	U	330.		330.	U	330.	U	330.	U

*** Validation Complete ***

PENSACOLA, SITE 41
PENSACOLA, SITE 41, PHASE IIB/III
BIOTA SAMPLE RESULTS

SVOA											
	SAMPLE ID ------->	041-J-18B1-01		041-J-3302-01		041-J-6401-01		041-J-6406-01		041-J-7501-01	
	ORIGINAL ID ----->	041J18B101		041J330201		041J640101		041J640601		041J750101	
	LAB SAMPLE ID --->	S775281*3		S775281*6		S775281*4		S775281*5		S775281*8	
	ID FROM REPORT -->	041J18B101		041J330201		041J640101		041J640601		041J750101	
	SAMPLE DATE ----->	09/04/97		09/02/97		09/08/97		09/04/97		09/05/97	
	DATE EXTRACTED -->	09/23/97		09/23/97		09/23/97		09/23/97		09/23/97	
	DATE ANALYZED --->	09/29/97		09/29/97		09/29/97		09/27/97		09/27/97	
	MATRIX ---------->	~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA		~~Soil~~ AH BIOTA	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	PEN15	VAL	PEN15	VAL	PEN15	VAL	PEN15	VAL	PEN15	VAL
121-14-2	2,4-Dinitrotoluene	330.	U	330.	U	330.	U	330.	U	330.	U
84-66-2	Diethylphthalate	330.	U	330.	U	330.	U	330.	U	330.	U
7005-72-3	4-Chlorophenylphenyl ether	330.	U	330.	U	330.	U	330.	U	330.	U
86-73-7	Fluorene	330.	U	330.	U	330.	U	330.	U	330.	U
100-01-6	4-Nitroaniline	1700.	U	1700.	U	1700.	U	1700.	U	1700.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1700.	U	1700.	U	1700.	U	1700.	U	1700.	U
86-30-6	N-Nitrosodiphenylamine	330.	U	330.	U	330.	U	330.	U	330.	U
101-55-3	4-Bromophenyl-phenylether	330.	U	330.	U	330.	U	330.	U	330.	U
118-74-1	Hexachlorobenzene	330.	U	330.	U	330.	U	330.	U	330.	U
87-86-5	Pentachlorophenol	1700.	U	1700.	U	1700.	U	1700.	U	1700.	U
85-01-8	Phenanthrene	330.	U	330.	U	330.	U	330.	U	330.	U
120-12-7	Anthracene	330.	U	330.	U	330.	U	330.	U	330.	U
86-74-8	Carbazole	330.	U	330.	U	330.	U	330.	U	330.	U
84-74-2	Di-n-butylphthalate	330.	U	330.	U	330.	U	330.	U	330.	U
206-44-0	Fluoranthene	330.	U	330.	U	330.	U	330.	U	330.	U
129-00-0	Pyrene	330.	U	330.	U	330.	U	330.	U	330.	UJ
85-68-7	Butylbenzylphthalate	330.	U	330.	U	330.	U	330.	U	330.	UJ
91-94-1	3,3'-Dichlorobenzidine	660.	U	660.	U	660.	U	660.	U	660.	UJ
56-55-3	Benzo(a)anthracene	330.	U	330.	U	330.	U	330.	U	330.	UJ
218-01-9	Chrysene	330.	U	330.	U	330.	U	330.	U	330.	UJ
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	92.	J	330.	U	330.	U	330.	U	330.	UJ
117-84-0	Di-n-octylphthalate	330.	UJ	330.	UJ	330.	UJ	330.	U	330.	UJ
205-99-2	Benzo(b)fluoranthene	330.	UJ	330.	UJ	330.	UJ	330.	U	330.	UJ
207-08-9	Benzo(k)fluoranthene	330.	UJ	330.	UJ	330.	UJ	330.	U	330.	UJ
50-32-8	Benzo(a)pyrene	330.	UJ	330.	UJ	330.	UJ	330.	U	330.	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	330.	UJ	330.	UJ	330.	UJ	330.	U	330.	UJ
53-70-3	Dibenz(a,h)anthracene	330.	UJ	330.	UJ	330.	UJ	330.	U	330.	UJ
191-24-2	Benzo(g,h,i)perylene	330.	UJ	330.	UJ	330.	UJ	330.	U	330.	UJ

*** Validation Complete ***

Appendix C
Taxanonomic Standard Operating Procedures

TAI Environmental Sciences Inc.
Standard Operating Procedures
TAXONOMY

1.0 GENERAL METHODOLOGY

1.1 PLANKTON. TAI conducts analyses for various plankton components including Phytoplankton, Zooplankton, Ichthyoplankton and Chlorophyll according to the methods outlined in 1). Standard Methods for the Examiniation of Water and Wastewater Part 10200, 17th Edition APHA 1989. and 2). Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents. (EPA-670/4-73-001).

1.2 PRIMARY PRODUCTION. TAI performs in situ analyses for primary production according to the methods described in 1). Standard Methods for the Examiniation of Water and Wastewater Part 10300, 17th Edition APHA 1989. and 2). Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents. (EPA-670/4-73-001).

1.3 PERIPHYTON. TAI performs analyses on periphyton samples according to the methods described in 1). Standard Methods for the Examiniation of Water and Wastewater Part 10200, 17th Edition APHA 1989. and 2). Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents. (EPA-670/4-73-001).

1.4.MACROPHYTON TAI performs in situ analyses of macrophytic communities according to the methods described in 1). Standard Methods for the Examiniation of Water and Wastewater Part 10400, 17th Edition APHA 1989. and 2). Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents. (EPA-670/4-73-001).

1.5 MACROINVERTEBRATES. TAI performs analyses for ecological investigation of Macroinvertebrate Communities including marine, estuarine and freshwater infauna and epifauna according to the methods described in 1). Standard Methods for the Examiniation of Water and Wastewater Part 10500, 17th Edition APHA 1989. and 2). Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents. (EPA-670/4-73-001) and 3). "Macroinvertebrate Field and Laboratory Methods for Evaluating the Biological Integrity of Surface Waters" ORD Washington, D.C. November 1990.

1.6 FISHES. TAI performs analyses of fishes according to the methods described in 1). Standard Methods for the Examiniation of Water and Wastewater Part 10600, 17th Edition APHA 1989. and 2). Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents. (EPA-670/4-73-001).

2.1 PLANKTON SAMPLING. Plankton sampling is performed using the procedures and equipment described in 1). Standard Methods for the Examiniation of Water and Wastewater Part 10200, 17th Edition APHA 1989. and 2). Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents. (EPA-670/4-73-001). Equipment used is included in Table 2.1.

2.2 PERIPHYTON SAMPLING. Periphyton Sampling is performed using the procedures and equipment described in 1). Standard Methods for the Examiniation of Water and Wastewater Part 10300, 17th Edition APHA 1989. and 2). Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents. (EPA-670/4-73-001)

Table 2.1 Equipment Used For Field Collection of Various Biological Community Components

Method	Sample Source	Component	Equipment
SM 10200	Surface Water	Plankton	Kemmerer Sampler, Plankton Nets (Wisconsin), Plankton Trap
SM 10300	Surface Water	Periphyton	Periphyton Sampler, glass slides, Natural substrates
SM 10300	Surface Water	Primary Production	Winkler Method (D.O.)
SM 10400	Surface Water	Macrophyton	Aerial Recon, Line Intercept.
SM 10500	Sediments	Macroinfauna	PonarGrab, 0.25 m Box-core, Ekman Grab, Surber Sampler, Phleger corer Hester-Dendy Sampler, Basket Sampler, Block Sampler, Scoop Nets.
SM 10600	Surface Waters	Fishes	Otter Trawl, Beach Seine, Scoop Nets, Block Nets, Electrofishing

2.3 BENTHIC MACROINVERTEBRATE SAMPLING. In general, sampling for macroinvertebrates is performed using the procedures and equipment described in 1). Standard Methods for the Examination of Water and Wastewater Part 10500, 17th Edition APHA 1989. and 2). Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents (EPA-670/4-73-001).

2.3.1 Field collection of marine, estuarine and freshwater benthic macroinvertebrate samples can utilize a variety of sampling gear. TAI personnel have experience with many types, the most common being Boxcore, Eckman, Petersen, Ponar and Petite ponar grabs, and with Hester-Dendy and other artificial substrate samplers. Bottom sediment type, collection depth and a variety of other factors, including client specifications, will effect the choice of sampling gear

2.3.2 Upon collection, grab samples may be horizontally or vertically sectioned and/or measured volumetrically depending on contract requirements. Collected samples are sieved using standard 500 micron sieve buckets and relaxed using a solution of magnesium sulfate, 2% buffered formalin and seawater, or they are placed on ice Relaxed samples, and those placed on ice, are preserved with a 10% buffered formalin - rose bengal solution after several hours chilling time. The latter process has proven to be very reliable and is the method of choice. Samples are then returned to the laboratory for processing.

2.3.3 Hester-Dendy samplers are composed of 0.3 cm-thick tempered hard board with 7.6 cm round plates and 2.5 cm round spacers. The plates are separated by an increasing number of spacers along a 10 in stainless steel eyebolt. This results in the plates being spaced at increasingly greater intervals. A total of 14 large plates and 24 spacers are used in each sampler.

2.3.4 The Hester-Dendy, or other artificial substrate, is deployed in the euphotic zone of the water column. The samplers are attached by 1/8 to 1/4 inch cord to a depth of approximately 0.3 m and suspended from a float. This assures uniformity of sample depth. Samplers are normally allowed 3 weeks for colonization, but this may be extended if conditions require.

2.3.5 This general procedure may be modified to fit specific conditions of the sampling area, study design or client requirements. Regardless of technique, uniform procedures are used. Before removal from the water, samplers are enclosed in an oversized plastic bag to prevent loss of organisms. These samples are then relaxed before returning to the laboratory.

2.5 Fishes. Fish populations are sampled using the methodologies described in the following manuals: 1). Standard Methods for the Examiniation of Water and Wastewater Part 10500, 17th

Edition APHA 1989. and 2). Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents. (EPA-670/4-73-001).

3.1 BENTHIC MICROINVERTEBRATE SAMPLE CUSTODY / TRACKING

3.1. Field Sampling Operations

Immediately following collection, samples are placed in pre-labeled (numbered) containers to ensure all field samples are collected, or at least attempted. Additional labels of heavy 100% rag paper are placed inside all biological samples in order to be able to identify the sample in the event the outer label is accidently removed or obliterated. A variety of field sheets are prepared to track the samples from the collection point to the laboratory and record field measurements, observations, and collection notes.

All samples collected are accompanied by chain-of-custody documents. The chain-of-custody forms identify all aspects of the transfer (collector, time of transfer, recipient, etc.) and are completed on a real-time basis.

3.2. Laboratory Operations

Upon receipt of the biological samples at the laboratory, chain-of-custody forms are completed and the samples are inventoried. One copy of the inventory is used in the sorting phase and another for the identification/enumeration phase.

In the sorting phase, the sorting technician removes the sample from the storage shelf and signs that sample out in the sample log book and records the date and time of removal. Upon sorting completion, the sorter puts the sample on the appropriate shelf and signs the sorted sample back in. The same procedure is utilized during the identification/enumeration phase. The taxonomist signs the sample out, using the Invoice of Specimen sheet , processes the sample, and signs the sample in upon completion. The completed samples and the residual materials are stored for QC checks and subsequent final verification and curation.

4.0 TAXONOMIC PROCEDURES

4.1 Sample Sorting

4.1.1 Initial removal of organisms from sediment and debris and separation into major phylogenetic categories are performed by experienced laboratory personnel Samples undergoing processing are routinely checked by an assigned QAQC referee and/or the Taxonomy Task Manager QAQC checks occur on no less than 10% of the samples processed

4.1.2 Removal of organisms from Hester-Dendy, or similar type, artificial substrate samplers is accomplished by dismantling the sampler in a tray filled 2cm deep with a 40% isopropyl alcohol solution Plates and spacers are then brushed and carefully scraped into the tray The sample is then sieved through a 0.5 mm mesh screen. This method has proven to be very effective in preventing excessive fragmentation or mutilation of organisms

4.1.3 Sorting of the organisms is accomplished by pouring just enough sample into the sorting tray to cover the bottom and scanning with a magnification lamp. All organisms, previously stained bright red, are removed with fine tipped forceps or pipette and placed in shell vials containing a 40% isopropyl alcohol solution. Shell vials are arranged in racks marked with the appropriate phylogenetic category to prevent errors. Stereo and compound microscopes are readily available for verification of any questionable objects or samples

4.1.4 Typical phylogenetic categories for saltwater samples may consist of Polychaeta, Crustacea, Mollusca, echinodermata, Rhynchocoela, Turbellaria and Miscellaneous. This will vary depending on sample diversity.

4.2 Sample Analysis

4..2.1 All identifications are done by experienced taxonomists and checked by our QAQC program. QAQC checks, including secondary identifications and/or comparison of samples to the voucher collection, occur on no less than 10%, randomly chosen, of the samples processed. All identifications and enumerations are recorded on standardized sheets for consistency and ease of data entry.

4..2.2 TAI's taxonomic team includes in-house and associate taxonomists. TAI maintains in-house expertise in chironomid, polychaete, mollusc, oligochaete, ichthyoplankton, zooplankton, finfishes and local crustacean and echinoderm identifications. Associate taxonomists are used to complement our in-house expertise by providing specialized identifications and performing secondary identifications as part of our QAQC program.

4.2.3 TAI maintains an extensive voucher collection of freshwater, estuarine and marine flora and fauna against which identified specimens are verified. The voucher collection is continuously upgraded with new specimens and a computer data file for easier location and quicker verifications. This will also be a continuously expanding project.

4.2.4 Following final verification, all samples are curated for a minimum three year period from the ending date of the corresponding contract. This allows for later verification or further data analysis.

4.2.5 Curation for long term storage is accomplished by placing each sample in a shell vial with a permanent label, and storage in air-tight, labelled containers filled with 40% isopropyl alcohol solution. Samples are stored in the TAI warehouse until the end of the curation period. These samples are then incorporated into the voucher collection or discarded.

4.2.6 TAI is experienced in wet weight, dry weight and ash weight biomassing. These procedures are performed as per Standard Methods 18 ed. Weighing is performed on a Mettler AE 163 dual beam balance with 0-31g and 0-162g ranges, touch control tare setting, automatic calibration adjustable time integration and a linearity of 0.02 mg and 0.1 mg on the respective ranges. Calibration is performed before each set of biomassing measurements, and after each subsequent 100 measurements. This insures accuracy and consistency.

4..2.7 Size class separations utilize a series of stackable sieves constructed of PVC and nylon plankton netting of 6500, 3500, 2000, 1000, 900, 650, 500 and 250 micron mesh sizes. Other mesh sizes are available upon request. Organisms are gently washed through the screens with a steady flow of water to prevent excess fragmentation or mutilation. Upon completion, each subsample is recorded in the Daily Taxonomy Log.

Table 4.1. Major Taxonomic References

polychaetes	Fauchald, 1977 Uebelacker and Johnson, 1984
oligochates	Brinkhurst, 1986 Hiltunen and Klemm, 1980
freshwater invertebrates	Pennak, 1953 Edmondson, 1959
estuarine/marine invertebrates	Gosner, 1971 Heard, 1982
freshwater algae	Smith, 1950

5.0 TAXONOMIC QA/QC

5.1.1 QA/QC checks occur on no less than 10% of the samples processed. For sorting tasks, at least 10% of all sorted samples are checked for completeness. Completeness checks are accomplished by resorting the residual material from a sample by a different technician. If the animals removed from the residual material total 5% or more of the total number of animals in the sample, this constitutes a QC failure, and all samples sorted by that technician shall be resorted back until the time of the last acceptable QC check.

5.1.2 For identification tasks, at least 10% of all identified samples are checked for identification and enumeration accuracy. Taxonomic checks are performed by the reidentification of the selected samples by a different taxonomist. A discrepancy of 5% or more constitutes a QC failure and all samples performed by the taxonomist on that project are reworked. Identification QC failures seldom occur as a result of the close working relationship that exists between TAI taxonomists. A voucher collection is prepared for each new project. As each species is encountered for the first time, all taxonomists inspect the specimen and become familiar with the key characters and voucher and consistency cards are prepared for that species. Therefore, any identification errors are corrected when the voucher collection is verified by outside expert taxonomists.

5.1.3 Data entry is facilitated by the use of standardized sheets for recording identification, enumeration and biomass of each sample. A visual check of all data is performed by an experienced referee or by the Taxonomy Task Manager to assure completeness and accuracy of the data.

6.0 TAXONOMY DATA REDUCTION AND REPORTING

6.1 Data Reduction, Analysis and Reporting

6.1.1 Data reduction begins after all raw data has been checked for completeness and accuracy. Preliminary statistical reports of the data are utilized (both tabular and graphical methods) to check the data for completeness, and to screen out questionable information. Simple descriptive statistics (Means, Range, Standard Deviation) of data is performed with the Symphony (T.M.) software system.

6.1.2 TAI can produce a number of analyses that present benthic invertebrate data by trophic type, abundance, ranked in order of abundance, diversity and cluster analysis. These, or additional analyses, are included as per client needs.

6..1.3 Diversity (Shannon-Wiener index) and evenness indices are calculated utilizing the machine methods described in the EPA 670/4-73-001, Biological Methods Manual (Weber, 1973). Log to base 2 is utilized unless otherwise requested by the client.

6.1.4 A cluster analysis package which runs on the IBM-PC has been developed by TAI. It is capable of analysis using a 150 x 150 species/station matrix and provides up to 12 similarity indices. The program has provisions for various standardizations, transformations and for both normal (Q) and inverse (r) mode analyses Generally, the Bray-Curtis and/or Morisita indices are used for routine benthic analyses.

6.1.5 Additionally, TAI has experience in preparing customized symphony and Lotus 1-2-3 worksheets for biological data for governmental clients and private consulting organizations. We are thoroughly familiar with developing macros for the Lotus System to perform the data summaries and preparing specialized statistics such as diversity and similarity, indices, and for outputting data for further statistical analysis

6.2 Data Validation

6.2.1 TAI uses a comprehensive QAQC program to assure accuracy and completeness of processing, identifications, data analysis and reporting, as per DEP-SOP (DER-QA-001/92, 30 September 1992 Section 10.3). Aspects of this plan have been mentioned throughout the manual.

6.2.2 The major elements of this plan are presented diagrammatically in Figure and include corporate experience, taxonomy task manager, experienced taxonomists, voucher collection, referee taxonomists, frequent data audits, sample tracking sheets, daily log sheets, standardized forms, and sample curation.

6.2.3 Data Storage

6.2.3.1 Copies of all forms, notes and reports are maintained on file for a minimum 3 year period from the ending date of the corresponding contract.

7.0 TAXONOMY CORRECTIVE ACTION

7.1 Taxonomic corrective action (as stated earlier in Section 5.3) may occur at the sorting level and/or the identification/enumeration level. During the sorting phase, the residual material is retained and at least 10% of these are reexamined for completeness. If the animals removed from the residual material total 5% of more of the total number of animals in the sample, this constitutes a QC failure, and all samples sorted by that technician shall be resorted back until the time of the last acceptable QC check.

7.2 For identification tasks, at least 10% of all completed samples are checked for accuracy by a reference taxonomist. A discrepancy of 2% or more constitutes a QC failure and all samples analyzed by that taxonomist on that project are reworked. This corresponds to the acceptance criteria according to Section 11, Table11.1 in DEP-SOP (DER-QA-001/92, 30 September 1992).

PROJECT EXPERIENCE

BENTHIC MACROINFAUNA TAXONOMY

Benthic Invertebrate Identification and Enumeration, White River, and adjacent Streams, Indianapolis, Indiana. USGS. (1994-1997) *ongoing*

Macroinvertebrate Identification and Enumeration, Streams near Macon, Georgia. (1995-2000) *ongoing*

Macroinfauna, fishes and *auf wuchs* community near Wando River, South Carolina. Industrial Client (1997).

Macroinvertebrate and Fish Study, Industrial Facility near Greenville, South Carolina. RMT Engineers. (1996)

Ecological Survey for RI/FS study, Chanute AFB, Illinois. Included Macroinvertebrate, dip net, fish and phytoplankton studies, including RBPIII assessment. Parson's Engineeering Sciences. (1995)

Macroinvertebrate, Fish and Periphyton Sampling, Including EPA RBPIII assessments of streams and lakes around Petroleum Refinery, Houston, Texas. Parson's Engineering Sciences (1995)

Macroinvertebrate Identification, Proposed Industrial Site, Argentina. Parson's Engineering Sciences. (1995)

Macroinvertebrate Sampling, Dip Net and RBPIII Assessment. Amoco Refinery Site, Near Norco, Louisiana. Montgomery-Watson Engineers (1991-1992)

Benthic Invertebrate Characterization Lake Maggiore, St. Petersberg, Florida. CH2M Hill (1990-91).

Baseline characterization of the macroinvertebrate community for assessing the effects of thin-layer dredge disposal on an estuarine environment. Fowl River, Alabama. (1986-88).

Baseline pre-disposal characterization of the benthic invertebrate community of several ocean disposal sites. Charlotte Harbor, Fort Pierce and Miami, Florida. (1986-89).

Benthic characterization for evaluation of potential impacts resulting from construction, development and initial operation of Navy homeports in the Gulf of Mexico. Pensacola Bay, Florida. (1986).

Characterization of benthic communities within natural and man-made embayments in Charlotte Harbor, Florida. (1986).

Characterization of the benthic community collected by core sampling in the Waccamaw River floodplain, South Carolina. (1986).

Identification and analysis of benthic invertebrates collected in estuarine and salt marsh areas of the Northern Gulf of Mexico (1989).

Identification and characterization of benthic invertebrates collected on artificial substrates. Key West, Florida. (1986).

Characterization of the benthic community, both pre-and post-discharge, in a freshwater wetlands area. Pasco County, Florida. (1985-Present).

Identification and analysis of the benthic invertebrates of St. John's Harbor, Florida. (1985-Present).

Identification of a freshwater benthic community from Pottsburg Creek, Florida. (1982-1992)

Baseline characterization and monitoring of the benthic fauna of Mobile Bay, Alabama. (1980-1982).

Analysis of benthic invertebrates collected from the Wando River, South Carolina. (1981-82; 1989-90)

Benthic survey of MOEPSI dumpsite tract. Coastal Alabama. (1981).

Bioassays and toxicity testing of benthic invertebrates collected at numerous sites along the South Atlantic and Gulf coasts. (1978-1990).

Analysis of benthic invertebrate samples collected on BLM- MAFLA cruises. Eastern Gulf of Mexico. (1979-1980).

Baseline characterization of the benthic invertebrate community of an EPA designated ocean disposal site. Wilmington Harbor, North Carolina. (1979).

Characterization of the benthic community and assessment of impacts resulting from construction, development, and initial operation. Naval Submarine Support Base, Kings Bay, Georgia. (1978-1979).

Benthic characterization and evaluation of potential impacts for an EIS for power plant expansion. Crystal River, Florida. (1977-1978).

Characterization of benthic invertebrate communities in coastal Mississippi, Alabama, and Florida (MAFLA) lease areas. (1976-1978).

Analysis of benthic invertebrates in the vicinity of a pulp and paper plant. Apalachicola Bay, Florida. (1977).

Establishment of a benthic invertebrate reference collection. Eastern Gulf of Mexico. (1976-1977).

Design of baseline benthic studies for the South Atlantic OCS program. (1976).

Benthic surveys of MAFLA lease areas. Eastern Gulf of Mexico. (1975-1976).

Characterization of benthic invertebrate communities of coastal Louisiana for the Environmental Impact Statement (EIS) for the Gulf Intracoastal Waterway. (1975).

Analysis of benthic invertebrate community structure and assessment of impacts resulting from maintenance dredging. Gulfport, Mississippi. (1974).

Characterization and delineation of subtidal and intertidal invertebrate communities. Coastal North Carolina. (1970- 1974).

Survey of the epibenthic fauna of the Hudson Canyon. North Atlantic Ocean. (1973).

Analysis of benthic invertebrate samples collected from various sites in the Florida Keys. (1973).

Characterization of the benthos of a high energy beach. Coastal North Carolina. (1973).

Characterization of the benthos of a high energy beach system. Yorkshire Coast, England. (1972).

Survey of benthic invertebrates of the North Carolina outer continental shelf. (1972).

Studies on the physiology of benthic estuarine organisms. Florida. (1971-1982)

Characterization of the subtidal and intertidal benthos of Puget Sound, Washington. (1971).

Characterization of benthic communities of the Gulf of California. (1971).

Appendix D
Benthic Macroinvertebrate Diversity Results

TAI Environmental Sciences Inc.

Client : ENSAFE
Location: Station 16
Date: Sept. 18, 1997

TAXON	FAMILY	Species	16-03									Sum
NEMERTEA	Unid.	*LPIL*										
ECHIURIDA	Echiuridae	*LPIL*										
GASTROPODA	Hydrobiidae	*Onobops sp.*										
GASTROPODA	Littorinidae	*Littorina irrorata*										
GASTROPODA	Melampidae	*Detracia floridana*										
GASTROPODA	Melampidae	*Melampus sp.*										
GASTROPODA	Planorbidae	*LPIL*										
PELECYPODA	Corbiculidae	*Polymesoda sp.*										
PELECYPODA	Mytilidae	*Amygdalum papyrium*										
PELECYPODA	Solecurtidae	*Tagelus plebius*										
POLYCHAETAE	Ampharetidae	*Hobsonia florida*										
POLYCHAETAE	Capitellidae	*Capitella capitata*	9									9
POLYCHAETAE	Capitellidae	*Mediomastus californiensus*	15									15
POLYCHAETAE	Goniadidae	*Glycinde solitaria*										
POLYCHAETAE	Nereidae	*Neanthes sp.*										
POLYCHAETAE	Orbiniidae	*Scolopus fragilis*										
POLYCHAETAE	Paronidae	*Aricidae sp.*										
POLYCHAETAE	Pilargiidae	*Parandalia americana*										
POLYCHAETAE	Sabellidae	*Chone cf. americana*										
POLYCHAETAE	Spionidae	*Polydora sp.*	1									1
POLYCHAETAE	Spionidae	*Streblospio benedicti*	12									12
CLADOCERA	Unid.	*LPIL*										
ISOPODA	Anthuridae	*Cyathura polita*										
CUMACEA	Nannasticidae	*Almyracuma sp.*										
DECAPODA	Unid. larvae	*LPIL*										
COLEOPTERA	Chelonariidae	*Chelonarum sp.*										
Totals			37	0	0	0	0	0	0	0	0	37
Number of Species			5	0	0	0	0	0	0	0	0	26
Shannon-Weiner Diversity,			1.692									1.692
Pielou's Evenness, J'			1.051									0.519
Margalef's Richness, D			4.723									25.723

TAI Environmental Sciences Inc.

Client : ENSAFE
Location: Station 5A
Date: Sept. 18, 1997

TAXON	FAMILY	Species	5A-04	5A-05	5A-06							Sum
NEMATODA	Unid.	*LPIL*	2	4								6
OLIGOCHAETA	Tubificidae	*Tubifex tubifex*	8									8
OLIGOCHAETA	Tubificidae	*Limnodrilus hoffmeisteri*	1									1
OLIGOCHAETA	Tubificidae	*Limnodrilus sp. (LPIL)*	25		1							26
OLIGOCHAETA	Lumbricidae	*Eiseniella sp.*		5	6							11
ODONATA	Libellulidae	*Sympetrum sp.*		1								
NEUROPTERA	Sialidae	*Sialis sp.*										
COLEOPTERA	Dytiscidae	*Bidessus sp.*										
DIPTERA	Ceratopogonidae	*Bezzia/Probezzia complex*	1		2							3
DIPTERA	Tendipedidae	*Conchepelopia sp.*	1	5								6
DIPTERA	Tendipedidae	*Cryptochironomous sp.*		5								5
DIPTERA	Tendipedidae	*Chironomous sp.*			8							8
DIPTERA	Tendipedidae	*Dycrotendipes sp. (LPIL)*	11		2							13
DIPTERA	Tendipedidae	*Glyptotendipes sp. (LPIL)*		7								7
DIPTERA	Tendipedidae	*Glyptotendipes sp. B*		5								5
DIPTERA	Tendipedidae	*Polypedilum fallax gp.*		3	1							4
DIPTERA	Tendipedidae	*Tanypus neopunctipennis*	2	4	3							9
DIPTERA	Tendipedidae	*Tanypus sp.*										
DIPTERA	Tendipedidae	*Tanytarsus sp.*	3	10								13
GASTROPODA	Physidae	*Physa sp.*										
PELECYPODA	Sphaeriidae	*Sphaerium sp.*										
PELECYPODA	Unid. juvenile	*LPIL*	12									12
COPEPODA	Unidentified	*LPIL*										
ARACHNIDA	Unidentified spider	*LPIL*										
Totals			66	49	23	0	0	0	0	0	0	137
Number of Species			10	10	7	0	0	0	0	0	0	24
Shannon-Weiner Diversity			2.560	3.164	2.425							3.721
Pielou's Evenness, J'			1.112	1.374	1.246							1.171
Margalef's Richness, D			9.761	9.743	6.681							23.797

TAI Environmental Sciences Inc.

Client : ENSAFE
Location: Station 18
Date: Sept. 18, 1997

TAXON	FAMILY	Species	18-B1									Sum
NEMATODA	Unid	*LPIL*	4									4
NEMERTEA	Unid	*LPIL*	4									4
ECHIURIDA	Echiuridae	*LPIL*										
GASTROPODA	Hydrobiidae	*Onobops sp.*										
GASTROPODA	Littorinidae	*Littorina irrorata*										
GASTROPODA	Melampidae	*Detracia floridana*										
GASTROPODA	Melampidae	*Melampus sp*										
GASTROPODA	Planorbidae	*LPIL*										
PELECYPODA	Corbiculidae	*Polymesoda sp.*	1									1
PELECYPODA	Mytilidae	*Amygdalum papyrium*										
PELECYPODA	Solecurtidae	*Tagelus plebius*										
POLYCHAETAE	Ampharetidae	*Hobsonia florida*										
POLYCHAETAE	Capitellidae	*Capitella capitata*	22									22
POLYCHAETAE	Capitellidae	*Mediomastus californiensus*										
POLYCHAETAE	Goniadidae	*Glycinde solitana*										
POLYCHAETAE	Nereidae	*Neanthes sp*										
POLYCHAETAE	Nereidae	*Nereis succinea*	7									7
POLYCHAETAE	Orbiniidae	*Scolopus fragilis*	1									1
POLYCHAETAE	Paronidae	*Aricidae sp*										
POLYCHAETAE	Pilargidae	*Parandalia americana*	2									2
POLYCHAETAE	Sabellidae	*Chone cf. americana*										
POLYCHAETAE	Spionidae	*Polydora sp*										
POLYCHAETAE	Spionidae	*Streblospio benedicti*										
OLIGOCHAETA	Tubificidae	*Limnodrilus sp. (LPIL)*	2									2
OLIGOCHAETA	Lumbriculidae	*Lumbriculus sp*	2									2
CLADOCERA	Unid	*LPIL*										
ISOPODA	Anthuridae	*Cyathura polita*										
ISOPODA	Parantanaidae	*Hargeria rapax*	1									1
CUMACEA	Nannasticidae	*Almyracuma sp*										
DECAPODA	Unid. larvae	*LPIL*										
COLEOPTERA	Chelonariidae	*Chelonarum sp*										
DIPTERA	Tendipedidae	*Tanytarsus sp.*	1									1
Totals			43	0	0	0	0	0	0	0	0	43
Number of Species			10	0	0	0	0	0	0	0	0	31
Shannon-Weiner Diversity			2.362									2.362
Pielou's Evenness, J'			1.026									0.688
Margalef's Richness, D			9.734									30.734

TAI Environmental Sciences Inc.

Client : ENSAFE
Location: Station 03
Date: Sept. 18, 1997

TAXON	FAMILY	Species	03-02	03-07								Sum
OLIGOCHAETA	Tubificidae	Tubifex tubifex	5	1								6
HEMIPTERA	Sialidae	Sialis sp	1									1
[illegible]	Dytiscidae	Ilidessus sp	1									1
DIPTERA	Unidentified larvae	LPIL		1								1
DIPTERA	Tendipeddae	Chironomus spp	15									15
DIPTERA	Tendipeddae	Dicrotendipes neomodestus	4									4
DIPTERA	Tendipeddae	Chinotanypus sp		1								1
DIPTERA	Ceratopogonidae	Culicoides sp	7									7
[illegible]	Physidae	Physa sp	1									1
[illegible]	Sphaeriidae	Sphaerium sp	35	2								37
[illegible]	Unidentified	LPIL	1									1
[illegible]	Unidentified sp. [illegible]	LPIL	1									1
Totals			71	5	0	0	0	0	0	0	0	76
Number of Species			10	4	0	0	0	0	0	0	0	12
Shannon-Weiner Diversity			2.243	1.921								2.373
Pielou's Evenness, J'			0.974	1.386								0.955
Margalef's Richness, D			9.765	3.379								11.769

TAI Environmental Sciences Inc.

Client : ENSAFE
Location: Station 64
Date: Sept. 18, 1997

TAXON	FAMILY	Species	64-04	64-05	64-06							Sum
NEMATODA	Unid	*LPIL*	3	2	9							14
NEMERTEA	Unid	*LPIL*		3								3
ECHIURIDA	Echiuridae	*LPIL*										
GASTROPODA	Hydrobiidae	*Onobops sp.*										
GASTROPODA	Littorinidae	*Littorina irrorata*	1									1
GASTROPODA	Melampidae	*Detracia floridana*										
GASTROPODA	Melampidae	*Melampus sp.*										
GASTROPODA	Neritidae	*Nerlina usnea*	32		16							48
GASTROPODA	Planorbidae	*LPIL*										
PELECYPODA	Corbiculidae	*Polymesoda sp*	2									2
PELECYPODA	Mytilidae	*Amygdalum papyrium*		1	3							4
PELECYPODA	Solecurtidae	*Tagelus plebius*										
PELECYPODA	Unid Juvenile	*LPIL*		1								1
POLYCHAETAE	Ampharetidae	*Hobsonia florida*	3	1	9							13
POLYCHAETAE	Capitellidae	*Capitella capitata*		11	15							26
POLYCHAETAE	Capitellidae	*Mediomastus californiensus*	7	7								14
POLYCHAETAE	Capitellidae	*Notomastus sp*		1								1
POLYCHAETAE	Goniadidae	*Glycinde solitaria*										
POLYCHAETAE	Nereidae	*Neanthes sp*										
POLYCHAETAE	Nereidae	*Nereis succinea*	12	6	12							30
POLYCHAETAE	Orbiniidae	*Scolopus fragilis*										
POLYCHAETAE	Paronidae	*Ancidae sp*										
POLYCHAETAE	Pilargidae	*Parandalia americana*		2								2
POLYCHAETAE	Sabellidae	*Chone cf americana*										
POLYCHAETAE	Spionidae	*Polydora sp*										
POLYCHAETAE	Spionidae	*Streblospio benedicti*	3	12	50							65
CLADOCERA	Unid	*LPIL*										
COPEPODA	Unid	*LPIL*	1		2							3
ISOPODA	Anthuridae	*Cyathura polita*										
ISOPODA	Valvifera	*Chiridotea sp*		3	3							6
TANAIDACEA	Paratanaidae	*Hargeria rapax*	1									1
CUMACEA	Nannasticidae	*Almyracuma sp*		12	2							14
DECAPODA	Xanthidae	*Panopeus sp.*		1								1
DECAPODA	Portunidae	*Callinectes sapidus*	1									1
DECAPODA	Unid. larvae	*LPIL*		1								1
COLEOPTERA	Chelonariidae	*Chelonarum sp.*										
Totals			66	64	121	0	0	0	0	0	0	251
Number of Species			11	15	10	0	0	0	0	0	0	36
Shannon-Weiner Diversity			2.424	3.300	2.635							3.294
Pielou's Evenness, J'			1.011	1.219	1.144							0.919
Margalef's Richness, D			10.761	14.760	9.791							35.819

TAI Environmental Sciences Inc.

Client : ENSAFE
Location: Station 75
Date: Sept. 18, 1997

TAXON	FAMILY	Species	75-01									Sum
OLIGOCHAETA	Naidae	*Nais behningi*	1									1
OLIGOCHAETA	Tubificidae	*Tubifex tubifex*	2									2
OLIGOCHAETA	Lumbricidae	*Lumbriculus sp*	1									1
CLADOCERA	Unid	*LPIL*	1									1
NEUROPTERA	Sialidae	*Sialis sp*										
COLEOPTERA	Dytiscidae	*Bidessus sp*										
DIPTERA	Unidentified adult	*LPIL*										
DIPTERA	Culicidae	*Chaoborus sp*	2									2
DIPTERA	Tendipedidae	*Chironomus sp*										
DIPTERA	Tendipedidae	*Dicrotendipes neomodestus*										
DIPTERA	Tendipedidae	*Clinotanypus sp*										
DIPTERA	Tendipedidae	*Phaenopsectra sp*	1									1
DIPTERA	Ceratopogonidae	*Culicoides sp*										
GASTROPODA	Physidae	*Physa sp*										
PELECYPODA	Sphaeriidae	*Sphaerium sp*										
COPEPODA	Unidentified	*LPIL*										
ARACHNIDA	Unidentified spider	*LPIL*										
Totals			8	0	0	0	0	0	0	0	0	8
Number of Species			6	0	0	0	0	0	0	0	0	17
Shannon-Weiner Diversity			2.499									2.499
Pielou's Evenness, J'			1.395									0.882
Margalef's Richness, D			5.519									16.519

TAI Environmental Sciences Inc.

Client : ENSAFE
Location: Station 40
Date: Sept. 18, 1997

TAXON	FAMILY	Species	40-01	40-02	40-03	40-04	40-05	40-06	40-07	40-09	40-10	Sum
NEMERTEA	Unid.	*LPIL*		1	4		8	1	4	1		19
ECHIURIDA	Echiuridae	*LPIL*							1			1
GASTROPODA	Hydrobiidae	*Onobops sp.*	1									1
GASTROPODA	Littorinidae	*Littorina irrorata*									4	4
GASTROPODA	Melampidae	*Detracia floridana*							1			1
GASTROPODA	Melampidae	*Melampus sp.*			1						1	2
GASTROPODA	Planorbidae	*LPIL*				1						1
PELECYPODA	Corbiculidae	*Polymesoda sp.*	2			200			12	41		255
PELECYPODA	Mytilidae	*Amygdalum papyrium*		3	2			1				6
PELECYPODA	Solecurtidae	*Tagelus plebius*								1		1
POLYCHAETAE	Ampharetidae	*Hobsonia florida*	2									2
POLYCHAETAE	Capitellidae	*Capitella capitata*	1	34	2	2	69	5				113
POLYCHAETAE	Capitellidae	*Mediomastus californiensus*		5	4		54		3		1	67
POLYCHAETAE	Goniadidae	*Glycinde solitaria*							1			1
POLYCHAETAE	Nereidae	*Neanthes sp.*		3	3		2					8
POLYCHAETAE	Orbiniidae	*Scolopus fragilis*			5	5	2					12
POLYCHAETAE	Paronidae	*Aricidae sp.*								7		7
POLYCHAETAE	Pilargiidae	*Parandalia americana*				1						1
POLYCHAETAE	Sabellidae	*Chone cf. americana*				1						1
POLYCHAETAE	Spionidae	*Paraprionospio pinnata*		1								1
POLYCHAETAE	Spionidae	*Polydora sp.*										
POLYCHAETAE	Spionidae	*Streblospio benedicti*		10	2		73	10	29		26	150
CLADOCEA	Unid	*LPIL*					2					2
ISOPODA	Anthuridae	*Cyathura polita*	1			1						2
CUMACEA	Nannasticidae	*Almyracuma sp.*						1				1
DECAPODA	Unid. larvae	*LPIL*				1						1
COLEOPTERA	Chelonariidae	*Chelonarum sp.*	1									1
Totals			8	57	23	212	210	18	51	50	32	681
Number of Species			6	7	8	8	7	5	7	4	4	28
Shannon-Weiner Diversity			2.499	1.645	2.855	0.452	1.933	1.879	4.793	0.858	0.931	2.770
Pielou's Evenness, J'			1.395	0.948	1.373	0.218	0.993	1.043	2.483	0.619	0.871	0.831
Margalef's Richness, D			5.519	6.753	7.681	7.813	6.813	4.654	6.746	3.744	3.711	27.846
MacArthur's Equitability			•	•	•	0.188	0.714	•	•	•	•	0.339

TAI Environmental Sciences Inc.

Client : ENSAFE
Location: Station 33
Date: Sept. 18, 1997

TAXON	FAMILY	Species	33-01									Sum
NEMERTEA	Unid.	*LPIL*										
ECHIURIDA	Echiuridae	*LPIL*										
GASTROPODA	Hydrobiidae	*Onobops sp.*	1									1
GASTROPODA	Littorinidae	*Littorina irrorata*	8									8
GASTROPODA	Melampidae	*Detracia floridana*	9									9
GASTROPODA	Melampidae	*Melampus sp*	6									6
GASTROPODA	Potamidae	*Cerithidea sp*	1									
GASTROPODA	Planorbidae	*LPIL*										
PELECYPODA	Corbiculidae	*Polymesoda sp*	2									2
PELECYPODA	Mytilidae	*Amygdalum papyrium*										
PELECYPODA	Solecurtidae	*Tagelus plebius*										
POLYCHAETAE	Ampharetidae	*Hobsonia florida*										
POLYCHAETAE	Capitellidae	*Capitella capitata*										
POLYCHAETAE	Capitellidae	*Mediomastus californiensus*										
POLYCHAETAE	Goniadidae	*Glycinde solitaria*										
POLYCHAETAE	Nereidae	*Neanthes sp*										
POLYCHAETAE	Orbiniidae	*Scolopus fragilis*										
POLYCHAETAE	Paronidae	*Ancidae sp*										
POLYCHAETAE	Pilargiidae	*Parandalia americana*										
POLYCHAETAE	Sabellidae	*Chone cf. americana*										
POLYCHAETAE	Spionidae	*Paraprionospio pinnata*										
POLYCHAETAE	Spionidae	*Polydora sp*										
POLYCHAETAE	Spionidae	*Streblospio benedicti*	16									16
CLADOCEA	Unid	*LPIL*										
ISOPODA	Anthuridae	*Cyathura polita*										
CUMACEA	Nannastlicidae	*Almyracuma sp*	1									1
DECAPODA	Unid. larvae	*LPIL*										
COLEOPTERA	Chelonariidae	*Chelonarum sp*										
Totals			44	0	0	0	0	0	0	0	0	43
Number of Species			8	0	0	0	0	0	0	0	0	30
Shannon-Weiner Diversity			5.459									5.428
Pielou's Evenness, J'			2.625									1.595
Margalef's Richness, D			7.736									29.734

Appendix E
Toxicity Test Methods and Results

Sediment Toxicity Testing
at Site 41, NAS, Pensacola, Florida

Submitted to:

David Trimm/EnSafe
2114 Airport Boulevard
Suite 1150
Pensacola, FL 32504

Submitted by:

TRAC Laboratories, Inc.
14 S. 2nd Street
Pensacola, Florida 32507
(850) 456-5836

Florida Department of Health and Rehabilitative Services
Certification Number E81181

Project Number: 119-1817-1821,
1823-1828, 1830-1836

October 1997

Toxicity Test Summary Sheet

Client:	EnSafe
Project Number:	119-1817-1821, 1823-1828, 1830-1836
Study Directors:	Jeri Brecken-Folse
Test Material:	Surface water and sediment from Site 41
Date Materials Received:	26 August through 4 September 1997
Dates of Tests:	1 September through 21 October 1997
Test Conditions:	Chronic static screens
Test Animals:	*Pimephales promelas* (Lot# PP-97-18), *Chironomus tentans* (Lot# CT-97-02, 03, 04), *Leptocheirus plumulosus* (Lot# LP-97-01/02), *Neanthes arenaceodentata* (Lot# NA-97-02).
Source:	Test organisms were supplied by commercial suppliers.
Control and Dilution Water:	Moderately hard reconstituted freshwater (RCF), U.S. EPA 1993, or natural seawater.
Exposure Concentration:	One hundred percent surface water or sediment
Effect Criteria:	Survival, growth and emergence
Chronic Effects:	*P. promelas*: Growth effects were detected. *C. tentans*: Growth effects were detected. *L. plumulosus*: Survival effects were detected. *N. arenaceodentata*: Effects were not detected

INTRODUCTION

Samples of surface water and sediments were collected by EnSafe personnel on 26 August through 4 September 1997 from Site 41, Pensacola Naval Air Station, Florida. Fathead minnows, *Pimephales promelas*, were exposed to five surface water samples to determine the chronic effects of survival and growth. Midge larvae, *Chironomus tentans*, were exposed to six sediment samples to determine the chronic effects of survival, growth and emergence. The amphipod, *Leptocheirus plumulosus*, and the marine polychaetae, *Neanthes arenaceodentata*, were exposed to seven sediment samples to determine the chronic effects of survival and growth. Tests were conducted from 1 September through 21 October 1997. All original raw data are archived at TRAC, but copies are provided as Appendix A.

MATERIALS AND METHODS

Test Material

Five surface water samples were collected by EnSafe personnel and delivered to TRAC on 26 August 1997, in filled 9.5 L cubitainers at 26.0 - 30.9°C. Surface water stations 7501, 5A04, 5A05, 5A06 and 0301 were assigned TRAC sample numbers 1821, 1817, 1818, 1819, and 1820, respectively.

Sediment samples from six stations were collected and delivered to TRAC on 28 August 1997. Each sample filled two 0.2 L plastic containers and arrived at temperatures between 27.0 and 29.0°C. Sediment stations 7501, 5A04, 5A05, 5A06, 302, and 307 were assigned TRAC sample numbers 1828, 1823, 1824, 1925, 1826 and 1827, respectively.

Sediment samples collected from stations 3301 and 3302 were collected and delivered 27 August 1997, and assigned samples numbers 1835 and 1836, respectively. Stations 6406 (1832) and 18B1 (1833) were collected and delivered 29 August 1997; 6404 (1830), 6405 (1831) and 1603 (1834) were collected and delivered 4 September 1997. The seven stations arrived at temperatures between 29.0 and 35.2°C in filled 3.8 L plastic containers.

Interstitial salinity and whether samples needed to be press sieved was noted on chain of custody (Appendix A). All samples were logged into the "Test Material Log," refrigerated and held at 4°C until test initiation.

Control Water

Overlying water was moderately hard RCF at a $CaCO_3$ hardness of 120 mg/L for the *P. promelas* and *C. tentans* tests. Control water was natural seawater collected from the Gulf of Mexico diluted with dechlorinated freshwater to 20 ppt salinity for *L. plumulosus* tests and 28 ppt for *N. arenaceodentata* tests.

Control Sediment

Control sediment for *Chironomus tentans* tests (F18) was formulated by combining commercial grade top soil with deionized water. Grain size characteristics were determined to be

20% sand and 80% silt and clay. Control sediment for marine species, *L. plumulosus* and *N. arenaceodentata*, was collected from Perdido Bay, Florida. This sediment is referred to as C17 in the data and was 2% sand and 98% silt and clay. Physical characteristics data are in Appendix A.

Test Organisms

P. promelas (Lot# PP-97-18) were delivered by overnight courier from a commercial supplier. Animals were less than 24 hours old upon arrival and test initiation. Reference toxicant tests are routinely conducted for *P. promelas* at TRAC. Reference toxicant data and control charts are in Appendix B.

C. tentans (Lot# CT-97-02/03/04) were also delivered by overnight courier from a commercial supplier. Batches were 11 and 12 days old upon test initiation. Average initial weight of midge larvae was 0.20 mg. The culturing laboratory supplied reference toxicant data for May, June and July conducted on this population of *C. tentans*. LC 50 data are in Appendix B.

L. plumulosus (Lot# LP-97-01/02) were delivered by overnight courier from a commercial supplier. The amphipods were 2-4 mm at test initiation. TRAC conducted one reference toxicant test for this species. Trimmed Spearman-Karber estimated an LC50 of 5.9 mg/L CdCl which could only be compared with one reference toxicant test cited in ASTM guidance (1.06 mg/L CdCl).

N. arenaceodentata (Lot# NA-97-02) arrived by overnight courier from a commercial supplier and were 2-3 weeks post-emergence at test initiation. The marine worms averaged 0.94 mg at test initiation. TRAC conducted one reference toxicant test for this species. The Trimmed Spearman-Karber Method estimated an LC50 of 14 mg/L CdCl which is within the range of LC50s cited by ASTM guidelines (12-22 mg/L CdCl).

Test Conditions

Tests were conducted in a temperature-controlled environmental chamber under a 16-hour light, 8-hour dark photoperiod. Dissolved oxygen, pH, temperature and salinity (for marine tests) were measured in one replicate of each sample intermittently throughout each test. Tests were conducted following the EPA and ASTM guidance cited by the contract proposal and are listed in the reference section at the end of this report. Test conditions varied for each species and are summarized in Table 1. Test endpoints and water quality measurements are recorded on raw data sheets in Appendix A.

Statistical Analysis

Statistical analyses of test data were performed using TOXSTAT, a computer program developed by the University of Wyoming.

P. promelas: survival data were entered at proportions, arc sine [square root (Y)] transformed and analyzed by Dunnett's ANOVA. Weight data were not transformed but analyzed by Dunnett's ANOVA.

C. tentans: Fischer's Exact Test was used to analyze survival data because there were 12 replicates each containing one organism. Weight data were not transformed but analyzed by

Bonferroni's T-Test because of unequal replicates (due to mortality). Emergence data for stations 5A04, 5A05 and 5A06 were arc sine transformed and analyzed by Kruskal-Wallis because assumptions were not met for Steels Many-One Rank Test or Bonferroni's Test. Emergence data for stations 7501, 0307 and 0302 did not meet the criteria for any one of the above analyses because there was not enough sample to duplicate after press sieving.

L. plumulosus: survival data were entered as proportions, arc sine transformed and analyzed by Dunnett's ANOVA.

N. arenaceodentata: weight data were not transformed but analyzed by Dunnett's ANOVA. Survival data did not require analysis.

Results

Mean percent survival, mean individual weights and percent total emergence is presented in Table 2. Raw data calculations are recorded on raw data sheets in Appendix A.

P. promelas: there were no chronic effects for survival, but weights were significantly lower than controls for minnows exposed to surface waters at stations 5A05, 5A06, 0301 and 7501.

C. tentans: there were no chronic effects for survival, but weights were significantly lower than controls for larvae exposed to sediments at stations 5A05, 7501 and 0307. There were no chronic effects for emergence when compared to the control sediment larvae which only yielded 50 and 60% (Table 2) emerged adults. Guidance suggests that the average emergence usually observed is 60%, and the control population should yield 70%. All stations performed as well as or better than the control sediments (F18). It should be noted however, that the lowest emergence occurred in stations 5A05 and 7501 (as well as control F18) which correlated with the significantly lower weights observed for *C. tentans* at these two stations.

L. plumulosus: survival for Stations 6404 and 6406 was significantly lower (78% and 74%) than the control station (98%). Notes in the raw data indicate both stations had strong petroleum odors.

N. arenaceodentata: Chronic effects were not observed for survival and weight at any station.

REFERENCES

Gulley, E.D., Boelter A.M., and Burgman H. 1989. TOXSTAT Release 3.0, University of Wyoming, Laramie, Wyoming.

TRAC Laboratories, Inc. 1994. Generic Quality Assurance Plan for Laboratory Toxicity Tests of Effluent Samples, Florida Department of Environmental Regulation.

U.S. EPA. 1989. Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (TRAC SOP 504.1, 516.1:F).

ASTM Standards on Aquatic Toxicology and Hazard Evaluation. (ASTM E-1367-92/TRAC SOP 517.1:F, ASTM E-1611-94, ASTM E-1706-95B/SOP Department of Fisheries and Wildlife, MSU, 1993).

Don Reish. Laboratory Protocol: Juveniles Polychaete Sediment Bioassay, Revised 1991.

Table 1. Summary of test conditions for 3 species.

Test Condition	*Neanthes arenaceodentata*	*Leptocheirus plumulosus*	*Pimephales promelas*	*Chironomus tentans*
Temp (°C.)	20±1	20±1	25±1	20±1[1]/23±1
Light intensity	50-100 fc	50-100 fc	50-100 fc	50-100 fc
Photo period	16L:8D	16L:8D	16:8D	16L:8D
Vessel size	1L Mason jar	1L Mason jar	0.5L	50 mL centrifuge tube/1L Mason jar
Sediment volume	0.200 L	0.200 L	n/a	7.5 g/200mL
Water volume	0.700 L	0.700 L	0.250 L	42.5 mL/700 mL
Organisms/vessels	5	20	10	1 / 10
Replicates	5	5	4	12 / 2[2]
Organisms/Conc.	25	100	40	12 / 20
Aeration	yes	yes	no	yes
Dilution water	Natural seawater	Natural seawater	Reconstituted freshwater	Reconstituted freshwater
Salinity	28 ppt	20 ppt	Mod. Hard	Mod. Hard
Duration	20 days	10 days	7 days	10 / 28 days
Size/age	2-3wk post-em 0.5-1.0 mg/dry	2-4 mm	<24 hours	2nd instar larvae/ 10-12 days
Renewal	2 times/week	no	daily	no / yes
Feeding	Tetramin	no	24 hr. artemia	Tetramin
Endoints	Survival, total and average weights	Survival	Survival, weights	10-d survival, weight, 28-d emergence

[1]Survival and weight test conditions listed before emergence test conditions.
[2]Stations 7501, 302 and 307 were press sieved for debris leaving only enough sample to set up one replicate; remaining samples had two replicates.

Summary of Bioassays Conducted (Sept. - Oct. '97) on Site 41 Surface Water and Sediments, NAS, Pensacola, FL

Pimephales promelas			*Chironomus tentans*				*Leptocheirus plumulosus*		*Neanthes arenaceodentata*		
Site	**%Survival**	**Weight (mg)**	**Site**	**%Survival**	**Weight (mg)**	**%Emerged**	**Site**	**%Survival**	**Site**	**% Survival**	**Weight (mg)**
Control	100%	0.58	F18	100%	2.6	60%	C17	99%	C17	100%	8.5
5A04	100%	0.49	5A04	100%	2.6	75%	3301	92%	3301	92%	10.7
5A05	100%	0.43*	5A05	100%	1.6*	50%	3302	96%	3302	100%	10.1
5A06	97.5%	0.46*	5A06	83%	2.8	75%	1881	100%	1881	100%	8.4
7501	90%	0.44*	F18	91%	2.7	50%	C17	98%	---	---	---
0301	97.5%	0.49	7501	83%	1.3*	50%	1603 ~~6403~~	93%	1603 ~~6403~~	100%	8.0
			0302	83%	2.9	60%	6404	78% *	6404	100%	8.0
			0307	91%	2.0*	70%	6405	96%	6405	96%	7.2
							6406	74% *	6406	88%	8.5

* = Statistical significant difference from control population.

APPENDIX A

(1)

NAVY CLEAN
ENSAFE/ALLEN & HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CLIENT: EnSafe/Allen & Hoshall
ADDRESS: 5724 Summer Trees, Memphis, TN 38134
PROJECT NAME/NUMBER: [illegible] Wetlands
PROJECT MANAGER: Henry Beiro
TELEPHONE NO.: (901) 372-7962
FAX NO.: (901) 372-2454
SAMPLERS: (SIGNATURE) [illegible]

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	TCL VOCs	TCL BNAs	TCL PEST/PCBs	TAL METALS	TCL CYANIDE	Lead	Nitrate	Chloride	REMARKS
3301	8/27	1400	Sed	1 gallon	4°C								X	X		5:10pm NPS
3302		1000	Sed	1.5 gal									X	X		5:17pm 2mm
3303		1630		2-300ml											X	NPS
3304		1600		3 300ml											X	NPS

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE [illegible]	8/27 1993	SIGNATURE [illegible]	8/28	SIGNATURE		SIGNATURE	
PRINTED D. Tirrim	TIME	PRINTED J. False	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY E/A&H	1800	COMPANY TTRAC	0830	COMPANY		COMPANY	
REASON SHIPMENT		REASON		REASON		REASON	

METHOD OF SHIPMENT: FEDEX
SHIPMENT NO.: Hand
SPECIAL INSTRUCTION: ~~PRIORITY~~

COMMENTS: Samples arrived after lab closed, and were left in Walk in cooler w/ COC. Samples were at 4°C this am when opened this morning.

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☐ DISPOSED OF (ADDITIONAL FEE)
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS (ADDITIONAL FEE)
- ☐ RETURNED TO CUSTOMER

059COCR

NAVY CLEAN
ENSAFE/ALLEN & HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CLIENT: EnSafe/Allen & Hoshall
ADDRESS: 5724 Summer Trees, Memphis, TN 38134
PROJECT NAME/NUMBER: 36-40/41
PROJECT MANAGER: Henry Beiro
TELEPHONE NO.: (901) 372-7962
FAX NO.: (901) 372-2454
SAMPLERS: (SIGNATURE) D. T

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	TCL VOCs	TCL BNAs	TCL PEST/PCBs	TAL METALS	TCL CYANIDE	Lead	Nickel	Mg & Chrome	REMARKS
40-01	8/28/97	1115	Sed	1 gal	4°C								X	X	X	5-25 NPS
05A-04	↓	0900	Sed	2-200ml	↓										X	NPS
05A-05		1000	Sed	2-200ml											X	NPS
05A-06		1015	Sed	2-200ml											X	NPS
75-01		1200	Sed	2-200ml											X	NPS
																~~NPS~~

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE: D. T	8/28	SIGNATURE:	28 Aug 97	SIGNATURE:		SIGNATURE:	
PRINTED: D. Timm	1997	PRINTED:		PRINTED:		PRINTED:	
COMPANY: E/~~[illegible]~~	TIME	COMPANY:	TIME	COMPANY:	TIME	COMPANY:	TIME
REASON: SHIPMENT	1300	REASON:	1600	REASON:		REASON:	

METHOD OF SHIPMENT: ~~FEDEX~~ Hand
SHIPMENT NO.:
SPECIAL INSTRUCTION: ~~PRIORITY~~

COMMENTS:

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☐ DISPOSED OF (ADDITIONAL FEE)
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS (ADDITIONAL FEE)
- ☐ RETURNED TO CUSTOMER

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NAVY CLEAN
ENSAFE/ALLEN & HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CLIENT EnSafe/Allen & Hoshall
ADDRESS 5724 Summer Trees
Memphis, TN. 38134
PROJECT NAME/NUMBER 036-5[illegible]/1

PROJECT MANAGER Henry Beiro
TELEPHONE NO. (901) 372-7962
FAX. NO. (901) 372-2454
SAMPLERS: (SIGNATURE)

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	TCL VOCs	TCL BNAs	TCL PEST/PCBs	TAL METALS	TCL CYANIDE	LEAD	Asbestos	MS/MSD	REMARKS Grass Sieve
04C-02	8-24	0900	Soil	1 gallon	4°C		1						X	X	X	20% ~~2NPS~~
04C-03		0930	Soil	1 gallon			1						X	X	X	20% NPS
04C-04		1000	Soil	1 gallon			1						X	X	X	20% NPS
04C-05		1100	Soil	1 gallon			1						X	X	X	20% NPS
04C-06		1120	Soil	1 gallon			1						X	X	X	20% NPS
[illegible]-B1		1030	Soil	2-gallon			2						X	X		1/16 2mm

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE D. T.	8/24/99	SIGNATURE	8/29	SIGNATURE		SIGNATURE	
PRINTED D. Trimm	TIME	PRINTED G. Brecken	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY E/~~ANH~~		COMPANY TRAC		COMPANY		COMPANY	
REASON SHIPMENT		REASON		REASON		REASON	

METHOD OF SHIPMENT: ~~FEDEX~~
SHIPMENT NO. H&D
SPECIAL INSTRUCTION: ~~PRIORITY~~

COMMENTS:

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☐ DISPOSED OF (ADDITIONAL FEE)
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS (ADDITIONAL FEE)
- ☐ RETURNED TO CUSTOMER

(4)

NAVY CLEAN
ENSAFE/ALLEN & HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CLIENT EnSafe/Allen & Hoshall
ADDRESS 5724 Summer Trees
Memphis, TN. 38134
PROJECT NAME/NUMBER 036/Sites 40/41

PROJECT MANAGER Henry Beiro
TELEPHONE NO. (901) 372-7962
FAX. NO. (901) 372-2454
SAMPLERS: (SIGNATURE) D. T

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	TCL VOCs	TCL BNAs	TCL PEST/PCBs	TAL METALS	TCL CYANIDE	Lead	Manganese	Mg, Si, d	REMARKS
40-07	9-3-97	0900	Sed	1-gal	4°C								X	X	X	
40-08	↓	0945	↓	↓	↓								X	X	X	
40-09		1000											X	X	X	
40-10		1030											X	X	X	
64-06		1045											X	X	X	

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE D. T	1993	SIGNATURE	3/9/97	SIGNATURE		SIGNATURE	
PRINTED D. Trimm	TIME	PRINTED Ann Johnson	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY E/A&H		COMPANY TAC		COMPANY		COMPANY	
REASON SHIPMENT		REASON Receive	1150	REASON		REASON	

METHOD OF SHIPMENT: ~~FEDEX~~
SHIPMENT NO. HAND
SPECIAL INSTRUCTION: ~~PRIORITY~~

COMMENTS:

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☐ DISPOSED OF (ADDITIONAL FEE)
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS (ADDITIONAL FEE)
- ☐ RETURNED TO CUSTOMER

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(5)

NAVY CLEAN
ENSAFE/ALLEN & HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CLIENT EnSafe/Allen & Hoshall
ADDRESS 5724 Summer Trees
Memphis, TN 38134
PROJECT NAME/NUMBER D36 Site 40/41
PROJECT MANAGER Henry Beiro
TELEPHONE NO. (901) 372-7962
FAX NO. (901) 372-2454
SAMPLERS: (SIGNATURE) D. L. Trimm

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	TCL VOCs	TCL BNAs	TCL PEST/PCBs	TAL METALS	TCL CYANIDE	Lead	Nitrate	REMARKS
04-05	9-4-97	1030	Sed	1 gal	4°C		1						X	X	NPS
04-04	9-4-97	1000	Sed	1 gal	↓		1						X	X	NPS
16-03	9-4-97	1130	Sed	1 gal	↓		1						X	X	NPS

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE D. L. Trimm	9/4 1997	SIGNATURE Rick Abad		SIGNATURE		SIGNATURE	
PRINTED D. L. Trimm	TIME	PRINTED RICK ABAD	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY E/A&H		COMPANY TRAC		COMPANY		COMPANY	
REASON SHIPMENT		REASON		REASON		REASON	

METHOD OF SHIPMENT: ~~FEDEX~~ HAND
SHIPMENT NO.
SPECIAL INSTRUCTION: ~~PRIORITY~~

COMMENTS:

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☐ DISPOSED OF (ADDITIONAL FEE)
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS (ADDITIONAL FEE)
- ☐ RETURNED TO CUSTOMER

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(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CLIENT: EnSafe/Allen & Hoshall
ADDRESS: 5724 Summer Trees, Memphis, TN. 38134
PROJECT NAME/NUMBER: wetland/036-Site 41
PROJECT MANAGER: Henry Beiro
TELEPHONE NO.: (901) 372-7962
FAX. NO.: (901) 372-2454
SAMPLERS: (SIGNATURE) D. Trimm, C. Mason

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	TCL VOCs	TCL BNAs	TCL PEST/PCBs	TAL METALS	TCL CYANIDE	Biomass/Pine Needles		REMARKS
0301	8/26	1030	W	2.5 gal	4°C								X		Initial Temp = 26°C
0304	↓	1315	↓	↓	↓								X		30.5°C ~~27.7°C~~
0305		1330											X		31.7°C
0306		1350											X		28.7°C
7501		1520											X		27.7°C

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE: [signature]	8/26/1997	SIGNATURE: Rick Abad		SIGNATURE:		SIGNATURE:	
PRINTED: D.L. Trimm		PRINTED: RICK ABAD		PRINTED:		PRINTED:	
COMPANY: E/A&H	TIME	COMPANY: TRAC LABS	TIME	COMPANY:	TIME	COMPANY:	TIME
REASON: SHIPMENT	1600	REASON:		REASON:		REASON:	

METHOD OF SHIPMENT: ~~FEDEX~~ Hand
SHIPMENT NO.:
SPECIAL INSTRUCTION: ~~PRIORITY~~

COMMENTS: TRAC Project # 119-1917-21

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☐ DISPOSED OF (ADDITIONAL FEE)
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS (ADDITIONAL FEE)
- ☐ RETURNED TO CUSTOMER

059COCR

TIERRA CONSULTING, INC.
SEDPET III: SEDIMENTARY PETROLOGY ANALYSIS PROGRAM

.LYSIS OF SAMPLE: TL-F18

ORGANIC CARBON = 3.94%

SIEVE ANALYSIS

SAMPLE WEIGHT = 15.04

SIEVE SIZE (MICRONS)	SIEVE SIZE (PHI)	SIEVE WT (GRAMS)	WEIGHT PERCENT RETAINED	CUMULATIVE PERCENT THROUGH	CUMULATIVE PERCENT RETAINED
500.00	1.00	.05	.33	99.67	.33
250.00	2.00	.09	.60	99.07	.93
125.00	3.00	.05	.33	98.74	1.26
62.50	4.00	.02	.13	98.60	1.40

HYDROMETER ANALYSIS

LUME = 1000.00 ASSUMED SPECIFIC GRAVITY = 2.650

TIME (MINS)	HYDROMETER READING	TEMPERATURE (DEGREES C)	EFFECTIVE DEPTH	TEMPERATURE CORRECTION
1.	14.00	21.50	14.00	.01341
5.	13.50	21.50	14.08	.01341
15.	13.00	21.50	14.16	.01341
60.	11.00	21.50	14.49	.01341
180.	9.00	21.50	14.82	.01341
720.	8.00	21.50	14.98	.01341
1200.	7.50	21.00	15.06	.01349

TIME (MINS)	DIAMETER (MICRONS)	DIAMETER (IN PHI)	WEIGHT PERCENT RETAINED	CUMULATIVE PERCENT THROUGH	CUMULATIVE PERCENT RETAINED
1.	50.18	4.32	5.52	93.09	6.91
5.	22.51	5.47	3.32	89.76	10.24
15.	13.03	6.26	3.32	86.44	13.56
60.	6.59	7.25	13.30	73.14	26.86
180.	3.85	8.02	13.30	59.84	40.16
720.	1.93	9.01	6.65	53.19	46.81
1200.	1.51	9.37	3.32	49.87	50.13

TEXTURAL CLASSIFICATION AND PHI PERCENTILES — SAMPLE TL-F18

SIZE CLASSIFICATION USED: STANDARD GEOLOGICAL SOILS CLASSIFICATION

GRAVEL/SAND CUTOFF	2000.00	MICRONS
SAND/SILT CUTOFF	62.50	MICRONS
SILT/CLAY CUTOFF	4.00	MICRONS

PERCENT GRAVEL	.00
PERCENT SAND	1.40
PERCENT SILT	37.81
PERCENT CLAY	60.80

TEXTURAL DESCRIPTIONS

FOLK'S: MUD
SHEPARD'S: SILTY CLAY
TREFETHEN'S: SILTY CLAY
U.S. ARMY CORPS OF ENGINEERS: CLAY
U.S. BUREAU OF SOILS: CLAY

PHI PERCENTILES

PHI(05)	4.21	PHI	54.15 MICRONS
PHI(16)	6.44	PHI	11.50 MICRONS
PHI(25)	7.11	PHI	7.25 MICRONS
PHI(50)	9.36	PHI	1.53 MICRONS

EXTRAPOLATION OF DATA TO CUMULATIVE 99.5% RETAINED.

NUMBER OF SAMPLES SELECTED: 7
CORRELATION COEFFICIENT: .9856613
STANDARD ERROR OF THE ESTIMATE: 1.1586659
RANGE OF STANDARD RESIDUALS: 12.7761 WITH MINIMUM: -6.0233 AND MAXIMUM: 6.7527
F-TEST: 170.6118 WITH 1 AND 5 DEGREES OF FREEDOM.

WARNING EXTRAPOLATION MAY BE MEANINGLESS SINCE
LESS THAN 75% ACCOUNTED FOR BY INPUT DATA.***

EXTRAPOLATED PHI PERCENTILES

PHI(05)	4.21	PHI	54.15 MICRONS
PHI(16)	6.44	PHI	11.50 MICRONS
PHI(25)	7.11	PHI	7.25 MICRONS
PHI(50)	9.36	PHI	1.53 MICRONS
PHI(75)	10.02	PHI	.97 MICRONS
PHI(84)	10.28	PHI	.80 MICRONS
PHI(95)	10.58	PHI	.66 MICRONS
PHI(99.9)	10.695	PHI	.603 MICRONS

INTERPOLATED PHI PERCENTILES SAMPLE TL-F18

PHI	MICRONS	MM	PCT. RET	PCT. FINER
1.00	500.00	.5000E+00	.33	99.67
1.25	420.45	.4204E+00	.48	99.52
1.50	353.55	.3536E+00	.63	99.37
1.75	297.30	.2973E+00	.78	99.22
2.00	250.00	.2500E+00	.93	99.07
2.25	210.22	.2102E+00	1.01	98.99
2.50	176.78	.1768E+00	1.10	98.90
2.75	148.65	.1487E+00	1.18	98.82
3.00	125.00	.1250E+00	1.26	98.74
3.25	105.11	.1051E+00	1.30	98.70
3.50	88.39	.8839E-01	1.33	98.67
3.75	74.33	.7433E-01	1.36	98.64
4.00	62.50	.6250E-01	1.40	98.60
4.25	52.56	.5256E-01	5.75	94.25
4.50	44.19	.4419E-01	7.44	92.56
4.75	37.16	.3716E-01	8.16	91.84
5.00	31.25	.3125E-01	8.88	91.12
5.25	26.28	.2628E-01	9.60	90.40
5.50	22.10	.2210E-01	10.35	89.65
5.75	18.58	.1858E-01	11.41	88.59
6.00	15.63	.1563E-01	12.46	87.54
6.25	13.14	.1314E-01	13.51	86.49
6.50	11.05	.1105E-01	16.78	83.22
6.75	9.29	.9291E-02	20.16	79.84
7.00	7.81	.7813E-02	23.54	76.46
7.25	6.57	.6570E-02	26.94	73.06
7.50	5.52	.5524E-02	31.22	68.78
7.75	4.65	.4645E-02	35.51	64.49
8.00	3.91	.3906E-02	39.79	60.21
8.25	3.28	.3285E-02	41.69	58.31
8.50	2.76	.2762E-02	43.37	56.63
8.75	2.32	.2323E-02	45.04	54.96
9.00	1.95	.1953E-02	46.72	53.28
9.25	1.64	.1642E-02	49.01	50.99
9.50	1.38	.1381E-02	55.03	44.97
9.75	1.16	.1161E-02	64.42	35.58
10.00	.98	.9766E-03	73.81	26.19
10.25	.82	.8212E-03	83.20	16.80
10.50	.69	.6905E-03	92.59	7.41

STATISTICS AND ENGINEERING PARAMETERS — SAMPLE TL-F18

INMAN'S STATISTICS:

MEDIAN	9.355	PHI	1.527	MICRONS
MEAN	8.363	PHI	3.037	MICRONS
STANDARD DEVIATION	1.921	POORLY SORTED		
SKEWNESS	-.517	STRONGLY COARSE-SKEWED		
KURTOSIS	.658	VERY PLATYKURTIC		

FOLK'S STATISTICS:

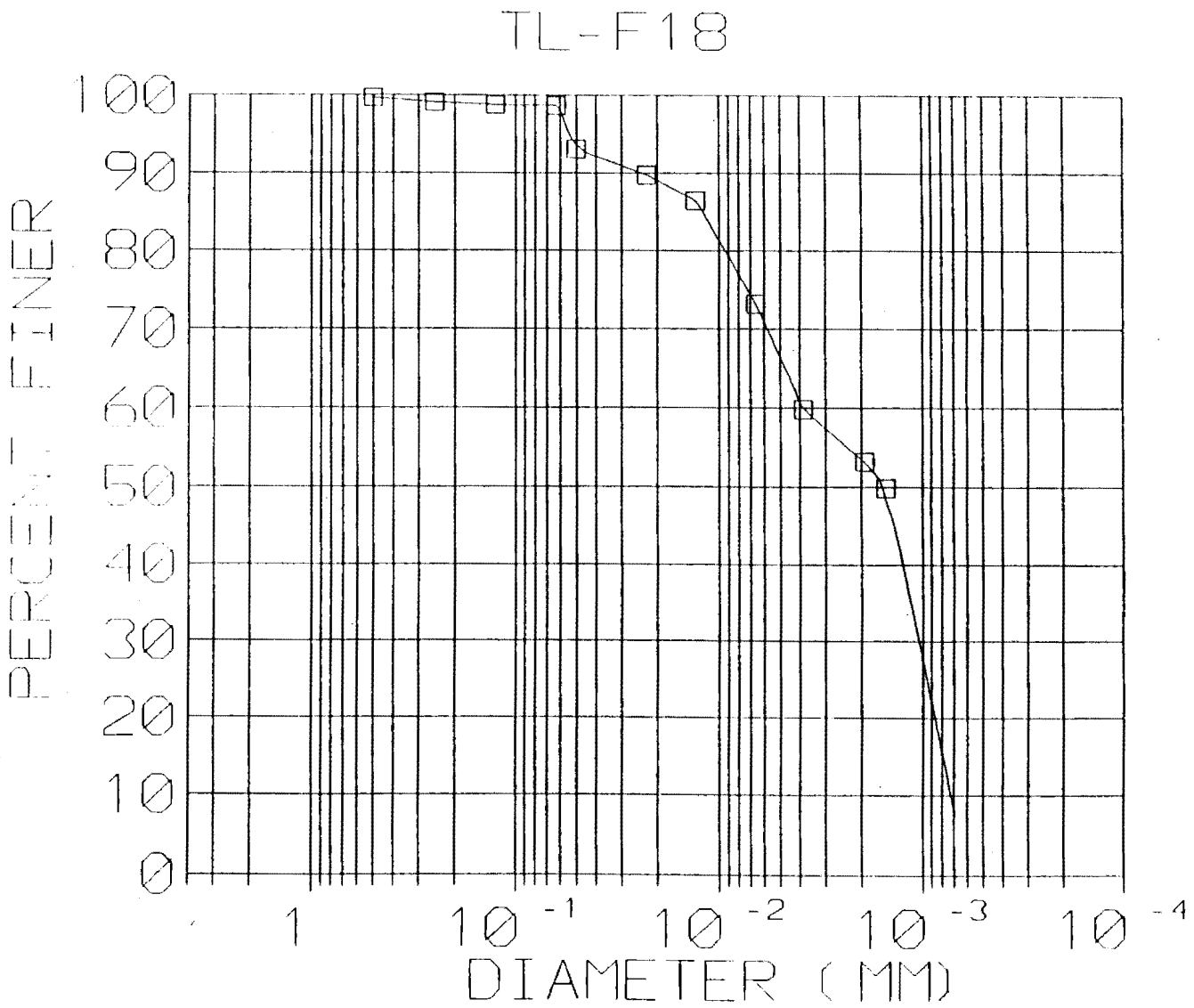
MEAN	8.694	PHI	2.415	MICRONS
STANDARD DEVIATION	1.925	POORLY SORTED		
SKEWNESS	-.567	STRONGLY COARSE-SKEWED		
KURTOSIS	.898	PLATYKURTIC		

MOMENT MEASURES:

MEAN	8.383	PHI	2.995	MICRONS
SECOND MOMENT	4.090			
STANDARD DEVIATION	2.022	VERY POORLY SORTED		
THIRD MOMENT	-8.602			
SKEWNESS	-1.040	STRONGLY COARSE-SKEWED		
FOURTH MOMENT	60.548			
KURTOSIS	1.206	LEPTOKURTIC		

ENGINEERING PARAMETERS:

D60	8.028	PHI	3.831	MICRONS
D30	9.899	PHI	1.048	MICRONS
D10	10.431	PHI	.724	MICRONS
COEF. OF UNIFORMITY	5.290			
COEF. OF CURVATURE	.395			


TL-F18
PERCENT FINER
100
90
80
70
60
50
40
30
20
10
0
1
10 -1
10 -2
10 -3
10 -4
DIAMETER (MM)

TIERRA CONSULTING,INC.
SEDPET III: SEDIMENTARY PETROLOGY ANALYSIS PROGRAM

ANALYSIS OF SAMPLE: TL-C17

SIEVE ANALYSIS

SAMPLE WEIGHT = 37.35

SIEVE SIZE (MICRONS)	SIEVE SIZE (PHI)	SIEVE WT (GRAMS)	WEIGHT PERCENT RETAINED	CUMULATIVE PERCENT THROUGH	CUMULATIVE PERCENT RETAINED
500.00	1.00	.07	.19	99.81	.19
250.00	2.00	1.27	3.40	96.41	3.59
125.00	3.00	5.10	13.65	82.76	17.24
62.50	4.00	1.08	2.89	79.87	20.13

HYDROMETER ANALYSIS

OLUME = 1000.00 ASSUMED SPECIFIC GRAVITY = 2.650

TIME (MINS)	HYDROMETER READING	TEMPERATURE (DEGREES C)	EFFECTIVE DEPTH	TEMPERATURE CORRECTION
1.	24.50	21.50	12.28	.01341
5.	22.00	21.50	12.69	.01341
15.	20.00	21.50	13.01	.01341
60.	18.50	21.50	13.26	.01341
180.	16.50	21.50	13.59	.01341
720.	15.00	21.50	13.83	.01341
1200.	14.00	21.50	14.00	.01341

TIME (MINS)	DIAMETER (MICRONS)	DIAMETER (IN PHI)	WEIGHT PERCENT RETAINED	CUMULATIVE PERCENT THROUGH	CUMULATIVE PERCENT RETAINED
1.	46.99	4.41	14.27	65.60	34.40
5.	21.36	5.55	6.69	58.90	41.10
15.	12.49	6.32	5.35	53.55	46.45
60.	6.30	7.31	4.02	49.53	50.47
180.	3.68	8.08	5.35	44.18	55.82
720.	1.86	9.07	4.02	40.16	59.84
1200.	1.45	9.43	2.68	37.48	62.52

TEXTURAL CLASSIFICATION AND PHI PERCENTILES — SAMPLE TL-C17

E CLASSIFICATION USED: STANDARD GEOLOGICAL SOILS CLASSIFICATION

GRAVEL/SAND CUTOFF	2000.00	MICRONS
SAND/SILT CUTOFF	62.50	MICRONS
SILT/CLAY CUTOFF	4.00	MICRONS

PERCENT GRAVEL	.00
PERCENT SAND	20.13
PERCENT SILT	34.87
PERCENT CLAY	44.99

TEXTURAL DESCRIPTIONS

FOLK'S: SANDY MUD
SHEPARD'S: SAND-SILT-CLAY
TREFETHEN'S: SANDY SILTY-CLAY
U.S. ARMY CORPS OF ENGINEERS: SILTY CLAY
U.S. BUREAU OF SOILS: CLAY

PHI PERCENTILES

PHI(05)	2.10	PHI	232.70	MICRONS
PHI(16)	2.91	PHI	133.14	MICRONS
PHI(25)	4.14	PHI	56.71	MICRONS
PHI(50)	7.19	PHI	6.83	MICRONS

EXTRAPOLATION OF DATA TO CUMULATIVE 99.5% RETAINED.

NUMBER OF SAMPLES SELECTED: 7
CORRELATION COEFFICIENT: .9913523
STANDARD ERROR OF THE ESTIMATE: 1.0313079
RANGE OF STANDARD RESIDUALS: 3.1565 WITH MINIMUM: -1.3534 AND MAXIMUM: 1.8030
F-TEST: 285.3494 WITH 1 AND 5 DEGREES OF FREEDOM.

WARNING EXTRAPOLATION MAY BE MEANINGLESS SINCE
LESS THAN 75% ACCOUNTED FOR BY INPUT DATA.***

EXTRAPOLATED PHI PERCENTILES

PHI(05)	2.10	PHI	232.70	MICRONS
PHI(16)	2.91	PHI	133.14	MICRONS
PHI(25)	4.14	PHI	56.71	MICRONS
PHI(50)	7.19	PHI	6.83	MICRONS
PHI(75)	10.85	PHI	.54	MICRONS
PHI(84)	11.83	PHI	.27	MICRONS
PHI(95)	12.90	PHI	.13	MICRONS
PHI(99.9)	13.342	PHI	.096	MICRONS

STATISTICS AND ENGINEERING PARAMETERS SAMPLE TL-C17

INMAN'S STATISTICS:

MEDIAN	7.194	PHI	6.828	MICRONS
MEAN	7.371	PHI	6.039	MICRONS
STANDARD DEVIATION	4.462	EXTREMELY POORLY SORTED		
SKEWNESS	.040	NEAR-SYMMETRICAL		
KURTOSIS	.210	VERY PLATYKURTIC		

FOLK'S STATISTICS:

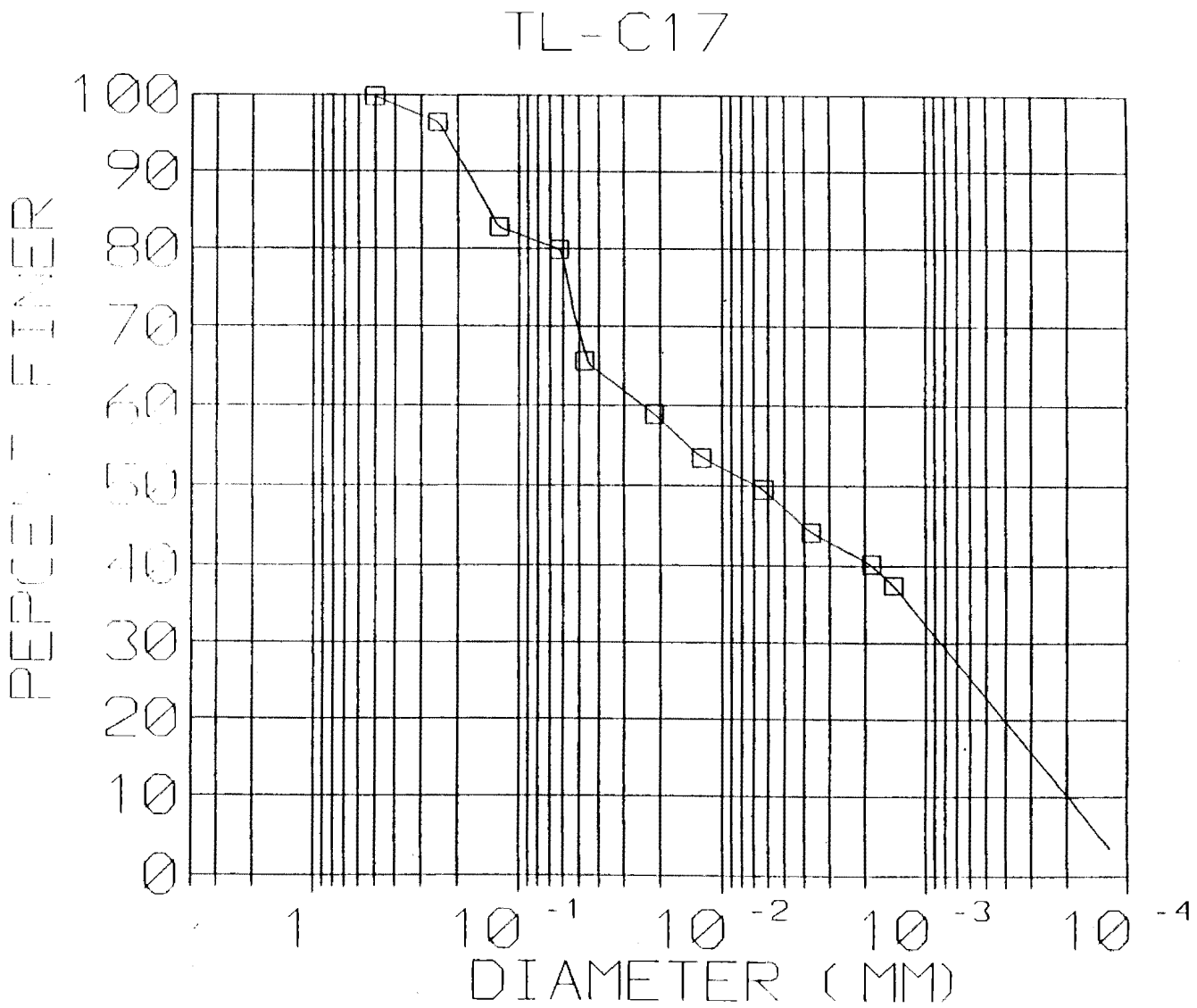
MEAN	7.312	PHI	6.292	MICRONS
STANDARD DEVIATION	3.868	VERY POORLY SORTED		
SKEWNESS	.049	NEAR-SYMMETRICAL		
KURTOSIS	.660	VERY PLATYKURTIC		

MOMENT MEASURES:

MEAN	7.312	PHI	6.294	MICRONS
SECOND MOMENT	13.796			
STANDARD DEVIATION	3.714	VERY POORLY SORTED		
THIRD MOMENT	3.849			
SKEWNESS	.075	NEAR-SYMMETRICAL		
)URTH MOMENT	300.664			
ʌURTOSIS	.527	VERY PLATYKURTIC		

ENGINEERING PARAMETERS:

D60	5.362	PHI	24.310	MICRONS
D30	10.214	PHI	.842	MICRONS
D10	12.307	PHI	.197	MICRONS
COEF. OF UNIFORMITY	123.155			
COEF. OF CURVATURE	.148			


TL-C17
PERCENT FINER
100
90
80
70
60
50
40
30
20
10
0
1
10 -1
10 -2
10 -3
10 -4
DIAMETER (MM)

TOXICITY TEST SURVIVAL

SPECIES *P. promelas*

TRAC ID 115-1817-1821

SPONSOR Ensafe

SAMPLE ID SA04, SA05, SA06, OJ01, 7501

AGE <24 hrs

BROOD FP 97 15

	BEGIN	END
DATE	27 Aug 1997	3 Sept 97
TIME	1535	1400

Conc. %	REP	Number Alive 0	24	48	72	96	120	144	168	ALIVE	DEAD	
ACF CTL	1	10	10	10	10	10	10	10	10			
	2	10	10	10	10	10	10	10	10			
	3	10	10	10	10	10	10	10	10			
	4	10	10	10	10	10	10	10	10	40	0	
1817 (SA04)	1	10	10	10	10	10	10	10	10			
	2	10	10	10	10	10	10	10	10			
	3	10	10	10	10	10	10	10	10			
	4	10	10	10	10	10	10	10	10	40	0	
1818 (SA05)	1	10	10	10	10	10	10	10	10			
	2	10	10	10	10	10	10	10	10			
	3	10	10	10	10	10	10	10	10			
	4	10	10	10	10	10	10	10	10	40	0	
1819 (SA06)	1	10	10	10	10	10	10	10	10			
	2	10	10	10	10	10	10	10	10			
	3	10	10	10	10	10	10	10	10			
	4	10	10	10	10	10	10	9	9	39	1	2.5%
1820 (OJ01)	1	10	10 (1)	10	10	10	10	10	10			
	2	10	10	10	10	10	10	10	10			
	3	10	10	10	10	10	10	10	9			
	4	10	10 (1)	10	10	10	10	10	10	39	1	2.5%
1821 (7501)	1	10	10	10	10	10	10	10	10			
	2	10	10	10	10	10	9	9	7			
	3	10	10	10	10	10	10	10	10			
	4	10	10	10	10	10	10	9	9	36	4	10%
COUNT		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
RENEWAL		/	/	/	JBE	JBE	JBE	RA	/			
TIME		/	[illegible]	1311	1400	1410	1130	1420	1400			

LOADING CHECK /

COMMENTS: (1) Dark colored material ingested by one F.H.

P. PROMELAS DRY WT.

TRAC ID 119-1817-1821

N = number of fish weighed

Conc.	Pan	Pan wt.	Pan + fish	Difference	N	Wt/fish (mg)
Control	A	1.0116	1.0211	0.0055	10	0.5500
	B	1.0124	1.0182	0.0058	10	0.5800
	C	1.0163	1.0221	0.0058	10	0.5800
	D	1.0161	1.0222	0.0061	10	0.6100
1817	A	1.0012	1.0102	0.0045	10	0.4500
	B	1.0093	1.0141	0.0048	10	0.4800
	C	1.0071	1.0121	0.0050	10	0.5000
	D	1.0037	1.0091	0.0054	10	0.5400
1818	A	0.9765	0.9801	0.0036	10	0.3600
	B	0.9867	0.9908	0.0041	10	0.4100
	C	0.9834	0.9880	0.0046	10	0.4600
	D	0.9788	0.9836	0.0048	10	0.4800
1819	A	1.0049	1.0097	0.0045	10	0.4500
	B	1.0087	1.0132	0.0045	10	0.4500
	C	1.0115	1.0163	0.0048	10	0.4800
	D	1.0143	~~1.0132~~ 1.0181	0.0038	9	0.42
1820	A	0.9803	0.9847	0.0044	10	0.4400
	B	0.9693	0.9738	0.0045	10	0.4500
	C	0.9659	0.9707	0.0048	9	0.5333
	D	0.9725	0.9778	0.0053	10	~~0.5353~~ 0.5333
1821	A	0.9905	0.9955	0.0050	10	0.5000
	B	0.9865	0.9886	0.0021	7	0.3000
	C	0.9863	0.9909	0.0046	10	0.4600
	D	0.9850	0.9896	0.0046	9	~~0.5111~~ 0.5111

	Date	Time	Operator
Tare weights	3 Sept 97	1330	[illegible]
Fish Placed in Oven	3 Sept 97	1415	[illegible]
Fish Removed from Oven	4 Sept 97	0900	[illegible]
Final weights	4 Sept 97	1545	[illegible]

pH AND CONDUCTIVITY

TRAC ID 117-1817-1821 Species Pimephales

	Conc (%)	pH 0	24	48	72	96	120	144	168
INITIAL	C	8.0	8.1	8.0	7.9	7.7	8.0		
	1817	7.3	7.0	6.8	6.9	6.9	7.1		
	1818	7.5	7.1	6.8	6.3	6.3	7.0		
	1819	7.0	6.8	6.7	6.7	6.7	6.7	→ (1)	
	1820	6.0	6.1	6.4	6.6	6.9	~~7.8~~ 6.5		
	1821	6.6	6.2	6.8	6.6	6.6	6.3		
FINAL	C		8.0	8.0	7.9	7.7	7.9		7.5
	1817		7.7	7.0	6.6	7.3	7.4		7.5
	1818		7.6	7.4	6.5	7.3	7.3		7.5
	1819		7.6	7.2	6.6	7.3	7.3	→ (1)	7.4
	1820		7.9	7.0	6.6	7.5	7.9		7.8
	1821		7.3	7.0	6.6	7.5	7.3		7.0

	Conc (%)	CONDUCTIVITY (umhos/cm) 0	24	48	72	96	120	144	168
INITIAL	C	280	285		309		281		
	1817	170	180		171		171		
	1818	94	99		95		97		
	1819	114	118		110		120	→ (1)	
	1820	244	247		237		239		
	1821	124	133		122		125		
I = Initial F = Final		I	F/I	F/I	F/I	F/I	F/I	F/I	F/I
Operator		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Time		1420	1120	1330	1600	1100	1145		1345
Sample		1817-1821	1817-1821	1817-1821	1817-1821	1817-1821	1817-1821		
Prep		474	474	~~474~~ 474	~~474~~ 474	474	474		

(1) pH and ~~the~~ conductivity were taken at the same.

TRAC ID 119-1817-1821 Species P. promelas

	Conc (%)	DISSOLVED OXYGEN (mg/L)							
		0	24	48	72	96	120	144	168
INITIAL	C	8.0	7.9	8.3	8.2	8.1	8.0	7.9	
	1817	7.8	8.1	8.3	8.2	8.8	8.9	10.4	
	1818	8.0	8.1	8.2	8.2	8.0	9.0	10.1	
	1819	7.8	6.6	7.5	7.8	8.2	8.4	9.8	
	1820	5.5	5.5	7.0	7.0	8.2	8.2	9.0	
	1821	7.5	6.5	6.9	6.8	8.2	8.2	9.6	
FINAL	C		7.5	7.6	7.8	8.0	6.4	6.3	6.4
	1817		7.3	7.3	7.4	7.9	6.2	6.7	6.4
	1818		7.3	7.4	7.4	7.9	5.9	6.9	6.7
	1819		7.2	7.2	7.0	7.5	6.2	6.6	6.5
	1820		7.3	7.0	7.0	7.0	6.3	6.6	6.2
	1821		7.2	6.9	6.9	6.9	6.2	6.5	6.7

	Conc (%)	TEMPERATURE (°C)							
		0	24	48	72	96	120	144	168
INITIAL	C	24.5	24.0	24.5	24.5	25.0	25.0	25.2	
	1817	24.5	24.0	24.5	24.6	25.0	25.0	25.5	
	1818	24.5	24.1	24.5	24.6	25.1	25.0	25.2	
	1819	24.6	24.3	24.5	24.6	25.1	25.0	25.2	
	1820	24.6	24.1	24.6	24.6	25.1	25.0	24.9	
	1821	24.6	24.1	24.6	24.6	25.1	25.0	24.9	
FINAL	C		25.7	25.3	25.8	25.8	26.0	24.5	25.2
	1817		25.7	25.3	25.8	25.8	26.0	24.5	25.2
	1818		25.6	25.3	25.8	25.6	25.8	24.5	25.2
	1819		25.6	25.3	25.8	25.6	25.8	24.5	25.3
	1820		25.5	25.4	25.8	25.7	25.8	24.5	25.3
	1821		[illegible]	[illegible]	25.8	25.6	25.8	24.8	25.5
I = Initial F = Final		I	[illegible]	[illegible]	[illegible]	F/I	F/I	F/I	F/I
Operator		[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Time		1430	[illegible]	[illegible]	[illegible]	1400	1100	1130	1130

FHM

119-1817-1821
File: C:\TOXSTAT\FHM.SUR

OT(Y))

...apiro Wilks test for normali

D = 0.158

W = 0.769

Critical W (P = 0.05) (n = 24)
Critical W (P = 0.01) (n = 24)

Data FAIL normality test. Try

Warning - The two homogeneity tests are sensitive to non-normal data and should not be performed.

119-1817-1821
File: C:\TOXSTAT\FHM.SUR Transform: ARC SINE(SQUARE ROOT(Y))

Hartley test for homogeneity of variance
Bartletts test for homogeneity of variance

:se two tests can not be performed because at least one group has zero variance.

Data FAIL to meet homogeneity of variance assumption.
Additional transformations are useless.

119-1817-1821
File: C:\TOXSTAT\FHM.SUR Transform: ARC SINE(SQUARE ROOT(Y))

STEELS MANY-ONE RANK TEST - Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	RANK SUM	CRIT. VALUE	df	SIG
1	control	1.412				
2	1817(5A04)	1.412	18.00	10.00	4.00	
3	1818(5A05)	1.412	18.00	10.00	4.00	
4	1819(5A06)	1.371	16.00	10.00	4.00	
5	1820(0301)	1.371	16.00	10.00	4.00	
6	1821(7501)	1.266	14.00	10.00	4.00	

Critical values use k = 5, are 1 tailed, and alpha = 0.05

119-1817-1821
File: C:\TOXSTAT\FHM-WT. Transform: NO TRANSFORMATION

piro Wilks test for normality

D = 0.053

W = 0.930

Critical W (P = 0.05) (n = 24) = 0.916
Critical W (P = 0.01) (n = 24) = 0.884

Data PASS normality test at P=0.01 level. Continue analysis.

119-1817-1821
File: C:\TOXSTAT\FHM-WT. Transform: NO TRANSFORMATION

Bartletts test for homogeneity of variance

Calculated B statistic = 6.98
Table Chi-square value = 15.09 (alpha = 0.01)
Table Chi-square value = 11.07 (alpha = 0.05)

rage df used in calculation ==> df (avg n - 1) = 3.00
l for Chi-square table value ==> df (#groups-1) = 5

Data PASS homogeneity test at 0.01 level. Continue analysis.

NOTE: If groups have unequal replicate sizes the average replicate size is used to calculate the B statistic (see above).

119-1817-1821
File: C:\TOXSTAT\FHM-WT. Transform: NO TRANSFORMATION

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	5	0.059	0.012	4.043
Within (Error)	18	0.053	0.003	
Total	23	0.112		

itical F value = 2.77 (0.05,5,18)
Since F > Critical F REJECT Ho:All groups equal

119-1817-1821
File: C:\TOXSTAT\FHM-WT. Transform: NO TRANSFORMATION

DUNNETTS TEST - TABLE 1 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	control	0.580	0.580		
2	1817(5A04)	0.493	0.493	2.281	
3	1818(5A05)	0.428	0.428	3.975	*
4	1819(5A06)	0.457	0.457	3.193	*
5	1820(0301)	0.488	0.488	2.411	*
6	1821(7501)	0.443	0.443	3.584	*

Dunnett table value = 2.41 (1 Tailed Value, P=0.05, df=18,5)

119-1817-1821
File: C:\TOXSTAT\FHM-WT. Transform: NO TRANSFORMATION

DUNNETTS TEST - TABLE 2 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	control	4			
2	1817(5A04)	4	0.092	15.9	0.087
3	1818(5A05)	4	0.092	15.9	0.152
4	1819(5A06)	4	0.092	15.9	0.122
5	1820(0301)	4	0.092	15.9	0.092
6	1821(7501)	4	0.092	15.9	0.137

	Chironomus tetans 28 - Day										Survival, Growth					Emergence	
	Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X		Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
F	12	9/22/97	[illegible]	23	7.8		—	✓	—		1					1	10/10
S	13	9/23/97	[illegible]	—	—	—	—	✓	—		2					2	10/14
S	14	9/24/97	[illegible]	—	—	—	—	✓	—		3					3	10/14
M	15	9/25/97	[illegible]	[illegible]	~~[illegible]~~ 7.5	5.8	—	✓	—		4					4	10/15
T	16	9/26/97	[illegible]	[illegible]	—	—	—	✓	—		5					5	
W	17	9/27/97	[illegible]	[illegible]	—	—	—	✓	—		6					6	
T	18	9/28/97	[illegible]	23	7.8	6.8	—	✓	—		7					7	
F	19	9/29/97	[illegible]	—	—			✓			8					8	
S	20	10/1/97	RA	—	—	—	—	✓	—		9					9	
S	21	10/2/97	RH	—	—	—	—	✓	—		10					10	
M	22	10/3/97	[illegible]					✓	—		11					11	
T	23	10/4/97	[illegible]	23	7.7	7.8		✓	X		12					12	
W	24	10/5/97	[illegible]	23	—	—	—	✓	—								
T	25	10/6/97	[illegible]	23	—	—	—	✓	—								
F	26	10/7/97	[illegible]	23	—	—	—	✓	X								
S	27	10/8/97	[illegible]	23	—	—	—	✓									
S	28	10/9/97	[illegible]	23	—		—	✓									
M	29	10/10/97	[illegible]	23	—	—	—	✓	X								
T	30	10/11/97	[illegible]	23	—	—	—	✓									

Project #: 119

Site #: F-18

Animal Batch #: CL-97-03

Comments:

12/20 = 6

Chironomus tetans 28 - Day								
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	9/26/97	[illegible]	–	7.8		–	✓	–
13	9/27/97	[illegible]	–	–	–	–	✓	–
14	9/28/97	[illegible]	–	–	–	–	✓	–
15	9/29/97	[illegible]	–	7.7	5.2	–	✓	–
16	9/30/97	[illegible]	23	–	–	–	✓	–
17	10/1/97	[illegible]	23	–	–	–	✓	–
18	10/2/97	[illegible]	23	8.1	7.5	–	✓	–
19	10/3/97	[illegible]	–	–	–	–	✓	–
20	10/4/97	RA	–	–	–	–	✓	–
21	10/5/97	RA	–	–	–	–	✓	–
22	10/6/97	[illegible]	–	–	–	–	✓	–
23	10/7/97	[illegible]	23	8.0	7.7	–	✓	X
24	10/8/97	[illegible]	23	–	–	–	✓	–
25	10/9/97	[illegible]	23	–	–	–	✓	–
26	10/10/97	[illegible]	23	–	–	–	✓	X
27	10/11/97	[illegible]	23	–	–	–	✓	–
28	10/12/97	[illegible]	23	–	–	–	✓	–
29	10/13/97	[illegible]	23	–	–	–	✓	X
30	10/14/97	[illegible]	23	8.1	7.2	–	✓	–

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1					1	~~10/10~~
2					2	10/14
3					3	10/15
4					4	
5					5	
6					6	
7					7	
8					8	
9					9	
10					10	
11					11	
12					12	

Project #: 119

Site #: SH04

Animal Batch #: Ct-97-03

Comments: ALGAE GROWN

15/20 =

Chironomus tetans 28 - Day								
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	9/26/97	[illegible]	23	7.8		—	✓	—
13	9/27/97	[illegible]	—	—	—	—	✓	—
14	[illegible]	[illegible]	—	—	—	—	✓	—
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	✓	—
16	[illegible]	[illegible]	[illegible]	—	—	—	✓	—
17	[illegible]	[illegible]	[illegible]		—	—	✓	—
18	[illegible]	[illegible]	[illegible]	7.9	7.5	—	✓	—
19	[illegible]	[illegible]			—	—	✓	—
20	[illegible]	[illegible]	—	—	—	—	✓	—
21	10/5/97	[illegible]	—	—	—	—	✓	—
22	10/6/97	[illegible]	—	—	—	—	✓	—
23	10/7/97	[illegible]	23	8.2	7.8	—	✓	X
24	10/8/97	[illegible]	23	—	—	—	✓	—
25	10/9/97	[illegible]	23	—	—	—	✓	—
26	10/10/97	[illegible]	23	—	—	—	✓	X
27	10/11/97	[illegible]	23	—	—	—	✓	—
28	10/12/97	[illegible]	23	—	—	—	✓	—
29	10/13/97	[illegible]	23	—	—	—	✓	X
30	10/14/97	[illegible]	23	8.2	7.2	—	✓	—

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1					1	10/10
2					2	10/14
3					3	
4					4	
5					5	
6					6	
7					7	
8					8	
9					9	
10					10	
11					11	
12					12	

Project #: 119

Site #: SA05

Animal Batch #: CL-97-03

Comments: ALGAL Growth

10/20=

Chironomus tetans 28 - Day								
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	9/26/97	BF	23	7.8		—	✓	—
13	9/27/97	BF	—	—	—	—	✓	—
14	9/28/97	BF	—	—	—	—	✓	—
15	9/29/97	BF	23	~~5.3~~ 7.6	5.3	—	✓	—
16	9/30/97	BF	23	—	—	—	✓	—
17	10/1/97	BF	23	—	—	—	✓	—
18	10/2/97	BF	23	7.7	5.5 ①	—	✓	—
19	10/3/97	BF		—	—	—	✓	—
20	10/4/97	RA	—	—	—	—	✓	—
21	10/5/97	RA	—	—	—	—	✓	—
22	10/6/97	BF	—	—		—	✓	—
23	10/7/97	BF	~~8~~ 23 BF	8.1	7.8	—	✓	X
24	10/8/97	BF	23	—	—	—	✓	—
25	10/9/97	BF	23	—	—	—	✓	—
26	10/10/97	BF	23	—	—	—	✓	X
27	10/11/97	BF	23	—	—	—	✓	—
28	10/12/97	BF	23	—	—	—	✓	—
29	10/13/97	BF	23	—	—	—	✓	X
30	10/14/97	BF	23	—	—	—	✓	—

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1					1	10/9 -
2					2	10/9 -
3					3	10/10 -
4					4	10/11 -
5					5	
6					6	
7					7	
8					8	
9					9	
10					10	
11					11	
12					12	

Project #: 119

Site #: 5H01

Animal Batch #: Ct-97-03

Comments: ① Checked airline because replicate DO: 7.5 mg/L

ALGAL Growth

15/20 =

*** STEELS RANK TEST IS ABORTED ***

Chiron.tentans 9/26-10/15/97
File: 119ct.eme Transform: ARC SINE(SQUARE ROOT(Y))

KRUSKAL-WALLIS ANOVA BY RANKS - TABLE 1 OF 2 (p=0.05)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	RANK SUM
1	F18	0.888	0.600	7.500
2	5A04	1.068	0.750	12.000
3	5A05	0.785	0.500	4.000
4	5A06	1.049	0.750	12.500

Calculated H Value = 4.297 Critical H Value Table = 6.167
Since Calc H < Crit H FAIL TO REJECT Ho:All groups are equal.

Chiron.tentans 9/26-10/15/97
File: 119ct.eme Transform: ARC SINE(SQUARE ROOT(Y))

DUNNS MULTIPLE COMPARISON - KRUSKAL-WALLIS - TABLE 2 OF 2 (p=0.05)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	ORIGINAL MEAN	GROUP 0 3	0 1	0 4	0 2
3	5A05	0.785	0.500	\			
1	F18	0.888	0.600	.	\		
4	5A06	1.049	0.750	.	.	\	
2	5A04	1.068	0.750	.	.	.	\

* = significant difference (p=0.05) . = no significant difference
Table q value (0.05,4) = 2.639 SE = 2.375

Chiron.tentans 9/26-10/15/97
File: 119ct.eme Transform: ARC SINE(SQUARE ROOT(Y))

Shapiro Wilks test for normality

D = 0.094

W = 0.992

Critical W (P = 0.05) (n = 8) = 0.818
Critical W (P = 0.01) (n = 8) = 0.749

Data PASS normality test at P=0.01 level. Continue analysis.

Chiron.tentans 9/26-10/15/97
File: 119ct.eme Transform: ARC SINE(SQUARE ROOT(Y))

Hartley test for homogeneity of variance
Bartletts test for homogeneity of variance

These two tests can not be performed because at least one group has zero variance.

Data FAIL to meet homogeneity of variance assumption. - ⇒ so Steels many - 0 RANK T
Additional transformations are useless.

↓

couldnt calculate

↓

Dunnetts

↓

Bonferroni

ran even though homogeneity couldn't be calculated

*** STEELS RANK TEST IS ABORTED ***

Chiron.tentans 9/26-10/15/97
File: 119ct.eme Transform: ARC SINE(SQUARE ROOT(Y))

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	3	0.109	0.036	1.551
Within (Error)	4	0.094	0.023	
Total	7	0.203		

Critical F value = 6.59 (0.05,3,4)
Since F < Critical F FAIL TO REJECT Ho:All groups equal

Chiron.tentans 9/26-10/15/97
File: 119ct.eme Transform: ARC SINE(SQUARE ROOT(Y))

BONFERRONI T-TEST - TABLE 1 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	F18	0.888	0.600		
2	5A04	1.068	0.750	-1.171	
3	5A05	0.785	0.500	0.672	
4	5A06	1.049	0.750	-1.051	

Bonferroni T table value = 3.19 (1 Tailed Value, P=0.05, df=4,3)

Chiron.tentans 9/26-10/15/97
File: 119ct.eme Transform: ARC SINE(SQUARE ROOT(Y))

BONFERRONI T-TEST - TABLE 2 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	F18	2			
2	5A04	2	0.450	75.0	-0.150
	5A05	2	0.450	75.0	0.100
	5A06	2	0.450	75.0	-0.150

*** STEELS RANK TEST IS ABORTED ***

Chiron.tentans 9/26-10/15/97
File: 119ct.eme Transform: ARC SINE(SQUARE ROOT(Y))

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	3	0.109	0.036	1.551
Within (Error)	4	0.094	0.023	
Total	7	0.203		

Critical F value = 6.59 (0.05,3,4)
Since F < Critical F FAIL TO REJECT Ho:All groups equal

Chiron.tentans 9/26-10/15/97
File: 119ct.eme Transform: ARC SINE(SQUARE ROOT(Y))

DUNNETTS TEST - TABLE 1 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	F18	0.888	0.600		
2	5A04	1.068	0.750	-1.171	
3	5A05	0.785	0.500	0.672	
4	5A06	1.049	0.750	-1.051	

Dunnett table value = 88.38 (1 Tailed Value, P=0.05, df=4,3)

Chiron.tentans 9/26-10/15/97
File: 119ct.eme Transform: ARC SINE(SQUARE ROOT(Y))

DUNNETTS TEST - TABLE 2 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	F18	2			
2	5A04	2	0.596	99.4	-0.150
3	5A05	2	0.596	99.4	0.100
4	5A06	2	0.596	99.4	-0.150

Chironomus tetans 28 - Day									Survival, Growth					Emergence	
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X	Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
12	9/26/97	[illegible]	23	7.8		—	✓	—	1					1	10/10
13	9/27/97	[illegible]	—	—	—	—	✓	—	2					2	10/13
14	[illegible]	[illegible]	—	—	—	—	✓	—	3					3	10/14
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	✓	—	4					4	
16	[illegible]	[illegible]	[illegible]		—	—	✓	—	5					5	
17	[illegible]	[illegible]	[illegible]		—	—	✓	—	6					6	
18	[illegible]	[illegible]	23	7.8	7.5	—	✓	—	7					7	
19	[illegible]	[illegible]				—	✓	—	8					8	
20	[illegible]	[illegible]		—	—	—	✓	—	9					9	
21	10/5/97	RA	—	—	—	—	✓	—	10					10	
22	10/6/97	[illegible]	—	—	—	—	✓	—						11	
23	10/7/97	[illegible]	23	8.0	7.8	—	✓							12	
24	10/8/97	[illegible]	23	—	—	—	✓	—	I						3/10 =
25	10/9/97	[illegible]	23	—	—	—	✓		S						
26	10/10/97	[illegible]	23	—	—	—	✓		A						
27	10/11/97	[illegible]	23	—	—	—	✓		C						
28	10/12/97	[illegible]	23	—	—	—	✓								
29	10/13/97	[illegible]	23	—	—	—	✓	↓							
30	10/14/97	[illegible]	23	8.2	7.0	—	✓	—							

Chiron

no chironomids - [illegible]

Chironomus tetans 28 - Day								
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	9/26/97	[illegible]	23	7.8		—	✓	—
13	9/27/97	[illegible]	—	—	—	—	✓	—
14	9/28/97	[illegible]	—	—	—	—	✓	—
15	9/29/97	[illegible]	23	~~5.3~~ 7.5	5.3	—	✓	—
16	9/30/97	[illegible]	23	—	—	—	✓	—
17	10/1/97	[illegible]	23	7.9	—	—	✓	—
18	10/2/97	[illegible]	23	7.8	7.0	—	✓	—
19	10/3/97	[illegible]	—	—	—	—	✓	—
20	10/4/97	RA	—	—	—	—	✓	—
21	10/5/97	RA	—	—	—	—	✓	—
22	10/6/97	[illegible]	—	—	—	—	✓	—
23	10/7/97	[illegible]	23	7.9	7.3	—	✓	—
24	10/8/97	[illegible]	23	—	—	—	—	—
25	10/9/97	[illegible]	23	—	—	—	✓	—
26	10/10/97	[illegible]	23	—	—	—	✓	—
27	10/11/97	[illegible]	23	—	—	—	✓	—
28	10/12/97	[illegible]	23	—	—		✓	—
29	10/13/97	[illegible]	23	—	—		✓	—
30	10/14/97	[illegible]	23	8.0	7.0	—	✓	—

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1					1	10/10 -
2					2	10/13 -
3					3	
4					4	
5					5	
6					6	
7					7	
8					8	
9					9	
10					10	
11					11	
12					12	

7/10 = 7

Project #: 119

Site #: 0307

Animal Batch #: Ct-97-03

Comments:

Chironomus tetans 28 - Day								
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	9/26/97	[illegible]	23	7.8	—	—	✓	—
13	9/27/97	[illegible]	—	—	—	—	✓	—
14	9/28/97	[illegible]	—	—	—	—	✓	—
15	9/29/97	[illegible]	23	7.5	5.2	—	✓	—
16	9/30/97	[illegible]	23	—	—	—	✓	—
17	10/1/97	[illegible]	23		—	—	✓	—
18	10/2/97	[illegible]	23	7.8	7.2	—	✓	—
19	10/3/97	[illegible]	—	—	—	—	✓	—
20	10/4/97	RA	—	—	—	—	✓	—
21	10/5/97	RA	—	—	—	—	✓	—
22	10/6/97	[illegible]	—	—	—	—	✓	—
23	10/7/97	[illegible]	23	7.9	7.7	—	✓	X
24	10/8/97	[illegible]	23	—	—	—	✓	—
25	10/9/97	[illegible]	23	—	—	—	✓	—
26	10/10/97	[illegible]	23	—	—	—	✓	X
27	10/11/97	[illegible]	23	—	—	—	✓	—
28	10/12/97	[illegible]	23	—	—	—	✓	—
29	10/13/97	[illegible]	23	—	—	—	✓	X
30	10/14/97	[illegible]	23	8.0	7.0	—	✓	—

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1					1	10/13
2					2	10/14
3					3	10/15
4					4	
5					5	
6					6	
7					7	
8					8	
9					9	
10					10	
11					11	
12					12	

Project #: 119 6/10 = 6

Site #: 0302

Animal Batch #: Ct-97-03

Comments: Cloudiest sample - water column turn cleared up

Chironomus tetans 28 - Day								
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	9/26/97	[illegible]	23	7.8		—	✓	—
13	9/27/97	[illegible]	—	—	—	—	✓	—
14	9/28/97	[illegible]	—	—	—	—	✓	—
15	9/29/97	[illegible]	23	7.5	52	—	✓	—
16	9/30/97	[illegible]	23	—	—	—	✓	—
17	10/1/97	[illegible]	23	—	—	—	✓	—
18	10/2/97	[illegible]	23	7.5	72		✓	—
19	10/3/97	[illegible]				—	✓	—
20	10/4/97	RA	—	—	—	—	✓	—
21	10/5/97	RA	—	—	—	—	✓	—
22	10/6/97	[illegible]	—	—	—		✓	—
23	10/7/97	[illegible]	23	7.7	78	—	✓	X
24	10/8/97	[illegible]	23	—	—	—	✓	—
25	10/9/97	[illegible]	23	—	—	—	—	—
26	10/10/97	[illegible]	23	—	—	—		X
27	10/11/97	[illegible]	23	—	—	—	—	—
28	10/12/97	[illegible]	23	—	—		—	
29	10/13/97	[illegible]	23	—	—	—	—	X
30	10/14/97	[illegible]	23	7.8	7.0	—	✓	—

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1					1	10/9
2					2	10/13
3					3	10/14
4					4	
5					5	
6					6	
7					7	
8					8	
9					9	
10					10	
11					11	
12					12	

5/10 = 50.

Project #: 119

Site #: ~~3-03~~ F-13

Animal Batch #: Ct-97-03

Comments:

S = 91%

Chironomus tetans 28 - Day									
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	~~9/2/97~~	BC	20	7.1	7.0	—	✓	—
13	2 Sept 97	BC	—	—	—	—	✓	✓
14	9/3/97	BC	—	—	—	—	✓	✓
15	9/4/97	BC	—	—	—	—	✓	✓
S 16	9/5/97	BC	—	—	—	—	✓	~~+8~~ BC
S 17	9/6/97	RA	—	—	—	—	✓	—
S 18	9/7/97	RA	—	—	—	—	✓	~~+8~~
N 19	9/8/97	BC	20	~~7.3~~ 7.3	—	—	✓	✓
T 20	9/9/97	BC	20	~~7.3~~ 7.3	—	—	✓	✓
N 21	9/10/97	BC	—	—	—	—	✓	✓
7 22	9/11/97	BC	20	7.5	8.6	—	—	—
23	9/12/97	DW	—	—	—	—	✓	—
24	9/13/97	DJ	—	—	—	—	✓	—
25	9/14/97	DJ	—	—	—	—	✓	—
26	9/15/97	BC	—	—	—	—	✓	—
27	9/16/97	BC	—	—	—	—	✓	—
28	9/17/97	BC	—	—		—	✓	—
29	9/18/97	BC	—	—	—	—	✓	—
30	9/19/97	BC	—	—	—	—	✓	—

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. ~~BC~~ (mg) BC	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1	1	23.8	28.1	~~5~~ 4.3	1	9/18/97
2	1	23.3	24.5	1.2	2	9/20/97
3	1	23.4	25.9	2.5	3	9/20/97
4	1	23.7	26.5	2.8	4	9/20/97
5	1	23.6	26.8	3.2	5	9/22/97
6	1	23.4	26.5	3.1	6	9/22/97
7	1	23.2	24.5	1.3	7	—
8	1	24.5	27.5	3.0	8	—
9	1	23.6	26.3	2.7	9	—
10	1	23.4	26.0	2.6	10	—
11	1	23.4	26.0	2.6	11	—
12	—	23.7	—	—	12	—

Project #: 119

Site #: Control, F-18

Animal Batch #: Ct-97-02

Comments: Fed - 6 mg/individual/day - Tetrafin

Sept 1 97 - 12 individuals gross 1.0347 g
tare 1.0334 g
net 0.19 mg. AVG WT

S

S = 83%

Chironomus tetans 28 - Day								
Day	Date 1 Sept 97	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	~~8/31/97~~	[illegible]	20	7.2	6.4	—	✓	✓
13	2 Sept 97	[illegible]	—	—	—	—	✓	✓
14	9/3/97	[illegible]	—	—	—	—	✓	✓
15	9/4/97	[illegible]	—	—	—	—	✓	✓
16	9/5/97	RA	—	—	—	—	✓	—
17	9/6/97	RA	—	—	—	—	✓	—
18	~~[illegible]~~	9/7/97 [illegible]	~~20~~	~~8.3~~ 7.3	—	—	✓	✓
19	9/8/97	[illegible]	—	—	—	—	✓	✓
20	9/9/97	[illegible]	20	8.3	—	—	✓	✓
21	9/10/97	[illegible]	—	—	—	—	✓	✓
22	9/11/97	[illegible]	20	8.1	8.0	—	—	—
23	9/12/97	LW	—	—	—	—	✓	—
24	9/13/97	DJ	—	—	—	—	✓	—
25	9/14/97	DJ	—	—	—	—	✓	—
26	9/15/97	[illegible]	—	—	—	—	✓	—
27	9/16/97	[illegible]	—	—	—	—	✓	—
28	9/17/97	[illegible]	—	—	—	—	✓	—
29	9/18/97	[illegible]	—	—	—	—	✓	—
30		[illegible]	—	—	—	—	✓	—

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1	1	23.5	26.3	2.8	1	9/20/97
2	1	23.5	27.3	3.8	2	9/20/97
3	1	23.8	26.5	2.7	3	
4	1	24.0	27.1	3.1	4	
5	1	23.7	26.9	3.2	5	
6	1	23.3	27.4	4.1	6	
7	1	23.2	~~24.8~~ 25.2	2.0	7	
8	1	23.4	25.9	2.5	8	
9	1	24.1	26.5	2.4	9	
10	1	23.2	25.9	2.7	10	
11	—	23.0	—	—	11	—
12	—	23.3	—	—	12	—

Project #: 119-1826

Site #: 4, 5 0302

Animal Batch #: CT-97-02

Comments:

5 = 91%

Chironomus tetans 28 - Day								
Day	Date 1 Sept 97	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	~~8/31/97~~	BC	20	7.2	6.3	—	✓	—
13	9/2/97	BC	20	—	—	—	✓	✓
14	9/3/97	BC	—	—	—	—	✓	✓
15	9/4/97	BC	—	—	—	—	✓	✓
16	9/5/97	BC	—	—	—	—	✓	✓
17	9/6/97	RA	—	—	—	—	✓	—
18	9/7/97	RA	—	—	—	—	✓	✓
19	9/8/97	BC	20	7.6	—	—	✓	✓
20	9/9/97	BC	—	7.4	—	—	✓	✓
21	9/10/97	BC	—	—	—	—	✓	✓
22	9/11/97	BC	20	7.5	7.8	—	—	—
23	9/12/97	JW	—	—	—	—	✓	—
24	9/13/97	DJ	—	—	—	—	✓	—
25	9/14/97	DJ	—	—	—	—	✓	—
26	9/15/97	BC	—	—	—	—	✓	—
27	9/16/97	BC	—		—	—	✓	—
28	9/17/97	BC	—	—	—	—	✓	—
29	9/18/97	BC	—	—	—	—	✓	—
30	9/19/97	BC	—				✓	—

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg) 9/9	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1	1	23.5	25.8	2.3	1	
2	1	23.8	25.6	1.8	2	
3	1	23.9	24.8	0.9	3	
4	1	23.9	26.5	2.6	4	
5	1	24.3	26.8	2.5	5	
6	1	23.9	26.1	2.2	6	
7	1	24.0	24.3	0.3	7	
8	1	24.3	26.3	2.0	8	
9	1	24.3	26.2	1.9	9	
10	1	23.9	26.7	2.8	10	
11	1	24.0	26.3	[illegible]	11	
12	—	24.0	—	—	12	—

Project #: 119-1827

Site #: 41, 0307

Animal Batch #: CT-97-02

Comments:

-

08

S: 83%

Chironomus tetans 28 - Day									Survival, Growth					Emergence	
Day	Date 1st-30	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X	Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
12	~~8/30/97~~	BJ	20	7.2	7.0	—	✓	—	1	1	24.2	24.9	0.7	1	
13	2 9/91	BJ	20	—	—	—	✓	✓	2	1	23.6	25.5	1.9	2	
14	9/3/97	BJ	—	—	—	—	✓	✓	3	1	23.8	24.8	1.0	3	
15	9/4/97	BJ	—	7.8	—	—	✓	✓	4	1	23.4	23.5	0.1	4	
16	9/5/97	BJ	—	—	—	—	✓	✓	5	1	23.9	25.9	2.0	5	
17	9/6/97	BJ	—	—	—	—	✓	✓	6	1	24.0	25.6	1.6	6	
18	9/7/97	ZA	—	—	—	—	✓	—	7	1	24.2	25.5	1.3	7	
19	9/8/97	ZA	—	—	—	—	✓	—	8	1	23.0	24.5	1.5	8	
20	9/9/97	BJ	20	7.8	—	—	✓	✓	9	1	24.2	25.1	0.9	9	
21	9/10/97	BJ	—	—	—	—	✓	✓	10	1	24.3	26.2	1.9	10	
22	9/11/97	BJ	20	7.9	8.1	—	~~✓~~	—	11	—	23.2	—	—	11	—
23	9/12/97	DW	—	—	—	—	✓	—	12	—	24.2	—	—	12	—
24	9/13/97	DJ	—	—	—	—	✓	—							
25	9/14/97	DJ	—	—	—	—	✓	—							
26	9/15/97	BJ	—	—	—	—	✓	—							
27	9/16/97	BJ	—	—	—	—	✓	—							
28	9/17/97	BJ	—	—	—	—	✓	—							
29	9/18/97	BJ	—	—	—	—	✓	—							
30	9/19/97	BJ	—	—	—	—	✓	—							

Project #: 119-1828

Site #: 41, 7501

Animal Batch #: Ct-97-02

Comments:

09

FISHERS EXACT TEST

IDENTIFICATION	NUMBER OF ALIVE	NUMBER OF DEAD	NUMBER OF TOTAL ANIMALS
CONTROL	11	1	12
302	10	2	12
TOTAL	21	3	24

CRITICAL FISHERS VALUE (12,12,11) (p=0.05) IS 6. b VALUE IS 10.
Since b is greater than 6 there is no significant difference between CONTROL and TREATMENT at the 0.05 level.

FISHERS EXACT TEST

IDENTIFICATION	NUMBER OF ALIVE	NUMBER OF DEAD	NUMBER OF TOTAL ANIMALS
CONTROL	11	1	12
307	11	1	12
TOTAL	22	2	24

CRITICAL FISHERS VALUE (12,12,11) (p=0.05) IS 6. b VALUE IS 11.
Since b is greater than 6 there is no significant difference between CONTROL and TREATMENT at the 0.05 level.

FISHERS EXACT TEST

IDENTIFICATION	NUMBER OF ALIVE	NUMBER OF DEAD	NUMBER OF TOTAL ANIMALS
CONTROL	11	1	12
7501	10	2	12

TOTAL	21	3	24

CRITICAL FISHERS VALUE (12,12,11) (p=0.05) IS 6. b VALUE IS 10.
Since b is greater than 6 there is no significant difference between CONTROL and TREATMENT at the 0.05 level.

SUMMARY OF FISHERS EXACT TESTS

GROUP	IDENTIFICATION	NUMBER EXPOSED	NUMBER DEAD	SIG (P=.05)
	CONTROL	12	1	
1	302	12	2	
2	307	12	1	
3	7501	12	2	

FISHERS EXACT TEST

IDENTIFICATION	NUMBER OF ALIVE	NUMBER OF DEAD	NUMBER OF TOTAL ANIMALS
CONTROL	0	3	3
3	0	3	3
TOTAL	0	6	6

CRITICAL FISHERS VALUE (3,3,0) (p=0.05) IS 0. b VALUE IS 0.
Since b is less than or equal to 0 there is a significant difference between CONTROL and TREATMENT at the 0.05 level.

FISHERS EXACT TEST

IDENTIFICATION	NUMBER OF ALIVE	NUMBER OF DEAD	NUMBER OF TOTAL ANIMALS
CONTROL	0	3	3
3	0	3	3

Chiron.tentans 9/1-9/11/97
File: 119ct2.gwt Transform: NO TRANSFORMATION

f oiro Wilks test for normality

D = 20.001

W = 0.968

Critical W (P = 0.05) (n = 42) = 0.942
Critical W (P = 0.01) (n = 42) = 0.922

Data PASS normality test at P=0.01 level. Continue analysis.

Chiron.tentans 9/1-9/11/97
File: 119ct2.gwt Transform: NO TRANSFORMATION

Bartletts test for homogeneity of variance

Calculated B statistic = 1.30
Table Chi-square value = 11.34 (alpha = 0.01)
Table Chi-square value = 7.81 (alpha = 0.05)

Average df used in calculation ==> df (avg n - 1) = 9.50
for Chi-square table value ==> df (#groups-1) = 3

Data PASS homogeneity test at 0.01 level. Continue analysis.

NOTE: If groups have unequal replicate sizes the average replicate size is used to calculate the B statistic (see above).

Chiron.tentans 9/1-9/11/97
File: 119ct2.gwt Transform: NO TRANSFORMATION

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	3	16.577	5.526	10.499
Within (Error)	38	20.001	0.526	
Total	41	36.578		

Critical F value = 2.92 (0.05,3,30)
Since F > Critical F REJECT Ho:All groups equal

Chiron.tentans 9/1-9/11/97
File: 119ct2.gwt Transform: NO TRANSFORMATION

BONFERRONI T-TEST - TABLE 1 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	F18	2.664	2.664		
2	0302	2.930	2.930	-0.840	
3	0307	1.964	1.964	2.263	*
4	7501	1.290	1.290	4.333	*

Bonferroni T table value = 2.21 (1 Tailed Value, P=0.05, df=38,3)

Chiron.tentans 9/1-9/11/97
File: 119ct2.gwt Transform: NO TRANSFORMATION

BONFERRONI T-TEST - TABLE 2 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	F18	11			
2	0302	10	0.700	26.3	-0.266
3	0307	11	0.683	25.7	0.700
4	7501	10	0.700	26.3	1.374

Chironomus tetans 28 - Day								
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	9/30/97	[illegible]	21	7.2	7.4	—	✓	—
13	10/1/97	[illegible]	—	—	—	—	✓	—
14	10/2/97	[illegible]	21	—	—	—	✓	—
15	10/3/97	[illegible]	21	—	—	—	✓	—
16	10/4/97	EA	21	—	—	—	✓	—
17	10/5/97	EA	21		—	—	✓	—
18	[illegible]	[illegible]					✓	
19	10/7/97	[illegible]	[illegible]		—	—	✓	
20	10/8/97	[illegible]	[illegible]			—	✓	
21	10/9/97	[illegible]	21	—	—	—	✓	
22	10/10/97	[illegible]	21	7.4	7.0	—	✓	—
23								
24								
25								
26								
27								
28								
29								
30								

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1	1	24.1	25.8	1.78	1	
2	1	24.3	26.7	2.4	2	
3	1	24.0	25.9	1.9	3	
4	1	23.9	25.3	1.4	4	
5	1	24.1	26.3	2.2	5	
6	1	23.6	27.5	3.9	6	
7	1	24.4	28.2	3.8	7	
8	1	24.3	~~25.9~~ 26.3	2.0	8	
9	1	24.3	~~25.2~~ 27.2	2.9	9	
10	1	23.9	26.9	3.0	10	
11	1	23.2	26.3	3.1	11	
12	1	23.4	26.0	2.6	12	

Project #: 119

Site #: F-18 (control)

Animal Batch #: Ct-97-04

Comments: ~12 day old larvae

Ave. weight (initial) = 0.19 mg

Chironomus tetans 28 - Day								
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	9/30/97	[illegible]	21	7.2	7.4	—	✓	—
13	10/1/97	[illegible]	—	—	—	—	✓	—
14	10/2/97	[illegible]	—	—	—	—	✓	—
15	10/3/97	[illegible]	—	—	—	—	✓	—
16	10/4/97	RA	—	—	—	—	✓	—
17	10/5/97	RA	—	—	—	—	✓	—
18	10/6/97	[illegible]	21	—	—	—	✓	—
19	10/7/97	[illegible]	21	—	—	—	✓	—
20	10/8/97	[illegible]	21	—	—	—	✓	—
21	10/9/97	[illegible]	21	—	—	—	✓	—
22	10/10/97	[illegible]	21	7.4	7.0	—	✓	—
23								
24								
25								
26								
27								
28								
29								
30								

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1	1	23.4	25.2	1.8	1	
2	1	23.6	25.9	2.3	2	
3	1	23.8	26.2	2.4	3	
4	1	23.5	27.5	4.0	4	
5	1	23.8	25.9	2.1	5	
6	1	23.9	28.3	4.4	6	
7	1	23.8	26.5	1.7	7	
8	1	23.9	26.4	2.5	8	
9	1	24.3	~~[illegible]~~ 27.1	2.8	9	
10	1	24.6	25.9	1.3	10	
11	1	23.8	26.5	2.7	11	
12	1	24.4	28.0	3.6	12	

Project #: 119

Site #: SA04

Animal Batch #: Ct-97-04

Comments:

Chironomus tetans 28 - Day								
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	9/30/97	[illegible]	21	7.2	7.4	—	✓	—
13	10/1/97	[illegible]	—	—	—	—	✓	—
14	10/2/97	[illegible]	21	—	—	—	✓	—
15	10/3/97	[illegible]	21	—	—	—	✓	—
16	10/4/97	RA	21	—	—	—	✓	—
17	10/5/97	RA	21	—	—	—	✓	—
18	10/6/97	[illegible]	21	—	—	—	✓	—
19	10/7/97	[illegible]	21	—	—	—	✓	—
20	10/8/97	[illegible]	21	—	—	—	✓	—
21	10/9/97	[illegible]	21	—	—	—	✓	—
22	10/10/97	[illegible]	21	7.4	7.0		✓	
23								
24								
25								
26								
27								
28								
29								
30								

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1	1	24.8	26.4	1.6	1	
2	1	24.2	24.7	0.5	2	
3	1	23.7	25.3	1.6	3	
4	1	23.3	26.4	3.1	4	
5	1	24.1	24.3	0.2	5	
6	1	24.1	25.5	1.4	6	
7	1	23.7	26.0	2.3	7	
8	1	24.3	25.1	0.8	8	
9	1	23.9	26.3	2.4	9	
10	1	23.4	25.2	1.8	10	
11	1	23.4	~~24~~ 25.1	1.7	11	
12	1	22.9	24.2	1.2	12	

Project #: 119

Site #: SA05

Animal Batch #: Ct-97-04

Comments:

Chironomus tetans 28 - Day								
Day	Date	By	T °C	pH	DO mg/L	S‰	Fed	H_2O-X
12	9/30/97	BP	21	7.2	7.4	—	✓	—
13	10/1/97	BP	—	—	—	—	✓	—
14	10/2/97	BP	21	—	—	—	✓	—
15	10/3/97	BP	21	—	—	—	✓	—
16	10/4/97	RM	21	—	—	—	✓	—
17	10/5/97	RM	21	—	—	—	✓	—
18	10/6/97	BP	21	—	—	—	✓	—
19	10/7/97	BP	21	—	—	—	✓	—
20	10/8/97	BP	21	—	—	—	✓	—
21	10/9/97	BP	21	—	—	—	✓	—
22	10/10/97	BP	21	7.4	7.0	—	✓	—
23								
24								
25								
26								
27								
28								
29								
30								

Survival, Growth					Emergence	
Rep.	# Alive	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Rep.	Date
1	Ø	23.3	—	—	1	
2	Ø	23.3	—	—	2	
3	~~26~~ 1	23.5	26.3	2.8	3	
4	1	23.9	25.3	1.4	4	
5	1	73.7 *	76.3	2.6	5	
6	1	77.5 *	81.2	3.7	6	
7	1	78.5 *	83.1	4.6	7	
8	1	73.7 *	77.2	3.5	8	
9	1	80.3 *	83.1	2.8	9	
10	1	~~88.4~~ 81.4 *	91.3	9.9	10	
11	1	82.6 *	85.5	2.9	11	
12	1	66.2 *	68.1	1.9	12	

Project #: 119

Site #: 5A06

Animal Batch #: Ct-97-04

Comments: * Had to use foil weigh boats because we were out of flat filter paper

FISHERS EXACT TEST

IDENTIFICATION	NUMBER OF ALIVE	NUMBER OF DEAD	NUMBER OF TOTAL ANIMALS
CONTROL	12	0	12
5A04	12	0	12
TOTAL	24	0	24

CRITICAL FISHERS VALUE (12,12,12) (p=0.05) IS 8. b VALUE IS 12.
Since b is greater than 8 there is no significant difference between CONTROL and TREATMENT at the 0.05 level.

FISHERS EXACT TEST

IDENTIFICATION	NUMBER OF ALIVE	NUMBER OF DEAD	NUMBER OF TOTAL ANIMALS
CONTROL	12	0	12
5A05	12	0	12
TOTAL	24	0	24

CRITICAL FISHERS VALUE (12,12,12) (p=0.05) IS 8. b VALUE IS 12.
Since b is greater than 8 there is no significant difference between CONTROL and TREATMENT at the 0.05 level.

FISHERS EXACT TEST

IDENTIFICATION	NUMBER OF ALIVE	NUMBER OF DEAD	NUMBER OF TOTAL ANIMALS
CONTROL	12	0	12
5A06	10	2	12

TOTAL	22	2	24

CRITICAL FISHERS VALUE (12,12,12) (p=0.05) IS 8. b VALUE IS 10.
Since b is greater than 8 there is no significant difference between CONTROL and TREATMENT at the 0.05 level.

SUMMARY OF FISHERS EXACT TESTS

GROUP	IDENTIFICATION	NUMBER EXPOSED	NUMBER DEAD	SIG (P=.05)
	CONTROL	12	0	
1	5A04	12	0	
2	5A05	12	0	
3	5A06	12	2	

Chiron.tentans 9/~~26~~30-10/~~15~~10/97
File: 119ct.gwt Transform: NO TRANSFORMATION

Shapiro Wilks test for normality

D = 32.102

W = 0.958

Critical W (P = 0.05) (n = 46) = 0.945
Critical W (P = 0.01) (n = 46) = 0.927

Data PASS normality test at P=0.01 level. Continue analysis.

Chiron.tentans 9/26-10/15/97
File: 119ct.gwt Transform: NO TRANSFORMATION

Bartletts test for homogeneity of variance

Calculated B statistic = 0.58
Table Chi-square value = 11.34 (alpha = 0.01)
Table Chi-square value = 7.81 (alpha = 0.05)

Average df used in calculation ==> df (avg n - 1) = 10.50
df for Chi-square table value ==> df (#groups-1) = 3

Data PASS homogeneity test at 0.01 level. Continue analysis.

NOTE: If groups have unequal replicate sizes the average replicate size is used to calculate the B statistic (see above).

Chiron.tentans 9/26-10/15/97
File: 119ct.gwt Transform: NO TRANSFORMATION

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	3	11.381	3.794	4.963
Within (Error)	42	32.102	0.764	
Total	45	43.484		

Critical F value = 2.84 (0.05,3,40)
Since F > Critical F REJECT Ho:All groups equal

Chiron.tentans 9/26-10/15/97
File: 119ct.gwt Transform: NO TRANSFORMATION

DUNNETTS TEST

****** WARNING ******

This data set has unequal replicates. The Bonferroni T-test should be used instead of the Dunnetts test.

Chiron.tentans 9/26-10/15/97
File: 119ct.gwt Transform: NO TRANSFORMATION

DUNNETTS TEST - TABLE 1 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	F18	2.583	2.583		
2	5A04	2.633	2.633	-0.140	
3	5A05	1.550	1.550	2.895	*
4	5A06	2.810	2.810	-0.606	

Dunnett table value = 2.13 (1 Tailed Value, P=0.05, df=40,3)

Chiron.tentans 9/26-10/15/97
File: 119ct.gwt Transform: NO TRANSFORMATION

DUNNETTS TEST - TABLE 2 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	F18	12			
	5A04	12	0.760	29.4	-0.050
	5A05	12	0.760	29.4	1.033
4	5A06	10	0.797	30.9	-0.227

Chiron.tentans 9/26-10/15/97
File: 119ct.gwt Transform: NO TRANSFORMATION

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	3	11.381	3.794	4.963
Within (Error)	42	32.102	0.764	
Total	45	43.484		

Critical F value = 2.84 (0.05,3,40)
Since F > Critical F REJECT Ho:All groups equal

Chiron.tentans 9/26-10/15/97
File: 119ct.gwt Transform: NO TRANSFORMATION

BONFERRONI T-TEST - TABLE 1 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	F18	2.583	2.583		
2	5A04	2.633	2.633	-0.140	
3	5A05	1.550	1.550	2.895	*
4	5A06	2.810	2.810	-0.606	

Bonferroni T table value = 2.21 (1 Tailed Value, P=0.05, df=40,3)

Chiron.tentans 9/26-10/15/97
File: 119ct.gwt Transform: NO TRANSFORMATION

BONFERRONI T-TEST - TABLE 2 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	F18	12			
2	5A04	12	0.787	30.5	-0.050
3	5A05	12	0.787	30.5	1.033

4	5A06	10	0.825	32.0	-0.227

Leptochierus plumulosus 10 - Day									Survival			
Day	Date	By	T°C	pH	DO mg/L	S‰	Fed	H_2O - X	Rep.	#.Alive	# NF	% Survival
0	9/23/97	[illegible]	21	7.8	7.0	20	—	—	1	20	0	100
1	9/24/97	[illegible]	—	—	—	—	—	—	2	19	1	95
2	9/25/97	[illegible]	21	7.7	7.0	20	—	—	3	19	1	95
3	9/26/97	[illegible]	—	—	—	—	—	—	4	20	0	100
4	9/27/97	[illegible]	21	—	—	—	—	—	5	20	0	100
5	9/28/97	[illegible]	21	—	—	—	—	—				
6	9/29/97	[illegible]	21	7.7	7.7	20	—	—				
7	9/30/97	[illegible]	21	—	—	—	—	—				
8	10/1/97	[illegible]	21	—	—	—	—	—				
9	10/2/97	[illegible]	21	—	—	—	—	—				
10	10/3/97	[illegible]	21	7.9	7.4	.						

Project #: 119 (EnSafe)

Site #: C-17 (control)

Animal Batch #: LP-97-02

Size - 2-4 mm (initial)

Comments:

Leptochierus plumulosus 10 - Day								
Day	Date	By	T°C	pH	DO mg/L	S‰	Fed	H_2O - X
0	9/23/97	[illegible]	21	7.9	7.0	20	—	—
1	9/24/97	[illegible]	--	—	—	—	—	—
2	9/25/97	[illegible]	21	7.7	6.9	20	—	—
3	9/26/97	[illegible]	—	—	—	—	—	—
4	9/27/97	[illegible]	21	—	—	—	—	—
5	9/28/97	[illegible]	21	—	—	—	—	—
6	9/29/97	[illegible]	21	7.8	7.7	20	—	
7	9/30/97	[illegible]	21	—	—	—	—	—
8	10/1/97	[illegible]	21	—	—	—	—	—
9	10/2/97	[illegible]	21	—	—	—	—	—
10	10/3/97	[illegible]	21	7.9	7.4	—	—	—

Survival			
Rep.	# Alive	# NF	% Survival
1	18	2	90
2	19	1	95
3	17	3	85
4	20	—	100
5	19	1	95

Project #: 119 (EnSite)

Site #: 6403

Animal Batch #: LP-97-02

Comments:

95% CV = 5.

1

	Neanthes arenaceodentata 20 - Day								
	Day	Date	By	T°C	pH	DO mg/L	S ‰	Fed	H_2O
T	0	9/16/97	BF	21	7.9	7.7	28	—	—
W	1	9/17/97	BF	21	—	—	—	✓	—
T	2	9/18/97	BF	21	7.9	7.7	28	—	—
F	3	9/19/97	BF	21	—	—	—	✓	—
S	4	9/20/97	BF	21	—	—	—	—	—
S	5	9/21/97	BF	21	—	—	—	—	—
M	6	9/22/97	BF	21	—	—	—	✓	—
T	7	9/23/97	BF	21	[illegible]	[illegible]	—	—	X
W	8	9/24/97	BF	21	—	—	—	✓	—
T	9	9/25/97	BF	[illegible]	7.7	7.3	28	—	—
F	10	9/26/97	BF	21	—	—	—	✓	—
S	11	9/27/97	BF	21	—	—	—	—	—
S	12	9/28/97	BF	21	—	—	—	—	—
M	13	9/29/97	BF	21	7.5	5.8	—	✓	—
T	14	9/30/97	BF	21	—	—	—	—	—
W	15	10/1/97	BF	21	—	—	—	✓	X
T	16	10/2/97	BF	21	7.8	7.2	—	—	X
F	17	10/3/97	BF	21	—	—	—	✓	—
S	18	10/4/97	BF	21	—	—	—	—	—
S	19	10/5/97	BF	21	—	—	—	—	—
M	20	10/6/97	BF	21	7.9	7.4	—	—	—

BF

Survival, Growth						
Rep.	# Alive	% Survival	Tare Wt. (g)	Gross Wt. (g)	Net Wt. (mg)	Individual Wt. (mg)
1	5	100	10.203	1.0679	47.6	9.5
2	5	100	10.174	1.0633	45.9	9.2
3	5	100	9.925	1.0279	35.4	7.1
4	5	100	9.804	1.0186	38.2	7.6
5	5	100	9.801	1.0261	46.3	9.3

Project #: 119

Site #: C-17

Animal Batch #: Na-97-02

Comments:

	Day	Date	By	T°C	pH	DO mg/L	S ‰	Fed	H_2O
T	0	9/16/97	[illegible]	21	7.9	7.2	26	—	—
W	1	9/17/97	[illegible]	21	—	—	—	✓	—
T	2	9/18/97	[illegible]	21	7.8	7.0	26	—	—
F	3	9/19/97	[illegible]	21	—	—	—	✓	—
S	4	9/20/97	[illegible]	21	—	—	—	—	—
S	5	9/21/97	[illegible]	21	—	—	—	—	—
M	6	9/22/97	[illegible]	21	—	—	—	✓	—
T	7	9/23/97	[illegible]	21	7.9	7.0	27		X
W	8	9/24/97	[illegible]	21	—	—	—	✓	—
T	9	9/25/97	[illegible]	21	7.9	7.4	23	—	—
F	10	9/26/97	[illegible]	21	—	—	—	✓	—
S	11	9/27/97	[illegible]	21	—	—	—	—	—
S	12	9/28/97	[illegible]	21	—	—	—	—	—
M	13	9/29/97	[illegible]	21	7.7	5.3	—	✓	—
T	14	9/30/97	[illegible]	21	~~7.83~~	—	—	—	—
W	15	10/1/97	[illegible]	21	7.8	6.9	—	✓	X
T	16	10/2/97	[illegible]	21	—	—	—	—	—
F	17	10/3/97	[illegible]	21	—	—	—	✓	—
S	18	10/4/97	[illegible]	—	—	—	—	—	—
S	19	10/5/97	[illegible]	—	—	—	—	—	—
M	20	10/6/97	[illegible]	21	7.9	6.8	—	—	—

Neanthes arenaceodentata 20 - Day

Rep.	# Alive	% Survival	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Individual Wt. (mg)
1	4	80	1015.7	1.0584	42.7	~~8.5~~ 10.7
2	4	80	1025.8	1.0729	47.1	11.8
3	5	100	1027.7	1.0809	53.2	10.6
4	5	100	1032.0	1.0741	42.1	8.4
5	5	100	1031.4	1.0923	60.9	12.2

Survival, Growth

Project #: 119

Site #: 3301

Animal Batch #: Na-97-02

Comments:

Neanthes arenaceodentata 20 - Day

	Day	Date	By	T°C	pH	DO mg/L	S ‰	Fed	H_2O
T	0	9/16/97	[illegible]	21	8.0	7.2	26	—	—
W	1	9/17/97	[illegible]	21	—	—	—	✓	—
T	2	9/18/97	[illegible]	21	7.9	7.2	26	—	—
F	3	9/19/97	[illegible]	21	—	—	—	✓	—
S	4	9/20/97	[illegible]	21	—	—	—	—	—
S	5	9/21/97	[illegible]	21	—	—	—	—	—
M	6	9/22/97	[illegible]	21	—	—	—	✓	—
T	7	9/23/97	[illegible]	21	7.8	7.0	27	—	X
W	8	9/24/97	[illegible]	21	—	—	—	✓	—
T	9	9/25/97	[illegible]	21	7.8	7.0	28	—	—
F	10	9/26/97	[illegible]	21	—	—	—	✓	—
S	11	9/27/97	[illegible]	21	—	—	—	—	—
S	12	9/28/97	[illegible]	21	—	—	—	—	—
M	13	9/29/97	[illegible]	21	7.7	5.2	—	✓	—
T	14	9/30/97	[illegible]	21	7.8	7.0	—	✓	X
W	15	10/1/97	[illegible]	21	—	—	—	✓	X
T	16	10/2/97	[illegible]	21	—	—		—	—
F	17	10/3/97	[illegible]	21	—	—	—	✓	—
S	18	10/4/97	[illegible]	—	—	—	—	—	—
S	19	10/5/97	[illegible]	—	—	—		—	—
M	20	10/6/97	[illegible]	21	7.9	7.2	—	—	—

Survival, Growth

Rep.	# Alive	% Survival	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Individual Wt. (mg)
1	5	100	1.0251	1.0854	60.3	12.1
2	5	100	1.0317	1.0882	56.5	11.3
3	5	100	1.0417	1.0915	46.8	9.4
4	5	100	1.0510	1.0986	47.6	9.5
5	5	100	1.0663	1.1073	41.0	8.2

Project #: 119

Site #: 3302

Animal Batch #: Na-97-02

Comments:

	Neanthes arenaceodentata 20 - Day								
	Day	Date	By	T°C	pH	DO mg/L	S ‰	Fed	H_2O
T	0	9/16/97	[illegible]	21	7.8	7.2	26	—	—
W	1	9/17/97	[illegible]	21	—	—	—	✓	—
T	2	9/18/97	[illegible]	21	7.8	7.0	26	—	—
F	3	9/19/97	[illegible]	21	—	-	—	✓	—
S	4	9/20/97	[illegible]	21	—	—	—	—	—
S	5	9/21/97	[illegible]	21	—	-	—	—	—
M	6	9/22/97	[illegible]	21	—	—	—	✓	—
T	7	9/23/97	[illegible]	21	7.7	7.0	27	—	X
W	8	9/24/97	[illegible]	21	—	—	—	✓	—
T	9	9/25/97	[illegible]	21	7.8	7.4	28	—	—
F	10	9/26/97	[illegible]	21	—	—	—	✓	—
S	11	9/27/97	[illegible]	21	—	—	—	—	—
S	12	9/28/97	[illegible]	21	—	—	—	—	—
M	13	9/29/97	[illegible]	21	8.1	5.8	-	✓	—
T	14	9/30/97	[illegible]	21	—	—	—	—	—
W	15	10/1/97	[illegible]	21	7.8	7.0	28	✓	X
T	16	10/2/97	[illegible]	21	-	-	-	✓	—
F	17	10/3/97	[illegible]	21	—	—	—	✓	-
S	18	10/4/97	[illegible]	—	—	—	—	—	-
S	19	10/5/97	[illegible]	—	—	-	—	—	—
M	20	10/6/97	[illegible]	21	7.9	7.2	—	—	—

Survival, Growth						
Rep.	# Alive	% Survival	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Individual Wt. (mg)
1	5	1017.5	100	1.0551	37.6	7.5
2	5	1015.7	100	1.0517	36.0	7.2
3	5	1003.5	100	1.0514	47.9	9.6
4	5	1013.1	100	1.0673	54.2	10.8
5	5	1017.0	100	1.0518	34.8	6.9

Project #: 119

Site #: 18 B1

Animal Batch #: Na-97-02

Comments:

2

Neanthes arenaceodentata 20 - Day								
Day	Date	By	T°C	pH	DO mg/L	S ‰	Fed	H_2O
0	9/16/97	[illegible]	21	7.9	7.6	27	—	—
1	9/17/97	[illegible]	21	—	—	—	✓	—
2	9/18/97	[illegible]	21	7.9	7.7	27	—	—
3	9/19/97	[illegible]	21	—	—	—	✓	—
4	9/20/97	[illegible]	21	—	—	—	—	—
5	9/21/97	[illegible]	21	—	—	—	—	—
6	9/22/97	[illegible]	21	—	—	—	✓	—
7	9/23/97	[illegible]	21	7.9	7.8	—	—	X
8	9/24/97	[illegible]	21	—	—	—	✓	—
9	9/25/97	[illegible]	21	7.9	7.7	27	—	—
10	9/26/97	[illegible]	21	—	—	—	✓	—
11	9/27/97	[illegible]	21	—	—	—	—	—
12	9/28/97	[illegible]	21	—	—	—	—	—
13	9/29/97	[illegible]	21	7.7	5.3	—	✓	—
14	9/30/97	[illegible]	21	—	—	—	—	
15	10/1/97	[illegible]	21	7.8	7.0	—	✓	X
16	10/2/97	[illegible]	21		—	—	—	—
17	10/3/97	[illegible]	21	—	—	—	✓	
18	10/4/97	[illegible]	—	—			—	
19	10/5/97	[illegible]		—	—	—	—	—
20	10/6/97	[illegible]	21	7.9	7.2	—	—	—

Survival, Growth						
Rep.	# Alive	% Survival	Tare ~~Wt. (mg)~~ g	Gross ~~Wt. (mg)~~ g	Net Wt. (mg)	Individual Wt. (mg)
1	5	1027.6	100	1.0528	25.2	5.0
2	5	1024.0	100	1.0671	45.1	9.0
3	5	1020.3	100	1.0553	35	7.0
4	5	1024.0	100	1.0709	46.9	9.4
5	5	1022.1	100	1.0585	36.4	7.3

Project #: 119

Site #: ~~[illegible] C-17~~ 1603

Animal Batch #: Na-97-02

Comments:

Neanthes arenaceodentata 20 - Day

Day	Date	By	T°C	pH	DO mg/L	S ‰	Fed	H_2O
0	9/16/97	[illegible]	21	8.0	7.6	26	—	—
1	9/17/97	[illegible]	21	—	—	—	✓	—
2	9/18/97	[illegible]	21	8.0	7.3	—	—	—
3	9/19/97	[illegible]	21	—	—	—	✓	—
4	9/20/97	[illegible]	21	—	—	—	—	—
5	9/21/97	[illegible]	21	—	—	—	—	—
6	9/22/97	[illegible]	21	—	—	—	✓	—
7	9/23/97	[illegible]	21	8.3	7.0	27	—	X
8	9/24/97	[illegible]	21	—	—	—	✓	—
9	9/25/97	[illegible]	21	8.2	7.0	27	—	—
10	9/26/97	[illegible]	21	—	—	—	✓	—
11	9/27/97	[illegible]	21	—	—	—	—	—
12	9/28/97	[illegible]	21	—	—		—	—
13	9/29/97	[illegible]	21	8.1	5.3	—	✓	—
14	9/30/97	[illegible]	21	—	—	—		—
15	10/1/97	[illegible]	21	7.8	7.0	—	✓	X
16	10/2/97	[illegible]	21	—	—	—	—	—
17	10/3/97	[illegible]	21	—	—	—	✓	
18	10/4/97	[illegible]	—	—	—	—		—
19	10/5/97	[illegible]	—	—	—	—	—	—
20	10/6/97	[illegible]	21	7.8	7.2	—	—	—

Survival, Growth

Rep.	# Alive	% Survival	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Individual Wt. (mg)
1	5	1013.3	100	1.0608	49.5	9.9
2	5	1009.0	100	1.0588	49.8	9.7
3	5	1004.3	100	1.0385	34.2	6.8
4	5	1010.3	100	1.0430	32.7	6.5
5	5	1012.0	100	1.0486	36.6	7.3

Project #: 119

Site #: 1604

Animal Batch #: Na-97-02

Comments:

Neanthes arenaceodentata 20 - Day

Day	Date	By	T°C	pH	DO mg/L	S ‰	Fed	H_2O
0	9/16/97	[illegible]	21	8.0	7.5	26	—	—
1	9/17/97	[illegible]	21	—	—	—	✓	—
2	9/18/97	[illegible]	21	8.0	7.7	27	—	—
3	9/19/97	[illegible]	21	—	—	—	✓	—
4	9/20/97	[illegible]	21	—	—	—	—	—
5	9/21/97	[illegible]	21	—	—	—	—	—
6	9/22/97	[illegible]	21	—	—	—	✓	—
7	9/23/97	[illegible]	21	8.1	7.0	27	—	X
8	9/24/97	[illegible]	21	—	—	—	✓	—
9	9/25/97	[illegible]	21	8.0	7.4	—	—	—
10	9/26/97	[illegible]	21	—	—	—	✓	—
11	9/27/97	[illegible]	21	—	—	—	—	—
12	9/28/97	[illegible]	21	—	—	—	—	—
13	9/29/97	[illegible]	21	—	—	—	✓	—
14	9/30/97	[illegible]	21	7.7	5.2	—	—	—
15	10/1/97	[illegible]	21	7.8	7.0	—	✓	X
16	10/2/97	[illegible]	21	—	—	—	—	—
17	10/3/97	[illegible]	21	—	—	—	✓	—
18	10/4/97	[illegible]	—	—	—	—	—	—
19	10/5/97	[illegible]	—	—	—	—	—	—
20	10/6/97	[illegible]	21	7.9	7.2	—	—	—

96% CV = 8.9 Survival, Growth

Rep.	# Alive	% Survival	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Individual Wt. (mg)
1	5	100	1009.7 ~~1009.4~~	1.0455	35.8	7.2
2	5	100	1013.7	1.0414	35.7	7.1
3	5	100	1017.8	1.0613	43.5	8.7
4	4	80	1012.2	1.0421	29.9	7.5
5	5	100	1009.9	1.0412	40.3	8.1

Project #: 119

Site #: 1605

Animal Batch #: Na-97-02

Comments:

(5)

Neanthes arenaceodentata 20 - Day								
Day	Date	By	T°C	pH	DO mg/L	S ‰	Fed	H_2O
0	9/16/97	[illegible]	21	7.8	7.2	26	—	—
1	9/17/97	[illegible]	21				✓	—
2	9/18/97	[illegible]	21	7.9	7.2	26	—	—
3	9/19/97	[illegible]	21	—	—	—	✓	—
4	9/20/97	[illegible]	21	—	—	—	—	—
5	9/21/97	[illegible]	21	—	—	—	—	—
6	9/22/97	[illegible]	21	—	—	—	✓	—
7	9/23/97	[illegible]	21	8.3	7.0	28	—	X
8	9/24/97	[illegible]	21	—	—	—	✓	—
9	9/25/97	[illegible]	21	7.9	7.4	28	—	—
10	9/26/97	[illegible]	21	—	—	—	✓	—
11	9/27/97	[illegible]	21	—	—	—	—	—
12	9/28/97	[illegible]	21	—	—	—	—	—
13	9/29/97	[illegible]	21	7.6	5.8	—	✓	—
14	9/30/97	[illegible]	—	—	—	—	—	—
15	10/1/97	[illegible]	21	7.8	7.0	28	✓	X
16	10/2/97	[illegible]	21	—	—	—	—	—
17	10/3/97	[illegible]	21	—	—	—	✓	
18	10/4/97	[illegible]	—	—	—	—	—	—
19	10/5/97	[illegible]	—	—	—	—	—	—
20	10/6/97	[illegible]	21	7.9	7.2	—	—	—

Survival, Growth						
Rep.	# Alive	% Survival	Tare Wt. (mg)	Gross Wt. (mg)	Net Wt. (mg)	Individual Wt. (mg)
1	5	100	1001.5	1.0501	48.6	9.7
2	5	100	996.9	1.0411	44.2	8.8
3	5	100	1025.7	1.0710	45.3	9.1
4	4	80	1078.3	1.0951	26.8	6.7
5	3	60	1025.1	1.0504	25.3	8.4

Project #: 119

Site #: 1606

Animal Batch #: Na-97-02

Comments:

Neanthes arena. growth 9/16-10/6/97
File: 119na.gwt Transform: NO TRANSFORMATION

DUNNETTS TEST - TABLE 2 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	C17	5			
2	3301	5	2.178	25.5	-2.200
3	3302	5	2.178	25.5	-1.560
4	18B1	5	2.178	25.5	0.120
5	1603	5	2.178	25.5	0.500
6	1604	5	2.178	25.5	0.500
7	1605	5	2.178	25.5	0.820
8	1606	5	2.178	25.5	0.000

File: 119na.gwt Transform: NO TRANSFORMATION

Bartletts test for homogeneity of variance

Calculated B statistic = 4.00
Table Chi-square value = 18.48 (alpha = 0.01)
Table Chi-square value = 14.07 (alpha = 0.05)

Average df used in calculation ==> df (avg n - 1) = 4.00
Used for Chi-square table value ==> df (#groups-1) = 7

Data PASS homogeneity test at 0.01 level. Continue analysis.

NOTE: If groups have unequal replicate sizes the average replicate size is used to calculate the B statistic (see above).

Neanthes arena. growth 9/16-10/6/97
File: 119na.gwt Transform: NO TRANSFORMATION

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	7	40.232	5.747	2.908
Within (Error)	32	63.236	1.976	
Total	39	103.468		

Critical F value = 2.33 (0.05,7,30)
Since F > Critical F REJECT Ho:All groups equal

Neanthes arena. growth 9/16-10/6/97
File: 119na.gwt Transform: NO TRANSFORMATION

DUNNETTS TEST - TABLE 1 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	C17	8.540	8.540		
2	3301	10.740	10.740	-2.474	
3	3302	10.100	10.100	-1.755	
4	18B1	8.420	8.420	0.135	
5	1603	8.040	8.040	0.562	
6	1604	8.040	8.040	0.562	
7	1605	7.720	7.720	0.922	
8	1606	8.540	8.540	0.000	

Dunnett table value = 2.45 (1 Tailed Value, P=0.05, df=30,7)

Neanthes arena. growth 9/16-10/6/97
File: 119na.gwt Transform: NO TRANSFORMATION

'piro Wilks test for normality

D = 63.236

W = 0.953

Critical W (P = 0.05) (n = 40) = 0.940
Critical W (P = 0.01) (n = 40) = 0.919

Data PASS normality test at P=0.01 level. Continue analysis.

Neanthes arena. growth 9/16-10/6/97
File: 119na.gwt Transform: NO TRANSFORMATION

Bartletts test for homogeneity of variance

Calculated B statistic = 4.00
Table Chi-square value = 18.48 (alpha = 0.01)
Table Chi-square value = 14.07 (alpha = 0.05)

Average df used in calculation ==> df (avg n - 1) = 4.00
d for Chi-square table value ==> df (#groups-1) = 7

Data PASS homogeneity test at 0.01 level. Continue analysis.

NOTE: If groups have unequal replicate sizes the average replicate size is used to calculate the B statistic (see above).

Neanthes arena. growth 9/16-10/6/97
File: 119na.gwt Transform: NO TRANSFORMATION

Shapiro Wilks test for normality

D = 63.236

W = 0.953

Critical W (P = 0.05) (n = 40) = 0.940
Critical W (P = 0.01) (n = 40) = 0.919

---

a PASS normality test at P=0.01 level. Continue analysis.

Neanthes arena. growth 9/16-10/6/97

APPENDIX B

APPENDIX B

Summary of test conditions and results of the monthly reference toxicity test for the fathead minnow (*Pimephales promelas*) to the reference toxicant, Sodium dodecyl Sulfate, in a 48 hour static acute test.

Source of test animal:	In-House
Lot number and age of animals used:	PP-97-18, 8 days old
Control and dilution water:	Reconstituted freshwater
Test material description:	White powder
Concentration (ppm) of SDS tested:	Control, 1.0, 2.0, 4.0, 8.0, and 16.0 ppm
Effect criterion:	Mortality

Results of 48-Hour LC50 Calculations
95% Confidence Limits (mg/L)

Method	48-h LC50	Lower	Upper
Binomial	****	****	****
Moving Avg.	****	****	****
Probit	****	****	****
Logit	3.09	2.27	4.30
T S-K	****	****	****

Test Dates	Age of Animals (Days)	LC50 Values (milligrams per liter) 48 hr
06-08 Aug 91 (3)	14	8.4(4.0-16.0)
17-19 Oct 91 (4)	3	2.8(2.0-4.0)
13-15 Nov 91 (5)	30	2.9(2.0-4.0)
03-05 Jan 92 (6)	3	2.3(1.0-4.0)
18-20 Feb 92 (7)	15	3.9(3.2-4.7)
24-26 Mar 92 (8)	8	4.8(3.7-6.6)
24-26 Apr 92 (9)	12	5.2(4.0-7.7)
18-20 Jun 92 (10)	13	5.2(4.0-8.0)
25-27 Sep 92 (11)	13	2.5(2.0-4.0)
20-22 Nov 92 (12)	10	2.7(2.0-4.0)
20-22 Jan 93 (13)	11	5.7(4.9-6.6)
16-18 Mar 93 (14)	1	5.3(4.0-8.0)
12-14 May 93 (15)	8	3.5(2.5-5.0)
02-04 Jul 93 (16)	13	5.0(4.0-8.0)
23-25 Sep 93 (17)	12	5.7(4.0-8.0)
18-20 Oct 93 (18)	7	3.2(2.3-4.2)
28-30 Dec 93 (19)	6	3.0(2.4-3.6)
09-11 Feb 94 (20)	7	4.2(3.5-5.0)
18-20 Apr 94 (21)	8	2.8(2.6-3.1)
08-10 Jun 94 (22)	6	5.5(5.1-5.8)

29-01 Jun-Jul 94 (23)	3	3.9(3.3-4.6)
08-11 Nov 94 (24)	12	2.7(2.3-3.2)
21-23 Dec 94 (25)	8	2.6(2.0-4.0)
25-27 Jan 95 (26)	2	4.2(3.5-5.2)
24-26 Feb 95 (27)	4	4.3(3.7-5.0)
11-13 Apr 95 (28)	8	1.5(1.3-1.8)
08-10 May 95 (29)	6	10.2(9.1-11.4)
19-21 Jun 95 (30)	10	2.3(2.0-2.6)
10-12 Jul 95 (31)	13	4.4(3.8-5.2)
16-18 Aug 95 (32)	2-4	4.1(3.5-4.9)
13-15 Sep 95 (33)	15	6.5(5.7-7.4)
13-15 Sep 95 (34)	2	6.3(5.4-7.2)
08-10 Nov 95 (35)	1	4.9(4.3-5.7)
01-03 Dec 95 (36)	4	2.8(2.4-3.2)
09-11 Jan 96 (37)	1	5.2(4.6-6.0)
13-15 Feb 96 (38)	13	6.3(5.6-7.0)
20-22 Mar 96 (39)	8	2.9(1.9-3.4)
25-27 Apr 96 (40)	10	5.3(4.8-5.8)
29-31 May 96 (41)	8	2.7(2.4-2.9)
19-21 Jun 96 (42)	7	3.9(3.2-4.7)
30 Jul-1 Aug 96 (43)	8	1.9(1.4-2.6)
27-29 Aug 96 (44)	3	1.9(1.6-2.3)
25-27 Sep 96 (45)	1	6.1(5.2-7.1)
29-31 Oct 96 (46)	5	3.3(2.7-4.1)
04-06 Dec 96 (47)	6	4.1(3.4-5.0)
03-05 Jan 97 (48)	5	2.7(2.2-3.3)
28-30 Jan 97 (49)	7	2.9(2.5-3.4)
05-07 Mar 97(50)	8	2.3(1.8-2.8)
23-25 Apr 97(51)	7	8.0(NR)
04-06 Sept 97(52)	8	3.1(2.3-4.3)

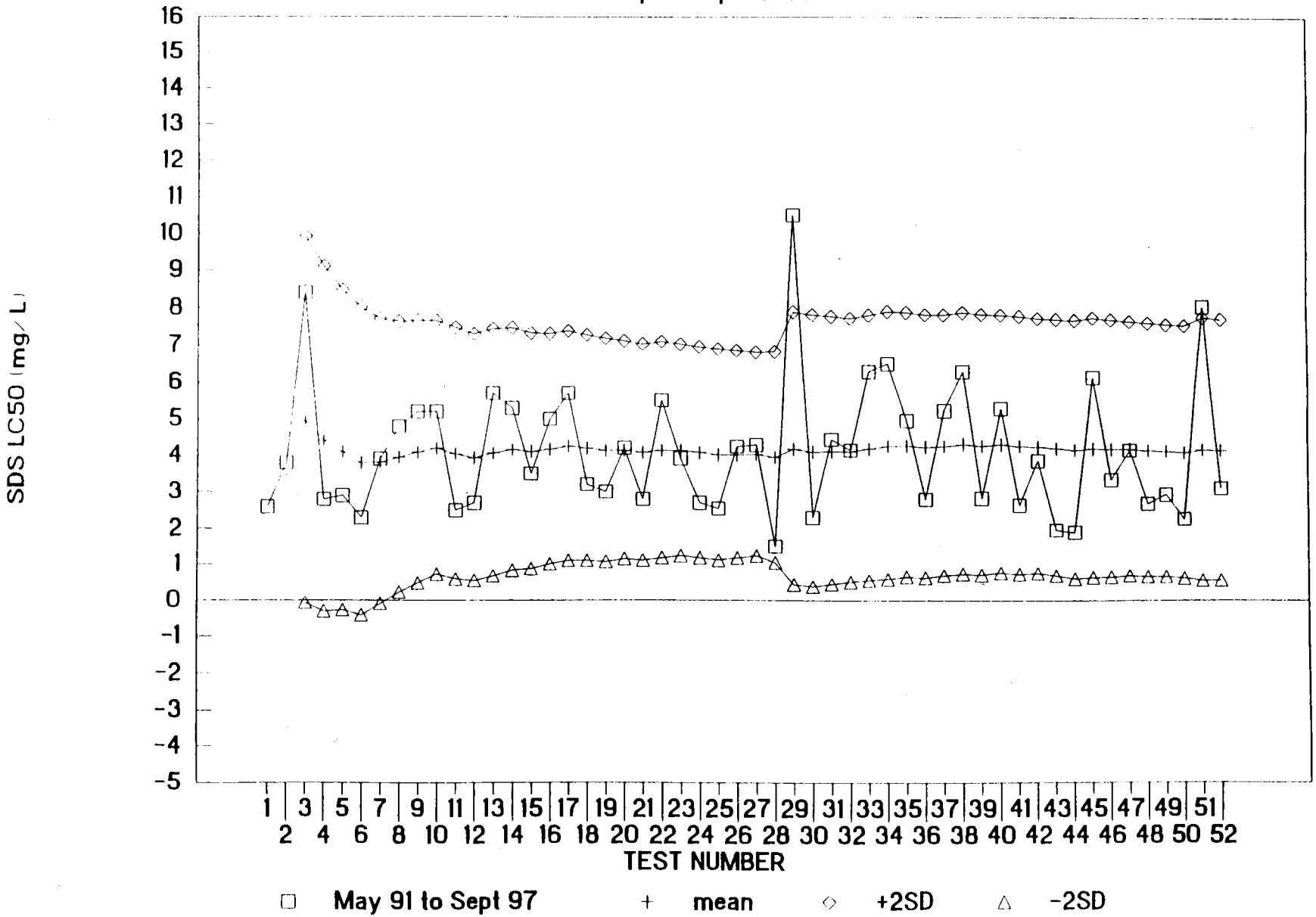
Reference:

U.S. Environmental Protection Agency. 1993. Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms. Fourth Edition. EPA 600/4-90/027F, Cincinnati, OH.

Hamilton, M. A., R. C. Russo, and R. V. Thurston. 1977. Trimmed Spearman-Karber. Method for Estimating Median Lethal Concentrations in Toxicity Bioassays. Environ. Sci. Technol. 11(7): 714-719; Correction 12(4):417 (1978).

CONTROL CHART

Pimephales promelas



TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

DATE: 8/18/97 TEST NUMBER: CdCl DURATION: 48 h
TOXICANT : CdCl
SPECIES: N.arenaceodentata

RAW DATA: ---	Concentration (mg/L)	Number Exposed	Mortalities
	.00	10	0
	2.50	10	0
	5.00	10	0
	10.00	10	0
	20.00	10	10
	40.00	10	10

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: LC50: 14.14
95% CONFIDENCE LIMITS
ARE NOT RELIABLE.

TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

DATE: 9/8/97 TEST NUMBER: 1 DURATION: 48 h
TOXICANT : CdCl
SPECIES: L.plumulosus

RAW DATA: ---	Concentration (mg/L)	Number Exposed	Mortalities
	.00	20	0
	.25	20	0
	.50	20	0
	1.00	20	0
	2.00	20	0
	4.00	20	5
	8.00	20	14

SPEARMAN-KARBER TRIM: 30.00%

SPEARMAN-KARBER ESTIMATES: LC50: 5.88
95% LOWER CONFIDENCE: 4.72
95% UPPER CONFIDENCE: 7.32

Reference toxicant data (48-h LC_{50}) for *Chironomus tentans* using copper sulfate in aqueous solution with a glass bead substrate (20°C, 16h light:8h dark photoperiod).

Date	**LC_{50} (µg/L)**	**95% UCL**	**95% LCL**
27 May 1997	359.10	216.71	595.06
13 June 1997	365.13	288.83	461.60
17 July 1997	578.33	252.50	1324.61

TIERRA CONSULTING, INC.
SEDPET III: SEDIMENTARY PETROLOGY ANALYSIS PROGRAM

ANALYSIS OF SAMPLE: TL-C17

ORGANIC CARBON = 3.94%

SIEVE ANALYSIS

SAMPLE WEIGHT = 15.04

SIEVE SIZE (MICRONS)	SIEVE SIZE (PHI)	SIEVE WT (GRAMS)	WEIGHT PERCENT RETAINED	CUMULATIVE PERCENT THROUGH	CUMULATIVE PERCENT RETAINED
500.00	1.00	.05	.33	99.67	.33
250.00	2.00	.09	.60	99.07	.93
125.00	3.00	.05	.33	98.74	1.26
62.50	4.00	.02	.13	98.60	1.40

HYDROMETER ANALYSIS

VOLUME = 1000.00 ASSUMED SPECIFIC GRAVITY = 2.650

TIME (MINS)	HYDROMETER READING	TEMPERATURE (DEGREES C)	EFFECTIVE DEPTH	TEMPERATURE CORRECTION
1.	14.00	21.50	14.00	.01341
5.	13.50	21.50	14.08	.01341
15.	13.00	21.50	14.16	.01341
60.	11.00	21.50	14.49	.01341
180.	9.00	21.50	14.82	.01341
720.	8.00	21.50	14.98	.01341
1200.	7.50	21.00	15.06	.01349

TIME (MINS)	DIAMETER (MICRONS)	DIAMETER (IN PHI)	WEIGHT PERCENT RETAINED	CUMULATIVE PERCENT THROUGH	CUMULATIVE PERCENT RETAINED
1.	50.18	4.32	5.52	93.09	6.91
5.	22.51	5.47	3.32	89.76	10.24
15.	13.03	6.26	3.32	86.44	13.56
60.	6.59	7.25	13.30	73.14	26.86
180.	3.85	8.02	13.30	59.84	40.16
720.	1.93	9.01	6.65	53.19	46.81
1200.	1.51	9.37	3.32	49.87	50.13

TEXTURAL CLASSIFICATION AND PHI PERCENTILES SAMPLE TL-C17

.E CLASSIFICATION USED: STANDARD GEOLOGICAL SOILS CLASSIFICATION

GRAVEL/SAND CUTOFF	2000.00	MICRONS
SAND/SILT CUTOFF	62.50	MICRONS
SILT/CLAY CUTOFF	4.00	MICRONS

PERCENT GRAVEL	.00
PERCENT SAND	1.40
PERCENT SILT	37.81
PERCENT CLAY	60.80

TEXTURAL DESCRIPTIONS

FOLK'S: MUD
SHEPARD'S: SILTY CLAY
TREFETHEN'S: SILTY CLAY
U.S. ARMY CORPS OF ENGINEERS: CLAY
U.S. BUREAU OF SOILS: CLAY

PHI PERCENTILES

PHI(05)	4.21	PHI	54.15	MICRONS
PHI(16)	6.44	PHI	11.50	MICRONS
(25)	7.11	PHI	7.25	MICRONS
(50)	9.36	PHI	1.53	MICRONS

EXTRAPOLATION OF DATA TO CUMULATIVE 99.5% RETAINED.

NUMBER OF SAMPLES SELECTED: 7
CORRELATION COEFFICIENT: .9856613
STANDARD ERROR OF THE ESTIMATE: 1.1586659
RANGE OF STANDARD RESIDUALS: 12.7761 WITH MINIMUM: -6.0233 AND MAXIMUM: 6.7527
F-TEST: 170.6118 WITH 1 AND 5 DEGREES OF FREEDOM.

WARNING EXTRAPOLATION MAY BE MEANINGLESS SINCE
LESS THAN 75% ACCOUNTED FOR BY INPUT DATA.***

EXTRAPOLATED PHI PERCENTILES

PHI(05)	4.21	PHI	54.15	MICRONS
PHI(16)	6.44	PHI	11.50	MICRONS
PHI(25)	7.11	PHI	7.25	MICRONS
PHI(50)	9.36	PHI	1.53	MICRONS
PHI(75)	10.02	PHI	.97	MICRONS
PHI(84)	10.28	PHI	.80	MICRONS
PHI(95)	10.58	PHI	.66	MICRONS
PHI(99.9)	10.695	PHI	.603	MICRONS

INTERPOLATED PHI PERCENTILES SAMPLE TL-C17

PHI	MICRONS	MM	PCT. RET	PCT. FINER
1.00	500.00	.5000E+00	.33	99.67
1.25	420.45	.4204E+00	.48	99.52
1.50	353.55	.3536E+00	.63	99.37
1.75	297.30	.2973E+00	.78	99.22
2.00	250.00	.2500E+00	.93	99.07
2.25	210.22	.2102E+00	1.01	98.99
2.50	176.78	.1768E+00	1.10	98.90
2.75	148.65	.1487E+00	1.18	98.82
3.00	125.00	.1250E+00	1.26	98.74
3.25	105.11	.1051E+00	1.30	98.70
3.50	88.39	.8839E-01	1.33	98.67
3.75	74.33	.7433E-01	1.36	98.64
4.00	62.50	.6250E-01	1.40	98.60
4.25	52.56	.5256E-01	5.75	94.25
4.50	44.19	.4419E-01	7.44	92.56
4.75	37.16	.3716E-01	8.16	91.84
5.00	31.25	.3125E-01	8.88	91.12
5.25	26.28	.2628E-01	9.60	90.40
5.50	22.10	.2210E-01	10.35	89.65
5.75	18.58	.1858E-01	11.41	88.59
6.00	15.63	.1563E-01	12.46	87.54
6.25	13.14	.1314E-01	13.51	86.49
6.50	11.05	.1105E-01	16.78	83.22
6.75	9.29	.9291E-02	20.16	79.84
7.00	7.81	.7813E-02	23.54	76.46
7.25	6.57	.6570E-02	26.94	73.06
7.50	5.52	.5524E-02	31.22	68.78
7.75	4.65	.4645E-02	35.51	64.49
8.00	3.91	.3906E-02	39.79	60.21
8.25	3.28	.3285E-02	41.69	58.31
8.50	2.76	.2762E-02	43.37	56.63
8.75	2.32	.2323E-02	45.04	54.96
9.00	1.95	.1953E-02	46.72	53.28
9.25	1.64	.1642E-02	49.01	50.99
9.50	1.38	.1381E-02	55.03	44.97
9.75	1.16	.1161E-02	64.42	35.58
10.00	.98	.9766E-03	73.81	26.19
10.25	.82	.8212E-03	83.20	16.80
10.50	.69	.6905E-03	92.59	7.41

STATISTICS AND ENGINEERING PARAMETERS SAMPLE TL-C17

MAN'S STATISTICS:

MEDIAN	9.355	PHI	1.527	MICRONS
MEAN	8.363	PHI	3.037	MICRONS
STANDARD DEVIATION	1.921	POORLY SORTED		
SKEWNESS	-.517	STRONGLY COARSE-SKEWED		
KURTOSIS	.658	VERY PLATYKURTIC		

FOLK'S STATISTICS:

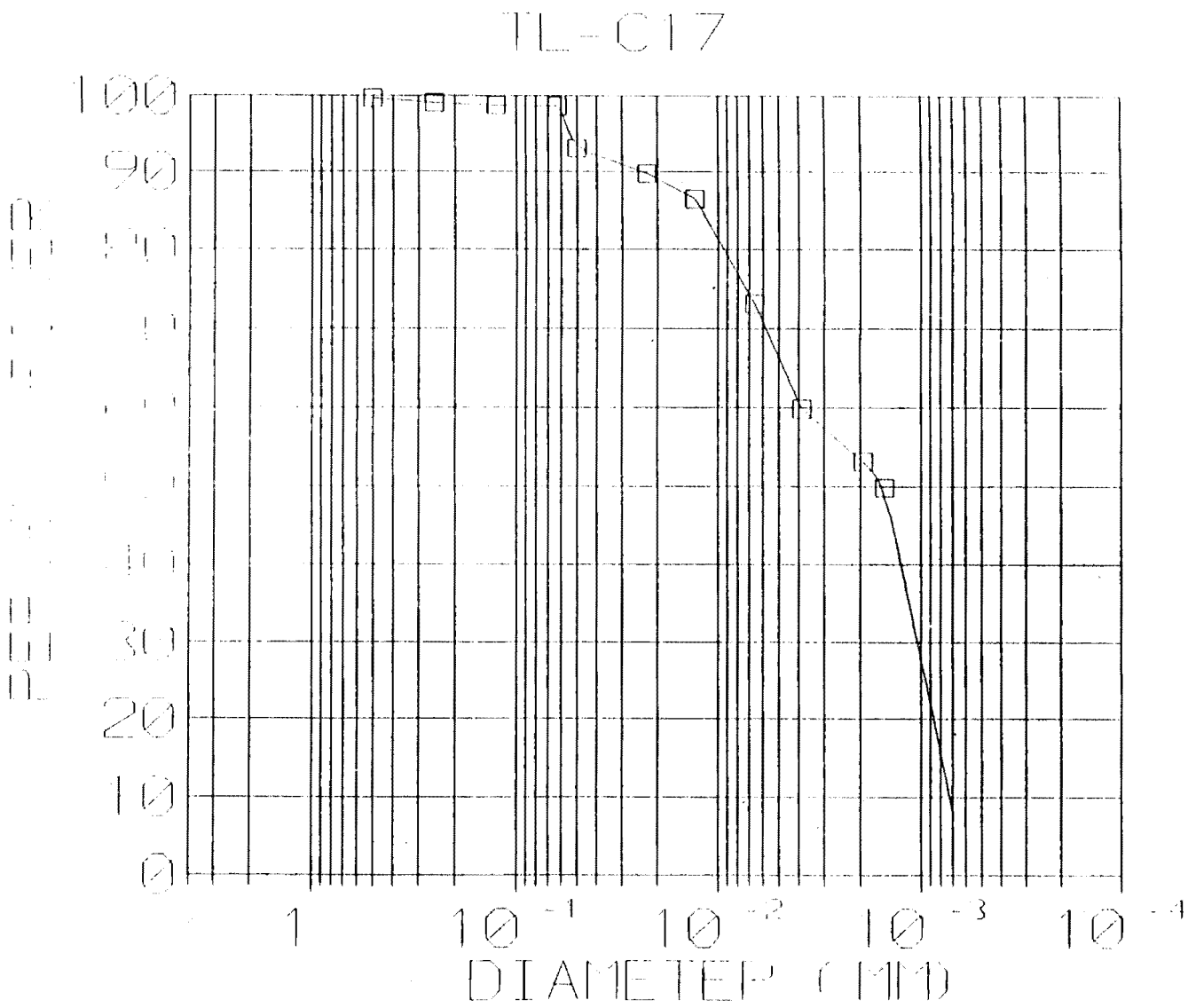
MEAN	8.694	PHI	2.415	MICRONS
STANDARD DEVIATION	1.925	POORLY SORTED		
SKEWNESS	-.567	STRONGLY COARSE-SKEWED		
KURTOSIS	.398	PLATYKURTIC		

MOMENT MEASURES:

MEAN	8.383	PHI	2.995	MICRONS
SECOND MOMENT	4.090			
STANDARD DEVIATION	2.022	VERY POORLY SORTED		
THIRD MOMENT	-8.602			
SKEWNESS	-1.040	STRONGLY COARSE-SKEWED		
FOURTH MOMENT	60.548			
RTOSIS	1.206	LEPTOKURTIC		

ENGINEERING PARAMETERS:

D60	8.028	PHI	3.831	MICRONS
D30	9.899	PHI	1.048	MICRONS
D10	10.431	PHI	.724	MICRONS
COEF. OF UNIFORMITY	5.290			
COEF. OF CURVATURE	.395			


TL-C17
100
90
80
70
60
50
40
30
20
10
0
1
10 -1
10 -2
10 -3
10 -4
DIAMETER (MM)

TIERRA CONSULTING, INC.
SEDPET III: SEDIMENTARY PETROLOGY ANALYSIS PROGRAM

LYSIS OF SAMPLE: TL-F18

SIEVE ANALYSIS

SAMPLE WEIGHT = 37.35

SIEVE SIZE (MICRONS)	SIEVE SIZE (PHI)	SIEVE WT (GRAMS)	WEIGHT PERCENT RETAINED	CUMULATIVE PERCENT THROUGH	CUMULATIVE PERCENT RETAINED
500.00	1.00	.07	.19	99.81	.19
250.00	2.00	1.27	3.40	96.41	3.59
125.00	3.00	5.10	13.65	82.76	17.24
62.50	4.00	1.08	2.89	79.87	20.13

HYDROMETER ANALYSIS

VOLUME = 1000.00 ASSUMED SPECIFIC GRAVITY = 2.650

TIME (MINS)	HYDROMETER READING	TEMPERATURE (DEGREES C)	EFFECTIVE DEPTH	TEMPERATURE CORRECTION
1.	24.50	21.50	12.28	.01341
5.	22.00	21.50	12.69	.01341
15.	20.00	21.50	13.01	.01341
60.	18.50	21.50	13.26	.01341
180.	16.50	21.50	13.59	.01341
720.	15.00	21.50	13.83	.01341
1200.	14.00	21.50	14.00	.01341

TIME (MINS)	DIAMETER (MICRONS)	DIAMETER (IN PHI	WEIGHT PERCENT RETAINED	CUMULATIVE PERCENT THROUGH	CUMULATIVE PERCENT RETAINED
1.	46.99	[illegible]	[illegible]	65.60	34.40
5.	21.36	[illegible]	[illegible]	58.90	41.10
15.	12.49	[illegible]	[illegible]	53.55	46.45
60.	6.30	[illegible]	[illegible]	49.53	50.47
180.	3.68	[illegible]	[illegible]	44.18	55.82
720.	1.86	[illegible]	[illegible]	40.16	59.84
1200.	1.45	[illegible]	[illegible]	37.48	62.52

TEXTURAL CLASSIFICATION AND PHI PERCENTILES — SAMPLE TL-F18

SIZE CLASSIFICATION USED: STANDARD GEOLOGICAL SOILS CLASSIFICATION

GRAVEL/SAND CUTOFF	2000.00	MICRONS
SAND/SILT CUTOFF	62.50	MICRONS
SILT/CLAY CUTOFF	4.00	MICRONS

PERCENT GRAVEL	.00
PERCENT SAND	20.13
PERCENT SILT	34.87
PERCENT CLAY	44.99

TEXTURAL DESCRIPTIONS

FOLK'S: SANDY MUD
SHEPARD'S: SAND-SILT-CLAY
TREFETHEN'S: SANDY SILTY-CLAY
U.S. ARMY CORPS OF ENGINEERS: SILTY CLAY
U.S. BUREAU OF SOILS: CLAY

PHI PERCENTILES

PHI(05)	2.10	PHI	232.70	MICRONS
PHI(16)	2.91	PHI	133.14	MICRONS
PHI(25)	4.14	PHI	56.71	MICRONS
PHI(50)	7.19	PHI	6.83	MICRONS

EXTRAPOLATION OF DATA TO CUMULATIVE 99.5% RETAINED.

NUMBER OF SAMPLES SELECTED: 7
CORRELATION COEFFICIENT: .9913523
STANDARD ERROR OF THE ESTIMATE: 1.0313079
RANGE OF STANDARD RESIDUALS: 3.1565 WITH MINIMUM: -1.3534 AND MAXIMUM: 1.8030
F-TEST: 285.3494 WITH 1 AND 5 DEGREES OF FREEDOM.

WARNING EXTRAPOLATION MAY BE MEANINGLESS SINCE
LESS THAN 75% ACCOUNTED FOR BY INPUT DATA.***

EXTRAPOLATED PHI PERCENTILES

PHI(05)	2.10	PHI	232.70	MICRONS
PHI(16)	2.91	PHI	133.14	MICRONS
PHI(25)	4.14	PHI	56.71	MICRONS
PHI(50)	7.19	PHI	6.83	MICRONS
PHI(75)	10.85	PHI	.54	MICRONS
PHI(84)	11.83	PHI	.27	MICRONS
PHI(95)	12.90	PHI	.13	MICRONS
PHI(99.9)	13.342	PHI	.096	MICRONS

INTERPOLATED PHI PERCENTILES SAMPLE TL-F18

PHI	MICRONS	MM	PCT. RET	PCT. FINER
1.00	500.00	.5000E+00	.19	99.81
1.25	420.45	.4204E+00	1.04	98.96
1.50	353.55	.3536E+00	1.89	98.11
1.75	297.30	.2973E+00	2.74	97.26
2.00	250.00	.2500E+00	3.59	96.41
2.25	210.22	.2102E+00	7.00	93.00
2.50	176.78	.1768E+00	10.41	89.59
2.75	148.65	.1487E+00	13.83	86.17
3.00	125.00	.1250E+00	17.24	82.76
3.25	105.11	.1051E+00	17.97	82.03
3.50	88.39	.8839E-01	18.69	81.31
3.75	74.33	.7433E-01	19.41	80.59
4.00	62.50	.6250E-01	20.13	79.87
4.25	52.56	.5256E-01	28.80	71.20
4.50	44.19	.4419E-01	34.93	65.07
4.75	37.16	.3716E-01	36.40	63.60
5.00	31.25	.3125E-01	37.87	62.13
5.25	26.28	.2628E-01	39.34	60.66
5.50	22.10	.2210E-01	40.81	59.19
5.75	18.58	.1858E-01	42.49	57.51
6.00	15.63	.1563E-01	44.22	55.78
6.25	13.14	.1314E-01	45.95	54.05
6.50	11.05	.1105E-01	47.17	52.83
6.75	9.29	.9291E-02	48.19	51.81
7.00	7.81	.7813E-02	49.21	50.79
7.25	6.57	.6570E-02	50.23	49.77
7.50	5.52	.5524E-02	51.79	48.21
7.75	4.65	.4645E-02	53.51	46.49
8.00	3.91	.3906E-02	55.24	44.76
8.25	3.28	.3285E-02	56.50	43.50
8.50	2.76	.2762E-02	57.52	42.48
8.75	2.32	.2323E-02	58.53	41.47
9.00	1.95	.1953E-02	59.55	40.45
9.25	1.64	.1642E-02	61.17	38.83
9.50	1.38	.1381E-02	63.17	36.83
9.75	1.16	.1161E-02	65.56	34.44
10.00	.98	.9766E-03	67.95	32.05
10.25	.82	.8212E-03	70.34	29.66
10.50	.69	.6905E-03	72.73	27.27
10.75	.58	.5807E-03	75.12	24.88
11.00	.49	.4883E-03	77.51	22.49
11.25	.41	.4106E-03	79.90	20.10
11.50	.35	.3453E-03	82.29	17.71
11.75	.29	.2903E-03	84.68	15.32
12.00	.24	.2441E-03	87.07	12.93
12.25	.21	.2053E-03	89.46	10.54
12.50	.17	.1726E-03	91.85	8.15
12.75	.15	.1452E-03	94.24	5.76
13.00	.12	.1221E-03	96.63	3.37

STATISTICS AND ENGINEERING PARAMETERS SAMPLE TL-F18

INMAN'S STATISTICS:

MEDIAN	7.194	PHI	6.828	MICRONS
MEAN	7.371	PHI	6.039	MICRONS
STANDARD DEVIATION	4.462	EXTREMELY POORLY SORTED		
SKEWNESS	.040	NEAR-SYMMETRICAL		
KURTOSIS	.210	VERY PLATYKURTIC		

FOLK'S STATISTICS:

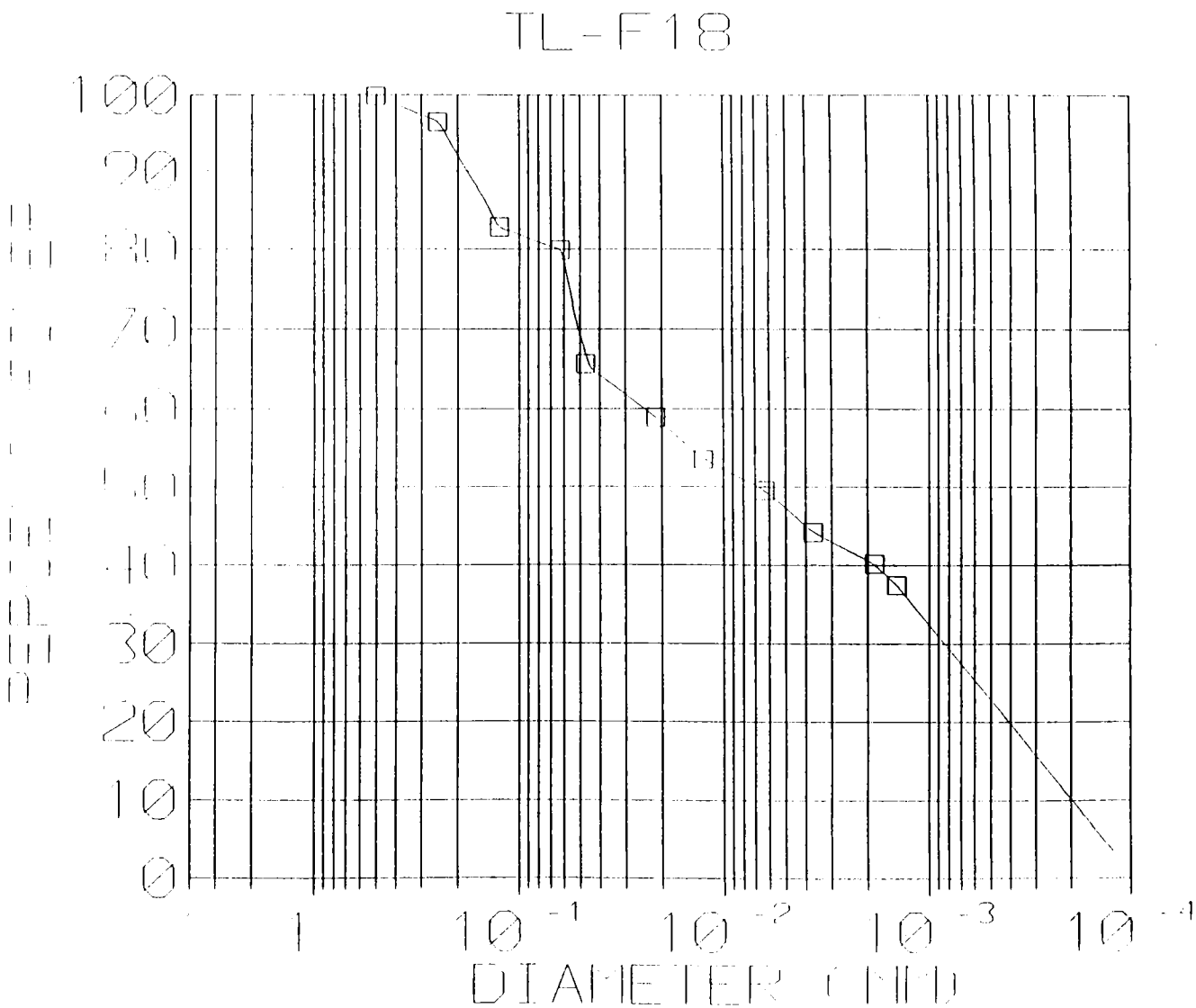
MEAN	7.312	PHI	6.292	MICRONS
STANDARD DEVIATION	3.868	VERY POORLY SORTED		
SKEWNESS	.049	NEAR-SYMMETRICAL		
KURTOSIS	.660	VERY PLATYKURTIC		

MOMENT MEASURES:

MEAN	7.312	PHI	6.294	MICRONS
SECOND MOMENT	13.796			
STANDARD DEVIATION	3.714	VERY POORLY SORTED		
THIRD MOMENT	3.849			
SKEWNESS	.075	NEAR-SYMMETRICAL		
FOURTH MOMENT	300.664			
KURTOSIS	.527	VERY PLATYKURTIC		

ENGINEERING PARAMETERS:

D60	5.362	PHI	24.310	MICRONS
D30	10.214	PHI	.842	MICRONS
D10	12.307	PHI	.197	MICRONS
COEF. OF UNIFORMITY	123.155			
COEF. OF CURVATURE	.148			


TL-F18
100
90
80
70
60
50
40
30
20
10
0
1
10 -1
10 -2
10 -3
10 -4
DIAMETER (MM)

Appendix F
Comparison of Digestion Techniques

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Environmental Contamination and Toxicology

omparison of Digestion Techniques in Analyses for Total .Metals in Marine Sediments

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It is generally recognized that in order to achieve a complete dissolution all metals within a sediment, some combination of hydrofluoric acid (HF) with other acids is required to release all metals from their silicate structures. This is because silicates are resistant to most mineral acids. Previous studies by Loring and Rantala (1988) assessed laboratory variability in determining total metal concentrations using hydrofluoric acid (HF) and nitric acid (NA) dissolution and extraction procedures. Studies on trace metal concentrations in estuarine and coastal marine sediments from the southeast US, and Florida in particular, recognized the need for a HF digestion (Windom et al. 1989). Schropp et al. (1990) used a HF digestion method to determine 'natural' metal-to-aluminum relationships for Florida sediments.

meet the requirements of the federal Comprehensive vironmental Response, Compensation and Liability Act (CERCLA), USEPA has established the Contract Laboratory Program (CLP) as an analytical standard. This method employs a NA digestion for estuarine and marine sediment metals analysis. However, since digestion method techniques under the CLP program are different than those used by Schropp et al. (1990), a comparison of the methods was in order. The results of this comparison could allow using the regression lines provided by FDER (1988) or Schropp et al. (1990) on sediments analyzed under the CLP for CERCLA. The overall study objective was to determine if metal data analyzed by a CLP NA digestion was comparable to metal data produced by using a HF digestion method.

MATERIALS AND METHODS

Twenty-nine locations within Pensacola Bay and Bayou Grande, Florida, were randomly selected for a

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comparative sediment digestion analysis. These sampling locations were examined after selection to ensure a variety of bottom types. This was done to prevent one bottom type from dominating the study. From December 1995 to February 1996, sediment samples were collected using a stainless-steel Ekman grab (529 cm^2). Two grab samples were collected from the top 5 to 6-cm and placed in a stainless-steel mixing bowl for compositing. From this composite sample, pre-cleaned containers were filled for immediate shipment to the laboratory. Samples were stored and shipped on ice within 24 hrs by a priority delivery service.

Each of the 29 samples were divided by the lab into two aliquots to be analyzed by inductively coupled plasma (ICP) emission spectroscopy. One aliquot would be digested in accordance with the standard procedure using NA, while the other would utilize a 50:50 mixture of HF and NA (1:1). Both digestion methods use 1 g (wet weight ± 0.50 g) of sediment weighed into an acid-washed Teflon beaker. Under the CLP NA digestion, the sample is allowed to reflux at 95°C with 10 mL of 1:1 nitric acid for 10 minutes without boiling. The digestate was then allowed to cool and 30% hydrogen peroxide added in 1 mL aliquots until no further vigorous effervesce was noted. No more than 10 mL of hydrogen peroxide was added at any time. Since these samples were to be analyzed by ICP, hydrochloric acid was added to the final acid-peroxide digestate. Insoluble materials were then filtered through a Whatman no.42 filter and brought to 100 mL volume by adding ASTM Type II water.

The method was modified to include the HF by using 5 mL of HF and 5 mL of NA (1:1) allowing the mixture to sit at room temperature for eight to twelve hrs. Next gentle heat (~ 70° C) was applied and the samples were allowed to reflux for eight to twelve hrs. The higher temperatures used in the CLP procedure would cause the HF mixture to boil. It was believed that boiling the acid mixture may affect the study results. At the end of this period another 5 mL of each acid was added to the samples. The samples were again refluxed for eight to twelve hrs at ~ 70°C. As before, hydrochloric acid was added to the digestate, filtered, and brought to 100 mL volume by adding ASTM Type II water.
Both types of digestates were analyzed for total metals in accordance with the CLP inorganic statement of work ILM03.0 for ICP. To meet the requirements of this study, trace ICP emission spectroscopy was used to

provide low level analysis modifying the interference check sample to include low level arsenic and lead.

The individual metal analytical results were first tested for relationships between the two digestion procedures. To illustrate the relationship between the HF and NA digestates, scatter plots were produced. Each ordered pair (x,y) representing x = NA and y = HF was plotted as a point; the similarity between the different digestion methods is illustrated by their closeness to the x = y line. If x is greater than y, most of the data will fall below the line. When y exceeds x, the data will lie largely above the x = y line.

To test whether the HF digestion tended to produce overall larger values than those produced by NA digestion, the Mann-Whitney rank-sum test was employed (Helsel and Hirsh, 1995). This non-parametric procedure can assess whether two independent groups differ. This non-parametric approach was used rather than a parametric t-test based on the results of normality testing. Although these distributions could be transformed to approach normality, justification for the use of a non-parametric versus a parametric test was based on discussions by Blair and Higgins (1980). They found that small deviations from a normal distribution were not always detectable in normality tests on small data sets, and that the use of non-parametric methods, such as the Mann-Whitney rank-sum test, exhibited large advantages in power over the t-test.

Finally, data produced by both digestion methods were plotted on regression lines found in FDER (1988) to evaluate where each digestion distribution for each metal occurred relative to the Schropp et al. (1990) and FDER (1988) regression lines for 'clean' sediments. It was hoped that differences in the digestion methods might be clarified so that past and future CLP NA data could be assessed with these regressions.

RESULTS AND DISCUSSION

Table 1 provides a comparison of descriptive statistics produced from the two digestion procedures. Comparing the mean and median results for HF to CLP NA digestion revealed no apparent differences with the exception of nickel. The distributions are likely not normal suggested by the high standard deviations. Based on the

Mann-Whitney Test, no statistical significant difference was found between the two data sets.

Table 1. Descriptive Statistics for HF and NA Metal Digestion Methods

	N	Mean (mg/kg)	Median (mg/kg)	St. Dev.	SE Mean	Mann-Whitney[a] Results
HF-Al	29	11,869	3,640	15,836	2,941	+
NA-Al	29	8,134	3,490	10,448	1,940	
HF-As	29	5.63	2.20	6.52	1.21	+
NA-As	29	6.18	3.20	7.08	1.32	
HF-Cd	29	1.15	0.46	1.15	0.21	+
NA-Cd	29	1.03	0.45	1.03	0.19	
HF-Cr	29	54.4	13.3	72.1	13.4	+
NA-Cr	29	47.8	10.4	62.5	11.6	
HF-Cu	29	13.11	6.6	15.23	2.83	+
NA-Cu	29	11.59	6.8	12.90	2.40	
HF-Pb	29	34.73	20.8	42.64	7.92	+
NA-Pb	29	36.73	16.3	43.14	8.01	
HF-Ni	29	9.27	2.7	16.6	3.09	+
NA-Ni	29	4.46	2.6	4.9	0.91	
HF-Zn	29	54.7	18.9	66.0	12.3	+
NA-Zn	29	48.9	28.6	55.8	10.4	

NOTE:
[a] No significant difference (α=0.05) between method results indicated by +.
St.Dev. = standard deviation
SE = standard error

Scatter plots provided in Figure 1 exhibit a comparison of the two methods relative to increasing metal content. A general observation should be noted that metal content appears to be directly proportional to the variability observed. The data suggests nickel is more effectively dissolved at greater concentrations by the HF digestion method. It has been suggested that this may be due to nickel remaining bound to the matrix during the NA digestion. Cadmium also exhibited extreme variability as concentrations increased. The symmetrical nature of cadmium's scatter plot (Figure 1) suggests the precision of the method may be the problem

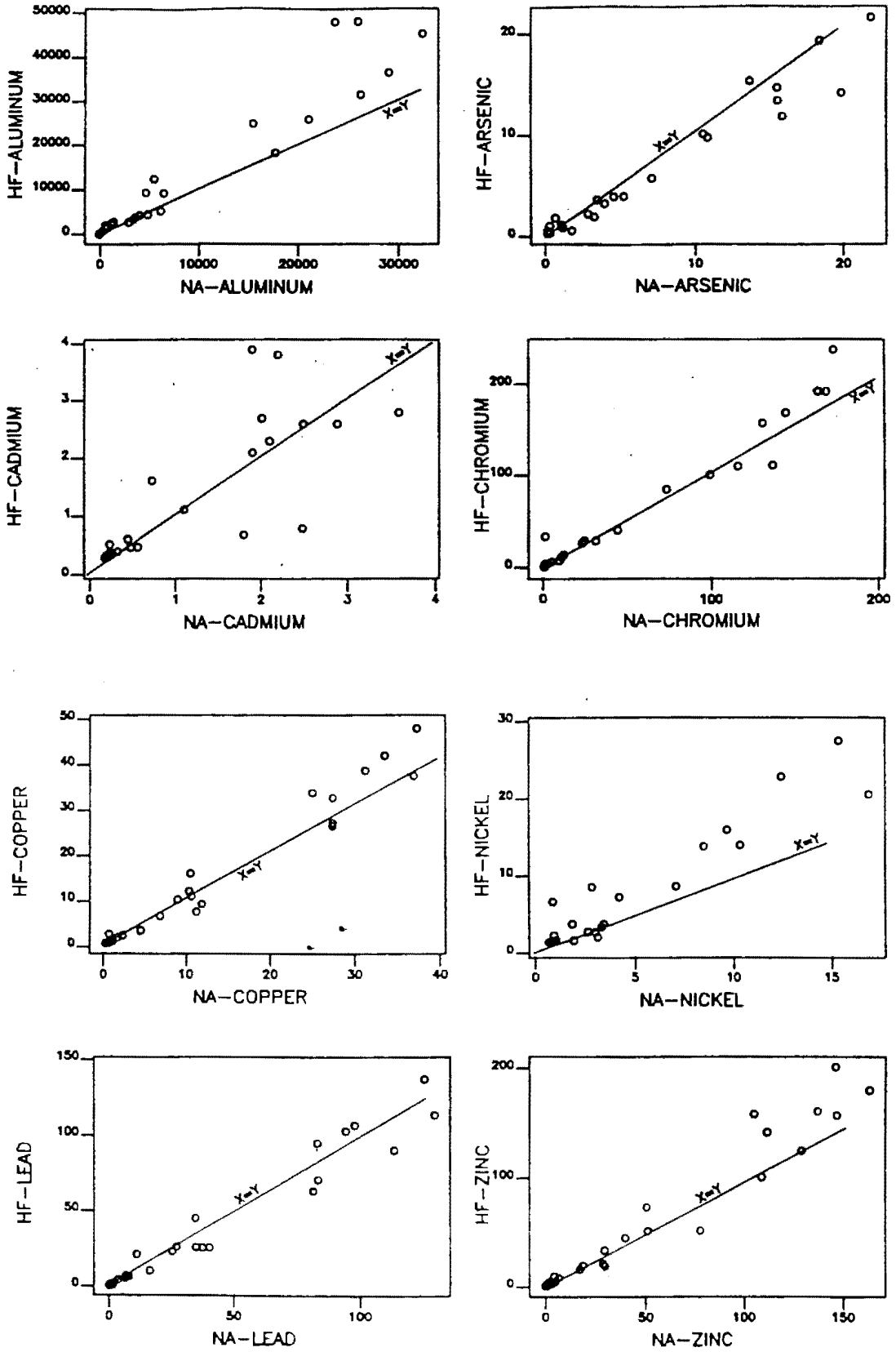

Figure 1 Metal concentrations (mg/Kg) from nitric (NA) and hydrofluoric (HF) digestion methods.

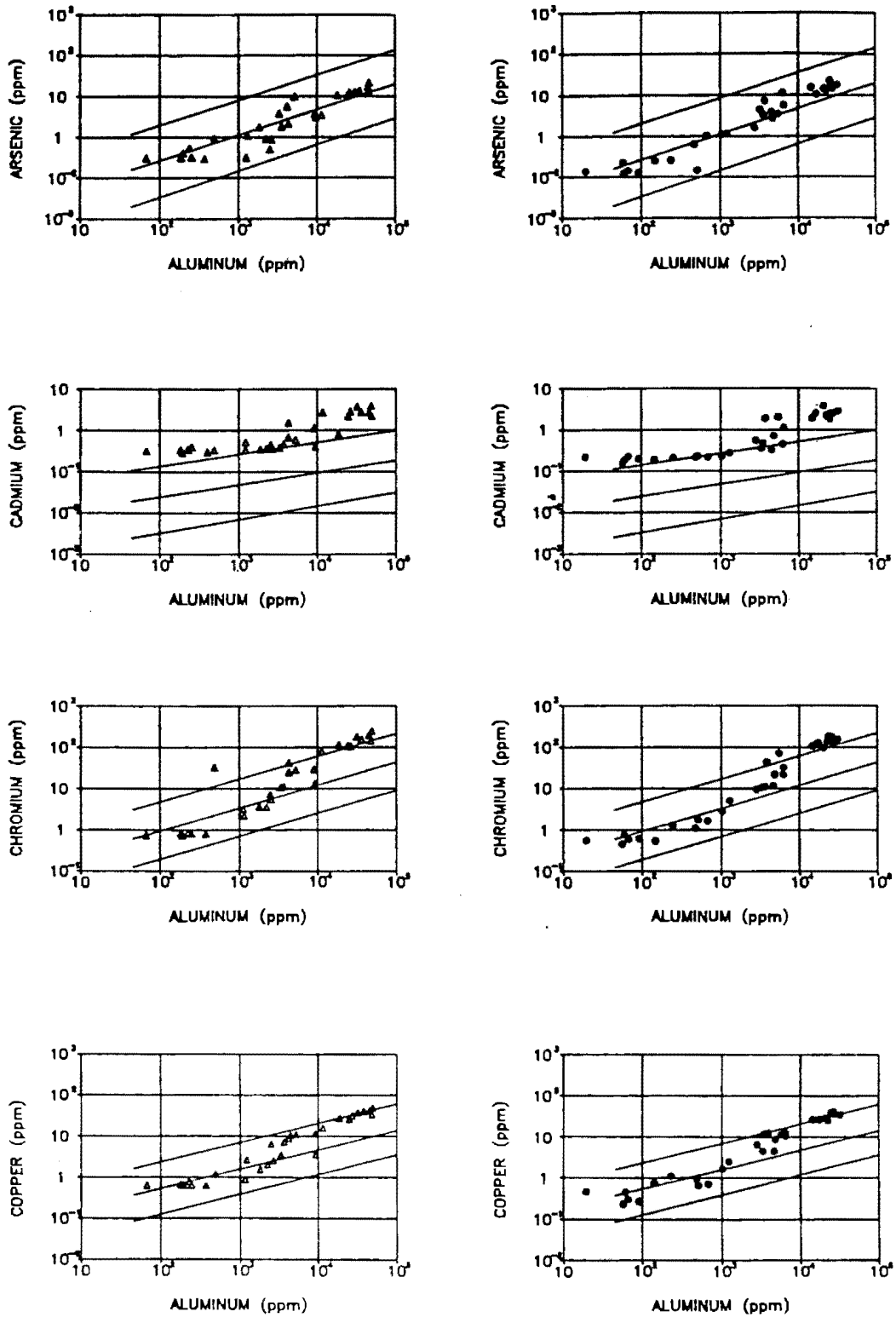

Figure 2. Nitric (NA) and hydrofluoric acid (HF) digestion results plotted on Florida (FDER, 1988) regression lines.

● = NITRIC ACID
△ = HYDROFLUORIC ACID

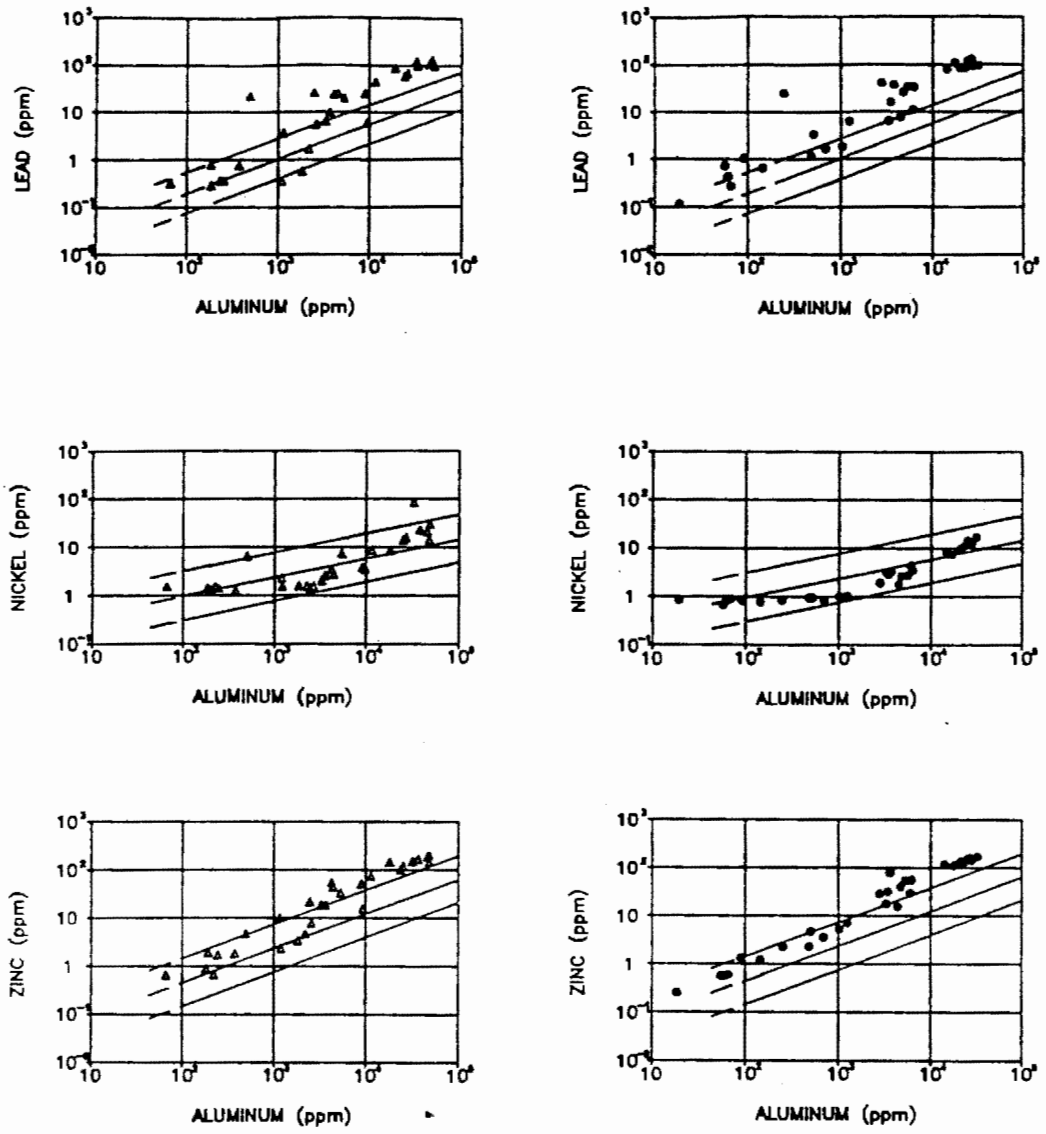

Figure 2 (cont.) Nitric (NA) and hydrofluoric acid (HF) digestion results plotted on Florida (FDER, 1988) regression lines.

● = NITRIC ACID
△ = HYDROFLUORIC ACID

and is not a function of the digestion technique used. The primary differences between the digestion methods were the HF addition, the length of reflux time, and the digestion temperature. Despite these differences, the aggressive HF digestion did not produce a significant difference in metals being dissolved for analysis.

The two data sets plotted on the FDER (1988) regression lines suggests that individual HF results appear higher than those produced by NA (Figure 2). This is likely due to the longer digestion time and aggressive nature of HF. Each metal has its own character of course, some metals appear identical. These findings suggest that ratios produced by the two methods are comparable. The data produced by NA methods conservatively predict anthropogenic metal contamination on the FDER (1988)regression lines.

Acknowledgments. Funding for this project was provided by Southern Division Naval Facilities Engineering Command. Special thanks to Messrs. Bill Gates and Bill Hill for their support of this study and to Dr. Steven Schropp for his technical input.

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Appendix G
Red Drum Mercury Exposure Model

Red Drum Mercury Exposure Model

A model was performed which predicts mercury tissue concentration in the red drum (*Sciaenops ocellatus*) based on concentrations of mercury in the sediment of Site 41. This model is based on a mercury bioaccumulation model developed by NOAA (Evans and Engel, 1994). The model assumes that mercury uptake into the red drum occurs via prey ingestion exclusively. The three prey sources are small fish, crustaceans, and infaunal invertebrates.

The model is developed and performed in the following steps, which each builds on the information gathered from the previous step:

- Step 1: Develop a formula which predicts methyl mercury accumulation in the three types of red drum prey based on sediment mercury concentrations and other physical factors.

- Step 2: Develop a formula, which predicts methyl mercury accumulation in red drum tissue based on the concentrations calculated in Step 1.

- Step 3: Perform the model.

- Step 4: Evaluate the predicted tissue concentrations against available data regarding mercury effects in fish in order to determine whether estimated methyl mercury concentrations in red drum are high enough to elicit an adverse effect.

METHODOLOGY AND RESULTS

Information relevant to the model that was used to estimate biotransfer of mercury from sediment to the red drum is described in this section.

Step 1

Predicting mercury tissue concentrations in the food items (e.g., small fish, crustaceans, and infaunal invertebrates) is performed in this step.

Estimating Mercury Concentration in Small Fish

There is little data available for predicting contaminant concentrations in small fish based on mercury concentrations in sediment. In general, there is agreement that the larger species of marine fish with longer life spans usually have the highest concentrations of mercury. Mercury concentrations also increase in fish with increasing body weight. Methyl mercury is the predominant form of mercury that is accumulated.

In a study performed by Walter *et al.*, (1973) wet weight mercury concentrations in freshwater carp were compared to dry weight sediment mercury concentrations. These results are shown

in the following table. Although a freshwater fish, the carp (*Cyprinus carpio*) and the yellow perch (*Perca flavescens*) are considered representative of prey species for the red drum in an estuarine environment.

Table 1
Mercury Concentrations in Sediment and Fish Tissue

Study Location	Sediment Concentration Range (mg/kg) Dry Weight	Carp Tissue Concentration Range (mg/kg) Wet Weight	Perch Tissue Concentration Range (mg/kg) Wet Weight
Upper Cheyenne	0.06 - 0.53	0.35 - 0.43	NA
Fishgut Creek	0.04 - 0.62	0.10 - 0.27	0.21
Oak Creek	0.04 - 0.5	0.16 - 0.24	0.15
Agency Creek	0.03 - 0.3	0.23 - 0.66	NA
Whitlocks Bay	0.04 - 0.09	0.17 - 0.29	0.14 - 0.67
Overall Range	0.03 - 0.62	0.10 - 0.66	0.14 - 0.67
Range Midpoint	0.33	0.38	0.41

Notes:
NA = Data not available
Source = Fish tissue concentrations and sediment concentrations are based on Walter et al., 1973.

Based on the carp tissue and perch tissue concentration range midpoint from this study, a coefficient of 1.2 (i.e., 0.38 mg/kg ÷0.33 mg/kg for carp and 0.41 mg/kg ÷0.33 mg/kg for perch) was chosen to represent the transfer of mercury from sediment to small fish tissue, as described below by Formula 1-1:

$$Cf = (1.2)(Cs) \qquad \text{(Formula 1-1)}$$

where:

Cf = Methyl Mercury in small fish (in ppm on a wet weight basis)
Cs = Total Mercury in sediment (in ppm reported on a dry weight basis)

It will also be assumed that 100% of the mercury present in small fish tissue is methyl mercury. Studies have shown that mercury predominantly occurs in the methyl form in fish muscle, which is also the tissue where most of the mercury body burden is maintained (Windom and Kendall, 1979). In a study performed on four freshwater fish species

(Grieb *et al.*, 1990), methyl mercury accounted for 99% of the total mercury in fish muscle. Other studies have shown that mercury is converted to its methylated form in fish tissue or by sediment microbes, reducing the significance of the methyl mercury/total mercury ratio during initial deposition or before ingestion.

Estimating Mercury Concentration in Crustaceans and Infaunal Invertebrates

Based on reviews of multiple literature sources by Evans and Engel, 1994, a biota sediment factor (BSF) of 2 was derived for mercury accumulation by all benthic organisms. This means that the mercury concentration in sediment may be multiplied by a factor of 2 in order to estimate the concentration of methyl mercury in benthic tissue. The estimated methyl mercury concentration is divided by another factor of 5 to account for the dry weight to wet weight conversion in tissue. Presented below are alternate formulae for estimating concentrations of methyl mercury in crustaceans and infaunal invertebrates.

Concentration of methyl mercury in crustaceans (Ccr):

$$Ccr = \left[\frac{(Cs * 2)}{5}\right] * (0.70) \quad \text{(Formula 1-2)}$$

Concentration of methyl mercury in infaunal invertebrates (Cinv):

$$Cinv = \left[\frac{(Cs * 2)}{5}\right] * (0.25) \quad \text{(Formula 1-3)}$$

STEP 2

The methyl mercury concentrations from the three prey species are then incorporated into the formula used to predict wet weight methyl mercury concentrations in the red drum. Red drum are postulated to accumulate mercury from two major sources, prey and surface water. However, surface water is considered to be a minimal exposure route. Within the prey pathway, crustaceans are assumed to comprise 60% of the red drum's diet, small fish 30% of the diet, and other infaunal invertebrates 10%.

For purposes of estimating concentrations of methyl mercury in the target tissues, it is assumed that input and excretion of methyl mercury are in balance at steady state, as described by the following formula:

$$a * R * C_o = C_1 * (g + K) \qquad \text{(Formula 1-4)}$$

where:

a	=	Assimilation efficiency of methyl mercury from food; a default value of 0.8 is assumed.
R	=	Feeding rate of target species; assumed to be 0.02 g/g-day for the juvenile red drum
C_o	=	Methyl mercury concentration in food (ppm)
C_1	=	Methyl mercury concentration in target species (ppm)
g	=	Growth rate coefficient; estimated to be 0.003/day for red drum
K	=	Methyl mercury excretion rate (expressed in terms of (day); a value of 0.00035/day is used

Bioaccumulation factor of methyl mercury

$$= C_1 / C_o$$

$$= \frac{a * R}{g + K} \qquad \text{(Formula 1-5)}$$

Total methyl mercury concentration in red drum tissue can be calculated using the following formula:

Methyl mercury concentration in red drum

$$= \left(\frac{a * R}{g + K}\right) * \left[(Cf)(\%Cf) + (Ccr)(\%Ccr) + (Cinv)(\%Cinv)\right] \qquad \text{(Formula 1-6)}$$

where:

a	=	Assimilation efficiency of mercury from food, or 0.8
R	=	Feeding rate of the red drum, or 0.02/day
g	=	growth rate coefficient, or 0.003/day
K	=	Methyl mercury excretion rate from the red drum, or 0.00035/day
Cf	=	Methyl mercury tissue concentration in small fish
$\%Cf$	=	Percent of red drum diet composed of small fish, or 0.3
Ccr	=	Methyl mercury tissue concentration in crustaceans
$\%Ccr$	=	Percent of red drum diet composed of crustaceans, or 0.6
$Cinv$	=	Methyl mercury tissue concentrations in infaunal benthic invertebrates
$\%Cinv$	=	Percent of red drum diet composed of benthic invertebrates, or 0.1

STEP 3

The results of the model are calculated in this step. Mercury was detected in 1 of 13 sediment samples collected from Site 41. The mean and maximum concentrations (assuming that nondetects were present at one-half of the detection limits) were estimated to be 0.14 mg/kg and 0.88 mg/kg on a dry weight basis. The mean total organic carbon concentration across Site 41 is 5.9%, which converts to approximately 11.8% organic matter. For the purpose of this modeling, both the mean and maximum concentrations of mercury in sediment were used in the calculations.

The concentration of methyl mercury in small fish is calculated below using Formula 1-1:

Cf (based on the mean concentration)

= (1.2)*(*Cs*)
= (1.2)*(0.14 mg/kg)
= 0.168 mg/kg

Cf (based on the maximum concentration)

= (1.2)*(*Cs*)
= (1.2)*(0.88 mg/kg)
= 1.056 mg/kg

The concentration of methyl mercury in crustaceans is calculated below using Formula 1-2:

Ccr (based on the mean concentration)

= [(*Cs**2)/5]*(0.7)
= [(0.14 mg/kg*2)/5]*(0.7)
= 0.0392 mg/kg

Ccr (based on the maximum concentration)

= [(*Cs**2)/5]*(0.7)
= [(0.88 mg/kg*2)/5]*(0.7)
= 0.2464 mg/kg

The concentration of methyl mercury in infaunal invertebrates is calculated below using Formula 1-3:

Cinv (based on the mean concentration)

= [(Cs*2)/5]*(0.25)
= [(0.14 mg/kg*2)/5]*(0.25)
= 0.014 mg/kg

Cinv (based on the maximum concentration)

= [(Cs*2)/5]*(0.25)
= [(0.88 mg/kg*2)/5]*(0.25)
= 0.088 mg/kg

Presented below is the methodology used for calculating the concentration of methyl mercury in red drum tissue using Formula 1-6. Concentrations of methyl mercury in crustaceans and infaunal invertebrates are estimated using Formula 1-2 and Formula 1-3, respectively.

Methyl mercury in red drum tissue (based on the mean concentration of mercury)

= [(*a***R*)/(g + *K*)]*[(*Cf*)(%*Cf*)+(*Ccr*)(%*Ccr*)+(*Cinv*)(%*Cinv*)]
= [(0.8*0.02 g/g-day)/(0.003/day + 0.00035/day)]*[(0.168 mg/kg)*(0.3)+(0.0392 mg/kg)*(0.6) +(0.014 mg/kg)*(0.1)]
= [4.78]*[(0.0504 mg/kg)+(0.0235 mg/kg)+(0.0014 mg/kg)]
= 0.36 mg/kg (wet weight)

Methyl mercury in red drum tissue (based on the maximum concentration of mercury)

= [(*a***R*)/(g + *K*)]*[(*Cf*)(%*Cf*)+(*Ccr*)(%*Ccr*)+(*Cinv*)(%*Cinv*)]
= [(0.8*0.02 g/g-day)/(0.003/day + 0.00035/day)]*[(1.056 mg/kg)*(0.3)+(0.2464 mg/kg)*(0.6) +(0.088 mg/kg)*(0.1)]
= [4.78]*[(0.3168 mg/kg)+(0.1478 mg/kg)+(0.0088 mg/kg)]
= 2.26 mg/kg (wet weight)

STEP 4

The predicted concentration of mercury in red drum tissue is then compared to effect thresholds listed in the Environmental Residue Effect Database (ERED) (USACE, 1997) to determine whether it exceeds an effect threshold for fish species. In reviewing the database, the lowest no-observed-effects-dose (NOED) is 0.14 mg/kg wet weight (assumed methyl mercury) in the tissue of the rainbow trout, a predatory freshwater fish. Based on the predicted mercury in red drum tissue, the HQ values are 2.6 (based on the mean concentration

predicted mercury in red drum tissue, the HQ values are 2.6 (based on the mean concentration of mercury in sediment) and 16.1 (based on the maximum concentration of mercury in sediment).

DISCUSSION AND UNCERTAINTY ANALYSIS

Presented in this section is an evaluation of the sources of uncertainties pertaining to the results of this modeling and a discussion of the results.

Concentrations of Methyl Mercury in Fish Tissue

Concentrations of methyl mercury in Level 4 fish were estimated based on the conservative assumptions that 100% of the mercury in the prey fish is methyl mercury. Therefore, the estimated concentrations of methyl mercury in Level 4 fish represent upper-bound values and the true values are not expected to be higher than the estimated ones and, in fact, can be lower.

Site Foraging Factor (SFF)

The SFF represents the percentage of red drum's diet that is from prey species at Site 41. For the purpose of this modeling effort, it was conservatively assumed that red drum spend 100% of their time foraging for prey at Site41.(i.e., an SFF of 1). The use of this conservative assumption is expected to result in an overestimate of concentrations in the red drum. In other words, the use of a more realistic SFF value, if available, is likely to result in lower mercury concentrations in red drum.

Trophic Transfer Coefficient

Using trophic transfer values from one study on freshwater fish (Walter et al., 1973) could also lead to uncertainty when trying to apply these data to the different sediment types within Site 41.

Sources of Mercury in Ambient Environment

Based on past research, it is known that mercury contamination in coastal sediments has resulted from non-point sources such as atmospheric deposition. To evaluate possible influence of non-point sources of mercury in Site 41, data from a comprehensive Pensacola Bay System (PBS) study (Long *et al.*, 1997) was reviewed and compared to the Site 41 data. The data show that out of 40 sediment samples collected across the PBS, the mean mercury concentration in sediment was 0.23 mg/kg. The mean mercury concentration in sediment from the 130 samples collected in Site 41was 0.14 mg/kg (assuming that all non-detect values were equal to half the detection limit). Therefore, it is reasonable to assume that the mercury concentrations present in Site 41 could have originated from non-point sources not related to Naval activities in and around Site 41.

CONCLUSIONS

A model that was developed by NOAA was used to estimate concentration of mercury in the red drum based on the mean mercury concentrations reported in sediment samples collected at Site 41. HQs of 6E-02 and 3E-01 were estimated, respectively, for recreational and subsistence fishermen. In light of the uncertainties, the results of this modeling suggest that reported levels of mercury in sediment is not expected to result in adverse impacts to the fishermen populations.

REFERENCES

Grieb, T.M., *et al.* (1990). Factors Affecting Mercury Accumulation in Fish in the Upper Michigan Peninsula. *Environmental Toxicology and Chemistry*, 9:919-930.

Evans, D.W., and Engel, D.W. (1994). Mercury Bioaccumulation in Finfish and Shellfish from Lavaca Bay, Texas: Descriptive Models and Annotated Bibliography. NOAA Tech. Mem. NMFS-SEFSC-348, 89p.

Long, E.R. *et al.* (1997). Magnitude and extent of sediment toxicity in four bays of the Florida Panhandle: Pensacola, Choctawhatchee, St. Andrew, and Apalachicola. Silver Spring, MD. (NOAA Technical Memorandum NOS ORCA 117).

U.S. Army Corps of Engineers. (1999). Environmental Residue Effects Database. Online. *Available: http://www.wes.army.mil/el/t2dbase.html.*

Walter, C.W., June, F.C., and Brown, H.G. (1973). Mercury in Fish, Sediments, and Water in Lake Oahe, South Dakota. *Journal WPCF*, 45:2203-2210.

Windom, H.L., and Kendall, D.R.. (1979). *Accumulation and Biotransformation of Mercury in Coastal and Marine Biota.* In Nriagu, J.O. (Ed). *The Biogeochemistry of Mercury in the Environment.* Amsterdam:Elsevier/North Holland Biomedical Press.

Appendix H
Validation Summary Reports

ENSAFE VALIDATION SUMMARY REPORT

Site Name:	Pensacola Phase III Sampling
CTO and Subtask No.:	0036-00100
Laboratory:	Savannah Laboratories
Sample Delivery Group:	SDG PEN15 Addendum
Method:	Semivolatile Organic Compounds - SW846 Method 8270 Appendix IX Metals - SW-846 Method 6010
Validation Guidance	USEPA Contract Laboratory Program National Functional Organic and Inorganic Data Review, February 1994
Matrix:	Tissue

Data were validated by EnSafe Inc. Ten tissue samples collected between September 2 and 8, 1997 were analyzed for semivolatile organic compounds (SVOCs) and Appendix IX metals by Savannah Laboratories of Savannah, Georgia, and were reported in sample delivery group (SDG) PEN15 Addendum. The data were reported and validated using USEPA definitive data without raw data (formerly USEPA Level III). All samples and analyses discussed in this summary report are listed in Table 1.

Table 1
Sample Summary

Sample ID	Appendix IX Metal	SVOC
041J400601	X	x
041J18B101	x	x
041J330201	x	x
041J640101	x	x
041J640601	x	x
041J750101	x	x
041J400602		x
041J330101		x
040J400601	X	X
040J400602	X	

ORGANIC VALIDATION RESULTS

All samples were received by the laboratory intact and with the proper documentation on September 18, 1997 with intact chains of custody and proper documentation. The following subsections summarize the data validation results. Tentatively identified compounds (TICs) were not reported and are not discussed in this report.

Semivolatile Organic Compound Fraction

1. All gas chromatography/mass spectroscopy tuning ion abundances and frequencies, initial calibration relative response factors (RRFs) and percent relative standard deviations, continuing calibration RRFs, surrogate recoveries, and internal standard retention times were within acceptable limits. There were no target analytes detected in the method blank. There are no field duplicates or field blanks associated with this SDG.

2. Bis(2-chloroethyl ether) had percent differences (%Ds) greater than the control limit of ≤25% for the calibration standards run 09/26/97 22:44 (25.4%) and 09/29/97 08:02. (26.5%) Nondetects of this compound in samples 041J18B101, 041J640101, 041J330201, 041J640601, and 041J750101 were qualified as estimated, "UJ."

3. The internal standard perylene-d12 exceeded the lower area limits for samples 041J18B101, 041J330201, 041J640101, and 041J750101. Nondetects of di-n-butylphthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene were qualified as estimated, "UJ."

   The internal standard chrysene-d12 exceeded the lower area limits for sample 041J750101. Nondetects of pyrene, butylbenzylphthalate, 3,3'dichlorobenzidine, benzo(a)anthracene, chrysene, and bis(2-ethylhexyl)phthalate were qualified as estimated "UJ."

INORGANIC VALIDATION RESULTS

Metals Fraction

1. All holding times, initial and continuing calibration recoveries, interference check sample recoveries, spike sample recoveries, laboratory duplicate relative percent differences, and laboratory control sample recoveries were within acceptable criteria. There were no field duplicates or field blanks associated with this SDG.

2. Selenium, arsenic, cobalt, silver, and thallium were detected in the preparation blank. Qualifiers were added to the data as outlined in Table 2.

Table 2
Laboratory Blank Contamination

Analyte	Samples Affected	Conc'n Found (mg/kg)	Qualifier Added
selenium	040J400601, 041J18B101, 041J330101, 041J330201, 041J640101, 041J640601, 041J750101	0.230	U
arsenic	040J400601, 040J400602, 041J18B101, 041J330101, 041J330201, 041J640101, 041J640601, 041J750101	-0.376	J(+),UJ (ND)
cobalt	040J400601, 040J400602, 041J18B101, 041J330101, 041J330201, 041J640101, 041J640601, 041J750101	-0.176	J(+),UJ (ND)
silver	040J400601, 040J400602, 041J18B101, 041J330101, 041J330201, 041J640101, 041J640601, 041J750101	-0.242	UJ (ND)
thallium	040J400601, 040J400602, 041J18B101, 041J330101, 041J330201, 041J640101, 041J640601, 041J750101	-0.798	UJ (ND)

NOTES:
J(+),UJ (ND) = Detects and nondetects qualified as estimated
UJ (ND) = There were no detects for this compound, only nondetects were qualified as estimated.

3. Copper, iron, and manganese exceeded the serial dilution %D control limit of 10%. Detections of these elements in all samples were qualified as estimated, "J." Nondetects were accepted without qualification.

4. Sample detections between the contract required detection limit and the instrument detection limit and flagged as "B" by the laboratory, were qualified as estimated "J" by the validator to indicate the sample detection was an estimated value.

PENSACOLA SITE 40
PENSACOLA, SITE 40, PHASE III SAMPLING

METAL								
	SAMPLE ID ------->	040-J-4006-01		040-J-4006-02				
	ORIGINAL ID ----->	040J400601		040J400602				
	LAB SAMPLE ID --->	S775281*1		S775281*2				
	ID FROM REPORT -->	040J400601		040J400602				
	SAMPLE DATE ----->	09/08/97		09/08/97				
	DATE EXTRACTED -->	09/24/97		09/24/97				
	DATE ANALYZED --->	09/26/97		09/26/97				
	MATRIX ---------->	Soil		Soil				
	UNITS ---------->	MG/KG		MG/KG				
CAS #	Parameter	PEN15	VAL	PEN15	VAL			
7439-92-1	Lead	1.5		2.2				
7429-90-5	Aluminum	4.5	U	5.8	J			
7440-36-0	Antimony	0.98	U	0.98	U			
7440-38-2	Arsenic	0.54	J	0.38	J			
7440-47-3	Chromium	0.36		0.43				
7440-48-4	Cobalt	0.13	UJ	0.13	UJ			
7440-50-8	Copper	1.4	J	1.1	J			
7439-89-6	Iron	11.7	J	21.3	J			
7439-96-5	Manganese	2.2	J	7.5	J			
7440-02-0	Nickel	0.27	U	0.27	U			
7782-49-2	Selenium	1.	U	1.4				
7440-22-4	Silver	0.06	UJ	0.06	UJ			
7440-28-0	Thallium	0.39	UJ	0.39	UJ			
7440-62-2	Vanadium	0.19	U	0.19	U			
7440-66-6	Zinc	33.3		27.2				
7440-39-3	Barium	NR		NR				
7440-41-7	Beryllium	NR		NR				
7440-43-9	Cadmium	NR		NR				
7440-70-2	Calcium	NR		NR				
57-12-5	Cyanide (CN)	NR		NR				
7439-95-4	Magnesium	NR		NR				
7439-97-6	Mercury	NR		NR				
7440-09-7	Potassium	NR		NR				
7440-23-5	Sodium	NR		NR				

*** Validation Complete ***

SVOA

SAMPLE ID -------->	040-J-4006-01
ORIGINAL ID ----->	040J400601
LAB SAMPLE ID --->	S775281*1
ID FROM REPORT -->	040J400601
SAMPLE DATE ----->	09/08/97
DATE EXTRACTED -->	09/23/97
DATE ANALYZED --->	09/26/97
MATRIX ---------->	Soil
UNITS ---------->	UG/KG

CAS #	Parameter	PEN15	VAL
108-95-2	Phenol	330.	U
111-44-4	bis(2-Chloroethyl)ether	330.	U
95-57-8	2-Chlorophenol	330.	U
541-73-1	1,3-Dichlorobenzene	330.	U
106-46-7	1,4-Dichlorobenzene	330.	U
95-50-1	1,2-Dichlorobenzene	330.	U
95-48-7	2-Methylphenol (o-Cresol)	330.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330.	U
9999900-32-2	3-Methylphenol/4-Methylphenol	330.	U
621-64-7	N-Nitroso-di-n-propylamine	330.	U
67-72-1	Hexachloroethane	330.	U
98-95-3	Nitrobenzene	330.	U
78-59-1	Isophorone	330.	U
88-75-5	2-Nitrophenol	330.	U
105-67-9	2,4-Dimethylphenol	330.	U
120-83-2	2,4-Dichlorophenol	330.	U
120-82-1	1,2,4-Trichlorobenzene	330.	U
91-20-3	Naphthalene	330.	U
106-47-8	4-Chloroaniline	660.	U
87-68-3	Hexachlorobutadiene	330.	U
111-91-1	bis(2-Chloroethoxy)methane	330.	U
59-50-7	4-Chloro-3-methylphenol	330.	U
91-57-6	2-Methylnaphthalene	330.	U
77-47-4	Hexachlorocyclopentadiene	330.	U
88-06-2	2,4,6-Trichlorophenol	330.	U
95-95-4	2,4,5-Trichlorophenol	330.	U
91-58-7	2-Chloronaphthalene	330.	U
88-74-4	2-Nitroaniline	1700.	U
131-11-3	Dimethylphthalate	330.	U
208-96-8	Acenaphthylene	330.	U
606-20-2	2,6-Dinitrotoluene	330.	U
99-09-2	3-Nitroaniline	1700.	U
83-32-9	Acenaphthene	330.	U
51-28-5	2,4-Dinitrophenol	1700.	U
100-02-7	4-Nitrophenol	1700.	U
132-64-9	Dibenzofuran	330.	U

*** Validation Complete ***

PENSACOLA SITE 40
PENSACOLA, SITE 40, PHASE III SAMPLING

SVOA

SAMPLE ID -------->	040-J-4006-01
ORIGINAL ID ----->	040J400601
LAB SAMPLE ID --->	S775281*1
ID FROM REPORT -->	040J400601
SAMPLE DATE ----->	09/08/97
DATE EXTRACTED -->	09/23/97
DATE ANALYZED --->	09/26/97
MATRIX ---------->	Soil
UNITS ---------->	UG/KG

CAS #	Parameter	PEN15	VAL
121-14-2	2,4-Dinitrotoluene	330.	U
84-66-2	Diethylphthalate	330.	U
7005-72-3	4-Chlorophenylphenyl ether	330.	U
86-73-7	Fluorene	330.	U
100-01-6	4-Nitroaniline	1700.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1700.	U
86-30-6	N-Nitrosodiphenylamine	330.	U
101-55-3	4-Bromophenyl-phenylether	330.	U
118-74-1	Hexachlorobenzene	330.	U
87-86-5	Pentachlorophenol	1700.	U
85-01-8	Phenanthrene	330.	U
120-12-7	Anthracene	330.	U
86-74-8	Carbazole	330.	U
84-74-2	Di-n-butylphthalate	330.	U
206-44-0	Fluoranthene	330.	U
129-00-0	Pyrene	330.	U
85-68-7	Butylbenzylphthalate	330.	U
91-94-1	3,3'-Dichlorobenzidine	660.	U
56-55-3	Benzo(a)anthracene	330.	U
218-01-9	Chrysene	330.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	330.	U
117-84-0	Di-n-octylphthalate	330.	U
205-99-2	Benzo(b)fluoranthene	330.	U
207-08-9	Benzo(k)fluoranthene	330.	U
50-32-8	Benzo(a)pyrene	330.	U
193-39-5	Indeno(1,2,3-cd)pyrene	330.	U
53-70-3	Dibenz(a,h)anthracene	330.	U
191-24-2	Benzo(g,h,i)perylene	330.	U

*** Validation Complete ***

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	030301
Date:	March 12, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	December 4 - 5, 1995
Number of Samples:	4 Aqueous Sample(s) with 0 MS/MSD(s) 10 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Low Concentration Volatiles, Volatiles, Low Concentration Semivolatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Simpson

Eugene M. Watson, Vice President

3-13-96

Date

4127 Plaza 94 South · St. Charles, MO 63304
(314) 936-1332 · Fax (314) 936-1335

SDG# 030301

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	LVOA		VOA		LSV		SV		P/P		TAL/C	
041W030301	WATER	X				X				X		X	
041W030401	WATER	X				X				X		X	
041TM00801	WATER	X											
041TM00901	WATER	X											
041M030301	SOIL				X				X		X		X
041M030401	SOIL				X				X		X		X
041M030501	SOIL				X				X		X		X
041M030601	SOIL				X				X		X		X
041M030701	SOIL				X				X		X		X
041M04D101	SOIL				X				X		X		X
041M04D201	SOIL				X				X		X		X
041M04D301	SOIL				X				X		X		X
041M04D401	SOIL				X				X		X		X
041M04D501	SOIL				X				X		X		X
Total Billable Samples	(Water/Soil)	4	0	0	10	2	0	0	10	2	10	2	10

LVOA = CLP Low Volatiles
VOA = CLP Volatiles
LSV = CLP Low Semivolatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide w/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # 030301

A validation was performed on the Volatile Data from SDG 030301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FM774, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W030301	acetone
041W030401	2-butanone
	2-hexanone

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFX	acetone	10	100
	methylene chloride	3	30

Samples	Compound	Qualification
041W030301	acetone	U
041W030401		
041W030301	methylene chloride	U

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W030301 041W030401	acetone 2-butanone 2-hexanone	+/-	J/R
041W030301 041W030401	acetone	+	U
041W030301	methylene chloride	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results.

SDG # 030301

A validation was performed on the Volatile Data from SDG 030301. The data was evaluated based on the following parameters.

- * Data Completeness
- * Holding Times
- * GC/MS Tuning
- * Calibrations
- * Internal Standard Performance
- Blanks
- * Surrogate Recoveries
- * Laboratory Control Samples
- * Field Duplicates
- * Compound Identification /Quantitation

* - All criteria were met for this parameter

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLKCB	Methylene chloride	3J	30
VBLKCC	methylene chloride	1J	10
VBLKCD	methylene chloride	3J	30
VBLKCE	methylene chloride	2J	20

Method Blank (continued)

Samples	Compound	Qualification
041M030601 041M030701 041M04D101 041M04D401 041M04D201	methylene chloride	U
041M030301 041M030401 041M030501 041M04D301 041M04D501	methylene chloride	CRQL

Trip Blank

Associated blank	Compound	Concentration	Action Level
040TM00801	acetone	3B	30

Samples	Compound	Qualification
041M030301 041M030401 041M030501 041M030601	acetone	U

System Performance and Overall Assessment

The overall system performance was fair The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M030601	methylene chloride	+	U
041M030701			
041M04D101			
041M04D401			
041M04D201			
041M030301	methylene chloride	+	CRQL
041M030401			
041M030501			
041M04D301			
041M04D501			
041M030301	acetone	+	U
041M030401			
041M030501			
041M030601			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OlC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 030301

A validation was performed on the Semivolatile Data from SDG 030301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within %D continuing calibration criteria. All RRFs were within calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, DJ132, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041W030301	3-nitroaniline

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W030301	3-nitroaniline	+/-	J/UJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 030301

A validation was performed on the Semivolatile Data from SDG 03031. The data was evaluated based on the following parameters.

*	•	Data Completeness
	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Holding Times

The following sample exceeded the method analysis holding time criteria of forty (40) days from date of sample extraction. Qualifications are required.

Specific Find:

040M04D401 exceeded holding time by four (4) days. Qualify all positive results as estimated (J).

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Specific Finding:

The continuing calibration, AJ105, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M030401	2,4-dinitrophenol (64.9%)

The continuing calibration, DJ195, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M030501	2,4-dinitrophenol (53.0%)
041M030601	4-nitrophenol (52.5%)
041M30701	4-nitroaniline (56.5%)
041M04D501	carbazole (51.2%)
041M04D301	
041M04D101	
041M04D201	

The continuing calibration, IF878, contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041M030301	4-chloroaniline (221.7%)

Method Blanks

Associated blank	Compound	Concentration	Action Level
SBLKIN	bis(2ethylhexyl)phthalate	33J	330

Samples	Compound	Qualification
041M030301	bis(2ethylhexyl)phthalate	CRQL

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040M04D401	All analytes	+	J
041M030401	2,4-dinitrophenol (64.9%)	+/-	J/UJ
041M030501 041M030601 041M30701 041M04D501 041M04D301 041M04D101 041M04D201	2,4-dinitrophenol (53.0%) 4-nitrophenol (52.5%) 4-nitroaniline (56.5%) carbazole (51.2%)	+/-	J/UJ
041M030301	4-chloroaniline (221.7%)	+/-	J/R
041M030301	bis(2ethylhexyl)phthalate	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 030301

A validation was performed on the Pesticide/Aroclor Data from SDG 030301. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Initial Calibrations

The initial calibrations that were analyzed by the laboratory for these samples were not acceptably linear for all compounds.

Initial Calibrations, Continued

Specific Findings

The initial calibration of 1/11/96 contained compounds with %RSDs greater than 20%. For the samples and the non-compliant compound listed below, all positive results are qualified as estimated, J, and all non-detect results are qualified as estimated, UJ.

All samples	Alpha-BHC (20.2%/21.0%)
	Delta-BHC (21.2%/21.1%)

Surrogate Recoveries

Several samples exhibited non-compliant TCX and/or DCB recoveries.

Specific Finding

The samples listed below exhibited low TCX and/or DCB recoveries. The positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

Sample ID	Surrogate	% Recovery
041M030301	DCB-1	29%
041M04D101	TCX-1/DCB-2	21%/28%
041M04D201	DCB-1/DCB-2	24%/20%

The sample listed below exhibited a high TCX recovery. The positive results are qualified as estimated, J.

Sample ID	Surrogate	% Recovery
041M04D301	TCX-1	238%

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLOR ANALYSIS

Analyte Identification/Quantitation

Four (4) samples required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Specific Findings

For the following samples and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

041M030601	4,4'-DDD
041M04D101	Delta-BHC
041M04D401	4,4'-DDE
	4,4'-DDD
041M04D201	4,4'-DDE
	4,4'-DDD

The positive results reported in all samples which exhibited column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 30% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
ALL SAMPLES	Alpha-BHC Delta-BHC	+/-	J/UJ
041M030301 041M04D101 041M04D201	ALL	+/-	J/UJ
041M04D301	ALL	+	J
041M030601	4,4'-DDD	+	D
041M04D101 041M04D401	Delta-BHC 4,4'-DDE 4,4'-DDD	+	D
041M04D201	4,4'-DDE 4,4'-DDD	+	D
041M030601DL 041M04D101DL 041M04D401DL 041M04D201DL	ALL OTHERS	+/-	UR
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 030301

A validation was performed on the Metals Data from SDG 030301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	3.07 mg/kg	no impact
Calcium	6.60 mg/kg	no impact
Copper	0.46 mg/kg	all soil samples below 2.3 mg/kg
Aluminum	29.6 ug/l	no impact

Calcium	44.2 ug/l	no impact
Sodium	107 ug/l	no impact
Thallium	3.52 ug/l	all water samples below 17.6 ug/l

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Sodium	-7.78 mg/kg	no impact

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

The Matrix Spike recovery for soils for Silver (67%) was below the lower control limits. All positive and non-detect results are qualified as estimated, "J" or "UJ".

The Matrix Spike recovery for soils for Selenium was above the upper control limits. All positive results are qualified as estimated, "J".

Laboratory Duplicate Analysis

Specific Finding

The laboratory RPD for Aluminum was not greater than 35% and for Selenium was not greater than 2 times the CRDL will not be qualified.

Serial Dilution

Specific Finding

The Serial Dilution for soils for Manganese was outside the control limits. All positive results are qualified as estimated, "J".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041W030401	77
Antimony	041M030301	82
Antimony	041M030701	71

The post digestion spike recovery for GFAA was above the upper control limits. All positive results for the listed samples below are qualified as estimated, "J".

Element	Sample IDs	% recoveries
Antimony	041M030601	129
Antimony	041M04D101	130
Antimony	041M04D401	117

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All soil samples below 2.30 mg/kg	Cu.	+	U
all water samples below 17.6 ug/l	Tl.		
all soil samples	Ag.	+/U	J/UJ
all soil samples	Se.	+	J
all soil samples	Mn.	+	J
041W030401, 041M030301, AND 041M030701.	Sb.	+/U	J/UJ
041M030601, 041M04D101 AND 041M04D401.	Sb.	+	J
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	041M10
Date:	February 14, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	NAS Pensacola; Site 40 & 41
Date Sampled:	November 27, 1995
Number of Samples:	4 Aqueous Sample(s) with 0 MS/MSD(s) 12 Non-aqueous Sample(s) with 1 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Low Volatiles, Volatiles, Low Semivolatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig H. Sempa
Eugene M. Watson, Vice President

3-4-96
Date

6716 Mexico Road · St. Peters, MO 63376
(314) 928-9533 · (314) 278-1828 · Fax (314) 278-2709

SDG# 041M10

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	LVOA		VOA		LSV		SV		P/P		TAL/C	
040TM01601	WATER	X											
041W130101	WATER	X				X				X		X	
041W5A0501	WATER	X				X				X		X	
041TM00401	WATER	X											
040MZ31301	SOIL				X				X		X		X
040MZ31501	SOIL				X				X		X		X
040MZ31901	SOIL				X				X		X		X
040MZ32001	SOIL				X				X		X		X
040MZ32101	SOIL				X				X		X		X
040MZ32201	SOIL				X				X		X		X
040MZ32301	SOIL				X				X		X		X
040NZ32301	SOIL				X				X		X		X
040MZ32401	SOIL				X				X		X		X
041M10A301	SOIL				X				X		X		X
041M130101	SOIL				X				X		X		X
041M5A0501	SOIL				X				X		X		X
Total Billable Samples (Water/Soil)		4	0	0	12	2	0	0	12	2	12	2	12

LVOA = CLP Low Volatiles
VOA = CLP Volatiles
LSV = CLP Low Semivolatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results.

SDG # 041M10

A validation was performed on the Volatile Data from SDG 041M10, low concentration. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FM505, contained compounds with %Ds greater than 25%, but less than 50%, and RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041W130101	acetone
041W5A0501	2-butanone
040TM01601	
041TM00401	

The continuing calibration, FM295, contained compounds with %Ds greater than 25%, but less than 50%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J).

040TM01601	methylene chloride
041TM00401	

Method Blank

Associated blank	Compound	Concentration
VBLKFQ	acetone	5

Samples	Compound	Qualification
041W130101	acetone	U
041W5A0501		

Trip Blank

Associated blank	Compound	Concentration
041TM00401	methylene chloride	8

Samples	Compound	Qualification
041W130101 041W5A0501	methylene chloride	U

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W130101 041W5A0501 040TM01601 041TM00401	acetone 2-butanone	+/-	J/R
040TM01601 041TM00401	methylene chloride	+	J
041W130101 041W5A0501	acetone	+	U
041W130101 041W5A0501	methylene chloride	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # 041M10

A validation was performed on the Volatile Data from SDG 041M10. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria.

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated(UJ).

041M5A0501RE chlorobenzene-d_5

Internal Standards (continued)

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated(UJ).

040MZ31901	chlorobenzene-d_5
041M5A0501	bromochloromethane
041MZ31901RE	1,4-difluorobenzene
	chlorobenzene-d_5

Method Blank

Associated blank	Compound	Concentration
VBLKCW	methylene chloride	2J
VBLKCX	methylene chloride	4J
VBLKCY	methylene chloride	4J
VBLKCA	methylene chloride	2J

Samples	Compound	Qualification
040MZ31501 040MZ32301 040M32001 040M32201 040MZ32301	methylene chloride	CRQL
040MZ32101 041M10A301 041M130101 041M5A501RE 040M32401 040MZ31901 040MZ31901RE	methylene chloride	U

Trip Blank

Associated blank	Compound	Concentration
040TM01601	methylene chloride	7
	Acetone	23
041TM00401	acetone	10

Samples	Compound	Qualification
040MZ32201 040MZ32401	acetone	CRQL
040MZ32301 040NZ32301 040MZ31901 040MZ31901RE 040MZ32001 041M10A301 041M130101 041M5A0501 041M5A0501RE	acetone	U
040MZ31301	methylene chloride	CRQL

Compound Identification /Quantitation

Reject samples 041M5A0501 and 040MZ31901RE, in favor of 041M5A0501RE and 040MZ31901, due to non compliant internal standard area recoveries.

System Performance and Overall Assessment

The overall system performance was fair The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ31901	All associated analytes chlorobenzene-d_5	+/-	J/UJ
040MZ31501 040MZ32301 040M32001 040M32201 040MZ32301	methylene chloride	+	CRQL
040MZ32101 041M10A301 041M130101 041M5A501RE 040M32401 040MZ31901	methylene chloride	+	U
040MZ32201 040MZ32401	acetone	+	CRQL
040MZ32301 040NZ32301 040MZ31901 040MZ32001 041M10A301 041M130101 041M5A0501RE	acetone	+	U
040MZ31301	methylene chloride	+	CRQL
041M5A0501 040MZ31901RE	All analytes	+/-	R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 041M10

A validation was performed on the Semivolatile Data from SDG 041M10, low concentration. The data was evaluated based on the following parameters.

*	•	Data Completeness
	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Holding Times

The following water sample, 041W130101, exceeded the method holding time of 7 days by 10 days. Qualify all positive results as estimated (J) and all non detects as estimated (UJ).

Continuing Calibrations

The continuing calibrations that were analyzed all of the criteria and non criteria compounds met requirements for RRFs. Qualifications are required for compounds with non compliant %Ds.

Continuing Standards (continued)

Specific Finding:

The continuing calibration, DJ132, contained compounds with %Ds greater than 25% D but less than 50% D. For the samples and non compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041W130101 3-nitroaniline

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that none of the data requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W130101	All analytes	+/-	J/UJ
041W130101	3-nitroaniline	+/-	J/UJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 041M10

A validation was performed on the Semivolatile Data from SDG 041M10. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing Calibrations

The continuing calibrations that were analyzed all of the criteria and non criteria compounds did not met requirements for RRFs and %D. Qualifications are required.

Continuing Standards (continued)

Specific Finding:

The continuing calibration, DI973, contained compounds with %Ds greater than 50% D but less than 90% D. For the samples and non compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041MZ32401	carbazole

The continuing calibration, DI973, contained compounds with %Ds greater than 25% D but less than 50% D. For the samples and non compliant compounds listed below, qualify all positive results as estimated (J).

041MZ32401	fluorene benzo(b)fluoranthene

The continuing calibration, JF804, contained compounds with %Ds greater than 50% D but less than 90% D. For the samples and non compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M10A301	di-n-octylphthalate
041M130101	
041M5A0501	
040MZ31501	
040MZ31901	
040MZ32001	
040MZ32101	
040MZ32201	
040MZ32301	
040NZ32301	

Continuing Standards (continued)

Specific Finding:

The continuing calibration, JF804, contained compounds with %Ds greater than 25% D but less than 50% D. For the samples and non compliant compounds listed below, qualify all positive results as estimated (J).

040MZ31501	bis(2-ethylhexyl)phthalate
040MZ31901	
040MZ32001	
040MZ32101	
040MZ32201	
040MZ32301	
040NZ32301	
041M10A301	
041M130101	
041M5A0501	

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that none of the data requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041MZ32401	carbazole	+/-	J/UJ
041MZ32401	fluorene benzo(b)fluoranthene	+	J
041M10A301 041M130101 041M5A0501 040MZ31501 040MZ31901 040MZ32001 040MZ32101 040MZ32201 040MZ32301 040NZ32301	di-n-octylphthalate	+/-	J/UJ
040MZ31501 040MZ31901 040MZ32001 040MZ32101 040MZ32201 040MZ32301 040NZ32301 041M10A301 041M130101 041M5A0501	bis(2-ethylhexyl)phthalate	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results this report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.8 Method; the National Functional Guidelines for Organic Data Validation, June 1991, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 041M10

A validation was performed on the Pesticide/Aroclor Data from SDG 041M10. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Surrogate Recoveries

Nine (9) samples required qualification due to non-compliant surrogate recoveries. One (1) of the samples exhibited recoveries below 10%.

Specific Findings

The following sample exhibited surrogate recoveries below 10%. All positive results are qualified as estimated, J, and all non-detect results are rejected, R.

041W130101

Surrogate Recoveries, continued

Specific Findings, continued

The following samples exhibited TCMX recoveries below the QC limit. All positive and non-detect results reported in the sample are qualified as estimated, J/UJ.

040MZ31301
040MZ32001
040MZ32101
041MZ32201
041MZ32401
040NZ32301
041M130101
041M5A0501

Field Duplicates

The field duplicate pair of sample 040MZ32301/040NZ32301 exhibited non-compliant precision results for the two (2) compounds reported above the compound CRQLs.

Specific Finding

The noted compounds in the following field duplicate pair exhibited non-compliant field duplicate precision. The reported positive results are qualified as estimated, J.

040MZ32301	4,4'-DDE
040NZ32301	AR1260

Compound Identification/Quantitation

Several reported results exhibited P flags due to column quantitation %Ds greater than 25%. Single component compounds in samples with reported aroclors should be considered suspect. The Form Is submitted by the laboratory indicated incorrect Concentrated Final Volumes for all samples. The laboratory indicated that the software limitation would not accommodate the correct final volume. The samples were to be calculated based on a final volume of 1.0 ml. Based on this information, calculation verification was possible. Supporting documentation explaining the discrepancy has been received. One sample required dilution to accurately quantitate target compounds.

Compound Identification, continued

Specific Findings

All positive results exhibiting P flags are qualified as estimated, J, due to column quantitation %Ds greater than 25%.

For the following sample, the compounds AR1260 and 4,4'-DDE are reported from the dilution analysis. All other compounds in the dilution analysis are rejected, UR.

041M5A0501

Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 5% of data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W130101	All compounds	+/-	J/R
040MZ31301 040MZ32001 040MZ32101 041MZ32201 041MZ32401 040NZ32301 041M130101 041M5A0501	All compounds	+/-	J/UJ
040MZ32301 040NZ32301	4,4'-DDE AR1260	+	J
041M5A0501	AR1260 4,4'-DDE	+	R
041M5A0501DL	All except D flagged corrsponding results	+/-	UR
All	All P flagged results	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 041M10

A validation was performed on the Metals Data from SDG 041M10. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
	•	Matrix Duplicates
	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Calcium	3.06 mg/kg	no impact
Thallium	3.42 ug/l	no impact

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Sodium	-21.0 mg/kg	no impact
Beryllium	-1.33 ug/l	all water samples
Iron	-6.16 ug/l	no impact
Potassium	-144. ug/l	no impact
Sodium	-81.1 ug/l	no impact

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

Tha Matrix Spike recovery for soils for Antimony was below 30%. All non-detect results are rejected and all positive results are qualified as estimated, "J".

The Matrix Spike recoveries for soils for Selenium, Thallium and Silver were below the lower control limits. All positive and non-detect results are qualified as estimated, "J" or "UJ".

Duplicate Analysis

Specific Finding

The Duplicate analyses for soils for Calcium and Lead were outside the control limits. All positive results are qualified as estimated, "J". The RPDs for Aluminum and Copper were below 35% and will not be qualified. The field duplicate for Calcium was greater than 50%. All positive results are qualified as estimated, "J".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	040MZ31501	84
Antimony	040MZ31901	52
Antimony	040MZ32001	66
Antimony	040MZ32101	71

Antimony	041MZ32201	67
Antimony	041MZ32301	62
Antimony	041NZ32301	70

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all water samples	Be.	+/U	J/UJ
all soil samples	Sb.	+	J
		U	R
all soil samples	Se, Ag and Tl.	+/U	J/UJ
all soil samples	Ca and Pb.	+	J
040MZ31501, 901, 32001, 32101, 201, 301 and NZ32301.	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	5A0101
Date:	February 14, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	NAS Pensacola; Site 41
Date Sampled:	November 16, 1995
Number of Samples:	8 Aqueous Sample(s) with 1 MS/MSD(s) 17 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Low Volatiles, Volatiles, Low Semivolatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig M. Sexton
Eugene M. Watson, Vice President

3-4-96
Date

4127 Plaza 94 South · St. Charles, MO 63304
(314) 936-1332 · Fax (314) 936-1335

SDG# 5A0101

Samples and Fractions Reviewed

Sample Identifications • Analytical Fractions

Ensafe ID	Matrix	LVOA		VOA		LSV		SV		P/P		TAL/CN	
041W061001	WATER	X				X				X		X	
041W5A0101	WATER	X				X				X		X	
041W5A0201	WATER	X				X				X		X	
041W5A0401	WATER	X				X				X		X	
041W5A0701	WATER	X				X				X		X	
041M060501	SOIL				X				X		X		X
041M060601	SOIL				X				X		X		X
041M061001	SOIL				X				X				X
041M061101	SOIL				X				X		X		X
041M5A0101	SOIL				X				X		X		X
041M5A0201	SOIL				X				X		X		X
041M5A0301	SOIL				X				X		X		X
041M5A0401	SOIL				X				X		X		X
041M5A0701	SOIL				X				X		X		X
041M641001	SOIL				X				X		X		X
041M641101	SOIL				X				X		X		X
041M641301	SOIL				X				X		X		X
041M641401	SOIL				X				X		X		X
041M641601	SOIL				X				X		X		X
041M641701	SOIL				X				X		X		X
041M642001	SOIL				X				X		X		X
041M642101	SOIL				X				X		X		X
041TM00201	WATER			X									
041TM00202	WATER			X									
041TM00203	WATER			X									
Total Billable Samples	(Water/Soil)	5	0	3	17	5	0	0	17	5	16	5	17

LVOA = CLP Low Volatiles
VOA = CLP Volatiles
LSV = CLP Low Semivolatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results.

SDG # 5A0101

A validation was performed on the Volatile Data from SDG 5A0101, low concentration. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FM362, contained compounds with %Ds greater than 25%, but less than 50%, and RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041W5A0101	acetone
041W5A0201	2-butanone
041W5A0401	
041W5A0701	
041W061001	

Method Blank

Associated blank	Compound	Concentration
VBLKFG	acetone	7

Samples	Compound	Qualification
041W061001	acetone	U
041W5A0101		
041W5A0201		
041W5A0401		
041W5A0701		

Trip Blank

Associated blank	Compound	Concentration
041TM00203	methylene chloride	10

Samples	Compound	Qualification
041W061001	methylene chloride	U
041W5A0101		

Trip Blank (continued)

Associated blank	Compound	Concentration
041TM00203	methylene chloride	10

Samples	Compound	Qualification
041W5A0201 041W5A0401 041W5A0701	methylene chloride	U

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W5A0101	acetone	+/-	J/R
041W5A0201	2-butanone		
041W5A0401			
041W5A0701			
041W061001			
041W061001	acetone	+	U
041W5A0101			
041W5A0201			
041W5A0401			
041W5A0701			
041W061001	methylene chloride	+	U
041W5A0101			
041W5A0201			
041W5A0401			
041W5A0701			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # 5A0101

A validation was performed on the Volatile Data from SDG 5A0101. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within continuing calibration criteria. All RRFs were within calibration criteria. Qualifications are required.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, BT652, contained compounds with %Ds greater than 25%, but less than 50%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J).

041M5A0101	methylene chloride
041M641401	
041M641601	
041M641701	
041M642001	

Method Blank

Associated blank	Compound	Concentration
VBLKBY	methylene chloride	12
VBLKCQ	methylene chloride	10
VBLKCR	methylene chloride	15
VBLKCS	methylene chloride	13

Samples	Compound	Qualification
041M5A0201	methylene chloride	CRQL
041M5A0301		
041M5A0401		
041M5A0701		
041M641001		
041M641101		
041M060501		
041M060601		
041M061101DL		
041M5A0101DL		

Method Blank (continued)

Samples	Compound	Qualification
041M061101	methylene chloride	U
041M641301		
041M642101		
041M061001		

Compound Identification /Quantitation

Reject E-flagged results for samples, 041M5A0101 and 041M061101, in favor of D-flagged results in diluted samples, 041M5A0101DL and 041M061101DL.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M5A0101	methylene chloride	+	J
041M641401			
041M641601			
041M641701			
041M642001			
041M5A0201	methylene chloride	+	CRQL
041M5A0301			
041M5A0401			
041M5A0701			
041M641001			
041M641101			
041M060501			
041M060601			
041M061101DL			
041M5A0101DL			
041M061101	methylene chloride	+	U
041M641301			
041M642101			
041M061001			
041M5A0101	All E-flagged results	+	R
041M061101			
041M5A0101DL	All analytes except	+	R
041M061101DL	D-flagged results		

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 5A0101

A validation was performed on the Semivolatile Data from SDG 5A0101, low concentration. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that none of the data requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 5A0101

A validation was performed on the Semivolatile Data from SDG 5A0101. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing Calibrations

The continuing calibrations that were analyzed all of the criteria and non criteria compounds did not met requirements for RRFs and %D. Qualifications are required.

Continuing Standards (continued)

Specific Finding:

The continuing calibration, AI739, contained compounds with %Ds greater than 50% D but less than 90% D. For the samples and non compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M642101	4-chloroaniline
041M5A0201	
041M5A0301	
041M641401	
041M5A0101	
041M641601	
041M640101	

The continuing calibration, IF423, contained compounds with %Ds greater than 50% D but less than 90% D. For the samples and non compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M5A0701	hexachlorocyclopentadiene
	2,4-dinitrophenol
	4-nitroaniline
	3,3'-dichlorobenzidine

The continuing calibration, IF423, contained compounds with %Ds greater than 25% D and RRFs less than 0.050. For the samples and non compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041M5A0701	2,2'-oxybis(1-chloropropane)
	3-nitroaniline

Method Blank

Associated blank	Compound	Concentration
SBLKAI	bis(2-ethylhexyl)phthalate	82J
SBLKJF	bis(2-ethylhexyl)phthalate	140J

Samples	Compound	Qualification
041M5A0101 041M5A0201 041M5A0301 041M5A0401 041M641401 041M641601 041M642101 041M060501 041M060601 041M061001 041M641701 041M642001	bis(2-ethylhexyl)phthalate	CRQL
041M640101 041M061101 041M641101 041M641301	bis(2-ethylhexyl)phthalate	U

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that none of the data requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M642101 041M5A0201 041M5A0301 041M641401 041M5A0101 041M641601 041M640101	4-chloroaniline	+/-	J/UJ
041M5A0701	hexachlorocyclopentadiene 2,4-dinitrophenol 4-nitroaniline 3,3'-dichlorobenzidine	+/-	J/UJ
041M5A0701	2,2'-oxybis(1-chloropropane) 3-nitroaniline	+/-	J/R
041M5A0101 041M5A0201 041M5A0301 041M5A0401 041M641401 041M641601 041M642101 041M060501 041M060601 041M061001 041M641701 041M642001	bis(2-ethylhexyl)phthalate	+	CRQL
041M640101 041M061101 041M641101 041M641301	bis(2-ethylhexyl)phthalate	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results this report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.8 Method; the National Functional Guidelines for Organic Data Validation, June 1991, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 5A0101

A validation was performed on the Pesticide/Aroclor Data from SDG 5A0101. The data was evaluated based on the following parameters:

- * Data Completeness
- * Holding Times
- * GC Performance
- * Calibration
- Blanks
- Surrogate Recoveries
- * Matrix Spike/Matrix Spike Duplicates
- * GPC and Florisil Clean-up Procedures
- * Field Duplicates
- * Compound Identification
- Compound Quantitation

* - All criteria were met for this parameter.

Method Blanks

One (1) method blank exhibited contamination for two (2) target compounds.

	PBLK02
α-BHC	0.11 μg/Kg
Endosulfan I	0.13 μg/Kg

Method Blanks, continued

Specific Finding

Samples	Compound	Qualification
041M060501 041M060601 041M5A0701 041M641101 041M641701 041M642001 041M642101	α-BHC	U
041M5A0201 041M5A0401 041M641601 041M641701 041M642001 041M642101	endosulfan I	U

Surrogate Recoveries

Five (5) samples required qualification due to non-compliant surrogate recoveries.

Specific Findings

The following sample exhibited a TCMX recovery below the QC limit. All positive and non-detect results reported in the sample are qualified as estimated, J/UJ.

041M5A0101
041M5A0201
041M5A0301
041M5A0401
041M641301

DATA ASSESSMENT NARRATIVE

PESTICIDES/AROCLORS

Compound Identification/Quantitation

One (1) sample required dilution to accurately quantitate target compounds. Several reported results exhibited P flags due to column quantitation %Ds greater than 25%. Single component compounds in samples with reported aroclors should be considered suspect. The Form Is submitted by the laboratory indicated incorrect Concentrated Final Volumes for all samples. The laboratory indicated that the software limitation would not accommodate the correct final volume. The samples were to be calculated based on a final volume of 1.0 ml. Based on this information, calculation verification was possible. Supporting documentation explaining the discrepancy has been received.

Specific Findings

All positive results exhibiting P flags are qualified as estimated, J, due to column quantitation %Ds greater than 25%.

For the following sample, the E flagged results are rejected in favor of the D flagged results reported from the dilution analysis. In the dilution analysis all other results are rejected, UR, in favor of the results reported from the undiluted analysis.

041M60601

Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 5% of data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M060501	α-BHC	+B	U
041M060601			
041M5A0701			
041M641101			
041M641701			
041M642001			
041M642101			
041M5A0201	endosulfan I	+B	U
041M5A0401			
041M641601			
041M641701			
041M642001			
041M642101			
041M5A0101	All Compounds	+/-	J/UJ
041M5A0201			
041M5A0301			
041M5A0401			
041M641301			
041M60601	All E flagged results	+E	R
041M60601DL	All except corresponding D flagged results	+/-	UR
All	All P flagged results	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 5A0101

A validation was performed on the Metals Data from SDG 5A0101. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Barium	0.14 mg/kg	041M642101
Calcium	17.4 mg/kg	no impact
Copper	0.56 mg/kg	041M061001
Iron	3.96 mg/kg	no impact
Lead	0.13 mg/kg	no impact

Zinc	0.62 mg/kg	no impact
Aluminum	23.4 ug/l	no impact
Barium	1.19 ug/l	no impact
Calcium	134. ug/l	no impact
Copper	6.86 ug/l	all water samples
Iron	22.1 ug/l	no impact
Manganese	1.09 ug/l	no impact
Sodium	76.1 ug/l	no impact
Vanadium	3.38 ug/l	all water samples
Zinc	11.4 ug/l	all water samples

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Cobalt	-0.49 mg/kg	all soil samples
Cobalt	-5.88 ug/l	all water samples

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

The Matrix Spike recovery for waters for Antimony was below the lower control limits. All positive and non-detect results are qualified as estimated, "J" or "UJ".

The Matrix Spike recovery for waters for Lead was above the upper control limits. All positive results are qualified as estimated, "J".

Serial Dilution

Specific Finding

The Serial Dilution for waters for Iron and Magnesium were outside the control limits. All positive results are qualified as estimated, "J".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041W5A0101	70
Antimony	041W5A0401	72
Antimony	041W5A0701	77
Antimony	041W061001	66
Antimony	041M641001	68
Antimony	041M41101	67
Antimony	041M5A0201	25
Antimony	041M5A0701	16
Antimony	041M641301	48
Antimony	041M642001	49
Antimony	041M642101	53
Antimony	041M060501	60
Antimony	041M060601	40
Antimony	041M641401	63
Antimony	041M061101	61
Antimony	041M5A0401	67

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
041M642101	Ba.	+	U
041M061001	Cu.		
all water samples	Cu, V and Zn.		
all soil and water samples	Co.	+/U	J/UJ
all water samples	Sb.	+/U	J/UJ
all water samples	Pb.	+	J
all water samples	Fe and Mg.	+	J
all samples	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	63A401
Date:	March 29, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	January 17 - 18, 1996
Number of Samples:	7 Aqueous Sample(s) with 0 MS/MSD(s) 9 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Volatiles, Low Concentration Volatiles, Semivolatiles, Low Concentration Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig B. Sexton

Eugene M. Watson, Vice President

4-1-96

Date

4127 Plaza 94 South St Charles, MO 63304
(314) 936-1332 Fax (314) 936-1335

SDG# 63A401

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	VOA		LVOA		SV		LSV		P/P		TAL/CN	
041M010101	SOIL		X				X				X		X
041M010201	SOIL		X				X				X		X
041M010301	SOIL		X				X				X		X
041M010401	SOIL		X				X				X		X
041M63A401	SOIL		X				X				X		X
041M63A501	SOIL		X				X				X		X
041M63B101	SOIL		X				X				X		X
041M63B201	SOIL		X				X				X		X
041M63B301	SOIL		X				X				X		X
041W010301	WATER			X				X		X		X	
041W190101	WATER			X				X		X		X	
041W190301	WATER			X				X		X		X	
041W63A201	WATER			X				X		X		X	
010W63B201	WATER			X				X		X		X	
041TM01701	WATER			X									
041TM01801	WATER			X									
Total Billable Samples (Water/Soil)		0	9	7	0	0	9	5	0	5	9	5	9

VOA = CLP Volatiles
LVOA = CLP Low Concentration Volatiles
SV = CLP Semivolatiles
LSV = CLP Low Concentration Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # 63A401

A validation was performed on the Volatile Data from SDG 63A401. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, BU497, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041M63A401	acetone (61.9%)
040M63A501	

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria.

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated (UJ).

041M010201RE	1,4-difluorobenzene chlorobenzene-d_5
041M010301 041M010101RE	chlorobenzene-d_5

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

DATA ASSESSMENT AND NARRATIVE

VOLATILE ANALYSIS

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLKBZ	methylene chloride	3J	30
VBLKGK	methylene chloride	2J	20
	Acetone	4J	40

Samples	Compound	Qualification
041M010301 041M010401 041M63B101 041M63B201 041M63B301 041M010101RE 041M010201RE	methylene chloride	CRQL
041M010101RE	acetone	U

Trip Blank

Associated blank	Compound	Concentration	Action Level
041TM01701	acetone	14	140
041TM01801	methylene chloride	3	3J
	Acetone	46	460

Trip Blank (continued)

Samples	Compound	Qualification
041M010301 041M010401 041M63B201 041M63B301	acetone	U
041M63A401 041M63A501	acetone	CRQL
041M63A401 041M63A501	methylene chloride	CRQL

Compound Identification /Quantitation

Reject samples 041M010101, 041M010201, and 041M010301RE, in favor of 041M010101RE, 041M01201RE, and 041M010301, due to non compliant internal standard area recoveries.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 10% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M63A401 040M63A501	acetone	+/-	J/UJ
041M010201RE	All associated analytes 1,4-difluorobenzene chlorobenzene-d_5	+/-	J/UJ
041M010301 041M010101RE	chlorobenzene-d_5		
041M010301 041M010401 041M63B101 041M63B201 041M63B301 041M010101RE 041M010201RE	methylene chloride	+	CRQL
041M010101RE 041M010301 041M010401 041M63B201 041M63B301	acetone	+	U
041M63A401 041M63A501	acetone	+	CRQL
041M63A401 041M63A501	methylene chloride	+	CRQL
041M010101 041M010201 041M010301RE	all analytes	+/-	R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # 63A401

A validation was performed on the Volatile Data from SDG 63A401. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FN448, contained compounds with %Ds that were greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041W63A201	chloromethane (-58.2)
041W63B201	
041W010301	

The continuing calibration, FN448, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W63A201	acetone (47.4)
041W63B201	2-butanone
041W010301	

The continuing calibration, FN469, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W190301	acetone (47.4)
	2-butanone

The continuing calibration, FN492, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W190101	acetone (57.9)
	2-butanone

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFM	acetone	6	60
VBLKFN	acetone	5	50
VBLKFO	acetone	7	70

Samples	Compound	Qualification
041W010301	acetone	U
041W63A201		
041W63B201		
041W190301		
041W190101		

Trip Blank

Associated blank	Compound	Conc.	Action Level
041TM01701	methylene chloride	4	40
	acetone	14	140

Samples	Compound	Qualification
041W010301	methylene chloride	U
041W63A201		
041W63B201		
041W190301		
041W190101		

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W63A201 041W63B201 041W010301	chloromethane (-58.2)	+/-	J/UJ
041W63A201 041W63B201 041W010301	acetone (47.4) 2-butanone	+/-	J/R
041W190301	acetone (47.4) 2-butanone	+/-	J/R
041W190101	acetone (57.9) 2-butanone	+/-	J/R
041W010301 041W63A201 041W63B201 041W190301 041W190101	acetone	+	U
041W010301 041W63A201 041W63B201 041W190301 041W190101	methylene chloride	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 63A401

A validation was performed on the Semivolatile Data from SDG 63A401. The data was evaluated based on the following parameters.

* • Data Completeness
* • Holding Times
* • GC/MS Tuning
* • Calibrations
* • Internal Standard Performance
* • Blanks
* • Surrogate Recoveries
* • Laboratory Control Sample
* • Field Duplicates
* • Compound Identification /Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that none of the data requires qualification.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 63A0401

A validation was performed on the Semivolatile Data from SDG 63A0401. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL

No qualifications are required.

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 63A401

A validation was performed on the Pesticide/Aroclor Data from SDG 63A401. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Surrogate Recoveries

Six (6) samples exhibited non-compliant TCX and/or DCB recoveries.

Surrogate Recoveries, Continued

Specific Finding

The samples listed below exhibited low TCX recoveries. The positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

Sample ID	Surrogate	% Recovery
041M010101	TCX-1	22%
041M010201	TCX-1	13%
	TCX-2	20%
041M010301	TCX-1	21%
041M63A401	TCX-1	26%

The samples listed below did not exhibit a DCB recovery. The positive results are qualified as estimated, J, and the non-detect results are rejected, R.

Sample ID	Surrogate	% Recovery
041M010401	DCB-1	0%
	DCB-2	166%
041M63B101	TCX-1	24%
	DCB-1	0%

Analyte Identification/Quantitation

Two (2) samples required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Analyte Identification/Quantitation, Continued

Specific Findings

For the following samples and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

041M010301	Aroclor 1260 4,4'-DDD Gamma-Chlordane
041M010401	Aroclor 1260 Alpha-Chlordane 4,4'-DDE 4,4'-DDD 4,4'-DDT Gamma-Chlordane

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 20% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M010101 041M010201 041M010301 041M63A401	ALL	+/-	J/UJ
041M010401 041M63B101	ALL	+/-	J/R
041M010301	Aroclor 1260 4,4'-DDD Gamma-Chlordane	+	D
041M010401	Aroclor 1260 Alpha-Chlordane 4,4'-DDE 4,4'-DDD 4,4'-DDT Gamma-Chlordane	+	D
041M010301DL 041M010401DL	ALL OTHERS	+/-	UR
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 63A401

A validation was performed on the Metals Data from SDG 63A401. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	14.4 mg/kg	no impact
Calcium	1.90 mg/kg	no impact
Iron	3.90 mg/kg	no impact
Magnesium	2.23 mg/kg	no impact
Sodium	3.64 mg/kg	all soil samples below 18.2 mg/kg

Aluminum	27.2 ug/l	all water samples below 136 ug/l
Sodium	57.6 ug/l	noimpact

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

Matrix Spike Recovery

Specific Finding

The Matrix Spike recovery for soils for Antimony (54%) was below the lower control limits (<75% but >30%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

Laboratory Duplicate Analysis

Specific Finding

The Duplicate analyses for Aluminum (49%) and Calcium (90%) were outside the control limits of 35%. All positive results are qualified as estimated, 'J". The RPD for Iron (22%) was below 35% and will not be qualified.

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041M63A401	67
Antimony	041M63A501	83
Antimony	041M63B201	41
Antimony	041M63B301	81
Antimony	041M010101	57
Antimony	041W63A201	82
Antimony	041W010301	61
Antimony	041W190301	42
Antimony	041M63B101	47
Antimony	041M190101	39

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 18.2 mg/kg	Na.	+	U
all water samples below 136 ug/l	Al.		
all soil samples	Sb.	+/U	J/UJ
all soil samples	Al and Ca.	+	J
041M63S401, 63A501, 63B201, 63B301, 010101, 63A201, 010301, 190301,63B101 and W190101.	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	640801
Date:	April 10, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	NAS Pensacola
Date Sampled:	February 1 - 9, 1996
Number of Samples:	1 Aqueous Sample(s) with 0 MS/MSD(s) 5 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively with Region IV Modifications
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Low Concentration Volatiles, Volatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Seaton

Eugene M. Watson, Vice President

5-3-96

Date

4177 Plaza 94 South St. Charles, MO 63304
(314) 936-1335 Fax (314) 936-1335

SDG# 640801

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	LVOA		VOA		SV		P/P		TAL/CN	
041TM02401	WATER	X									
041M640101	SOIL				X		X		X		X
041M640401	SOIL				X		X		X		X
041M640801	SOIL				X		X		X		X
041M641801	SOIL				X		X		X		X
041M641901	SOIL				X		X		X		X
Total Billable Samples	(Water/Soil)	1	0	0	5	0	5	0	5	0	5

LVOA = CLP Low Volatiles
VOA = CLP Volatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

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SDG #640801

A validation was performed on the Volatile Data from SDG 640801. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The overall system performance was fair. The data reviewer estimates that none of the data requires qualification.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG #640801

A validation was performed on the Volatile Data from SDG 640801. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, GD599, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M641901RE	chloroethane (52.4%)

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria. Qualifications are required.

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated (UJ).

041M641901RE	chlorobenzene-d_5
041M64901	1,4-difluorobenzene chlorobenzene-d_5

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLKGS	acetone	4J	40

Method Blank (continued)

Samples	Compound	Qualification
041M640801	acetone	CRQL

Trip Blank

Associated blank	Compound	Concentration	Action Level
041TM02401	methylene chloride	4	40
	Acetone	9	90

Samples	Compound	Qualification
041M640801 041M641801 041M641901	methylene chloride	CRQL
041M640101	acetone	U

Compound Identification /Quantitation

Reject sample 041M641901, in favor of the reanalysis, due to non compliant internal standard area recoveries.

System Performance and Overall Assessment

The overall system performance was fair. The data reviewer estimates that less than 10% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M641901RE	chloroethane	+/-	J/UJ
041M641901RE	All associated analytes chlorobenzene-d_5	+/-	J/UJ
041M64901	1,4-difluorobenzene chlorobenzene-d_5		
041M640801	acetone	+	CRQL
041M640801 041M641801 041M641901	methylene chloride	+	CRQL
041M640101	acetone	+	U
041M641901	all results	+/-	R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 640801

A validation was performed on the Semivolatile Data from SDG 640801. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within %D continuing calibration criteria. All RRFs were within calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, JG481, contained compounds with %Ds greater than 25%, but less than 50%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J).

041M640801	pyrene (-31.8) butylbenzylphthalate (-30.2) bis(2-ethylhexyl)phthalate (-29.4)

The continuing calibration, JG481, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041M640801	di-n-octylphthalate (-73.0)

The continuing calibration, JG502, contained compounds with %Ds greater than 25%, but less than 50%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J).

041M641901	butylbenzylphthalate (-29.0)
041M641801	bis(2-ethylhexyl)phthalate (-39.1)

The continuing calibration, JG534, contained compounds with %Ds greater than 25%, but less than 50%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J).

041M640401 041M640101	pyrene (-30.7)

The continuing calibration, JG534, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041M640401 041M640101	2,2'-oxybis(1-chloropropane) (-58.6)

Method Blanks

Associated blank	Compound	Conc.	Action Level
SBLKJU	bis(2-ethylhexyl) phthalate	93J	930

Samples	Compound	Qualification
041M640101	bis(2-ethylhexyl) phthalate	CRQL
041M640401		

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M640801	pyrene (-31.8) butylbenzylphthalate (-30.2) bis(2-ethylhexyl)phthalate (-29.4)	+	J
041M640801	di-n-octylphthalate (-73.0)	+/-	J/UJ
041M641901 041M641801	butylbenzylphthalate (-29.0) bis(2-ethylhexyl)phthalate (-39.1)	+	J
041M640401 041M640101	pyrene (-30.7)	+	J
041M640401 041M640101	2,2'-oxybis- (1-chloropropane) (-58.6)	+/-	J/UJ
041M640101 041M640401	bis(2-ethylhexyl) phthalate	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 640801

A validation was performed on the Pesticide/Aroclor Data from SDG 640801. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Initial Calibrations

The initial calibrations that were analyzed by the laboratory for these samples were not acceptably linear for all compounds.

Initial Calibrations, Continued

Specific Findings

The initial calibration of 2/20/96 contained a compound with a %RSD greater than 20%. For the samples and the non-compliant compound listed below, all positive results are qualified as estimated, J, and all non-detect results are qualified as estimated, UJ.

All samples	Endosulfan II (39.3%)

Surrogate Recoveries

One (1) sample exhibited a non-compliant DCB recovery.

Specific Finding

The sample listed below exhibited a high DCB recovery. The positive results are qualified as estimated, J.

Sample ID	Surrogate	% Recovery
041M640101	DCB-1	475%

Analyte Identification/Quantitation

One (1) sample required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Specific Findings

For the following sample and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

041M640101	Endrin
	4,4'-DDD
	4,4'-DDT

Analyte Identification/Quantitation, Continued

Specific Findings, Continued

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 30% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
All samples	Endosulfan II	+/-	J/UJ
041M640101	ALL	+	J
041M640101	Endrin 4,4'-DDD 4,4'-DDT	+	D
041M640101DL	ALL OTHERS	+/-	UR
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 640801

A validation was performed on the Metals Data from SDG 640801. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	2.68 mg/kg	no impact
Calcium	0.76 mg/kg	no impact
Copper	0.60 mg/kg	all soil samples below 3.0 mg/kg
Lead	0.20 mg/kg	no impact

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited more contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Arsenic	-0.20 mg/kg	all soil samples below 2.0 mg/kg
Sodium	-4.71 mg/kg	all soil samples below 47.1 mg/kg

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

The Matrix Spike recovery for soils for Antimony (9%) was below 30%. All non-detect results are rejected and all positive results are qualfied as estimated, "J".

The Matrix Spike recovery for Thallium (73%) was below the lower control limits (<85% but >10%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits (<85% BUT >10%). All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041M640101	66
Antimony	041M640401	11
Antimony	041M640801	65
Antimony	041M641801	48
Antimony	041M641901	59

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All soil samples below 3.0 mg/kg	Cu.	+	U
All soil samples below 2.0 mg/kg	As.	+/U	J/UJ
All soil samples below 47.1 mg/kg	Na.		
All soil samples	Sb.	+	J
		U	R
All soil samples	Tl.	+/U	J/UJ
041M640101, 40401, 40801, 411801 and 41901.	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	EM0040
Date:	March 12, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	November 30 - December 1, 1995
Number of Samples:	7 Aqueous Sample(s) with 1 MS/MSD(s) 10 Non-aqueous Sample(s) with 1 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Low Concentration Volatiles, Volatiles, Low Concentration Semivolatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Fefan

Eugene M. Watson, Vice President

3-13-96

Date

4107 Plaza 94 South St. Charles, MO 63304
(314) 946-1335 Fax (314) 936-1335

SDG# EM0040

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	LVOA		VOA		LSV		SV		P/P		TAL/C	
040EM00401	WATER	X				X				X		X	
040FM00401	WATER	X				X				X		X	
040TM01901	WATER	X											
041W030101	WATER	X				X				X		X	
041R030101	WATER	X				X				X		X	
041W030201	WATER	X				X				X		X	
041TM00701	WATER	X											
040MZ30401	SOIL				X				X		X		X
040MZ30601	SOIL				X				X		X		X
040MZ30801	SOIL				X				X		X		X
040MZ31401	SOIL				X				X		X		X
040MZ31701	SOIL				X				X		X		X
040MZ41801	SOIL				X				X		X		X
040MZ42401	SOIL				X				X		X		X
041M030101	SOIL				X				X		X		X
041N030101	SOIL				X				X		X		X
041M030201	SOIL				X				X		X		X
Total Billable Samples	(Water/Soil)	7	0	0	10	5	0	0	10	5	10	5	10

LVOA = CLP Low Volatiles
VOA = CLP Volatiles
LSV = CLP Low Semivolatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide w/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # EM0040

A validation was performed on the Volatile Data from SDG EM0040. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FM602, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041R030101	acetone
	2-butanone

The continuing calibration, FM622, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W030101	acetone
041W030201	2-butanone
	2-hexanone

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFW	acetone	6	60

Samples	Compound	Qualification
041W030101	acetone	U
041W030201		
041R030101		

Trip Blanks

Associated blank	Compound	Conc.	Action Level
041TM00701	methylene chloride	6	60
	acetone	17	170

Samples	Compound	Qualification
041W030201	methylene chloride	U

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041R030101	acetone 2-butanone	+/-	J/R
041W030101 041W030201	acetone 2-butanone 2-hexanone	+/-	J/R
041W030101 041W030201 041R030101	acetone	+	U
041W030201	methylene chloride	+	U

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QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results.

SDG #EM0040

A validation was performed on the Volatile Data from SDG EM0040. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
	•	Internal Standard Performance
	•	Blanks
	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria.

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated(UJ).

041M030201 chlorobenzene-d_5

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLKCY	Methylene chloride	4J	40
VBLKCZ	methylene chloride	2J	20
VBLKCA	methylene chloride	2J	20

Samples	Compound	Qualification
040MZ30601	methylene chloride	CRQL
040MZ30801		
040MZ30401		
040MZ31401		
040MZ31701		
040MZ31801		
040MZ41201		
041M030101		
041M030201		

Trip Blank

Associated blank	Compound	Concentration	Action Level
040TM01901	acetone	26B	260
	Methylene chloride	2	20

Samples	Compound	Qualification
041M030101	acetone	U
041NZ030101		
041M030201		
040MZ30401		
040MZ31801		

Trip Blank (continued)

Samples	Compound	Qualification
040MZ30801 040MZ31401 040MZ31701	acetone	CRQL
041N030101	methylene chloride	CRQL

Surrogates

All of the surrogate recoveries for these samples were not within QA/QC limits.

Specific Finding:

Sample listed below exhibited high recoveries for toluene-d_8. Qualify all positive results as estimated (J).

041M030201

Compound Identification /Quantitation

Reject sample 041M030201RE, in favor of the initial analysis, due to non compliant surrogate recoveries.

System Performance and Overall Assessment

The overall system performance was fair. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M030201	All associated analytes chlorobenzene-d_5	+/-	J/UJ
040MZ30601 040MZ30801 040MZ30401 040MZ31401 040MZ31701 040MZ31801 040MZ41201 041M030101 041M030201	methylene chloride	+	CRQL
041M030101 041NZ030101 041M030201 040MZ30401 040MZ31801	acetone	+	U
040MZ30801 040MZ31401 040MZ31701	acetone	+	CRQL
041N030101	methylene chloride	+	CRQL
041M030201	all analytes	+	J
041M030201RE	all analytes	+/-	R

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QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OlC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EM0040

A validation was performed on the Semivolatile Data from SDG EM0040. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Method Blanks

Associated blank	Compound	Conc.	Action Level
041EM00201	bis(2-ethylhexyl) phthalate	2J	20

Samples	Compound	Qualification
041R030101	bis(-ethylhexyl)phthalate	CRQL

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041R030101	bis(-ethylhexyl)phthalate	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EM0040

A validation was performed on the Semivolatile Data from SDG EM0040. The data was evaluated based on the following parameters.

*	•	Data Completeness
	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
	•	Internal Standard Performance
	•	Blanks
	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Holding Times

The following samples had extractions that exceeded the method criteria of fourteen (14) days from date sampled. Samples exceeded the holding time by thirteen (13) and fifteen (15) days. Qualifications are required.

Specific Find:

040MZ30601 exceeded holding time by fifteen (15) days and sample 040MZ30801 exceeded holding time by thirteen (13) days. Qualify all positive results as estimated (J) and non detects as estimated (UJ).

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Specific Finding:

The continuing calibration, DJ216, contained compounds with %Ds greater than 25% an less than 50%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J).

041N030101	pyrene (37.9%)
	Chrysene (27.0%)
	Benzo(k)fluoranthene (33.6%)

The continuing calibration, DJ216, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041N030101	4-chloroaniline (54.9%)
	3-nitroaniline (78.8%)
	2,4-dinitrophenol (51.2%)
	4-nitroaniline (74.1%)
	Bis(2-ethylhexyl)phthalate (55.9%)
	Di-n-octyl phthalate (54.2%)

The continuing calibration, IF760, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

040MZ30401	hexachlorocyclopentadiene (50.6%)
041M030101	

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, IF760, contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

040MZ30401 4-chloroaniline (218.2%)
041M030101

The continuing calibration, IF723, contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041M030201 4-chloroaniline (230.1%)

The continuing calibration, IF780, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

040MZ31401 hexachlorocyclopentadiene (68.4%)
040MZ31701

The continuing calibration, IF723, contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

040MZ31401 4-chloroaniline (190.9%)
040MZ31701

The continuing calibration, AJ074, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

040MZ41801 4,6-dinitro-2-methylphenol (63.2%)

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, IF723, contained compounds with RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

040MZ41801 2,4-dinitrophenol (0.034)
040MZ42401

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria.

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated(UJ).

040MZ31401 perylene-d_{12}
040MZ31701

Method Blanks

Associated blank	Compound	Concentration	Action Level
SBLKII	bis(2ethylhexyl)phthalate	45J	450
SBLKAM	bis(2ethylhexyl)phthalate	48J	480
SBLKDL	bis(2ethylhexyl)phthalate	37J	370
SBLKJO	bis(2ethylhexyl)phthalate	90J	900

Method Blanks (continued)

Samples	Compound	Qualification
040MZ31401 040MZ31701 041M030101 040MZ42401 040MZ41801 041N030101	bis(2ethylhexyl)phthalate	CRQL
040MZ30801	bis(2ethylhexyl)phthalate	U

Field Blanks

Associated blank	Compound	Concentration	Action Level
040FM00401	bis(2ethylhexyl)phthalate	1J	10

Samples	Compound	Qualification
040MZ30601	bis(2ethylhexyl)phthalate	CRQL

Surrogates

All of the surrogate recoveries for these samples were not within QA/QC limits.

Specific Finding:

Sample listed below exhibited low recoveries for 2-fluorophenol and 2,4,6-tribromophenol. Qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041N030101 (15%, 18%)

Compound Identification /Quantitation

Specific Finding:

Reject samples 040MZ31701RE and 040MZ31401RE, in favor of the initial analysis, due to non compliant internal standard areas.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 10% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ30601 040MZ30801	All analytes	+/-	J/UJ
041N030101	pyrene (37.9%) Chrysene (27.0%) Benzo(k)fluoranthene (33.6%)	+	J
041N030101	4-chloroaniline (54.9%) 3-nitroaniline (78.8%) 2,4-dinitrophenol (51.2%) 4-nitroaniline (74.1%) Bis(2-ethylhexyl)phthalate (55.9%) Di-n-octyl phthalate (54.2%)	+/-	J/UJ
040MZ30401 041M030101	hexachlorocyclopentadiene (50.6%)	+/-	J/UJ
040MZ30401 041M030101	4-chloroaniline (218.2%)	+/-	J/R
041M030201	4-chloroaniline (230.1%)	+/-	J/R
040MZ31401 040MZ31701	hexachlorocyclopentadiene (68.4%)	+/-	J/UJ
040MZ31401 040MZ31701	4-chloroaniline (190.9%)	+/-	J/R
040MZ41801	4,6-dinitro-2-methylphenol (63.2%)	+/-	J/UJ
040MZ41801 040MZ42401	2,4-dinitrophenol (0.034)	+/-	J/R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ31401 040MZ31701	All associated analytes perylene-d_{12}	+/-	J/UJ
040MZ31401 040MZ31701 041M030101 040MZ42401 040MZ41801 041N030101	bis(2ethylhexyl)phthalate	+	CRQL
040MZ30801	bis(2ethylhexyl)phthalate	+	U
040MZ30601	bis(2ethylhexyl)phthalate	+	CRQL
041N030101	All analytes	+/-	J/UJ
040MZ31701RE 040MZ31401RE	All analytes	+/-	R

* DL denotes the Form 1 qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EM0040

A validation was performed on the Pesticide/Aroclor Data from SDG EM0040. The data was evaluated based on the following parameters:

*	•	Data Completeness
	•	Holding Times
*	•	GC Performance
	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Holding Times

The analysis holding times were exceeded for many samples.

Holding Times, Continued

Specific Findings

The following samples exceeded the analysis holding time by one (1) to four (4) days. It is the professional opinion of the data validator that the positive results should be qualified as estimated, J.

040MZ30401
040MZ30401DL
040MZ30601
040MZ30801
040MZ31401
040MZ31701
040MZ41801
041M030101
041N030101
041M030101DL
041N030101DL
041M030201
041W030201
041M030201DL

Initial Calibrations

The initial calibrations that were analyzed by the laboratory for these samples were not acceptably linear for all compounds.

Specific Findings

The initial calibration of 1/11/96 contained compounds with %RSDs greater than 20%. For the samples and the non-compliant compound listed below, all positive results are qualified as estimated, J, and all non-detect results are qualified as estimated, UJ.

All samples	Alpha-BHC (20.2%/21.0%)
	Delta-BHC (21.2%/21.1%)

Surrogate Recoveries

Several samples exhibited non-compliant TCX and/or DCB recoveries.

Specific Finding

The sample listed below exhibited a TCX recovery below 10%. The positive results are qualified as estimated, J, and the non-detect results are rejected, R.

Sample ID	Surrogate	% Recovery
041W030201	TCX-1	8%

The sample listed below exhibited a high DCB recovery. The positive results are qualified as estimated, J.

Sample ID	Surrogate	% Recovery
040MZ30401	DCB-1	282%

Field Duplicates

The field duplicate pair of samples 041M030101 and 041N030101 exhibited positive results and non-compliant RPDs for several target compounds. Three (3) compounds required qualification due to poor duplicate precision.

Specific Finding

The field duplicate pair of samples 041M030101 and 041N030101 exhibited positive results and non-compliant RPDs for three (3) compounds. For the compounds listed below, the positive results are qualified as estimated, J, due to poor duplicate precision.

041M030101	Delta-BHC (72%)
041N030101	4,4'-DDE (67%)
	4,4'-DDT (110%)

Analyte Identification/Quantitation

Four (4) samples required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Specific Findings

For the following samples and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

040MZ30401	Dieldrin Alpha Chlordane
041M030101 041N030101	4,4'-DDE 4,4'-DDD 4,4'-DDT
041M030201	Aroclor 1260 4,4'-DDD

The positive results reported in all samples which exhibited column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 30% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ30401 040MZ30401DL 040MZ30601 040MZ30801 040MZ31401 040MZ31701 040MZ41801 041M030101 041N030101 041M030101DL 041N030101DL 041M030201 041W030201 041M030201DL	ALL	+	J
All samples	Alpha-BHC Delta-BHC	+/-	J/UJ
041W030201	ALL	+/-	J/R
040MZ30401	ALL	+	J
041M030101 041N030101	Delta-BHC 4,4'-DDE 4,4'-DDT	+	J
040MZ30401	Dieldrin Alpha Chlordane	+	D
041M030101 041N030101	4,4'-DDE 4,4'-DDD 4,4'-DDT	+	D
041M030201	Aroclor 1260 4,4'-DDD	+	D

SUMMARY OF DATA QUALIFICATIONS, Continued

SAMPLE ID	ANALYTE ID	DL	QL
040MZ30401DL 041M030101DL 041N030101DL 041M030201DL	ALL OTHERS	+/-	UR
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EM0040

A validation was performed on the Metals Data from SDG EM0040. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
	•	Field Duplicates
*	•	Laboratory Control Samples
	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Calcium	6.25 mg/kg	no impact
Iron	9.25 mg/kg	no impact
Lead	0.11 mg/kg	all soil samples below 0.55 mg/kg
Iron	4.28 ug/l	no impact

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Barium	-0.13 mg/kg	all soil samples below 1.3 mg/kg
Copper	-0.49 mg/kg	all soil samples below 4.9 mg/kg
Potassium	-20.3 mg/kg	all soil samples below 203 mg/kg
Silver	-0.42 mg/kg	all soil samples below 4.2 mg/kg
Barium	-1.81 ug/l	all water samples below 18.1 ug/l
Potassium	-152 ug/l	all water samples below 1520 ug/l
Selenium	-3.26 ug/l	all water samples below 32.6 ug/l
Zinc	-5.32 ug/l	all water samples below 53.2 ug/l

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

The Matrix Spike recoveries for soils for Antimony (52%), Cadmium (74%), Selenium (74%), Silver (64%) and Thallium (65%) and for waters for Antimony (65%) were below the lower control limits. All positive and non-detect results are qualified as estimated, "J" or "UJ".

Field Duplicate Analysis

Specific Finding

The field duplicate analyses for soils for Aluminum, Iron, Magnesium, Manganese, Vanadium and Zinc were above 50% and will be qualified as estimated, "J".

Serial Dilution

Specific Finding

The Serial Dilutions for soils for Lead and Calcium were outside the control limits. All positive results are qualified as estimated, "J".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041R030101	61
Antimony	041W030201	65
Antimony	040MZ30601	79
Antimony	041M030201	53
Antimony	040MZ30801	83

The post digestion spike recovery for GFAA was above the upper control limits. All positive results for the listed samples below are qualified as estimated, "J".

Element	Sample IDs	% recoveries
Antimony	040EM00401	122
Antimony	040MZ30401	125

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All soil samples below 0.55 mg/kg	Pb.	+	U
all soil samples below 1.3 mg/kg	Ba.	+/U	J/UJ
all soil samples below 4.9 mg/kg	Cu.		
all soil samples below 203 mg/kg	K.		
all soil samples below 4.2 mg/kg	Ag.		
all water samples below 18.1 ug/l	Ba.		
all water samples below 1520 ug/l	K.		
all water samples below 32.6 ug/l	Se.		
all water samples below 53.2 ug/l	Zn.		
allsoil samples	Sb, Cd, Se, Ag and Tl.	+/U	J/UJ
all water samples	Sb.		
all soil samples	Al, Fe, Mg, Mn, V and Zn.	+	J
all soil samples	Pb and Ca.	+	J
041R030101, 041W030201, 040MZ30601, 040MZ31401, 041M030201 and 040MZ30801.	Sb.	+/U	J/UJ
040EM00401 and 040MZ30401.	Sb.	+	J
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	EM005
Date:	March 29, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	January 15 - 18, 1996
Number of Samples:	7 Aqueous Sample(s) with 0 MS/MSD(s) 13 Non-aqueous Sample(s) with 1 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Volatiles, Low Concentration Volatiles, Semivolatiles, Low Concentration Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig S. Supra

Eugene M. Watson, Vice President

4-2-96

Date

St. Charles, MO 63304
(314) 936-1335

SDG# EM005

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	VOA		LVOA		SV		LSV		P/P		TAL/CN	
041M170101	SOIL		X				X				X		X
041M170201	SOIL		X				X				X		X
041M170301	SOIL		X				X				X		X
041M19A101	SOIL		X				X				X		X
041M19A201	SOIL		X				X				X		X
041M19B101	SOIL		X				X				X		X
041C490101	SOIL		X				X				X		X
041M490101	SOIL		X				X				X		X
041M490201	SOIL		X				X				X		X
041M490301	SOIL		X				X				X		X
041M63A101	SOIL		X				X				X		X
041M63A201	SOIL		X				X				X		X
041M63A301	SOIL		X				X				X		X
041W04D101	WATER			X				X		X		X	
041W04D401	WATER			X				X		X		X	
041W170101	WATER			X				X		X		X	
041EM00501	WATER			X				X		X		X	
041FM00501	WATER			X				X		X		X	
040TM01501	WATER			X									
041TM01601	WATER			X									
Total Billable Samples (Water/Soil)		0	13	7	0	0	13	5	0	5	13	5	13

VOA = CLP Volatiles
LVOA = CLP Low Concentration Volatiles
SV = CLP Semivolatiles
LSV = CLP Low Concentration Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG #EM005

A validation was performed on the Volatile Data from SDG EM005. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, BU497, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041M63A101 acetone (61.9%)

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria.

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated (UJ).

041M63A301 chlorobenzene-d_5

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLKCZ	bromomethane	3J	15
	Methylene chloride	1J	10
	4-methyl-2-pentanone	5J	25
	2-hexanone	5J	25
VBLKCA	acetone	6J	60
	Bromomethane	3J	15

Method Blank (continued)

Associated blank	Compound	Concentration	Action Level
VBLKBZ	methylene chloride	3J	30

Samples	Compound	Qualification
041C490101 041M170101 041M170201 041M170301 041M490101 041M490201 041M490301	bromomethane	CRQL
041C490101 041M170101 041M170201 041M19B101 041M490101 041M490201 041M63A301	methylene chloride	CRQL
041M170101	4-methyl-2-pentanone	CRQL
041M170101	2-hexanone	CRQL
041M19A101 041M490301	acetone	U
041M19A201	acetone	CRQL

Trip Blank

Associated blank	Compound	Concentration	Action Level
041TM01601	acetone	28	280
041TM01801	methylene chloride	3	30

Samples	Compound	Qualification
041M170201 041M63A101 041M63A201	acetone	CRQL
041M170301 041M19B101 041C490101 041M490201	acetone	U
041M19A101 041M19A201 041M490301 041M63A101 041M63A201	methylene chloride	CRQL

Compound Identification /Quantitation

Reject sample 041M63A301RE, in favor of the initial analysis, due to non compliant internal standard area recoveries.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 10% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M63A101	acetone	+/-	J/UJ
041M63A301	All associated analytes chlorobenzene-d_5	+/-	J/UJ
041C490101 041M170101 041M170201 041M170301 041M490101 041M490201 041M490301	bromomethane	+	CRQL
041C490101 041M170101 041M170201 041M19B101 041M490101 041M490201 041M63A301	methylene chloride	+	CRQL
041M170101	4-methyl-2-pentanone	+	CRQL
041M170101	2-hexanone	+	CRQL
041M19A101 041M490301	acetone	+	U
041M19A201 041M170201 041M63A101 041M63A201	acetone	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M170301	acetone	+	U
041M19B101			
041C490101			
041M490201			
041M19A101	methylene chloride	+	CRQL
041M19A201			
041M490301			
041M63A101			
041M63A201			
041M63A301RE	all analytes	+/-	R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # EM005

A validation was performed on the Volatile Data from SDG EM005. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, EN139, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W04D401DL	acetone 2-butanone 1,2-dibromo-3-chloropropane

The continuing calibration, FN414, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W04D101	acetone (55.3)
041W04D401	2-butanone

The continuing calibration, FN433, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W170101	acetone (55.3) 2-butanone

The continuing calibration, FN571, contained compounds with %Ds that were greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041W170101DL	chloromethane (63.9)

The continuing calibration, FN571, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W170101DL	acetone (65.8) 2-butanone (26.9) 2-hexanone (40.3)

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFL	acetone	3	30
VBLKFJ	acetone	6	60

Samples	Compound	Qualification
041W04D101	acetone	U
041W04D401		
041W170101		

Rinseate Blank

Associated blank	Compound	Conc.	Action Level
041EM00501	acetone	23	230
	2-butanone	2J	20

Samples	Compound	Qualification
041W170101	2-butanone	CRQL

Compound Identification/Quantitation

Specific Finding:

For sample 041W170101 and 041W04D401 reject the E-flagged results in favor of the results from the diluted samples 041W170101DL and 041W04D401DL.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W04D401DL	acetone 2-butanone 1,2-dibromo-3-chloropropane	+/-	J/R
041W04D101 041W04D401	acetone (55.3) 2-butanone	+/-	J/R
041W170101	acetone (55.3) 2-butanone	+/-	J/R
041W170101DL	chloromethane (63.9)	+/-	J/UJ
041W170101DL	acetone (65.8) 2-butanone (26.9) 2-hexanone (40.3)	+/-	J/R
041W04D101 041W04D401 041W170101	acetone	+	U
041W170101	2-butanone	+	CRQL
041W170101 041W04D401	E-Flagged results	+	R

* DL denotes the Form 1 qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EM005

A validation was performed on the Semivolatile Data from SDG EM005. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, DJ559, contained compounds with %Ds greater than 50% an less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M170301	2,4-dinitrophenol (58.2%)
041M170201	4,6-dinitro-2-methylphenol (59.7%)
041C490101	
041M19A101	
041M19A201	
041M63A201	
041M19B101	
041M490101	
041M490201	
041M490301	
041M63A101	

The continuing calibration, JG243, contained compounds with %Ds greater than 50% an less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M170101	4-chloroaniline (58.0%)
041M63A301	

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

Method Blanks

Associated blank	Compound	Concentration	Action Level
SBLKDJ	bis(2-ethylhexyl)phthalate	33J	330
SBLKJK	bis(2-ethylhexyl)phthalate	71J	710

Samples	Compound	Qualification
041C490101	bis(2-ethylhexyl)phthalate	CRQL
041M170301		
041M19A101		
041M19A201		
041M19B101		
041M490201		
041M490301		
041M63A101		
041M63A201		
041M170101		
041M63A301		

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M170301	2,4-dinitrophenol	+/-	J/UJ
041M170201	4,6-dinitro-2-methylphenol		
041C490101			
041M19A101			
041M19A201			
041M63A201			
041M19B101			
041M490101			
041M490201			
041M490301			
041M63A101			
041M170101	4-chloroaniline	+/-	J/UJ
041M63A301			
041C490101	bis(2-ethylhexyl)phthalate	+	CRQL
041M170301			
041M19A101			
041M19A201			
041M19B101			
041M490201			
041M490301			
041M63A101			
041M63A201			
041M170101			
041M63A301			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EM005

A validation was performed on the Semivolatile Data from SDG EM005. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within %D continuing calibration criteria. All RRFs were within calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, DJ601, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041W04D401	hexachlorocyclopentadiene (54.5)
041W04D101	
041W170101	

Method Blanks

Associated blank	Compound	Conc.	Action Level
041EM00501	bis(2-ethylhexyl) phthalate	2J	20

Samples	Compound	Qualification
041W04D401	bis(2-ethylhexyl) phthalate	CRQL
041W170101		

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W04D401 041W04D101 041W170101	hexachlorocyclopentadiene (54.5)	+/-	J/UJ
041W04D401 041W170101	bis(2-ethylhexyl) phthalate	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EM005

A validation was performed on the Pesticide/Aroclor Data from SDG EM005. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
	•	Calibration
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Initial Calibrations

The initial calibrations that were analyzed by the laboratory for these samples were not acceptably linear for all compounds.

Initial Calibrations, Continued

Specific Findings

The initial calibration of 1/20/96 contained a compound with a %RSD greater than 20%. For the samples and the non-compliant compound listed below, all positive results are qualified as estimated, J, and all non-detect results are qualified as estimated, UJ.

All samples	Alpha-BHC (20.6%)

Field Duplicates

The field duplicate pair of samples 041M490101 and 041C490101 exhibited positive results for three (3) compounds. One (1) compound exhibited a non-compliant RPD.

Specific Findings

The field duplicate pair of samples 040MZ21801 and 040NZ21801 exhibited positive results and a non-compliant RPD for one (1) compound. For the non-compliant compound listed below, the positive results are qualified as estimated, J.

041M490101 041C490101	4,4'-DDD (63%)

Analyte Identification/Quantitation

Five (5) samples required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Analyte Identification/Quantitation, Continued

Specific Findings

For the following samples and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

041M19A101	Heptachlor Epoxide
041C490101 041M490101 041M490201	4,4'-DDD
041M63A301	Aroclor 1260 4,4'-DDD

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 20% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
All samples	Alpha-BHC	+/-	J/UJ
041M490101 041C490101	4,4'-DDD	+	J
041M19A101	Heptachlor Epoxide	+	D
041C490101 041M490101 041M490201	4,4'-DDD	+	D
041M63A301	Aroclor 1260 4,4'-DDD	+	D
041M19A101DL 041C490101DL 041M490101DL 041M490201DL 041M63A301DL	ALL OTHERS	+/-	UR
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EM005

A validation was performed on the Metals Data from SDG EM005. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	6.26 mg/kg	no impact
Cadmium	0.23 mg/kg	all soil samples below 1.15 mg/kg
Calcium	3.83 mg/kg	no impact
Iron	2.50 mg/kg	no impact
Magnesium	3.85 mg/kg	no impact

Aluminum	23.9 ug/l	all water samples below 120 ug/l
Cadmium	2.78 ug/l	all water samples below 13.9 ug/l
Manganese	1.05 ug/l	no impact
Sodium	66.2 ug/l	no impact

The field and equipment blank exhibited contamination for the following elements.

Barium	4.0 ug/l	all water non QC samples below 20.0 ug/l

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Antimony	-0.36 mg/kg	all soil samples below 3.6 mg/kg

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

The Matrix Spike recoveries for soils for Antimony (55%) and Selenium (67%) were below the lower control limits (<75% but >30%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041M170201	68
Antimony	041M170301	65
Antimony	041C490101	49
Antimony	041M19A101	84
Antimony	041M19B101	57
Antimony	041M490101	61
Antimony	041M490201	73

Antimony	041M490301	70
Antimony	041M63A201	75
Antimony	041M63A101	68
Antimony	041W04D101	62
Antimony	041W04D401	70
Antimony	041W170101	74

The post digestion spike recovery for GFAA was above the upper control limits. All positive results for the listed samples below are qualified as estimated, "J".

Element	Sample IDs	% recoveries
Antimony	041M63A301	130

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 1.15 mg/kg	Cd.	+	U
all water samples below 120 ug/l	Al.		
all water samples below 13.9 ug/l	Cd.		
allwater samples below 20.0 ug/l	Ba.		
all soil samples below 3.6 mg/kg	Sb.	+/U	J/UJ
all soil samples	Sb and Se.	+/U	J/UJ
014M170201, 70301, 041C490101, 041M19A101, 19B101, 490101, 490201, 490301, 63A201, 63A101, 041W04D101, 04D401 and 170101.	Sb.	+/U	J/UJ
041M63S201.	Sb.	+	J
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	EM0050
Date:	March 12, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	December 6 - 7, 1995
Number of Samples:	7 Aqueous Sample(s) with 0 MS/MSD(s) 13 Non-aqueous Sample(s) with 1 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Low Concentration Volatiles, Volatiles, Low Concentration Semivolatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig H. Swanson

Eugene M. Watson, Vice President

3-25-96

Date

4127 Plaza 94 South · St. Charles, MO 63304
(314) 936-1332 · Fax (314) 936-1335

SDG# EM0050

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	LVOA		VOA		LSV		SV		P/P		TAL/C	
040EM00501	WATER	X				X				X		X	
040FM00501	WATER	X				X				X		X	
041W150101	WATER	X				X				X		X	
041W150201	WATER	X				X				X		X	
041EM00301	WATER	X				X				X		X	
041FM00301	WATER	X				X				X		X	
041TM01001	WATER	X											
040MZ52101	SOIL				X				X		X		X
040MZ52201	SOIL				X				X		X		X
040MZ52301	SOIL				X				X		X		X
040MZ52601	SOIL				X				X		X		X
040MZ52801	SOIL				X				X		X		X
040MZ52901	SOIL				X				X		X		X
040MZ53001	SOIL				X				X		X		X
040NZ53001	SOIL				X				X		X		X
040MZ53201	SOIL				X				X		X		X
041M150101	SOIL				X				X		X		X
041M150201	SOIL				X				X		X		X
041M150301	SOIL				X				X		X		X
041M150401	SOIL				X				X		X		X
Total Billable Samples (Water/Soil)		7	0	0	13	6	0	0	13	6	13	6	13

LVOA = CLP Low Volatiles
VOA = CLP Volatiles
LSV = CLP Low Semivolatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide w/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # EM0050

A validation was performed on the Volatile Data from SDG EM0050. The data was evaluated based on the following parameters.

- * Data Completeness
- * Holding Times
- * GC/MS Tuning
- Calibrations
- Internal Standard Performance
- Blanks
- * Surrogate Recoveries
- * Laboratory Control Samples
- * Field Duplicates
- Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, GD003, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041M150301	2-butanone (64.4%)
040MZ52101	
040MZ52201	
040MZ52301	
040MZ52601	
040MZ52801	

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria.

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated (UJ).

041M150101RE	1,4-difluorobenzene
	chlorobenzene-d_5

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLKGV	methylene chloride	4J	40
	Acetone	5J	50
VBLKBL	methylene chloride	10	100

Samples	Compound	Qualification
040MZ52101	methylene chloride	U
040MZ52201		
040MZ52301		
040MZ52601		
040MZ52801		
041M150101		
041M150301		
040MZ53201		
040MZ52201	acetone	U

Compound Identification /Quantitation

Reject sample 041M150101, in favor of reanalysis, due to non compliant surrogate recoveries.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 10% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M150301 040MZ52101 040MZ52201 040MZ52301 040MZ52601 040MZ52801	2-butanone	+/-	J/UJ
041M150101RE	All associated analytes 1,4-difluorobenzene chlorobenzene-d_5	+/-	J/UJ
040MZ52101 040MZ52201 040MZ52301 040MZ52601 040MZ52801 041M150101 041M150301 040MZ53201	methylene chloride	+	U
040MZ52201	acetone	+	U
041M150101	all analytes	+/-	R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # EM0050

A validation was performed on the Volatile Data from SDG EM0050. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FM737, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W150101 acetone

The continuing calibration, FM881, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W150201 acetone
2-butanone
2-hexanone

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFE	acetone	9	90
VBLKFM	acetone	11	110
	methylene chloride	3	30

Samples	Compound	Qualification
041W150101	acetone	U
041W150201		
041W150201	methylene chloride	U

DATA ASSESSMENT AND NARRATIVE

VOLATILE ANALYSIS

Trip Blanks

Associated blank	Compound	Conc.	Action Level
041TM01001	methylene chloride	4	40
	2-butanone	1J	10

Samples	Compound	Qualification
041W150101	methylene chloride	U
041W150101	2-butanone	CRQL

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W150101	acetone	+/-	J/R
041W150201	acetone 2-butanone 2-hexanone	+/-	J/R
041W150101 041W150201	acetone	+	U
041W150201	methylene chloride	+	U
041W150101	methylene chloride		U
041W150101	2-butanone	+	CRQL

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QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EM0050

A validation was performed on the Semivolatile Data from SDG EM0050. The data was evaluated based on the following parameters.

*	•	Data Completeness
	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Holding Times

The following sample had extractions that exceeded the method criteria of fourteen (14) days from date sampled. Qualifications are required.

Specific Find:

040MZ53201 exceeded holding time by nine (9) days. Qualify all positive results as estimated (J) and non detects as estimated (UJ).

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Specific Finding:

The continuing calibration, AJ074, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

040MZ52201	4,6-dinitro-2-methylphenol (63.2%)
040MZ52901	
040MZ53001	

The continuing calibration, AJ074, contained compounds with RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

040MZ52201	2,4-dinitrophenol (0.034)
040MZ52901	
040MZ53001	

The continuing calibration, AJ105, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

040MZ52801	2,4-dinitrophenol (64.9%)
040MZ52601	
041M150301	

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, IF809, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

040MZ53001	hexachlorocyclopentadiene (57.6%)
040MZ50101	
040MZ52301	
041M150201	
041M150401	

The continuing calibration, IF809, contained compounds with RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

040MZ53001	4-chloroaniline (191.6%)
040MZ50101	
040MZ52301	
041M150201	
041M150401	

The continuing calibration, IF833, contained compounds with RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

040MZ52101	4-chloroaniline (219.6%)

Method Blanks

Associated blank	Compound	Concentration	Action Level
SBLKAR	bis(2ethylhexyl)phthalate	61J	610

Samples	Compound	Qualification
040MZ52201	bis(2ethylhexyl)phthalate	CRQL
040MZ52601		
040MZ52801		
040MZ52901		
040MZ53001		
041M150301		

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ53201	All analytes	+/-	J/UJ
040MZ52201 040MZ52901 040MZ53001	4,6-dinitro-2-methylphenol (63.2%)	+/-	J/UJ
040MZ52201 040MZ52901 040MZ53001	2,4-dinitrophenol (0.034)	+/-	J/R
040MZ52801 040MZ52601 041M150301	2,4-dinitrophenol (64.9%)	+/-	J/UJ
040MZ53001 040MZ50101 040MZ52301 041M150201 041M150401	hexachlorocyclopentadiene (57.6%)	+/-	J/UJ
040MZ53001 040MZ50101 040MZ52301 041M150201 041M150401	4-chloroaniline (191.6%)	+/-	J/R
040MZ52101	4-chloroaniline (219.6%)	+/-	J/R
040MZ52201 040MZ52601 040MZ52801 040MZ52901 040MZ53001 041M150301	bis(2ethylhexyl)phthalate	+	CRQL

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QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OlC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EM0050

A validation was performed on the Semivolatile Data from SDG EM0050. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Method Blanks

Associated blank	Compound	Conc.	Action Level
041FM00301	bis(2-ethylhexyl) phthalate	1J	10

Samples	Compound	Qualification
041W150101	bis(-ethylhexyl)phthalate	U

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W150101	bis(-ethylhexyl)phthalate	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EM0050

A validation was performed on the Pesticide/Aroclor Data from SDG EM0050. The data was evaluated based on the following parameters:

*	•	Data Completeness
	•	Holding Times
*	•	GC Performance
	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Holding Times

The analysis holding times were exceeded for many samples.

Holding Times, Continued

Specific Findings

The following samples exceeded the analysis holding time by three (3) to four (4) days. It is the professional opinion of the data validator that the positive results should be qualified as estimated, J.

040MZ52101
040MZ52201
040MZ52301
040MZ52601
040MZ52901
040MZ53001
040NZ53001
040MZ53201
041M150101
041W150101
041M150101DL
041M150201
041M150201DL
041M150301
041M150301DL
041M150401

Initial Calibrations

The initial calibrations that were analyzed by the laboratory for these samples were not acceptably linear for all compounds.

Specific Findings

The initial calibration of 1/20/96 contained compounds with %RSDs greater than 20%. For the samples and the non-compliant compound listed below, all positive results are qualified as estimated, J, and all non-detect results are qualified as estimated, UJ.

All samples	Alpha-BHC (20.6%)

Surrogate Recoveries

One (1) sample exhibited a non-compliant TCX recovery.

Specific Finding

The sample listed below exhibited a high TCX recovery. The positive results are qualified as estimated, J.

Sample ID	Surrogate	% Recovery
041M150301	TCX-2	385%

Analyte Identification/Quantitation

Three (3) samples required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Specific Findings

For the following samples and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

041M150101	4,4'-DDE
041M150201	4,4'-DDD
041M150301	

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 30% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ52101	ALL	+	J
040MZ52201			
040MZ52301			
040MZ52601			
040MZ52901			
040MZ53001			
040NZ53001			
040MZ53201			
041M150101			
041W150101			
041M150101DL			
041M150201			
041M150201DL			
041M150301			
041M150301DL			
041M150401			
All samples	Alpha-BHC	+/-	J/UJ
041M150301	ALL	+	J
041M150101	4,4'-DDE	+	D
041M150201	4,4'-DDD		
041M150301			
041M150101DL	ALL OTHERS	+/-	UR
041M150201DL			
041M150301DL			
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EM0050

A validation was performed on the Metals Data from SDG EM0050. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
	•	Matrix Duplicates
	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Antimony	0.53 mg/kg	all soil samples below 2.65 mg/kg
Calcium	2.45 mg/kg	no impact
Iron	2.64 mg/kg	no impact
Antimony	2.44 ug/l	no impact

Calcium	11.9 ug/l	no impact
Iron	8.04 ug/l	no impact

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Chromium	-0.86 mg/kg	all soil samples below 8.6 mg/kg
Copper	-0.56 mg/kg	all soil samples below 5.6 mg/kg
Manganese	-0.12 mg/kg	all soil samples below 1.2 mg/kg
Silver	-0.86 mg/kg	all soil samples below 8.6 mg/kg
Sodium	-16.3 mg/kg	no impact
Vanadium	-0.23 mg/kg	all soil samples below 2.3 mg/kg
Arsenic	-2.02 ug/l	no impact

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

The Matrix Spike recovery for soils for Antimony (72%) was were below the lower control limits. All positive and non-detect results are qualified as estimated, "J" or "UJ".

Field and Laboratory Duplicate Analysis

Specific Finding

The duplicate analyses for Calcium and Chromium were outside teh control limits of 35%. All positive results are qualified as estimated, "J". The field duplicate analysis for soils for Calcium was above 50% and will be qualified as estimated, "J".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	040EM00501	70
Antimony	041W150201	41
Antimony	041M150101	58
Antimony	041M150401	40
Antimony	040M152101	68
Antimony	040M155201	48
Antimony	040M152301	73
Antimony	040M152801	77
Antimony	040M152901	55
Antimony	041M153001	48
Antimony	041M153201	64
Antimony	041W150101	21
Antimony	040NZ53001	61

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All soil samples below 2.65 mg/kg	Sb.	+	U
all soil samples below 8.6 mg/kg	Cr.	+/U	J/UJ
all soil samples below 5.6 mg/kg	Cu.		
all soil samples below 1.2 mg/kg	Mn.		
all soil samples below 8.6 mg/kg	Ag.		
all soil samples below 2.3 mg/kg	V.		
all soil samples	Sb.	+/U	J/UJ
all soil samples	Ca and Cr.	+	J
040EM00501, 041W150201, 0401150101, 041M150401, 041M152101, 01M1522201, 041M152301, 041M152801, 041M152901, 040M153001, 040M153201, 041W150101 AND 040NZ53001.	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	EM0060
Date:	March 29, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	January 25 - 26, 1996
Number of Samples:	4 Aqueous Sample(s) with 0 MS/MSD(s) 2 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Volatiles, Low Concentration Volatiles, Semivolatiles, Low Concentration Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig H. Sexton

Eugene M. Watson, Vice President

4-2-96

Date

4127 Plaza 94 South St. Charles, MO 63304
(314) 936-1332 · Fax (314) 936-1335

SDG# EM0060

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	VOA		LVOA		SV		LSV		P/P		TAL/CN	
041M790101	SOIL		X			X					X		X
041M790301	SOIL		X			X					X		X
041EM00601	WATER			X				X		X		X	
040FM00601	WATER			X				X		X		X	
041TM02201	WATER			X									
041TM02301	WATER			X									
Total Billable Samples	(Water/Soil)	0	2	4	0	2	0	2	0	2	2	2	2

VOA = CLP Volatiles
LVOA = CLP Low Concentration Volatiles
SV = CLP Semivolatiles
LSV = CLP Low Concentration Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # EM0060

A validation was performed on the Volatile Data from SDG EM0060. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

Trip Blank

Associated blank	Compound	Concentration	Action Level
041TM02301	acetone	21	210

Samples	Compound	Qualification
041M790101	acetone	U

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 10% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M790101	acetone	+	U

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QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

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SDG # EM0060

A validation was performed on the Volatile Data from SDG EM0060. The data was evaluated based on the following parameters.

* • Data Completeness
* • Holding Times
* • GC/MS Tuning
* • Calibrations
* • Internal Standard Performance
* • Blanks
* • Surrogate Recoveries
* • Laboratory Control Samples
* • Field Duplicates
* • Compound Identification /Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL

No qualifications are required.

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EM0060

A validation was performed on the Semivolatile Data from SDG EM0060. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, IG222, contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041M790101	4-chloroaniline (230.1%)
041M790301	

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

Method Blanks

Associated blank	Compound	Concentration	Action Level
SBLKIA	bis(2-ethylhexyl)phthalate	53J	530

Samples	Compound	Qualification
041M790101	bis(2-ethylhexyl)phthalate	CRQL

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

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J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M790101 041M790301	4-chloroaniline	+/-	J/R
041M790101	bis(2-ethylhexyl)phthalate	CRQL	

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EM0060

A validation was performed on the Semivolatile Data from SDG EM0060. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL

No qualifications are required.

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QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
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DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EM0060

A validation was performed on the Pesticide/Aroclor Data from SDG EM0060. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Analyte Identification/Quantitation

One (1) sample required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Analyte Identification/Quantitation, Continued

Specific Findings

For the following sample and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

041M790101	Alpha Chlordane
	4,4'-DDD

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 20% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

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J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M790101	Alpha Chlordane 4,4'-DDD	+	D
041M790101DL	ALL OTHERS	+/-	UR
ALL	ALL P >25%	+	J

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QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EM0060

A validation was performed on the Metals Data from SDG EM0060. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
*	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	9.38 mg/kg	no impact
Calcium	26.8 mg/kg	all soil samples below 134 mg/kg
Iron	6.19 mg/kg	no impact
Magnesium	2.35 mg/kg	no impact
Manganese	0.13 mg/kg	no impact

Sodium	11.5 mg/kg	all soil samples below 57.5 mg/kg
Zinc	1.05 mg/kg	all soil samples below 5.25 mg/kg

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Arsenic	-0.25 mg/kg	all soil samples below 2.5 mg/kg

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041M790301	76

The post digestion spike recovery for GFAA was above the upper control limits. All positive results for the listed samples below are qualified as estimated, "J".

Element	Sample IDs	% recoveries
Antimony	041MZ90101	146

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 134 mg/kg	Ca.	+	U
all soil samples below 57.5 mg/kg	Na.		
all soil samples below 5.25 mg/kg	Zn.		
all soil samples below 2.5 mg/kg	As.	+/U	J/UJ
041M790301.	Sb.	+/U	J/UJ
041M790101.	Sb.	+	J
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	EMD060
Date:	March 22, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	December 13 - 15, 1995
Number of Samples:	9 Aqueous Sample(s) with 0 MS/MSD(s) 12 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Volatiles, Low Concentration Volatiles, Semivolatiles, Low Concentration Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig M. Scurfon
Eugene M. Watson, Vice President

3-25-96
Date

4127 Plaza 94 South · St. Charles, MO 63304
(314) 936-1332 · Fax (314) 936-1335

SDG# EMD060

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	VOA		LVOA		SV		LSV		P/P		TAL/CN	
040EM00601	WATER	X				X				X		X	
040FM00601	WATER	X				X				X		X	
040MZ24101	SOIL		X				X				X		X
040MZ24201	SOIL		X				X				X		X
040MZ274401	SOIL		X				X				X		X
040MZ24501	SOIL		X				X				X		X
040MZ24601	SOIL		X				X				X		X
040MZ24701	SOIL		X				X				X		X
040MZ24801	SOIL		X				X				X		X
040MZ24901	SOIL		X				X				X		X
041M18A101	SOIL		X				X				X		X
041M18A201	SOIL		X				X				X		X
041M18A301	SOIL		X				X				X		X
041M18B101	SOIL		X				X				X		X
040TM02601	WATER			X									
041W18A201	WATER			X				X		X		X	
041W18B101	WATER			X				X		X		X	
041EM00401	WATER			X				X		X		X	
041FM00401	WATER			X				X		X		X	
041TM01301	WATER			X									
041TM01401	WATER			X									
Total Billable Samples (Water/Soil)		2	12	7	0	2	12	4	0	6	12	6	12

VOA = CLP Volatiles
LVOA = CLP Low Concentrtion Volatiles
SV = CLP Semivolatiles
LSV = CLP Low Concentration Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/cyanide

DATA ASSESSMENT NARRATIVE

VOLATILE ORGANICS

General

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SDG # EMD060

A validation was performed on the Volatile Data from SDG EMD060. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibration
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
	•	Internal Standard Performance
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Continuing Calibrations

The continuing calibrations that were analyzed by the laboratory for these samples were not acceptable for all compound %Ds. The average RRF requirements were met for all continuing calibration standards.

Continuing Calibrations, continued
Specific Findings

The continuing calibration standard, BU156, contained compounds with %Ds greater than 25% but less than 50%. For the samples and noncompliant compounds listed below, the positive results are qualified as estimated, J.

041M18A301 041M18B101	acetone (25.7%)
041M18A301 041M18B101	2-butanone (33.0%)
040MZ24201 040MZ24801	methylene chloride (33.4%)

Field QC Blanks

Contamination for methylene chloride was detected in the field QC blanks. The end-user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria.

	040EM00601	**040FM00601**
methylene chloride	58 μg/L	56 μg/L

Field QC Blanks, continued

	Samples	Contaminant	Action Levels	Qualification
040EM00601	040MZ24201 040MZ24501 040MZ24701RE 040MZ24801 040MZ24901	methylene chloride	580 μg/Kg	CRQL
	041M18A101RE			U

Internal Standard Areas

Three (3) samples exhibited noncompliant IS EICP area recoveries.

Specific Findings

The following samples exhibited noncompliant internal standard area recoveries. All associated positive and non-detect results are qualified as estimated, J/UJ.

040MZ24701 041M18A301 040MZ24701RE 041M18A101RE	chlorobenzene-d_5
040M18A101	1,4-difluorobenzene chlorobenzene-d_5
041M18A301RE	All internal standards

Compound Quantitation

Specific Finding

The samples noted below are rejected, UR, in favor of the initial or RE analysis of the sample. The reviewer chose the analysis exhibiting the best IS area recoveries.

041M18A101
040MZ24701RE
041M18A301RE

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 5% of data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

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R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M18A301 041M18B101	acetone	+	J
041M18A301 041M18B101	2-butanone	+	J
040MZ24201 040MZ24801	methylene chloride	+	J
040MZ24201 040MZ24501 040MZ24701RE 040MZ24801 040MZ24901	methylene chloride	+	CRQL
041M18A101RE	methylene chloride	+	U
040MZ24701 041M18A301 040MZ24701RE 041M18A101RE	All associated with chlorobenzene-d.	+/-	J/UJ
040M18A101	All associated with 1,4-difluorobenzene chlorobenzene-d.	+/-	J/UJ
041M18A301RE	All associated with All internal standards	+/-	J/UJ

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M18A101	ALL	+/-	UR
040MZ24701RE			
041M18A301RE			

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QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # EMD060

A validation was performed on the Volatile Data from SDG EMD060. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FN006, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W18A201	acetone
041W18B101	2-butanone

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFQ	acetone	8	80

Samples	Compound	Qualification
041W18A201	acetone	U
041W18B101		

Trip Blanks

Associated blank	Compound	Conc.	Action Level
041TM01401	methylene chloride	5B	50

Samples	Compound	Qualification
041W18A201	methylene chloride	CRQL

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W18A201 041W18B101	acetone 2-butanone	+/-	J/R
041W18A201 041W18B101	acetone	+	U
041W18A201	methylene chloride	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EMD060

A validation was performed on the Semivolatile Data from SDG EMD060. The data was evaluated based on the following parameters.

*	•	Data Completeness
	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Holding Times

The following samples had extractions that exceeded the method criteria of fourteen (14) days from date sampled. Qualifications are required

Specific Find:

040MZ24401 and 040MZ24501 exceeded holding time by twenty-three (23) days. Qualify all positive results as estimated (J) and non detects as rejected (R).

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Specific Finding:

The continuing calibration, AJ317, contained compounds with %Ds greater than 50% an less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

040MZ24501	2,4-dinitrophenol (61.6%)

The continuing calibration, DJ491, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

040MZ24701	3-nitroaniline (58.3%)
	2,4-dinitrophenol (59.7%)

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria.

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated (UJ).

041M18A201	perylene-d_{12}

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

Method Blanks

Associated blank	Compound	Concentration	Action Level
SBLKDZ	bis(2ethylhexyl)phthalate	61J	610
SBLKAQ	bis(2ethylhexyl)phthalate	86J	860

Samples	Compound	Qualification
040MZ24101	bis(2ethylhexyl)phthalate	CRQL
040MZ24601		
040MZ24701		
040MZ24801		
040MZ24901		
041M18A101		
041M18A201		
041M18A301		
041M18B101		
040MZ24401		
040MZ24501		

Rinseate Blanks

Associated blank	Compound	Concentration	Action Level
040EM00601	diethylphthalate	3J	30

Samples	Compound	Qualification
041M18A101	diethylphthalate	CRQL

Compound Identification /Quantitation

Specific Finding:

Reject sample 041M18A201RE, in favor of the initial analysis, due to non compliant internal standard area recoveries.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ24401 040MZ24501	all analytes	+/-	J/R
040MZ24501	2,4-dinitrophenol	+/-	J/UJ
040MZ24701	3-nitroaniline 2,4-dinitrophenol	+/-	J/UJ
041M18A201	All associated analytes perylene-d_{12}	+/-	J/UJ
040MZ24101 040MZ24601 040MZ24701 040MZ24801 040MZ24901 041M18A101 041M18A201 041M18A301 041M18B101 040MZ24401 040MZ24501	bis(2ethylhexyl)phthalate	+	CRQL
041M18A101	diethylphthalate	+	CRQL
041M18A201RE	all analytes	+/-	R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EMD060

A validation was performed on the Semivolatile Data from SDG EMD060. The data was evaluated based on the following parameters.

- * Data Completeness
- * Holding Times
- * GC/MS Tuning
- * Calibrations
- * Internal Standard Performance
- Blanks
- * Surrogate Recoveries
- * Matrix Spike/Matrix Spike Duplicate
- * Field Duplicates
- * Compound Identification /Quantitation

* - All criteria were met for this parameter

Field Blanks

Associated blank	Compound	Conc.	Action Level
041FM00401	bis(2-ethylhexyl) phthalate	9J	90

Samples	Compound	Qualification
041W18A201	bis(2-ethylhexyl) phthalate	CRQL

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W18A201	bis(2-ethylhexyl) phthalate	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EMD060

A validation was performed on the Pesticide/Aroclor Data from SDG EMD060. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Initial Calibrations

The initial calibrations that were analyzed by the laboratory for these samples were not acceptably linear for all compounds.

Initial Calibrations, Continued

Specific Findings

The initial calibration of 1/20/96 contained compounds with %RSDs greater than 20%. For the samples and the non-compliant compound listed below, all positive results are qualified as estimated, J, and all non-detect results are qualified as estimated, UJ.

040MZ24201	Alpha-BHC (20.6%)
040MZ24601	
040MZ24901	
040MZ24801	
041M18A301	
040MZ24501	
040MZ24101	
040MZ24401	
040MZ24701	
041M18A201	
041M18B101	
041M18A101DL	
041M18A201DL	
041M18A101	
041M18B101DL	

Surrogate Recoveries

Several samples exhibited non-compliant TCX and/or DCB recoveries.

Specific Finding

One (1) sample exhibited a high TCX recovery. For the samples listed below, the positive results are qualified as estimated, J.

Sample ID	Surrogate	% Recovery
040MZ24101	TCX-2	170%

Surrogate Recoveries, Continued

Specific Finding, Continued

Three (3) samples exhibited low TCX or DCB recoveries. For the samples listed below, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

Sample ID	Surrogate	% Recovery
040MZ24401	TCX-1	14%
040EM00601	DCB-1	25%
041FM00401	TCX-1	29%

Two (2) samples exhibited TCX recoveries below 10%. For the samples listed below, the positive results are qualified as estimated, J, and the non-detect results are rejected, R.

Sample ID	Surrogate	% Recovery
041EM00401	TCX-1	3%
	TCX-2	4%
040MZ24201	TCX-1	9%
	TCX-2	25%
	DCB-1	21%
	DCB-2	17%

Analyte Identification/Quantitation

Three (3) samples required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Analyte Identification/Quantitations, Continued

Specific Findings

For the following samples and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

041M18A101	4,4'-DDD
041M18A201	4,4'-DDE
	4,4'-DDT
041M18B101	4,4'-DDT

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 30% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ24201	Alpha-BHC	+/-	J/UJ
040MZ24601			
040MZ24901			
040MZ24801			
041M18A301			
040MZ24501			
040MZ24101			
040MZ24401			
040MZ24701			
041M18A201			
041M18B101			
041M18A101DL			
041M18A201DL			
041M18A101			
041M18B101DL			
040MZ24101	ALL	+	J
040MZ24401	ALL	+/-	J/UJ
040EM00601			
041FM00401			
041EM00401	ALL	+/-	J/R
040MZ24201			
041M18A101	4,4'-DDD	+	D
041M18A201	4,4'-DDE		
	4,4'-DDT		
041M18B101	4,4'-DDT	+	D
041M18A101DL	ALL OTHERS	+/-	UR
041M18A201DL			
041M18B101DL			
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EMD060

A validation was performed on the Metals Data from SDG EMD060. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	10.1 mg/kg	no impact
Barium	0.21 mg/kg	all soil samples below 1.05 mg/kg
Calcium	14.6 mg/kg	no impact
Iron	5.74 mg/kg	no impact
Lead	0.48 mg/kg	all soil samples below 2.4 mg/kg

Magnesium	4.11 mg/kg	no impact
Potassium	15.4 mg/kg	all soil samples below 77.0 mg/kg
Silver	0.45 mg/kg	no impact
Sodium	6.48 mg/kg	no impact
Zinc	0.82 mg/kg	all soil samples below 4.1 mg/kg
Calcium	117.0 ug/l	no impact
Iron	13.7 ug/l	no impact
Sodium	118.0 ug/l	no impact

The field and equipment blank exhibited contamination for the following elements.

Arsenic	2.1 ug/l	all water non QC samples below 10.5 ug/l
Barium	4.8 ug/l	all water non QC samples below 24.0 ug/l

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Thallium	-0.35 mg/kg	all soil samples below 3.5 mg/kg
Antimony	-2.2 ug/l	all water non QC samples below 22.0 ug/l

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

The Matrix Spike recovery for soils for Antimony (45%) was below the lower control limits (<75% but >30%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

The Matrix Spike recovery for Mercury (172%) was abvoe the upper control limits (>125%). All positive results are qualified as estimated, "J".

Laboratory Duplicate Analysis

Specific Finding

The duplicate analysis for Mercury was less than 2 times the CRDL. No qualification is necessary.

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041M18B101	77
Antimony	041W18A301	52
Antimony	040MZ24101	76
Antimony	040MZ24201	56
Antimony	040MZ24401	54
Antimony	040MZ24801	60
Antimony	040MZ24901	63
Antimony	041M18A101	45
Antimony	040MZ24601	78
Antimony	041M18A201	80
Antimony	041W18B101	41
Antimony	041W18A201	42

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 1.05 mg/kg	Ba.	+	U
all soil samples below 2.4 mg/kg	Pb.		
all soil samples below 77.0 mg/kg	K.		
all soil samples below 4.1 mg/kg	Zn.		
all water samples below 10.5 ug/l	As.		
all water samples below 24.0 ug/l	Ba.		
all soil samples below 3.5 mg/kg	Tl.	+/U	J/UJ
all water sdamples below 22.0 ug/l	Sb.		
all soil samples	Sb.	+/U	J/UJ
all soil samples	Hg.	+	J
041M18B101, 041M18A301, 040MZ24101, 040MZ24201, 040MZ24401, 040MZ24801, 040MZ24901, 041M18A101, 040MZ24601, 041M18A201, 041W18B101 AND 041W18A201.	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	EW0010
Date:	March 12, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	December 7 - 11, 1995
Number of Samples:	6 Aqueous Sample(s) with 0 MS/MSD(s) 8 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Low Concentration Volatiles, Volatiles, Low Concentration Semivolatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Eugene N. Watson, Vice President

3-13-96
Date

4107 Plaza 44 South St. Charles MO 63304
(314) 936-1335 Fax (314) 936-1335

SDG# EW0010

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	LVOA		VOA		LSV		SV		P/P		TAL/C	
040TM02301	WATER	X											
040TM02401	WATER	X											
041W160101	WATER	X				X				X		X	
041W160201	WATER	X				X				X		X	
041TM01101	WATER	X											
041EW00101	WATER	X											
040M251501	SOIL				X				X		X		X
040MZ51701	SOIL				X				X		X		X
040MZ51801	SOIL				X				X		X		X
040MZ51901	SOIL				X				X		X		X
040MZ52001	SOIL				X				X		X		X
041M160101	SOIL				X				X		X		X
041M160201	SOIL				X				X		X		X
041M160301	SOIL				X				X		X		X
Total Billable Samples	(Water/Soil)	6	0	0	8	2	0	0	8	2	8	2	8

LVOA = CLP Low Volatiles
VOA = CLP Volatiles
LSV = CLP Low Semivolatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide w/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # EM0010

A validation was performed on the Volatile Data from SDG EM0010. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FM774, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W160101	acetone
041W160201	2-butanone
	2-hexanone

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFH	acetone	7	70
	methylene chloride	2	20

Samples	Compound	Qualification
041W160101 041W160201	acetone	U
041W160101 041W160201	methylene chloride	U

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W160101 041W160201	acetone 2-butanone 2-hexanone	+/-	J/R
041W160101 041W160201	acetone	+	U
041W160101 041W160201	methylene chloride	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. .

SDG # EW0010

A validation was performed on the Volatile Data from SDG EW0010. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within %D continuing calibration criteria. All RRFs were within calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, BT957, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M160101	acetone (72.0%)
040MZ51501	
040MZ51701	
040MZ51901	
040MZ52001	

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLKBN	Methylene chloride	2J	20

Samples	Compound	Qualification
040MZ51501	methylene chloride	CRQL
040MZ51701		
040MZ51901		
040MZ52001		
041M160101		

Trip Blank

Associated blank	Compound	Concentration	Action Level
040TM02401	acetone	25B	250
041TM01101	methlyene chloride	4B	40
	Acetone	11B	110

Trip Blank (continued)

Samples	Compound	Qualification
040MZ51801 041M160201 041M160301	acetone	U
041M160201	methlyene chloride	U

System Performance and Overall Assessment

The overall system performance was fair. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M160101 040MZ51501 040MZ51701 040MZ51901 040MZ52001	acetone (72.0%)	+/-	J/UJ
040MZ51501 040MZ51701 040MZ51901 040MZ52001 041M160101	methylene chloride	+	CRQL
040MZ51801 041M160201 041M160301	acetone	+	U
041M160201	methlyene chloride	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OlC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EM0010

A validation was performed on the Semivolatile Data from SDG EM0010. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within %D continuing calibration criteria. All RRFs were within calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, DJ174, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041W160201	4-chloroaniline (51.9)
	butylbenzylphthalate (50.6)
	3,3'-dichlorobenzidine (52.9)

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W160201	4-chloroaniline (51.9) butylbenzylphthalate (50.6) 3,3'-dichlorobenzidine (52.9)	+/-	J/UJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # EW0010

A validation was performed on the Semivolatile Data from SDG EW0010. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, IF833, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041MZ160101	hexachlorocyclopentadiene (63.6%)
041MZ160201	
041MZ160301	
040MZ51501	

The continuing calibration, IF833, contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041MZ160101	4-chloroaniline (219.6%)
041MZ160201	
041MZ160301	
040MZ51501	

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041MZ160101 041MZ160201 041MZ160301 040MZ51501	hexachlorocyclopentadiene (63.6%)	+/-	J/UJ
041MZ160101 041MZ160201 041MZ160301 040MZ51501	4-chloroaniline (219.6%)	+/-	J/R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EM0010

A validation was performed on the Pesticide/Aroclor Data from SDG EM0010. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Surrogate Recoveries

Six (6) samples exhibited non-compliant TCX recoveries.

Surrogate Recoveries, Continued

Specific Finding

The samples listed below exhibited high TCX recoveries. The positive results are qualified as estimated, J.

Sample ID	Surrogate	% Recovery
040MZ51501	TCX-2	163%
040MZ51701	TCX-2	246%
040MZ51801	TCX-2	160%
040MZ52001	TCX-2	176%
041M160101	TCX-2	255%
041M160201	TCX-2	298%

Analyte Identification/Quantitation

Several samples exhibited column quantitation %Ds greater than 25%.

Specific Findings

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 30% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ51501	ALL	+	J
040MZ51701			
040MZ51801			
040MZ52001			
041M160101			
041M160201			
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # EW0010

A validation was performed on the Metals Data from SDG EW0010. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	9.97 mg/kg	no impact
Barium	0.13 mg/kg	all soils samples below 0.65 mg/kg
Calcium	7.31 mg/kg	no impact
Iron	22.5 mg/kg	all soil samples below 112.5 mg/kg
Lead	0.18 mg/kg	all soil samples below 0.90 mg/kg

Aluminum	35.2 ug/l	all water samples below 176 ug/l
Calcium	96.5 ug/l	no impact
Iron	16.9 ug/l	no impact
Lead	1.37 ug/l	no impact
Sodium	138 ug/l	no impact

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Antimony	-0.60 mg/kg	all soil samples below 6.0 mg/kg
Antimony	-3.58 ug/l	all water samples below 35.8 ug/l
Potassium	-113 ug/l	no impact

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

The Matrix Spike recovery for soils for Antimony (27%) was below 30%. All non-detect results are rejected and all positive results are qualified as estimated, "J".

Laboratory Duplicate Analysis

Specific Finding

The RPD for Iron was below 35%. No qualification is required.

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041M160201	40
Antimony	041M160301	69

Antimony	041M151901	40
Antimony	041M151701	67
Antimony	041M151801	67
Antimony	041M152001	70
Antimony	041M160101	57

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All soil samples below 0.65 mg/kg	Ba.	+	U
all soil samples below 112 mg/kg	Fe.		
all soil samples below 0.90 mg/kg	Pb.		
all water samples below 176 ug/l	Al.		
all soil samples below 6.0 mg/kg	Sb.	+/U	J/UJ
all water samples below 35.8 ug/l	Sb.		
all soil samples	Sb.	+	J
		U	R
04QM160201, 041M160301, 041M151901, 041M151701, 041M151801, 041M152001 AND 041M160101	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	M00901
Date:	March 29, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	January 19 - 22, 1996
Number of Samples:	14 Aqueous Sample(s) with 1 MS/MSD(s) 5 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Volatiles, Low Concentration Volatiles, Semivolatiles, Low Concentration Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Swafford

Eugene M. Watson, Vice President

4-2-96

Date

4127 Plaza 94 South St Charles, MO 63304
(314) 936-1332 Fax (314) 936-1335

SDG# M00901

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	VOA		LVOA		SV		LSV		P/P		TAL/CN	
RABM000101	SOIL		X				X				X		X
RABM000201	SOIL		X				X				X		X
RABM000301	SOIL		X				X				X		X
041M480101	SOIL		X				X				X		X
041N480101	SOIL		X				X				X		X
040EM00901	WATER			X		X				X		X	
040FM00901	WATER			X		X				X		X	
040TM03501	WATER			X									
RABW000101	WATER			X				X		X		X	
RABW000201	WATER			X				X		X		X	
RABW000301	WATER			X				X		X		X	
041W480101	WATER			X				X		X		X	
041R480101	WATER			X				X		X		X	
041W490301	WATER			X				X		X		X	
041TM01901	WATER			X									
041WW10101	WATER			X				X		X		X	
041WW10201	WATER			X				X		X		X	
041WW10301	WATER			X				X		X		X	
041W490101	WATER			X				X		X		X	
Total Billable Samples	(Water/Soil)	0	5	14	0	2	5	10	0	12	5	12	5

VOA = CLP Volatiles
LVOA = CLP Low Concentration Volatiles
SV = CLP Semivolatiles
LSV = CLP Low Concentration Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # M00901

A validation was performed on the Volatile Data from SDG M00901. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLKCB	acetone	4J	40
	Methylene chloride	2J	20

Samples	Compound	Qualification
RABM000101 RABM000201 RABM000301	methylene chloride	CRQL
RABM000201	acetone	U

Trip Blank

Associated blank	Compound	Concentration	Action Level
040TM03501	acetone	59	590
	Methylene chloride	3	30

Samples	Compound	Qualification
041M480101 041N480101	acetone	U
041N480101	methylene chloride	CRQL

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 10% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
RABM000101 RABM000201 RABM000301	methylene chloride	+	CRQL
RABM000201 041M480101 041N480101	acetone	+	U
041N480101	methylene chloride	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # M00901

A validation was performed on the Volatile Data from SDG M00901. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, EN139, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

RABW000201	acetone
RABW000301	2-butanone
	1,2-dibromo-3-chloropropane

The continuing calibration, FN531, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

RABW000101	acetone
	2-butanone

The continuing calibration, FN571, contained compounds with %Ds that were greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041W490101	chloromethane (63.9)
041W490301	
041WW10101	
041WW10201	

The continuing calibration, FN571, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W490101	acetone (65.8)
041W490301	2-butanone (26.9)
041WW10101	2-hexanone (40.3)
041WW10201	

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FN591, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041WW10201DL	acetone (63.2)
041WW10301	2-butanone

The continuing calibration, FN610, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W480101	acetone (63.2)
2-butanone	

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFQ	acetone	6	60
VBLKFU	acetone	6	6

Samples	Compound	Qualification
RABW000101	acetone	U
041W480101		

Trip Blanks

Associated blank	Compound	Conc.	Action Level
040TM03501	methylene chloride	3	30
	acetone	59	590

Samples	Compound	Qualification
RABW000101	methylene chloride	U
RABW000201		
RABW000301		

Trip Blanks

Associated blank	Compound	Conc.	Action Level
040TM03501	methylene chloride	3	30
	acetone	59	590
041TM01901	methylene chloride	1	10
	acetone	72	720

Samples	Compound	Qualification
041W480101	methylene chloride	U
041W490101		
041W490301		
041WW10101		
041WW10201		
041WW10201DL		
RABW000201	acetone	U
RABW000301		
041W490301		
041WW10201		
041WW10201DL		
041WW10301		

Compound Identification/Quantitation

Specific Finding:

For sample 041WW10201, reject the E-flagged results in favor of the results from the diluted samples 041WW10201DL.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
RABW000201 RABW000301	acetone 2-butanone 1,2-dibromo-3-chloropropane	+/-	J/R
RABW000101	acetone 2-butanone	+/-	J/R
041W490101 041W490301 041WW10101 041WW10201	chloromethane (63.9)	+/-	J/UJ
041W490101 041W490301 041WW10101 041WW10201	acetone (65.8) 2-butanone (26.9) 2-hexanone (40.3)	+/-	J/R
041WW10201DL 041WW10301	acetone (63.2) 2-butanone	+/-	J/R
041W480101	acetone (63.2) 2-butanone	+/-	J/R
RABW000101 041W480101	acetone	+	U
RABW000101 RABW000201 RABW000301	methylene chloride	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W480101	methylene chloride	+	U
041W490101			
041W490301			
041WW10101			
041WW10201			
041WW10201DL			
RABW000201	acetone	+	U
RABW000301			
041W490301			
041WW10201			
041WW10201DL			
041WW10301			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # M00901

A validation was performed on the Semivolatile Data from SDG M00901. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, DJ674, contained compounds with %Ds greater than 50% an less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

RABM000101	2,4-dinitrophenol (74.6%)
041M480101	
041N480101	
RABM000201	

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
RABM000101	2,4-dinitrophenol	+/-	J/UJ
041M480101			
041N480101			
RABM000201			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # M00901

A validation was performed on the Semivolatile Data from SDG M00901, the sample data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within %D continuing calibration criteria. All RRFs were within calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, DJ602, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041WW10101	hexachlorocyclopentadiene (54.5)
041W490101	

The continuing calibration, DJ715, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

RABW000201	hexachlorocyclopentadiene (60.8)
RABW000301	
041W480101	
RABW000101	
041WW10301	
041W490301	
041WW10201	

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041WW10101 041W490101	hexachlorocyclopentadiene (54.5)	+/-	J/UJ
RABW000201 RABW000301 041W480101 RABW000101 041WW10301 041W490301 041WW10201	hexachlorocyclopentadiene (60.8)	+/-	J/UJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # M00901

A validation was performed on the Pesticide/Aroclor Data from SDG M00901. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Surrogate Recoveries

One (1) sample exhibited a non-compliant DCB recovery.

Surrogate Recoveries, Continued

Specific Finding

The sample listed below exhibited a low DCB recovery. The positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

Sample ID	Surrogate	% Recovery
041WW10201	DCB-2	29%

Field Duplicates

The field duplicate pair of samples 41M480101 and 41N480101 exhibited positive results for several compounds. Three (3) compounds exhibited non-compliant RPDs.

Specific Findings

The field duplicate pair of samples 41M480101 and 41N480101 exhibited positive results and non-compliant RPDs for three (3) compounds. For the non-compliant compounds listed below, the positive results are qualified as estimated, J.

041M480101	4,4'-DDE (61%)
041N480101	4,4'-DDD (60%)
	4,4'-DDT (53%)

Analyte Identification/Quantitation

Four (4) samples required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Analyte Identification/Quantitation, Continued

Specific Findings

For the following samples and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

RABM000101	4,4'-DDD
	4,4'-DDT
RABM000201	4,4'-DDE
041M480101	4,4'-DDD
041N480101	

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 20% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041WW10201	ALL	+/-	J/UJ
041M480101 041N480101	4,4'-DDE 4,4'-DDD 4,4'-DDT	+	J
RABM000101	4,4'-DDD 4,4'-DDT	+	D
RABM000201 041M480101 041N480101	4,4'-DDE 4,4'-DDD	+	D
RABM000101DL RABM000201DL 041M480101DL 041N480101DL	ALL OTHERS	+/-	UR
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # M00901

A validation was performed on the Metals Data from SDG M00901. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
*	•	Matrix Spike Recovery
	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	14.2 mg/kg	no impact
Calcium	3.01 mg/kg	no impact
Lead	0.28 mg/kg	all soil samples below 1.4 mg/kg
Sodium	71.4 mg/kg	all soil samples below 357 mg/kg
Zinc	0.95 mg/kg	all soil samples below 4.75 mg/kg

Aluminum	21.4 ug/l	no impact
Arsenic	3.28 ug/l	all water samples below 16.4 ug/l
Calcium	26.1 ug/l	no impact
Magnesium	22.7 ug/l	no impact
Sodium	889 ug/l	all water samples below 4445 ug/l

The field and equipment blank exhibited contamination for the following elements.

Aluminum	315 ug/l	all water samples below 1575 ug/l
Arsenic	3.9 ug/l	all water samples below 19.5 ug/l
Barium	5.1 ug/l	all water samples below 25.5 ug/l
Calcium	163 ug/l	no impact
Mercury	0.18 mg/kg	all water samples below 0.9 ug/l
Sodium	949 ug/l	all water samples below 4745 ug/l
Zinc	42.7 ug/l	all water samples below 214 ug/l

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Thallium	0.5 mg/kg	all soil samples below 5.0 mg/kg
Cobalt	-2.23 ug/l	all water samples below 23.3 ug/l

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Duplicate Analysis

Specific Finding

The Duplicate analysis for waters for Aluminum was outside the control limits (>20%). All positive results are qualified as estimated, "J".

Serial Dilution

Specific Finding

The Serial Dilution for waters for Calcium and Magnesium were outside the control limits (10%). All positive results are qualified as estimated, "J".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041WW10101	79
Antimony	041WW10301	69
Antimony	RABM000101	67
Antimony	RABM000301	77
Antimony	041M480101	68
Antimony	RABW000301	54
Antimony	041W480101	64

The post digestion spike recovery for GFAA was above the upper control limits. All positive results for the listed samples below are qualified as estimated, "J".

Element	Sample IDs	% recoveries
Antimony	041N480101	116

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 1.4 mg/kg	Pb.	+	U
all soil samples below 357 mg/kg	Na.		
all soil samples below 4.75 mg/kg	Zn.		
all water samples below 16.4 ug/l	As.		
all water samples below 4445 ug/l	Na.		
all water samples below 1575 ug/l	Al.		
all water samples below 19.5 ug/l	As.		
all water samples below 25.5 ug/l	Ba.		
all water samples below 0.9 ug/l	Hg.		
all water samples below 4745 ug/l	Na.		
all water samples below 214 ug/l	Zn.		
all water samples	Al.	+	J
all water samples	Ca and Mg.	+	J
041WW10101, WW10301, RABM000101, 301, 041M480101, RABW000301 AND 041W480101.	Sb.	+/U	J/UJ
041N480101.	Sb.	+	J
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	M06010
Date:	February 14, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	NAS Pensacola; Site 41
Date Sampled:	November 15, 1995
Number of Samples:	1 Aqueous Sample(s) with 0 MS/MSD(s) 19 Non-aqueous Sample(s) with 2 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Volatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Searson

Eugene M. Watson, Vice President

3-7-96

Date

6716 Mexico Road St. Peters, MO 63376
(314) 928-9533 (314) 278-1828 · Fax (314) 278-2709

SDG# M06010

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	VOA		SV		P/P		TAL/C	
041M060101	SOIL		X		X		X		X
041M060201	SOIL		X		X		X		X
041M060301	SOIL		X		X		X		X
041M060401	SOIL		X		X		X		X
041N060401	SOIL		X		X		X		X
041M250101	SOIL		X		X		X		X
041M250201	SOIL		X		X		X		X
041M250301	SOIL		X		X		X		X
041N250301	SOIL		X		X		X		X
041M270101	SOIL		X		X		X		X
041M270201	SOIL		X		X		X		X
041M640201	SOIL		X		X		X		X
041M640301	SOIL		X		X		X		X
041M640501	SOIL		X		X		X		X
041M640601	SOIL		X		X		X		X
041M640701	SOIL		X		X		X		X
041M640901	SOIL		X		X		X		X
041M641201	SOIL		X		X		X		X
041M641501	SOIL		X		X		X		X
041TM00101	WATER	X							
Total Billable Samples (Water/Soil)		1	19	0	19	0	19	0	19

VOA = CLP Volatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and are based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.8 Method; the National Functional Guidelines for Organic Data Validation, June 1991, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # M06010

A validation was performed on the Volatile Data from SDG MO6010. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibration
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
	•	Internal Standard Performance
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Continuing Calibrations

The continuing calibrations that were analyzed by the laboratory for these samples were not acceptable for all compound %Ds. The average RRF requirements were met for all continuing calibration standards.

Continuing Calibrations, continued

Specific Findings

The continuing calibration standard, BT611 contained compounds with %Ds greater than 50% but less than 90%. For the samples and noncompliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

041M640301 2-hexanone
041M640501
041M641201

The continuing calibration standard, CP944 contained compounds with %Ds greater than 25% but less than 50%. For the samples and noncompliant compounds listed below, the positive results are qualified as estimated, J.

041M250301 acetone
041M640301RE
041M640701
041M640901
041M641501

Method Blanks

Contamination for methylene chloride was detected in eight (8) of the nine (9) method blanks.

	VBLKHR	VBLKBU	VBLKCM	VBLKBW
methylene chloride	3 μg/Kg	8 μg/Kg	5 μg/Kg	7 μg/Kg

	VBLKCN	VBLKCO	VBLKHX	VBLKBZ
methylene chloride	3 μg/Kg	8 μg/Kg	220 μg/Kg	4 μg/Kg

Method Blanks, continued

Specific Finding

Samples	Contaminant	Qualification
041M060201	methylene chloride	U
041M060301		
041M270101		
041M060401		
041N060401		
041M250201		
041M250201RE		
041M270101RE		
041M270201		
041M640301RE		
041M640901		
041NZ50301		
041M640201		
041M060101		
041M640601		
041M250101	methylene chloride	CRQL
041M250301		
041M640701		
041M641501		

Field QC Blanks

Contamination for methylene chloride or acetone was detected in the two (2) trip blanks.

	041TM00102	041TM00101
methylene chloride	-------	8 μg/L
acetone	6 μg/L	-------

Field QC Blanks, continued

Specific Finding

	Samples	Contaminant	Qualification
041TM00102	041N250301 041M270201	acetone	U
	041M270101RE	acetone	CRQL
041TM00101	041M641201	methylene chloride	U
	041M640301 041M640501	methylene chloride	CRQL

Internal Standard Areas

Several samples exhibited noncompliant IS EICP area recoveries.

Specific Findings

The following samples exhibited noncompliant internal standard area recoveries. All associated positive and non-detect results are qualified as estimated, J/UJ.

041M250201 041M640301RE	chlorobenzene-d_5
041M250201RE 041M270101RE 041M270101 041M640301	1,4-difluorobenzene chlorobenzene-d_5

Compound Quantitation

Specific Finding

The sample noted below is rejected, UR, in favor of the RE or initial analysis of the sample.

041M250201RE
041M270101RE
041M640301

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 5% of data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M640301	2-hexanone	+/-	J/UJ
041M640501			
041M641201			
041M250301	acetone	+	J
041M640301RE			
041M640701			
041M640901			
041M641501			
041M060201	methylene chloride	+B	U
041M060301			
041M270101			
041M060401			
041N060401			
041M250201			
041M250201RE			
041M270101RE			
041M270201			
041M640301RE			
041M640901			
041NZ50301			
041M640201			
041M060101			
041M640601			
041M250101	methylene chloride	+B	CRQL
041M250301			
041M640701			
041M641501			
041N250301	acetone	+	U
041M270201			
041M270101RE	acetone	+	CRQL
041M641201	methylene chloride	+	U

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M640301 041M640501	methylene chloride	+	CRQL
041M250201 041M640301RE	chlorobenzene-d_5	+/-	J/UJ
041M250201RE 041M270101RE 041M270101 041M640301	1,4-difluorobenzene chlorobenzene-d_5	+/-	J/UJ
041M250201RE 041M270101RE 041M640301	All compounds	+/-	UR

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLC01.8, 3/90 Method; the National Functional Guidelines for Organic Data Validation, June 1991, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # M06010

A validation was performed on the Semivolatile Data from SDG M06010. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibration
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Internal Standard Performance
*	•	Compound Identification
*	•	Compound Quantitation

* - All criteria were met for this parameter.

Continuing Calibrations

The continuing calibrations that were analyzed by the laboratory for these samples were not acceptable for all compound %Ds. All average RRF requirements were not met.

Continuing Calibrations, continued

Specific Findings

The continuing calibration standard, DI748 contained compounds with %Ds greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

041M641201	3,3'-dichlorobenzidine
041M640901	bis(2-ethylhexyl)phthalate
	Di-n-octylphthalate

The continuing calibration standard, IF240 contained compounds with %Ds greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

041M060201	2,2'-oxybis(1-chloropropane)
041M060301	4-nitrophenol
041M250101	
041M250201	
041M250301	

The continuing calibration standard, IF258 contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are rejected, R.

041M060101	2,2'-oxybis(1-chloropropane)
041M060401	

The continuing calibration standard, IF348 contained compounds with %Ds greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

041M641501	4-chloroaniline
	4-nitroaniline
	Carbazole

Continuing Calibrations, continued

Specific Findings

The continuing calibration standard, IF348 contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are rejected, R.

041M641501 2,2'-oxybis(1-chloropropane)
3-nitroaniline (RRF 0.012)

The continuing calibration standard, IF423 contained compounds with %Ds greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

041M640601 hexachlorocyclopentadiene
2,4-dinitrophenol
4-nitroaniline
3,3'-dichlorobenzidine

The continuing calibration standard, IF348 contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are rejected, R.

041M640601 2,2'-oxybis(1-chloropropane)
3-nitroaniline (RRF 0.012)

Method Blanks

The six (6) method blanks exhibited contamination for bis(2-ethylhexyl)phthalate and/or di-n-butylphthalate.

	SBLKJW	SBLKJY	SBLKIV	SBLKIC
bis(2-ethylhexyl)phthalate	82 µg/Kg	120 µg/Kg	120 µg/Kg	110 µg/Kg
di-n-butylphthalate	------	------	------	39 µg/Kg

Method Blanks, continued

	SBLKDL	SBLKAI
bis(2-ethylhexyl)phthalate	130 µg/Kg	100 µg/Kg
di-n-butylphthalate	34 µg/Kg	-------

Specific Finding

Samples	Contaminant	Qualification
041M270101	bis(2-ethylhexyl)phthalate	CRQL
041M270201		
041M640301		
041M640701		
041N060401		
041N250301		
041M640601		
041M641501		
041M640901		
041M641201		
041M640201		
041M060101		
041M060201		
041M060401		
041M250101		
041M250201		
041M250301		
041M640301	bis(2-ethylhexyl)phthalate	U
041M640501		
041M060301		
041M641501	di-n-butylphthalate	CRQL
041M640901		
041M641201		

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 5% of data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M641201 041M640901	3,3'-dichlorobenzidine bis(2-ethylhexyl)phthalate Di-n-octylphthalate	+/-	J/UJ
041M060201 041M060301 041M250101 041M250201 041M250301	2,2'-oxybis(1-chloropropane) 4-nitrophenol	+/-	J/UJ
041M060101 041M060401	2,2'-oxybis(1-chloropropane)	+/-	J/R
041M641501	4-chloroaniline 4-nitroaniline Carbazole	+/-	J/UJ
041M641501	2,2'-oxybis(1-chloropropane) 3-nitroaniline (RRF 0.012)	+/-	J/R
041M640601	hexachlorocyclopentadiene 2,4-dinitrophenol 4-nitroaniline 3,3'-dichlorobenzidine	+/-	J/UJ
041M640601	2,2'-oxybis(1-chloropropane) 3-nitroaniline (RRF 0.012)	+/-	J/R

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M270101	bis(2-ethylhexyl)phthalate	+B	CRQL
041M270201			
041M640301			
041M640701			
041N060401			
041N250301			
041M640601			
041M641501			
041M640901			
041M641201			
041M640201			
041M060101			
041M060201			
041M060401			
041M250101			
041M250201			
041M250301			
041M640301	bis(2-ethylhexyl)phthalate	+B	U
041M640501			
041M060301			
041M641501	di-n-butylphthalate	+B	CRQL
041M640901			
041M641201			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results this report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.8 Method; the National Functional Guidelines for Organic Data Validation, June 1991, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # M06010

A validation was performed on the Pesticide/Aroclor Data from SDG M06010. The data was evaluated based on the following parameters:

*	•	Data Completeness
	•	Holding Times
*	•	GC Performance
	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Holding Times

One (1) sample required qualifications due to exceeded holding times.

Specific Finding

The following sample was extracted fourteen (14) days outside the extraction holding time. All positive and non-detect results are qualified as estimated, J/UJ.

041M250201

Initial Calibrations

The initial calibrations analyzed for these samples were not all within the 20% RSD criteria.

Specific Finding

The initial calibration analyzed on 12/02/95 exhibited a non-compliant RPD for two (2) compounds. Reported results for the noted compounds in the following samples are qualified as estimated, J/UJ.

041M250101	α-BHC (20.7/23.8)
041M270101	4,4'-DDT (21.1)
041M270201	
041M641501	
041M640501DL	
041M060101DL	

Surrogate Recoveries

Three (3) samples required qualification due to non-compliant surrogate recoveries.

Specific Findings

The following samples exhibited TCMX recoveries below the QC limit. All positive and non-detect results reported in the sample are qualified as estimated, J/UJ.

Samples	Surrogate	% Recoveries
041M060201	Tetrachloro-m-xylene	23%
041M270101		29%
041M641501		26%

Compound Identification/Quantitation

Several reported results exhibited P flags due to column quantitation %Ds greater than 25%. Single component compounds in samples with reported aroclors should be considered suspect. The Form Is submitted by the laboratory indicated incorrect Concentrated Final Volumes for all samples. The laboratory indicated that the software limitation would not accommodate the correct final volume. The samples were to be calculated based on a final volume of 1.0 ml. Based on this information, calculation verification was possible. Supporting documentation

Compound Identification, continued

explaining the discrepancy has been received. Several samples required dilution to accurately quantitate detected target compounds. Sample 041M060101DL was reported incorrectly on the Form Is and on the spreadsheet deliverables. The laboratory calculated the results in this sample based on a dilution factor of 10. However, the actual dilution factor for the sample analysis was 100. Therefore, the laboratory has resubmitted a corrected Form I to the validator reflecting corrected dilution factor and results for sample 041M060101DL. The results on the spreadsheet were changed by the validator. A copy of the resubmitted Form I is contained in the validation worksheets of this report. One (1) compound in one (1) sample was reported slightly above the calibration range. However, the compound was not detected in the dilution analysis of the sample. Therefore, the compound was qualified as estimated in the lessor dilution analysis of the sample.

Specific Findings

For the following samples and noted compounds, the results are rejected, UR, and replaced with the corresponding D flagged result from the dilution analysis. All other results from the dilution analysis are rejected, UR, in favor of the results from the undiluted analysis of the sample.

041M060301	4,4'-DDE
	4,4'-DDD
	4,4'-DDT
041M640201	AR1254
	4,4'-DDE
	4,4'-DDD
041M640501	4,4'-DDE
041M640701	4,4'-DDD
041M060101	4,4'-DDD
	4,4'-DDT

The noted compound in the following sample is qualified as estimated, J, because it is above the calibration range.

041M640501	4,4'-DDD

Compound Identification, continued

Specific Findings, continued

All positive results exhibiting P flags are qualified as estimated, J, due to column quantitation %Ds greater than 25%.

Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 5% of data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M250101 041M270101 041M270201 041M641501 041M640501DL 041M060101DL 041N641501	α-BHC 4,4'-DDT	+/-	J/UJ
041M060201 041M270101 041M641501	All compounds	+/-	J/UJ
041M060301	4,4'-DDE 4,4'-DDD 4,4'-DDT	+	UR
041M640201	AR1254 4,4'-DDE 4,4'-DDD	+	UR
041M640501	4,4'-DDE	+	UR
041M640701	4,4'-DDD	+	UR
041M060101	4,4'-DDD 4,4'-DDT	+	UR
041M060301DL 041M640201DL 041M640501DL 041M640701DL 041M060101DL	All except corresponding D flagged results	+/-	UR
041M640501	4,4'-DDD		

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
All	All P flagged results	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # M06010

A validation was performed on the Metals Data from SDG M06010. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
	•	Matrix Duplicates
	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	6.08 mg/kg	no impact
Calcium	4.58 mg/kg	no impact
Iron	4.17 mg/kg	no impact
Lead	0.27 mg/kg	no impact

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

Matrix Spike Recovery

Specific Finding

The Matrix Spike recovery for soils for Antimony was below 30%. All non-detect results are rejected and all positive results are qualified as estimated, "J".

The Matrix Spike recoveries for soils for Copper and Silver were below the lower control limits. All positive and non-detect results are qualified as estimated, "J" or "UJ".

The Matrix Spike recovery for soils for Selenium was above the upper control limits. All positive results are qualified as estimated, "J".

Duplicate Analysis

Specific Finding

The Duplicate analyses for Calcium, Lead and Zinc were outside the control limits. All positive results are qualified as estimated, "J". The RPDs for Aluminum, Cadmium, Chromium and Iron were not greater than 35% and will not be qualified. The field duplicate RPDs for Aluminum, Calcium, Iron and Sodium were greater than 50%. All positive results are qualified as estimated, "J".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041M060101	59
Antimony	041M060201	48
Antimony	041M060301	55
Antimony	041M060401	69
Antimony	041M250301	58
Antimony	041M250201	42
Antimony	041M270201	55
Antimony	041M270101	70

Antimony	041M060401	69
Antimony	041M640201	54
Antimony	041M640301	71
Antimony	041M640601	59
Antimony	041M640501	79
Antimony	041M640701	46
Antimony	041M640901	55
Antimony	041M641201	59
Antimony	041M641501	67

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples	Sb.	+	J
		U	R
all soil samples	Pb and Ag.	+/U	J/UJ
all soil samples	Se.	+	J
all soil samples	Pb, Ca, Zn, Al, Fe and Na.	+	J
041M060101, 201, 301, 401, 250301, 201, 270201, 101, 640601, 201, 301, 501, 701 901, 641201 and 501.	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	M06070
Date:	February 14, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	NAS Pensacola; Site 41
Date Sampled:	November 13 - 15, 1995
Number of Samples:	13 Aqueous Sample(s) with 0 MS/MSD(s) 9 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Volatiles, Low Concentration Volatiles, Low Concentration Semivolatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Sefan

Eugene M. Watson, Vice President

3-7-96

Date

4127 Plaza 94 South St Charles, MO 63304
(314) 936-1332 Fax (314) 936-1335

SDG# M06070

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	VOA		LVOA		LSV		SV		P/P		TAL/CN	
041W060301	WATER			X		X				X		X	
041M060701	SOIL		X						X		X		X
041W060701	WATER			X		X				X		X	
041M060801	SOIL		X						X		X		X
041M060901	SOIL		X						X		X		X
041W250101	WATER			X		X				X		X	
041W250301	WATER			X		X				X		X	
041R250301	WATER			X		X				X		X	
041W270201	WATER			X		X				X		X	
041M320101	SOIL		X						X		X		X
041W320101	WATER			X		X				X		X	
041M320201	SOIL		X						X		X		X
041M320301	SOIL		X						X		X		X
041W320301	WATER			X		X				X		X	
041M330101	SOIL		X						X		X		X
041W330101	WATER			X		X				X		X	
041M330201	SOIL		X						X		X		X
041M330301	SOIL		X						X		X		X
041W330301	WATER			X		X				X		X	
041EM00101	WATER			X		X				X		X	
041FM00101	WATER			X		X				X		X	
041TM00102	WATER			X									
Total Billable Samples (Water/Soil)		0	9	13	0	12	0	0	9	12	9	12	9

VOA = CLP Volatiles
LVOA = CLP Low Concentration Volatiles
LSV = CLP Low Concentration Semivolatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times. blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results.

SDG # M06070

A validation was performed on the Volatile Data from SDG M06070. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria.

Specific Finding:

The Samples listed below. exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated(UJ).

041M320201	1,4-difluorobenzene chlorobenzene-d_5

Internal Standards (continued)

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated(UJ).

041M320201RE	bromochloromethane 1,4-difluorobenzene chlorobenzene-d_5

Method Blank

Associated blank	Compound	Concentration
VBLKCK	Methylene chloride	7
VBLKCL	methylene chloride	3J
VBLKCM	methylene chloride	5J
VBLKCO	methylene chloride	8J

Samples	Compound	Qualification
041M060901 041M320201 041M320201RE 041M060701 041M320101 041M330101 041M330201	methylene chloride	U
041M060801 041M060901DL 041M320301 041M330301	methylene chloride	CRQL

Trip Blank

Associated blank	Compound	Concentration
041TM00102	acetone	6B

Samples	Compound	Qualification
041M060701 041M320101 041M330301	acetone	U

Compound Identification /Quantitation

Reject E-flagged results for samples 041M060901, in favor of the diluted sample.

Reject 041M320201RE, in favor of the initial analysis, due to non compliant internal standard area recoveries.

System Performance and Overall Assessment

The overall system performance was fair. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M320201	All associated analytes 1,4-difluorobenzene chlorobenzene-d_5	+/-	J/UJ
041M320201RE	bromochloromethane 1,4-difluorobenzene chlorobenzene-d_5		
041M060901 041M320201 041M320201RE 041M060701 041M320101 041M330101 041M330201	methylene chloride	+	U
041M060801 041M060901DL 041M320301 041M330301	methylene chloride	+	CRQL
041M060701 041M320101 041M330301	acetone	+	U
041M060901	All E-flagged results	+	R
041M060901DL	All analytes except D-flagged results	+/-	R
041M320201RE	All analytes	+/-	R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results.

SDG # M06070

A validation was performed on the Volatile Data from SDG M06070, low concentration. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FM272, contained compounds with %Ds greater than 25%, but less than 50%, and RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041W060701	acetone
041W320101	2-butanone

The continuing calibration, FM295, contained compounds with %Ds greater than 25%, but less than 50%, and RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041W320301	acetone
041EM00101	2-butanone
041FM00101	
041W330101	
041W330301	
041R250301	
041W060301	
041W250101	
041W250301	
041W270201	

The continuing calibration, FM295, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041W320301	methylene chloride
041EM00101	
041FM00101	
041W330101	
041W330301	
041R250301	
041W060301	

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FM295, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041W250101	methylene chloride
041W250301	
041W270201	

The continuing calibration, FM3645, contained compounds with RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041TM00102	acetone
	2-butanone

Method Blank

Associated blank	Compound	Concentration
VBLKFC	acetone	9
	Methylene chloride	1
VBLKFD	acetone	7

Samples	Compound	Qualification
041W060701	acetone	U
041W320101		
041R250301		
041W250101		
041W250301		
041W270201		
041W320301		
041W330101		
041W330301		
041W320101	methylene chloride	U

Rinseate Blank

Associated blank	Compound	Concentration
041EM00101	methylene chloride	1

Samples	Compound	Qualification
041W060301 041W250101 041W270201 041W330101 041W330301	methylene chloride	U

Compound Identification /Quantitation

Reject E-flagged results for samples 041R250301 and 041W250301, in favor of the diluted samples, 041R250301DL and 041W250301DL, D-flagged results.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W060701 041W320101	acetone 2-butanone	+/-	J/R
041W320301 041EM00101 041FM00101 041W330101 041W330301 041R250301 041W060301 041W250101 041W250301 041W270201	acetone 2-butanone	+/-	J/R
041W320301 041EM00101 041FM00101 041W330101 041W330301 041R250301 041W060301 041W250101 041W250301 041W270201	methylene chloride	+/-	J/UJ
041TM00102	acetone 2-butanone	+/-	J/R
041W060701 041W320101 041R250301 041W250101 041W250301	acetone	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W270201 041W320301 041W330101 041W330301	acetone	+	U
041W320101 041W060301 041W270201 041W330101 041W330301	methylene chloride	+	U
041R250301 041W250301	All E-flagged results	+	R
041R250301DL 041W250301DL	All analytes except D-flagged results	+	R

DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP3/90: National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # M06070

A validation was performed on the Semivolatile Data from SDG M06070, low concentration. The data was evaluated based on the following parameters.

*	•	Data Completeness
	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Holding Times

All extraction holding times for all samples were not met for all samples per the SOW and National Functional Guidelines. Qualifications are required.

Specific Finding:

The following samples extraction date exceeded the required hold time of twenty seven (27) days by twenty two (22) days. Qualify all positive results as estimated (J) and non detects as reject (R).

041W250101
041R250301
041W270201

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria.

Specific Finding:

The continuing calibration, DI842, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041W060301	4-nitrophenol
041W250301	

The continuing calibration, DJ132, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041W250101	3-nitroaniline
041W270201	

The continuing calibration,DJ154, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041R250301	4-chloroaniline
	3-nitroaniline
	3,3'-dichlorobenzidine

Field Blanks

Associated blank	Compound	Concentration
041FM00101	bis(2ethylhexyl)phthalate	10

Samples	Compound	Qualification
041W330301	bis(2ethylhexyl)phthalate	CRQL

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 10% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W250101 041R250301 041W270201	all analytes	+/-	J/R
041W060301 041W250301	4-nitrophenol	+/-	J/UJ
041W250101 041W270201	3-nitroaniline	+/-	J/UJ
041R250301	4-chloroaniline 3-nitroaniline 3,3'-dichlorobenzidine	+/-	J/UJ
041W330301	bis(2ethylhexyl)phthalate	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # M06070

A validation was performed on the Semivolatile Data from SDG M06070. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Contractual Non compliance

The analysis of samples 041M060701 and 041M330101 exhibited low internal standard area recoveries. No reanalysis of these samples were performed, as required by method EPA CLP3/90 section 8.1 page D-52/SV.

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, IF348, contained compounds with %Ds greater than 90% and RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

SBLKIF	2,2'-oxybis(1-chloropropane)
041M060801	3-nitroaniline

The continuing calibration, IF348, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

SBLKIF	4-chloroaniline
041M060801	4-nitroaniline
	Carbazole

The continuing calibration, IF462, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

SBLKIN	2,2'-oxybis(1-chloropropane)
041M320301	

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria.

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated(UJ).

041M060701	perylene-d_{12}
041M330101	

Method Blanks

Associated blank	Compound	Concentration
SBLKJY	bis(2ethylhexyl)phthalate	120J
SBLKIF	di-n-butylphthalate bis(2ethylhexyl)phthalate	21J 75J
SBLKJK	bis(2ethylhexyl)phthalate	69J
SBLKIN	bis(2ethylhexyl)phthalate	33J

Samples	Compound	Qualification
041M060701 041M060901 041M330301 041M320301	bis(2ethylhexyl)phthalate	CRQL
041M060801	bis(2ethylhexyl)phthalate	U
041M060801	di-n-butylphthalate	CRQL

System Performance and Overall Assessment

The overall system performance was fair The laboratory did not encounter any large problems. The data reviewer estimates that less than 10% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M060801	2,2'-oxybis(1-chloropropane) 3-nitroaniline	+/-	J/R
041M060801	4-chloroaniline 4-nitroaniline Carbazole	+/-	J/UJ
041M320301	2,2'-oxybis(1-chloropropane)	+/-	J/UJ
041M060701 041M330101	All associated analytes perylene-d_{12}	+/-	J/UJ
041M060701 041M060901 041M330301 041M320301	bis(2ethylhexyl)phthalate	+	CRQL
041M060801	bis(2ethylhexyl)phthalate	+	U
041M060801	di-n-butylphthalate	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results this report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.8 Method; the National Functional Guidelines for Organic Data Validation, June 1991, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # M06070

A validation was performed on the Pesticide/Aroclor Data from SDG M06070. The data was evaluated based on the following parameters:

*	•	Data Completeness
	•	Holding Times
*	•	GC Performance
	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Holding Times

One (1) sample required qualification for exceeded holding times.

Specific Finding

The following sample's extraction holding time was exceeded by eight (8) days. All positive and non-detect results are qualified as estimated, J/UJ.

041M060701

Initial Calibrations

The initial calibrations analyzed for these samples were not all within the 20% RSD criteria.

Specific Finding

The initial calibration analyzed on 11/28/95 exhibited a non-compliant RPD for two (2) compounds. Reported results for the noted compounds in the following samples are qualified as estimated, J/UJ.

041W060701	α-BHC
041W320101	δ-BHC
041W320301	
041EM00101	
041FM00101	
041W330101	
041W330301	
041R250301	
041W060301	
041W250301	
041M060901	
041M320101	
041M320301	
041M330101	
041W250101	
041W270201	
041M330201	
041M330301	
041M060801	
041M060801DL	

The initial calibration analyzed on 12/02/95 exhibited a non-compliant RPD for two (2) compounds. Reported results for the noted compounds in the following samples are qualified as estimated, J/UJ.

041M060701	α-BHC
	4,4'-DDT

Surrogate Recoveries

Three (3) samples required qualification due to non-compliant surrogate recoveries.

Specific Findings

The following samples exhibited a TCMX recovery below the QC limit. All positive and non-detect results reported in the sample are qualified as estimated, J/UJ.

041M320201
041M320301
041M330101

Compound Identification/Quantitation

One (1) sample required dilution to accurately quantitate target compounds. Several reported results exhibited P flags due to column quantitation %Ds greater than 25%. Single component compounds in samples with reported aroclors should be considered suspect. The Form Is submitted by the laboratory indicated incorrect Concentrated Final Volumes for all samples. The laboratory indicated that the software limitation would not accommodate the correct final volume. The samples were to be calculated based on a final volume of 1.0 ml. Based on this information, calculation verification was possible. Supporting documentation explaining the discrepancy has been received.

Specific Findings

All positive results exhibiting P flags are qualified as estimated, J, due to column quantitation %Ds greater than 25%.

For the following sample, the noted compounds are rejected in favor of the D flagged results reported from the dilution analysis. In the dilution analysis all other results are rejected, UR, in favor of the results reported from the undiluted analysis.

041M060801	4,4'-DDE
	4,4'-DDD

Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 5% of data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M060701	All compounds	+/-	J/UJ
041W060701 041W320101 041W320301 041EM00101 041FM00101 041W330101 041W330301 041R250301 041W060301 041W250301 041M060901 041M320101 041M320301 041M330101 041W250101 041W270201 041M330201 041M330301 041M060801 041M060801DL	α-BHC δ-BHC	+/-	J/UJ
041M060701	α-BHC 4,4'-DDT	+/-	J/UJ
041M320201 041M320301 041M330101	All compounds	+/-	J/UJ
041M060801	4,4'-DDE 4,4'-DDD	+	R
041M060801DL	All but corresponding D flagged results	+/-	UR

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
All	All P flagged results	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # M06070

A validation was performed on the Metals Data from SDG M06070. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
*	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	3.41 mg/kg	no impact
Iron	0.39 mg/kg	no impact
Lead	0.21 mg/kg	no impact
Zinc	0.71 mg/kg	041M330301.
Calcium	17.3 ug/l	no impact

Sodium	153. ug/l	no impact

The field and equipment blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	40.4 ug/l	all water samples
Barium	3.0 ug/l	all water samples
Zinc	47.9 ug/l	all water samples

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041W060301	73
Antimony	041W060701	61
Antimony	041W250101	44
Antimony	041R250301	59
Antimony	041W270201	45
Antimony	041W320101	58
Antimony	041M320301	71
Antimony	041M330101	45
Antimony	041M330201	50
Antimony	041M330301	62
Antimony	041M060801	67
Antimony	041M060901	64
Antimony	041M320101	67
Antimony	041W330301	77

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
041M330301.	Zn.	+	U
all water samples	Al, Ba and Zn.		
041W060301, 701, 041W250101, 041R250301, 041W270201, 041W320101, 041M320201, 041M330101, 041M 330201, 041M330301, 041M 060801, 041M060901, 041M320101 AND 041W330301.	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	M52A10
Date:	March 29, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	January 23 -24, 1996
Number of Samples:	8 Aqueous Sample(s) with 0 MS/MSD(s) 11 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Volatiles, Low Concentration Volatiles, Semivolatiles, Low Concentration Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig H. Scufan

Eugene M. Watson, Vice President

4-2-96

Date

4127 Plaza 94 South St Charles, MO 63304
(314) 936-1332 Fax (314) 936-1335

SDG# M52A10

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	VOA		LVOA		SV		LSV		P/P		TAL/CN	
041M52A101	SOIL		X				X				X		X
041M52D101	SOIL		X				X				X		X
041M52E101	SOIL		X				X				X		X
041M52E201	SOIL		X				X				X		X
041M52E301	SOIL		X				X				X		X
041M56A101	SOIL		X				X				X		X
041M580101	SOIL		X				X				X		X
041M63B401	SOIL		X				X				X		X
041MW20101	SOIL		X				X				X		X
041MW20201	SOIL		X				X				X		X
041MW20301	SOIL		X				X				X		X
041W52A101	WATER			X				X		X		X	
041W52E301	WATER			X				X		X		X	
041W56A101	WATER			X				X		X		X	
041W580101	WATER			X				X		X		X	
041W63B401	WATER			X				X		X		X	
041TM02001	WATER			X									
041TM02101	WATER			X									
041WW20201	WATER			X				X		X		X	
Total Billable Samples (Water/Soil)		0	11	8	0	0	11	6	0	6	11	6	11

VOA = CLP Volatiles
LVOA = CLP Low Concentration Volatiles
SV = CLP Semivolatiles
LSV = CLP Low Concentration Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG #M52A10

A validation was performed on the Volatile Data from SDG M52A10. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria.

Specific Finding:

The Samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated (UJ).

041M52A101RE chlorobenzene-d_5
041M52E201

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLKGN	methylene chloride	3J	30

Samples	Compound	Qualification
041MW20301	methylene chloride	CRQL

Trip Blank

Associated blank	Compound	Concentration	Action Level
041TM02001	acetone	33	330
	Methylene chloride	3J	30

Samples	Compound	Qualification
041M52A101RE	methylene chloride	CRQL
041M52E201		
041M52E301		
041M56A101		
041M580101		
041M63B401		
041M52D101	acetone	U
041M52E101		
041M52E201		
041M52E301		
041M56A101		
041MW20101		
041MW20201		

Compound Identification /Quantitation

Reject samples 041M52A101 and 041M52E201RE, in favor of 041M52A101RE and 041M52E201, due to non compliant surrogate recoveries.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M52A101RE 041M52E201	All associated analytes chlorobenzene-d_5	+/-	J/UJ
041MW20301 041M52E201 041M52E301 041M56A101 041M580101 041M63B401 041M52A101RE	methylene chloride	+	CRQL
041M52D101 041M52E101 041M52E201 041M52E301 041M56A101 041MW20101 041MW20201	acetone	+	U
041M52A101 041M52E201RE	all analytes	+/-	R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # M52A10

A validation was performed on the Volatile Data from SDG M52A10. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration,FN610, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W52A101	acetone (65.8)
041W52E301	2-butanone
041W63B401	
041WW20201	
041W56A101	
041W580101	

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFU	acetone	6	60

Samples	Compound	Qualification
041W52A101	acetone	CRQL
041W52E301	acetone	U
041W56A101		
041W580101		
041W63B401		
041WW20201		

Trip Blanks

Associated blank	Compound	Conc.	Action Level
041TM02101	methylene chloride	3	30
	acetone	33	330

Samples	Compound	Qualification
041W52A101	methylene chloride	U
041W52E301		

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W52A101 041W52E301 041W63B401 041WW20201 041W56A101 041W580101	acetone (65.8) 2-butanone	+/-	J/R
041W52A101	acetone	+	CRQL
041W52E301 041W56A101 041W580101 041W63B401 041WW20201	acetone	+	U
041W52A101 041W52E301	methylene chloride	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # M52A10

A validation was performed on the Semivolatile Data from SDG M52A10. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, JG447, contained compounds with %Ds greater than 50% an less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041MZ20101	2,2'-oxybis(1-chloropropane) (57.9%)
041M52A101	

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041MZ20101 041M52A101	2,2'-oxybis(1-chloropropane)	+/-	J/UJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # M52A10

A validation was performed on the Semivolatile Data from SDG M52A10. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within %D continuing calibration criteria. All RRFs were within calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, DJ659, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041W63B401 hexachlorocyclopentadiene (60.8)

The continuing calibration, DJ715, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041WW20201 hexachlorocyclopentadiene (67.5)

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W63B401	hexachlorocyclopentadiene (60.8)	+/-	J/UJ
041WW20201	hexachlorocyclopentadiene (67.5)	+/-	J/UJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # M52A10

A validation was performed on the Pesticide/Aroclor Data from SDG M52A10. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Surrogate Recoveries

Three (3) samples exhibited non-compliant TCX and/or DCB recoveries.

Surrogate Recoveries, Continued

Specific Finding

The samples listed below exhibited low TCX and/or DCB recoveries. The positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

Sample ID	Surrogate	% Recovery
041W52E301	DCB-1	24%
	DCB-2	21%
041W56A101	TCX-1	21%
	TCX-2	21%
	DCB-1	21%
	DCB-2	18%
041WW20201	DCB-1	21%
	DCB-2	15%

Analyte Identification/Quantitation

Three (3) samples required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Specific Findings

For the following samples and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

041M52E101	4,4'-DDE
041M56A101	4,4'-DDD
041MW20101	4,4'-DDD

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 20% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W52E301 041W56A101 041WW20201	ALL	+/-	J/UJ
041M52E101 041M56A101	4,4'-DDE 4,4'-DDD	+	D
041MW20101	4,4'-DDD	+	D
041M52E101DL 041M56A101DL 041MW20101DL	ALL OTHERS	+/-	UR
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # M52A10

A validation was performed on the Metals Data from SDG M52A10. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	2.94 mg/kg	no impact
Calcium	10.6 mg/kg	no impact
Iron	1.95 mg/kg	no impact
Sodium	4.65 mg/kg	all soil samples below 23.3 mg/kg
Aluminum	22.6 ug/l	no impact

Calcium	126 ug/l	no impact
Iron	19.4 ug/l	all water samples below 97 ug/l
Magnesium	23.8 ug/l	no impact
Manganese	1.34 ug/l	all water samples below 6.7 ug/l
Sodium	118 ug/l	no impact

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Antimony	-0.21 mg/kg	all soil samples below 2.1 mg/kg
Antimony	-2.52 ug/l	all water samples below 25.2 ug/l
Cadmium	-2.01 ug/l	all water samples below 20.1 ug/l

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

The Matrix Spike recoveries for soils for Antimony (43%) and Selenium (47%) were below the lower control limits (<75% but >30%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041M52A101	69
Antimony	041M52D101	62
Antimony	041M52E101	74
Antimony	041M52E201	71
Antimony	041M56A101	44
Antimony	041M58A101	50
Antimony	041MW20201	82
Antimony	041W52S101	61

Antimony	041W63B401	48
Antimony	041WW20201	58
Antimony	041W56A101	58
Antimony	041W580101	46
Antimony	041M52E201	62

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 23.3 mg/kg	Na.	+	U
all water samples below 97 ug/l	Fe.		
all water samples below 6.7 ug/l	Mn.		
all soil samples bellow 2.1 mg/kg	Sb.	+/U	J/UJ
all water samples below 25.2 ug/l	Sb.		
all water samples below 20.1 ug/l	Cd.		
all soil samples	Sb and Se.	+/U	J/UJ
041M52A101, 52D101, 52E101, 52E301, 56A101, 580101, W20201, 52A101, W63B401, WW20201, W56A101, W580101 and 52E201.	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

EnSafe/Allen & Hoshall
5720 Summer Trees Drive, Suite 8
Memphis, TN 38134
Attn: Drew Cowan

5/15/96

Dear Mr. Cowan:

Please find enclosed data validation narratives, flagged Form I's and qualified electronic data for SDGs Z13601 and Z30201.

We are pleased to be of service to EnSafe/Allen & Hoshall. Please call me at (770) 923-3890 if you have any questions.

Sincerely,

Kevin C. Harmon
Client Services Director

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY REPORT

COMPANY:	Ensafe/Allen & Hoshall
SITE NAME:	NAS Pensacola, Sites 40 and 41
PROJECT NUMBER:	8500.14
CONTRACTED LAB:	Ceimic Corporation
QA/QC LEVEL:	EPA Level IV
EPA METHOD:	SOW ILM03.0
VALIDATION GUIDELINES:	*USEPA CLP National Functional Guidelines for Inorganic Data Review*, 1994
SAMPLE MATRIX:	Sediment
TYPE OF ANALYSIS:	Total Metals
SDG NUMBER:	Z13601 (Level IV)

SAMPLES:

Client Sample #	Lab Sample #	Matrix	Total Metals
040MZ13001	960182-02	Sediment	X
040MZ13601	960182-01	Sediment	X
040MZ21501	960182-05	Sediment	X
040MZ21801	960182-14	Sediment	X
040MZ22001	960182-07	Sediment	X
040MZ22201	960182-06	Sediment	X
040MZ22501	960182-11	Sediment	X
040MZ22601	960182-09	Sediment	X
040MZ22801	960182-10	Sediment	X
040MZ23101	960182-13	Sediment	X
040MZ23601	960182-12	Sediment	X
040MZ24401	960182-15	Sediment	X
040MZ24701	960182-16	Sediment	X
040MZ40501	960182-03	Sediment	X
040MZ51301	960182-08	Sediment	X
041M030401	960182-19	Sediment	X
041M030501	960182-20	Sediment	X
041M04D201	960182-18	Sediment	X
041M160201	960182-17	Sediment	X
040M63A301	960182-04	Sediment	X

Data Qualifier Definitions

J	-	The association numerical value is an estimated quantity.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

Client Sample #	Lab Sample #	Matrix	Total Metals
040MZ13001RE/D*	960182-02D	Sediment	+
040MZ13001S	960182-02S	Sediment	+

* = Reanalysis and Laboratory Duplicate samples are one and the same.
+ = Non-billable Quality Control Sample

RE/D* = MATRIX DUPLICATE, S = MATRIX SPIKE

DATA REVIEWER(S): Marvin L. Smith, Jean M. Delashmit

RELEASE SIGNATURE: Ken C. Harmon

DATA QUALIFICATION SUMMARY

Ceimic Corporation - Z13601, Level IV CLP Inorganics

SAMPLES: 040MZ13001, 040MZ13601, 040MZ21501, 040MZ21801, 040MZ22001, 040MZ22201, 040MZ22501, 040MZ22601, 040MZ22801, 040MZ23101, 040MZ23601, 040MZ24401, 040MZ24701, 040MZ40501, 040MZ51301, 041M030401, 041M030501, 041M04D201, 041M160201, 041M63A301, 040MZ13001RE/D*, 040MZ13001S

TOTAL METALS

I.) Holding Times:

The holding times from sampling date to analysis date were 78 to 129 days for all samples in this SDG, which grossly exceeded the 28 day QC limit for mercury. All positive results for mercury were flagged as estimated (J) and all non-detect mercury results were rejected (R).

II.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met, so no action was necessary.

Continuing Calibration Verification (CCV):

All Continuing Calibration criteria were met, so no action was necessary.

III.) Blanks:

The following blank results represent the highest detections associated with the samples and were used for data qualification:

Blank Type/ID#	Analyte	Max Conc.	Action Level
PBS	aluminum	13.4 mg/kg	67.0 mg/kg
CCB11	barium	7.00 ug/L	7.00 mg/kg
CCB12	cadmium	2.70 ug/L	2.70 mg/kg
CCB6	calcium	97.6 ug/L	97.6 mg/kg
CCB11	cobalt	4.20 ug/L	4.20 mg/kg
PBS	iron	19.9 mg/kg	99.5 mg/kg
CCB6	lead	80.6 ug/L	80.6 mg/kg
PBS	magnesium	11.2 mg/kg	56.0 mg/kg
CCB11	manganese	4.10 ug/L	4.10 mg/kg

Blank Type/ID#	Analyte	Max Conc.	Action Level
PBS	mercury	0.06 mg/kg	0.30 mg/kg
PBS	selenium	0.27 mg/kg	1.35 mg/kg
CCB4	sodium	597 ug/L	2990 mg/kg
CCB11	silver	5.40 ug/L	5.40 mg/kg
PBS	zinc	0.28 mg/kg	1.40 mg/kg

CCB = Continuing Calibration Blank, PBS = Preparation Blank (Soil)

After correction for percent solids, all results greater than the IDL but less than 5X the blank amount (Action Level, mg/kg for sediment samples) for which the contaminated blank was an associated calibration or preparation blank were flagged as undetected (U).

The following analytes had negative results with absolute values greater than the IDL:

Blank Type/ID#	Analyte	Neg. Conc.	5X Conc.
CCB8	arsenic	-4.10 ug/L	4.10 mg/kg
CCB1	cadmium	-2.20 ug/L	2.20 mg/kg
CCB2	chromium	-5.40 ug/L	5.40 mg/kg
CCB4	manganese	-1.50 ug/L	1.50 mg/kg
CCB4	nickel	-12.4 ug/L	12.4 mg/kg
PBS	silver	-0.26 mg/kg	1.30 mg/kg
PBS	thallium	-0.59 mg/kg	2.95 mg/kg
ICB1	zinc	-8.10 ug/L	8.10 mg/kg

ICB = Initial Calibration Blank, PBS = Preparation Blank (Soil)

After correction for percent solids, all associated positive sample results less than 5X the absolute value of the negative blank results and all associated non-detects were flagged as estimated (J) and (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met, so no action was taken.

The following analytes were present in ICS Solution A at concentrations greater than the IDL:

antimony	50 ug/L
barium	3 ug/L
manganese	8 ug/L
silver	8 ug/L
sodium	350 ug/L
vanadium	10 ug/L

These analytes should not be present. Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

Negative results were observed in ICS Solution A at absolute concentrations greater than the IDL for the following analytes:

arsenic	-4 ug/L
chromium	-10 ug/L
cobalt	-8 ug/L
silver	-6 ug/L
sodium	-79 ug/L
zinc	-6 ug/L

Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

V.) ICP Serial Dilution Analysis:

The Serial Dilution Percent Differences (%D's) of selenium (21%) and vanadium (11%) in sediment sample 040MZ13001L exceeded the 10% QC limit. Positive results for selenium and vanadium in all associated sediment samples were flagged as estimated (J).

VI.) Laboratory Control Samples (LCS):

The soil LCS Percent Recoveries (%R's) of cobalt (131%) and selenium (450%) exceeded the 80-120% QC limits. All positive results for these analytes in the associated sediment samples were flagged as estimated (J).

VII.) Duplicate Sample Analysis:

The Relative Percent Differences (RPD's) of lead (78%) and selenium (47%) in laboratory duplicate samples 040MZ13001 and 040MZ13001D exceeded the 35% QC limit for sediment samples. All positive and non-detect results for these analytes in the associated sediment samples were flagged as estimated (J) and (UJ).

VIII.) Matrix Spike Recoveries:

The Percent Recoveries (%R's) of the following analytes in sediment spiked sample 040MZ30101S were outside the 75-125% QC limits:

antimony	-272%
arsenic	131%
copper	127%
lead	337%
silver	0%
thallium	0%

All positive results for arsenic, copper and lead in the associated samples were flagged as estimated (J). All associated positive sample results for antimony, silver and thallium were flagged as estimated (J) and all non-detects were rejected (R) since the recoveries for these analytes were below the 30% rejection limit.

The concentration of selenium in unspiked sample 040MZ13001 exceeded the concentration of the spike added by more than 4X. No action was required.

IX.) Field Duplicates:

There were no field duplicate samples designated in this SDG. No action was necessary.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was required.

XI.) Sample Result, Calculation/Transcription Verification:

All criteria were met, so no action was necessary.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met, so no action was taken.

XIII.) Overall Assessment of Data/General:

Laboratory Duplicate sample 041MZ13001D was identified on the spreadsheet as "041MZ13001RE." This sample was processed and routinely flagged by the laboratory. The laboratory flags were removed during validation. This sample was not validated as a routine sample, but rather was treated as a QC laboratory duplicate sample which did not require qualification. The validator changed the sample ID on the spreadsheet to "041MZ13001RE/D."

All non-detect mercury results were rejected because of excessive (greater than 2X QC limits) holding time exceedances. All non-detect results for antimony, silver and thallium were rejected because of very low (less than 30%) matrix spike recoveries. All other laboratory data were acceptable with qualifications.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY REPORT

COMPANY:	Ensafe/Allen & Hoshall
SITE NAME:	NAS Pensacola, Sites 40 and 41
PROJECT NUMBER:	8500.14
CONTRACTED LAB:	Ceimic Corporation
QA/QC LEVEL:	EPA Level IV
EPA METHOD:	SOW ILM03.0
VALIDATION GUIDELINES:	*USEPA CLP National Functional Guidelines for Inorganic Data Review*, 1994
SAMPLE MATRIX:	Sediment
TYPE OF ANALYSIS:	Total Metals
SDG NUMBER:	Z30201 (Level IV)

SAMPLES:

Client Sample #	Lab Sample #	Matrix	Total Metals
040MZ30101	960183-02	Sediment	X
040MZ30201	960183-01	Sediment	X
040MZ40801	960183-11	Sediment	X
040MZ42401	960183-05	Sediment	X
040MZ53701	960183-03	Sediment	X
040MZ54101	960183-20	Sediment	X
040MZ61301	960183-12	Sediment	X
040MZ61801	960183-13	Sediment	X
040MZ62001	960183-14	Sediment	X
040MZ71401	960183-15	Sediment	X
040MZ73501	960183-17	Sediment	X
040MZ80701	960183-16	Sediment	X
040MZ81201	960183-19	Sediment	X
040MZ82101	960183-18	Sediment	X
040MZ90601	960183-10	Sediment	X
041M10A101	960183-04	Sediment	X
041M320301	960183-08	Sediment	X
041M330201	960183-09	Sediment	X
041M641401	960183-06	Sediment	X
040M641501	960183-07	Sediment	X

Client Sample #	Lab Sample #	Matrix	Total Metals
040MZ30101RE/D*	960183-02D	Sediment	+
040MZ30101S	960183-02S	Sediment	+

* = Reanalysis and Laboratory Duplicate samples are one and the same.
+ = Non-billable Quality Control Sample

RE/D* = MATRIX DUPLICATE, S = MATRIX SPIKE

D = MATRIX DUPLICATE, RE = REANALYSIS, S = MATRIX SPIKE

DATA REVIEWER(S): Marvin L. Smith, Jean M. Delashmit

RELEASE SIGNATURE:

Data Qualifier Definitions

J	-	The association numerical value is an estimated quantity.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA QUALIFICATION SUMMARY

Ceimic Corporation - Z30201, Level IV CLP Inorganics

SAMPLES: 040MZ30101, 040MZ30201, 040MZ40801, 040MZ42401, 040MZ53701, 040MZ54101, 040MZ61301, 040MZ61801, 040MZ62001, 040MZ71401, 040MZ73501, 040MZ80701, 040MZ81201, 040MZ82101, 040MZ90601, 041M10A101, 041M320301, 041M330201, 041M641401, 041M641501, 040MZ30101RE/D*, 040MZ30101S

TOTAL METALS

I.) Holding Times:

The holding times from sampling to analysis were 134 to 170 days for all samples in this SDG, which grossly exceeded the 28 day QC limit for mercury. All positive results for mercury were flagged as estimated (J) and all non-detect mercury results were rejected (R).

II.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met, so no action was necessary.

Continuing Calibration Verification (CCV):

All Continuing Calibration criteria were met, so no action was necessary.

III.) Blanks:

The following blank results represent the highest detections associated with the samples and were used for data qualification:

Blank Type/ID#	Analyte	Max Conc.	Action Level
PBS	aluminum	18.3 mg/kg	91.5 mg/kg
CCB9	antimony	46.8 ug/L	46.8 mg/kg
PBS	arsenic	4.83 mg/kg	24.2 mg/kg
CCB7	barium	7.1 ug/L	7.1 mg/kg
PBS	calcium	19.9 mg/kg	99.5 mg/kg
PBS	chromium	1.94 mg/kg	9.70 mg/kg
CCB9	cobalt	2.5 ug/L	2.5 mg/kg
PBS	copper	0.29 mg/kg	1.45 mg/kg
PBS	iron	25.1 mg/kg	126 mg/kg

Blank Type/ID#	Analyte	Max Conc.	Action Level
PBS	magnesium	10.9 mg/kg	54.5 mg/kg
CCB7	potassium	121 ug/L	121 mg/kg
PBS	selenium	0.80 mg/kg	4.0 mg/kg
CCB9	sodium	211 ug/L	211 mg/kg
PBS	zinc	0.38 mg/kg	1.9 mg/kg

CCB = Continuing Calibration Blank, PBS = Preparation Blank (Soil)

After correction for percent solids, all results greater than the IDL but less than 5X the blank amount (Action Level, mg/kg for sediment samples) for which the contaminated blank was an associated calibration or preparation blank were flagged as undetected (U).

The following analytes had negative results with absolute values greater than the IDL:

Blank Type/ID#	Analyte	Neg. Conc.	5X Conc.
ICB2	calcium	-6.40 ug/L	6.40 mg/kg
ICB2	iron	-17.2 ug/L	17.2 mg/kg
ICB2	manganese	-1.90 ug/L	1.90 mg/kg
PBS	sodium	-6.16 mg/kg	30.8 mg/kg
PBS	thallium	-0.84 mg/kg	4.20 mg/kg

ICB = Initial Calibration Blank, PBS = Preparation Blank (Soil)

After correction for percent solids, all associated positive sample results less than 5X the absolute value of the negative blank results and all associated non-detects were flagged as estimated (J) and (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met.

The following analytes were present in ICS Solution A at concentrations greater than the IDL:

antimony	56 ug/L
manganese	2 ug/L
potassium	157 ug/L
silver	9 ug/L
sodium	48 ug/L
vanadium	10 ug/L

These analytes should not be present. Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

Negative results were observed in ICS Solution A at absolute concentrations greater than the IDL for the following analytes:

chromium	-6 ug/L
cobalt	-5 ug/L
copper	-5 ug/L
nickel	-10 ug/L
sodium	-102 ug/L
zinc	-7 ug/L

Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

V.) ICP Serial Dilution Analysis:

The Serial Dilution Percent Differences (%D's) of iron (43%) and lead (12%) in sediment sample 040MZ30101L exceeded the 10% QC limit. Positive results for these analytes in all associated sediment samples were flagged as estimated (J).

VI.) Laboratory Control Samples (LCS):

The soil LCS Percent Recoveries (%R's) of aluminum (76%), magnesium (61%) and sodium (76%) were below the 80-120% QC limits. All positive and non-detect results for these analytes in the associated sediment samples were flagged as estimated (J) and (UJ).

The soil LCS Percent Recoveries (%R's) of cobalt (137%) and potassium (131%) exceeded the 80-120% QC limits. All positive results for these analytes in the associated sediment samples were flagged as estimated (J).

VII.) Duplicate Sample Analysis:

The Relative Percent Differences (RPD's) of iron (56%), manganese (177%) and selenium (46%) in laboratory duplicate samples 040MZ30101 and 040MZ30101D exceeded the 35% QC limit for sediment samples. All positive and non-detect results for these analytes in the associated sediment samples were flagged as estimated (J) and (UJ).

VIII.) Matrix Spike Recoveries:

The Percent Recoveries (%R's) of the following analytes in sediment spiked sample 040MZ30101S were below the 75-125% QC limits:

arsenic	38%
beryllium	62%
cadmium	30%
cobalt	71%
manganese	-248%
nickel	27%
silver	0%
thallium	0%
zinc	56%

All positive and non-detect results for arsenic, beryllium, cadmium, cobalt and zinc in all associated samples were flagged as estimated (J) and (UJ). All positive results for manganese, nickel, silver and thallium were flagged as estimated (J) and the non-detects were rejected (R) since the recoveries for these analytes were less than the 30% rejection limit.

The concentrations of antimony, chromium, lead and selenium in unspiked sample 040MZ30101 exceeded the concentration of the spike added to spiked sample 040MZ30101S by more than 4X. No action was required.

IX.) Field Duplicates:

There were no field duplicate samples designated in this SDG. No action was necessary.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was required.

XI.) Sample Result, Calculation/Transcription Verification:

All criteria were met, so no action was necessary.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met, so no action was taken.

XIII.) Overall Assessment of Data/General:

Laboratory Duplicate sample 041MZ30101D was identified on the spreadsheets as "041MZ30101RE." This sample was processed and routinely flagged by the laboratory. The laboratory flags were removed during validation. This sample was not validated as a routine sample, but rather was treated as a QC laboratory duplicate sample which would not require qualification. The validator changed the sample ID on the spreadsheet to "041MZ301D1RE/D."

All non-detect mercury results were rejected because of excessive (greater than 2X QC limits) holding time exceedances. All non-detect results for manganese, nickel, silver and thallium were rejected because of very low (less than 30%) matrix spike recoveries. All other laboratory data were acceptable with qualifications.

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

RECEIVED

Data Validation Report

SDG#:	Z30301
Date:	March 22, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	November 29, 1995
Number of Samples:	4 Aqueous Sample(s) with 0 MS/MSD(s) 11 Non-aqueous Sample(s) with 1 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Volatiles, Low Concentration Volatiles, Semivolatiles, Low Concentration Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Swyan
Eugene M. Watson, Vice President

3-25-96
Date

4127 Plaza 94 South St Charles, MO 63304
(314) 936-1332 Fax (314) 936-1335

SDG# Z30301

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	VOA		LVOA		SV		LSV		P/P		TAL/CN	
040MZ30101	SOIL		X				X				X		X
040MZ30201	SOIL		X				X				X		X
040MZ30301	SOIL		X				X				X		X
040MZ30701	SOIL		X				X				X		X
040MZ30901	SOIL		X				X				X		X
040MZ31101	SOIL		X				X				X		X
040MZ40901	SOIL		X				X				X		X
041M120201	SOIL		X				X				X		X
041M570101	SOIL		X				X				X		X
041M720101	SOIL		X				X				X		X
041MZ20201	SOIL		X				X				X		X
040TM01801	WATER			X									
041W570101	WATER			X				X		X		X	
041W720101	WATER			X				X		X		X	
041TM00601	WATER			X									
Total Billable Samples (Water/Soil)		0	11	4	0	0	11	2	0	2	11	2	11

VOA = CLP Volatiles
LVOA = CLP Low Concentrtion Volatiles
SV = CLP Semivolatiles
LSV = CLP Low Concentration Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/cyanide

DATA ASSESSMENT NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and are based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.8 Method; the National Functional Guidelines for Organic Data Validation, June 1991, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # Z30301

A validation was performed on the Volatile Data from SDG Z30301. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibration
	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
	•	Internal Standard Performance
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Continuing Calibrations

The continuing calibrations that were analyzed by the laboratory for these samples were not acceptable for all compound %Ds. The average RRF requirements were met for all continuing calibration standards.

Continuing Calibrations, continued

Specific Findings

The continuing calibration standard, HB326, contained compounds with %Ds greater than 50% but less than 90%. For the samples and noncompliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

041M120201 acetone (68.2%)
041M720101

Method Blanks

Contamination for several target compounds was detected in the method blanks. All B flagged TICs are rejected.

	VBLKGL	VBLKCZ	VBLKCA
methylene chloride	10 µg/Kg	2 µg/Kg	2 µg/Kg
bromomethane	--------	3 µg/Kg	--------

Specific Finding

	Samples	Contaminant	Action Levels	Qualification
VBLKGL	040MZ30301 041MZ20201 040MZ30901 040MZ31101	methylene chloride	100 µg/Kg	CRQL
VBLKCZ	040MZ30201 040MZ30701RE 040MZ40901		20 µg/Kg	CRQL
VBLKCA	041M570101		20 µg/Kg	CRQL
VBLKGL	040MZ30701 040MZ30101	methylene chloride	100 µg/Kg	U

Method Blanks, continued

The end-user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria.

Internal Standard Areas

One sample and its RE exhibited noncompliant IS EICP area recoveries.

Specific Findings

The following samples exhibited noncompliant internal standard area recoveries. All associated positive and non-detect results are qualified as estimated, J/UJ.

040MZ30701	1,4-difluorobenzene chlorobenzene-d_5
040MZ30701RE	All internal standards

Surrogate Recoveries

Specific Finding

The following sample exhibited a surrogate recovery above the QC limits. All reported positive results in the sample are qualified as estimated, J.

Samples	Surrogate	%Recovery
040MZ30701	1,2-dichloroethane-d4	125%

Compound Quantitation

Specific Finding

The samples noted below are rejected, UR, in favor of the initial analysis of the sample. The samples exhibited similar internal standard results.

040MZ30701RE

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 5% of data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M120201 041M720101	acetone	+/-	J/UJ
040MZ30301 041MZ20201 040MZ30901 040MZ31101 040MZ30201 040MZ30701RE 040MZ40901 041M570101	methylene chloride	+B	CRQL
040MZ30701 040MZ30101	methylene chloride	+B	U
040MZ30701	All associated with 1,4-difluorobenzene chlorobenzene-d_5	+/-	J/UJ
040MZ30701RE	All associated with All internal standards	+/-	J/UJ
040MZ30701	1,2-dichloroethane-d4	+	J
040MZ30701RE	All compounds	+/-	UR

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # Z30301

A validation was performed on the Volatile Data from SDG Z30301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Initial Calibrations

The initial calibrations that were analyzed by the laboratory for these samples were not acceptable for all compound %RSDs. The average RRFs for all of the compounds met the initial calibration criteria.

Initial Calibrations (continued)

Specific Finding:

The initial calibration analyzed on, 12/04/95, contained compounds with %RSD greater than 30% and RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detect (R).

041W720101	acetone (43.2)
	2-butanone

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Specific Finding:

The continuing calibration, FM602, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W570101	acetone
	2-butanone
	2-hexanone (25.9)

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFW	acetone	11	110

Samples	Compound	Qualification
041W570101	acetone	U

Trip Blanks

Associated blank	Compound	Conc.	Action Level
041TM00601	methylene chloride	4	40

Samples	Compound	Qualification
041W720101	methylene chloride	CRQL

Compound Identification/Quantitation

Specific Finding:

For sample 041W570101, reject all E-flagged results in favor of the D-flagged results in the diluted sample. For the diluted sample 041W570101DL, reject all results (R) except for the D-flagged results with corresponding E-flagged results.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W720101	acetone (43.2) 2-butanone	+/-	J/R
041W570101	acetone 2-butanone 2-hexanone (25.9)	+/-	J/R
041W570101	acetone	+	U
041W720101	methylene chloride	+	CRQL
041W570101	All E-flagged results	+	R
041W570101DL	All results (R) except	+/-	R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # Z30301

A validation was performed on the Semivolatile Data from SDG Z30301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Specific Finding:

The continuing calibration, IF723, contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041M570101 4-chloroaniline (230.1%)

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, IF780, contained compounds with %Ds greater than 50% an less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M120201 hexachlorocyclopentadiene (68.4%)

The continuing calibration, IF780, contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041M120201 4-chloroaniline (190.9%)

Blanks

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X and 10X criteria to field samples.

Method Blanks

Associated blank	Compound	Concentration	Action Level
SBLKIK	bis(2ethylhexyl)phthalate	150J	1500
	Di-n-butylbenzylphthalte	21J	210
SBLKAI	bis(2ethylhexyl)phthalate	150J	1500
SBLKDF	bis(2ethylhexyl)phthalate	150J	1500

Method Blanks (continued)

Samples	Compound	Qualification
041M570101 040MZ30101 040MZ30701 040MZ31101 040MZ30201 041M720101	bis(2ethylhexyl)phthalate	CRQL
041MZ20201	bis(2ethylhexyl)phthalate	U
041M570101	Di-n-butylbenzylphthalte	CRQL

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M120201	hexachlorocyclopentadiene	+/-	J/UJ
041M120201	4-chloroaniline	+/-	J/R
041M570101 040MZ30101 040MZ30701 040MZ31101 040MZ30201 041M720101	bis(2ethylhexyl)phthalate	+	CRQL
041MZ20201	bis(2ethylhexyl)phthalate	+	U
041M570101	Di-n-butylbenzylphthalte	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # Z30301

A validation was performed on the Semivolatile Data from SDG Z30301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within %D continuing calibration criteria. All RRFs were within calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, DJ154, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and all non detects as estimated (UJ).

041W570101	4-chloroaniline (59.4) 3,3'-dichlorobenzidine (60.2) 3-nitroaniline (64.1)

Field Blanks

Associated blank	Compound	Conc.	Action Level
041FM00401	bis(2-ethylhexyl) phthalate	9J	90

Samples	Compound	Qualification
041W720101	bis(2-ethylhexyl) phthalate	U

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W570101	4-chloroaniline (59.4)	+/-	J/UJ
	3,3'-dichlorobenzidine (60.2)		
	3-nitroaniline (64.1)		
041W720101	bis(2-ethylhexyl) phthalate	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # Z30301

A validation was performed on the Pesticide/Aroclor Data from SDG Z30301. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
	•	GC Performance
*	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

GC Performance

PEM0D and PEM1D (1/5/96 17:38) exhibited high %Ds for two (2) compounds.

GC Performance, Continued

Specific Finding

PEM0D and PEM1D (1/5/96 17:38) exhibited high %Ds for 4,4'-DDT and Methoxychlor. For the following samples and non-compliant compounds the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

041W720101	4,4'-DDT (-49.0%/-45.0%)
041MZ20201	Methoxychlor (-46.8%/-38.4%)
040MZ40901	
040MZ31101	
041M570101	
040MZ30301	
040MZ30901	
040MZ30701	
041W570101	
040MZ30101	
040MZ30201	
041M120201	
041M720101	

Surrogate Recoveries

One (1) sample exhibited a non-compliant TCX recovery.

Specific Finding

The sample listed below exhibited a low TCX recovery. The positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

Sample ID	Surrogate	% Recovery
040MZ30901	TCX-2	25%

Analyte Identification/Quantitation

One (1) sample required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Specific Findings

For the following sample and compounds, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

040MZ40101	Gamma-BHC
	Endrin

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 10% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W720101	4,4'-DDT	+/-	J/UJ
041MZ20201	Methoxychlor		
040MZ40901			
040MZ31101			
041M570101			
040MZ30301			
040MZ30901			
040MZ30701			
041W570101			
040MZ30101			
040MZ30201			
041M120201			
041M720101			
040MZ30901	ALL	+/-	J/UJ
040MZ40101	Gamma-BHC Endrin	+	D
040MZ40101DL	ALL OTHERS	+/-	UR
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # Z30301

A validation was performed on the Metals Data from SDG Z30301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Sodium	-7.14 mg/kg	all soil samples below 71.4 mg/kg
Zinc	-0.30 mg/kg	all soil samples below 3.0 mg/kg

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ"

Matrix Spike Recovery

Specific Finding

The Matrix Spike recovery for soils for Antimony (27%) was below 30%. All non-detect results are rejected and all positive results are qualified as estimated, "J".

The Matrix Spike recovery for soils for Thallium (68%) was below the lower control limits (<75% but >30%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

The Matrix Spike recovery for Chromium (131%) was abvoe the upper control limits (>125%). All positive results are qualified as estimated, "J".

Laboratory Duplicate Analysis

Specific Finding

The duplicate analysis for Selenium was less than 2 times the CRDL. No qualification is necessary.

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	040MZ30301	74
Antimony	040MZ30701	76
Antimony	040MZ31101	84
Antimony	040MZ40901	66
Antimony	041M120201	69

The post digestion spike recovery for GFAA was above the upper control limits. All positive results for the listed samples below are qualified as estimated, "J".

Element	Sample IDs	% recoveries
Antimony	040MZ30101	135
Antimony	041M570101	134
Antimony	041MZ20201	118

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 71.4 mg/kg	Na.	+/U	J/UJ
all soil samples below 3.0 mg/kg	Zn.		
all soil samples	Sb.	+	J
		U	R
all soil samples	Tl.	+/U	J/UJ
all soil samples	Cr.	+	J
040MZ30301, 040MZ30701, 040MZ31101, 040MZ40901 and 041M120201.	Sb.	+/U	J/UJ
040MZ30101, 041M570101 and 041MZ20201.	Sb.	+	J
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	Z42101
Date:	February 14, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	NAS Pensacola; Site 40 & 41
Date Sampled:	November 17, 1995
Number of Samples:	4 Aqueous Sample(s) with 0 MS/MSD(s) 11 Non-aqueous Sample(s) with 1 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level IV
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Low Volatiles, Volatiles, Low Semivolatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

for Eugene M. Watson, Vice President

3-4-96
Date

6716 Mexico Road · St. Peters, MO 63376
(314) 928-9533 · (314) 278-1828 · Fax (314) 278-2709

SDG# Z42101

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

Ensafe ID	Matrix	LVOA		VOA		LSV		SV		P/P		TAL/C	
041W5A0601	WATER	X				X				X		X	
041W5B0201	WATER	X				X				X		X	
040TM01501	WATER			X									
040MZ42101	SOIL				X				X		X		X
040MZ42201	SOIL				X				X		X		X
040NZ42201	SOIL				X				X		X		X
040MZ42301	SOIL				X				X		X		X
040MZ42401	SOIL				X				X		X		X
041M5A0601	SOIL				X				X		X		X
041M5B0101	SOIL				X				X		X		X
041M5B0201	SOIL				X				X		X		X
041M642301	SOIL				X				X		X		X
041M642401	SOIL				X				X		X		X
041TM00301	WATER			X									
041M642201	SOIL				X				X		X		X
Total Billable Samples (Water/Soil)		2	0	2	11	2	0	0	11	2	11	2	11

LVOA = CLP Low Volatiles
VOA = CLP Volatiles
LSV = CLP Low Semivolatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

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SDG # Z42101

A validation was performed on the Volatile Data from SDG Z42101. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within continuing calibration criteria. All RRFs were within calibration criteria. Qualifications are required.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, CQ029, contained compounds with %Ds greater than 25%, but less than 50%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J)

041M5A0601 acetone

Method Blank

Associated blank	Compound	Concentration
VBLKCQ	methylene chloride	10
VBLKCR	methylene chloride	15
VBLKCS	methylene chloride	13

Samples	Compound	Qualification
040MZ42101 040MZ42201 040MZ42301 040MZ42401 040NZ42201 041M642301	methylene chloride	U
041M5B0101 041M642201 041M642401 041M5A0601	methylene chloride	CRQL

System Performance and Overall Assessment

The overall system performance was fair The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M5A0601	acetone	+	J
040MZ42101	methylene chloride	+	U
040MZ42201			
040MZ42301			
040MZ42401			
040NZ42201			
041M642301			
041M5B0101	methylene chloride	+	CRQL
041M642201			
041M642401			
041M5A0601			

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QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP OLC01.0, 10/92 SOW; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results.

SDG # Z42101

A validation was performed on the Volatile Data from SDG Z42101, low concentration. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FM384, contained compounds with %Ds greater than 25%, but less than 50%, and RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041W5A0601	acetone
041W5B0201	2-butanone

The continuing calibration, FM384, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041W5A0601	2-hexanone
041W5B0201	

Trip Blank

Associated blank	Compound	Concentration
041TM00301	methylene chloride	11

Samples	Compound	Qualification
041W5A0601 041W5A0201	methylene chloride	U

Compound Identification /Quantitation

Reject E-flagged analytes for sample 041W5B0201, in favor of D-flagged results in diluted sample 041W5B0201DL.

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W5A0601 041W5B0201	acetone 2-butanone	+/-	J/R
041W5A0601 041W5B0201	2-hexanone	+/-	J/UJ
041W5A0601 041W5A0201	methylene chloride	+	U
041W5B0201	All E-flagged results	+	R
041W5B0201DL	All analytes except D-flagged results	+/-	R

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OLC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # Z42101

A validation was performed on the Semivolatile Data from SDG Z42101, low concentration. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that none of the data requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data

DATA ASSESSMENT NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLC01.8, 3/90 Method; the National Functional Guidelines for Organic Data Validation, June 1991, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # Z42101

A validation was performed on the Semivolatile Data from SDG Z42101. The data was evaluated based on the following parameters:

*	•	Data Completeness
	•	Holding Times
*	•	GC/MS Tuning
	•	Calibration
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Internal Standard Performance
*	•	Compound Identification
*	•	Compound Quantitation

* - All criteria were met for this parameter.

Holding Times

Three (3) samples were extracted outside the extraction holding time.

Specific Finding

The following samples were extracted sixteen (16) days outside the extraction holding time. All positive results are qualified as estimated, J, and all non-detect results are rejected, R.

040MZ42101 040MZ42301 041M642301

Continuing Calibrations

The continuing calibrations that were analyzed by the laboratory for these samples were not acceptable for all compound %Ds. All average RRF requirements were met.

Specific Finding

The continuing calibration standard, DJ216 contained compounds with %Ds greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

040MZ42101	4-chloroaniline
040MZ42301	3-nitroaniline
041M642301	2,4-dinitrophenol
	4-nitroaniline
	Bis(2-ethylhexyl)phthalate
	Di-n-octylphthalate

The continuing calibration standard, IF285 contained compounds with %Ds greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

040NZ42201	2,2'-oxybis(1-chloropropane)
040MZ42401	hexachlorocyclopentadiene
041M5A0601	3-nitroaniline
	2,4-dinitrophenol
	4-nitroaniline
	3,3'-dichlorobenzidine

The continuing calibration standard, IF314 contained compounds with %Ds greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

041M642401	hexachlorocyclopentadiene
040MZ42201	3-nitroaniline
041M5B0201	carbazole
041M5B0101	
041M642201	

Continuing Calibrations, continued

Specific Findings

The continuing calibration standard, IF314 contained compounds with %Ds greater than 90%. For the samples and non-compliant compounds listed below, the positive results are qualified as estimated, J, and the non-detect results are rejected, R.

041M642401 2,2'-oxybis(1-chloropropane)

Method Blanks

One (1) of the two (2) method blanks exhibited contamination for bis(2-ethylhexyl)phthalate.

	SBLKIX
bis(2-ethylhexyl)phthalate	110 μg/Kg

Specific Finding

Samples	Contaminant	Qualification
041M5B0101	bis(2-ethylhexyl)phthalate	CRQL
041M5B0201		
041M642201		
041M642401		
040MZ42201		
040NZ42201		

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 5% of data required qualifications. A typographical error was noted on the Form V. The data noted is 12/29/96, but should be 12/29/95.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ42101	4-chloroaniline	+/-	J/UJ
040MZ42301	3-nitroaniline		
041M642301	2,4-dinitrophenol		
	4-nitroaniline		
	Bis(2-ethylhexyl)phthalate		
	Di-n-octylphthalate		
040NZ42201	2,2'-oxybis(1-chloropropane)	+/-	J/UJ
040MZ42401	hexachlorocyclopentadiene		
041M5A0601	3-nitroaniline		
	2,4-dinitrophenol		
	4-nitroaniline		
	3,3'-dichlorobenzidine		
041M642401	hexachlorocyclopentadiene	+/-	J/UJ
040MZ42201	3-nitroaniline		
041M5B0201	carbazole		
041M5B0101			
041M642201			
041M642401	3,3'-oxybis(1-chloropropane)	+/-	J/R
041M5B0101	bis(2-ethylhexyl)phthalate	+B	CRQL
041M5B0201			
041M642201			
041M642401			
040MZ42201			
040NZ42201			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results this report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.8 Method; the National Functional Guidelines for Organic Data Validation, June 1991, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # Z42101

A validation was performed on the Pesticide/Aroclor Data from SDG Z42101. The data was evaluated based on the following parameters:

- * Data Completeness
- * Holding Times
- * GC Performance
- * Calibration
- Blanks
- Surrogate Recoveries
- * Matrix Spike/Matrix Spike Duplicates
- * GPC and Florisil Clean-up Procedures
- * Field Duplicates
- * Compound Identification
- Compound Quantitation

* - All criteria were met for this parameter.

Method Blanks

One (1) method blank exhibited contamination for one (1) target compound.

	PBLK02
endosulfan I	0.24 μg/Kg

Method Blanks, continued

Specific Finding

Samples	Compound	Qualification
040MZ42101	endosulfan I	U
040MZ42201		
040MZ42301		
040MZ42401		
040NZ42201	endosulfan I	CRQL

Surrogate Recoveries

One (1) sample required qualification due to non-compliant surrogate recoveries.

Specific Findings

The following sample exhibited a TCMX recovery below the QC limit. All positive and non-detect results reported in the sample are qualified as estimated, J/UJ.

041M642401

Compound Identification/Quantitation

Several reported results exhibited P flags due to column quantitation %Ds greater than 25%. Single component compounds in samples with reported aroclors should be considered suspect. The Form Is submitted by the laboratory indicated incorrect Concentrated Final Volumes for all samples. The laboratory indicated that the software limitation would not accommodate the correct final volume. The samples were to be calculated based on a final volume of 1.0 ml. Based on this information, calculation verification was possible. Supporting documentation explaining the discrepancy has been received.

Specific Findings

All positive results exhibiting P flags are qualified as estimated, J, due to column quantitation %Ds greater than 25%.

Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 5% of data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ42101 040MZ42201 040MZ42301 040MZ42401	endosulfan I	+B	U
040NZ42201	endosulfan I	+B	CRQL
041M642401	All Samples	+/-	J/UJ
All	All P flagged results	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # Z42101

A validation was performed on the Metals Data from SDG Z42101. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
	•	Matrix Duplicates
	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Barium	0.21 mg/kg	all soil samples below 1.05 mg/kg
Calcium	9.14 mg/kg	no impact
Copper	0.81 mg/kg	all soil samples below 4.05 mg/kg
Iron	3.74 mg/kg	no impact
Lead	0.22 mg/kg	all soil samples below 1.1 mg/kg

Selenium	0.36 mg/kg	no impact
Vanadium	0.44 mg/kg	all soil samples below 2.2 mg/kg
Zinc	0.53 mg/kg	all soil samples below 2.65 mg/kg
Aluminum	29.0 ug/l	all water samples below 145 ug/l
Calcium	123. ug/l	no impact
Iron	49.3 ug/l	no impact
Lead	1.32 ug/l	all water samples below 6.6 ug/l
Nickel	17.1 ug/l	all water samples below 85.5 ug/l

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U". The field or DI water blanks exhibited contamination but had no impact on the data.

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Arsenic	-0.37 mg/kg	all soil samples below 3.7 mg/kg
Sodium	-19.7 mg/kg	no impact
Arsenic	-2.28 ug/l	all water samples
Chromium	-8.44 ug/l	all water samples
Potassium	-138. ug/l	all water samples below 1380 ug/l
Silver	-6.94 ug/l	all water samples
Sodium	-124. ug/l	no impact

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

Tha Matrix Spike recovery for soils for Antimony was below 30%. All non-detect results are rejected and all positive results are qualified as estimated, "J".

The Matrix Spike recoveries for soils for Lead and Silver were below the lower control limits. All positive and non-detect results are qualified as estimated, "J" or "UJ".

The Matrix Spike recovery for soils for Selenium was above the upper control limits. All positive results are qualified as estimated, "J".

Duplicate Analysis

Specific Finding

The Duplicate analysis for Lead was outside the control limits. All positive results are qualified as estimated, "J". The field duplicate for Calcium was greater than 50%. All positive results are qualified as estimated, "J".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	040MZ42101	64
Antimony	040MZ42201	50
Antimony	040NZ42201	76
Antimony	040MZ42401	77
Antimony	041M5B0101	77
Antimony	041M5B0201	72
Antimony	041M642201	74
Antimony	041M642301	66

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 1.05 mg/kg	Ba.	+	U
all soil samples below 4.05 mg/kg	Cu.		
all soil samples below 1.1 mg/kg	Pb.		
all soil samples below 2.2 mg/kg	V.		
all soil samples below 2.65 mg/kg	Zn.		
all water samples below 145 ug/l	Al.		
all water samples below 6.6 ug/l	Pb.		
all water samples below 85.5 ug/l	Ni.		
all soils samples below 197 mg/kg	Na.	+/U	J/UJ
all water samples	As.		
all water samples	Cr.		
all water samples	Ag.		
all water samples below 1380 ug/l	K.		
all soil samples	Sb.	+	J
		U	R
all soil samples	Pb and Ag.	+/U	J/UJ
all soil samples	Se.	+	J
all soil samples	Pb.	+	J
040MZ42101, 42201, NZ42201, MZ42401, 041M5B0101, 201, 642201 and 301.	Sb.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	Z53301
Date:	March 12, 1996
Client Name:	Ensafe/Allen & Hoshall
Project/Site Name:	Pensacola
Date Sampled:	November 28, 1995
Number of Samples:	5 Aqueous Sample(s) with 0 MS/MSD(s) 9 Non-aqueous Sample(s) with 1 MS/MSD(s)
Laboratory:	CEIMIC Corporation
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	CLP Multimedia SOW
Analytical Fractions:	Low Concentration Volatiles, Volatiles, Low Concentration Semivolatiles, Semivolatiles, Pesticides w/PCB's, Metals w/Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user in urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Seaton

Eugene M. Watson, Vice President

3-13-96

Date

4107 Pearce 44 South St. Charles, MO 63304
(314) 936-1330 Fax (314) 936-1335

SDG# Z53301

Samples and Fractions Reviewed

Sample Identifications | Analytical Fractions

Ensafe ID	Matrix	LVOA		VOA		LSV		SV		P/P		TAL/C	
040TM01701	WATER	X											
041W120101	WATER	X				X				X		X	
041EM00201	WATER	X				X				X		X	
041FM00201	WATER	X				X				X		X	
041TM00501	WATER	X											
040MZ53301	SOIL				X				X		X		X
040MZ53401	SOIL				X				X		X		X
040MZ53501	SOIL				X				X		X		X
040MZ53601	SOIL				X				X		X		X
040MZ53701	SOIL				X				X		X		X
040MZ53801	SOIL				X				X		X		X
041M10A101	SOIL				X				X		X		X
041M10A201	SOIL				X				X		X		X
041M120101	SOIL				X				X		X		X
Total Billable Samples	(Water/Soil)	5	0	0	9	3	0	0	9	3	9	3	9

LVOA = CLP Low Volatiles
VOA = CLP Volatiles
LSV = CLP Low Semivolatiles
SV = CLP Semivolatiles
P/P = CLP Pesticide w/PCB's
TAL/CN = CLP Metals w/Cyanide

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

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SDG # Z53301

A validation was performed on the Volatile Data from SDG Z53301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within continuing calibration criteria.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, FM505, contained compounds with RRFs less than 0.05. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and reject all non detects (R).

041W120101	acetone
	2-butanone

Method Blanks

Associated blank	Compound	Conc.	Action Level
VBLKFQ	acetone	5	50

Samples	Compound	Qualification
041W120101	acetone	U

Trip Blanks

Associated blank	Compound	Conc.	Action Level
041TM00501	methylene chloride	9	90
	acetone	10	100

Samples	Compound	Qualification
041W120101	methylene chloride	U

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041W120101	acetone 2-butanone	+/-	J/R
041W120101	acetone	+	U
041W120101	methylene chloride	+	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; the National Functional Guidelines for Organic Data Review, June 1991, and DQO Level IV. All comments made within this report should be considered when examining the analytical results.

SDG # Z53301

A validation was performed on the Volatile Data from SDG Z53301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Samples
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLKCV	Methylene chloride	2J	20
VBLKCX	methylene chloride	4J	40
VBLKCY	methylene chloride	4J	40
VBLKHB	methylene chloride	970J	9700

Method Blank (continued)

Samples	Compound	Qualification
040MZ5350 040MZ53301 040MZ53401 040MZ53601 040MZ53701 040MZ53801 041M10A101 041M10A201	methylene chloride	U
041M120101	methylene chloride	CRQL

Trip Blank

Associated blank	Compound	Concentration	Action Level
040TM01701	acetone	5B	50
040TM00501	acetone	10B	100

Samples	Compound	Qualification
040MZ53301	acetone	CRQL
040MZ53501 040MZ53601 040M10A101	acetone	U

System Performance and Overall Assessment

The overall system performance was fair. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
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The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ5350	methylene chloride	+	U
040MZ53301			
040MZ53401			
040MZ53601			
040MZ53701			
040MZ53801			
041M10A101			
041M10A201			
041M120101	methylene chloride	+	CRQL
040MZ53301	acetone	+	CRQL
040MZ53501	acetone	+	U
040MZ53601			
040M10A101			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP, OlC01.0 10/92; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # Z53301

A validation was performed on the Semivolatile Data from SDG Z53301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

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NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

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METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL

No qualifications are required.

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP 3/90; National Functional Guidelines for Organic Data Review, and DQO Level IV. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # Z53301

A validation was performed on the Semivolatile Data from SDG Z53301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds and RRFs that were not within %D and RRF continuing calibration criteria. Qualifications are required.

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, IF423, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041M120101	hexzchloropentadiene (54.4%)
040MZ53801	2,4-dinitrophenol (52.9%)
	4-nitroaniline (60.3%)
	3,3'-dichlorobenzidine (65.0%)

The continuing calibration, IF423, contained compounds with %Ds greater than 90% and RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

041M120101	2,2'-oxybis(1-chloropropane) (113.9%)
040MZ53801	3-nitroaniline (95.6% and 0.018)

The continuing calibration, IF374, contained compounds with %Ds greater than 50%, but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

040MZ53301	2,2'-oxybis(1-chloropropane) (83.2%)
040MZ53401	4-nitroaniline (53.6%)
040MZ53501	butylbenzylphthalate (54.4%)
040MZ53601	3,3'-dichlorobenzidene (67.0%)
040MZ53701	bis(2-ethylhexyl)phthalate (68.9%)
041M10A101	
041M10A201	

Continuing calibrations (continued)

Specific Finding:

The continuing calibration, IF374, contained compounds with %Ds greater than 90% and RRF less than 0.050. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as rejected (R).

040MZ53301	3-nitroaniline (95.6% and 0.018)
040MZ53401	
040MZ53501	
040MZ53601	
040MZ53701	
041M10A101	
041M10A201	

Method Blanks

Associated blank	Compound	Concentration	Action Level
SBLKIG	bis(2ethylhexyl)phthalate	17J	170
	Di-n-octylphthalate	25J	250

Samples	Compound	Qualification
041M10A101	bis(2ethylhexyl)phthalate	CRQL
041M10A201		
040MZ53301		
040MZ53401		
040MZ53501		
040MZ53601		
040MZ53701		
040MZ53801		
041M10A101	Di-n-octylphthalate	CRQL
040MZ53801		

System Performance and Overall Assessment

The overall system performance was fair. The laboratory did not encounter any large problems. The data reviewer estimates that less than 5% of the data is qualified.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M120101 040MZ53801	hexzchloropentadiene (54.4%) 2,4-dinitrophenol (52.9%) 4-nitroaniline (60.3%) 3,3'-dichlorobenzidine (65.0%)	+/-	J/UJ
041M120101 040MZ53801	2,2'-oxybis(1-chloropropane) 3-nitroaniline (95.6% and 0.018)	+/-	J/R
040MZ53301 040MZ53401 040MZ53501 040MZ53601 040MZ53701 041M10A101 041M10A201	2,2'-oxybis(1-chloropropane) 4-nitroaniline (53.6%) butylbenzylphthalate (54.4%) 3,3'-dichlorobenzidene (67.0%) bis(2-ethylhexyl)phthalate (68.9%)	+/-	J/UJ
040MZ53301 040MZ53401 040MZ53501 040MZ53601 040MZ53701 041M10A101 041M10A201	3-nitroaniline (95.6% and 0.018)	+/-	J/R
041M10A101 041M10A201 040MZ53301 040MZ53401 040MZ53501 040MZ53601 040MZ53701 040MZ53801	bis(2ethylhexyl)phthalate	+	CRQL
041M10A101 040MZ53801	Di-n-octylphthalate	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP OLM01.9 Method; the National Functional Guidelines for Organic Data Validation, June 1991; and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # Z53301

A validation was performed on the Pesticide/Aroclor Data from SDG Z53301. The data was evaluated based on the following parameters:

*	•	Data Completeness
	•	Holding Times
	•	GC Performance
*	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	GPC and Florisil Clean-up Procedures
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Holding Times

The analysis holding times were exceeded for many samples.

Holding Times, Continued

Specific Findings

The following samples exceeded the analysis holding time by two (2) to three (3) days. It is the professional opinion of the data validator that the positive results should be qualified as estimated, J.

040MZ53501
040MZ53601
040MZ53801
041M10A101
041M10A201
041M120101
041M120101DL

GC Instrument Performance

Several PEM RPDs were above the QC limit.

Specific Findings

PEM1D (1/10/96 22:22) exhibited a RPD greater than 25%. For the following samples and non-compliant compound, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

040MZ53301	4,4'-DDT
040MZ53401	
040MZ53501	
040MZ53601	
040MZ53701	
041M120101DL	
041W120101	
041EM00201	
041FM00201	
040MZ53801	
041M10A201	
041M120101	
041M10A101	

GC Instrument Performance, Continued

Specific Findings, Continued

PEM1E (1/11/96 23:01) exhibited a RPD greater than 25%. For the following samples and non-compliant compound, the positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

040MZ53801	4,4'-DDT
041M10A201	
041M120101	
041M10A101	

Surrogate Recoveries

Several samples exhibited non-compliant TCX and/or DCB recoveries.

Specific Finding

The sample listed below exhibited a low TCX recovery. The positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

Sample ID	Surrogate	% Recovery
040MZ53801	TCX-1	26%

The sample listed below exhibited a high DCB recovery. The positive results are qualified as estimated, J.

Sample ID	Surrogate	% Recovery
041M120101	DCB-2	160%

Analyte Identification/Quantitation

One (1) sample required dilution to accurately quantitate target compounds. Several samples exhibited column quantitation %Ds greater than 25%.

Specific Findings

For the following sample and compound, the results from the original analysis are replaced with the corresponding results from the dilution analysis. All other results from the dilution are rejected, UR, in favor of the results reported from the undiluted analysis.

041M120101 Endrin Ketone

The positive results reported in all samples which exhibit column quantitation differences greater than 25% are qualified as estimated, J.

System Performance and Overall Assessment

Overall performance was acceptable. The data reviewer estimates less than 30% of the data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
040MZ53501	ALL	+	J
040MZ53601			
040MZ53801			
041M10A101			
041M10A201			
041M120101			
041M120101DL			
040MZ53301	4,4'-DDT	+/-	J/UJ
040MZ53401			
040MZ53501			
040MZ53601			
040MZ53701			
041M120101DL			
041W120101			
041EM00201			
041FM00201			
040MZ53801			
041M10A201			
041M120101			
041M10A101			
040MZ53801	4,4'-DDT	+/-	J/UJ
041M10A201			
041M120101			
041M10A101			
040MZ53801	ALL	+/-	J/UJ
041M120101	ALL	+	J
041M120101	Endrin Ketone	+	D
041M120101DL	ALL OTHERS	+/-	UR
ALL	ALL P >25%	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level IV requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # Z53301

A validation was performed on the Metals Data from SDG Z53301. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	MSAs

* - All criteria were met for this parameter.

Preparation and Field Blanks

Specific Finding

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Antimony	0.20 mg/kg	all soil samples below 1.0 mg/kg
Calcium	14.5 mg/kg	no impact
Iron	1.53 mg/kg	no impact
Lead	0.14 mg/kg	all soil samples below 0.70 mg/kg

Antimony	3.37 ug/l	all water samples below 33.7 ug/l
Iron	20.9 ug/l	no impact

The field QC blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	81.0 ug/l	all water samples below 405 ug/l
Barium	4.7 ug/l	all water samples below 23.5 ug/l
Zinc	12.2 ug/l	all water samples below 61.0 ug/l

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U".

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Manganese	-0.19 mg/kg	all soil samples below 1.9 mg/kg
Sodium	-32.1 mg/kg	all soil samples below 321 mg/kg
Thallium	-0.33 mg/kg	all soil samples below 3.3 mg/kg
Zinc	-0.36 mg/kg	all soil samples below 3.6 mg/kg
Barium	-2.07 ug/l	all water samples below 20.7 ug/l
Copper	-5.08 ug/l	all water samples below 50.8 ug/l
Potassium	-275 ug/l	all water samples below 2750 ug/l
Sodium	-98.4 ug/l	all water samples below 984 ug/l

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

Specific Finding

The Matrix Spike recoveries for soils for Antimony (58%) and Silver (59%) were below the lower control limits. All positive and non-detect results are qualified as estimated, "J" or "UJ".

Duplicate Analysis

Specific Finding

The duplicate analysis for soils for Calcium was above 35% and will be qualified as estimated, "J".

MSAs

Specific Finding

The post digestion spike recovery for GFAA was below the lower control limits. All positive and non-detect results for the listed samples below are qualified as estimated, "J" or "UJ".

Element	Sample IDs	% recoveries
Antimony	041W120101	77
Antimony	040MZ53501	65
Antimony	040MZ53601	75
Antimony	040MZ53701	62
Antimony	040MZ53801	81

The post digestion spike recovery for GFAA was above the upper control limits. All positive results for the listed samples below are qualified as estimated, "J".

Element	Sample IDs	% recoveries
Antimony	041FM00201	118
Antimony	041M10A201	138

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All soil samples below 1.00 mg/kg	Sb.	+	U
all soil samples below 0.7 mg/kg	Pb.		
all water samples below 16.9mg/kg	Sb.		
all water samples below 23.5 mg/kg	Ba.		
all water samples below 405 mg/kg	Al.		
all water samples below 61.0 mg/kg	Zn.		
all soil samples below 1.9 mg/kg	Mn.	+/U	J/UJ
all soil samples below 321 mg/kg	Na.		
all soil samples below 3.3 mg/kg	Tl.		
all soil samples below 3.6 mg/kg	Zn.		
all water samples below 20.7 ug/l	Ba.		
all water samples below 50.8 ug/l	Cu.		
allsoil samples	Sb and Ag.	+/U	J/UJ
all soil samples	Ca.	+	J
041W120101, 040MZ53501, 040MZ53601, 040MZ53701 and 040MZ53801.	Sb.	+/U	J/UJ
040FM00201 and 041M10A201.	Sb.	+	J
All "B" results	all analytes	B	J

HEARTLAND
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Data Validation Report

SDG#:	PEN11
Date:	October 8, 1997
Client Name:	EnSafe
Project/Site Name:	Pensacola, Sites 40 & 41
Date Sampled:	August 26-September 3, 1997
Number of Samples:	12 Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Savannah Laboratories
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Volatiles, Semivolatiles, Pesticide/PCB's, Metals, Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Searson
for Paul B. Humburg, President

10-10-97
Date

MO 63304
1635

SDG# PEN11

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

ENSAFE ID	MATRIX	VOA		SVOA		P/P		TAL/CN	
040W2B0701	WATER	X		X		X		X	
040W2B0901	WATER	X		X		X		X	
041W030101	WATER	X		X		X		X	
041W330101	WATER	X		X		X		X	
041W330201	WATER	X		X		X		X	
041W5A0401	WATER	X		X		X		X	
041W5A0501	WATER	X		X		X		X	
041W5A0601	WATER	X		X		X		X	
041R5A0601	WATER	X		X		X		X	
041W750101	WATER	X		X		X		X	
041T082697	WATER	X							
041T082797	WATER	X							
Total Billable Samples (Water/Soil)		12	0	10	0	10	0	10	0

VOA = Volatiles
SV = Semivolatiles
P/P = Pesticide/PCB's
TAL/CN = Metals w/Cyanide

DATA ASSESSMENT NARRATIVES

DATA ASSESSMENT NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Method 8240; the National Functional Guidelines for Organic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN11

A validation was performed on the Volatile Data from SDG PEN11. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibration
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Internal Standard Performance
*	•	Compound Identification
*	•	Compound Quantitation

* - All criteria were met for this parameter.

Field QC Blanks

The trip and rinseate blanks associated with these samples exhibited contamination. The samples required qualification. The end-user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X or 10X criteria to field samples

Field QC Blanks, continued

Associated Blanks	Compound	Conc.	Action Level
040TW09047	carbon disulfide	0.46 μg/L	4.6 μg/L
041E082897	carbon disulfide	0.90 μg/L	9.0 μg/L

Samples	Compound	Qualification
041W330101	carbon disulfide	CRQL
041W5A0401		
041W5A0601		

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
041W330101	carbon disulfide	+	CRQL
041W5A0401			
041W5A0601			

DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA SW846 8270; the National Functional Guidelines for Organic Data Review, February 1994; and DQO Level III. All comments made within this report should be considered when examining the analytical results.

SDG # PEN11

A validation was performed on the Semivolatile Data from SDG PEN11. The data was evaluated based on the following parameters.

* Data Completeness
* Holding Times
* GC/MS Tuning
  Calibrations
* Internal Standard Performance
* Blanks
* Surrogate Recoveries
* Laboratory Control Samples
* Field Duplicates
* Compound Identification/Quantitation

* - All criteria were met for this parameter

Continuing Calibrations

The continuing calibrations were acceptable for all average RRFs. All %Ds were not within continuing calibration criteria. Qualifications are required.

Continuing Calibrations (continued)

The continuing calibration, JQ750, contained compounds with %Ds greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

041W030101	2,4-dinitrophenol (64.1%)
041W5A0401	4,6-dinitro-2-methylphenol (58.8%)
041W5A0501	
041W5A0601	
041R5A0601	
041W750101	
041W330101	
041W330201	

System Performance and Overall Assessment

The data as presented requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
041W030101	2,4-dinitrophenol	+/-	J/UJ
041W5A0401	4,6-dinitro-2-methylphenol		
041W5A0501			
041W5A0601			
041R5A0601			
041W750101			
041W330101			
041W330201			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8080; the National Functional Guidelines for Organic Data Validation, February 1994; and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN11

A validation was performed on the Pesticide/Aroclor Data from SDG PEN11. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Contractual Non-Compliance

The method requires that all target compounds, including the multi-component compounds, be analyzed with a five (5) point calibration curve. The laboratory analyzed a single point curve for the Aroclors 1221, 1232, 1242, 1248 and 1254. No positive results were reported for the compounds analyzed with a single point calibration, therefore the data did not require qualification.

Method Blanks

One (1) associated method blank exhibited contamination for target compounds and required qualifications. The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moistures as associated samples. These factors must be taken into consideration when applying the 5X criteria to field samples. The method blank results were compared to the associated samples.

Blank ID	Compound	Concentration	Action Level
08290-MMB	4,4'-DDD	0.0035 JP µg/L	0.0175 µg/L

The following samples have been qualified for method blank contamination. The qualifications are for all the blanks.

Sample	Compound	Qualification
041W5A0501 041R5A0601 041W750101	4,4'-DDD	CRQL

QC Blanks

The associated QC blank exhibited contamination for target compounds and required qualifications. The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moistures as associated samples. These factors must be taken into consideration when applying the 5X criteria to field samples. The QC blank results were compared to the associated samples.

Blank ID	Compound	Concentration	Action Level
041E082897	Heptachlor	0.0020 JBP µg/L	0.01 µg/L

The following sample has been qualified for QC blank contamination. The qualifications are for all the blanks.

Sample	Compound	Qualification
041R5A0601	Heptachlor	CRQL

Surrogate Recoveries

The sample listed below exhibited a DCB recovery less than 10%. The positive results are qualified as estimated, J, and the non-detect results are rejected, UR.

Sample ID	Surrogate	% Recovery
041W750101	DCB-2	6%

Compound Identification/Quantitation

Several samples exhibited column quantitation %Ds greater than 40%. The following guidelines were used to qualify the data:

1. No qualifications are required for positive sample results which exhibited column quantitation differences <40%. The "P" flag is removed from the result.

2. The positive sample result which exhibited a column quantitation difference >40%, but ≤100% is qualified as estimated, J.

3. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and is <10X the respective compound CRQL, is qualified as non-detect, U. (All multi-component results are exempt from this rule.)

4. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and >10X the respective compound CRQL, is qualified as presumptively present at an estimated concentration, NJ. (All multi-component results are exempt from this rule.)

5. The positive multi-component pesticide sample result which exhibited a column quantitation difference >100% and <10X the respective multi-component CRQL is qualified as presumptively present at an estimated concentration, NJ.

Compound Identification/Quantitation, Continued

The following samples and compounds have been qualified for high column quantitation %Ds.

Sample ID	Compound	%D	Lab Qual.	HESI Qual.	Ref. #
041W5A0501	Beta-BHC	222.6%	P	U	3
	Gamma-BHC	134.0%	P	U	3
	Dieldrin	117.8%	P	U	3
	4,4'-DDD	233.3%	P	U	3
041W5A0601	Gamma-Chlordane	269.9%	P	U	3
041R5A0601	Alpha-BHC	154.2%	P	U	3
	4,4'-DDD	284.6%	P	U	3
041W750101	Dieldrin	87.1%	P	J	2
	4,4'-DDE	137.9%	P	U	3
	4,4'-DDD	83.9%	P	J	2
041W330101	Dieldrin	30.0%	P		1
040W2B0901	Delta-BHC	111.5%	P	U	3
040W2B0701	Delta-BHC	93.5%	P	J	2
	Gamma-BHC	230.0	P	U	3

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

NJ = Result is considered presumptively present at an estimated concentration

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
041W5A0501 041R5A0601 041W750101	4,4'-DDD	+	CRQL
041R5A0601	Heptachlor	+	CRQL
041W750101	ALL	+/-	J/UR
ALL	All P < 40%	+	
ALL	All P > 40% But ≤ 100%	+	J
ALL	single component pests All P > 100% And < 10X CRQL	+	U
ALL	single component pests All P > 100% And > 10X CRQL	+	NJ
ALL	multi-component pests All P> 100% And < 10X CRQL	+	NJ

DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994; and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN11

A validation was performed on the Metals and Cyanide Data from SDG PEN11. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
*	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
	•	Post Digestion Spiking

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation blank exhibited contamination for the following elements.

Elements	Conc	Samples affected
Beryllium	0.20 ug/l	all water samples below 1.0 ug/l
Lead	1.2 ug/l	all water samples below 6.0 ug/l
Mercury	0.06 ug/l	all water samples 0.3 ug/l

The calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Barium	0.8 ug/l	no impact
Chromium	1.1 ug/l	all water samples below 5.5 ug/l
Manganese	0.9 ug/l	all water samples below 4.5 ug/l
Nickel	2.1 ug/l	all water samples below 10.5 ug/l

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U".

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Arsenic	-5.38 ug/l	all water samples below 53.8 ug/l
Chromium	-0.9 ug/l	all water samples below 9.0 ug/l
Cobalt	-1.17 ug/l	all water samples below 11.7 ug/l
Iron	-20.6 ug/l	all water samples below 206 ug/l
Vanadium	-1.99 ug/l	all water samples below 19.9 ug/l
Cyanide	-4.56 ug/l	all water samples below 45.6 ug/l

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Post Digestion Spiking results

The post digestion spiking for the following samples were below the lower control limits (>10% but <85%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

Analytes	Sample IDs	Recovery
Silver	040W2B0701	60
Silver	040W2B0901	59
Silver	041W330101	80
Thallium	040W2B0701	47
Thallium	040W2B0901	40
Thallium	041W330101	64

"B" qualifier

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All water samples below 1.0 ug/l	Be.	+	U
All water samples below 5.5 ug/l	Cr.		
All water samples below 6.0 ug/l	Pb.		
All water samples below 4.5 ug/l	Mn.		
All water samples below 0.3 ug/l	Hg.		
All water samples below 10.5 ug/l	Ni.		
All water samples below 53.8 ug/l	As.	+/U	J/UJ
All water samples below 9.0 ug/l	Cr.		
All water samples below 11.7 ug/l	Co.		
All water samples below 206 ug/l	Fe.		
All water samples below 19.9 ug/l	V.		
All water samples below 45.6 ug/l	Cn.		
040W2B0701, 040W2B0901 and 041W330101.	Ag and Tl.	+/U	J/UJ
All "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	PEN12
Date:	October 14, 1997
Client Name:	EnSafe
Project/Site Name:	Pensacola - Sites 40 & 41
Date Sampled:	August 27-September 3, 1997
Number of Samples:	4 Aqueous Sample(s) with 0 MS/MSD(s) 20 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Savannah Laboratories
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Volatiles, Semivolatiles, Pesticide/PCB's, Metals, Cyanide, Total Organic Carbons

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

for Kimberly S. Shopp
Paul B. Humburg, President

14 October 1997
Date

4127 Plaza 94 South · St. Charles, MO 63304
(314) 936-1332 · Fax (314) 936-1335

SDG# PEN12

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

ENSAFE ID	MATRIX	VOA		SVOA		P/P		TAL		CN		TOC	
040T082997	WATER	X											
040M2B0101	SOIL		X		X		X		X		X		X
040M2B0201	SOIL		X		X		X		X		X		X
040M2B0301	SOIL		X		X		X		X		X		X
040M2B0401	SOIL		X		X		X		X		X		X
040M2B0501	SOIL		X		X		X		X		X		X
040M2B0601	SOIL		X		X		X		X		X		X
040M2B0701	SOIL		X										
040M2B0901	SOIL		X										
040M2B1001	SOIL		X										
040TW09037	WATER	X											
041M030201	SOIL		X		X		X		X		X		X
041M030701	SOIL		X		X		X		X		X		X
041E082897	WATER	X		X		X		X		X			
041T082897	WATER	X											
041M18B101	SOIL		X		X		X		X		X		X
041M330101	SOIL		X		X		X		X		X		X
041M330201	SOIL		X		X		X		X		X		X
041M5A0401	SOIL		X		X		X		X		X		X
041M5A0501	SOIL		X		X		X		X		X		X
041M5A0601	SOIL		X		X		X		X		X		X
041M640601	SOIL		X										
041M750101	SOIL		X		X		X		X		X		X
041N750101	SOIL		X		X		X		X		X		X
Total Billable Samples (Water/Soil)		4	20	1	16	1	16	1	16	1	16	0	16

VOA = Volatiles
SV = Semivolatiles
P/P = Pesticide/PCB's
TAL = Metals
CN = Cyanide
TOC = Total Organic Carbons

DATA ASSESSMENT NARRATIVES

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA SW846, Method 8240; the National Functional Guidelines for Organic Data Review, February 1994, and DQO Level III. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # PEN12

A validation was performed on the Volatile Data from SDG PEN12. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within %D continuing calibration criteria. All RRFs were within calibration criteria.

Continuing calibrations (continued)

The continuing calibration, MQ306, contained compounds with %Ds greater than 25% D but less than 50% D. For the samples and non compliant compounds listed below, qualify all positive results as estimated (J).

041M030201RE acetone (28.0)

Compound Identification/Quantitation

Specific Finding:

Do not use results for the samples listed below, in favor of the re-analyzed sample results due to non compliant surrogate recoveries and/or non compliant internal standard areas.

041M030201
041M330101

Do not use results for the re-analyzed samples listed below, due to non compliant internal standard areas.

041M5A601RE
041M640601RE
041N750101RE
040M2B0501RE
040M2B0601RE
040M2B0201RE

System Performance and Overall Assessment

The laboratory did not encounter any large problems. The data as presented requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D= result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M030201RE	acetone (28.0)	+	J
041M030201 041M330101	All results	+/-	Do not use
041M5A601RE 041M640601RE 041N750101RE 040M2B0501RE 040M2B0601RE 040M2B0201RE	All results	+/-	Do not use

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA SW846 8270; the National Functional Guidelines for Organic Data Review, February 1994, and DQO Level III. All comments made within this report should be considered when examining the analytical results.

SDG # PEN12

A validation was performed on the Semivolatile Data from SDG PEN12. The data was evaluated based on the following parameters.

* Data Completeness
* Holding Times
* GC/MS Tuning
* Calibrations
* Internal Standard Performance
* Blanks
* Surrogate Recoveries
* Laboratory Control Samples
* Field Duplicates
* Compound Identification /Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The data as presented requires no qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL

No qualifications are required.

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8080; the National Functional Guidelines for Organic Data Validation, February 1994; and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN12

A validation was performed on the Pesticide/Aroclor Data from SDG PEN12. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Contractual Non-Compliance

The method requires that all target compounds, including the multi-component compounds, be analyzed with a five (5) point calibration curve. The laboratory analyzed a single point curve for the Aroclors 1221, 1232, 1242, 1248, and 1254. No positive results were reported for the compounds analyzed with a single point calibration, therefore the data did not require qualification.

Compound Identification/Quantitation

Two (2) samples required dilution to accurately quantitate target compounds. For the following samples, the E flagged results are replaced with the corresponding results from the dilution analysis. All other results from the dilution are not used in favor of the results reported from the original analysis.

041M18B101
041M5A0401

Several samples exhibited column quantitation %Ds greater than 40%. The following guidelines were used to qualify the data:

1. No qualifications are required for positive sample results which exhibited column quantitation differences <40%. The "P" flag is removed from the result.

2. The positive sample result which exhibited a column quantitation difference >40%, but ≤100% is qualified as estimated, J.

3. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and is <10X the respective compound CRQL, is qualified as non-detect, U. (All multi-component results are exempt from this rule.)

4. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and >10X the respective compound CRQL, is qualified as presumptively present at an estimated concentration, NJ. (All multi-component results are exempt from this rule.)

5. The positive multi-component pesticide sample result which exhibited a column quantitation difference >100% and <10X the respective multi-component CRQL is qualified as presumptively present at an estimated concentration, NJ.

Compound Identification/Quantitation, Continued

The following samples and compounds have been qualified for high column quantitation %Ds.

Sample ID	Compound	%D	Lab Qual.	HESI Qual.	Ref. #
041M330201	Gamma-BHC	45.4%	P	J	2
	Dieldrin	2197%	P	U	3
	Methoxychlor	3700%	P	U	3
041M030201	Gamma-BHC	666.0%	P	U	3
	Methoxychlor	1150%	P	U	3
041M030701	Dieldrin	1998%	P	U	3
	Endosulfan Sulfate	52.8%	P	J	2
	Gamma-Chlordane	75.7%	P	J	2
041M5A0401	Gamma-BHC	83.3%	P	J	2
	Dieldrin	762.1%	P	U	3
	Endrin	146.4%	P	U	3
	Endosulfan Sulfate	56.5%	P	J	2
	Methoxychlor	990.9%	P	U	3
	Endrin Aldehyde	364.3%	P	U	3
	Gamma-Chlordane	77.2%	P	J	2
041M5A0501	Endrin	158.3%	P	U	3
041M5A0601	Endosulfan I	[illegible].0%	P	U	3
	Dieldrin	64.3%	P	J	2
	Endrin	36.4%	P		1
	Endosulfan Sulfate	50.0%	P	J	2
	Methoxychlor	1385%	P	U	3
	Alpha-Chlordane	115.4%	P	U	3
	Gamma-Chlordane	828.6%	P	U	3

Compound Identification/Quantitation, Continued

The following samples and compounds have been qualified for high column quantitation %Ds.

Sample ID	Compound	%D	Lab Qual.	HESI Qual.	Ref. #
041M750101	Gamma-BHC	32.0%	P		1
	Dieldrin	1040%	P	U	3
	4,4'-DDT	70.0%	P	J	2
	Methoxychlor	386.5%	P	U	3
	Endrin Aldehyde	793.6%	P	U	3
	Gamma-Chlordane	300.0%	P	U	3
041N750101	Dieldrin	596.4%	P	U	3
	4,4'-DDT	100.0%	P	J	2
	Methoxychlor	633.3%	P	U	3
	Gamma-Chlordane	217.1%	P	U	3
040M2B0201	Gamma-BHC	34.1%	P		1
	Endrin	74.6%	P	J	2
	Endrin Aldehyde	309.1%	p	U	3
041M18B101	4,4'-DDE	49.2%	P	J	2
040M2B0501	Endrin	48.6%	P	J	2
	Endrin Ketone	114.3%	P	U	3
	Endrin Aldehyde	420.8%	P	U	3
040M2B0601	Gamma-BHC	152.9%	P	U	3
	Dieldrin	670.3%	P	U	3
	4,4'-DDT	81.8%	p	J	2

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

NJ = Result is considered presumptively present at an estimated concentration

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
041M18B101 041M5A0401	All E flagged	+E	D
041M18B101DL 041M5A0401DL	All except corresponding D flagged results	+/-	Not Used
ALL	All P < 40%	+	
ALL	All P > 40% But ≤ 100%	+	J
ALL	single component pests All P > 100% And < 10X CRQL	+	U
ALL	single component pests All P > 100% And > 10X CRQL	+	NJ
ALL	multi-component pests All P > 100% And < 10X CRQL	+	NJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS, CYANIDE AND TOC

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Methods 6010, 7000, 9012, and 9060; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN12

A validation was performed on the Metals, Cyanide and TOC data from SDG PEN12. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions
*	•	Post Digestion Spiking

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation blank exhibited contamination for the following elements.

Elements	Conc	Samples Affected
Mercury	0.005 mg/Kg	All soil samples ≤ 0.025 mg/Kg
Potassium	3.426 mg/Kg	All soil samples ≤ 17.3 mg/Kg

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U".

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples Affected
Arsenic	-0.479 mg/Kg	All samples ≤ 4.79 mg/Kg
Cadmium	-0.049 mg/Kg	All samples ≤ 0.49 mg/Kg
Cobalt	-0.165 mg/Kg	All samples ≤ 1.65 mg/Kg
Silver	-0.221 mg/Kg	All samples ≤ 2.21 mg/Kg

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

The equipment rinseate blank 041E082897 exhibited contamination for some target analytes. However, there was no impact on the analytical data because of this contamination.

Matrix Spike Recoveries

The matrix spike recoveries for soils for Antimony (71.3%) and Cyanide (40.6%) were below the lower control limits (>30% but ≤75%). All positive and non-detect results for these analytes are qualified as estimated, "J" or "UJ".

"B" Qualifier

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All soil samples ≤ 0.025 mg/Kg	Hg	+	U
All soil samples ≤ 17.3 mg/Kg	K	+	U
All soil samples ≤ 4.79 mg/Kg	As	+/-	J/UJ
All soil samples ≤ 0.49 mg/Kg	Cd	+/-	J/UJ
All samples ≤ 1.65 mg/Kg	Co	+/-	J/UJ
All samples ≤ 2.21 mg/Kg	Ag	+/-	J/UJ
All soil samples	Sb, CN	+/-	J/UJ
All soil samples	All	+ "B"	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	PEN13
Date:	October 14, 1997
Client Name:	EnSafe
Project/Site Name:	Pensacola - Sites 40 & 41
Date Sampled:	September 3-8, 1997
Number of Samples:	11 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Savannah Laboratories
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Volatiles, Semivolatiles, Pesticide/PCB's, Metals, Cyanide, Total Organic Carbons

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

for Kimberly S. Shopp
Paul B. Humburg, President

14 October 1997
Date

4127 Plaza 94 South - St. Charles, MO 63304
(314) 936-1337 Fax (314) 936-1335

SDG# PEN13

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

ENSAFE ID	MATRIX	VOA		SVOA		P/P		TAL		CN		TOC	
040M2B0701	SOIL				X		X		X				X
040M2B0801	SOIL		X		X		X		X				X
040M2B0901	SOIL				X		X		X		X		X
040M2B1001	SOIL				X		X		X				X
040SR10910	SOIL								X				
040SR20920	SOIL								X				
040SR30930	SOIL								X				
041M160301	SOIL		X		X		X		X				X
041M640401	SOIL		X		X		X		X				X
041M640501	SOIL		X		X		X		X				X
041M640601	SOIL				X		X		X				X
Total Billable Samples	(Water/Soil)	0	4	0	8	0	8	0	11	0	1	0	8

VOA = Volatiles
SV = Semivolatiles
P/P = Pesticide/PCB's
TAL = Metals
CN = Cyanide
TOC = Total Organic Carbons

DATA ASSESSMENT NARRATIVES

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA SW846, Method 8240; the National Functional Guidelines for Organic Data Review, February 1994, and DQO Level III. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG # PEN13

A validation was performed on the Volatile Data from SDG PEN13. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibrations
*	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing calibrations

The continuing calibrations that were analyzed with this data package exhibited %Ds that were not within %D continuing calibration criteria All RRFs were within calibration criteria.

Continuing calibrations (continued)

The continuing calibration, MQ349, contained compounds with %Ds greater than 25% D but less than 50% D. For the samples and non compliant compounds listed below, qualify all positive results as estimated (J).

041M640401	acetone (25.8)
041M640501RE	

Compound Identification/Quantitation

Specific Finding:

Do not use results for the sample 041M640501, in favor of the re-analyzed sample results due to non compliant internal standard areas.

System Performance and Overall Assessment

The laboratory did not encounter any large problems. The data as presented requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D= result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
041M640401 041M640501RE	acetone (25.8)	+	J
041M640501	All results	+/-	Do not use

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA SW846 8270; the National Functional Guidelines for Organic Data Review, February 1994, and DQO Level III. All comments made within this report should be considered when examining the analytical results.

SDG # PEN13

A validation was performed on the Semivolatile Data from SDG PEN13. The data was evaluated based on the following parameters.

* Data Completeness
* Holding Times
* GC/MS Tuning
  Calibrations
  Internal Standard Performance
* Blanks
* Surrogate Recoveries
* Laboratory Control Samples
* Field Duplicates
  Compound Identification /Quantitation

* - All criteria were met for this parameter

Continuing Calibrations

The continuing calibrations were acceptable for all average RRFs. All %Ds were not within continuing calibration criteria. Qualifications are required.

Continuing Calibration (continued)

The continuing calibration, GQ569, contained compounds with %Ds greater than 25% but less than 50%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J).

040M2B0801	pyrene (25.8%)
041M640401	
041M640501	
041M640601	

The continuing calibration, GQ569, contained compounds with %Ds greater than 25% but less than 50%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J).

041M640401	carbazole (27.8%)
041M640501	
041M640601	

The continuing calibration, JQ766, contained compounds with %Ds greater than 25% but less than 50%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J).

040M2B0701	pyrene (40.2%)

The continuing calibration, JQ766, contained compounds with %Ds greater than 50% but less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

040M2B0701	2,2'-oxybis(1-chloropropene) (68.8%)
040M2B1001	3,3'-dichlorobenzidine (65.3%)
041M160301	

Internal Standards

All internal standard EICP areas did not meet the internal standard EICP area QA/QC criteria. Qualifications are required.

Internal Standards (continued)

The following samples exhibited low internal standard area for the internal standard listed. Qualify associated positive results as estimated (J) and non detects as estimated (UJ).

041M640501	perylene-d_{12}
041M640401	

Compound Identification/Quantitation

Do not use samples 041M640501RE and 041M640401RE, in favor of the initial analysis, due to non compliant internal standard area recoveries.

System Performance and Overall Assessment

The data as presented requires qualifications.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
040M2B0801 041M640401 041M640501 041M640601	pyrene	+	J
041M640401 041M640501 041M640601	carbazole	+	J
040M2B0701	pyrene	+	J
040M2B0701 040M2B1001 041M160301	bis(2-chloroisopropyl)ether 3,3'-dichlorobenzidine	+/-	J/UJ
041M640501 041M640401	All associated compounds perylene-d_{12}	+/-	J/UJ
041M640501RE 041M640401RE	all compounds	+/-	do not use

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
040M2B0801 041M640401 041M640501 041M640601	pyrene	+	J
041M640401 041M640501 041M640601	carbazole	+	J
040M2B0701	pyrene	+	J
040M2B0701 040M2B1001 041M160301	bis(2-chloroisopropyl)ether 3,3'-dichlorobenzidine	+/-	J/UJ
041M640501 041M640401	All associated compounds perylene-d_{12}	+/-	J/UJ
041M640501RE 041M640401RE	all compounds	+/-	do not use

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8080; the National Functional Guidelines for Organic Data Validation, February 1994; and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN13

A validation was performed on the Pesticide/Aroclor Data from SDG PEN13. The data was evaluated based on the following parameters:

- * Data Completeness
- * Holding Times
- * GC Performance
- * Calibration
- * Blanks
- * Surrogate Recoveries
- * Matrix Spike/Matrix Spike Duplicates
- * Field Duplicates
- * Compound Identification
- Compound Quantitation

* - All criteria were met for this parameter.

Contractual Non-Compliance

The method requires that all target compounds, including the multi-component compounds, be analyzed with a five (5) point calibration curve. The laboratory analyzed a single point curve for the Aroclors 1221, 1232, 1242, 1248, and 1254. No positive results were reported for the compounds analyzed with a single point calibration, therefore the data did not require qualification.

Compound Identification/Quantitation

Several target compounds were not confirmed due to coelution of matrix interferences and flagged X by the laboratory. The sample concentrations were too low for GC/MS confirmation. It is the profession opinion of the data reviewer that these results be considered presumptively present at an estimated concentration. For the following samples and compounds, the positive results which did not meet the confirmation criteria should be considered presumptively present and are qualified as estimated, NJ.

041M640401	Delta-BHC
041M640601	

Several samples exhibited column quantitation %Ds greater than 40%. The following guidelines were used to qualify the data:

1. No qualifications are required for positive sample results which exhibited column quantitation differences <40%. The "P" flag is removed from the result.

2. The positive sample result which exhibited a column quantitation difference >40%, but ≤100% is qualified as estimated, J.

3. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and is <10X the respective compound CRQL, is qualified as non-detect, U. (All multi-component results are exempt from this rule.)

4. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and >10X the respective compound CRQL, is qualified as presumptively present at an estimated concentration, NJ. (All multi-component results are exempt from this rule.)

5. The positive multi-component pesticide sample result which exhibited a column quantitation difference >100% and <10X the respective multi-component CRQL is qualified as presumptively present at an estimated concentration, NJ.

Compound Identification/Quantitation, Continued

The following samples and compounds have been qualified for high column quantitation %Ds.

Sample ID	Compound	%D	Lab Qual.	HESI Qual.	Ref. #
041M640601	Gamma-BHC	1689.5%	P	U	3
	Aldrin	605.9%	P	U	3
	Heptachlor Epoxide	50920%	P	U	3
	Endosulfan I	76.9%	P	J	2
	Dieldrin	27.3%	P		1
	4,4'-DDT	31.6%	P		1
	Alpha-Chlordane	116.7%	P	U	3
	Gamma-Chlordane	144.4%	P	U	3
040M2B0701	4,4'-DDE	139.1%	P	U	3
041M640501	Aldrin	2207.7%	P	U	3
	Heptachlor Epoxide	499.0%	P	U	3
	Endosulfan I	237.2%	P	U	3
	4,4'-DDT	120.8%	P	U	3
	Gamma-Chlordane	185.7%	P	U	3
041M640401	Aldrin	1207.7%	P	U	3
	Endosulfan I	50.0%	P	J	2
	4,4'-DDT	72.2%	P	J	2
	Alpha-Chlordane	94.6%	P	J	2
	Gamma-Chlordane	1275.0%	P	U	3
	Aroclor-1260	26.7%	P		1
040M2B0801	Dieldrin	38.5%	P		1

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

NJ = Result is considered presumptively present at an estimated concentration

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
041M640401 041M640601	Delta-BHC	+	NJ
ALL	All P < 40%	+	
ALL	All P > 40% But ≤ 100%	+	J
ALL	single component pests All P > 100% And < 10X CRQL	+	U
ALL	single component pests All P > 100% And > 10X CRQL	+	NJ
ALL	multi-component pests All P> 100% And < 10X CRQL	+	NJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS, CYANIDE AND TOC

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Methods 6010, 7000, 9012, and 9060; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN13

A validation was performed on the Metals, Cyanide and TOC data from SDG PEN13. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
*	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
	•	Serial Dilutions
*	•	Post Digestion Spiking

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation blank exhibited contamination for the following elements.

Elements	Conc.	Samples Affected
Mercury	0.002 mg/Kg	All soil samples ≤ 0.010 mg/Kg
Sodium	6.636 mg/Kg	No Impact
Zinc	0.518 mg/Kg	All soil samples ≤ 2.59 mg/Kg

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U".

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples Affected
Silver	-0.180 mg/Kg	All samples ≤ 1.80 mg/Kg
Thallium	-0.472 mg/Kg	All samples ≤ 4.72 mg/Kg

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

The equipment rinseate blank 041E082897 exhibited contamination for some target analytes. However there was no impact on the analytical data because of this contamination.

Serial Dilution Results

The serial dilution for Aluminum was outside the control limits of 10% (42.1%). All positive results are qualified as estimated, "J".

"B" Qualifier

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All soil samples ≤ 0.010mg/kg	Hg	+	U
All soil samples ≤ 2.59mg/kg	Zn	+	U
All soil samples ≤ 1.80mg/kg	Ag	+/-	J/UJ
All soil samples ≤ 4.72mg/kg	Tl	+/-	J/UJ
All soil samples	Al	+	J
All soil samples	All	+ "B"	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	PEN14
Date:	October 8, 1997
Client Name:	EnSafe
Project/Site Name:	Pensacola, Sites 40 & 41
Date Sampled:	September 4, 1997
Number of Samples:	5 Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Savannah Laboratories
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Volatiles, Semivolatiles, Pesticide/PCB's, Metals, Cyanide

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Searles
for Paul B. Humburg, President

10/10/97
Date

4127 Plaza 94 South · St. Charles, MO 63304
(314) 936-1332 · Fax (314) 936-1335

SDG# PEN14

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

ENSAFE ID	MATRIX	VOA		SVOA		P/P		TAL/CN	
040W2B0101	WATER	X		X		X		X	
040TW09047	WATER	X							
041W640101	WATER	X		X		X		X	
041W640501	WATER	X		X		X		X	
041R640501	WATER	X		X		X		X	
Total Billable Samples	(Water/Soil)	5	0	4	0	4	0	4	0

VOA = Volatiles
SV = Semivolatiles
P/P = Pesticide/PCB's
TAL/CN = Metals w/Cyanide

DATA ASSESSMENT NARRATIVES

DATA ASSESSMENT NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Method 8240; the National Functional Guidelines for Organic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN14

A validation was performed on the Volatile Data from SDG PEN14. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibration
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Internal Standard Performance
*	•	Compound Identification
*	•	Compound Quantitation

* - All criteria were met for this parameter.

Field QC Blanks

The trip and rinseate blanks associated with these samples exhibited contamination. The samples required qualification. The end-user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into consideration when applying the 5X or 10X criteria to field samples.

Field QC Blanks, continued

Associated Blanks	Compound	Conc.	Action Level
040TW09047	carbon disulfide	0.46 μg/L	4.6 μg/L
041E082897	carbon disulfide	0.90 μg/L	9.0 μg/L

Samples	Compound	Qualification
040W2B0101	carbon disulfide	CRQL
041W640101		
041W640501		
041R640501		

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
040W2B0101	carbon disulfide	+	CRQL
041W640101			
041W640501			
041R640501			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA SW846 8270; the National Functional Guidelines for Organic Data Review, February 1994; and DQO Level III. All comments made within this report should be considered when examining the analytical results.

SDG # PEN14

A validation was performed on the Semivolatile Data from SDG PEN14. The data was evaluated based on the following parameters.

* Data Completeness
* Holding Times
* GC/MS Tuning
* Calibrations
* Internal Standard Performance
* Blanks
* Surrogate Recoveries
* Laboratory Control Samples
* Field Duplicates
* Compound Identification /Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The data as presented requires no qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL

No qualifications are required.

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8080; the National Functional Guidelines for Organic Data Validation, February 1994; and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN14

A validation was performed on the Pesticide/Aroclor Data from SDG PEN14. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Contractual Non-Compliance

The method requires that all target compounds, including the multi-component compounds, be analyzed with a five (5) point calibration curve. The laboratory analyzed a single point curve for the Aroclors 1221, 1232, 1242, 1248, and 1254. No positive results were reported for the compounds analyzed with a single point calibration, therefore the data do not require qualification.

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLOR ANALYSIS

Compound Identification/Quantitation

Several samples exhibited column quantitation %Ds greater than 40%. The following guidelines were used to qualify the data:

1. No qualifications are required for positive sample results which exhibited column quantitation differences <40%. The "P" flag is removed from the result.

2. The positive sample result which exhibited a column quantitation difference >40%, but ≤100% is qualified as estimated, J.

3. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and is <10X the respective compound CRQL, is qualified as non-detect, U. (All multi-component results are exempt from this rule.)

4. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and >10X the respective compound CRQL, is qualified as presumptively present at an estimated concentration, NJ. (All multi-component results are exempt from this rule.)

5. The positive multi-component pesticide sample result which exhibited a column quantitation difference >100% and <10X the respective multi-component CRQL is qualified as presumptively present at an estimated concentration, NJ.

The following samples and compounds have been qualified for high column quantitation %Ds.

Sample ID	Compound	%D	Lab Qual.	HESI Qual.	Ref. #
041W640501	Beta-BHC	303.2%	P	U	3
	Gamma-BHC	207.7%	P	U	3
041W640101	Beta-BHC	52.8%	P	J	2
	Gamma-BHC	220.0%	P	U	3
041R640501	Beta-BHC	82.4%	P	J	2
	Gamma-BHC	328.6%	P	U	3
040W2B0101	Beta-BHC	157.1%	P	U	3
	Gamma-BHC	441.7%	P	U	3

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

NJ = Result is considered presumptively present at an estimated concentration

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
ALL	All P < 40%	+	
ALL	All P > 40% But ≤ 100%	+	J
ALL	single component pests All P > 100% And < 10X CRQL	+	U
ALL	single component pests All P > 100% And > 10X CRQL	+	NJ
ALL	multi-component pests All P> 100% And < 10X CRQL	+	NJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS AND CYANIDE

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the CLP ILM03.0 Method; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN14

A validation was performed on the Metals and Cyanide Data from SDG PEN14. The data was evaluated based on the following parameters.

- * Data Completeness
- * Holding Times
- * Calibrations
- Blanks
- * Interferences
- Matrix Spike Recovery
- * Matrix Duplicates
- * Field Duplicates
- * Laboratory Control Samples
- Serial Dilutions
- Post Digestion Spiking

* - All criteria were met for this parameter.

Preparation and Field Blanks

The calibration blanks exhibited contamination for the following elements.

Elements	Conc	Samples affected
Aluminum	30.0 ug/l	all water samples below 150 ug/l
Barium	3.9 ug/l	no impact
Calcium	30.4 ug/l	no impact
Magnesium	25.3 ug/l	no impact
Manganese	0.8 ug/l	no impact
Vanadium	0.8 ug/l	all water samples below 4.0 ug/l

The USEPA requires that all sample values below five times the preparation, field, DI or calibration blank contamination be qualified as non-detect, "U".

The preparation blank exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Cadmium	-0.75 ug/l	all water samples below 7.5 ug/l
Chromium	-1.06 ug/l	all water samples below 10.6 ug/l
Nickel	-1.75 ug/l	all water samples below 17.5 ug/l

This reviewer qualifies all samples results below ten times the negative bias as estimated, "J" or "UJ".

Matrix Spike Recovery

The Matrix Spike recoveries for waters for Mercury (68%) and Silver (61%) were below the lower control limits (>30% but <75%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

The Matrix Spike recovery for waters for Zinc (128%) was above the upper control limits (> 125%). All positive results are qualified as estimated, "J".

Serial Dilution results

The serial dilution for waters for Potassium was outside the control limits of 10%. All positive results are qualified as estimated, "J".

Post Digestion Spiking results

The post digestion spiking for the following samples were below the lower control limits (> 10% but <85%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

Analytes	Sample IDs	Recovery
Silver	040W2B0101	53
Silver	041W640101	62
Silver	041W640501	60
Silver	041R640501	64
Thallium	040W2B0101	63
Thallium	041W640101	81
Thallium	041W640501	67
Thallium	041R640501	68

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All water samples below 150 ug/l	Al.	+	U
All water samples below 4.0 ug/l	V.		
All water samples below 7.5 ug/l	Cd.	+/U	J/UJ
All water samples below 10.6 ug/l	Cr.		
All water samples below 17.5 ug/l	Ni.		
All water samples	Hg and Ag.	+/U	J/UJ
All water samples	Zn.	+	J
All water samples	K.	+	J
041W640101, 041W640501, 041R640501 and 040W2B0101.	Ag and Tl.	+/U	J/UJ
All "B" results	all analytes	B	J

"B" qualifier

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	PEN15
Date:	October 30, 1997
Client Name:	EnSafe
Project/Site Name:	Pensacola
Date Sampled:	September 2-8, 1997
Number of Samples:	8 Non-aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Savannah Laboratories
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, June 1991 and February, 1994, respectively
QA/QC Level:	EPA DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Polynuclear Aromatic Hydrocarbons, Pesticide/PCB's, Lead

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Searfoss
for Paul B. Humburg, President

11/4/97
Date

4127 Plaza 94 South St. Charles, MO 63304
(314) 936-1332 Fax (314) 936-1335

SDG# PEN15

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

ENSAFE ID	MATRIX	PAH		P/P		PB	
040J400601	SOIL		X		X		X
040J400602	SOIL				X		X
041J18B101	SOIL		X		X		X
041J330101	SOIL				X		X
041J330201	SOIL		X		X		X
041J640101	SOIL		X		X		X
041J640601	SOIL		X		X		X
041J750101	SOIL		X		X		X
Total Billable Samples (Water/Soil)		0	6	0	8	0	8

PAH = Polynuclear Aromatic Hydrocarbons
P/P = Pesticide/PCB's
PB = Lead

DATA ASSESSMENT NARRATIVES

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA SW846, method 8270; National Functional Guidelines for Organic Data Review, February 1994 and DQO Level III All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # PEN15

A validation was performed on the Semivolatile Data from SDG PEN15. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibrations
	•	Internal Standard Performance
*	•	Blanks
*	•	Surrogate Recoveries
*	•	Laboratory Control Sample
*	•	Field Duplicates
*	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Internal Standards

The samples listed below, exhibited low internal standard areas. Qualify all associated positive results as estimated (J) and all non detects as estimated (UJ).

041J750101	chrysene-d_{12} perylene-d_{12}
041J188101 041J330201 041J640101	perylene-d_{12}

System Performance and Overall Assessment

The laboratory did not encounter any large problems. The data requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

K = Result is biased high

L = Result is biased low

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL
	All associated compounds	+/-	J/UJ
041J750101	chrysene-d_{12} perylene-d_{12}		
041J188101 041J330201 041J640101	perylene-d_{12}		

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8080; the National Functional Guidelines for Organic Data Validation, February 1994; and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN15

A validation was performed on the Pesticide/Aroclor Data from SDG PEN15. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Compound Identification
	•	Compound Quantitation

* - All criteria were met for this parameter.

Contractual Non-Compliance

The method requires that all target compounds, including the multi-component compounds, be analyzed with a five (5) point calibration curve. The laboratory analyzed a single point curve for the Aroclors 1221, 1232, 1242, 1248, and 1254. No positive results were reported for the compounds analyzed with a single point calibration, therefore the data did not require qualification.

Method Blanks

The associated method blank exhibited contamination for target compounds and required qualifications. The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moistures as associated samples. These factors must be taken into consideration when applying the 5X criteria to field samples. The method blank results were compared to the associated samples.

Blank ID	Compound	Concentration	Action Level
0923Q-KMB	Delta-BHC	0.20 J µg/Kg	1.0 µg/Kg
	4,4'-DDD	0.28 JP µg/Kg	1.4 µg/Kg

The following samples have been qualified for method blank contamination. The qualifications are for all the blanks.

Sample	Compound	Qualification
040J400602	Delta-BHC	CRQL
041J330201	4,4'-DDD	CRQL

Compound Identification/Quantitation

Several samples exhibited column quantitation %Ds greater than 40%. The following guidelines were used to qualify the data:

1. No qualifications are required for positive sample results which exhibited column quantitation differences < 40%. The "P" flag is removed from the result.

2. The positive sample result which exhibited a column quantitation difference > 40%, but ≤ 100% is qualified as estimated, J.

3. The positive single component pesticide sample result which exhibited a column quantitation difference > 100% and is < 10X the respective compound CRQL, is qualified as non-detect, U. (All multi-component results are exempt from this rule.)

Compound Identification/Quantitation, Continued

4. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and >10X the respective compound CRQL, is qualified as presumptively present at an estimated concentration, NJ. (All multi-component results are exempt from this rule.)

5. The positive multi-component pesticide sample result which exhibited a column quantitation difference >100% and <10X the respective multi-component CRQL is qualified as presumptively present at an estimated concentration, NJ.

The following samples and compounds have been qualified for high column quantitation %Ds.

Sample ID	Compound	%D	Lab Qual.	HESI Qual.	Ref. #
040J400601	Gamma-BHC	26.4%	P		1
	Alpha-chlordane	1081.8%	P	U	3
	Gamma-Chlordane	41.2%	P	J	2
040J400602	Delta-BHC	88.2%	P	J	2
	Gamma-BHC	35.1%	P		1
	Aldrin	106.4%	P	U	3
	Heptachlor Epoxide	135.3%	P	U	3
	Dieldrin	46.2%	P	J	2
	Alpha-Chlordane	533.8%	P	U	3
	Gamma-Chlordane	82.4%	P	J	2
041J18B101	4,4'-DDT	159.7	P	U	3
	Alpha-Chlordane	85.7%	P	J	2
041J640101	Gamma-BHC	50.0%	P	J	2
	Endosulfan I	100.0%	P	J	2
	Dieldrin	30.3%	P		1
	4,4'-DDT	89.3%	P	J	2
	Alpha-Chlordane	143.6%	P	U	3
	Gamma-Chlordane	109.0%	P	U	3
	Aroclor-1260	92.3%	P	J	2

Compound Identification/Quantitation, Continued

Sample ID	Compound	%D	Lab Qual.	HESI Qual.	Ref. #
041J640601	Endosulfan I	58.3%	P	J	2
	Dieldrin	262.5%	P	U	3
	Alpha-Chlordane	58.3%	P	J	2
	Gamma-Chlordane	73.7%	P	J	2
	Aroclor-1260	46.3%	P	J	2
041J330201	Dieldrin	361.5%	P	U	3
	4,4'-DDE	86.7%	P	J	2
	4,4'-DDD	414.3%	P	U	3
	4,4'-DDT	42.8%	P	J	2
	Gamma-Chlordane	486.2%	P	U	3
041J330101	Heptachlor	37.5%	P		1
	Aldrin	423.8%	P	U	3
	Endosulfan I	233.3%	P	U	3
	Dieldrin	445.4%	P	U	3
	4,4'-DDE	27.8%	P		1
	Endrin Aldehyde	214.3%	P	U	3
	Alpha-Chlordane	227.3%	P	U	3
	Gamma-Chlordane	81.8%	P	J	2
041J750101	4,4'-DDT	237.0%	P	U	3

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

NJ = Result is considered presumptively present at an estimated concentration

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
040J400602	Delta-BHC	+	CRQL
041J330201	4,4'-DDD	+	CRQL
ALL	All P < 40%	+	
ALL	All P > 40% But ≤ 100%	+	J
ALL	single component pests All P > 100% And < 10X CRQL	+	U
ALL	single component pests All P > 100% And > 10X CRQL	+	NJ
ALL	multi-component pests All P> 100% And < 10X CRQL	+	NJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
LEAD ONLY

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW 846 Methods; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # PEN15

A validation was performed on the Lead only Data from SDG PEN15. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
*	•	Blanks
*	•	Interferences
*	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions

* - All criteria were met for this parameter.

Specific Finding

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B" per Ensafe's request.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
All "B" results	all analytes	B	J

Appendix I
DDT Background Data

Data from *Magnitude and Extent of Sediment Toxicity in Four Bays of the Florida Panhandle: Pensacola, Choctawhatchee, St. Andrew, and Apalachicola.* (Long *et al.*, 1997).

Appendix B1. Chemistry and toxicity data from Pensacola Bay, 1993.

Station No.	Location	2,4-DDD ppb	4,4-DDD ppb	2,4'-DDE ppb	2,4-DDT ppb	4,4-DDT ppb	TOTAL DDT ppb	Endrin ppb	C/100	endrin ug/goc	Dieldrin ppb	C/100	Dieldrin ug/goc
1	Bayou Grande	1	5	1	0.1	0.5	7.6	1	0.06		2.84	0.06	0.05
2	Bayou Grande	1	0.5	1	0.1	0.5	3.1	1	0		0.1	0	
3	Bayou Grande	1	2.58	2.1	0.1	2.02	7.8	1	0.05		5.76	0.05	0.13
4	Bayou Chico	5.92	12.36	1	0.1	0.5	19.88	1	0.03		1.72	0.03	0.06
5	Bayou Chico	19.24	36.98	1	4.26	10.8	72.28	20.3	0.06	0.39	24.98	0.06	0.4
6	Bayou Chico	2.76	12.64	1	0.1	2.86	19.36	1	0.05		1.54	0.05	0.03
7	Bayou Chico	1	43.82	1	0.1	26.78	72.7	37.2	0.09	0.62	0.1	0.09	
8	Bayou Chico	29	35.12	1	0.1	28.08	93.3	11.28	0.06	0.2	9.54	0.06	0.16
9	Bayou Chico	1	8.6	1	0.1	8.84	19.54	1	0.06		1.36	0.06	0.02
10	Bayou Texar	8.16	37.24	1	1.72	37.06	85.18	1	0.06		10.26	0.06	0.17
11	Bayou Texar	1	8.52	1	0.1	4.94	15.56	1	0.04		2.44	0.04	0.06
12	Bayou Texar	1	0.5	1	0.1	0.5	3.1	1	0.04		0.1	0.04	
13	Bayou Texar	1	25.72	1	2.1	20.3	50.12	4.02	0.04	0.12	8.8	0.04	0.24
14	Warrington	1	0.5	1	0.1	2.32	4.92	1	0.03		0.1	0.03	
15	Bayou Chico	1	0.5	1	0.1	0.5	3.1	1	0.03		1.76	0.03	0.05
16	Bayou Channel	1	0.5	1	0.1	0.5	3.1	1	0		0.1	0	
17	Inner Harbor Channel	1	0.5	1	1.76	0.5	4.76	1	0		0.1	0	
18	Inner Harbor	16.76	53.84	1	0.1	0.5	72.2	1	0.06		7.26	0.06	0.12
19	Inner Harbor	1	0.5	1	0.1	0.5	3.1	1	0.03		0.1	0.03	
20	Inner Harbor	1	0.5	1	0.1	0.5	3.1	1	0.02		0.1	0.02	
21	Pensacola Bay	1	0.5	1	0.1	0.5	3.1	1	0.03		0.1	0.03	
22	Pensacola Bay	1	0.5	1	0.1	0.5	3.1	1	0.03		1.92	0.03	0.06
23	Inner Harbor	1	0.5	1	0.1	0.5	3.1	1	0.03		2.78	0.03	0.09
24	Lower Bay	1	0.5	1	0.1	0.5	3.1	1	0.03		0.1	0.03	
25	Lower Bay								0.03			0.03	
26	East Bay								0.03			0.03	
27	East Bay								0.04			0.04	
28	East Bay								0.04			0.04	
29	Blackwater Bay								0.05			0.05	
30	Blackwater Bay								0.07			0.07	
31	Blackwater Bay								0.03			0.03	
32	Escambia Bay								0.03			0.03	
33	Escambia Bay								0.01			0.01	
34	Escambia Bay								0.03			0.03	
35	Escambia Bay								0.04			0.04	
36	Escambia Bay								0.01			0.01	
37	Escambia River Mouth								0			0	
38	Escambia								0.03			0.03	
39	Floridatown								0.01			0.01	
40	Central Bay								0.03			0.03	
MDL		1 ppb	0.5 ppb	1 ppb	0.1 ppb	0.5 ppb	1	1			0.1		

DDT and its Metabolites from the Sites 40 and 41 Remedial Investigations at the Naval Air Station Pensacola

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE ID	PARAM	RESULT	VQUAL	CONC UNITS
041M480101	4,4'-DDD	2600.0000	DJ	UG/KG
041M18A101	4,4'-DDD	930.0000	D	UG/KG
041M18B101	4,4'-DDD	280.0000	D	UG/KG
041M150301	4,4'-DDD	200.0000	DJ	UG/KG
041M640201	4,4'-DDD	140.0000	D	UG/KG
041M04D401	4,4'-DDD	110.0000	D	UG/KG
041M490101	4,4'-DDD	94.0000	DJ	UG/KG
041M150101	4,4'-DDD	85.0000	DJ	UG/KG
041M150201	4,4'-DDD	62.0000	DJ	UG/KG
041M490201	4,4'-DDD	59.0000	DJ	UG/KG
041M56A101	4,4'-DDD	53.0000	D	UG/KG
041M18A201	4,4'-DDD	49.0000	DJ	UG/KG
041M640301	4,4'-DDD	44.0000	J	UG/KG
041M060301	4,4'-DDD	40.0000	DJ	UG/KG
041M04D101	4,4'-DDD	33.0000	DJ	UG/KG
041M030201	4,4'-DDD	31.0000	D	UG/KG
041M640601	4,4'-DDD	30.0000		UG/KG
041M640501	4,4'-DDD	29.0000	J	UG/KG
041M010401	4,4'-DDD	25.0000	DJ	UG/KG
041M320101	4,4'-DDD	24.0000	J	UG/KG
041M060101	4,4'-DDD	23.0000	J	UG/KG
041M060701	4,4'-DDD	22.0000	J	UG/KG
040MZ21901	4,4'-DDD	16.0000	J	UG/KG
041M18A301	4,4'-DDD	16.0000		UG/KG
041M640401	4,4'-DDD	16.0000		UG/KG
040MZ22401	4,4'-DDD	15.0000		UG/KG
041M04D201	4,4'-DDD	15.0000	DJ	UG/KG
041M030101	4,4'-DDD	14.0000	DJ	UG/KG
041M790101	4,4'-DDD	14.0000	DJ	UG/KG
040MZ22301	4,4'-DDD	12.0000		UG/KG
041M640101	4,4'-DDD	12.0000	DJ	UG/KG
041M640701	4,4'-DDD	12.0000	D	UG/KG
040MZ20501	4,4'-DDD	9.8000	U	UG/KG
040MZ11201	4,4'-DDD	8.9000	U	UG/KG
041M060601	4,4'-DDD	8.3000	D	UG/KG
041M010201	4,4'-DDD	7.9000	J	UG/KG
041M030601	4,4'-DDD	7.7000	D	UG/KG
040MZ22101	4,4'-DDD	7.6000	DJ	UG/KG
040MZ10601	4,4'-DDD	7.3000	U	UG/KG
040MZ10901	4,4'-DDD	6.8000	U	UG/KG
041M030701	4,4'-DDD	6.8000	J	UG/KG
040MZ10701	4,4'-DDD	6.5000	U	UG/KG
041M060801	4,4'-DDD	6.4000	D	UG/KG
041M52E101	4,4'-DDD	6.1000	DJ	UG/KG
041MW20101	4,4'-DDD	5.8000	D	UG/KG
040MZ10501	4,4'-DDD	5.6000	U	UG/KG
041M63A301	4,4'-DDD	5.6000	DJ	UG/KG
040MZ21801	4,4'-DDD	5.2000	J	UG/KG
040MZ22201	4,4'-DDD	5.0000	J	UG/KG
041M010301	4,4'-DDD	5.0000	DJ	UG/KG
041M160301	4,4'-DDD	4.8000	J	UG/KG
041M030501	4,4'-DDD	3.5000	J	UG/KG
041M320301	4,4'-DDD	3.3000	J	UG/KG
041M570101	4,4'-DDD	3.3000	J	UG/KG
041M060201	4,4'-DDD	3.1000	J	UG/KG
040MZ10401	4,4'-DDD	3.0000	U	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE_ID	PARAM	RESULT	VQUAL	CONC_UNITS
040MZ11301	4,4'-DDD	2.7000	U	UG/KG
040MZ10101	4,4'-DDD	2.4000	U	UG/KG
040MZ21701	4,4'-DDD	2.4000		UG/KG
040MZ21401	4,4'-DDD	2.3000	J	UG/KG
041M060401	4,4'-DDD	2.3000	J	UG/KG
041M5A0401	4,4'-DDD	2.3000	J	UG/KG
040MZ10801	4,4'-DDD	2.2000	U	UG/KG
041M060501	4,4'-DDD	2.2000		UG/KG
041M5B0201	4,4'-DDD	2.2000	J	UG/KG
041M640801	4,4'-DDD	2.2000		UG/KG
041M641001	4,4'-DDD	2.2000	J	UG/KG
040MZ10201	4,4'-DDD	2.1000	U	UG/KG
040MZ11001	4,4'-DDD	2.1000	U	UG/KG
040MZ11101	4,4'-DDD	2.1000	U	UG/KG
040MZ13401	4,4'-DDD	2.1000	U	UG/KG
041M320201	4,4'-DDD	2.1000	UJ	UG/KG
040MZ10301	4,4'-DDD	2.0000	U	UG/KG
040MZ24401	4,4'-DDD	1.8000	J	UG/KG
040MZ21501	4,4'-DDD	1.7000	J	UG/KG
041M250101	4,4'-DDD	1.7000	U	UG/KG
040MZ13501	4,4'-DDD	1.6000		UG/KG
041M030401	4,4'-DDD	1.6000	J	UG/KG
041M160201	4,4'-DDD	1.5000	J	UG/KG
041M5A0201	4,4'-DDD	1.5000	J	UG/KG
041M19A101	4,4'-DDD	1.4000	U	UG/KG
041M52A101	4,4'-DDD	1.4000	U	UG/KG
040MZ40101	4,4'-DDD	1.3000	J	UG/KG
041M030301	4,4'-DDD	1.3000	J	UG/KG
041M150401	4,4'-DDD	1.3000	J	UG/KG
041M63A201	4,4'-DDD	1.3000	J	UG/KG
040MZ13601	4,4'-DDD	1.2000	U	UG/KG
040MZ31901	4,4'-DDD	1.2000	U	UG/KG
041M250201	4,4'-DDD	1.2000	U	UG/KG
040MZ12201	4,4'-DDD	1.1000	U	UG/KG
040MZ40501	4,4'-DDD	1.1000	U	UG/KG
041M641901	4,4'-DDD	1.1000	J	UG/KG
040MZ22601	4,4'-DDD	1.0000	U	UG/KG
040MZ24701	4,4'-DDD	1.0000	J	UG/KG
041M641401	4,4'-DDD	1.0000	U	UG/KG
040MZ12901	4,4'-DDD	0.9900	U	UG/KG
040MZ13701	4,4'-DDD	0.9800	U	UG/KG
040MZ20601	4,4'-DDD	0.9800	U	UG/KG
041M641601	4,4'-DDD	0.9700	U	UG/KG
040MZ21601	4,4'-DDD	0.9300	J	UG/KG
041M641301	4,4'-DDD	0.9200	UJ	UG/KG
041MW20301	4,4'-DDD	0.9100	U	UG/KG
040MZ11901	4,4'-DDD	0.8800	U	UG/KG
041MW20201	4,4'-DDD	0.8600		UG/KG
040MZ11401	4,4'-DDD	0.8400	U	UG/KG
041M5A0301	4,4'-DDD	0.8400	J	UG/KG
040MZ22801	4,4'-DDD	0.8100	U	UG/KG
040MZ24601	4,4'-DDD	0.8100	U	UG/KG
041M5A0501	4,4'-DDD	0.8100	UJ	UG/KG
040MZ13001	4,4'-DDD	0.7600	U	UG/KG
040MZ23301	4,4'-DDD	0.7600	U	UG/KG
040MZ40401	4,4'-DDD	0.7300	UJ	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE ID	PARAM	RESULT	VQUAL	CONC UNITS
041M19B101	4,4'-DDD	0.7100		UG/KG
040MZ12001	4,4'-DDD	0.7000	UR	UG/KG
041M270201	4,4'-DDD	0.7000	U	UG/KG
041M641101	4,4'-DDD	0.6800	J	UG/KG
040MZ30201	4,4'-DDD	0.6700	U	UG/KG
041M5A0101	4,4'-DDD	0.6400	J	UG/KG
040MZ11601	4,4'-DDD	0.6200	U	UG/KG
040MZ23101	4,4'-DDD	0.6000	U	UG/KG
041M250301	4,4'-DDD	0.5300	U	UG/KG
040MZ11501	4,4'-DDD	0.5100	UR	UG/KG
041M52E201	4,4'-DDD	0.5100	J	UG/KG
040MZ21201	4,4'-DDD	0.5000	J	UG/KG
040MZ32301	4,4'-DDD	0.5000	J	UG/KG
041M52D101	4,4'-DDD	0.4500	J	UG/KG
040MZ23601	4,4'-DDD	0.4300	J	UG/KG
040MZ30701	4,4'-DDD	0.4200	U	UG/KG
041M330201	4,4'-DDD	0.4200	U	UG/KG
041M270101	4,4'-DDD	0.4100	UJ	UG/KG
041M330101	4,4'-DDD	0.3900	UJ	UG/KG
040MZ20801	4,4'-DDD	0.3700	J	UG/KG
040MZ40801	4,4'-DDD	0.3700	J	UG/KG
041M63B101	4,4'-DDD	0.3600	UR	UG/KG
040MZ30401	4,4'-DDD	0.3400	J	UG/KG
041M63B201	4,4'-DDD	0.3400	J	UG/KG
040MZ24501	4,4'-DDD	0.3200	J	UG/KG
041M120201	4,4'-DDD	0.3200	U	UG/KG
041M63A401	4,4'-DDD	0.3200	J	UG/KG
041M640901	4,4'-DDD	0.3100	J	UG/KG
041M641701	4,4'-DDD	0.3100	U	UG/KG
040MZ22501	4,4'-DDD	0.2800	U	UG/KG
041M160101	4,4'-DDD	0.2700	J	UG/KG
040MZ20901	4,4'-DDD	0.2600	J	UG/KG
040MZ21001	4,4'-DDD	0.2600	J	UG/KG
040MZ40301	4,4'-DDD	0.2600	J	UG/KG
041M130101	4,4'-DDD	0.2600	UJ	UG/KG
041M641201	4,4'-DDD	0.2600	J	UG/KG
040MZ32001	4,4'-DDD	0.2500	UJ	UG/KG
041M060901	4,4'-DDD	0.2500	J	UG/KG
040MZ31701	4,4'-DDD	0.2400	J	UG/KG
040MZ41301	4,4'-DDD	0.2400	U	UG/KG
041M490301	4,4'-DDD	0.2400	U	UG/KG
041M52E301	4,4'-DDD	0.2400	U	UG/KG
041M642201	4,4'-DDD	0.2400	U	UG/KG
040MZ21101	4,4'-DDD	0.2300	U	UG/KG
040MZ23501	4,4'-DDD	0.2300	U	UG/KG
040MZ30801	4,4'-DDD	0.2300	U	UG/KG
041M010101	4,4'-DDD	0.2300	UJ	UG/KG
041M170101	4,4'-DDD	0.2300	J	UG/KG
041M580101	4,4'-DDD	0.2300	U	UG/KG
041M5A0601	4,4'-DDD	0.2300	U	UG/KG
041M5A0701	4,4'-DDD	0.2300	J	UG/KG
041M63B401	4,4'-DDD	0.2300	J	UG/KG
041M642401	4,4'-DDD	0.2300	UJ	UG/KG
041M720101	4,4'-DDD	0.2300	U	UG/KG
040MZ11701	4,4'-DDD	0.2200	U	UG/KG
040MZ12601	4,4'-DDD	0.2200	U	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE ID	PARAM	RESULT	VQUAL	CONC UNITS
040MZ20301	4,4'-DDD	0.2200	UJ	UG/KG
040MZ20701	4,4'-DDD	0.2200	U	UG/KG
040MZ23401	4,4'-DDD	0.2200	U	UG/KG
040MZ23801	4,4'-DDD	0.2200	U	UG/KG
040MZ24101	4,4'-DDD	0.2200	U	UG/KG
040MZ24801	4,4'-DDD	0.2200	U	UG/KG
040MZ24901	4,4'-DDD	0.2200	U	UG/KG
040MZ25101	4,4'-DDD	0.2200	U	UG/KG
040MZ25501	4,4'-DDD	0.2200	U	UG/KG
040MZ25701	4,4'-DDD	0.2200	U	UG/KG
040MZ31001	4,4'-DDD	0.2200	U	UG/KG
040MZ31301	4,4'-DDD	0.2200	UJ	UG/KG
040MZ31401	4,4'-DDD	0.2200	U	UG/KG
040MZ31501	4,4'-DDD	0.2200	U	UG/KG
040MZ31601	4,4'-DDD	0.2200	U	UG/KG
040MZ31801	4,4'-DDD	0.2200	U	UG/KG
040MZ32201	4,4'-DDD	0.2200	UJ	UG/KG
040MZ32401	4,4'-DDD	0.2200	UJ	UG/KG
040MZ40701	4,4'-DDD	0.2200	UR	UG/KG
040MZ41101	4,4'-DDD	0.2200	U	UG/KG
040MZ41201	4,4'-DDD	0.2200	U	UG/KG
040MZ41401	4,4'-DDD	0.2200	U	UG/KG
040MZ41501	4,4'-DDD	0.2200	U	UG/KG
040MZ41601	4,4'-DDD	0.2200	U	UG/KG
040MZ41701	4,4'-DDD	0.2200	U	UG/KG
040MZ42101	4,4'-DDD	0.2200	U	UG/KG
041M061001	4,4'-DDD	0.2200	J	UG/KG
041M330301	4,4'-DDD	0.2200	U	UG/KG
041M641801	4,4'-DDD	0.2200	U	UG/KG
041M642301	4,4'-DDD	0.2200	U	UG/KG
041M790301	4,4'-DDD	0.2200	U	UG/KG
040MZ11801	4,4'-DDD	0.2100	U	UG/KG
040MZ12101	4,4'-DDD	0.2100	U	UG/KG
040MZ12401	4,4'-DDD	0.2100	U	UG/KG
040MZ12501	4,4'-DDD	0.2100	U	UG/KG
040MZ12701	4,4'-DDD	0.2100	U	UG/KG
040MZ12801	4,4'-DDD	0.2100	U	UG/KG
040MZ13101	4,4'-DDD	0.2100	U	UG/KG
040MZ13201	4,4'-DDD	0.2100	U	UG/KG
040MZ13301	4,4'-DDD	0.2100	U	UG/KG
040MZ13801	4,4'-DDD	0.2100	U	UG/KG
040MZ20101	4,4'-DDD	0.2100	UJ	UG/KG
040MZ20201	4,4'-DDD	0.2100	UJ	UG/KG
040MZ20401	4,4'-DDD	0.2100	UJ	UG/KG
040MZ21301	4,4'-DDD	0.2100	UJ	UG/KG
040MZ22001	4,4'-DDD	0.2100	UJ	UG/KG
040MZ22701	4,4'-DDD	0.2100	U	UG/KG
040MZ22901	4,4'-DDD	0.2100	U	UG/KG
040MZ23001	4,4'-DDD	0.2100	U	UG/KG
040MZ23201	4,4'-DDD	0.2100	U	UG/KG
040MZ23701	4,4'-DDD	0.2100	U	UG/KG
040MZ23901	4,4'-DDD	0.2100	U	UG/KG
040MZ24001	4,4'-DDD	0.2100	U	UG/KG
040MZ24201	4,4'-DDD	0.2100	UR	UG/KG
040MZ24301	4,4'-DDD	0.2100	U	UG/KG
040MZ25001	4,4'-DDD	0.2100	U	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE ID	PARAM	RESULT	VQUAL	CONC UNITS
040MZ25201	4,4'-DDD	0.2100	U	UG/KG
040MZ25301	4,4'-DDD	0.2100	U	UG/KG
040MZ25401	4,4'-DDD	0.2100	U	UG/KG
040MZ25601	4,4'-DDD	0.2100	U	UG/KG
040MZ30101	4,4'-DDD	0.2100	U	UG/KG
040MZ30301	4,4'-DDD	0.2100	U	UG/KG
040MZ30501	4,4'-DDD	0.2100	U	UG/KG
040MZ30601	4,4'-DDD	0.2100	U	UG/KG
040MZ30901	4,4'-DDD	0.2100	UJ	UG/KG
040MZ31101	4,4'-DDD	0.2100	U	UG/KG
040MZ31201	4,4'-DDD	0.2100	U	UG/KG
040MZ32101	4,4'-DDD	0.2100	UJ	UG/KG
040MZ40201	4,4'-DDD	0.2100	UR	UG/KG
040MZ40601	4,4'-DDD	0.2100	U	UG/KG
040MZ40901	4,4'-DDD	0.2100	U	UG/KG
040MZ41001	4,4'-DDD	0.2100	U	UG/KG
040MZ41801	4,4'-DDD	0.2100	U	UG/KG
040MZ41901	4,4'-DDD	0.2100	UJ	UG/KG
040MZ42001	4,4'-DDD	0.2100	U	UG/KG
040MZ42201	4,4'-DDD	0.2100	U	UG/KG
040MZ42301	4,4'-DDD	0.2100	U	UG/KG
040MZ42401	4,4'-DDD	0.2100	U	UG/KG
041M04D301	4,4'-DDD	0.2100	U	UG/KG
041M04D501	4,4'-DDD	0.2100	U	UG/KG
041M061101	4,4'-DDD	0.2100	J	UG/KG
041M10A101	4,4'-DDD	0.2100	U	UG/KG
041M10A201	4,4'-DDD	0.2100	U	UG/KG
041M10A301	4,4'-DDD	0.2100	U	UG/KG
041M120101	4,4'-DDD	0.2100	U	UG/KG
041M170201	4,4'-DDD	0.2100	U	UG/KG
041M19A201	4,4'-DDD	0.2100	U	UG/KG
041M5B0101	4,4'-DDD	0.2100	U	UG/KG
041M63A501	4,4'-DDD	0.2100	U	UG/KG
041M63B301	4,4'-DDD	0.2100	U	UG/KG
041M642001	4,4'-DDD	0.2100	U	UG/KG
041M642101	4,4'-DDD	0.2100	U	UG/KG
041M63A101	4,4'-DDD	0.2000	U	UG/KG
041M641501	4,4'-DDD	0.2000	J	UG/KG
041M720201	4,4'-DDD	0.2000	J	UG/KG
040MZ12301	4,4'-DDD	0.1900	U	UG/KG
041M170301	4,4'-DDD	0.1900	U	UG/KG
041M480101	4,4'-DDE	620.0000	DJ	UG/KG
041M150101	4,4'-DDE	340.0000	DJ	UG/KG
041M18A101	4,4'-DDE	270.0000	D	UG/KG
041M5A0501	4,4'-DDE	120.0000	D	UG/KG
041M060101	4,4'-DDE	110.0000	D	UG/KG
041M150201	4,4'-DDE	110.0000	DJ	UG/KG
041M640301	4,4'-DDE	78.0000		UG/KG
041M640201	4,4'-DDE	72.0000	DJ	UG/KG
041M150301	4,4'-DDE	69.0000	DJ	UG/KG
041M04D401	4,4'-DDE	65.0000	DJ	UG/KG
041M18A201	4,4'-DDE	57.0000	DJ	UG/KG
041M18B101	4,4'-DDE	50.0000	U	UG/KG
041M04D101	4,4'-DDE	46.0000	DJ	UG/KG
041M320101	4,4'-DDE	37.0000	J	UG/KG
041M060701	4,4'-DDE	34.0000	J	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE_ID	PARAM	RESULT	VQUAL	CONC_UNITS
041M060301	4,4'-DDE	33.0000	DJ	UG/KG
041M04D201	4,4'-DDE	29.0000	DJ	UG/KG
041M640501	4,4'-DDE	27.0000	DJ	UG/KG
041M160301	4,4'-DDE	26.0000	J	UG/KG
041M030101	4,4'-DDE	21.0000	DJ	UG/KG
041M490101	4,4'-DDE	18.0000		UG/KG
041M640401	4,4'-DDE	18.0000		UG/KG
041M640601	4,4'-DDE	16.0000	J	UG/KG
041M18A301	4,4'-DDE	14.0000	J	UG/KG
040MZ22401	4,4'-DDE	13.0000		UG/KG
041M150401	4,4'-DDE	10.0000	J	UG/KG
040MZ22301	4,4'-DDE	9.7000		UG/KG
040MZ21901	4,4'-DDE	9.4000	J	UG/KG
041M490201	4,4'-DDE	9.2000		UG/KG
041M010201	4,4'-DDE	8.6000	J	UG/KG
041M060801	4,4'-DDE	8.4000	D	UG/KG
041M060601	4,4'-DDE	8.0000	D	UG/KG
041M570101	4,4'-DDE	7.2000	J	UG/KG
041M52E101	4,4'-DDE	7.0000	D	UG/KG
040MZ21401	4,4'-DDE	5.8000		UG/KG
041M56A101	4,4'-DDE	5.3000	DJ	UG/KG
040MZ21801	4,4'-DDE	4.6000	J	UG/KG
041M010401	4,4'-DDE	4.5000	DJ	UG/KG
040MZ10901	4,4'-DDE	4.4000	DJ	UG/KG
040MZ21501	4,4'-DDE	4.4000		UG/KG
040MZ31901	4,4'-DDE	4.4000		UG/KG
041M060401	4,4'-DDE	4.3000		UG/KG
040MZ22101	4,4'-DDE	4.2000	J	UG/KG
040MZ10701	4,4'-DDE	4.0000	DJ	UG/KG
040MZ22201	4,4'-DDE	3.9000		UG/KG
041M5B0201	4,4'-DDE	3.9000		UG/KG
040MZ30401	4,4'-DDE	3.8000	J	UG/KG
041M640101	4,4'-DDE	3.7000	J	UG/KG
040MZ10601	4,4'-DDE	3.4000	DJ	UG/KG
040MZ23301	4,4'-DDE	3.3000	J	UG/KG
040MZ10501	4,4'-DDE	3.1000	DJ	UG/KG
041M160201	4,4'-DDE	3.1000	J	UG/KG
041M330101	4,4'-DDE	3.1000	J	UG/KG
040MZ22601	4,4'-DDE	2.9000	J	UG/KG
041M060201	4,4'-DDE	2.8000	J	UG/KG
041M060501	4,4'-DDE	2.8000	J	UG/KG
040MZ11301	4,4'-DDE	2.7000	U	UG/KG
040MZ12201	4,4'-DDE	2.7000	J	UG/KG
041M270101	4,4'-DDE	2.7000	J	UG/KG
040MZ20501	4,4'-DDE	2.6000	DJ	UG/KG
041M030601	4,4'-DDE	2.5000	J	UG/KG
041M641001	4,4'-DDE	2.5000	J	UG/KG
040MZ10101	4,4'-DDE	2.4000	U	UG/KG
040MZ22801	4,4'-DDE	2.4000	J	UG/KG
041M640801	4,4'-DDE	2.4000		UG/KG
041MW20101	4,4'-DDE	2.4000	J	UG/KG
040MZ11201	4,4'-DDE	2.3000	DJ	UG/KG
041M10A301	4,4'-DDE	2.3000		UG/KG
040MZ10801	4,4'-DDE	2.2000	U	UG/KG
040MZ24401	4,4'-DDE	2.2000	J	UG/KG
041M320301	4,4'-DDE	2.2000	J	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE ID	PARAM	RESULT	VQUAL	CONC UNITS
040MZ10201	4,4'-DDE	2.1000	U	UG/KG
040MZ11001	4,4'-DDE	2.1000	U	UG/KG
040MZ11101	4,4'-DDE	2.1000	U	UG/KG
040MZ11501	4,4'-DDE	2.1000	J	UG/KG
040MZ13401	4,4'-DDE	2.1000	U	UG/KG
041M320201	4,4'-DDE	2.1000	UJ	UG/KG
040MZ10301	4,4'-DDE	2.0000	U	UG/KG
040MZ13001	4,4'-DDE	2.0000	J	UG/KG
040MZ20601	4,4'-DDE	2.0000	J	UG/KG
040MZ31701	4,4'-DDE	2.0000	J	UG/KG
041M250201	4,4'-DDE	2.0000	J	UG/KG
041M641101	4,4'-DDE	2.0000	J	UG/KG
040MZ24701	4,4'-DDE	1.9000	J	UG/KG
041M130101	4,4'-DDE	1.9000	J	UG/KG
040MZ21701	4,4'-DDE	1.8000		UG/KG
040MZ23101	4,4'-DDE	1.8000	J	UG/KG
041M270201	4,4'-DDE	1.8000	J	UG/KG
041M250101	4,4'-DDE	1.7000	U	UG/KG
041M5A0401	4,4'-DDE	1.7000	J	UG/KG
040MZ11901	4,4'-DDE	1.6000	J	UG/KG
040MZ40101	4,4'-DDE	1.6000	J	UG/KG
040MZ11401	4,4'-DDE	1.5000	J	UG/KG
040MZ11601	4,4'-DDE	1.5000	J	UG/KG
041M030201	4,4'-DDE	1.5000	U	UG/KG
040MZ32301	4,4'-DDE	1.4000	J	UG/KG
041M19A101	4,4'-DDE	1.4000	U	UG/KG
041M52A101	4,4'-DDE	1.4000	U	UG/KG
041M5A0201	4,4'-DDE	1.4000	J	UG/KG
041M641301	4,4'-DDE	1.4000	J	UG/KG
041M250301	4,4'-DDE	1.3000	J	UG/KG
041M641901	4,4'-DDE	1.3000	J	UG/KG
041M790101	4,4'-DDE	1.3000	J	UG/KG
040MZ12901	4,4'-DDE	1.2000	J	UG/KG
040MZ13601	4,4'-DDE	1.2000	U	UG/KG
040MZ40501	4,4'-DDE	1.2000	J	UG/KG
041M19B101	4,4'-DDE	1.2000		UG/KG
041M5A0601	4,4'-DDE	1.2000		UG/KG
040MZ30801	4,4'-DDE	1.1000	J	UG/KG
041M030501	4,4'-DDE	1.1000	U	UG/KG
041M641401	4,4'-DDE	1.0000	U	UG/KG
040MZ10401	4,4'-DDE	0.9900	DJ	UG/KG
040MZ13701	4,4'-DDE	0.9800	U	UG/KG
041M120201	4,4'-DDE	0.9700		UG/KG
041M641601	4,4'-DDE	0.9700	U	UG/KG
041M63A201	4,4'-DDE	0.9500		UG/KG
041MW20301	4,4'-DDE	0.9100	U	UG/KG
041M030401	4,4'-DDE	0.9000		UG/KG
040MZ40401	4,4'-DDE	0.8900	J	UG/KG
041M030701	4,4'-DDE	0.8800	U	UG/KG
041M5A0101	4,4'-DDE	0.8700	J	UG/KG
041M030301	4,4'-DDE	0.8400	J	UG/KG
040MZ24601	4,4'-DDE	0.8100	U	UG/KG
040MZ21201	4,4'-DDE	0.8000		UG/KG
040MZ22501	4,4'-DDE	0.8000	J	UG/KG
041M04D301	4,4'-DDE	0.7200	J	UG/KG
040MZ12001	4,4'-DDE	0.7000	UR	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE_ID	PARAM	RESULT	VQUAL	CONC_UNITS
040MZ21601	4,4'-DDE	0.6800	J	UG/KG
040MZ30201	4,4'-DDE	0.6700	U	UG/KG
040MZ30701	4,4'-DDE	0.6600	J	UG/KG
041M5A0301	4,4'-DDE	0.6100	UJ	UG/KG
041M640701	4,4'-DDE	0.6100		UG/KG
040MZ22001	4,4'-DDE	0.5900		UG/KG
041M19A201	4,4'-DDE	0.5500		UG/KG
040MZ32001	4,4'-DDE	0.4900	J	UG/KG
040MZ21101	4,4'-DDE	0.4800	J	UG/KG
041M010301	4,4'-DDE	0.4800	J	UG/KG
041M52E201	4,4'-DDE	0.4500	U	UG/KG
040MZ32401	4,4'-DDE	0.4300	J	UG/KG
041M52D101	4,4'-DDE	0.4300	U	UG/KG
041M641501	4,4'-DDE	0.4300	J	UG/KG
041M330201	4,4'-DDE	0.4200	U	UG/KG
041M63A301	4,4'-DDE	0.3800	U	UG/KG
041MW20201	4,4'-DDE	0.3800	J	UG/KG
041M63B401	4,4'-DDE	0.3700	J	UG/KG
041M63B101	4,4'-DDE	0.3600	J	UG/KG
041M640901	4,4'-DDE	0.3500		UG/KG
041M04D501	4,4'-DDE	0.3200		UG/KG
041M5B0101	4,4'-DDE	0.3200	J	UG/KG
041M641701	4,4'-DDE	0.3100	U	UG/KG
040MZ23601	4,4'-DDE	0.3000	J	UG/KG
040MZ24501	4,4'-DDE	0.3000	J	UG/KG
041M160101	4,4'-DDE	0.3000	J	UG/KG
041M170101	4,4'-DDE	0.3000		UG/KG
041M061101	4,4'-DDE	0.2900		UG/KG
040MZ31401	4,4'-DDE	0.2800	J	UG/KG
041M63B201	4,4'-DDE	0.2700	J	UG/KG
040MZ40801	4,4'-DDE	0.2600	UJ	UG/KG
041M63A401	4,4'-DDE	0.2600	UJ	UG/KG
041M10A201	4,4'-DDE	0.2500	J	UG/KG
040MZ41301	4,4'-DDE	0.2400	U	UG/KG
041M490301	4,4'-DDE	0.2400	U	UG/KG
041M52E301	4,4'-DDE	0.2400	U	UG/KG
041M642201	4,4'-DDE	0.2400	U	UG/KG
041M720101	4,4'-DDE	0.2400		UG/KG
040MZ23501	4,4'-DDE	0.2300	U	UG/KG
040MZ41101	4,4'-DDE	0.2300	J	UG/KG
041M010101	4,4'-DDE	0.2300	UJ	UG/KG
041M061001	4,4'-DDE	0.2300		UG/KG
041M580101	4,4'-DDE	0.2300	U	UG/KG
041M642401	4,4'-DDE	0.2300	UJ	UG/KG
040MZ11701	4,4'-DDE	0.2200	U	UG/KG
040MZ12601	4,4'-DDE	0.2200	U	UG/KG
040MZ20301	4,4'-DDE	0.2200	U	UG/KG
040MZ20701	4,4'-DDE	0.2200	U	UG/KG
040MZ23401	4,4'-DDE	0.2200	U	UG/KG
040MZ23801	4,4'-DDE	0.2200	U	UG/KG
040MZ24101	4,4'-DDE	0.2200	U	UG/KG
040MZ24801	4,4'-DDE	0.2200	U	UG/KG
040MZ24901	4,4'-DDE	0.2200	U	UG/KG
040MZ25101	4,4'-DDE	0.2200	J	UG/KG
040MZ25501	4,4'-DDE	0.2200	U	UG/KG
040MZ25701	4,4'-DDE	0.2200	U	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE ID	PARAM	RESULT	VQUAL	CONC UNITS
040MZ31001	4,4'-DDE	0.2200	U	UG/KG
040MZ31301	4,4'-DDE	0.2200	UJ	UG/KG
040MZ31501	4,4'-DDE	0.2200	U	UG/KG
040MZ31601	4,4'-DDE	0.2200	U	UG/KG
040MZ31801	4,4'-DDE	0.2200	U	UG/KG
040MZ32201	4,4'-DDE	0.2200	UJ	UG/KG
040MZ40701	4,4'-DDE	0.2200	UR	UG/KG
040MZ41201	4,4'-DDE	0.2200	U	UG/KG
040MZ41401	4,4'-DDE	0.2200	U	UG/KG
040MZ41501	4,4'-DDE	0.2200	U	UG/KG
040MZ41601	4,4'-DDE	0.2200	U	UG/KG
040MZ41701	4,4'-DDE	0.2200	U	UG/KG
040MZ42101	4,4'-DDE	0.2200	U	UG/KG
041M060901	4,4'-DDE	0.2200	U	UG/KG
041M330301	4,4'-DDE	0.2200	U	UG/KG
041M641801	4,4'-DDE	0.2200	U	UG/KG
041M642301	4,4'-DDE	0.2200	U	UG/KG
041M790301	4,4'-DDE	0.2200	U	UG/KG
040MZ11801	4,4'-DDE	0.2100	U	UG/KG
040MZ12101	4,4'-DDE	0.2100	U	UG/KG
040MZ12401	4,4'-DDE	0.2100	U	UG/KG
040MZ12501	4,4'-DDE	0.2100	U	UG/KG
040MZ12701	4,4'-DDE	0.2100	U	UG/KG
040MZ12801	4,4'-DDE	0.2100	U	UG/KG
040MZ13101	4,4'-DDE	0.2100	U	UG/KG
040MZ13201	4,4'-DDE	0.2100	U	UG/KG
040MZ13301	4,4'-DDE	0.2100	U	UG/KG
040MZ13501	4,4'-DDE	0.2100	U	UG/KG
040MZ13801	4,4'-DDE	0.2100	U	UG/KG
040MZ20101	4,4'-DDE	0.2100	U	UG/KG
040MZ20201	4,4'-DDE	0.2100	U	UG/KG
040MZ20401	4,4'-DDE	0.2100	U	UG/KG
040MZ20801	4,4'-DDE	0.2100	U	UG/KG
040MZ20901	4,4'-DDE	0.2100	U	UG/KG
040MZ21001	4,4'-DDE	0.2100	U	UG/KG
040MZ21301	4,4'-DDE	0.2100	U	UG/KG
040MZ22701	4,4'-DDE	0.2100	U	UG/KG
040MZ22901	4,4'-DDE	0.2100	U	UG/KG
040MZ23001	4,4'-DDE	0.2100	U	UG/KG
040MZ23201	4,4'-DDE	0.2100	U	UG/KG
040MZ23701	4,4'-DDE	0.2100	U	UG/KG
040MZ23901	4,4'-DDE	0.2100	U	UG/KG
040MZ24001	4,4'-DDE	0.2100	U	UG/KG
040MZ24201	4,4'-DDE	0.2100	UR	UG/KG
040MZ24301	4,4'-DDE	0.2100	U	UG/KG
040MZ25001	4,4'-DDE	0.2100	U	UG/KG
040MZ25201	4,4'-DDE	0.2100	U	UG/KG
040MZ25301	4,4'-DDE	0.2100	U	UG/KG
040MZ25401	4,4'-DDE	0.2100	U	UG/KG
040MZ25601	4,4'-DDE	0.2100	U	UG/KG
040MZ30101	4,4'-DDE	0.2100	U	UG/KG
040MZ30301	4,4'-DDE	0.2100	U	UG/KG
040MZ30501	4,4'-DDE	0.2100	U	UG/KG
040MZ30601	4,4'-DDE	0.2100	J	UG/KG
040MZ30901	4,4'-DDE	0.2100	UJ	UG/KG
040MZ31101	4,4'-DDE	0.2100	U	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE_ID	PARAM	RESULT	VQUAL	CONC_UNITS
040MZ31201	4,4'-DDE	0.2100	U	UG/KG
040MZ32101	4,4'-DDE	0.2100	UJ	UG/KG
040MZ40201	4,4'-DDE	0.2100	UR	UG/KG
040MZ40301	4,4'-DDE	0.2100	U	UG/KG
040MZ40601	4,4'-DDE	0.2100	U	UG/KG
040MZ40901	4,4'-DDE	0.2100	U	UG/KG
040MZ41001	4,4'-DDE	0.2100	U	UG/KG
040MZ41801	4,4'-DDE	0.2100	U	UG/KG
040MZ41901	4,4'-DDE	0.2100	UJ	UG/KG
040MZ42001	4,4'-DDE	0.2100	U	UG/KG
040MZ42201	4,4'-DDE	0.2100	U	UG/KG
040MZ42301	4,4'-DDE	0.2100	U	UG/KG
040MZ42401	4,4'-DDE	0.2100	U	UG/KG
041M10A101	4,4'-DDE	0.2100	U	UG/KG
041M120101	4,4'-DDE	0.2100	U	UG/KG
041M170201	4,4'-DDE	0.2100	U	UG/KG
041M63A501	4,4'-DDE	0.2100	U	UG/KG
041M63B301	4,4'-DDE	0.2100	U	UG/KG
041M641201	4,4'-DDE	0.2100	U	UG/KG
041M642001	4,4'-DDE	0.2100	U	UG/KG
041M642101	4,4'-DDE	0.2100	U	UG/KG
041M720201	4,4'-DDE	0.2100	U	UG/KG
041M5A0701	4,4'-DDE	0.2000	U	UG/KG
041M63A101	4,4'-DDE	0.2000	U	UG/KG
040MZ12301	4,4'-DDE	0.1900	U	UG/KG
041M170301	4,4'-DDE	0.1900	U	UG/KG
041M18B101	4,4'-DDT	1800.0000	D	UG/KG
041M18A101	4,4'-DDT	1200.0000	D	UG/KG
041M18A201	4,4'-DDT	310.0000	D	UG/KG
041M060101	4,4'-DDT	260.0000	DJ	UG/KG
041M480101	4,4'-DDT	240.0000	J	UG/KG
041M060301	4,4'-DDT	52.0000	D	UG/KG
040MZ22401	4,4'-DDT	22.0000	J	UG/KG
041M150301	4,4'-DDT	16.0000	J	UG/KG
041M640101	4,4'-DDT	14.0000	DJ	UG/KG
041M640301	4,4'-DDT	14.0000	J	UG/KG
041M320101	4,4'-DDT	13.0000	J	UG/KG
040MZ22101	4,4'-DDT	12.0000	DJ	UG/KG
041M060701	4,4'-DDT	11.0000	J	UG/KG
041M010401	4,4'-DDT	10.0000	DJ	UG/KG
041M150101	4,4'-DDT	9.9000	J	UG/KG
040MZ20501	4,4'-DDT	9.8000	U	UG/KG
040MZ11201	4,4'-DDT	8.9000	U	UG/KG
041M030101	4,4'-DDT	7.5000	DJ	UG/KG
040MZ10601	4,4'-DDT	7.3000	U	UG/KG
040MZ10901	4,4'-DDT	6.8000	U	UG/KG
040MZ10701	4,4'-DDT	6.5000	U	UG/KG
040MZ21901	4,4'-DDT	6.3000	J	UG/KG
040MZ10501	4,4'-DDT	5.6000	U	UG/KG
041M5A0501	4,4'-DDT	5.0000	J	UG/KG
041M060601	4,4'-DDT	4.8000	J	UG/KG
041M060801	4,4'-DDT	4.5000	J	UG/KG
041M150201	4,4'-DDT	4.3000	J	UG/KG
041M04D401	4,4'-DDT	3.9000	J	UG/KG
041M790101	4,4'-DDT	3.5000	J	UG/KG
041MW20101	4,4'-DDT	3.5000	J	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE ID	PARAM	RESULT	VQUAL	CONC UNITS
041M640201	4,4'-DDT	3.3000	U	UG/KG
040MZ10401	4,4'-DDT	3.0000	U	UG/KG
040MZ22301	4,4'-DDT	3.0000	J	UG/KG
041M490201	4,4'-DDT	3.0000	J	UG/KG
041M04D101	4,4'-DDT	2.9000	J	UG/KG
041M160301	4,4'-DDT	2.8000	J	UG/KG
041M56A101	4,4'-DDT	2.8000		UG/KG
040MZ11301	4,4'-DDT	2.7000	U	UG/KG
040MZ10101	4,4'-DDT	2.4000	U	UG/KG
040MZ10801	4,4'-DDT	2.2000	U	UG/KG
040MZ21801	4,4'-DDT	2.2000	J	UG/KG
041M04D201	4,4'-DDT	2.2000	J	UG/KG
041M060501	4,4'-DDT	2.2000		UG/KG
040MZ10201	4,4'-DDT	2.1000	U	UG/KG
040MZ11001	4,4'-DDT	2.1000	U	UG/KG
040MZ11101	4,4'-DDT	2.1000	U	UG/KG
040MZ13401	4,4'-DDT	2.1000	U	UG/KG
041M320201	4,4'-DDT	2.1000	UJ	UG/KG
040MZ10301	4,4'-DDT	2.0000	U	UG/KG
041M060401	4,4'-DDT	2.0000	J	UG/KG
040MZ30101	4,4'-DDT	1.9000	J	UG/KG
041M030601	4,4'-DDT	1.9000	J	UG/KG
041M18A301	4,4'-DDT	1.9000	J	UG/KG
041M270201	4,4'-DDT	1.9000	J	UG/KG
041M640401	4,4'-DDT	1.9000	U	UG/KG
041M250101	4,4'-DDT	1.8000	J	UG/KG
040MZ31701	4,4'-DDT	1.6000	J	UG/KG
041M04D301	4,4'-DDT	1.5000	J	UG/KG
041M320301	4,4'-DDT	1.5000	UJ	UG/KG
041M010301	4,4'-DDT	1.4000	J	UG/KG
041M030201	4,4'-DDT	1.4000	J	UG/KG
041M130101	4,4'-DDT	1.4000	J	UG/KG
041M19A101	4,4'-DDT	1.4000	U	UG/KG
041M52A101	4,4'-DDT	1.4000	U	UG/KG
041M640601	4,4'-DDT	1.4000	J	UG/KG
040MZ40101	4,4'-DDT	1.3000	J	UG/KG
041M52E101	4,4'-DDT	1.3000		UG/KG
041M5A0401	4,4'-DDT	1.3000	J	UG/KG
040MZ13601	4,4'-DDT	1.2000	U	UG/KG
040MZ31901	4,4'-DDT	1.2000	U	UG/KG
041M250201	4,4'-DDT	1.2000	U	UG/KG
041M490101	4,4'-DDT	1.2000	J	UG/KG
041M570101	4,4'-DDT	1.2000	J	UG/KG
040MZ12201	4,4'-DDT	1.1000	UJ	UG/KG
040MZ24401	4,4'-DDT	1.1000	UJ	UG/KG
040MZ30401	4,4'-DDT	1.1000	J	UG/KG
040MZ40501	4,4'-DDT	1.1000	UJ	UG/KG
041M010201	4,4'-DDT	1.1000	J	UG/KG
041M030501	4,4'-DDT	1.1000	U	UG/KG
041M63A301	4,4'-DDT	1.1000	J	UG/KG
041M641901	4,4'-DDT	1.1000	U	UG/KG
040MZ22601	4,4'-DDT	1.0000	J	UG/KG
041M641401	4,4'-DDT	1.0000	U	UG/KG
040MZ12901	4,4'-DDT	0.9900	UJ	UG/KG
040MZ13701	4,4'-DDT	0.9800	U	UG/KG
040MZ20601	4,4'-DDT	0.9800	U	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE_ID	PARAM	RESULT	VQUAL	CONC_UNITS
040MZ22701	4,4'-DDT	0.9800		UG/KG
041M641001	4,4'-DDT	0.9700	U	UG/KG
041M641601	4,4'-DDT	0.9700	U	UG/KG
040MZ24701	4,4'-DDT	0.9400	U	UG/KG
041M030701	4,4'-DDT	0.9400	J	UG/KG
041M641301	4,4'-DDT	0.9200	UJ	UG/KG
041MW20301	4,4'-DDT	0.9100	U	UG/KG
040MZ21701	4,4'-DDT	0.8900	J	UG/KG
040MZ11901	4,4'-DDT	0.8800	UJ	UG/KG
040MZ11401	4,4'-DDT	0.8400	UJ	UG/KG
040MZ24601	4,4'-DDT	0.8400	J	UG/KG
040MZ22801	4,4'-DDT	0.8100	U	UG/KG
041M5A0101	4,4'-DDT	0.7800	J	UG/KG
041M63A401	4,4'-DDT	0.7800	J	UG/KG
040MZ13001	4,4'-DDT	0.7600	U	UG/KG
040MZ23301	4,4'-DDT	0.7500	J	UG/KG
041M060901	4,4'-DDT	0.7400		UG/KG
041M640501	4,4'-DDT	0.7400	J	UG/KG
040MZ40401	4,4'-DDT	0.7300	UJ	UG/KG
041M5B0201	4,4'-DDT	0.7300	U	UG/KG
040MZ12001	4,4'-DDT	0.7000	UR	UG/KG
040MZ30201	4,4'-DDT	0.6700	UJ	UG/KG
040MZ21401	4,4'-DDT	0.6600	UJ	UG/KG
041M640801	4,4'-DDT	0.6600	J	UG/KG
040MZ23101	4,4'-DDT	0.6300	J	UG/KG
040MZ11601	4,4'-DDT	0.6200	UJ	UG/KG
041M5A0301	4,4'-DDT	0.6100	UJ	UG/KG
041M641501	4,4'-DDT	0.6000	J	UG/KG
041M150401	4,4'-DDT	0.5900	U	UG/KG
041M641101	4,4'-DDT	0.5900	U	UG/KG
040MZ32101	4,4'-DDT	0.5800	J	UG/KG
041M10A201	4,4'-DDT	0.5300	J	UG/KG
041M250301	4,4'-DDT	0.5300	U	UG/KG
040MZ11501	4,4'-DDT	0.5100	UR	UG/KG
040MZ22501	4,4'-DDT	0.4900	J	UG/KG
040MZ21601	4,4'-DDT	0.4800	J	UG/KG
041M030301	4,4'-DDT	0.4800	J	UG/KG
040MZ21501	4,4'-DDT	0.4700	UJ	UG/KG
040MZ30701	4,4'-DDT	0.4700	J	UG/KG
040MZ32301	4,4'-DDT	0.4600	U	UG/KG
041M52E201	4,4'-DDT	0.4500	U	UG/KG
041M52D101	4,4'-DDT	0.4300	U	UG/KG
041M330201	4,4'-DDT	0.4200	U	UG/KG
041M270101	4,4'-DDT	0.4100	UJ	UG/KG
041M330101	4,4'-DDT	0.3900	UJ	UG/KG
040MZ30801	4,4'-DDT	0.3600	J	UG/KG
040MZ41501	4,4'-DDT	0.3600		UG/KG
041M63B101	4,4'-DDT	0.3600	UR	UG/KG
041M060201	4,4'-DDT	0.3500	J	UG/KG
041M19B101	4,4'-DDT	0.3400	J	UG/KG
041M160201	4,4'-DDT	0.3300	U	UG/KG
040MZ40301	4,4'-DDT	0.3200	J	UG/KG
041M030401	4,4'-DDT	0.3200	J	UG/KG
041M120201	4,4'-DDT	0.3200	UJ	UG/KG
041M5A0201	4,4'-DDT	0.3200	UJ	UG/KG
040MZ40801	4,4'-DDT	0.3100	J	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE ID	PARAM	RESULT	VQUAL	CONC UNITS
041M641701	4,4'-DDT	0.3100	U	UG/KG
040MZ31301	4,4'-DDT	0.2900	J	UG/KG
041M63A201	4,4'-DDT	0.2900	J	UG/KG
041MW20201	4,4'-DDT	0.2800	J	UG/KG
040MZ20901	4,4'-DDT	0.2700	J	UG/KG
040MZ22201	4,4'-DDT	0.2600	UJ	UG/KG
040MZ31601	4,4'-DDT	0.2600	J	UG/KG
041M720101	4,4'-DDT	0.2600	J	UG/KG
040MZ23601	4,4'-DDT	0.2500	U	UG/KG
040MZ32001	4,4'-DDT	0.2500	UJ	UG/KG
041M10A301	4,4'-DDT	0.2500	J	UG/KG
040MZ41301	4,4'-DDT	0.2400	UJ	UG/KG
041M490301	4,4'-DDT	0.2400	U	UG/KG
041M52E301	4,4'-DDT	0.2400	U	UG/KG
041M642201	4,4'-DDT	0.2400	U	UG/KG
040MZ21101	4,4'-DDT	0.2300	U	UG/KG
040MZ22001	4,4'-DDT	0.2300	J	UG/KG
040MZ23501	4,4'-DDT	0.2300	U	UG/KG
040MZ30901	4,4'-DDT	0.2300	J	UG/KG
040MZ31001	4,4'-DDT	0.2300	J	UG/KG
041M010101	4,4'-DDT	0.2300	UJ	UG/KG
041M170101	4,4'-DDT	0.2300	U	UG/KG
041M580101	4,4'-DDT	0.2300	U	UG/KG
041M5A0601	4,4'-DDT	0.2300	U	UG/KG
041M63B201	4,4'-DDT	0.2300	U	UG/KG
041M640701	4,4'-DDT	0.2300	U	UG/KG
041M642401	4,4'-DDT	0.2300	UJ	UG/KG
040MZ11701	4,4'-DDT	0.2200	UJ	UG/KG
040MZ12601	4,4'-DDT	0.2200	UJ	UG/KG
040MZ20301	4,4'-DDT	0.2200	UJ	UG/KG
040MZ20701	4,4'-DDT	0.2200	U	UG/KG
040MZ23401	4,4'-DDT	0.2200	U	UG/KG
040MZ23801	4,4'-DDT	0.2200	U	UG/KG
040MZ24101	4,4'-DDT	0.2200	U	UG/KG
040MZ24801	4,4'-DDT	0.2200	U	UG/KG
040MZ24901	4,4'-DDT	0.2200	U	UG/KG
040MZ25101	4,4'-DDT	0.2200	U	UG/KG
040MZ25501	4,4'-DDT	0.2200	U	UG/KG
040MZ25701	4,4'-DDT	0.2200	U	UG/KG
040MZ31401	4,4'-DDT	0.2200	U	UG/KG
040MZ31501	4,4'-DDT	0.2200	U	UG/KG
040MZ31801	4,4'-DDT	0.2200	U	UG/KG
040MZ32201	4,4'-DDT	0.2200	UJ	UG/KG
040MZ32401	4,4'-DDT	0.2200	UJ	UG/KG
040MZ40701	4,4'-DDT	0.2200	UR	UG/KG
040MZ41101	4,4'-DDT	0.2200	U	UG/KG
040MZ41201	4,4'-DDT	0.2200	U	UG/KG
040MZ41401	4,4'-DDT	0.2200	UJ	UG/KG
040MZ41601	4,4'-DDT	0.2200	U	UG/KG
040MZ41701	4,4'-DDT	0.2200	UJ	UG/KG
040MZ42101	4,4'-DDT	0.2200	U	UG/KG
041M061001	4,4'-DDT	0.2200		UG/KG
041M330301	4,4'-DDT	0.2200	U	UG/KG
041M63B401	4,4'-DDT	0.2200	U	UG/KG
041M641801	4,4'-DDT	0.2200	U	UG/KG
041M642301	4,4'-DDT	0.2200	U	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE_ID	PARAM	RESULT	VQUAL	CONC_UNITS
041M790301	4,4'-DDT	0.2200	U	UG/KG
040MZ11801	4,4'-DDT	0.2100	UJ	UG/KG
040MZ12101	4,4'-DDT	0.2100	UJ	UG/KG
040MZ12401	4,4'-DDT	0.2100	UJ	UG/KG
040MZ12501	4,4'-DDT	0.2100	UJ	UG/KG
040MZ12701	4,4'-DDT	0.2100	UJ	UG/KG
040MZ12801	4,4'-DDT	0.2100	UJ	UG/KG
040MZ13101	4,4'-DDT	0.2100	U	UG/KG
040MZ13201	4,4'-DDT	0.2100	U	UG/KG
040MZ13301	4,4'-DDT	0.2100	U	UG/KG
040MZ13501	4,4'-DDT	0.2100	U	UG/KG
040MZ13801	4,4'-DDT	0.2100	U	UG/KG
040MZ20101	4,4'-DDT	0.2100	UJ	UG/KG
040MZ20201	4,4'-DDT	0.2100	UJ	UG/KG
040MZ20401	4,4'-DDT	0.2100	UJ	UG/KG
040MZ20801	4,4'-DDT	0.2100	J	UG/KG
040MZ21001	4,4'-DDT	0.2100	U	UG/KG
040MZ21201	4,4'-DDT	0.2100	J	UG/KG
040MZ21301	4,4'-DDT	0.2100	UJ	UG/KG
040MZ22901	4,4'-DDT	0.2100	U	UG/KG
040MZ23001	4,4'-DDT	0.2100	U	UG/KG
040MZ23201	4,4'-DDT	0.2100	U	UG/KG
040MZ23701	4,4'-DDT	0.2100	U	UG/KG
040MZ23901	4,4'-DDT	0.2100	U	UG/KG
040MZ24001	4,4'-DDT	0.2100	U	UG/KG
040MZ24201	4,4'-DDT	0.2100	UR	UG/KG
040MZ24301	4,4'-DDT	0.2100	U	UG/KG
040MZ25001	4,4'-DDT	0.2100	U	UG/KG
040MZ25201	4,4'-DDT	0.2100	U	UG/KG
040MZ25301	4,4'-DDT	0.2100	U	UG/KG
040MZ25401	4,4'-DDT	0.2100	U	UG/KG
040MZ25601	4,4'-DDT	0.2100	U	UG/KG
040MZ30301	4,4'-DDT	0.2100	UJ	UG/KG
040MZ30501	4,4'-DDT	0.2100	U	UG/KG
040MZ30601	4,4'-DDT	0.2100	U	UG/KG
040MZ31101	4,4'-DDT	0.2100	UJ	UG/KG
040MZ31201	4,4'-DDT	0.2100	UJ	UG/KG
040MZ40201	4,4'-DDT	0.2100	UR	UG/KG
040MZ40601	4,4'-DDT	0.2100	UJ	UG/KG
040MZ40901	4,4'-DDT	0.2100	UJ	UG/KG
040MZ41001	4,4'-DDT	0.2100	U	UG/KG
040MZ41801	4,4'-DDT	0.2100	U	UG/KG
040MZ41901	4,4'-DDT	0.2100	UJ	UG/KG
040MZ42001	4,4'-DDT	0.2100	UJ	UG/KG
040MZ42201	4,4'-DDT	0.2100	U	UG/KG
040MZ42301	4,4'-DDT	0.2100	U	UG/KG
040MZ42401	4,4'-DDT	0.2100	U	UG/KG
041M04D501	4,4'-DDT	0.2100	U	UG/KG
041M10A101	4,4'-DDT	0.2100	UJ	UG/KG
041M120101	4,4'-DDT	0.2100	UJ	UG/KG
041M160101	4,4'-DDT	0.2100	U	UG/KG
041M170201	4,4'-DDT	0.2100	U	UG/KG
041M19A201	4,4'-DDT	0.2100	U	UG/KG
041M5B0101	4,4'-DDT	0.2100	U	UG/KG
041M63A501	4,4'-DDT	0.2100	U	UG/KG
041M63B301	4,4'-DDT	0.2100	U	UG/KG

Table 1
DDT and its Metabolites in Sites 40 and 41 Sediments
NAS Pensacola

SAMPLE_ID	PARAM	RESULT	VQUAL	CONC_UNITS
041M640901	4,4'-DDT	0.2100	U	UG/KG
041M641201	4,4'-DDT	0.2100	U	UG/KG
041M642001	4,4'-DDT	0.2100	U	UG/KG
041M642101	4,4'-DDT	0.2100	U	UG/KG
041M720201	4,4'-DDT	0.2100	UJ	UG/KG
041M061101	4,4'-DDT	0.2000	U	UG/KG
041M5A0701	4,4'-DDT	0.2000	U	UG/KG
041M63A101	4,4'-DDT	0.2000	U	UG/KG
040MZ12301	4,4'-DDT	0.1900	UJ	UG/KG
041M170301	4,4'-DDT	0.1900	U	UG/KG
040MZ24501	4,4'-DDT	0.1800	U	UG/KG

Notes:

U	Undetected — The analyte was not detected.
J	Estimated Value — One or more QC parameters were outside control limits.
NJ	Presumptive Identification — The analyte is is presumptively identified at an estimated concentration.
UJ	Undetected and Estimated — The analyte was not detected. The quantitation limit is estimated.
D	Diluted Result — The result was obtained from a diluted sample.
R/UR	Unusable Data — One or more QC parameters grossly exceeded control limits.
UG/KG	Micrograms per kilogram or parts per billion (ppb)

See Section 8 of this report for a full description of the data qualifiers.

Summary Tables for the Blue-coded and Reference Wetlands from the Site 41 Remedial Investigation Report

Table 5-32
Detected Concentrations in Wetland 13 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	1/1	1590	1590
Antimony (Sb)	1/1	0.15	0.15
Arsenic (As)	1/1	0.14	0.14
Barium (Ba)	1/1	0.88	0.88
Beryllium (Be)	1/1	0.11	0.11
Calcium (Ca)	1/1	327	327
Chromium (Cr)	1/1	4	4
Copper (Cu)	1/1	1.2	1.2
Iron (Fe)	1/1	229	229
Lead (Pb)	1/1	9.2	9.2
Magnesium (Mg)	1/1	187	187
Manganese (Mn)	1/1	0.85	0.85
Potassium (K)	1/1	50.6	50.6
Selenium (Se)	1/1	0.41	0.41
Sodium (Na)	1/1	290	290
Vanadium (V)	1/1	7.5	7.5
Zinc (Zn)	1/1	1.7	1.7
Pesticides and PCBs (μg/kg)			
4,4'-DDE	1/1	1.9	1.9
4,4'-DDT	1/1	1.4	1.4
Dieldrin	1/1	0.3	0.3
SVOCs (μg/kg)			
Di-n-butylphthalate	1/1	26	26
Fluoranthene	1/1	29	29
bis(2-Ethylhexyl)phthalate (BEHP)	1/1	31	31

Table 5-34
Detected Concentrations in Wetland 17 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	3/3	438 - 842	598.67
Arsenic (As)	3/3	0.27 - 0.58	0.40
Barium (Ba)	3/3	0.48 - 0.73	0.57
Calcium (Ca)	3/3	57.5 - 129	87.57
Chromium (Cr)	3/3	2.1 - 3.6	2.9
Cobalt (Co)	2/3	0.14 - 0.17	0.155
Copper (Cu)	3/3	0.75 - 1.3	0.97
Iron (Fe)	3/3	467 - 1190	794.67
Lead (Pb)	3/3	2.2 - 3.4	2.6
Magnesium (Mg)	3/3	114 - 320	198
Manganese (Mn)	3/3	0.8 - 2.4	1.63
Potassium (K)	3/3	39.1 - 119	72.67
Sodium (Na)	3/3	2.75 - 1350	712.67
Thallium (Tl)	1/3	0.31	0.31
Vanadium (V)	3/3	1.4 - 2.1	1.7
Zinc (Zn)	3/3	1.8 - 4.2	2.8
Pesticides and PCBs (μg/kg)			
4,4'-DDD	1/3	0.23	0.23
4,4'-DDE	1/3	0.3	0.3
Aroclor-1260	3/3	0.7 - 2.8	1.46
Gamma-BHC (Lindane)	2/3	0.2 - 0.51	0.36
SVOCs (μg/kg)			
bis(2-Ethylhexyl)phthalate (BEHP)	1/3	2300	2300
VOCs (μg/kg)			
Chlorobenzene	1/3	2	2

Table 5-36
Detected Concentrations in Wetland 19 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	3/3	494 - 18900	6790
Arsenic (As)	3/3	0.17 - 15.7	5.57
Barium (Ba)	3/3	0.58 - 30.2	10.51
Beryllium (Be)	1/3	0.48	0.48
Calcium (Ca)	3/3	47.5 - 1720	639.5
Chromium (Cr)	3/3	1.2 - 16.5	6.9
Cobalt (Co)	1/3	3.4	3.4
Copper (Cu)	3/3	0.78 - 10.7	4.36
Iron (Fe)	3/3	545 - 16800	6395
Lead (Pb)	3/3	1.2 - 16.2	7.07
Magnesium (Mg)	3/3	30.1 - 572	290.7
Manganese (Mn)	3/3	1.3 - 169	57.9
Nickel (Ni)	1/3	7	7
Potassium (K)	3/3	17.5 - 463	189.8
Sodium (Na)	3/3	18.6 - 805	320.2
Vanadium (V)	3/3	0.99 - 35.4	12.96
Zinc (Zn)	3/3	1.4 - 30.6	12.27
Pesticides and PCBs (µg/kg)			
4,4'-DDE	2/3	0.55 - 1.2	0.88
4,4'-DDD	1/3	0.71	0.71
4,4'-DDT	1/3	0.34	0.34
Aroclor-1260	2/3	1.1 - 4.2	2.65
delta-BHC	2/3	0.11 - 0.31	0.21
Dieldrin	2/3	0.2 - 0.21	0.21
Endosulfan I	1/3	5.3	5.3
Endrin	1/3	0.27	0.27
gamma-Chlordane	1/3	1.3	1.3
Heptachlor epoxide	2/3	0.22 - 26	13.11
SVOCs (µg/kg)			
Fluoranthene	1/3	28	28
Pyrene	1/3	28	28
VOCs (µg/kg)			
Chloromethane	1/3	2	2

Table 5-38
Detected Concentrations in Wetland 52 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	5/5	667 - 6230	3061.4
Arsenic (As)	1/5	0.31	0.31
Barium (Ba)	5/5	2.2 - 43.3	14.98
Calcium (Ca)	5/5	526 - 3670	1897.2
Chromium (Cr)	5/5	1.2 - 6.7	3.32
Cobalt (Co)	3/5	0.21 - 1.4	0.62
Copper (Cu)	5/5	0.92 - 6.4	2.984
Iron (Fe)	5/5	361 - 2300	1158.6
Lead (Pb)	5/5	2.6 - 17.7	7.36
Magnesium (Mg)	5/5	110 - 1280	613
Manganese (Mn)	5/5	2 - 15.8	9.08
Nickel (Ni)	4/5	0.99 - 5.2	2.35
Potassium (K)	5/5	22.2 - 160	80.46
Selenium (Se)	4/5	0.73 - 10.2	3.69
Sodium (Na)	3/5	61.1 - 169	124.37
Vanadium (V)	5/5	1.1 - 6.6	4.1
Zinc (Zn)	4/5	3.2 - 25.5	11.18
Pesticides and PCBs (µg/kg)			
4,4'-DDD	3/5	0.45 - 6.1	2.35
4,4'-DDE	1/5	7	7
4,4'-DDT	1/5	1.3	1.3
Aldrin	1/5	2.8	2.8
Aroclor-1260	2/5	3.3 - 3.7	3.5
Dieldrin	1/5	9.5	9.5
Endosulfan I	2/5	0.39 - 5.7	3.05
Endosulfan sulfate	1/5	1.2	1.2
Endrin	2/5	1.7 - 2.4	2.05
alpha-BHC	1/5	0.14	0.14
alpha-Chlordane	1/5	0.34	0.34
delta-BHC	1/5	0.61	0.61
gamma-BHC (Lindane)	1/5	0.43	0.43
gamma-Chlordane	1/5	0.91	0.91
SVOCs (µg/kg)			
2-Methylnaphthalene	1/5	50	50
4-Methylphenol (p-Cresol)	2/5	110 - 170	140
Acenaphthene	1/5	77	77
Anthracene	1/5	100	100
Benzo(a)anthracene	2/5	26 - 100	63
Benzo(a)pyrene	1/5	64	64

Table 5-40
Detected Concentrations in Wetland 56 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	1/1	2560	2560
Arsenic (As)	1/1	0.33	0.33
Barium (Ba)	1/1	3.3	3.3
Calcium (Ca)	1/1	682	682
Chromium (Cr)	1/1	3.1	3.1
Cobalt (Co)	1/1	0.3	0.3
Copper (Cu)	1/1	3.1	3.1
Iron (Fe)	1/1	1210	1210
Lead (Pb)	1/1	9.4	9.4
Magnesium (Mg)	1/1	82.1	82.1
Manganese (Mn)	1/1	3.2	3.2
Nickel (Ni)	1/1	1.4	1.4
Potassium (K)	1/1	52	52
Selenium (Se)	1/1	2.4	2.4
Vanadium (V)	1/1	4	4
Zinc (Zn)	1/1	5.9	5.9
Pesticides and PCBs (μg/kg)			
4,4'-DDD	1/1	53	53
4,4'-DDE	1/1	5.3	5.3
4,4'-DDT	1/1	2.8	2.8
Endrin	1/1	0.39	0.39
gamma-BHC (Lindane)	1/1	0.4	0.4
SVOCs (μg/kg)			
Pyrene	1/1	36	36
bis(2-Ethylhexyl)phthalate (BEHP)	1/1	51	51

Table 5-42
Detected Concentrations in Wetland 57 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	1/1	5520	5520
Arsenic (As)	1/1	1.6	1.6
Barium (Ba)	1/1	11.3	11.3
Calcium (Ca)	1/1	2720	2720
Chromium (Cr)	1/1	4.8	4.8
Cobalt (Co)	1/1	0.45	0.45
Copper (Cu)	1/1	4.9	4.9
Iron (Fe)	1/1	3790	3790
Lead (Pb)	1/1	17.7	17.7
Magnesium (Mg)	1/1	214	214
Manganese (Mn)	1/1	15.8	15.8
Mercury (Hg)	1/1	0.14	0.14
Nickel (Ni)	1/1	2	2
Potassium (K)	1/1	117	117
Selenium (Se)	1/1	1.6	1.6
Sodium (Na)	1/1	48.8	48.8
Vanadium (V)	1/1	9.2	9.2
Zinc (Zn)	1/1	14.7	14.7
Pesticides and PCBs (μg/kg)			
4,4'-DDD	1/1	3.3	3.3
4,4'-DDE	1/1	7.2	7.2
4,4'-DDT	1/1	1.2	1.2
Aldrin	1/1	0.2	0.2
Aroclor-1260	1/1	3.7	3.7
beta-BHC	1/1	0.19	0.19
gamma-BHC (Lindane)	1/1	0.4	0.4
SVOCs (μg/kg)			
Benzo(b)fluoranthene	1/1	41	41
Fluoranthene	1/1	68	68
Pyrene	1/1	72	72
VOCs (μg/kg)			
Acetone	1/1	49	49

Table 5-44
Detected Concentrations in Wetland 58 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	1/1	1360	1360
Arsenic (As)	1/1	0.27	0.27
Barium (Ba)	1/1	1.2	1.2
Calcium (Ca)	1/1	230	230
Chromium (Cr)	1/1	1.2	1.2
Copper (Cu)	1/1	1.8	1.8
Iron (Fe)	1/1	548	548
Lead (Pb)	1/1	7.8	7.8
Magnesium (Mg)	1/1	70	70
Manganese (Mn)	1/1	1.2	1.2
Nickel (Ni)	1/1	1.2	1.2
Potassium (K)	1/1	41.2	41.2
Selenium (Se)	1/1	0.41	0.41
Vanadium (V)	1/1	2.5	2.5
Zinc (Zn)	1/1	2.3	2.3
PCBs (µg/kg)			
Aroclor-1260	1/1	0.66	0.66
SVOCs (µg/kg)			
2-Methylnaphthalene	1/1	110	110
Acenaphthene	1/1	110	110
Anthracene	1/1	84	84
Butylbenzylphthalate	1/1	25	25
Carbazole	1/1	40	40
Di-n-butylphthalate	1/1	42	42
Dibenzofuran	1/1	88	88
Fluoranthene	1/1	110	110
Fluorene	1/1	120	120
Naphthalene	1/1	220	220
Phenanthrene	1/1	250	250
Pyrene	1/1	70	70
bis(2-Ethylhexyl)phthalate (BEHP)	1/1	34	34
VOCs (µg/kg)			
Acetone	1/1	520	520

Table 5-46
Detected Concentrations in Wetland 63B Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	4/4	101 - 1960	650
Antimony (Sb)	1/4	0.25	0.25
Arsenic (As)	2/4	0.24 - 0.43	0.34
Barium (Ba)	4/4	0.71 - 4	1.7
Beryllium (Be)	1/4	0.1	0.1
Calcium (Ca)	4/4	191 - 3230	1315.5
Chromium (Cr)	4/4	0.34 - 5.2	1.94
Cobalt (Co)	2/4	0.2 - 0.42	0.31
Copper (Cu)	4/4	0.35 - 4.4	1.69
Iron (Fe)	4/4	112 - 1290	564.75
Lead (Pb)	4/4	0.95 - 13	4.413
Magnesium (Mg)	4/4	33.6 - 410	151.485
Manganese (Mn)	4/4	0.88 - 7.1	3.25
Nickel (Ni)	1/4	0.88	0.88
Potassium (K)	4/4	10.3 - 121	47.4
Selenium (Se)	1/4	0.4	0.4
Sodium (Na)	4/4	28.4 - 129	70.05
Vanadium (V)	4/4	0.35 - 3.9	1.5
Zinc (Zn)	4/4	0.79 - 13	4.5
Pesticides and PCBs (μg/kg)			
4,4'-DDD	2/4	0.23 - 0.34	0.285
4,4'-DDE	3/4	0.27 - 0.37	0.3333
Aroclor-1260	4/4	1.2 - 6.3	3
Endosulfan sulfate	1/4	0.98	0.98
SVOCs (μg/kg)			
2-Methylnaphthalene	1/4	24	24
Acenaphthene	1/4	39	39
Anthracene	1/4	44	44
Benzo(a)pyrene	1/4	39	39
Benzo(b)fluoranthene	1/4	56	56
Butylbenzylphthalate	1/4	29	29
Di-n-butylphthalate	1/4	27	27
Dibenzofuran	1/4	34	34
Fluoranthene	[illegible]	41 - 86	62
Fluorene	[illegible]	47	47
Naphthalene	[illegible]	23	23
Phenanthrene	[illegible]	120	120
Pyrene	[illegible]	41 - 65	49
bis(2-Ethylhexyl)phthalate (BEHP)	3/4	33 - 97	57.33

Table 5-48
Detected Concentrations in Wetland 72 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	2/2	736-2450	1593
Arsenic (As)	2/2	0.28-0.86	0.57
Barium (Ba)	2/2	1.3-2.3	1.8
Cadmium (Cd)	½	0.27	0.27
Calcium (Ca)	2/2	23.2-43.1	33.15
Chromium (Cr)	2/2	0.85-3.2	2.025
Copper (Cu)	2/2	1.2-38.9	20.05
Iron (Fe)	2/2	397-1510	953.5
Lead (Pb)	2/2	1.8-17.5	9.65
Magnesium (Mg)	2/2	20.3-50	35.15
Manganese (Mn)	2/2	1.3-10.7	6
Nickel (Ni)	½	1.4	1.4
Potassium (K)	2/2	8.4-29.7	19.05
Selenium (Se)	½	0.26	0.26
Sodium (Na)	2/2	3-8.7	5.85
Vanadium (V)	2/2	1.2-3.8	2.5
Zinc (Zn)	2/2	3.3-10.7	7
Pesticides and PCBs (µg/kg)			
4,4'-DDD	½	0.2	0.2
4,4'-DDE	½	0.24	0.24
4,4'-DDT	½	0.26	0.26
SVOCs (µg/kg)			
Anthracene	½	41	41
Benzo(a)anthracene	½	47	47
Benzo(a)pyrene	½	43	43
Benzo(b)fluoranthene	½	90	90
Benzo(g,h,i)perylene	½	58	58
Benzo(k)fluoranthene	½	27	27
Chrysene	½	47	47
Di-n-butylphthalate	½	43	43
Fluoranthene	2/2	30-120	75
Indeno(1,2,3-cd)pyrene	½	47	47
Phenanthrene	½	49	49
Pyrene	2/2	38-98	68
VOCs (µg/kg)			
Acetone	½	32	32
Methylene chloride	1	740	740

Table 5-50
Detected Concentrations in Wetland 79 Sediments
NAS Pensacola Site 41, Phase II

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	2/2	723 - 13600	7161.5
Arsenic (As)	½	1.9	1.9
Barium (Ba)	2/2	2.9 - 30.6	16.75
Beryllium (Be)	½	0.17	0.17
Calcium (Ca)	½	2140	2140
Chromium (Cr)	2/2	0.87 - 15	7.935
Cobalt (Co)	½	1	1
Copper (Cu)	2/2	0.64 - 6	3.32
Iron (Fe)	2/2	756 - 9520	5138
Lead (Pb)	2/2	2 - 42.7	22.35
Magnesium (Mg)	2/2	40 - 561	300.5
Manganese (Mn)	2/2	5.7 - 95.4	50.55
Nickel (Ni)	½	4.4	4.4
Potassium (K)	2/2	32.6 - 374	203.3
Selenium (Se)	½	0.78	0.78
Sodium (Na)	½	217	217
Thallium (Tl)	½	1.3	1.3
Vanadium (V)	2/2	1.5 - 20.5	11
Zinc (Zn)	½	44.7	44.7
Pesticides and PCBs (µg/kg)			
4,4'-DDD	½	14	14
4,4'-DDE	½	1.3	1.3
4,4'-DDT	½	3.5	3.5
Dieldrin	½	3.5	3.5
Endrin	½	6.2	6.2
Endrin aldehyde	½	0.74	0.74
Heptachlor	½	3	3
Heptachlor epoxide	½	1.3	1.3
alpha-Chlordane	½	38	38
delta-BHC	½	0.29	0.29
gamma-Chlordane	½	45	45
Semivolatiles (µg/kg)			
4-Methylphenol (p-Cresol)	½	170	170
Benzo(a)anthracene	½	53	53
Benzo(a)pyrene	½	73	73
Benzo(b)fluoranthene		100	100
Benzo(g,h,i)perylene	½	83	83
Benzo(k)fluoranthene	½	50	50
Butylbenzylphthalate	2/2	22 - 57	39.5

Table 5-51
Detected Concentrations in Wetland W2 Sediments
NAS Pensacola Site 41, Phase II

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	3/3	607-6700	3615.67
Arsenic (As)	2/3	0.5-14.1	7.3
Barium (Ba)	3/3	1-11.5	6.27
Beryllium (Be)	2/3	0.08-0.35	0.215
Cadmium (Cd)	1/3	0.18	0.18
Calcium (Ca)	3/3	285-1250	623
Chromium (Cr)	3/3	0.76-10.2	5.45
Cobalt (Co)	2/3	0.24-3.3	1.77
Copper (Cu)	3/3	1.3-4.7	3.07
Iron (Fe)	3/3	209-5130	2049
Lead (Pb)	3/3	2.3-17.1	9.5
Magnesium (Mg)	3/3	93.5-1660	636.17
Manganese (Mn)	3/3	1.2-6	3.4
Nickel (Ni)	3/3	0.8-9.2	3.77
Potassium (K)	3/3	32-503	207.67
Selenium (Se)	3/3	0.46-1.6	1.12
Sodium (Na)	3/3	254-2430	1342
Vanadium (V)	3/3	1.2-27	11.33
Zinc (Zn)	2/3	4.9-10.4	7.67
Pesticides and PCBs (µg/kg)			
4,4'-DDD	2/3	5.8-8.6	3.33
4,4'-DDE	2/3	0.38-2.4	1.39
4,4'-DDT	2/3	0.28-3.5	1.89
Aldrin	1/3	0.23	0.23
Aroclor-1260	3/3	1.7-5.6	3.7
Dieldrin	1/3	0.34	0.34
Endrin	2/3	0.77-2.5	1.64
alpha-Chlordane	2/3	0.14-0.22	0.18
delta-BHC	1/3	0.63	0.63
Semivolatiles (µg/kg)			
Benzo(b)fluoranthene	1/3	28	28
Butylbenzylphthalate	2/3	21	26.5
Chrysene	1/3	40	40
Di-n-butylphthalate	2/3	33	36
Diethylphthalate	1/3	220	220
Fluoranthene	1/3	47	47
Indeno(1,2,3-cd)pyrene	1/3	26	26
Pyrene	1/3	82	82
bis(2-Ethylhexyl)phthalate (BEHP)	2/3	55	257.5
Volatiles (µg/kg)			
Acetone	1/3	210	210

Table 5-53
Detected Concentrations in Wetland 25 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	3/3	4180 - 12500	8486.67
Arsenic (As)	3/3	1.1 - 8.8	5.97
Barium (Ba)	3/3	2.3 - 8.6	5.5
Beryllium (Be)	2/3	0.47 - 0.59	0.53
Cadmium (Cd)	1/3	1.3	1.3
Calcium (Ca)	3/3	1770 - 17900	7790
Chromium (Cr)	3/3	7.1 - 59.1	33.07
Cobalt (Co)	3/3	1.6 - 2	1.83
Copper (Cu)	3/3	6.1 - 19.6	12.63
Iron (Fe)	3/3	1780 - 18500	11260
Lead (Pb)	3/3	21.4 - 58.7	37.4
Magnesium (Mg)	3/3	1420 - 6660	4523.33
Manganese (Mn)	3/3	2.6 - 66	33.1
Nickel (Ni)	2/3	6.5 - 6.9	6.7
Potassium (K)	3/3	172 - 2060	1220.67
Selenium (Se)	1/3	1.9	1.9
Sodium (Na)	3/3	640 - 24700	15913.33
Vanadium (V)	3/3	10.1 - 33.7	22.2
Zinc (Zn)	3/3	7.3 - 57.1	28.7
Pesticides and PCBs (μg/kg)			
4,4'-DDE	2/3	1.3 - 2	1.65
4,4'-DDT	1/3	1.8	1.8
Aldrin	2/3	0.28 - 1.4	0.84
Aroclor-1254	3/3	4.3 - 11	10.77
Endrin	2/3	0.84 - 1.9	1.37
alpha-BHC	1/3	0.67	0.67
alpha-Chlordane	2/3	0.56 - 0.88	0.72
gamma-BHC (Lindane)	1/3	1.3	1.3
SVOCs (μg/kg)			
Benzo(b)fluoranthene	1/3	59	59
VOCs (μg/kg)			
Acetone	1/3	940	940
Tetrachloroethene	1/3	23	23

Table 5-55
Detected Concentrations in Wetland 27 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum	2/2	2900 - 3670	3285
Arsenic	2/2	0.98 - 1.1	1.04
Barium	2/2	2.3 - 3.1	2.7
Calcium	2/2	941 - 1260	1100.5
Chromium	2/2	11.1 - 12.4	11.75
Cobalt	2/2	0.46 - 0.51	0.485
Copper	2/2	3.4 - 4.2	3.8
Iron	2/2	1380 - 1440	1410
Lead	2/2	13.2 - 13.5	13.35
Magnesium	2/2	1200 - 2070	1635
Manganese	2/2	5.1	5.1
Nickel	2/2	2-3	2.5
Potassium	2/2	406 - 689	547.5
Selenium	1/2	0.39	0.39
Sodium	2/2	3170 - 8610	5890
Vanadium	2/2	5.2 - 6.9	6.05
Zinc	2/2	4.7 - 8.2	6.45
Pesticides and PCBs (µg/kg)			
4,4'-DDE	2/2	1.8 - 2.7	2.25
4,4'-DDT	1/2	1.9	1.9
alpha-BHC	2/2	0.49 - 1.3	0.895
alpha-Chlordane	1/2	0.49	0.49
SVOCs (µg/kg)			
Diethylphthalate	1/2	390	390

Table 5-57
Detected Concentrations in Wetland 32 Sediments
NAS Pensacola Site 41, Phase IIA

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	3/3	3670 - 7780	5123.33
Barium (Ba)	3/3	6.7 - 9.7	8.50
Beryllium (Be)	1/3	0.51 - 0.51	0.51
Calcium (Ca)	3/3	2150 - 4320	2966.67
Chromium (Cr)	3/3	5.7 - 7.2	6.30
Copper (Cu)	3/3	5.7 - 9.2	6.87
Iron (Fe)	3/3	471 - 832	651.67
Lead (Pb)	3/3	41.3 - 52.3	45.07
Magnesium (Mg)	3/3	2230 - 4280	2990.00
Manganese (Mn)	3/3	3.5 - 5.6	4.87
Mercury (Hg)	1/3	0.51	0.51
Potassium (K)	3/3	306 - 485	408.00
Selenium (Se)	2/3	2.4 - 3.6	3.00
Sodium (Na)	3/3	2580 - 3680	3080.00
Vanadium (V)	3/3	5.2 - 7.6	6.47
Zinc (Zn)	3/3	6.8 - 9.4	8.03
Pesticides and PCBs (μg/kg)			
4,4'-DDD	2/3	3.3 - 24	13.65
4,4'-DDE	2/3	2.2 - 37	19.60
4,4'-DDT	1/3	13	13.00
Aroclor-1254	1/3	210	210.00
Dieldrin	1/3	13	13.00
Endrin	1/3	15	15.00
Endrin aldehyde	1/3	4.2	4.20
alpha-BHC	2/3	1.4 - 5.2	3.30
alpha-Chlordane	1/3	12	12.00
gamma-BHC (Lindane)	1/3	1.4	1.40
gamma-Chlordane	1/3	5.9	5.90
Semivolatiles (μg/kg)			
Pyrene	1/3	170	170.00
Volatiles (μg/kg)			
2-Butanone (MEK)	1/3	70	70.00
Acetone	2/3	930 - 1900	1415.00
Chlorobenzene	1/3	14	14.00

Table 5-59
Detected Concentrations in Wetland 33 Sediments
NAS Pensacola Site 41, Phase II

Parameter	Frequency of Detection	Range of Detected Concentrations	Average Detected Concentration
Inorganics (mg/kg)			
Aluminum (Al)	3/3	135 - 2460	1371.67
Arsenic (As)	2/3	1.4 - 1.8	1.6
Barium (Ba)	3/3	0.3 - 2.6	1.4
Calcium (Ca)	3/3	116 - 1470	915.33
Chromium (Cr)	2/3	3.5 - 5.5	4.5
Chromium (Cr)	2/3	3.5	4.5
Cobalt (Co)	1/3	0.99	0.99
Copper (Cu)	3/3	0.49 - 8.1	4.49
Iron (Fe)	3/3	151 - 2120	1297
Lead (Pb)	3/3	0.69 - 13.3	8.63
Magnesium (Mg)	3/3	189 - 2420	1363
Manganese (Mn)	3/3	0.62 - 8.2	4.77
Nickel (Ni)	1/3	3	3
Potassium (K)	3/3	70.3 - 698	384.77
Selenium (Se)	1/3	0.66	0.66
Sodium (Na)	3/3	979 - 10100	5606.33
Vanadium (V)	3/3	0.38 - 4.7	3.13
Zinc (Zn)	2/3	8.3 - 14	11.15
Pesticides and PCBs (μg/kg)			
4,4'-DDE	1/3	3.1	3.1
Aldrin	2/3	0.18 - 0.44	0.31
Aroclor-1254	2/3	2.4 - 12	7.2
alpha-BHC	2/3	0.3 - 0.39	0.345
alpha-Chlordane	2/3	0.35 - 0.7	0.525
delta-BHC	2/3	0.13 - 0.57	0.35
Semivolatiles (μg/kg)			
Anthracene	1/3	700	700
Benzo(a)anthracene	1/3	1800	1800
Benzo(a)pyrene	1/3	1100	1100
Benzo(b)fluoranthene	1/3	1100	1100
Benzo(g,h,i)perylene	1/3	740	740
Benzo(k)fluoranthene	1/3	710	710
Carbazole	1/3	220	220
Chrysene	1/3	1500	1500
Di-n-butylphthalate	1/3	32	32
Dibenzofuran	1/3	70	70
Fluoranthene	1/3	2700	2700
Fluorene	1/3	230	230
Indeno(1,2,3-cd)pyrene	1/3	740	740

FINAL REMEDIAL INVESTIGATION REPORT
SITE 41, NAS PENSACOLA WETLANDS
NAVAL AIR STATION
PENSACOLA, FLORIDA

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