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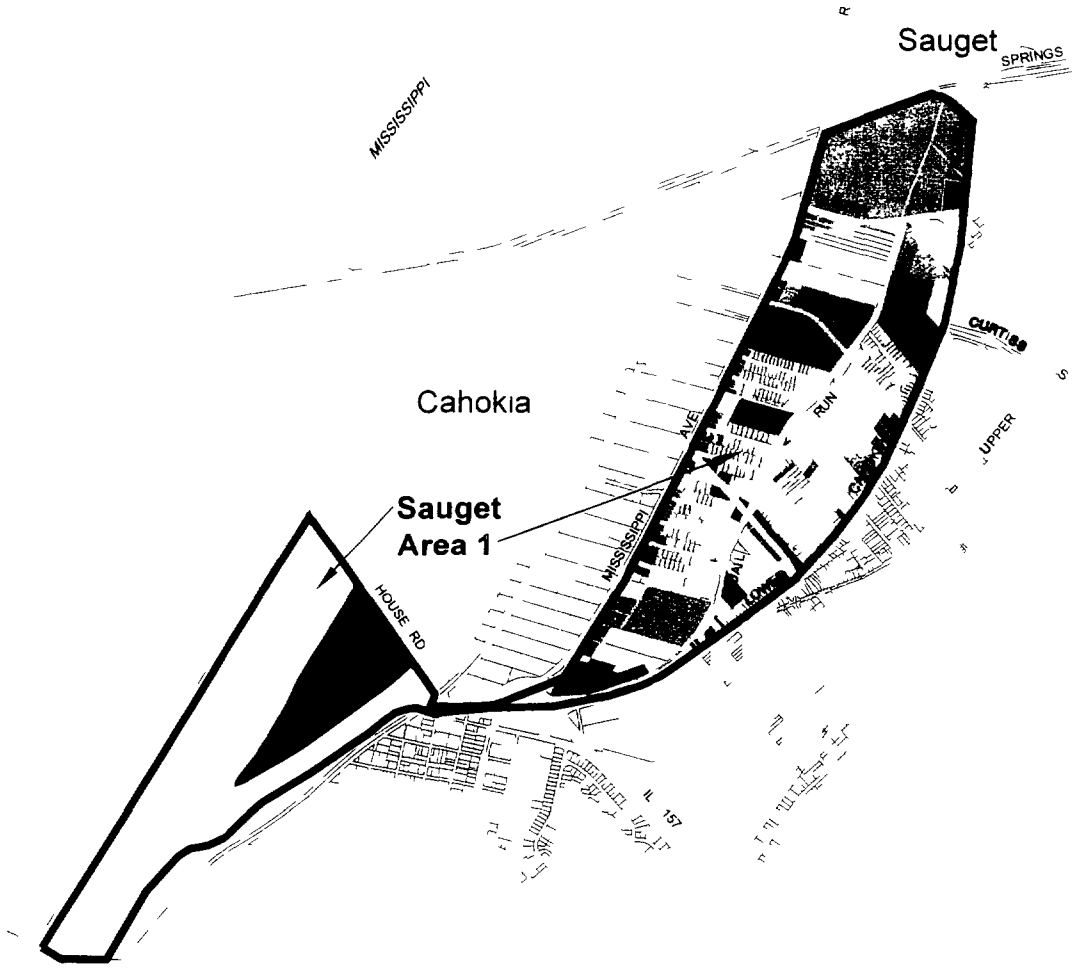
202482

ENGINEERING EVALUATION/COST ANALYSIS
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
SAUGET AREA 1
SAUGET AND CAHOKIA, ILLINOIS

Revision 2 September 28, 2001

Appendix A - G



Prepared For

EPA United States Environmental Protection Agency

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Innovative Environmental Solutions

Engineering Evaluation/Cost Analysis
Remedial Investigation/Feasibility Study

Sauget Area 1
Sauget & Cahokia, Illinois

Volume 2 of 2
Appendices

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APPENDIX A
EE/CA AND RI/FS INVESTIGATION
ANALYTICAL DATA

Table A-1.1
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	WASTE-G-B-0-0.5FTEB	WASTE-G-B1-0-0.5FT	WASTE-G-B1-0-0 5FTFD	WASTE-G-B2-0-0 5FT	WASTE-G-B3-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/7/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5U	5.3U	5.4U	4.4U	4 8U
1,1,2,2-Tetrachloroethane	5U	5.3U	5.4U	4.4U	4 8U
1,1,2-Trichloroethane	5U	5.3U	5.4U	4 4U	4 8U
1,1-Dichloroethane	5U	5.3U	5.4U	4.4U	4.8U
1,1-Dichloroethene	5U	4.9U	5U	4U	4 4U
1,2-Dichloroethane	5U	5.3U	5.4U	4.4U	4.8U
1,2-Dichloropropane	5U	5.3U	5.4U	4.4U	4.8U
2-Butanone (MEK)	25U	26U	27U	22U	24U
2-Hexanone	25U	26U	27U	22U	24U
4-Methyl-2-pentanone (MIBK)	25U	26U	27U	22U	24U
Acetone	50U	53U	54U	44U	48U
Benzene	1.2U	5.3U	5.4U	4.4U	4 8U
Bromodichloromethane	5U	5.3U	5.4U	4.4U	4 8U
Bromoform	5U	5.3U	5.4U	4.4U	4 8U
Bromomethane (Methyl bromide)	9.8U	11U	11U	8.8U	9.6U
Carbon disulfide	5U	5.3U	5.4U	4.4U	4.8U
Carbon tetrachloride	5U	5.3U	5.4U	4.4U	4.8U
Chlorobenzene	5U	5.3U	5.4U	4 4U	4 8U
Chloroethane	10U	11U	11U	8.8U	9 6U
Chloroform	5U	5.3U	5.4U	4.4U	4 8U
Chloromethane	10U	11U	11U	8.8U	9.6U
Cis/Trans-1,2-Dichloroethene	5U	5.3U	5.4U	4 4U	4 8U
Dibromochloromethane	5U	5.3U	5.4U	4.4U	4 8U
Ethylbenzene	5U	5.3U	5.4U	4 4U	4 8U
Methylene chloride (Dichloromethane)	4.7U	5.3U	5.4U	4.4U	4 8U
Styrene	5U	5.3U	5.4U	4.4U	4 8U
Tetrachloroethene	5U	5.3U	5.4U	4.4U	4 8U
Toluene	5U	5.3U	5.4U	4.4U	4.8U
Trichloroethene	2.7U	5.3U	5.4U	4 4U	4 8U
Vinyl chloride	10U	11U	11U	8.8U	9.6U
Xylenes, Total	5U	5.3U	5 4U	4.4U	4 8U
cis-1,3-Dichloropropene	1U	4.2U	4.4U	3.5U	3 8U
trans-1,3-Dichloropropene	5U	4.2U	4.4U	3.5U	3 8U
Total VOC's	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.1
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	WASTE-G-B4-0-0.5FT	WASTE-H-B1-0-0 5FT	WASTE-H-B2-0-0 5FT	WASTE-H-B3-0-0 5FT	WASTE-H-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/7/1999	9/27/1999	9/27/1999	9/27/1999	9/27/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5.8U	7.9U	5.1U	9U	6 8U
1,1,2,2-Tetrachloroethane	5 8U	7.9UJ	5.1U	9U	6 8U
1,1,2-Trichloroethane	5 8U	7.9U	5.1U	9U	6 8U
1,1-Dichloroethane	5 8U	7.9U	5.1U	9U	6 8U
1,1-Dichloroethene	5 4U	7.3U	4.7U	8.3U	6 2U
1,2-Dichloroethane	5 8U	7.9U	5.1U	9U	6 8U
1,2-Dichloropropane	5 8U	7.9U	5 1U	9U	6 8U
2-Butanone (MEK)	29U	39U	25U	45U	34U
2-Hexanone	29U	39UJ	25U	5 7J	34U
4-Methyl-2-pentanone (MIBK)	29U	39U	25U	45U	34U
Acetone	58U	79U	51U	90U	68U
Benzene	5 8U	7 9U	5.1U	9U	6 8U
Bromodichloromethane	5 8U	7.9U	5.1U	9U	6 8U
Bromoform	5 8U	7.9UJ	5 1U	9U	6 8U
Bromomethane (Methyl bromide)	12U	16U	10U	18U	14U
Carbon disulfide	5 8U	4.3J	5.1U	9U	6 8U
Carbon tetrachloride	5 8U	7.9U	5.1U	9U	6 8U
Chlorobenzene	5.8U	7.9UJ	5.1U	9U	6 8U
Chloroethane	12U	16U	10U	18U	14U
Chloroform	5.8U	7.9U	5 1U	9U	6 8U
Chloromethane	12U	16U	10U	18U	14U
Cis/Trans-1,2-Dichloroethene	5 8U	7.9U	5 1U	9U	6 8U
Dibromochloromethane	5 8U	7.9UJ	5 1U	9U	6 8U
Ethylbenzene	5 8U	7 9UJ	5 1U	9U	6 8U
Methylene chloride (Dichloromethane)	5.8U	7.9U	5 1U	9U	6 8U
Styrene	5 8U	7 9UJ	5 1U	9U	6 8U
Tetrachloroethene	5.8U	7.9UJ	5.1U	17	6 8U
Toluene	5.8U	7.9U	5.1U	9U	6 8U
Trichloroethene	5.8U	7.9U	5 1U	9U	6 8U
Vinyl chloride	12U	16U	10U	18U	14U
Xylenes, Total	5 8U	7 9UJ	5 1U	9U	6 8U
cis-1,3-Dichloropropene	4.7U	6.3U	4 1U	7 2U	5 4U
trans-1,3-Dichloropropene	4 7U	6.3U	4 1U	7 2U	5 4U
Total VOC's	**ND**	**4.3**	**ND**	**22.7**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate, ND-none detected

Table A-1.1
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	WASTE-I-B-0-0 5FTEB	WASTE-I-B1-0-0 5FT	WASTE-I-B2-0-0 5FT	WASTE-I-B3-0-0 5FT	WASTE-I-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/14/1999	10/13/1999	10/13/1999	10/13/1999	10/14/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5 0U	5 5U	6 3U	4 7U	5 6U
1,1,2,2-Tetrachloroethane	5 0U	5 5U	6 3U	4 7U	5 6U
1,1,2-Trichloroethane	5 0U	5 5U	6 3U	4 7U	5 6U
1,1-Dichloroethane	5 0U	5 5U	6 3U	4 7U	5 6U
1,1-Dichloroethene	5 0U	5 0U	5 8U	4 3U	5 2U
1,2-Dichloroethane	5 0U	5 5U	6 3U	4 7U	5 6U
1,2-Dichloropropane	5 0U	5 5U	6 3U	4 7U	5 6U
2-Butanone (MEK)	25U	27U	32U	23U	28U
2-Hexanone	25U	27U	32U	23U	28U
4-Methyl-2-pentanone (MIBK)	25U	27U	32U	23U	28U
Acetone	50U	55U	63U	47U	56U
Benzene	0 31J	5 5U	6 3U	4 7U	5 6U
Bromodichloromethane	5 0U	5 5U	6 3U	4 7U	5 6U
Bromoform	5 0U	5 5U	6 3U	4 7U	5 6U
Bromomethane (Methyl bromide)	9 8U	11U	13U	9 4U	11U
Carbon disulfide	5 0U	5 5U	6 3U	4 7U	5 6U
Carbon tetrachloride	5 0U	5 5U	6 3U	4 7U	5 6U
Chlorobenzene	5 0U	5 5U	6 3U	4 7U	5 6U
Chloroethane	10U	11U	13U	9 4U	11U
Chloroform	5 0U	5 5U	6 3U	4 7U	5 6U
Chloromethane	10U	11U	13U	9 4U	11U
Cis/Trans-1 2-Dichloroethene	5 0U	5 5U	6 3U	4 7U	5 6U
Dibromochloromethane	5 0U	5 5U	6 3U	4 7U	5 6U
Ethylbenzene	5 0U	5 5U	6 3U	4 7U	5 6U
Methylene chloride (Dichloromethane)	0 90J	5 5U	6 3U	4 7U	5 6U
Styrene	5 0U	5 5U	6 3U	4 7U	5 6U
Tetrachloroethene	5 0U	5 5U	6 3U	4 7U	5 6U
Toluene	5 0U	5 5U	6 3U	4 7U	5 6U
Trichloroethene	0 32J	5 5U	6 3U	4 7U	5 6U
Vinyl chloride	10U	11U	13U	9 4U	11U
Xylenes Total	5 0U	5 5U	6 3U	4 7U	5 6U
cis-1 3-Dichloropropene	1 0U	4 4U	5 0U	3 7U	4 5U
trans-1,3-Dichloropropene	5 0U	4 4U	5 0U	3 7U	4 5U
Total VOC's	**1 53**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.1
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	WASTE-I-B4-0-0 5FTFD	WASTE-L-B1-0-0 5FT	WASTE-L-B2-0-0 5FT	WASTE-L-B3-0-0 5FT	WASTE-L-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/14/1999	9/27/1999	9/27/1999	9/27/1999	9/27/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 1,1-Trichloroethane	6 0U	6 3U	5 3U	9 7U	6 6U
1 1,2,2-Tetrachloroethane	6 0U	6 3U	5 3U	9 7UJ	6 6U
1,1,2-Trichloroethane	6 0U	6 3U	5 3U	9 7U	6 6U
1 1-Dichloroethane	6 0U	6 3U	5 3U	9 7U	6 6U
1 1-Dichloroethene	5 5U	5 8U	4 8U	8 9U	6 1U
1 2-Dichloroethane	6 0U	6 3U	5 3U	9 7U	6 6U
1 2-Dichloropropane	6 0U	6 3U	5 3U	9 7U	6 6U
2-Butanone (MEK)	30U	31U	26U	48U	33U
2-Hexanone	30U	31U	26U	48UJ	33U
4-Methyl-2-pentanone (MIBK)	30U	31U	26U	48U	33U
Acetone	60U	63U	53U	97U	66U
Benzene	6 0U	6 3U	5 3U	9 7U	6 6U
Bromodichloromethane	6 0U	6 3U	5 3U	9 7U	6 6U
Bromoform	6 0U	6 3U	5 3U	9 7UJ	6 6U
Bromomethane (Methyl bromide)	12U	12U	10U	19U	13U
Carbon disulfide	6 0U	6 3U	5 3U	9 7U	6 6U
Carbon tetrachloride	6 0U	6 3U	5 3U	9 7U	6 6U
Chlorobenzene	6 0U	6 3U	5 3U	9 7UJ	6 6U
Chloroethane	12U	12U	10U	19U	13U
Chloroform	6 0U	6 3U	5 3U	9 7U	6 6U
Chloromethane	12U	12U	10U	19U	13U
Cis/Trans-1,2-Dichloroethene	6 0U	6 3U	5 3U	9 7U	6 6U
Dibromochloromethane	6 0U	6 3U	5 3U	9 7UJ	6 6U
Ethylbenzene	6 0U	6 3U	5 3U	9 7UJ	6 6U
Methylene chloride (Dichloromethane)	6 0U	6 3U	5 3U	9 7U	6 6U
Styrene	6 0U	6 3U	5 3U	9 7UJ	6 6U
Tetrachloroethene	6 0U	6 3U	5 3U	9 7UJ	6 6U
Toluene	3 8J	6 3U	13	9 7U	6 6U
Trichloroethene	6 0U	6 3U	5 3U	9 7U	6 6U
Vinyl chloride	12U	12U	10U	19U	13U
Xylenes Total	6 0U	6 3U	5 3U	9 7UJ	6 6U
cis-1,3-Dichloropropene	4 8U	5U	4 2U	7 8U	5 3U
trans-1 3-Dichloropropene	4 8U	5U	4 2U	7 8U	5 3U
Total VOC's	**3 8**	**ND**	**13**	**ND**	**ND**

Notes: U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.1
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	WASTE-N-B1-0-0 5FT	WASTE-N-B2-0-0 5FT	WASTE-N-B3-0-0 5FT	WASTE-N-B4-0-0 5FT	WASTE-N-B4-0-0 5FTEB
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	11/30/1999	11/30/1999	11/30/1999	12/2/1999	12/2/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
1 1 1-Trichloroethane	9U	4 9U	5 9U	6 5U	5U
1,1,2,2-Tetrachloroethane	9U	4 9U	5 9U	6 5U	5U
1,1,2-Trichloroethane	9U	4 9U	5 9U	6 5U	5U
1,1-Dichloroethane	9U	4 9U	5 9U	6 5U	5U
1,1-Dichloroethene	8 2U	4 5U	5 4U	6U	5U
1,2-Dichloroethane	9U	4 9U	5 9U	6 5U	5U
1,2-Dichloropropane	9U	4 9U	5 9U	6 5U	5U
2-Butanone (MEK)	45U	25U	30U	33U	25U
2-Hexanone	45U	25UJ	30U	33U	25U
4-Methyl-2-pentanone (MIBK)	45U	25U	30U	33U	25U
Acetone	90U	49U	59U	65U	50U
Benzene	9U	4 9U	5 9U	6 5U	1 2U
Bromodichloromethane	9U	4 9U	5 9U	6 5U	5U
Bromoform	9U	4 9U	5 9U	6 5U	5U
Bromomethane (Methyl bromide)	18U	9 9U	12U	13U	9 8U
Carbon disulfide	9U	4 9U	5 9U	6 5U	5U
Carbon tetrachloride	9U	4 9U	5 9U	6 5U	5U
Chlorobenzene	9U	4 9U	5 9U	6 5U	5U
Chloroethane	18U	9 9U	12U	13U	10U
Chloroform	9U	4 9U	5 9U	6 5U	5U
Chloromethane	18U	9 9U	12U	13U	10U
Cis/Trans-1 2-Dichloroethene	9U	4 9U	5 9U	6 5U	5U
Dibromochloromethane	9U	4 9U	5 9U	6 5U	5U
Ethylbenzene	9U	4 9U	5 9U	6 5U	5U
Methylene chloride (Dichloromethane)	9U	4 9U	5 9U	6 5U	4 7U
Styrene	9U	4 9U	5 9U	6 5U	5U
Tetrachloroethene	9U	4 9U	5 9U	6 5U	5U
Toluene	9U	4 9U	5 9U	6 5U	5U
Trichloroethene	9U	4 9U	5 9U	6 5U	2 7U
Vinyl chloride	18U	9 9U	12U	13U	10U
Xylenes, Total	9U	4 9U	5 9U	6 5U	5U
cis-1 3-Dichloropropene	7 2U	4U	4 7U	5 2U	1U
trans-1 3-Dichloropropene	7 2U	4U	4 7U	5 2U	5U
Total VOC's	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.1
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	WASTE-N-B4-0-0.5FTFD
Description	Waste - Discrete Surface
Sample Date	12/2/1999
Units	ug/kg dw
1,1,1-Trichloroethane	6.8U
1,1,2,2-Tetrachloroethane	6.8U
1,1,2-Trichloroethane	6.8U
1,1-Dichloroethane	6 8U
1,1-Dichloroethene	6 3U
1,2-Dichloroethane	6.8U
1,2-Dichloropropane	6.8U
2-Butanone (MEK)	34U
2-Hexanone	34U
4-Methyl-2-pentanone (MIBK)	34U
Acetone	68U
Benzene	6.8U
Bromodichloromethane	6.8U
Bromoform	6.8U
Bromomethane (Methyl bromide)	14U
Carbon disulfide	6.8U
Carbon tetrachloride	6.8U
Chlorobenzene	6 8U
Chloroethane	14U
Chloroform	6.8U
Chloromethane	14U
Cis/Trans-1,2-Dichloroethene	6.8U
Dibromochloromethane	6.8U
Ethylbenzene	6.8U
Methylene chloride (Dichloromethane)	6.8U
Styrene	6.8U
Tetrachloroethene	6.8U
Toluene	6.8U
Trichloroethene	6.8U
Vinyl chloride	14U
Xylenes, Total	6.8U
cis-1,3-Dichloropropene	5.5U
trans-1,3-Dichloropropene	5.5U
Total VOC's	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-G-B-0-0 5FTEB	WASTE-G-B1-0-0 5FT	WASTE-G-B1-0-0 5FTFD	WASTE-G-B2-0-0 5FT	WASTE-G-B3-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/7/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	10U	200U	200U	200U	190U
1,2-Dichlorobenzene	10U	200U	200U	200U	190U
1,3-Dichlorobenzene	10U	200U	200U	200U	190U
1,4-Dichlorobenzene	10U	200U	200U	200U	190U
2,2'-Oxybis(1-Chloropropane)	10U	200U	200U	200U	190U
2,4,5-Trichlorophenol	10U	200U	200U	200U	190U
2,4,6-Trichlorophenol	2 1U	200U	200U	200U	190U
2,4-Dichlorophenol	10U	200U	200U	200U	190U
2,4-Dinitrophenol	14U	1000U	990U	980U	940U
2,4-Dinitrotoluene	10U	200U	200U	200U	190U
2,6-Dinitrotoluene	10U	200U	200U	200U	190U
2-Chloronaphthalene	10U	200U	200U	200U	190U
2-Chlorophenol	10U	200U	200U	200U	190U
2-Methylnaphthalene	10U	200U	200U	200U	190U
2-Methylphenol (o-cresol)	10U	200U	200U	200U	190U
2-Nitroaniline	50U	1000U	990U	980U	940U
2-Nitrophenol	10U	200U	200U	200U	190U
3,3'-Dichlorobenzidine	20U	390U	380U	380U	370U
3-Methylphenol/4-Methylphenol	10U	200U	200U	200U	190U
3-Nitroaniline	50U	1000U	990U	980U	940U
4,6-Dinitro-2-methylphenol	13U	1000U	990U	980U	940U
4-Bromophenylphenyl ether	1U	200U	200U	200U	190U
4-Chloro-3-methylphenol	10U	200U	200U	200U	190U
4-Chloroaniline	9 2J	390U	380U	380U	370U
4-Chlorophenylphenyl ether	10U	200U	200U	200U	190U
4-Nitroaniline	50U	1000U	990U	980U	940U
4-Nitrophenol	50U	1000U	990U	980U	940U
Acenaphthene	10U	200U	200U	200U	190U
Acenaphthylene	10U	200U	200U	200U	190U
Anthracene	10U	200U	200U	200U	190U
Benzo(a)anthracene	10U	200U	200U	200U	190U
Benzo(a)pyrene	10U	110U	100U	100U	100U
Benzo(b)fluoranthene	10U	200U	200U	200U	190U
Benzo(g,h,i)perylene	10U	200U	200U	200U	190U
Benzo(k)fluoranthene	10U	200U	200U	200U	190U
Butylbenzylphthalate	10U	200U	200U	200U	190U
Carbazole	10U	200U	200U	200U	190U
Chrysene	10U	200U	200U	200U	190U

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-G-B-0-0 5FTEB	WASTE-G-B1-0-0 5FT	WASTE-G-B1-0-0 5FTFD	WASTE-G-B2-0-0 5FT	WASTE-G-B3-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/7/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	10U	110U	100U	100U	100U
Dibenzofuran	10U	200U	200U	200U	190U
Diethylphthalate	10U	200U	200U	200U	190U
Dimethylphthalate	10U	200U	200U	200U	190U
Di-n-butylphthalate	10U	200U	200U	200U	190U
Di-n-octylphthalate	10U	200U	200U	200U	190U
Fluoranthene	10U	200U	200U	200U	190U
Fluorene	1U	200U	200U	200U	190U
Hexachlorobenzene	10U	83U	81U	81U	78U
Hexachlorobutadiene	10U	200U	200U	200U	190U
Hexachlorocyclopentadiene	10U	200U	200U	200U	190U
Hexachloroethane	1 9U	200U	200U	200U	190U
Indeno(1,2,3-cd)pyrene	10U	200U	200U	200U	190U
Isophorone	10U	200U	200U	200U	190U
Naphthalene	10U	200U	200U	200U	190U
Nitrobenzene	3 5U	200U	200U	200U	190U
N-Nitroso-di-n-propylamine	10U	200U	200U	200U	190U
N-Nitrosodiphenylamine	5U	200U	200U	200U	190U
Pentachlorophenol	5U	1000U	990U	980U	940U
Phenanthrene	10U	200U	200U	200U	190U
Phenol	10U	200U	200U	200U	190U
Pyrene	10U	200U	200U	200U	190U
bis(2-Chloroethoxy)methane	10U	200U	200U	200U	190U
bis(2-Chloroethyl)ether	10U	200U	200U	200U	190U
bis(2-Ethylhexyl)phthalate	1 8U	200U	200U	200U	190U
Total SVOC's	**9.2**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-G-B4-0-0 5FT	WASTE-H-B1-0-0 5FT	WASTE-H-B2-0-0 5FT	WASTE-H-B3-0-0 5FT	WASTE-H-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/7/1999	9/27/1999	9/27/1999	9/27/1999	9/27/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 2,4-Trichlorobenzene	180U	180U	190U	180U	180U
1 2-Dichlorobenzene	180U	180U	190U	180U	180U
1 3-Dichlorobenzene	180U	180U	190U	180U	180U
1 4-Dichlorobenzene	180U	180U	190U	180U	180U
2 2'-Oxybis(1-Chloropropane)	180U	180U	190U	180U	180U
2,4,5-Trichlorophenol	180U	180U	190U	180U	180U
2,4,6-Trichlorophenol	180U	180U	190U	180U	180U
2,4-Dichlorophenol	180U	180U	190U	180U	180U
2,4-Dinitrophenol	920U	880U	930U	880U	880R
2,4-Dinitrotoluene	180U	180U	190U	180U	180U
2,6-Dinitrotoluene	180U	180U	190U	180U	180U
2-Chloronaphthalene	180U	180U	190U	180U	180U
2-Chlorophenol	180U	180U	190U	180U	180U
2-Methylnaphthalene	180U	180U	190U	180U	180U
2-Methylphenol (o-cresol)	180U	180U	190U	180U	180U
2-Nitroaniline	920U	880U	930U	880U	880U
2-Nitrophenol	180U	180U	190U	180U	180U
3,3'-Dichlorobenzidine	360U	340U	360U	340U	340U
3-Methylphenol/4-Methylphenol	180U	180U	190U	180U	180U
3-Nitroaniline	920U	880U	930U	880U	880U
4,6-Dinitro-2-methylphenol	920U	880U	930U	880U	880U
4-Bromophenylphenyl ether	180U	180U	190U	180U	180U
4-Chloro-3-methylphenol	180U	180U	190U	180U	180U
4-Chloroaniline	360U	340U	360U	340U	340U
4-Chlorophenylphenyl ether	180U	180U	190U	180U	180U
4-Nitroaniline	920U	880U	930U	880U	880U
4-Nitrophenol	920U	880U	930U	880U	880U
Acenaphthene	180U	180U	190U	180U	180U
Acenaphthylene	180U	180U	190U	180U	180U
Anthracene	180U	180U	190U	180U	180U
Benzo(a)anthracene	180U	95J	100J	180U	130J
Benzo(a)pyrene	97U	100	110	94U	140
Benzo(b)fluoranthene	180U	120J	100J	180U	140J
Benzo(g,h,i)perylene	180U	180U	190U	180U	370
Benzo(k)fluoranthene	180U	85J	130J	180U	82J
Butylbenzylphthalate	180U	180U	190U	180U	180UJ
Carbazole	180U	180U	190U	180U	180U
Chrysene	180U	110J	130J	180U	300J

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-G-B4-0-0 5FT	WASTE-H-B1-0-0 5FT	WASTE-H-B2-0-0 5FT	WASTE-H-B3-0-0 5FT	WASTE-H-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/7/1999	9/27/1999	9/27/1999	9/27/1999	9/27/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	97U	93U	98U	94U	93U
Dibenzofuran	180U	180U	190U	180U	180U
Diethylphthalate	180U	180U	190U	180U	180U
Dimethylphthalate	180U	180U	190U	180U	180UJ
Di-n-butylphthalate	180U	180U	190U	180U	180U
Di-n-octylphthalate	180U	180U	190U	180U	180U
Fluoranthene	180U	210	240	180U	140J
Fluorene	180U	180U	190U	180U	180U
Hexachlorobenzene	76U	73U	77U	73U	72U
Hexachlorobutadiene	180U	180U	190U	180U	180U
Hexachlorocyclopentadiene	180U	180U	190U	180U	180U
Hexachloroethane	180U	180U	190U	180U	180U
Indeno(1,2,3-cd)pyrene	180U	180U	87J	180U	100J
Isophorone	180U	180U	190U	180U	180U
Naphthalene	180U	180U	190U	180U	180U
Nitrobenzene	180U	180U	190U	180U	180U
N-Nitroso-di-n-propylamine	180U	180U	190U	180U	180U
N-Nitrosodiphenylamine	180U	180U	190U	180U	180UJ
Pentachlorophenol	920U	880U	930U	880U	880U
Phenanthrene	180U	180U	190U	180U	110J
Phenol	180U	180U	190U	180U	180U
Pyrene	180U	160J	190	180U	190
bis(2-Chloroethoxy)methane	180U	180U	190U	180U	180U
bis(2-Chloroethyl)ether	180U	180U	190U	180U	180U
bis(2-Ethylhexyl)phthalate	180U	110J	190U	180U	120J
Total SVOC's	**ND**	**990**	**1087**	**ND**	**1822**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate, ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-I-B-0-0 5FTEB	WASTE-I-B1-0-0 5FT	WASTE-I-B2-0-0 5FT	WASTE-I-B3-0-0 5FT	WASTE-I-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/14/1999	10/13/1999	10/13/1999	10/13/1999	10/14/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2 4-Trichlorobenzene	10U	180U	180J	180U	170U
1,2-Dichlorobenzene	10U	180U	190U	180U	170U
1,3-Dichlorobenzene	10U	180U	190U	180U	170U
1,4-Dichlorobenzene	10U	180U	46J	180U	170U
2,2'-Oxybis(1-Chloropropane)	10U	180U	190U	180U	170U
2,4,5-Trichlorophenol	10U	180U	190U	180U	170U
2,4,6-Trichlorophenol	2 1U	180U	190U	180U	170U
2,4-Dichlorophenol	10U	180U	82J	180U	170U
2,4-Dinitrophenol	14U	880U	940U	920U	870U
2,4-Dinitrotoluene	10U	180U	190U	180U	170U
2,6-Dinitrotoluene	10U	180U	190U	180U	170U
2-Chloronaphthalene	10U	180U	190U	180U	170U
2-Chlorophenol	10U	180U	190U	180U	170U
2-Methylnaphthalene	10U	180U	190U	180U	170U
2-Methylphenol (o-cresol)	10U	180U	190U	180U	170U
2-Nitroaniline	50U	880U	160J	920U	870U
2-Nitrophenol	10U	180U	190U	180U	170U
3,3'-Dichlorobenzidine	20U	340U	360U	360U	340U
3-Methylphenol/4-Methylphenol	10U	180U	190U	180U	170U
3-Nitroaniline	50U	880U	940U	920U	870U
4,6-Dinitro-2-methylphenol	13U	880U	940U	920U	870U
4-Bromophenylphenyl ether	1 0U	180U	190U	180U	170U
4-Chloro-3-methylphenol	10U	180U	190U	180U	170U
4-Chloroaniline	20U	340U	18000D	240J	340U
4-Chlorophenylphenyl ether	10U	180U	190U	180U	170U
4-Nitroaniline	50U	880U	940U	920U	870U
4-Nitrophenol	50U	880U	940U	920U	870U
Acenaphthene	10U	180U	190U	180U	170U
Acenaphthylene	10U	180U	190U	180U	170U
Anthracene	10U	180U	190U	730	23J
Benzo(a)anthracene	10U	78J	190U	2200	180
Benzo(a)pyrene	10U	70J	99U	2200	140
Benzo(b)fluoranthene	10U	100J	190U	2800	200
Benzo(g,h,i)perylene	10U	180U	110J	1600	110J
Benzo(k)fluoranthene	10U	55J	190U	960	92J
Butylbenzylphthalate	10U	180UJ	190U	180U	170U
Carbazole	10U	180U	190U	320	170U
Chrysene	10U	99J	190U	2200	190

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-I-B-0-0.5FTEB	WASTE-I-B1-0-0.5FT	WASTE-I-B2-0-0.5FT	WASTE-I-B3-0-0 5FT	WASTE-I-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/14/1999	10/13/1999	10/13/1999	10/13/1999	10/14/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	10U	93U	99U	360	29J
Dibenzofuran	10U	180U	190U	100J	170U
Diethylphthalate	10U	180U	190U	180U	170U
Dimethylphthalate	10U	180UJ	190U	180U	170U
Di-n-butylphthalate	10U	180U	190U	52J	170U
Di-n-octylphthalate	10U	180U	190U	180U	170U
Fluoranthene	10U	170J	120J	6000	290
Fluorene	1.0U	180U	190U	230	170U
Hexachlorobenzene	10U	72U	110	76U	72U
Hexachlorobutadiene	10U	180U	190U	180U	170U
Hexachlorocyclopentadiene	10U	180U	190U	180U	170U
Hexachloroethane	1.9U	180U	190U	180U	170U
Indeno(1,2,3-cd)pyrene	10U	180U	190U	1600	110J
Isophorone	10U	180U	190U	180U	170U
Naphthalene	10U	180U	190U	180U	170U
Nitrobenzene	3.5U	180U	190U	180U	170U
N-Nitroso-di-n-propylamine	10U	180U	190U	180U	170U
N-Nitrosodiphenylamine	5.0U	180U	190U	180U	170U
Pentachlorophenol	5 0U	880U	2000	920U	870U
Phenanthrene	10U	71J	50J	3300	110J
Phenol	10U	180U	190U	180U	170U
Pyrene	10U	140J	170J	4700	310
bis(2-Chloroethoxy)methane	10U	180U	190U	180U	170U
bis(2-Chloroethyl)ether	10U	180U	190U	180U	170U
bis(2-Ethylhexyl)phthalate	1 8U	180U	190U	180U	170U
Total SVOC's	**ND**	**783**	**21028**	**29592**	**1784**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-I-B4-0-0.5FTFD	WASTE-L-B1-0-0 5FT	WASTE-L-B2-0-0 5FT	WASTE-L-B3-0-0 5FT	WASTE-L-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/14/1999	9/27/1999	9/27/1999	9/27/1999	9/27/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 2,4-Trichlorobenzene	170U	180U	360U	180U	190U
1,2-Dichlorobenzene	170U	180U	360U	180U	190U
1,3-Dichlorobenzene	170U	180U	360U	180U	190U
1,4-Dichlorobenzene	170U	180U	360U	180U	190U
2,2'-Oxybis(1-Chloropropane)	170U	180U	360U	180U	190U
2,4,5-Trichlorophenol	170U	180U	360U	180U	190U
2,4,6-Trichlorophenol	170U	180U	360U	180U	190U
2,4-Dichlorophenol	170U	180U	360U	180U	190U
2,4-Dinitrophenol	840U	880U	1800U	920U	940U
2,4-Dinitrotoluene	170U	180U	360U	180U	190U
2,6-Dinitrotoluene	170U	180U	360U	180U	190U
2-Chloronaphthalene	170U	180U	360U	180U	190U
2-Chlorophenol	170U	180U	360U	180U	190U
2-Methylnaphthalene	170U	180U	140J	180U	190U
2-Methylphenol (o-cresol)	170U	180U	360U	180U	190U
2-Nitroaniline	840U	880U	1800U	920U	940U
2-Nitrophenol	170U	180U	360U	180U	190U
3,3'-Dichlorobenzidine	320U	340U	710U	360U	360U
3-Methylphenol/4-Methylphenol	170U	180U	360U	180U	190U
3-Nitroaniline	840U	880U	1800U	920U	940U
4,6-Dinitro-2-methylphenol	840U	880U	1800U	920U	940U
4-Bromophenylphenyl ether	170U	180U	360U	180U	190U
4-Chloro-3-methylphenol	170U	180U	360U	180U	190U
4-Chloroaniline	320U	340U	710U	360U	360U
4-Chlorophenylphenyl ether	170U	180U	360U	180U	190U
4-Nitroaniline	840U	880U	1800U	920U	940U
4-Nitrophenol	840U	880U	1800U	920U	940U
Acenaphthene	170U	140J	1600	180U	190U
Acenaphthylene	170U	180U	360U	180U	190U
Anthracene	34J	360	3600	180U	160J
Benzo(a)anthracene	300	1700	7800	180U	640
Benzo(a)pyrene	250	1600	7000	98U	550
Benzo(b)fluoranthene	320	1500	6600	180U	580
Benzo(g,h,i)perylene	180	1100	3800	180U	340
Benzo(k)fluoranthene	170	1800	6800	180U	460
Butylbenzylphthalate	170U	180U	360U	180U	190U
Carbazole	170U	190	1500	180U	140J
Chrysene	320	1900	7800	180U	760

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-I-B4-0-0.5FTFD	WASTE-L-B1-0-0.5FT	WASTE-L-B2-0-0.5FT	WASTE-L-B3-0-0 5FT	WASTE-L-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/14/1999	9/27/1999	9/27/1999	9/27/1999	9/27/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	88U	420	1300	98U	100U
Dibenzofuran	170U	180U	750	180U	190U
Diethylphthalate	170U	180U	360U	180U	190U
Dimethylphthalate	170U	180U	360U	180U	190U
Di-n-butylphthalate	170U	180U	360U	180U	190U
Di-n-octylphthalate	170U	180U	360U	180U	190U
Fluoranthene	440	3400	18000	180U	1600
Fluorene	170U	100J	1400	180U	190U
Hexachlorobenzene	69U	72U	150U	76U	78U
Hexachlorobutadiene	170U	180U	360U	180U	190U
Hexachlorocyclopentadiene	170U	180U	360U	180U	190U
Hexachloroethane	170U	180U	360U	180U	190U
Indeno(1,2,3-cd)pyrene	190	1100	4800	180U	320
Isophorone	170U	180U	360U	180U	190U
Naphthalene	170U	180U	320J	180U	190U
Nitrobenzene	170U	180U	360U	180U	190U
N-Nitroso-di-n-propylamine	170U	180U	360U	180U	190U
N-Nitrosodiphenylamine	170U	180U	360U	180U	190U
Pentachlorophenol	840U	880U	1800U	920U	940U
Phenanthrene	170U	1400	12000	180U	1000
Phenol	170U	180U	360U	180U	190U
Pyrene	460	2700	13000	180U	1300
bis(2-Chloroethoxy)methane	170U	180U	360U	180U	190U
bis(2-Chloroethyl)ether	170U	180U	360U	180U	190U
bis(2-Ethylhexyl)phthalate	90J	310	360U	180U	180J
Total SVOC's	**2754**	**19720**	**98210**	**ND**	**8030**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-N-B1-0-0 5FT	WASTE-N-B2-0-0 5FT	WASTE-N-B3-0-0 5FT	WASTE-N-B4-0-0 5FT	WASTE-N-B4-0-0 5FTEB
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	11/30/1999	11/30/1999	11/30/1999	12/2/1999	12/2/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
1,2,4-Trichlorobenzene	180U	180UJ	180U	190U	10U
1,2-Dichlorobenzene	180U	180U	180U	190U	10U
1,3-Dichlorobenzene	180U	180U	180U	190U	10U
1,4-Dichlorobenzene	180U	180U	180U	190U	10U
2,2'-Oxybis(1-Chloropropane)	180U	180U	180U	190U	10U
2,4,5-Trichlorophenol	180U	180U	180U	190U	10U
2,4,6-Trichlorophenol	180U	180UJ	180U	190U	2 1U
2,4-Dichlorophenol	180U	180U	180U	190U	10U
2,4-Dinitrophenol	900U	920U	920U	950U	14U
2,4-Dinitrotoluene	180U	180U	180U	190U	10U
2,6-Dinitrotoluene	180U	180U	180U	190U	10U
2-Chloronaphthalene	180U	180U	180U	190U	10U
2-Chlorophenol	180U	180U	180U	190U	10U
2-Methylnaphthalene	180U	180U	180U	190U	10U
2-Methylphenol (o-cresol)	180U	180U	180U	190U	10U
2-Nitroaniline	900U	920U	920U	950U	50U
2-Nitrophenol	180U	180U	180U	190U	10U
3,3'-Dichlorobenzidine	350U	360U	360U	370U	20U
3-Methylphenol/4-Methylphenol	180U	180U	180U	190U	10U
3-Nitroaniline	900U	920UJ	920U	950U	50U
4,6-Dinitro-2-methylphenol	900U	920U	920U	950U	13U
4-Bromophenylphenyl ether	180U	180UJ	180U	190U	1U
4-Chloro-3-methylphenol	180U	180U	180U	190U	10U
4-Chloroaniline	350U	360U	360U	370U	20U
4-Chlorophenylphenyl ether	180U	180U	180U	190U	10U
4-Nitroaniline	900U	920U	920U	950U	50U
4-Nitrophenol	900U	920U	920U	950U	50U
Acenaphthene	180U	180U	180U	190U	10U
Acenaphthylene	180U	180U	180U	190U	10U
Anthracene	58J	47J	180U	35J	10U
Benzo(a)anthracene	270	220	70J	97J	10U
Benzo(a)pyrene	330	240	72J	94J	10U
Benzo(b)fluoranthene	320	190	59J	80J	10U
Benzo(g,h,i)perylene	300	180U	180U	190U	10U
Benzo(k)fluoranthene	360	290J	80J	120J	10U
Butylbenzylphthalate	180U	180UJ	180U	190U	10U
Carbazole	180U	180U	180U	190U	10U
Chrysene	310	270	88J	110J	10U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-N-B1-0-0 5FT	WASTE-N-B2-0-0.5FT	WASTE-N-B3-0-0 5FT	WASTE-N-B4-0-0 5FT	WASTE-N-B4-0-0 5FTEB
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	11/30/1999	11/30/1999	11/30/1999	12/2/1999	12/2/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
Dibenzo(a,h)anthracene	110	81J	98U	100U	10U
Dibenzofuran	180U	180U	180U	190U	10U
Diethylphthalate	180U	180U	180U	190U	10U
Dimethylphthalate	180U	180U	180U	190U	10U
Di-n-butylphthalate	180U	180U	180U	190U	10U
Di-n-octylphthalate	180U	180U	180U	190U	10U
Fluoranthene	610	500J	170J	240	10U
Fluorene	180U	180U	180U	190U	1U
Hexachlorobenzene	74U	76U	76U	78U	10U
Hexachlorobutadiene	180U	180U	180U	190U	10U
Hexachlorocyclopentadiene	180U	180U	180U	190U	10U
Hexachloroethane	180U	180U	180U	190U	1 9U
Indeno(1,2,3-cd)pyrene	250	150J	180U	190U	10U
Isophorone	180U	180U	180U	190U	10U
Naphthalene	180U	180U	180U	190U	10U
Nitrobenzene	180U	180U	180U	190U	3 5U
N-Nitroso-di-n-propylamine	180U	180U	180U	190U	10U
N-Nitrosodiphenylamine	180U	180U	180U	190U	5U
Pentachlorophenol	900U	920U	150U	190U	10U
Phenanthrene	260	190J	150J	190J	10U
Phenol	180U	180U	150U	190U	10U
Pyrene	550	420J	150J	190	10U
bis(2-Chloroethoxy)methane	180U	180U	180U	190U	10U
bis(2-Chloroethyl)ether	180U	180U	180U	190U	10U
bis(2-Ethylhexyl)phthalate	180U	130J	180U	190U	1 8U
Total SVOC's	**3728**	**2728**	**839**	**1156**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-N-B4-0-0 5FTFD
Description	Waste - Discrete Surface
Sample Date	12/2/1999
Units	ug/kg dw
1,2,4-Trichlorobenzene	190U
1,2-Dichlorobenzene	190U
1,3-Dichlorobenzene	190U
1,4-Dichlorobenzene	190U
2,2'-Oxybis(1-Chloropropane)	190U
2,4,5-Trichlorophenol	190U
2,4,6-Trichlorophenol	190U
2,4-Dichlorophenol	190U
2,4-Dinitrophenol	940U
2,4-Dinitrotoluene	190U
2,6-Dinitrotoluene	190U
2-Chloronaphthalene	190U
2-Chlorophenol	190U
2-Methylnaphthalene	190U
2-Methylphenol (o-cresol)	190U
2-Nitroaniline	940U
2-Nitrophenol	190U
3,3'-Dichlorobenzidine	370U
3-Methylphenol/4-Methylphenol	190U
3-Nitroaniline	940U
4,6-Dinitro-2-methylphenol	940U
4-Bromophenylphenyl ether	190U
4-Chloro-3-methylphenol	190U
4-Chloroaniline	370U
4-Chlorophenylphenyl ether	190U
4-Nitroaniline	940U
4-Nitrophenol	940U
Acenaphthene	190U
Acenaphthylene	190U
Anthracene	37J
Benzo(a)anthracene	130J
Benzo(a)pyrene	120
Benzo(b)fluoranthene	100J
Benzo(g,h,i)perylene	190U
Benzo(k)fluoranthene	160J
Butylbenzylphthalate	190U
Carbazole	190U
Chrysene	150J

Table A-1.2
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-N-B4-0-0.5FTFD
Description	Waste - Discrete Surface
Sample Date	12/2/1999
Units	ug/kg dw
Dibenzo(a,h)anthracene	100U
Dibenzofuran	190U
Diethylphthalate	190U
Dimethylphthalate	190U
Di-n-butylphthalate	190U
Di-n-octylphthalate	190U
Fluoranthene	340
Fluorene	190U
Hexachlorobenzene	78U
Hexachlorobutadiene	190U
Hexachlorocyclopentadiene	190U
Hexachloroethane	190U
Indeno(1,2,3-cd)pyrene	80J
Isophorone	190U
Naphthalene	190U
Nitrobenzene	190U
N-Nitroso-di-n-propylamine	190U
N-Nitrosodiphenylamine	190U
Pentachlorophenol	940U
Phenanthrene	210
Phenol	190U
Pyrene	300
bis(2-Chloroethoxy)methane	190U
bis(2-Chloroethyl)ether	190U
bis(2-Ethylhexyl)phthalate	190U
Total SVOC's	**1627**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.3
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WASTE-G-B-0-0 5FTEB	WASTE-G-B1-0-0 5FT	WASTE-G-B1-0-0 5FTFD	WASTE-G-B2-0-0 5FT	WASTE-G-B3-0-0 5FT	WASTE-G-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/7/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	0 5U	20U	20U	19U	18U	18U
Dichlorobiphenyl	0 1U	3.9U	3 9U	3 8U	3 6U	3 6U
Heptachlorobiphenyl	0 3U	12U	12U	12U	11U	11U
Hexachlorobiphenyl	0 2U	8U	23	7 9	7 4U	7 4U
Monochlorobiphenyl	0.1U	3.9U	3 9U	3 8U	3 6U	3 6U
Nonachlorobiphenyl	0 5U	20U	20U	19U	18U	18U
Octachlorobiphenyl	0 3U	12U	12U	12U	11U	11U
Pentachlorobiphenyl	0 2U	8U	60	7 8U	7 4U	7 4U
Tetrachlorobiphenyl	0 2U	8U	7 9U	7 8U	7 4U	7 4U
Trichlorobiphenyl	0 1U	3 9U	3 9U	3 8U	3 6U	3 6U
Total PCB's	**ND**	**ND**	**83**	**7.9**	**ND**	**ND**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-1.3
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WASTE-H-B1-0-0 5FT	WASTE-H-B2-0-0.5FT	WASTE-H-B3-0-0 5FT	WASTE-H-B4-0-0.5FT	WASTE-I-B-0-0 5FTEB	WASTE-I-B1-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	9/27/1999	9/27/1999	9/27/1999	9/27/1999	10/14/1999	10/13/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw
Decachlorobiphenyl	46	18U	17U	170U	0.50U	880U
Dichlorobiphenyl	3.4U	3.6U	3.4U	34U	0 10U	170U
Heptachlorobiphenyl	52	11U	10U	100	0.30U	530U
Hexachlorobiphenyl	36	7.4U	7U	400	0.20U	350U
Monochlorobiphenyl	3.4U	3.6U	3.4U	34U	0 10U	170U
Nonachlorobiphenyl	17U	18U	17U	170U	0.50U	880U
Octachlorobiphenyl	26	11U	10U	36J	0 30U	530U
Pentachlorobiphenyl	500	17	7U	350	0 080J	350U
Tetrachlorobiphenyl	790	7 4U	7U	170	0.20U	350U
Trichlorobiphenyl	69	3.6U	3.4U	41	0 10U	170U
Total PCB's	**1519**	**17**	**ND**	**1097**	**0.08**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.3
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WASTE-I-B2-0-0.5FT	WASTE-I-B3-0-0.5FT	WASTE-I-B4-0-0.5FT	WASTE-I-B4-0-0.5FTFD	WASTE-L-B1-0-0 5FT	WASTE-L-B2-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/13/1999	10/13/1999	10/14/1999	10/14/1999	9/27/1999	9/27/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	930U	180U	170U	170U	860U	90U
Dichlorobiphenyl	680	36U	34U	34U	170U	18U
Heptachlorobiphenyl	17000	520J	100U	100U	510U	21J
Hexachlorobiphenyl	32000	1100J	69U	37J	340U	180J
Monochlorobiphenyl	37U	36U	34U	34U	170U	18U
Nonachlorobiphenyl	1700	180U	170U	170U	860U	90U
Octachlorobiphenyl	9000	400J	100U	100U	510U	54U
Pentachlorobiphenyl	32000	1000J	69U	70U	340U	760J
Tetrachlorobiphenyl	23000	360J	69U	70U	340U	210J
Trichlorobiphenyl	5900	38J	34U	34U	170U	18U
Total PCB's	**121280**	**3418**	**ND**	**37**	**ND**	**1171**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.3
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WASTE-L-B3-0-0 5FT	WASTE-L-B4-0-0.5FT	WASTE-N-B1-0-0.5FT	WASTE-N-B2-0-0.5FT	WASTE-N-B3-0-0 5FT	WASTE-N-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	9/27/1999	9/27/1999	11/30/1999	11/30/1999	11/30/1999	12/2/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	18U	190U	10J	18U	18U	19U
Dichlorobiphenyl	3.6U	37U	3.5U	3 6U	3.6U	3 7U
Heptachlorobiphenyl	11U	110U	57	11U	11U	11U
Hexachlorobiphenyl	7 3U	48J	7.2U	7.3UJ	7 3U	7 5U
Monochlorobiphenyl	3 6U	37U	3.5U	3.6U	3 6U	3 7U
Nonachlorobiphenyl	18U	190U	18U	18U	18U	19U
Octachlorobiphenyl	11U	110U	21	11UJ	11U	11U
Pentachlorobiphenyl	7.3U	250	90	7 3U	7 3U	7 5U
Tetrachlorobiphenyl	7 3U	50J	7 2U	7 3U	7 3U	7 5U
Trichlorobiphenyl	3 6U	37U	3 5U	3.6U	3 6U	3 7U
Total PCB's	**ND**	**348**	**178**	**ND**	**ND**	**ND**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.3
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WASTE-N-B4-0-0.5FTEB	WASTE-N-B4-0-0.5FTFD
Description	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	12/2/1999	12/2/1999
Units	ug/l	ug/kg dw
Decachlorobiphenyl	0.5U	18U
Dichlorobiphenyl	0.1U	3.7U
Heptachlorobiphenyl	0.3U	11U
Hexachlorobiphenyl	0.2U	7.4U
Monochlorobiphenyl	0.1U	3.7U
Nonachlorobiphenyl	0.2J	18U
Octachlorobiphenyl	0.3U	11U
Pentachlorobiphenyl	0.2U	7.4U
Tetrachlorobiphenyl	0.2U	7.4U
Trichlorobiphenyl	0.1U	3.7U
Total PCB's	**0.2**	**ND**

Table A-1.4
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	WASTE-G-B-0-0 5FTEB	WASTE-G-B1-0-0.5FT	WASTE-G-B1-0-0 5FTFD	WASTE-G-B2-0-0.5FT	WASTE-G-B3-0-0 5FT	WASTE-G-B4-0-0 5FT
Description	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface
Sample Date	10/7/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	0.1U	3.9U	3.9U	3.8U	3 6U	3.6U
4,4'-DDE	0.1U	3.9U	3 9U	3 8U	3 6U	3.6U
4,4'-DDT	0.1U	0 11J	0.059J	0.1J	0 16J	3.6U
Aldrin	0 05U	2U	2U	2U	1 9U	1 9U
Alpha Chlordane	0.05U	2U	2U	0.12J	0 26J	1 9U
Dieldrin	0 1U	3.9U	3.9U	3.8U	0 062J	3 6U
Endosulfan I	0.05U	2U	2U	2U	0 22J	1 9U
Endosulfan II	0.1U	3.9U	3.9U	3.8U	3.6U	0 34J
Endosulfan sulfate	0.1U	3.9U	3.9U	0.12J	0.18J	3 6U
Endrin	0 1U	0.16J	0.15J	3 8U	0 14J	3 6U
Endrin aldehyde	0 1U	3.9U	3.9U	0.67J	0 12J	3 6U
Endrin ketone	0.1U	0.11J	3.9U	0.79J	3 6U	3.6U
Gamma Chlordane	0.05U	0.081J	0.073J	0.22J	0.31J	1 9U
Heptachlor	0.05U	2U	2U	2U	1.9U	1.9U
Heptachlor epoxide	0.05U	2U	2U	2U	0.22J	1 9U
Methoxychlor	0.5U	20U	20U	0 94J	19U	19U
Toxaphene	5U	200U	200U	200U	190U	190U
alpha-BHC	0.039U	0.59U	0.59U	0.58U	0 55U	0 55U
beta-BHC	0.014U	0.59U	0.59U	0.58U	0.55U	0.55U
delta-BHC	0.0074J	0.59U	0.068J	0.07J	0.058J	0.55U
gamma-BHC (Lindane)	0.019U	2U	2U	2U	1 9U	1.9U
Total Pesticides	**0.0074**	**0.461**	**0.35**	**3.03**	**1.73**	**0.34**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.4
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	WASTE-H-B1-0-0 5FT	WASTE-H-B2-0-0 5FT	WASTE-H-B3-0-0 5FT	WASTE-H-B4-0-0 5FT	WASTE-I-B-0-0 5FTEB	WASTE-I-B1-0-0 5FT
Description	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface
Sample Date	9/27/1999	9/27/1999	9/27/1999	9/27/1999	10/14/1999	10/13/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw
4,4'-DDD	17U	3 6U	3 4U	17U	0 10U	4 1R
4,4'-DDE	86	6 9	3 4U	43	0 10U	5 4R
4,4'-DDT	60J	8 7J	3 4U	110J	0 10U	10R
Aldrin	21	1 9U	1 8U	10	0 50U	2 0R
Alpha Chlordane	8 8U	1 9U	1 8U	8 8U	0 050U	2 4R
Dieldrin	17U	3 6U	3 4U	17U	0 10U	5 7R
Endosulfan I	8 8U	1 9U	1 8U	8 8U	0 050U	0 73R
Endosulfan II	7 2J	3 6U	3 4U	17U	0 10U	6 6R
Endosulfan sulfate	17U	3 6U	3 4U	17U	0 10U	3 4R
Endrin	17U	3 6U	3 4U	17U	0 10U	5 1R
Endrin aldehyde	17U	3 6U	3 4U	17U	0 10U	12R
Endrin ketone	15J	1 4J	3 4U	82J	0 10U	8 0R
Gamma Chlordane	27	1 9U	1 8U	30J	0 050U	2 8R
Heptachlor	2J	1 9U	1 8U	8 8U	0 050U	2 0R
Heptachlor epoxide	44	1 9U	0 59J	20J	0 050U	2 5R
Methoxychlor	33J	19U	18U	130J	0 50U	23R
Toxaphene	880U	190U	180U	880U	0 50U	180R
alpha-BHC	2 6U	0 5U	0 5U	2 6U	0 039U	1 6R
beta-BHC	2 6U	0 5U	0 5U	2 6U	0 014U	2 1R
delta-BHC	2 6U	0 5U	0 5U	2 6U	0 012U	1 7R
gamma-BHC (Lindane)	8 8U	1 9U	1 8U	8 8U	0 019U	1 9R
Total Pesticides	**295 2**	**17**	**0.59**	**425**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.4
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	WASTE-I-B2-0-0 5FT	WASTE-I-B3-0-0 5FT	WASTE-I-B4-0-0 5FT	WASTE-I-B4-0-0 5FTFD	WASTE-L-B1-0-0 5FT	WASTE-L-B2-0-0 5FT
Description	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface
Sample Date	10/13/1999	10/13/1999	10/14/1999	10/14/1999	9/27/1999	9/27/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4'-DDD	200J	0 31J	0 38J	0 47J	17U	18U
4,4'-DDE	300J	7 4J	1 7J	1 4J	20	12J
4,4'-DDT	460J	18U	2 4J	2 6J	16J	18U
Aldrin	250J	3 5J	0 94J	0 70J	8 7U	9 1U
Alpha Chlordane	380U	9 1U	2 9J	2 4J	8 7U	9 1U
Dieldrin	200J	9 6J	1 8J	1 6J	17U	12J
Endosulfan I	260J	5 7J	1 1J	0 34J	8 7U	9 1U
Endosulfan II	600J	15J	2.4J	2 1J	17U	18U
Endosulfan sulfate	730U	8.8J	17U	17U	17U	18U
Endrin	240J	5.8J	1 1J	0 72J	17U	18U
Endrin aldehyde	1500J	40J	5 3J	4 1J	17U	18U
Endrin ketone	700J	22J	3 6J	2 8J	28J	9 5J
Gamma Chlordane	380	9.0J	6 0J	5 1J	21	14J
Heptachlor	69J	9.1U	0 85J	0 86J	8 7U	9 1U
Heptachlor epoxide	140J	4 7J	1 1J	0 78J	4 4J	9 2J
Methoxychlor	3000J	67J	18J	14J	46J	24J
Toxaphene	38000U	910U	870U	880U	870U	910U
alpha-BHC	110U	2.7U	2 6U	2 6U	2 6U	2 7U
beta-BHC	110U	2 7U	2.6U	2 6U	2 6U	3 7J
delta-BHC	110U	2.7U	2.6U	2 6U	2 6U	2 7U
gamma-BHC (Lindane)	380U	9.1U	8.7U	8.8U	8 7U	9 1U
Total Pesticides	**8299**	**198.81**	**49.57**	**39.97**	**135.4**	**84.4**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-1.4
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	WASTE-L-B3-0-0 5FT	WASTE-L-B4-0-0 5FT	WASTE-N-B1-0-0 5FT	WASTE-N-B2-0-0 5FT	WASTE-N-B3-0-0 5FT	WASTE-N-B4-0-0 5FT
Description	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface	Waste-Discrete Surface
Sample Date	9/27/1999	9/27/1999	11/30/1999	11/30/1999	11/30/1999	12/2/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	3 6U	18U	3 5U	7 1U	3 6UJ	3 7U
4,4'-DDE	3 6U	10J	3 5U	7 1U	3 6UJ	3 7U
4,4'-DDT	3 6U	18U	3 5U	2 7J	3 6UJ	3 7U
Aldrin	1 8U	5 5J	1 8U	3 7U	1 8UJ	1 9U
Alpha Chlordane	1 8U	9 4U	1 8U	3 7U	1 8UJ	1 2J
Dieldrin	3 6U	18U	3 5U	7 1U	3 6UJ	3 7U
Endosulfan I	1 8U	9 4U	1 8U	3 7U	1 8UJ	1 9U
Endosulfan II	3 6U	18U	3 5U	7 1U	3 6UJ	3 7U
Endosulfan sulfate	3 6U	18U	3 5U	7 1U	3 6UJ	3 7U
Endrin	3 6U	18U	3 5U	7 1U	3 6UJ	3 7U
Endrin aldehyde	3 6U	18U	3 5U	7 1U	3 6UJ	3 7U
Endrin ketone	3 6U	9 9J	3 5U	7 1U	3 6UJ	3 7U
Gamma Chlordane	1 8U	10J	1 8U	3 7U	1 8UJ	2
Heptachlor	1 8U	9 4U	1 8U	3 7U	1 8UJ	1 9U
Heptachlor epoxide	1 8U	8 9J	1 8U	3 7U	1 8UJ	1 9U
Methoxychlor	18U	94U	18U	55J	18UJ	19U
Toxaphene	180U	940U	180U	370U	180UJ	190U
alpha-BHC	0 5U	2 8U	0 54U	1 1U	0 54UJ	0 56U
beta-BHC	0 5U	2 8U	0 54U	1 1U	0 54UJ	0 4J
delta-BHC	0 5U	2 8U	0 54U	1 1U	0 54UJ	0 56U
gamma-BHC (Lindane)	1 8U	9 4U	1 8U	3 7U	1 8UJ	1 9U
Total Pesticides	**ND**	**44.3**	**ND**	**57.7**	**ND**	**3 6**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.4
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	WASTE-N-B4-0-0 5FTEB	WASTE-N-B4-0-0 5FTFD
Description	Waste-Discrete Surface	Waste-Discrete Surface
Sample Date	12/2/1999	12/2/1999
Units	ug/l	ug/kg dw
4,4'-DDD	0 1U	3 6U
4,4'-DDE	0 1U	3 6U
4 4'-DDT	0 1U	3 6U
Aldrin	0 05U	1 6J
Alpha Chlordane	0 05U	1J
Dieldrin	0 1U	2 4J
Endosulfan I	0 05U	1 9U
Endosulfan II	0 1U	3 6U
Endosulfan sulfate	0 1U	3 6U
Endrin	0 1U	3 6U
Endrin aldehyde	0 1U	3 6U
Endrin ketone	0 1U	3 6U
Gamma Chlordane	0 05U	1 7J
Heptachlor	0 05U	1 9U
Heptachlor epoxide	0 05U	1 9U
Methoxychlor	0 5U	19U
Toxaphene	5U	190U
alpha-BHC	0 039U	0 55U
beta-BHC	0 014U	0 55U
delta-BHC	0 012U	0 55U
gamma-BHC (Lindane)	0 019U	1 9U
Total Pesticides	**ND**	**6.7**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.5
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	WASTE-G-B-0-0 5FTEB	WASTE-G-B1-0-0 5FT	WASTE-G-B1-0-0 5FTFD	WASTE-G-B2-0-0 5FT	WASTE-G-B3-0-0 5FT	WASTE-G-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/7/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4 5-T	0 5U	9 8U	9 6U	9 5U	9 2UJ	8 9UJ
2 4,5-TP (Silvex)	0 5U	9 8U	9 6U	9 5U	9 2UJ	8 9UJ
2,4-D	0 5U	9 8U	9 6U	9 5U	9 2UJ	8 9UJ
2,4-DB	0 5U	9 8U	9 6U	9 5U	9 2UJ	8 9UJ
Dalapon	120U	76U	75U	74U	72UJ	70UJ
Dicamba	1 2U	23U	23U	23U	22UJ	22UJ
Dichloroprop	6U	120U	120U	110U	110UJ	110UJ
Dinoseb	6U	120U	120U	110U	110UJ	110UJ
MCPA	120U	2300U	2300U	2300U	2200UJ	2200UJ
MCPP	120U	2300U	2300U	2300U	2200UJ	2200UJ
Pentachlorophenol	1 0U	20U	20U	19U	19UJ	18U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.5
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	WASTE-H-B1-0-0 5FT	WASTE-H-B2-0-0.5FT	WASTE-H-B3-0-0 5FT	WASTE-H-B4-0-0.5FT	WASTE-I-B-0-0 5FTEB	WASTE-I-B1-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	9/27/1999	9/27/1999	9/27/1999	9/27/1999	10/14/1999	10/13/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw
2,4,5-T	8.6U	9.1U	8.6U	8.5U	0 50U	8.7UJ
2,4,5-TP (Silvex)	8.6U	9.1U	8.6U	8.5UJ	0.50U	8.7UJ
2,4-D	8.6U	9.1U	8.6U	8.5U	0.50U	8.7UJ
2,4-DB	8.6U	9.1U	9.7	8.4J	0.50U	8.7UJ
Dalapon	68U	71U	68U	67UJ	120U	68U
Dicamba	21U	22U	21U	20UJ	1 2U	21UJ
Dichloroprop	100U	110U	100U	100U	6.0U	100UJ
Dinoseb	100U	110U	100U	100UJ	6 0U	100UJ
MCPA	2100U	2200U	2100U	2000U	120U	2100UJ
MCPP	2100U	2200U	2100U	2000U	120U	2100UJ
Pentachlorophenol	18U	18U	18U	41	1 0U	0 62J
Total Herbicides	**ND**	**ND**	**9.7**	**49.4**	**ND**	**0.62**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.5
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	WASTE-I-B2-0-0 5FT	WASTE-I-B3-0-0 5FT	WASTE-I-B4-0-0 5FT	WASTE-I-B4-0-0 5FTFD	WASTE-L-B1-0-0 5FT	WASTE-L-B2-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/13/1999	10/13/1999	10/14/1999	10/14/1999	9/27/1999	9/27/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	180U	9 0U	8 5U	8 5U	8 5U	8 9U
2,4,5-TP (Silvex)	180U	9.0U	8.5U	8 5U	8 5U	8 9U
2,4-D	180U	9.0U	8 5U	8 5U	8 5U	8 9U
2,4-DB	180UJ	9.0UJ	8.5UJ	54J	8 5U	8 9U
Dalapon	1400U	70U	66U	67U	67U	70U
Dicamba	440U	22U	20U	20U	20U	22U
Dichloroprop	2200U	110U	100U	100U	100U	110U
Dinoseb	2200U	110U	100U	100U	100U	110U
MCPA	44000UJ	2200UJ	2000UJ	2000UJ	2000U	2200U
MCPP	44000UJ	2200UJ	2000UJ	2000UJ	2000U	2200U
Pentachlorophenol	1300	9.7J	1.1J	17U	40	18U
Total Herbicides	**1300**	**9.7**	**1.1**	**54**	**40**	**ND**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.5
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	WASTE-L-B3-0-0 5FT	WASTE-L-B4-0-0.5FT	WASTE-N-B1-0-0 5FT	WASTE-N-B2-0-0 5FT	WASTE-N-B3-0-0 5FT	WASTE-N-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	9/27/1999	9/27/1999	11/30/1999	11/30/1999	11/30/1999	12/2/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	9U	9.2U	8.8U	9UJ	8 9U	9.3U
2,4,5-TP (Silvex)	9U	9.2U	8.8U	9UJ	8.9U	9.3U
2,4-D	9U	9.2U	8.8U	9UJ	8.9U	9.3U
2,4-DB	9U	9.2U	8.8U	9UJ	8 9U	9.3U
Dalapon	71U	72U	69U	70UJ	70U	73U
Dicamba	22U	22U	21U	22UJ	22U	22U
Dichloroprop	110U	110U	110U	110UJ	110U	110U
Dinoseb	110U	110U	110U	110UJ	110U	110U
MCPA	2200U	2200U	2100U	2200UJ	2200U	2200U
MCPP	2200U	2200U	2100U	2200UJ	2200U	2200U
Pentachlorophenol	18U	19U	130D	4 3J	4J	2 2J
Total Herbicides	**ND**	**ND**	**131**	**4.3**	**4**	**2.2**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-1.5
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	WASTE-N-B4-0-0 5FTEB	WASTE-N-B4-0-0 5FTFD
Description	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	12/2/1999	12/2/1999
Units	ug/l	ug/kg dw
2,4,5-T	0 5U	9 2U
2,4,5-TP (Silvex)	0 5U	9 2U
2,4-D	0 5U	9 2U
2,4-DB	0 5U	9 2U
Dalapon	120U	72U
Dicamba	1 2U	22U
Dichloroprop	6U	110U
Dinoseb	6U	110U
MCPA	120U	2200U
MCPP	120U	2200U
Pentachlorophenol	1U	3J
Total Herbicides	**ND**	**3**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-1.6
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	WASTE-G-B-0-0 5FTEB	WASTE-G-B1-0 0 5FT	WASTE-G-B1-0-0 5FTFD	WASTE-G-B2-0-0 5FT	WASTE-G-B3-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/7/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999
Units	ug/l	ug/kg	ug/kg	ug/kg	ug/kg
1 2,3,4,6,7,8,9-OCDD	0 0000176M	10J	10 6	14 4	3 6J
1 2,3 4,6,7,8,9-OCDF	0 0000118	0 12J	0 09	1 1	0 06UJ
1 2,3,4,6 7,8-HpCDD	0 0000057U	0 09J	0 09	0 46	0 05UJ
1,2,3 4,6,7,8-HpCDF	0 0000164U	0 04UJ	0 03U	0 22	0 04UJ
1 2,3,4,7,8,9-HpCDF	0 0000212U	0 04UJ	0 03U	0 04U	0 04UJ
1,2,3,4,7,8-HxCDD	0 0000056U	0 04UJ	0 03U	0 04U	0 04UJ
1,2,3,4,7,8-HxCDF	0 0000153U	0 03UJ	0 02U	0 03U	0 03UJ
1,2,3,6,7,8-HxCDD	0 0000053U	0.03UJ	0 03U	0 03U	0 04UJ
1,2,3,6,7,8-HxCDF	0 0000142U	0 03UJ	0 02U	0 03U	0 03UJ
1,2,3,7,8,9-HxCDD	0 0000055U	0 04UJ	0 03U	0 03U	0 04UJ
1,2,3,7,8,9-HxCDF	0 000017U	0 03UJ	0 02U	0 03U	0 03UJ
1,2,3,7,8-PeCDD	0 0000102U	0 06UJ	0 05UJ	0 06UJ	0 06UJ
1,2,3,7,8-PeCDF	0 0000065U	0 04UJ	0 03UJ	0 04UJ	0 04UJ
2,3,4,6,7,8-HxCDF	0 0000151U	0 03UJ	0 03U	0 03U	0 03UJ
2,3,4,7,8-PeCDF	0 0000069U	0 04UJ	0 04UJ	0 04UJ	0 04UJ
2,3,7,8-TCDD	0 0000078U	0 03UJ	0.03UJ	0 03UJ	0 04UJ
2,3,7,8-TCDF	0 0000056U	0 03UJ	0 03UJ	0 03UJ	0 03UJ
Total HpCDD	0 0000057U	0 17	0 17	0 92	0 05U
Total HpCDF	0 0000185U	0 04U	0 03U	0 81	0 04U
Total HxCDD	0 0000055U	0 03U	0 03U	0 03U	0 04U
Total HxCDF	0 0000153U	0 03U	0 02U	0 03U	0 03U
Total PeCDD	0 0000102U	0 06U	0 05U	0 06U	0 06U
Total PeCDF	0 0000067U	0 04U	0 03U	0 04U	0 04U
Total TCDD	0 0000078U	2 6M	2 5M	2 4M	2 3M
Total TCDF	0 0000056U	0 08M	0 07M	0 08M	0 08M
1998 Total TEQ w/ EMPC as ND	**0.0000152861**	**0.071312**	**0.063519**	**0 07705**	**0 075513**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.6
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8290 PCDD/PCDF Data

	Sample Id	WASTE-G-B4-0-0 5FT	WASTE-H-B1-0-0 5FT	WASTE-H-B2-0-0 5FT	WASTE-H-B3-0-0 5FT	WASTE-H-B4-0-0 5FT
	Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
	Sample Date	10/7/1999	9/27/1999	9/27/1999	9/27/1999	9/27/1999
	Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3 4,6,7,8,9-OCDD		4 1J	85	8 6	5 3	328J
1,2,3,4,6,7,8,9-OCDF		0 07UJ	10 5	1 8	0 48	55 7
1,2,3,4,6,7,8-HpCDD		0 05UJ	6	1 1	0 34	29 2
1,2,3,4,6,7,8-HpCDF		0 05UJ	2 7	0 73	0 15	11 6
1,2,3,4,7,8,9-HpCDF		0 05UJ	0 13	0 11	0 01U	0 63
1,2,3,4,7,8-HxCDD		0 04UJ	0 08	0 07	0 01U	0 21
1,2,3,4,7,8-HxCDF		0 03UJ	0 44	0 19	0 01U	0 75
1,2,3,6,7 8-HxCDD		0 04UJ	0 19	0 16	0 01U	0 98
1,2,3,6,7,8-HxCDF		0 04UJ	0 08	0 06	0 01U	0 26
1,2,3,7,8,9-HxCDD		0 04UJ	0 16	0 23	0 01U	0 57
1,2,3,7,8,9-HxCDF		0 04UJ	0 01U	0 01U	0 01U	0 01U
1,2,3,7,8-PeCDD		0 07UJ	0 06	0 14	0 03U	0 14
1,2,3,7,8-PeCDF		0 04UJ	0 08	0 08	0 02U	0 12
2,3,4,6,7,8-HxCDF		0 04UJ	0 11	0 06	0 01U	0 4
2,3 4,7,8-PeCDF		0 04UJ	0 28J	0 06J	0 02U	0 43J
2,3,7,8-TCDD		0 04UJ	0 04M	0 01U	0 01U	0 06
2 3 7,8-TCDF		0 03UJ	0 9	0 13	0 01U	1
Total HpCDD		0 05U	11 3	2	0 63	53 9
Total HpCDF		0 05U	7 2M	1 4	0 38	41 9
Total HxCDD		0 04U	1 9M	1 7M	0 01U	6 3M
Total HxCDF		0 03U	1 8	0 79M	0 09	8 7M
Total PeCDD		0 07U	0 83M	1 7M	0 03U	1 5M
Total PeCDF		0 04U	2 2	0 72M	0 02U	4
Total TCDD		2 3M	4M	3 1M	2 3M	5 3M
Total TCDF		0 08M	3 8M	0 69M	0 06M	4 3M
1998 Total TEQ w/ EMPC as ND		**0.0821635**	**0.51835**	**0.28994**	**0 035028**	**1.29117**

Notes U not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-1.6
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	WASTE-I-B-0-0 5FTEB	WASTE-I-B1-0-0.5FT	WASTE-I-B2-0-0.5FT	WASTE-I-B3-0-0 5FT	WASTE-I-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/14/1999	10/13/1999	10/13/1999	10/13/1999	10/14/1999
Units	ug/l	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	0.0002U	6.7	4920J	94 4	19 6
1,2,3,4,6,7,8,9-OCDF	0 0002U	2 3	1460J	27 7	5
1,2,3,4,6,7,8-HpCDD	0 0001U	1 1	337J	6 2	1 3
1,2,3,4,6,7,8-HpCDF	0 0001U	0.6	157J	4 8	0 96
1,2,3,4,7,8,9-HpCDF	0 0001U	0 08	29.4	1 1	0 08
1,2,3,4,7,8-HxCDD	0 0001U	0 03U	2 2M	0 04U	0 009U
1,2,3,4,7,8-HxCDF	0 00006U	0.12	22.4	1.1	0 08
1,2,3,6,7,8-HxCDD	0.0001U	0.07	8 6	0.18	0 05
1,2,3,6,7,8-HxCDF	0.00007U	0.05M	9	0 4	0 04
1,2,3,7,8,9-HxCDD	0.0001U	0.03U	5	0 12	0 01U
1,2,3,7,8,9-HxCDF	0 00007U	0 02U	0 2U	0 22	0 007U
1,2,3,7,8-PeCDD	0 0002U	0 04U	0.45	0.05U	0 01U
1,2,3,7,8-PeCDF	0.0001U	0.02U	13.2M	0 1	0 01U
2,3,4,6,7,8-HxCDF	0 00008U	0.06	0 2U	0 18	0 05M
2,3,4,7,8-PeCDF	0 0001U	0.03U	2 5	0 23	0 01U
2,3,7,8-TCDD	0.00009U	0.02U	0 1U	0 03U	0 008U
2,3,7,8-TCDF	0 00008U	0 07	2.6J	0 22	0 008U
Total HpCDD	0 0001U	1.7	591	12 3	2 5
Total HpCDF	0.0001U	1 4	721M	17 1	3
Total HxCDD	0.0001U	0.19	89.6M	1 4M	0 3M
Total HxCDF	0 00006U	0.55M	140M	4 5M	0 64M
Total PeCDD	0.0002U	0.04U	74 8M	0.05U	0 01U
Total PeCDF	0 0001U	0.07	114M	1 3	0 05
Total TCDD	0.0193M	2.2M	15.4M	2.9M	2 2M
Total TCDF	0 00061M	0.07	10 5M	0.22	0 08M
1998 Total TEQ w/ EMPC as ND	**0.00020702**	**0.0952**	**12.842**	**0.53721**	**0.05881**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-1.6
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	WASTE-I-B4-0-0 5FTFD	WASTE-L-B1-0-0 5FT	WASTE-L-B2-0-0 5FT	WASTE-L-B3-0-0 5FT	WASTE-L-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/14/1999	9/27/1999	9/27/1999	9/27/1999	9/27/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	18 7	46 6	33	3 1	39 7
1,2,3,4,6,7,8,9-OCDF	4 2	9 5	2 5	0 25	3 5
1,2,3,4,6,7,8-HpCDD	1 3	4 3	2 1	0 21	2 6
1,2,3,4,6,7,8-HpCDF	1 1	3 8	1 9	0 37	0 8
1,2,3,4,7,8,9-HpCDF	0 09M	0 32	0 13	0 01U	0 07
1,2,3,4,7,8-HxCDD	0 04U	0 12	0 08	0 01U	0 05
1,2,3,4,7,8-HxCDF	0 11	1 3	0 7	0 14	0 08M
1,2,3,6,7,8-HxCDD	0 04U	0 12	0 1	0 02U	0 11
1,2,3,6,7,8-HxCDF	0 06M	0 4	0 19	0 05	0 07
1,2,3,7,8,9-HxCDD	0 04U	0 22	0 14	0 02U	0 08
1,2,3,7,8,9-HxCDF	0 03U	0 01U	0 01U	0 01U	0 01U
1,2,3,7,8-PeCDD	0 06U	0 07	0.04	0 02U	0 03U
1,2,3,7,8-PeCDF	0 04U	0 45	0 21	0 02M	0 02U
2,3,4,6,7,8-HxCDF	0 03U	0 63	0 33	0 09	0 08
2,3,4,7,8-PeCDF	0 04U	0 5J	0 23J	0 07J	0 02U
2,3,7,8-TCDD	0 04U	0 03M	0 01U	0 01U	0 01U
2,3,7,8-TCDF	0 03U	1 1J	0 51	0 11	0 09
Total HpCDD	2 6	8	4 1	0 41	4 9
Total HpCDF	3 5M	8 4	3 4	0 83	2 8
Total HxCDD	0 24M	1 9M	1M	0 05	0 72M
Total HxCDF	0 73M	4 4M	2 4M	0 47M	1 2M
Total PeCDD	0 06U	1 3M	0 57M	0 02U	0 11M
Total PeCDF	0 04U	4 6M	2 4M	0 54M	0 12
Total TCDD	2 2M	2 8M	2 7M	2 4M	2 5M
Total TCDF	0 1M	4 2M	2 1M	0 36M	0 09
1998 Total TEQ w/ EMPC as ND	**0.11224**	**0.83681**	**0 42085**	**0.098685**	**0.11702**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.6
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	WASTE-N-B1-0-0.5FT	WASTE-N-B2-0-0 5FT	WASTE-N-B3-0-0.5FT	WASTE-N-B4-0-0 5FT	WASTE-N-B4-0-0 5FTEB
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	11/30/1999	11/30/1999	11/30/1999	12/2/1999	12/2/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/l
1,2,3,4,6,7,8,9-OCDD	243J	31.5	1	4	0 0000062U
1,2,3,4,6,7,8,9-OCDF	16.1	1 9	0 04	0 12	0 0000047U
1,2,3,4,6,7,8-HpCDD	16.8	1 6	0.02U	0 15	0 000004U
1,2,3,4,6,7,8-HpCDF	4.2	0.5	0.02U	0.03U	0 0000025U
1,2,3,4,7,8,9-HpCDF	0.16	0.03U	0.02U	0 04U	0 0000037U
1,2,3,4,7,8-HxCDD	0.07	0.03U	0 01U	0 03U	0 0000029U
1,2,3,4,7,8-HxCDF	0.36	0.02U	0.01U	0 03U	0 000002U
1,2,3,6,7,8-HxCDD	0.38	0.04U	0 02U	0.04U	0 0000028U
1,2,3,6,7,8-HxCDF	0.03U	0.03U	0 01U	0 03U	0 0000018U
1,2,3,7,8,9-HxCDD	0.26J	0.05U	0.03U	0 06U	0 0000031U
1,2,3,7,8,9-HxCDF	0.03U	0 03U	0 02U	0 03U	0 0000023U
1,2,3,7,8-PeCDD	0 05U	0.05U	0 03U	0 06U	0 0000033U
1,2,3,7,8-PeCDF	0.02U	0.02U	0 01U	0 02U	0 0000021U
2,3,4,6,7,8-HxCDF	0.03U	0.03U	0 01U	0 03U	0 0000019U
2,3,4,7,8-PeCDF	0.02U	0.03U	0.01U	0 03U	0 0000021U
2,3,7,8-TCDD	0 03U	0.03U	0 01U	0 03U	0 0000026U
2,3,7,8-TCDF	0.02U	0.02U	0.01U	0 02U	0 0000021U
Total HpCDD	31.3	2 7	0.02U	0 28	0 000004U
Total HpCDF	14.7	1 6	0 02U	0 09	0 0000029U
Total HxCDD	3.7M	0 36M	0.01U	0 03U	0.0000029U
Total HxCDF	2.6M	0.25	0.01U	0 03U	0 000002U
Total PeCDD	0.26M	0.05U	0.03U	0.06U	0 0000033U
Total PeCDF	0 11M	0.02U	0.01U	0.02U	0 0000021U
Total TCDD	3 6M	3M	2 7M	3M	0 0000026U
Total TCDF	0 05M	0.02U	0 05M	0 04M	0 0000021U
1998 Total TEQ w/ EMPC as ND	**0.39551**	**0.08499**	**0.029154**	**0.068762**	**0.000004524**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-1.6
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	WASTE-N-B4-0-0 5FTFD
Description	Waste - Discrete Surface
Sample Date	12/2/1999
Units	ug/kg
1,2,3,4,6,7,8,9-OCDD	7 1
1,2,3,4,6,7,8,9-OCDF	0 34
1,2,3,4,6,7,8-HpCDD	0 32
1,2,3,4,6,7,8-HpCDF	0.09
1,2,3,4,7,8,9-HpCDF	0 04U
1,2,3,4,7,8-HxCDD	0 02U
1,2,3,4,7,8-HxCDF	0 03U
1,2,3,6,7,8-HxCDD	0 03U
1,2,3,6,7,8-HxCDF	0 04U
1,2,3,7,8,9-HxCDD	0 04U
1,2,3,7,8,9-HxCDF	0 04U
1,2,3,7,8-PeCDD	0 03U
1,2,3,7,8-PeCDF	0 01U
2,3,4,6,7,8-HxCDF	0 03U
2,3,4,7,8-PeCDF	0 02U
2,3,7,8-TCDD	0 02U
2,3,7,8-TCDF	0 01U
Total HpCDD	0 63
Total HpCDF	0 38
Total HxCDD	0.02U
Total HxCDF	0 03U
Total PeCDD	0 03U
Total PeCDF	0 01U
Total TCDD	3 1M
Total TCDF	0 05M
1998 Total TEQ w/ EMPC as ND	**0.047294**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-1.7
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	WASTE-G-B-0-0 5FTEB	WASTE-G-B1-0-0.5FT	WASTE-G-B1-0-0.5FTFD	WASTE-G-B2-0-0 5FT	WASTE-G-B3-0-0 5FT	WASTE-G-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/7/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999
Units	mg/l	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	0 2U	14000J	13000J	14000J	15000J	9300J
Antimony	0 02U	2 4UJ	2 4UJ	0 72J	0 65J	2 2UJ
Arsenic	0.01U	8 3	7.8	6.5	7 7	6 5
Barium	0.01U	140J	140J	120J	79J	130J
Beryllium	0.004U	0.63	0.62	0.64	0.58	0 51
Cadmium	0.005U	0 32J	0.46J	0.22J	0 18J	0 25J
Calcium	0.25J	15000J	13000J	10000J	9800J	5100J
Chromium	0.01U	20J	20J	20J	22J	15J
Cobalt	0.01U	8 5	8.7	7.3	5 8	7 6
Copper	0.02U	190J	390J	200J	140J	100J
Cyanide, Total	0.01U	0.6U	0.59U	0.58U	0.56U	0 55U
Iron	0.027J	20000J	19000J	18000J	20000J	16000J
Lead	0.005U	14	17	11	16	12
Magnesium	0.5U	5100	4800	4500	3300	3600
Manganese	0.01U	630J	640J	540J	260J	740J
Mercury	0.0002U	0.031	0.027	0.029	0 015J	0 025
Molybdenum	0.01U	0.5J	0.49J	0.38J	0.78J	0 42J
Nickel	0.04U	21	22	19	17	18
Potassium	1U	1600	1600	1700	1300	1200
Selenium	0.01U	1.2U	1.2U	1.2U	1.1U	1 1U
Silver	0.01U	1 2U	1.2U	1.2U	1.1U	1.1U
Sodium	0.5	71U	82U	94U	56U	79U
Thallium	0.01U	1.2U	1.2U	1.2U	1 1U	1 1U
Vanadium	0 01U	39J	39J	40J	32J	32J
Zinc	0.02U	64J	75J	56J	60J	58J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.7
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	WASTE-H-B1-0-0 5FT	WASTE-H-B2-0-0 5FT	WASTE-H-B3-0-0 5FT	WASTE-H-B4-0-0 5FT	WASTE-I-B-0-0 5FTEB	WASTE-I-B1-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	9/27/1999	9/27/1999	9/27/1999	9/27/1999	10/14/1999	10/13/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/l	mg/kg dw
Aluminum	5000J	14000J	4300J	8500J	0 070J	5200J
Antimony	1 8J	0 69J	2 3J	1 5J	0 020U	2 9J
Arsenic	6 5	7 5	64	13	0 010U	4 9J
Banum	110	120	99	120	0 010U	110
Beryllium	0 83	0 73	3 8	0 73	0 0040U	0 71J
Cadmium	8 7J	2 7J	2 7J	22J	0 0050U	2 2J
Calcium	15000	7500	5900	42000	0 20J	92000J
Chromium	15J	20J	23J	20J	0 010U	18J
Cobalt	5 2	9 5	20	5 4	0 010U	4 8
Copper	480	200	340	480	0 020U	2000J
Cyanide, Total	0 52U	0 55U	0 52U	0 52U	0 010U	0 53U
Iron	18000	17000	14000	16000	0 050U	12000J
Lead	200J	53J	100J	230J	0 0050U	220J
Magnesium	2500	2400	690	2500	0 50U	7600J
Manganese	480	720	98	450	0 010U	190
Mercury	0 2	0 064	0 1	0 77	0 00020U	0 057
Molybdenum	3 6J	0 98J	11J	4 2J	0 010U	2 7J
Nickel	23	20	70	23	0 040U	20J
Potassium	1100	1600	1100	830	1 0U	1100J
Selenium	0 64J	1 1U	4 7	0 42J	0 010U	1 1U
Silver	1 8J	1 1UJ	0 51J	2 7J	0 010U	3 1J
Sodium	180	110	310	390	0 41J	760J
Thallium	1U	1 1U	2 5	0 94U	0 010U	1 1U
Vanadium	20	33	45	22	0 010U	17J
Zinc	800J	350J	370J	3600J	0 020U	1200J

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-1.7
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	WASTE-I-B2-0-0 5FT	WASTE-I-B3-0-0.5FT	WASTE-I-B4-0-0 5FT	WASTE-I-B4-0-0 5FTFD	WASTE-L-B1-0-0 5FT	WASTE-L-B2-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/13/1999	10/13/1999	10/14/1999	10/14/1999	9/27/1999	9/27/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	5600J	8000J	3300J	4200J	7000J	4900J
Antimony	8.4J	8.4J	3.8J	5 3J	5 4J	3J
Arsenic	9.7J	12J	3.9J	5.2J	35	37
Barium	740	190	75	91	250	150
Beryllium	0.77J	1.7J	0.38J	0 54J	1 4	1 4
Cadmium	31J	9.2J	2.1J	2.7J	10J	4 6J
Calcium	190000J	110000J	240000J	230000J	29000	20000
Chromium	37J	65J	11J	15J	79J	35J
Cobalt	33	8.4	1.8	2.2	17	15
Copper	10000J	13000J	1200J	2100J	1700	4700
Cyanide, Total	0.53U	0.52U	0.51U	0.52U	1.6	0 54U
Iron	10000J	16000J	4600J	6100J	32000	24000
Lead	1500J	830J	190J	270J	940J	190J
Magnesium	11000J	12000J	16000J	22000J	4200	2100
Manganese	160	300	150	170	490	240
Mercury	2.0	0.31	0.047	0.048	0 56	0.34
Molybdenum	7.5J	8.5J	3.4J	6.1J	16J	23J
Nickel	42J	65J	13J	16J	51	43
Potassium	1300J	1500J	900J	1200J	1200	950
Selenium	1.6	1.6	0.44J	0.83J	4.3	4
Silver	11J	19J	1.3J	2.2J	1.2J	0.7J
Sodium	870J	440J	430J	510J	400	540
Thallium	1.0U	0.99U	0.94U	0.95U	2.1	1 9
Vanadium	21J	26J	9.4J	12J	49	40
Zinc	2800J	1300J	310J	500J	870J	420J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-1.7
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	WASTE-L-B3-0-0 5FT	WASTE-L-B4-0-0.5FT	WASTE-N-B1-0-0 5FT	WASTE-N-B2-0-0 5FT	WASTE-N-B3-0-0 5FT	WASTE-N-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	9/27/1999	9/27/1999	11/30/1999	11/30/1999	11/30/1999	12/2/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	3500J	7600J	7900	8600	7500	10000
Antimony	2 7J	2J	2.2UJ	0 71J	2 2UJ	2 2UJ
Arsenic	30	31	5 5J	6 2J	7.3J	5 5J
Barium	63	220	860J	1200J	170J	110J
Beryllium	1 5	1 6	0 48U	0 46U	0.56U	0 5U
Cadmium	0 71J	7.1J	1 5	1	0.3J	0 61
Calcium	2800	28000	63000J	41000J	16000J	130000J
Chromium	17J	50J	18J	18J	12J	16J
Cobalt	11	12	5 7	5 6	5 9	5 8
Copper	190	460	50J	110J	16J	22J
Cyanide, Total	0 54U	0.56U	0.54U	0.54U	0.54U	0 56U
Iron	7100	29000	15000J	15000J	13000J	12000J
Lead	64J	280J	410J	99J	19J	23J
Magnesium	340	3300	6600J	5200	5400J	11000J
Manganese	23	650	400J	410J	280J	380J
Mercury	0 039	0 35	0.095	0 095	0 031	0 046
Molybdenum	9 3J	9 6J	0 96J	1J	0 7J	1 3
Nickel	38	55	16	17	15	15
Potassium	500	1700	1300	1600	1200	1500
Selenium	1 8	2 2	1.1U	0.99U	1 1U	0 61J
Silver	1 1UJ	0.8J	1.1U	0.99U	1 1U	1 1U
Sodium	210	230	220UJ	110U	200UJ	210UJ
Thallium	1 6	1 8	1.1U	0 99U	0 62UJ	1 1U
Vanadium	39	49	21	23	22	27
Zinc	160J	590J	210J	250J	62J	71J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.7
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	WASTE-N-B4-0-0 5FTEB	WASTE-N-B4-0-0.5FTFD
Description	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	12/2/1999	12/2/1999
Units	mg/l	mg/kg dw
Aluminum	0 2U	12000
Antimony	0 0052J	2 2UJ
Arsenic	0 01U	7 1J
Barium	0 01U	170J
Beryllium	0 0011J	0 59U
Cadmium	0.005U	0.56
Calcium	0.39J	88000J
Chromium	0.01U	20J
Cobalt	0.01U	6.5
Copper	0.0017J	27J
Cyanide, Total	0.01U	0.56U
Iron	0.031J	16000J
Lead	0.005U	26J
Magnesium	0.5U	12000J
Manganese	0 01U	430J
Mercury	0 0002U	0.054
Molybdenum	0 01U	1.6
Nickel	0.04U	18
Potassium	1U	1500
Selenium	0.01U	0 75J
Silver	0 01U	1.1U
Sodium	0.47J	160UJ
Thallium	0 01U	0 74UJ
Vanadium	0.01U	31
Zinc	0 0063J	79J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-1.8
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Other Data

Sample Id	WASTE-G-B1-0-0 5FT	WASTE-G-B1-0-0 5FTFD	WASTE-G-B2-0-0 5FT	WASTE-G-B3-0-0 5FT	WASTE-G-B4-0-0 5FT	WASTE-H-B1-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/6/99	10/6/99	10/6/99	10/7/99	10/7/99	9/27/99
Mercury (mg/kg)	0 031	0 027	0 029	0 015J	0 025	0 2
pH (su)	7 53	7 49	7 51	7 64	7 6	7 6

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.8
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Other Data

Sample Id	WASTE-H-B2-0-0 5FT	WASTE-H-B3-0-0 5FT	WASTE-H-B4-0-0 5FT	WASTE-I-B1-0-0 5FT	WASTE-I-B2-0-0 5FT	WASTE-I-B3-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	9/27/99	9/27/99	9/27/99	10/13/99	10/13/99	10/13/99
Mercury (mg/kg)	0 064	0 1	0 77	0 057	2 0	0 31
pH (su)	7 54	7 03	7 18	8 42	7 71	8 03

Notes: ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.8
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Other Data

Sample Id	WASTE-I-B4-0-0 5FT	WASTE-I-B4-0-0 5FTFD	WASTE-L-B1-0-0 5FT	WASTE-L-B2-0-0 5FT	WASTE-L-B3-0-0 5FT	WASTE-L-B4-0-0 5FT
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	10/14/99	10/14/99	9/27/99	9/27/99	9/27/99	9/27/99
Mercury (mg/kg)	0 047	0 048	0 56	0 34	0 039	0 35
pH (su)	7 36	7 54	7 52	7 88	7 75	7 64

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-1.8
Sauget Area 1
Fill Area Discrete Surface Sample Analytical Results
Other Data

Sample Id	WASTE-N-B1-0-0 5FT	WASTE-N-B2-0-0 5FT	WASTE-N-B3-0-0 5FT	WASTE-N-B4-0-0 5FT	WASTE-N-B4-0-0 5FTFD
Description	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface	Waste - Discrete Surface
Sample Date	11/30/99	11/30/99	11/30/99	12/2/99	12/2/99
Mercury (mg/kg)	0 095	0 095	0 031	0 046	0 054
pH (su)	7 86	7 79	7 9	7 82	7 93

Note not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.1
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	WASTE-I-B-COMPEB	WASTE-L-B1-12-14FT	WASTE-MEB	WASTE-N-B4-COMPEB
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/1999	9/28/1999	10/14/1999	12/2/1999
Units	ug/l	ug/kg dw	ug/l	ug/l
1 1 1-Trichloroethane	5 0U	4 5U	5 0U	5U
1 1 2 2-Tetrachloroethane	5 0U	4 5U	5 0U	5U
1 1 2-Trichloroethane	5 0U	4 5U	5 0U	5U
1 1-Dichloroethane	5 0U	4 5U	5 0U	5U
1 1-Dichloroethene	5 0U	4 1U	5 0U	5U
1 2-Dichloroethane	5 0U	4 5U	5 0U	5U
1 2-Dichloropropane	5 0U	4 5U	5 0U	5U
2-Butanone (MEK)	25U	11J	25U	25U
2-Hexanone	25U	22U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	22J	25U	25U
Acetone	50U	91	50U	50U
Benzene	1 2U	26	1 2U	1 2U
Bromodichloromethane	5 0U	4 5U	5 0U	5U
Bromoform	5 0U	4 5U	5 0U	5U
Bromomethane (Methyl bromide)	9 8U	8 9U	9 8U	9 8U
Carbon disulfide	5 0U	33	5 0U	5U
Carbon tetrachloride	5 0U	4 5U	5 0U	5U
Chlorobenzene	5 0U	24	5 0U	5U
Chloroethane	10U	8 9U	10U	10U
Chloroform	5 0U	4 5U	5 0U	5U
Chloromethane	10U	8 9U	10U	10U
Cis/Trans-1,2-Dichloroethene	5 0U	4 5U	5 0U	5U
Dibromochloromethane	5 0U	4 5U	5 0U	5U
Ethylbenzene	5 0U	2 3J	5 0U	5U
Methylene chloride (Dichloromethane)	0 42J	4 5U	4 7U	4 7U
Styrene	5 0U	4 5U	5 0U	5U
Tetrachloroethene	5 0U	4 5U	5 0U	5U
Toluene	5 0U	43	5 0U	5U
Trichloroethene	2 7U	4 5U	2 7U	2 7U
Vinyl chloride	10U	8 9U	10U	10U
Xylenes, Total	5 0U	5 5	5 0U	5U
cis-1 3-Dichloropropene	1 0U	3 6U	1 0U	1U
trans-1 3-Dichloropropene	5 0U	3 6U	5 0U	5U
Total VOC's	**0 42**	**257 8**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank FD field duplicate ND-none detected

Table A-2.2
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8260B/1311 Volatile Organic Compound Data

SAMP_ID	WASTE-G-B1-2-4FT	WASTE-G-B2-12-14FT	WASTE-G-B3-10-12FT	WASTE-G-B3-10-12FTFD	WASTE-G-B4-12-14FT	WASTE-H-B1-4-6FT
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/8/1999	10/8/1999	10/11/1999	10/11/1999	10/12/1999	10/1/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1,1-Dichloroethene	0 02U	0 02U	0 02U	0 025U	0 02U	0 02U
1,2-Dichloroethane	0 02U	0 02U	0 02U	0 025U	0 02U	0 02U
2-Butanone (MEK)	0 1U	0 1U	0 16	0 08J	0 1U	0 1U
Benzene	0 02U	0 035	0 92	0 28	0 17	0 02U
Carbon tetrachloride	0 02U	0 02U	0 02U	0 025U	0 02U	0 02U
Chlorobenzene	0 02U	0 57	0 018J	0 012J	2 7	0 02U
Chloroform	0 02U	0 02U	0 02U	0 025U	0 02U	0 02U
Tetrachloroethene	0 0074J	0 027	0 02U	0 025U	0 13	0 033
Trichloroethene	0 0024J	0 012J	0 0061J	0 0026J	0 079	0 0064J
Vinyl chloride	0 04U	0 04U	0 04U	0 05U	0 04U	0 04U
Total VOC's	**0 0098**	**0.644**	**1.1041**	**0.3746**	**3.079**	**0.0394**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.2
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8260B/1311 Volatile Organic Compound Data

SAMP_ID	WASTE-H-B2-4-6FT	WASTE-H-B2A-4-6FT	WASTE-H-B3-2-4FT	WASTE-H-B4-14-16FT	WASTE-HEB	WASTE-I-B1-14-16FT	WASTE-I-B2-2-4FT
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/1/1999	10/5/1999	10/4/1999	10/4/1999	10/5/1999	10/14/1999	10/15/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1 1-Dichloroethene	0 02U	0 02U	0 2U	0 02U	0 02U	0 02U	0 02U
1 2-Dichloroethane	0 02U	0 02U	0 2U	0 02U	0 02U	0 02U	0 02U
2-Butanone (MEK)	0 1U	0 1U	1U	0 1U	0 1U	0 1U	0 1U
Benzene	0 02U	0 02U	2 5	0 087	0 02U	0 068	0 14
Carbon tetrachloride	0 02U	0 02U	0 2U	0 02U	0 02U	0 02U	0 02U
Chlorobenzene	0 02U	0 02U	2 7	1 5	0 02U	0 35	8 9
Chloroform	0 02U	0 02U	0 2U	0 02U	0 02U	0 02U	2 9
Tetrachloroethene	0 013J	0 02U	0 2U	0 02U	0 02U	0 02U	0 29
Trichloroethene	0 0027J	0 02U	0 2U	0 02U	0 02U	0 02U	0 0063J
Vinyl chloride	0 04U	0 04U	0 4U	0 04U	0 04U	0 04U	0 04U
Total VOC's	**0.0157**	**ND**	**5.2**	**1.587**	**ND**	**0 418**	**12.2363**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-2.2
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8260B/1311 Volatile Organic Compound Data

SAMP_ID	WASTE-I-B4-0-2FT	WASTE-I-B5-24-26FT	WASTE-I-B5-24-26FTFD	WASTE-L-B1-COMP	WASTE-L-B2-COMP	WASTE-L-B3-0-2FT	WASTE-L-B3-COMP
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/14/1999	10/15/1999	10/15/1999	9/29/1999	9/29/1999	9/30/1999	9/30/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1,1-Dichloroethene	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U
1,2-Dichloroethane	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U
2-Butanone (MEK)	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
Benzene	0 02U	0 76	0 26	0 02U	0 02U	0 02U	0 02U
Carbon tetrachloride	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U
Chlorobenzene	0 02U	1 4	1	0 0074J	0 02U	0 02U	0 02U
Chloroform	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U
Tetrachloroethene	0 02U	0 02U	0 02U	0 072	0 034	0 019J	0 032
Trichloroethene	0 0013J	0 0018J	0 0011J	0 012J	0 0065J	0 0035J	0 0064J
Vinyl chloride	0 04U	0 04U	0 04U	0 04U	0 04U	0 04U	0 04U
Total VOC's	**0 0013**	**2 1618**	**1.2611**	**0.0914**	**0.0405**	**0.0225**	**0.0384**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.2
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8260B/1311 Volatile Organic Compound Data

SAMP_ID	WASTE-L-B4-0-2FT	WASTE-L-B4-COMP	WASTE-M-B1-0-1 5FT	WASTE-M-B2-0-1 5FT	WASTE-M-B3-0-2FT	WASTE-M-B4-0-2FT
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	9/30/1999	9/30/1999	10/14/1999	10/14/1999	10/14/1999	10/14/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1,1-Dichloroethene	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U
1,2-Dichloroethane	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U
2-Butanone (MEK)	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
Benzene	0 02U	0 02U	0 0011J	0 02U	0 0012J	0 0012J
Carbon tetrachloride	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U
Chlorobenzene	0 02U	0 032	0 15	0 049	0 047	0 05
Chloroform	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U
Tetrachloroethene	0 022	0 03	0 02U	0 02U	0 02U	0 02U
Trichloroethene	0 0046J	0 0053J	0 0012J	0 021	0 02U	0 02U
Vinyl chloride	0 04U	0 04U	0 04U	0 04U	0 04U	0 04U
Total VOC's	**0.0266**	**0.0673**	**0.1523**	**0.07**	**0.0482**	**0.0512**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.2
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8260B/1311 Volatile Organic Compound Data

SAMP_ID	WASTE-M-B4-0-2FTFD	WASTE-N-B1-14-16FT	WASTE-N-B2-14-16FT	WASTE-N-B3-2-4FT	WASTE-N-B3-2-4FTFD	WASTE-N-B4-0-2FT
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/14/1999	11/30/1999	12/1/1999	12/1/1999	12/1/1999	12/2/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1,1-Dichloroethene	0 02U	0 020U	0 020U	0 020U	0 020U	0 020U
1,2-Dichloroethane	0 02U	0 020U	0 020U	0 020U	0 020U	0 020U
2-Butanone (MEK)	0 1U	0 10U	0 10U	0 10U	0 10U	0 10U
Benzene	0 0012J	0 020U	0 020U	0 013J	0 020U	0 020U
Carbon tetrachloride	0 02U	0 020U	0 020U	0 020U	0 020U	0 020U
Chlorobenzene	0 034	0 020U	0 020U	0 020U	0 020U	0 020U
Chloroform	0 02U	0 020U	0 020U	0 020U	0 020U	0 020U
Tetrachloroethene	0 02U	0 020U	0 020U	0 020U	0 020U	0 020U
Trichloroethene	0 0082J	0 020U	0 020U	0 020U	0 020U	0 0024J
Vinyl chloride	0 04U	0 040U	0 040U	0 040U	0 040U	0 040U
Total VOC's	**0 0434**	**ND**	**ND**	**0.013**	**ND**	**0 0024**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.3
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-I-B-COMPEB	WASTE-MEB	WASTE-N-B4-COMPEB
Description	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/1999	10/14/1999	12/2/1999
Units	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U
2 2'-Oxybis(1-Chloropropane)	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U
2-Chlorophenol	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U
2-Nitroaniline	50U	50U	50U
2-Nitrophenol	10U	10U	10U
3&4-Methylphenol (m&p-cresol)	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U
3-Nitroaniline	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U
4-Bromophenylphenyl ether	1 0U	1 0U	1U
4-Chloro-3-methylphenol	10U	10U	10U
4-Chloroaniline	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U
4-Nitroaniline	50U	50U	50U
4-Nitrophenol	50U	50U	50U
Acenaphthene	10U	10U	10U
Acenaphthylene	10U	10U	10U
Anthracene	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U
Carbazole	10U	10U	10U
Chrysene	10U	10U	10U

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.3
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	WASTE-I-B-COMPEB	WASTE-MEB	WASTE-N-B4-COMPEB
Description	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/1999	10/14/1999	12/2/1999
Units	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U
Dibenzofuran	10U	10U	10U
Diethylphthalate	10U	10U	10U
Dimethylphthalate	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U
Fluoranthene	10U	10U	10U
Fluorene	1 0U	1.0U	1U
Hexachlorobenzene	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U
Hexachloroethane	1 9U	1.9U	1.9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U
Isophorone	10U	10U	10U
Naphthalene	10U	10U	10U
Nitrobenzene	3.5U	3.5U	3.5U
N-Nitroso-di-n-propylamine	10U	10U	10U
N-Nitrosodiphenylamine	5.0U	5.0U	5U
Pentachlorophenol	5.0U	5.0U	5U
Phenanthrene	10U	10U	10U
Phenol	10U	10U	10U
Pyrene	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1 8U	1 8U
Total SVOC's	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.4
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8270C/1311 Semivolatile Organic Compound Data

SAMP_ID	WASTE-G-B1-COMP	WASTE-G-B2-COMP	WASTE-G-B3-COMP	WASTE-G-B3-COMPFD	WASTE-G-B4-COMP	WASTE-H-B1-COMP
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/8/1999	10/8/1999	10/11/1999	10/11/1999	10/12/1999	10/1/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1 4-Dichlorobenzene	0 05U	0 04J	0 32	0 11	0 16J	0 05U
2,4,5-Trichlorophenol	0 05U	0 05U	0 05U	0 05U	0 2U	0 05U
2,4,6-Trichlorophenol	0 0091J	0 05U	7 1	2 8	0 2U	0 05U
2,4-Dinitrotoluene	0 05U	0 05U	0 05U	0 05U	0 2U	0 05U
2-Methylphenol (o-cresol)	0 05U	0 05U	0 05U	0 099	0 014J	0 05U
Cresol m & p (TCLP)	0 05U	0 05U	0 15	0 12	0 084J	0 05U
Cresol o,m,p (TCLP)	0 05U	0 05U	0 15	0 22	0 097J	0 05U
Hexachlorobenzene	0 05U	0 05U	0 05U	0 05U	0 2U	0 05U
Hexachlorobutadiene	0 05U	0 05U	0 05U	0 05U	0 2U	0 05U
Hexachloroethane	0 05U	0 05U	0 05U	0 05U	0 2U	0 05U
Nitrobenzene	0 018J	0 05U	0 12	0 027J	0 042J	0 05U
Pentachlorophenol	1 1	0 25U	0 25U	0 25U	1U	0 25U
Pyridine (TCLP)	0 25U	0 25U	0 25U	0 25U	1U	0 25U
Total SVOC's	**1 1271**	**0.04**	**7.84**	**3.376**	**0.397**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.4
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8270C/1311 Semivolatile Organic Compound Data

SAMP_ID	WASTE-H-B2A-COMP	WASTE-H-B2-COMP	WASTE-H-B3-COMP	WASTE-H-B4-COMP	WASTE-HEB	WASTE-I-B1-COMP
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/5/1999	10/1/1999	10/4/1999	10/4/1999	10/5/1999	10/14/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1,4-Dichlorobenzene	0 05U	0.05U	1.6	0.1	0.05U	0 0056J
2,4,5-Trichlorophenol	0 05U	0 05U	0 05U	0.02J	0 05U	0 05U
2,4,6-Trichlorophenol	0.05U	0.05U	0.051	0.05U	0.05U	0.05U
2,4-Dinitrotoluene	0.05U	0.05U	0 05U	0.05U	0.05U	0 05U
2-Methylphenol (o-cresol)	0 05U	0.05U	0 055	0.0063J	0.05U	0 05U
Cresol m & p (TCLP)	0 05U	0.05U	0.48	0.0061J	0.05U	0 05U
Cresol o,m,p (TCLP)	0 05U	0.05U	0.54	0.012J	0.05U	0 05U
Hexachlorobenzene	0 05U	0.05U	0 05U	0 018J	0.05U	0 05U
Hexachlorobutadiene	0 05U	0.05U	0 05U	0 05U	0 05U	0 05U
Hexachloroethane	0 05U	0.05U	0 05U	0 05U	0.05U	0 05U
Nitrobenzene	0 05U	0 05U	0.05U	0.05U	0.05U	0.05U
Pentachlorophenol	0 25U	0 25U	0.046J	0 45	0.25U	1 2
Pyridine (TCLP)	0 25U	0.25U	0.25U	0 25U	0 25U	0 25U
Total SVOC's	**ND**	**ND**	**2.772**	**0.6124**	**ND**	**1.2056**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.4
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8270C/1311 Semivolatile Organic Compound Data

SAMP_ID	WASTE-I-B2-COMP	WASTE-I-B4-COMP	WASTE-I-B5-COMP	WASTE-I-B5-COMPFD	WASTE-L-B1-COMP	WASTE-L-B2-COMP
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/15/1999	10/14/1999	10/15/1999	10/15/1999	9/29/1999	9/29/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1,4-Dichlorobenzene	1 3	0.05U	1 5	0.63	0 09	0 05U
2,4,5-Trichlorophenol	1 4	0 05U	0 05U	0 05U	0.05U	0 05U
2,4,6-Trichlorophenol	0 05U	0 05U	0 019J	0 0079J	0.05U	0 05U
2,4-Dinitrotoluene	0 038J	0 05U	0 05U	0.05U	0 05U	0 05U
2-Methylphenol (o-cresol)	0 014J	0.05U	0.05U	0.05U	0.05U	0 05U
Cresol m & p (TCLP)	0 14	0 05U	0 15	0.076	0 05U	0 05U
Cresol o,m,p (TCLP)	0.16	0 05U	0.15	0 076	0.05U	0.05U
Hexachlorobenzene	0 05U	0.05U	0.05U	0.05U	0.05U	0 05U
Hexachlorobutadiene	0 05U	0.05U	0.05U	0.05U	0 05U	0 05U
Hexachloroethane	0.05U	0.05U	0.05U	0.05U	0.05U	0.05U
Nitrobenzene	0 013J	0.05U	0.05U	0.05U	0.05U	0 05U
Pentachlorophenol	3 8	0 25U	0 062J	0.024J	0.25U	0 25U
Pyridine (TCLP)	0 012J	0 25U	0.25U	0.25U	0.037J	0 25U
Total SVOC's	**6.877**	**ND**	**1.881**	***0.8139***	***0.127***	***ND***

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.4
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8270C/1311 Semivolatile Organic Compound Data

SAMP_ID	WASTE-L-B3-COMP	WASTE-L-B4-COMP	WASTE-M-B1-0-1 5FT	WASTE-M-B2-0-1 5FT	WASTE-M-B3-0-2FT	WASTE-M-B4-0-2FT
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	9/30/1999	9/30/1999	10/14/1999	10/14/1999	10/14/1999	10/14/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1,4-Dichlorobenzene	0 05U	0 87	0 031J	0 012J	0 0095J	0 012J
2,4,5-Trichlorophenol	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
2,4,6-Trichlorophenol	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
2,4-Dinitrotoluene	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
2-Methylphenol (o-cresol)	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
Cresol m & p (TCLP)	0 05U	0 19	0 05U	0 05U	0 05U	0 05U
Cresol o,m,p (TCLP)	0 05U	0 19	0 05U	0 05U	0 05U	0 05U
Hexachlorobenzene	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
Hexachlorobutadiene	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
Hexachloroethane	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
Nitrobenzene	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
Pentachlorophenol	0 25U	0 15J	0 25U	0 25U	0 25U	0 25U
Pyridine (TCLP)	0 25U	0 39	0 25U	0 25U	0 25U	0 25U
Total SVOC's	**ND**	**1 79**	**0 031**	**0.012**	**0.0095**	**0 012**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.4
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8270C/1311 Semivolatile Organic Compound Data

SAMP_ID	WASTE-M-B4-0-2FTFD	WASTE-N-B1-COMP	WASTE-N-B2-COMP	WASTE-N-B3-COMP	WASTE-N-B3-COMPFD	WASTE-N-B4-COMP
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/14/1999	11/30/1999	12/1/1999	12/1/1999	12/1/1999	12/2/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1,4-Dichlorobenzene	0 015J	0 050U	0.050U	0.050U	0.050U	0 050U
2,4,5-Trichlorophenol	0 05U	0 050U	0.050U	0.050U	0 050U	0 050U
2,4,6-Trichlorophenol	0 05U	0 050U	0.050U	0.050U	0.050U	0 050U
2,4-Dinitrotoluene	0 05U	0.050U	0 050U	0 050U	0.050U	0 050U
2-Methylphenol (o-cresol)	0.05U	0.050U	0.050U	0 050U	0.050U	0 050U
Cresol m & p (TCLP)	0 05U	0.050U	0 050U	0 050U	0.050U	0 050U
Cresol o,m,p (TCLP)	0 05U	0.050U	0 050U	0 050U	0 050U	0 050U
Hexachlorobenzene	0 05U	0.050U	0.050U	0 050U	0.050U	0 050U
Hexachlorobutadiene	0.05U	0.050U	0.050U	0 050U	0.050U	0 050U
Hexachloroethane	0 05U	0.050U	0.050U	0 050U	0.050U	0 050U
Nitrobenzene	0 05U	0.050U	0.050U	0.050U	0.050U	0 050U
Pentachlorophenol	0 25U	0.25U	0.25U	0 25U	0.25U	0 25U
Pyridine (TCLP)	0.25U	0 25U	0.25U	0.25U	0.25U	0 25U
Total SVOC's	**0.015**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.5
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WASTE-G-B1-COMP	WASTE-G-B2-COMP	WASTE-G-B3-COMP	WASTE-G-B3-COMPFD	WASTE-G-B4-COMP	WASTE-H-B1-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/8/1999	10/8/1999	10/11/1999	10/11/1999	10/12/1999	10/1/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg/dw
Decachlorobiphenyl	2200U	1800U	3800U	4000U	2100U	68
Dichlorobiphenyl	430U	340U	760U	800U	700	3 8U
Heptachlorobiphenyl	86000	30000	1300J	1700J	5800	12U
Hexachlorobiphenyl	81000	27000	2500	4100	4900	4 2J
Monochlorobiphenyl	370J	340U	760U	800U	410U	3 8U
Nonachlorobiphenyl	2200U	1800U	3800U	4000U	2100U	19U
Octachlorobiphenyl	24000	7000	2200U	2400U	2900	12U
Pentachlorobiphenyl	68000	13000	3800	6100	4500	7 8U
Tetrachlorobiphenyl	53000	3000	1500U	3900	5500	7 8U
Trichlorobiphenyl	12000	1100	910	1600	4300	3 8U
Total PCB's	**324370**	**81100**	**8510**	**17400**	**28600**	**72.2**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.5
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WASTE-H-B2A-COMP	WASTE-H-B2-COMP	WASTE-H-B3-COMP	WASTE-H-B4-COMP	WASTE-HEB	WASTE-I-B1-COMP	WASTE-I-B2-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/5/1999	10/1/1999	10/4/1999	10/4/1999	10/5/1999	10/14/1999	10/15/1999
Units	ug/kg dw	ug/kg/dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
Decachlorobiphenyl	1100J	1000	1100U	6400U	0.5U	890	9200U
Dichlorobiphenyl	230U	180U	14000	2800	0 1U	40U	64000
Heptachlorobiphenyl	1300	550U	50000	120000	0.3U	2200	220000
Hexachlorobiphenyl	4400	940	46000	280000	0 2U	3200	330000
Monochlorobiphenyl	230U	180U	170J	1300U	0.1U	40U	36000
Nonachlorobiphenyl	1200U	930U	1100U	6400U	0 5U	200U	9200U
Octachlorobiphenyl	460J	550U	31000	27000	0 3U	780	110000
Pentachlorobiphenyl	3200	370U	39000	340000	0 2U	2200	370000
Tetrachlorobiphenyl	470U	370U	55000	360000	0 2U	1800	580000
Trichlorobiphenyl	230U	180U	54000	51000	0 1U	220	340000
Total PCB's	**10460**	**1940**	**289170**	**1180800**	**ND**	**11290**	**2050000**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.5
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WASTE-I-B4-COMP	WASTE-I-B5-COMP	WASTE-I-B5-COMPFD	WASTE-I-B-COMPEB	WASTE-L-B1-COMP	WASTE-L-B2-COMP	WASTE-L-B3-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/14/1999	10/15/1999	10/15/1999	10/15/1999	9/29/1999	9/29/1999	9/30/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	450	1900U	2400U	0.50U	2100U	190U	98U
Dichlorobiphenyl	36U	380U	470U	0.10U	420U	38U	19U
Heptachlorobiphenyl	120	3300	3200	0.30U	8300	110U	59U
Hexachlorobiphenyl	900	4700	6900	0.20U	13000	76U	110
Monochlorobiphenyl	36U	380U	470U	0 10U	420U	38U	19U
Nonachlorobiphenyl	180U	1900U	2400U	0 50U	2100U	190U	98U
Octachlorobiphenyl	110U	3000	1100J	0.30U	5000	110U	59U
Pentachlorobiphenyl	1600	2300	4800	0.20U	16000	76U	420
Tetrachlorobiphenyl	1400	2800	960U	0.20U	8400	76U	2500
Trichlorobiphenyl	140	520	360J	0.10U	1400	38U	820
Total PCB's	**4610**	**16620**	**16360**	**ND**	**52100**	**ND**	**3850**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.5
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WASTE-L-B4-COMP	WASTE-M-B1-0-1 5FT	WASTE-M-B2-0-1 5FT	WASTE-M-B3-0-2FT	WASTE-M-B4-0-2FT	WASTE-M-B4-0-2FTFD	WASTE-MEB
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	9/30/1999	10/14/1999	10/14/1999	10/14/1999	10/14/1999	10/14/1999	10/14/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
Decachlorobiphenyl	2000U	6000U	1600J	2500U	29000U	2800U	0 50U
Dichlorobiphenyl	3200	1200U	510U	500U	5800U	940	0 10U
Heptachlorobiphenyl	1200U	3600U	660J	1500U	17000U	1700U	0 30U
Hexachlorobiphenyl	1000	1300J	4000	1000U	12000U	1500	0 20U
Monochlorobiphenyl	390U	1200U	510U	500U	5800U	550U	0 10U
Nonachlorobiphenyl	2000U	6000U	2600U	2500U	29000U	2800U	0 50U
Octachlorobiphenyl	1200U	3600U	1600U	1500U	17000U	1700U	0 30U
Pentachlorobiphenyl	14000	9400	11000	1000U	10000J	8100	0 20U
Tetrachlorobiphenyl	49000	26000	19000	1000U	12000U	20000	0 20U
Trichlorobiphenyl	23000	11000	6800	500U	42000	13000	0 10U
Total PCB's	**90200**	**47700**	**43060**	**ND**	**52000**	**43540**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.5
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WASTE-N-B1-COMP	WASTE-N-B2-COMP	WASTE-N-B3-COMP	WASTE-N-B3-COMPFD	WASTE-N-B4-COMP	WASTE-N-B4-COMPEB
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	11/30/1999	12/1/1999	12/1/1999	12/1/1999	12/2/1999	12/2/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
Decachlorobiphenyl	19U	190U	96U	95U	89U	0 5U
Dichlorobiphenyl	3 8U	38U	19U	19U	18U	0 1U
Heptachlorobiphenyl	11U	120U	57U	57U	53U	0 3U
Hexachlorobiphenyl	7 7U	78U	38U	38U	36U	0 2U
Monochlorobiphenyl	3 8U	38U	19U	19U	18U	0 1U
Nonachlorobiphenyl	19U	190U	96U	95U	89U	0 5U
Octachlorobiphenyl	11U	120U	57U	57U	53U	0 3U
Pentachlorobiphenyl	7 7U	78U	38U	38U	36U	0 2U
Tetrachlorobiphenyl	7 7U	78U	38U	38U	36U	0 2U
Trichlorobiphenyl	3 8U	38U	19U	19U	18U	0 1U
Total PCB's	ND	ND	ND	ND	ND	ND

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.6
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	WASTE-I-B-COMPEB	WASTE-MEB	WASTE-N-B4-COMPEB
Description	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/1999	10/14/1999	12/2/1999
Units	ug/l	ug/l	ug/l
4 4'-DDD	0 0090J	0 10U	0 1U
4,4'-DDE	0 10U	0 10U	0 1U
4,4'-DDT	0 0082J	0 10U	0 1U
Aldrin	0 50U	0 50U	0 05U
Alpha Chlordane	0 050U	0 050U	0 05U
Dieldrin	0 10U	0 10U	0 1U
Endosulfan I	0 050U	0 050U	0 05U
Endosulfan II	0 10U	0 10U	0 1U
Endosulfan sulfate	0 10U	0 10U	0 1U
Endrin	0 10U	0 10U	0 1U
Endrin aldehyde	0 10U	0 10U	0 1U
Endrin ketone	0 10U	0 10U	0 1U
Gamma Chlordane	0 050U	0 050U	0 05U
Heptachlor	0 050U	0 050U	0 05U
Heptachlor epoxide	0 050U	0 050U	0 05U
Methoxychlor	0 50U	0 50U	0 5U
Toxaphene	0 50U	0 50U	5U
alpha-BHC	0 039U	0 039U	0 039U
beta-BHC	0 014U	0 014U	0 014U
delta-BHC	0 0028J	0 012U	0 012U
gamma-BHC (Lindane)	0 00056J	0 019U	0 019U
Total Pesticides	**0.02056**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-2.7
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8081A/1311 Pesticide Data

SAMP_ID	WASTE-G-B1-COMP	WASTE-G-B2-COMP	WASTE-G-B3-COMP	WASTE-G-B3-COMPFD	WASTE-G-B4-COMP	WASTE-H-B1-COMP
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/8/1999	10/8/1999	10/11/1999	10/11/1999	10/12/1999	10/1/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l dw	mg/l
Chlordane (TCLP)	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U
Endrin	0 005U	0 005U	0 005U	0 005U	0 005U	0 005U
gamma-BHC (Lindane)	0 0025U	0 0042	0 0025U	0 0025U	0 0025U	0 0025U
Heptachlor	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U
Heptachlor epoxide	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U
Methoxychlor	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U
Toxaphene	0 25U	0 25U	0 25U	0 25U	0 25U	0 25U
Total Pesticides	**ND**	**0 0042**	**ND**	**ND**	**ND**	**ND**

Note: U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC D-re[illegible] from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

T .-2.7

Sauget Area 1

Fill Area Composite Sample Analytical Results

TCLP Method 8081A/1311 Pesticide Data

SAMP_ID	WASTE-H-B2A-COMP	WASTE-H-B2-COMP	WASTE-H-B3-COMP	WASTE-H-B4-COMP	WASTE-HEB	WASTE-I-B1-COMP	WASTE-I-B2-COMP
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/5/1999	10/1/1999	10/4/1999	10/4/1999	10/5/1999	10/14/1999	10/15/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Chlordane (TCLP)	0 025U	0 025U	0 025U	0 12U	0 025U	0 025U	0 025U
Endrin	0 005U	0 005U	0 005U	0 025U	0 005U	0 005U	0 005U
gamma-BHC (Lindane)	0 0025U	0 0025U	0 0025U	0 012U	0 0025U		
Heptachlor	0 0025U	0 0025U	0 0025U	0 012U	0 0025U	0 0025U	0 0025U
Heptachlor epoxide	0 0025U	0 0025U	0 0025U	0 012U	0 0025U	0 0025U	0 0025U
Methoxychlor	0 025U	0 025U	0 025U	0 12U	0 025U	0 025U	0 025U
Toxaphene	0 25U	0 25U	0 25U	1 2U	0 25U	0 25U	0 25U
Total Pesticides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table A-2.7
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8081A/1311 Pesticide Data

SAMP_ID	WASTE-I-B4-COMP	WASTE-I-B5-COMP	WASTE-I-B5-COMPFD	WASTE-L-B1-COMP	WASTE-L-B2-COMP	WASTE-L-B3-COMP	WASTE-L-B4-COMP
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/14/1999	10/15/1999	10/15/1999	9/29/1999	9/29/1999	9/30/1999	9/30/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Chlordane (TCLP)	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U
Endrin	0 005U	0 005U	0 005U	0 005U	0 005U	0 005U	0 005U
gamma-BHC (Lindane)	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U
Heptachlor	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U
Heptachlor epoxide	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U
Methoxychlor	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U
Toxaphene	0 25U	0 25U	0 25U	0 25U	0 25U	0 25U	0 25U
Total Pesticides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Note: ot detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-re from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

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Sauget Area 1

Fill Area Composite Sample Analytical Results

TCLP Method 8081A/1311 Pesticide Data

SAMP_ID	WASTE-M-B1-0-1 5FT	WASTE-M-B2-0-1 5FT	WASTE-M-B3-0-2FT	WASTE-M-B4-0-2FT	WASTE-M-B4-0-2FTFD	WASTE-N-B1-COMP
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	10/14/1999	10/14/1999	10/14/1999	10/14/1999	10/14/1999	11/30/1999
UNITS	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Chlordane (TCLP)	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U
Endrin	0 005U	0 005U	0 005U	0 005U	0 005U	0 0050U
gamma-BHC (Lindane)	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U
Heptachlor	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U
Heptachlor epoxide	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U	0 0025U
Methoxychlor	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U
Toxaphene	0 25U	0 25U	0 25U	0 25U	0 25U	0 25U
Total Pesticides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.7
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8081A/1311 Pesticide Data

SAMP_ID	WASTE-N-B2-COMP	WASTE-N-B3-COMP	WASTE-N-B3-COMPFD	WASTE-N-B4-COMP
SOL_DESC	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
SAMP_DATE	12/1/1999	12/1/1999	12/1/1999	12/2/1999
UNITS	mg/l	mg/l	mg/l	mg/l
Chlordane (TCLP)	0 025U	0 025U	0 025U	0 025U
Endrin	0 0050U	0 0050U	0 0050U	0 0050U
gamma-BHC (Lindane)	0 0025U	0 0025U	0 0025U	0 0025U
Heptachlor	0 0025U	0 0025U	0.0025U	0 0025U
Heptachlor epoxide	0 0025U	0 0025U	0 0025U	0 0025U
Methoxychlor	0 025U	0 025U	0 025U	0 025U
Toxaphene	0 25U	0 25U	0 25U	0 25U
Total Pesticides	**ND**	**ND**	**ND**	**ND**

Not[illegible] not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-r[illegible] from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.8
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 8151A Herbicide Compound Data

Sample Id	WASTE-I-B-COMPEB	WASTE-MEB	WASTE-N-B4-COMPEB
Description	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/99	10/14/99	12/2/99
Units	ug/l	ug/l	ug/l
2,4,5-T	0 50U	0 50U	0 5U
2,4,5-TP (Silvex)	0 50U	0 50U	0 5U
2,4-D	0 50U	0 50U	0 5U
2,4-DB	0 50U	0 50U	0 5U
Dalapon	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U
Dichloroprop	6 0U	6 0U	6U
Dinoseb	6 0U	6 0U	6U
MCPA	120U	120U	120U
MCPP	120U	120U	120U
Pentachlorophenol	1 0U	1 0U	1U
Total Herbicides	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.9
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8151 Herbicide Data

Sample Id	WASTE-G-B1-COMP	WASTE-G-B2-COMP	WASTE-G-B3-COMP	WASTE-G-B3-COMPFD	WASTE-G-B4-COMP	WASTE-H-B1-COMP	WASTE-H-B2A-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/8/99	10/8/99	10/11/99	10/11/99	10/12/99	10/1/99	10/5/99
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
2,4,5-TP (Silvex)	0 25U	0 12U	6 2U	6 2U	0 025U	0 025U	0 025U
2,4-D	2 6	0 12U	60	40	0 04	0 025U	0 025U
Total Herbicides	**2.6**	**ND**	**60**	**40**	**0.04**	**ND**	**ND**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.9
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8151 Herbicide Data

Sample Id	WASTE-H-B2-COMP	WASTE-H-B3-COMP	WASTE-H-B4-COMP	WASTE-HEB	WASTE-I-B1-COMP	WASTE-I-B2-COMP	WASTE-I-B4-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/1/99	10/4/99	10/4/99	10/5/99	10/14/99	10/15/99	10/14/99
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
2,4,5-TP (Silvex)	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U
2,4-D	0 025U	0 42	0 0072J	0 025U	0 025U	0 14	0 025U
Total Herbicides	**ND**	**0.42**	**0.0072**	**ND**	**ND**	**0.14**	**ND**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.9
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8151 Herbicide Data

Sample Id	WASTE-I-B5-COMP	WASTE-I-B5-COMPFD	WASTE-L-B1-COMP	WASTE-L-B2-COMP	WASTE-L-B3-COMP	WASTE-L-B4-COMP	WASTE-M-B1-0-1 5FT
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/99	10/15/99	9/29/99	9/29/99	9/30/99	9/30/99	10/14/99
Units	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	mg/l
2,4,5-TP (Silvex)	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U
2,4-D	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U	0 025U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-2.9
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8151 Herbicide Data

Sample Id	WASTE-M-B2-0-1 5FT	WASTE-M-B3-0-2FT	WASTE-M-B4-0-2FT	WASTE-M-B4-0-2FTFD	WASTE-N-B1-COMP	WASTE-N-B2-COMP	WASTE-N-B3-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/14/99	10/14/99	10/14/99	10/14/99	11/30/99	12/1/99	12/1/99
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
2,4,5-TP (Silvex)	0.025U	0.025U	0.025U	0.025U	0.025U	0.025U	0.025U
2,4-D	0.025U	0 025U	0.025U	0.025U	0.025U	0.025U	0 025U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes. U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.9
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8151 Herbicide Data

Sample Id	WASTE-N-B3-COMPFD	WASTE-N-B4-COMP
Description	Waste - Composite	Waste - Composite
Sample Date	12/1/99	12/2/99
Units	mg/l	mg/l
2,4,5-TP (Silvex)	0 025U	0 025U
2,4-D	0 025U	0 025U
Total Herbicides	**ND**	**ND**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.10
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8280A/8290 PCDD/PCDF Data

Sample Id	WASTE-G-B1-COMP	WASTE-G-B2-COMP	WASTE-G-B3-COMP	WASTE-G-B3-COMPFD	WASTE-G-B4-COMP	WASTE-H-B1-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/8/1999	10/8/1999	10/11/1999	10/11/1999	10/12/1999	10/1/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2 3 4 6,7 8 9-OCDD	0 475	2 51	0 0069	0 0521	9	0 0003U
1 2,3 4,6,7,8,9-OCDF	0 094	0 324	0 002	0 004	2 92	0 0003U
1 2 3 4,6 7 8-HpCDD	0 0258	0 212	0 0002U	0 0042	0 628	0 0002U
1 2 3 4 6,7,8-HpCDF	0 0101	0 0522	0 0001U	0 00061	0 182	0 0002U
1 2 3 4 7,8,9-HpCDF	0 0004U	0 0103U	0 0001U	0 0001U	0 0105U	0 0002U
1,2 3,4,7,8-HxCDD	0 0005U	0 0129U	0 0001U	0 0001U	0 0125U	0 0002U
1,2,3,4,7,8-HxCDF	0 0003U	0 0083U	0 00009U	0 00008U	0 0085U	0 0001U
1,2,3 6,7,8-HxCDD	0 00078	0 0126U	0 0001U	0 0001U	0 0122U	0 0002U
1,2,3,6 7,8-HxCDF	0 0003U	0 0085U	0 0001U	0 00008U	0 0087U	0 0001U
1,2,3,7 8,9-HxCDD	0 0004U	0 0123U	0 0001U	0 0001U	0 012U	0 0002U
1 2,3 7,8,9-HxCDF	0 0003U	0 0089U	0 0001U	0 00009U	0 0091U	0 0001U
1,2,3 7,8-PeCDD	0 0006U	0 0203U	0 0002U	0 0002U	0 0187U	0 0002U
1,2,3,7,8-PeCDF	0 0004U	0 0122U	0 0001U	0 0001U	0 012U	0 0002U
2,3,4,6,7,8-HxCDF	0 0003U	0 0091U	0 0001U	0 00009U	0 0093U	0 0001U
2,3,4,7,8-PeCDF	0 0004U	0 0122U	0 0001U	0 0001U	0 012U	0 0002U
2,3,7,8-TCDD	0 0003U	0 0117U	0 00009U	0 0001U	0 0107U	0 0001U
2,3,7,8-TCDF	0 0003U	0 0091U	0 00009U	0 0015	0 0089U	0 0001U
Total HpCDD	0 052	0 425	0 0002U	0 0091	1 07	0 0002U
Total HpCDF	0 046	0 222	0 00036	0 0024	1 01	0 0002U
Total HxCDD	0 0017	0 0576U	0 0001U	0 0001U	0 0373U	0 0002U
Total HxCDF	0 003	0 03U	0 00009U	0 00008U	0 0891	0 0001U
Total PeCDD	0 0006U	0 0203U	0 0017	0 0002U	0 0187U	0 0002U
Total PeCDF	0 0004U	0 0122U	0 0001U	0 0014	0 012U	0 0002U
Total TCDD	0 0207	2 12	0 0238	0 0233	2 16	0 0211M
Total TCDF	0 00067	0 0355	0 00049	0 0055	0 0408	0 00057M
1998 Total TEQ w/ EMPC as ND	**0 0011759**	**0 0333692**	**0.00021439**	**0.00041371**	**0.0397875**	**0 00026303**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-2.10
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8280A/8290 PCDD/PCDF Data

Sample Id	WASTE-H-B2A-COMP	WASTE-H-B2-COMP	WASTE-H-B3-COMP	WASTE-H-B4-COMP	WASTE-HEB	WASTE-I-B1-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/5/1999	10/1/1999	10/4/1999	10/4/1999	10/5/1999	10/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 0025U	0 027	0 0022U	0 555	0 0003U	0 0548
1,2,3,4,6,7,8,9-OCDF	0 0022U	0 011	0 002U	0 202	0 0002U	0 0088
1,2,3,4,6,7,8-HpCDD	0 0016U	0 0018U	0 0014U	0 0433	0 0002U	0 0045
1 2,3,4,6,7,8-HpCDF	0 0013U	0 0012	0 0011U	0 0171	0 0001U	0 0011U
1 2,3 4,7,8,9-HpCDF	0 0013U	0 0013U	0 0012U	0 0009U	0 0001U	0 0016U
1,2,3,4,7,8-HxCDD	0 0014U	0 0015U	0 0012U	0 0011U	0 0002U	0 0009U
1,2,3,4,7,8-HxCDF	0 0009U	0 0009U	0 0008U	0 0006U	0 0001U	0 0009U
1,2,3,6,7,8-HxCDD	0 0013U	0 0014U	0 0011U	0 0011U	0 0002U	0 0013U
1,2,3,6,7 8-HxCDF	0 001U	0 0009U	0 0009U	0 0007U	0 0001U	0 001U
1,2,3,7,8,9-HxCDD	0 0012U	0 0013U	0 0011U	0 001U	0 0002U	0 0018U
1,2,3,7,8,9-HxCDF	0 0011U	0 001U	0.0009U	0 0007U	0 0001U	0 0011U
1,2,3,7,8-PeCDD	0 0021U	0 0021U	0 0016U	0.0015U	0 0003U	0 002U
1,2,3,7,8-PeCDF	0 0013U	0 0012U	0 0009U	0 0009U	0 0002U	0 0009U
2,3,4,6,7,8-HxCDF	0 0011U	0 001U	0 001U	0 0007U	0 0001U	0 001U
2,3,4,7,8-PeCDF	0 0013U	0 0012U	0 001U	0 0009U	0 0002U	0 0011U
2,3 7,8-TCDD	0 0028	0 0022	0 0009U	0 0009U	0 0002U	0 001U
2,3 7,8-TCDF	0 001U	0 0009U	0 0007U	0 0007U	0 0001U	0 0008U
Total HpCDD	0 0016U	0 0018U	0 0014U	0 0821	0 0002U	0 0097
Total HpCDF	0 0013U	0 0061	0 0011U	0 0961	0 0001U	0 0074
Total HxCDD	0 0012U	0 0013U	0 0011U	0 0035	0 0002U	0 0009U
Total HxCDF	0 0009U	0 0009U	0 0008U	0 0079	0 0001U	0 0009U
Total PeCDD	0 0036	0 0021U	0 0016U	0 0027	0 0003U	0 002U
Total PeCDF	0 0013U	0 0012U	0 0009U	0 0009U	0 0002U	0 0009U
Total TCDD	0 0248	0 0256	0 0218	0 022	0 0214M	0 0421
Total TCDF	0 001U	0 0009U	0 0007U	0 0007U	0 00069M	0 0008U
1998 Total TEQ w/ EMPC as ND	**0.004678735**	**0.0040563**	**0.00192621**	**0.0024617**	**0.000362025**	**0 00230236**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.10
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8280A/8290 PCDD/PCDF Data

Sample Id	WASTE-I-B2-COMP	WASTE-I-B4-COMP	WASTE-I-B5-COMP	WASTE-I-B5-COMPFD	WASTE-I-B-COMPEB	WASTE-L-B1-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/1999	10/14/1999	10/15/1999	10/15/1999	10/15/1999	9/29/1999
Units	*ug/l*	*ug/l*	*ug/l*	*ug/l*	*ug/l*	*ug/l*
1 2,3 4 6,7 8,9-OCDD	0 0332	0 0004U	0 0467	0 0008U	0 0204	0 0077
1 2,3 4 6 7,8,9-OCDF	0 0272	0 0004U	0 0172	0 0007U	0 0194	0 003
1 2,3,4,6 7,8-HpCDD	0 0032	0 0003U	0 0022U	0 0005U	0 0095	0 0003U
1 2,3,4,6 7,8-HpCDF	0 0028	0 0002U	0 0016U	0 0004U	0 0112	0 0002U
1,2,3,4 7,8,9-HpCDF	0 0003U	0 0002U	0 0015U	0 0004U	0 0093	0 0002U
1,2,3 4,7,8-HxCDD	0 0004U	0 0002U	0 0017U	0 0004U	0 0087	0 0002U
1,2,3,4,7,8-HxCDF	0 0002U	0 0002U	0 0012U	0 0003U	0 0097	0 0002U
1,2,3,6,7,8-HxCDD	0 0003U	0 0002U	0 0017U	0 0004U	0 0097	0 0002U
1,2,3,6,7,8-HxCDF	0 0002U	0 0002U	0 0012U	0 0003U	0 0104	0 0002U
1,2,3,7,8,9-HxCDD	0 0004U	0 0002U	0 0017U	0 0004U	0 0087	0 0002U
1,2,3,7,8,9-HxCDF	0 0002U	0 0002U	0 0013U	0 0003U	0 0098	0 0002U
1,2,3,7,8-PeCDD	0 0005U	0 0004U	0 0023U	0 0006U	0 0117	0 0003U
1,2,3,7,8-PeCDF	0 0003U	0 0002U	0 0014U	0 0004U	0 0145	0 0002U
2,3,4 6,7,8-HxCDF	0 0002U	0 0002U	0 0013U	0 0003U	0 0105	0 0002U
2,3,4,7,8-PeCDF	0 0003U	0 0003U	0 0015U	0 0004U	0 0134	0 0002U
2,3,7,8-TCDD	0 0003U	0 0002U	0 0013U	0 0003U	0 0046	0 0002U
2,3,7,8-TCDF	0 0002U	0 0002U	0 001U	0 0003U	0 0047	0 0002U
Total HpCDD	0 0066	0 0003U	0 0022U	0 0005U	0 0095	0 0003U
Total HpCDF	0 0135	0.0002U	0 0052	0 0004U	0 0205	0 0013
Total HxCDD	0 0003U	0 0002U	0 0017U	0 0004U	0 0271	0 0002U
Total HxCDF	0 00094	0 0002U	0 0012U	0 0003U	0 0404	0 0002U
Total PeCDD	0 0005U	0 0004U	0 0023U	0 0006U	0 0117	0 0003U
Total PeCDF	0 0003U	0 0002U	0 0014U	0 0004U	0 0278	0 0002U
Total TCDD	0 0244	0 0208M	0 024	0 0203	0 0245	0 0207
Total TCDF	0 0007	0 00061M	0 001U	0 00088	0 0053	0 00053
1998 Total TEQ w/ EMPC as ND	**0.00065504**	**0.00046354**	**0.00279789**	**0.000701575**	**0.03124898**	**0 00038957**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.10
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8280A/8290 PCDD/PCDF Data

Sample Id	WASTE-L-B2-COMP	WASTE-L-B3-COMP	WASTE-L-B4-COMP	WASTE-M-B1-0-1 5FT	WASTE-M-B2-0-1 5FT	WASTE-M-B3-0-2FT
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	9/29/1999	9/30/1999	9/30/1999	10/14/1999	10/14/1999	10/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 0027U	0 0017	0 0078	0 0082U	0 0112	0 0138
1,2,3 4,6,7,8,9-OCDF	0 0024U	0 0019U	0 0018	0 0068U	0 0024	0 0035
1,2,3,4,6 7,8-HpCDD	0 0019U	0 0014U	0 0016U	0 0087U	0 0011U	0 0012U
1,2,3 4,6,7,8-HpCDF	0 0013U	0 0012U	0 0011U	0 0065U	0 001U	0 0009U
1,2,3,4,7,8,9-HpCDF	0 0013U	0 0012U	0 0011U	0 0078U	0 0011U	0 0011U
1,2,3,4,7,8-HxCDD	0 0016U	0 0012U	0 0013U	0 0057U	0 0007U	0 0008U
1,2,3,4,7,8-HxCDF	0 001U	0 0008U	0 0008U	0 0054U	0 0008U	0 0007U
1,2,3,6,7,8-HxCDD	0 0015U	0 0011U	0 0012U	0 0079U	0 001U	0 0011U
1,2,3 6 7,8-HxCDF	0 001U	0 0009U	0 0008U	0 006U	0 0009U	0 0008U
1 2,3,7 8,9-HxCDD	0 0014U	0 0011U	0 0012U	0 0113U	0 0014U	0 0016U
1,2,3,7,8,9-HxCDF	0 0011U	0 001U	0 0009U	0 0067U	0 001U	0 0009U
1,2,3,7,8-PeCDD	0 0021U	0 0018U	0 002U	0 0141U	0 002U	0 0022U
1,2,3,7,8-PeCDF	0 0012U	0 0011U	0 0011U	0 0054U	0 0008U	0 0009U
2,3,4,6,7,8-HxCDF	0 0011U	0 001U	0 0009U	0 0063U	0 0009U	0 0008U
2 3,4,7,8-PeCDF	0 0013U	0 0011U	0 0012U	0 0066U	0 0009U	0 0011U
2 3 7 8-TCDD	0 0026	0 0023	0 0021	0 007U	0 001U	0 0011U
2,3 7 8-TCDF	0 001U	0 0008U	0 0009U	0 0047U	0 0007U	0 0008U
Total HpCDD	0 0019U	0 0014U	0 0016U	0 0087U	0 0011U	0 0012U
Total HpCDF	0 0013U	0 0012U	0 0011U	0 0065U	0 001U	0 003
Total HxCDD	0 0014U	0 0011U	0 0012U	0 0057U	0 0007U	0 0008U
Total HxCDF	0 001U	0 0008U	0 0008U	0 0054U	0 0008U	0 0007U
Total PeCDD	0 0021U	0 0018U	0 002U	0 0141U	0 002U	0 0022U
Total PeCDF	0 0012U	0 0011U	0 0011U	0 0054U	0 0008U	0 0009U
Total TCDD	0 0242	0 0247	0 0238	0 007U	0 042	0 041
Total TCDF	0 001U	0 0008U	0 0009U	0 0047U	0 0007U	0 0008U
1998 Total TEQ w/ EMPC as ND	**0 004512755**	**0.003916765**	**0.00384746**	**0.01515075**	**0.00213236**	**0.00234023**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.10
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8280A/8290 PCDD/PCDF Data

Sample Id	WASTE-M-B4-0-2FT	WASTE-M-B4-0-2FTFD	WASTE-MEB	WASTE-N-B1-COMP	WASTE-N-B2-COMP	WASTE-N-B3-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/14/1999	10/14/1999	10/14/1999	11/30/1999	12/1/1999	12/1/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2 3 4 6 7 8,9-OCDD	0 0417	0 0408	0 0003U	0 0018U	0 0008U	0 0009U
1 2 3 4 6 7 8 9-OCDF	0 0135	0 0101	0 0003U	0 0015U	0 0007U	0 0008U
1 2,3,4 6,7,8-HpCDD	0 0037	0 0053	0 0002U	0 0008U	0 001U	0 0009U
1 2,3 4 6,7,8-HpCDF	0 002	0 0021	0 0001U	0 0006U	0 0007U	0 0006U
1 2 3 4 7 8,9-HpCDF	0 0002U	0 0011U	0 0002U	0 0007U	0 0008U	0 0008U
1,2,3,4,7,8-HxCDD	0 0002U	0 001U	0 0002U	0 0004U	0 0006U	0 0006U
1,2,3,4,7,8-HxCDF	0 0001U	0 0007U	0 0001U	0 0004U	0 0005U	0 0005U
1,2,3,6,7,8-HxCDD	0 0002U	0 0014U	0 0002U	0 0007U	0 0009U	0 0009U
1,2,3,6,7,8-HxCDF	0 0001U	0 0008U	0 0001U	0 0004U	0 0006U	0 0005U
1,2,3,7,8,9-HxCDD	0 0002U	0 002U	0 0002U	0 0009U	0 0012U	0 0011U
1,2,3,7,8,9-HxCDF	0 0002U	0 0009U	0 0001U	0 0005U	0 0007U	0 0006U
1,2 3,7,8-PeCDD	0 0005U	0 0024U	0 0003U	0 0009U	0 0013U	0 0014U
1,2,3,7 8-PeCDF	0 0003U	0 001U	0 0002U	0 0005U	0 0006U	0 0006U
2,3,4,6,7,8-HxCDF	0 0002U	0 0009U	0 0001U	0 0004U	0 0006U	0 0005U
2,3,4,7,8-PeCDF	0 0003U	0 0012U	0 0002U	0 0006U	0 0007U	0 0007U
2,3,7,8-TCDD	0 0003U	0 0012U	0 0002U	0 0004U	0 0006U	0 0006U
2,3,7,8-TCDF	0 0002U	0 0008U	0 0001U	0 0005U	0 0005U	0 0005U
Total HpCDD	0 0071	0 0095	0 0002U	0 0008U	0 001U	0 0009U
Total HpCDF	0 0083	0 0087	0 0001U	0 0006U	0 0007U	0 0006U
Total HxCDD	0 0002U	0 001U	0 0002U	0 0004U	0 0006U	0 0006U
Total HxCDF	0 00091	0 0007U	0 0001U	0 0004U	0 0005U	0 0005U
Total PeCDD	0 0005U	0 0024U	0 0003U	0 0009U	0 0013U	0 0014U
Total PeCDF	0 0003U	0 001U	0 0002U	0 0005U	0 0006U	0 0006U
Total TCDD	0 0199	0 0448	0 0173M	0 0317	0 0392	0 042
Total TCDF	0 00078	0 0008U	0 00073M	0 00091	0 00079	0 001
1998 Total TEQ w/ EMPC as ND	**0 00061602**	**0.00263459**	**0.00036253**	**0.001033165**	**0 001432575**	**0 001461585**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.10
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 8280A/8290 PCDD/PCDF Data

Sample Id	WASTE-N-B3-COMPFD	WASTE-N-B4-COMP	WASTE-N-B4-COMPEB
Description	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	12/1/1999	12/2/1999	12/2/1999
Units	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 0009U	0.0012U	0.0022U
1,2,3,4,6,7,8,9-OCDF	0 0008U	0 001U	0.002U
1,2,3,4,6,7,8-HpCDD	0 001U	0.0008U	0 0015U
1,2,3,4,6,7,8-HpCDF	0 0007U	0 0005U	0.0016U
1,2,3,4,7,8,9-HpCDF	0 0008U	0 0007U	0.0019U
1,2,3,4,7,8-HxCDD	0 0006U	0 0004U	0 0009U
1,2,3,4,7,8-HxCDF	0 0005U	0.0004U	0.0012U
1,2,3,6,7,8-HxCDD	0 0009U	0 0006U	0 0014U
1,2,3,6,7,8-HxCDF	0 0006U	0 0004U	0 0013U
1,2,3,7,8,9-HxCDD	0 0012U	0 0008U	0.0018U
1,2,3,7,8,9-HxCDF	0 0007U	0.0005U	0.0015U
1,2,3,7,8-PeCDD	0 0015U	0.0009U	0.0027U
1,2,3,7,8-PeCDF	0 0006U	0.0005U	0.0016U
2,3,4,6,7,8-HxCDF	0 0006U	0.0004U	0 0013U
2,3,4,7,8-PeCDF	0 0008U	0 0006U	0 0018U
2,3,7,8-TCDD	0 0007U	0 0004U	0 0012U
2,3,7,8-TCDF	0 0005U	0 0004U	0 0013U
Total HpCDD	0 001U	0 0008U	0 0015U
Total HpCDF	0 0007U	0 0005U	0 0016U
Total HxCDD	0 0006U	0 0004U	0 0009U
Total HxCDF	0 0005U	0.0004U	0.0012U
Total PeCDD	0 0015U	0.0009U	0.0027U
Total PeCDF	0 0006U	0.0005U	0.0016U
Total TCDD	0 0403	0 0342	0 0301U
Total TCDF	0 0005U	0 00085	0 0018U
1998 Total TEQ w/ EMPC as ND	**0.001607585**	**0.00101761**	**0.0030127987**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.11
Sauget Area 1
Fill Area Composite Sample Analytical Results
Method 6010B/7470A/9010B Inorganic

Sample Id	WASTE-I-B-COMPEB	WASTE-MEB	WASTE-N-B4-COMPEB
Description	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/1999	10/14/1999	12/2/1999
Units	mg/l	mg/l	mg/l
Aluminum	0 074J	0 20U	0 2U
Antimony	0 020U	0 020U	0 02U
Arsenic	0 010U	0 010U	0 01U
Barium	0 010U	0 010U	0 01U
Beryllium	0 0040U	0 0040U	0 0011J
Cadmium	0 0050U	0 0050U	0 005U
Calcium	0 32J	0 25J	0 15J
Chromium	0 010U	0 010U	0 01U
Cobalt	0 010U	0 010U	0 01U
Copper	0 020U	0 020U	0 02U
Iron	0 050U	0 050U	0 05U
Lead	0 0050U	0 0050U	0 005U
Magnesium	0 50U	0 50U	0 5U
Manganese	0 010U	0 010U	0 01U
Molybdenum	0 010U	0 010U	0 01U
Nickel	0 040U	0 040U	0 04U
Potassium	1 0U	1 0U	1U
Selenium	0 010U	0 010U	0 01U
Silver	0 010U	0 010U	0 01U
Sodium	0 37J	0 47J	0 5U
Thallium	0 010U	0 010U	0 01U
Vanadium	0 010U	0 010U	0 01U
Zinc	0 026	0 0093J	0 0096J

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.12
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 6010B/7470A/9010B Inorganic

Sample Id	WASTE-G-B1-COMP	WASTE-G-B2-COMP	WASTE-G-B3-COMP	WASTE-G-B3-COMPFD	WASTE-G-B4-COMP	WASTE-H-B1-COMP	WASTE-H-B2A-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/8/1999	10/8/1999	10/11/1999	10/11/1999	10/12/1999	10/1/1999	10/5/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Arsenic	0.2U	0 2U	0.2U	0 2U	0.2U	0 2U	0 2U
Barium	1 2	4 2	1U	1 6	5.3	1U	1U
Cadmium	0 1U	0 1U	0 1U	0 1U	0 12	0 1U	0 39
Chromium	0 2U	0 2U	0 2U	0 2U	0 2U	0 2U	0 2U
Lead	0 2U	0 2U	0 2U	0 22	24	0 2U	0 47
Selenium	0 5U	0 5U	0.5U	0 5U	0 5U	0 5U	0 5U
Silver	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.12
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 6010B/7470A/9010B Inorganic

Sample Id	WASTE-H-B2-COMP	WASTE-H-B3-COMP	WASTE-H-B4-COMP	WASTE-HEB	WASTE-I-B1-COMP	WASTE-I-B2-COMP	WASTE-I-B4-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/1/1999	10/4/1999	10/4/1999	10/5/1999	10/14/1999	10/15/1999	10/14/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Arsenic	0.2U	0 45	0.2U	0.2U	0.2U	0.2U	0 2U
Barium	1U	1U	1U	1U	1U	1U	1U
Cadmium	0 13	22	0.1U	0.1U	0.17	0.1U	0 1U
Chromium	0.2U	0 2U	0 2U	0 2U	0.2U	0.2U	0.2U
Lead	0.2U	40	0.3	0.2U	0.94	0.2U	0.58
Selenium	0 5U	0 5U	0.5U	0.5U	0.5U	0.5U	0 5U
Silver	0 1U	0 1U	0.1U	0 1U	0.1U	0.1U	0 1U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.12
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 6010B/7470A/9010B Inorganic

Sample Id	WASTE-I-B5-COMP	WASTE-I-B5-COMPFD	WASTE-L-B1-COMP	WASTE-L-B2-COMP	WASTE-L-B3-COMP	WASTE-L-B4-COMP	WASTE-M-B1-0-1 5FT
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/1999	10/15/1999	9/29/1999	9/29/1999	9/30/1999	9/30/1999	10/14/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Arsenic	0 2U	0 2U	0 2U	0 2U	0 2U	0 79	0 2U
Barium	49	68	1U	1U	1U	1U	2 3
Cadmium	0 83	0 74	0 18	0 27	0 1U	0 14	0 1U
Chromium	0 2U	0 2U	0 2U	0 2U	0 2U	0 2U	0 2U
Lead	16	1 6	0 2U	0 2U	0 2U	0 2U	0 2U
Selenium	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U
Silver	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-2.12
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 6010B/7470A/9010B Inorganic

Sample Id	WASTE-M-B2-0-1 5FT	WASTE-M-B3-0-2FT	WASTE-M-B4-0-2FT	WASTE-M-B4-0-2FTFD	WASTE-N-B1-COMP	WASTE-N-B2-COMP	WASTE-N-B3-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/14/1999	10/14/1999	10/14/1999	10/14/1999	11/30/1999	12/1/1999	12/1/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Arsenic	0.2U	0 2U	0 32	0.33	0.20U	0 20U	0 20U
Barium	1 8	2 2	2 3	1 9	0.95J	1 8	0 66J
Cadmium	0 1U	0 1U	0 1U	0 1U	0 10U	0 10U	0 10U
Chromium	0.2U	0 2U	0.2U	0.2U	0.20U	0.20U	0 20U
Lead	0.2U	0 2U	0.2U	0.2U	0.20U	0 046J	0.046J
Selenium	0 5U	0 5U	0 5U	0 5U	0.50U	0 50U	0 50U
Silver	0.1U	0 1U	0.1U	0.1U	0.10U	0 10U	0 10U

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.12
Sauget Area 1
Fill Area Composite Sample Analytical Results
TCLP Method 6010B/7470A/9010B Inorganic

Sample Id	WASTE-N-B3-COMPFD	WASTE-N-B4-COMP
Description	Waste - Composite	Waste - Composite
Sample Date	12/1/1999	12/2/1999
Units	mg/l	mg/l
Arsenic	0 20U	0 20U
Barium	0 85J	0 68J
Cadmium	0 10U	0 10U
Chromium	0 20U	0 20U
Lead	0 017J	0 019J
Selenium	0 50U	0 50U
Silver	0 10U	0 10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-2.13
Sauget Area 1
Fill Area Composite Sample Analytical Results
Other Data

Sample Id	WASTE-G-B1-2-4FT	WASTE-G-B1-COMP	WASTE-G-B2-12-14FT	WASTE-G-B2-COMP	WASTE-G-B3-10-12FT
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/11/1999
Corrosivity-pH (su)		6 93		3 16	
Ignitability - Flash Point		NIVO		NIVO	
pH (su)	6 86	7 3	3 37	3 5	9 28
Total Releasable Cyanide (mg/kg)		100U		100U	
Total Releasable Sulfide (mg/kg)		50U		50U	

Table A-2.13
Sauget Area 1
Fill Area Composite Sample Analytical Results
Other Data

Sample Id	WASTE-G-B3-10-12FTFD	WASTE-G-B3-COMP	WASTE-G-B3-COMPFD	WASTE-G-B4-12-14FT	WASTE-G-B4-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/11/1999	10/11/1999	10/11/1999	10/12/1999	10/12/1999
Corrosivity-pH (su)		9 04	8 35		7 62
Ignitability - Flash Point		NIVO	NIVO		NIVO
pH (su)	8 09	8 9	8 8	7 03	7 6
Total Releasable Cyanide (mg/kg)		100U	100U		100U
Total Releasable Sulfide (mg/kg)		50U	50U		50U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.13
Sauget Area 1
Fill Area Composite Sample Analytical Results
Other Data

Sample Id	WASTE-H-B1-4-6FT	WASTE-H-B1-COMP	WASTE-H-B2-4-6FT	WASTE-H-B2A-4-6FT	WASTE-H-B2A-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/1/1999	10/1/1999	10/1/1999	10/5/1999	10/5/1999
Corrosivity-pH (su)		7 63			7 58
Ignitability - Flash Point		NIVO			NIVO
pH (su)	7 97	7 8	9 64	6 61	6 8
Total Releasable Cyanide (mg/kg)		100U			100U
Total Releasable Sulfide (mg/kg)		50U			50U

Table A-2.13
Sauget Area 1
Fill Area Composite Sample Analytical Results
Other Data

Sample Id	WASTE-H-B2-COMP	WASTE-H-B3-COMP	WASTE-H-B4-COMP	WASTE-HEB	WASTE-I-B1-14-16FT	WASTE-I-B1-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/1/1999	10/4/1999	10/4/1999	10/5/1999	10/14/1999	10/14/1999
Corrosivity-pH (su)	7 29	6 02	6 98			8 14
Ignitability - Flash Point	NIVO	NIVO	NIVO			NIVO
pH (su)	7 2	5 8	7 8	6 5	6 9	8 2
Total Releasable Cyanide (mg/kg)	100U	100U	100U			100U
Total Releasable Sulfide (mg/kg)	730	50U	50U			50U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.13
Sauget Area 1
Fill Area Composite Sample Analytical Results
Other Data

Sample Id	WASTE-I-B2-2-4FT	WASTE-I-B2-COMP	WASTE-I-B4-0-2FT	WASTE-I-B4-COMP	WASTE-I-B5-24-26FT
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/1999	10/15/1999	10/14/1999	10/14/1999	10/15/1999
Corrosivity-pH (su)		7.41		11.05	
Ignitability - Flash Point		NIVO		NIVO	
pH (su)	7 22	8.5	7 72	2 6	7 21
Total Releasable Cyanide (mg/kg)		100U		100U	
Total Releasable Sulfide (mg/kg)		50U		50U	

Table A-2.13
Sauget Area 1
Fill Area Composite Sample Analytical Results
Other Data

Sample Id	WASTE-I-B5-24-26FTFD	WASTE-I-B5-COMP	WASTE-I-B5-COMPFD	WASTE-L-B1-COMP	WASTE-L-B2-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/15/1999	10/15/1999	10/15/1999	9/29/1999	9/29/1999
Corrosivity-pH (su)		9 09	9 93	7 48	7 5
Ignitability - Flash Point		NIVO	NIVO	NIVO	NIVO
pH (su)	7 19	9 9	9 5	8 5	8 6
Total Releasable Cyanide (mg/kg)		100U	100U	100U	100U
Total Releasable Sulfide (mg/kg)		50U	50U	320	50U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.13
Sauget Area 1
Fill Area Composite Sample Analytical Results
Other Data

Sample Id	WASTE-L-B3-0-2FT	WASTE-L-B3-COMP	WASTE-L-B4-0-2FT	WASTE-L-B4-COMP	WASTE-M-B1-0-1 5FT
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	9/30/1999	9/30/1999	9/30/1999	9/30/1999	10/14/1999
Corrosivity-pH (su)		9 85		7 54	7 1
Ignitability - Flash Point		NIVO		NIVO	NIVO
pH (su)	9 65	9 6	7 52	8 5	9 1
Total Releasable Cyanide (mg/kg)		100U		100U	100U
Total Releasable Sulfide (mg/kg)		50U		480	50U

Table A-2.13
Sauget Area 1
Fill Area Composite Sample Analytical Results
Other Data

Sample Id	WASTE-M-B2-0-1 5FT	WASTE-M-B3-0-2FT	WASTE-M-B4-0-2FT	WASTE-M-B4-0-2FTFD	WASTE-N-B1-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	10/14/1999	10/14/1999	10/14/1999	10/14/1999	11/30/1999
Corrosivity-pH (su)	7 1	7 37	7 03	6 84	9 80
Ignitability - Flash Point	NIVO	NIVO	NIVO	NIVO	NIVO
pH (su)	8 9	8 2	8 2	8	10 40
Total Releasable Cyanide (mg/kg)	100U	100U	100U	213	100U
Total Releasable Sulfide (mg/kg)	300	160	67	450	50U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-2.13
Sauget Area 1
Fill Area Composite Sample Analytical Results
Other Data

Sample Id	WASTE-N-B2-14-16FT	WASTE-N-B2-COMP	WASTE-N-B3-2-4FT	WASTE-N-B3-2-4FTFD	WASTE-N-B3-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	12/1/1999	12/1/1999	12/1/1999	12/1/1999	12/1/1999
Corrosivity-pH (su)		7 78			7 30
Ignitability - Flash Point		NIVO			NIVO
pH (su)	7 28	9 10	7 72	7 79	8 60
Total Releasable Cyanide (mg/kg)		100U			100U
Total Releasable Sulfide (mg/kg)		50U			50U

Table A-2.13
Sauget Area 1
Fill Area Composite Sample Analytical Results
Other Data

Sample Id	WASTE-N-B3-COMPFD	WASTE-N-B4-0-2FT	WASTE-N-B4-COMP
Description	Waste - Composite	Waste - Composite	Waste - Composite
Sample Date	12/1/1999	12/2/1999	12/2/1999
Corrosivity-pH (su)	7 34		8 00
Ignitability - Flash Point	NIVO		NIVO
pH (su)	8 80	8 14	7 20
Total Releasable Cyanide (mg/kg)	100U		100U
Total Releasable Sulfide (mg/kg)	50U		50U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-GHL-S1-102-106FT	AA-GHL-S1-107-111FT	AA-GHL-S1-12-16FT	AA-GHL-S1-22-26FT	AA-GHL-S1-22-26FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	12/2/1999	11/16/1999	11/17/1999	11/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5U	5U	5 0U	5 0U	5 0U
1,1,2,2-Tetrachloroethane	5U	5U	5 0U	5 0U	5 0U
1,1,2-Trichloroethane	5U	5U	5 0U	5 0U	5 0U
1,1-Dichloroethane	5U	5U	5 0U	5 0U	5 0U
1,1-Dichloroethene	5U	5U	5 0U	5 0U	5 0U
1,2-Dichloroethane	5U	5U	5 0U	5 0U	5 0U
1,2-Dichloropropane	5U	5U	5 0U	5 0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5U	5U	5 0U	5 0U	5 0U
Bromoform	5U	5U	5 0U	5 0U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5U	5U	5 0U	5 0U	5 0U
Carbon tetrachloride	5U	5U	5 0U	5 0U	5 0U
Chlorobenzene	1 6J	0 89J	5 0U	0 88J	5 0U
Chloroethane	10U	10U	10U	10U	10U
Chloroform	5U	5U	5 0U	5 0U	5 0U
Chloromethane	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5U	5U	5 0U	0 64J	5 0U
Dibromochloromethane	5U	5U	5 0U	5 0U	5 0U
Ethylbenzene	5U	5U	5 0U	5 0U	5 0U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	0 51J
Styrene	5U	5U	5 0U	5 0U	5 0U
Tetrachloroethene	5U	5U	13	7 1	5 0U
Toluene	5U	5U	5 0U	0 85J	5 0U
Trichloroethene	2 7U	2 7U	0 50J	1 8J	2 7U
Vinyl chloride	10U	10U	10U	10U	10U
Xylenes, Total	5U	5U	5 0U	5 0U	5 0U
cis-1 3-Dichloropropene	1U	1U	1 0U	1 0U	1 0U
trans-1 3-Dichloropropene	5U	5U	5 0U	5 0U	5 0U
Total VOC's	**1 6**	**0.89**	**13.5**	**11 27**	**0 51**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-GHL-S1-22-26FTFD	AA-GHL-S1-32-36FT	AA-GHL-S1-42-46FT	AA-GHL-S1-52-56FT	AA-GHL-S1-62-66FT	AA-GHL-S1-72-76FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/17/1999	11/18/1999	11/18/1999	11/19/1999	11/29/1999	11/30/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5U	5U
1 1,2,2-Tetrachloroethane	5 0U	5 0U	5 0U	5 0U	5U	5U
1,1,2-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5U	5U
1,1-Dichloroethane	5 0U	5.0U	5 0U	5 0U	5U	5U
1,1-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5U	5U
1,2-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5U	5U
1 2-Dichloropropane	5 0U	5 0U	5 0U	5 0U	5U	5U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5 0U	5 0U	5 0U	5 0U	5U	5U
Bromoform	5 0U	5 0U	5 0U	5 0U	5U	5U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5 0U	5 0U	5 0U	5 0U	5U	5U
Carbon tetrachloride	5 0U	5 0U	5 0U	5 0U	5U	5U
Chlorobenzene	1 0J	11	20	87	270D	9 6
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5 0U	5 0U	5 0U	5 0U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	0 78J	11	5 0	1 3J	5U	5U
Dibromochloromethane	5 0U	5 0U	5 0U	5 0U	5U	5U
Ethylbenzene	5 0U	5 0U	5 0U	5 0U	5U	5U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5 0U	5 0U	5 0U	5 0U	5U	5U
Tetrachloroethene	7 8	5 0U	5 0U	5 0U	5U	5U
Toluene	0 52J	5 0U	5 0U	5 0U	5U	5U
Trichloroethene	2 0J	1 8J	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5 0U	5 0U	5 0U	5 0U	5U	5U
cis-1,3-Dichloropropene	1 0U	1 0U	1 0U	1 0U	1U	1U
trans-1,3-Dichloropropene	5 0U	5 0U	5 0U	5 0U	5U	5U
Total VOC's	**12.1**	**23.8**	**25**	**88.3**	**270**	**9 6**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-GHL-S1-82-86FT	AA-GHL-S1-92-96FT	AA-GHL-S1-92-96FTFD	AA-GHL-S2-12-16FT	AA-GHL-S2-22-26FT	AA-GHL-S2-32-36FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/30/1999	12/1/1999	12/1/1999	11/18/1999	11/18/1999	11/19/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 1 1-Trichloroethane	5U	5U	5U	5 0U	5 0U	5 0U
1 1,2,2-Tetrachloroethane	5U	5U	5U	5 0U	5 0U	5 0U
1 1,2-Trichloroethane	5U	5U	5U	5 0U	5 0U	5 0U
1,1-Dichloroethane	5U	5U	5U	5 0U	5 0U	5 0U
1,1-Dichloroethene	5U	5U	5U	5 0U	5 0U	5 0U
1,2-Dichloroethane	5U	5U	5U	5 0U	5 0U	5 0U
1,2-Dichloropropane	5U	5U	5U	5 0U	5 0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5U	5U	5U	5 0U	5 0U	5 0U
Bromoform	5U	5U	5U	5 0U	5 0U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5U	5U	5U	5 0U	5 0U	5 0U
Carbon tetrachloride	5U	5U	5U	5 0U	5 0U	5 0U
Chlorobenzene	9 3	1 5J	1 3J	5 0U	5 0U	5 0U
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5 0U	5 0U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5U	5U	5U	0 55J	1 9J	7 5
Dibromochloromethane	5U	5U	5U	5 0U	5 0U	5 0U
Ethylbenzene	5U	5U	5U	5 0U	5 0U	5 0U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5U	5U	5U	5 0U	5 0U	5 0U
Tetrachloroethene	5U	5U	5U	5 0U	5 0U	5 0U
Toluene	5U	0 54J	5U	5 0U	5 0U	5 0U
Trichloroethene	2 7U	2 7U	2 7U	0 79J	1 6J	2 5J
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5U	5U	5U	5 0U	5 0U	5 0U
cis-1,3-Dichloropropene	1U	1U	1U	1 0U	1 0U	1 0U
trans-1,3-Dichloropropene	5U	5U	5U	5 0U	5 0U	5 0U
Total VOC's	**9.3**	**2.04**	**1 3**	**1 34**	**3.5**	**10**

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-GHL-S2-32-36FTEB	AA-GHL-S2-42-46FT	AA-GHL-S2-52-56FT	AA-GHL-S2-62-66FT	AA-GHL-S2-62-66FTFD	AA-GHL-S2-72-76FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/19/1999	11/19/1999	11/29/1999	11/30/1999	11/30/1999	11/30/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5.0U	5.0U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5.0U	5.0U	5U	5U	5U	5U
1,1,2-Trichloroethane	5.0U	5.0U	5U	5U	5U	5U
1,1-Dichloroethane	5.0U	5.0U	5U	5U	5U	5U
1,1-Dichloroethene	5.0U	5.0U	5U	5U	5U	5U
1,2-Dichloroethane	5.0U	5.0U	5U	5U	5U	5U
1,2-Dichloropropane	5.0U	5.0U	5U	5U	5U	5U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	10J	50U	50U
Benzene	1.2U	1.2U	1 2U	1.2U	2 2	0 49J
Bromodichloromethane	5.0U	5.0U	5U	5U	5U	5U
Bromoform	5.0U	5 0U	5U	5U	5U	5U
Bromomethane (Methyl bromide)	9 8U	9 8U	9.8U	9.8U	9 8U	9 8U
Carbon disulfide	5 0U	5 0U	5U	5U	5U	5U
Carbon tetrachloride	5.0U	5.0U	5U	5U	5U	5U
Chlorobenzene	5.0U	5.0U	14	88	80	76
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5.0U	5.0U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5.0U	5 0	4 3J	21	19	2 2J
Dibromochloromethane	5 0U	5 0U	5U	5U	5U	5U
Ethylbenzene	5 0U	5 0U	5U	2.2J	2 3J	5U
Methylene chloride (Dichloromethane)	4.7U	4 7U	4 7U	4.7U	4 7U	4 7U
Styrene	5.0U	5.0U	5U	5U	5U	5U
Tetrachloroethene	5.0U	5.0U	8 9	1.6J	5U	5U
Toluene	5.0U	0.56J	5U	0.94J	1J	5U
Trichloroethene	2 7U	2 7U	2.7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	7.5J	7.1J	10U
Xylenes, Total	5.0U	5 0U	5U	5U	5U	5U
cis-1,3-Dichloropropene	1.0U	1.0U	1U	1U	1U	1U
trans-1,3-Dichloropropene	5 0U	5.0U	5U	5U	5U	5U
Total VOC's	**ND**	**5.56**	**27.2**	**131.24**	**111.6**	**78.69**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-GHL-S2-82-86FT	AA-GHL-S2-92-96FT	AA-GHL-S2-92-96FTEB	AA-GHL-S2-99-103FT	AA-GHL-S3-100-104FT	AA-GHL-S3-110-114FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	12/2/1999	12/2/1999	12/2/1999	12/20/1999	12/21/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1.2U	1.2U	1.2U	1.2U	1.2U	1 2U
Bromodichloromethane	5U	5U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U	5U	5U
Bromomethane (Methyl bromide)	9.8U	9.8U	9.8U	9.8U	9 8U	9.8U
Carbon disulfide	5U	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U
Chlorobenzene	19	1.5J	5U	1.4J	4.8J	0 91J
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5U	5U	5U	5U	5U	5U
Dibromochloromethane	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U
Methylene chloride (Dichloromethane)	4.7U	4.7U	4.7U	4.7U	4 7U	4 7U
Styrene	5U	5U	5U	5U	5U	5U
Tetrachloroethene	5U	5U	5U	5U	5U	5U
Toluene	5U	5U	5U	5U	5U	5U
Trichloroethene	2.7U	2.7U	2.7U	2.7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	1U	1U	1U	1U	1U	1U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U
Total VOC's	**19**	**1.5**	**ND**	**1.4**	**4.8**	**0.91**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-GHL-S3-20-24FT	AA-GHL-S3-30-34FT	AA-GHL-S3-30-34FTFD	AA-GHL-S3-40-44FT	AA-GHL-S3-50-54FT	AA-GHL-S3-60-64FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/14/1999	12/15/1999	12/15/1999	12/15/1999	12/16/1999	12/16/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5U	5U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U	5U	5U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5U	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	5U	8 8
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5U	5U	5U	5U	5U	5U
Dibromochloromethane	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5U	5U	5U	5U	5U	5U
Tetrachloroethene	5U	5U	5U	5U	5U	5U
Toluene	5U	5U	5U	5U	5U	5U
Trichloroethene	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	1U	1U	1U	1U	1U	1U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U
Total VOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**8.8**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-GHL-S3-60-64FTEB	AA-GHL-S3-70-74FT	AA-GHL-S3-80-84FT	AA-GHL-S3-90-94FT	AA-H-S1-101-105FT	AA-H-S1-101-105FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/16/1999	12/17/1999	12/17/1999	12/20/1999	3/16/2000	3/17/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5U	5U	5U	5U	5 0U	5 0U
1 1 2,2-Tetrachloroethane	5U	5U	5U	5U	5 0U	5 0U
1 1 2-Trichloroethane	5U	5U	5U	5U	5 0U	5 0U
1 1-Dichloroethane	5U	5U	5U	5U	5 0U	5 0U
1,1-Dichloroethene	5U	5U	5U	5U	5 0U	5 0U
1,2-Dichloroethane	5U	5U	5U	5U	5 0U	5 0U
1,2-Dichloropropane	5U	5U	5U	5U	5 0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	16J	50U	50U	50U	50U	50U
Benzene	0 57J	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5U	5U	5U	5U	5 0U	5 0U
Bromoform	5U	5U	5U	5U	5 0U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	28	5U	5U	5U	5 0U	5 0U
Carbon tetrachloride	5U	5U	5U	5U	5 0U	5 0U
Chlorobenzene	0 68J	14	16	9 2	14	5 0U
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5 0U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5U	5U	5U	5U	5 0U	5 0U
Dibromochloromethane	5U	5U	5U	5U	5 0U	5 0U
Ethylbenzene	5U	5U	5U	5U	5 0U	5 0U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5U	5U	5U	5U	5 0U	5 0U
Tetrachloroethene	5U	5U	5U	1 2J	5 0U	5 0U
Toluene	1 4J	0 73J	5U	5U	0 63J	5 0U
Trichloroethene	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes Total	5U	5U	5U	5U	5 0U	5 0U
cis-1 3-Dichloropropene	1U	1U	1U	1U	1 0U	1 0U
trans-1 3-Dichloropropene	5U	5U	5U	5U	5 0U	5 0U
Total VOC's	**46 65**	**14.73**	**16**	**10.4**	**14.63**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-H-S1-53-57FT	AA-H-S1-63-67FT	AA-H-S1-73-77FT	AA-H-S1-73-77FTFD	AA-H-S1-83-87FT	AA-H-S1-83-87FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/10/2000	3/10/2000	3/13/2000	3/13/2000	3/13/2000	3/14/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1,2,2-Tetrachloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1,2-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethene	3 7J	5 0U	5 0U	5 0U	5 0U	5 0U
1,2-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,2-Dichloropropane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	3 1	1 3	7 5	11	18	1 2U
Bromodichloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromoform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Carbon tetrachloride	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chlorobenzene	91	66	63	92	230D	5 0U
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5 0U	5 0U	5 0U	5 0U	0 97J	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5 0U	5 0U	0 92J	1 3J	2 1J	5 0U
Dibromochloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Ethylbenzene	13	5 0	2 0J	2 7J	3 8J	5 0U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4.7U	4 7U	4 7U	4 7U
Styrene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Tetrachloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Toluene	2 2J	0 88J	3 8J	5 7	6 5	5 0U
Trichloroethene	1 8J	2 7U	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	30	6 8	2 6J	4 9J	6 9	5 0U
cis-1,3-Dichloropropene	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
trans-1,3-Dichloropropene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Total VOC's	**144.8**	**79.98**	**79.82**	**117.6**	**268.27**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-H-S1-93-97FT	AA-I-S1-17-21FT	AA-I-S1-27-31FT	AA-I-S1-37-41FT	AA-I-S1-47-51FT	AA-I-S1-57-61FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/15/2000	12/14/1999	12/15/1999	12/15/1999	12/16/1999	12/16/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5.0U	50U	500U	500U	50U	500U
1,1,2,2-Tetrachloroethane	5.0U	50U	500U	500U	50U	500U
1,1,2-Trichloroethane	5.0U	50U	500U	500U	50U	500U
1,1-Dichloroethane	5.0U	960	500U	500U	50U	500U
1,1-Dichloroethene	5.0U	32J	500U	500U	50U	500U
1,2-Dichloroethane	5.0U	50U	500U	500U	50U	500U
1,2-Dichloropropane	5.0U	50U	500U	500U	50U	500U
2-Butanone (MEK)	25U	250U	2500U	2500U	250U	2500U
2-Hexanone	25U	250U	2500U	2500U	250U	2500U
4-Methyl-2-pentanone (MIBK)	26	250U	2500U	2500U	250U	2500U
Acetone	50U	500U	5000U	5000U	500U	5000U
Benzene	140	620	290	120U	190	120U
Bromodichloromethane	5.0U	50U	500U	500U	50U	500U
Bromoform	5.0U	50U	500U	500U	50U	500U
Bromomethane (Methyl bromide)	9.8U	98U	980U	980U	98U	980U
Carbon disulfide	5.0U	50U	500U	500U	50U	500U
Carbon tetrachloride	5.0U	50U	500U	500U	50U	500U
Chlorobenzene	600D	1600	8700	9800	9400D	20000
Chloroethane	10U	100U	1000U	1000U	100U	1000U
Chloroform	7.4	50U	500U	500U	50U	500U
Chloromethane	10U	100U	1000U	1000U	100U	1000U
Cis/Trans-1,2-Dichloroethene	17	1200	500U	500U	310	500U
Dibromochloromethane	5.0U	50U	500U	500U	50U	500U
Ethylbenzene	18	870	240J	220J	270	190J
Methylene chloride (Dichloromethane)	4.7U	47U	470U	470U	47U	470U
Styrene	5.0U	50U	500U	500U	50U	500U
Tetrachloroethene	5.0U	50U	500U	500U	50U	500U
Toluene	46	18J	500U	500U	26J	86J
Trichloroethene	2.5J	27U	270U	270U	27U	270U
Vinyl chloride	10U	970	1000U	1000U	320	1000U
Xylenes, Total	33	50U	500U	500U	23J	500U
cis-1,3-Dichloropropene	1.0U	10U	100U	100U	10U	100U
trans-1,3-Dichloropropene	5.0U	50U	500U	500U	50U	500U
Total VOC's	**889.9**	**6270**	**9230**	**10020**	**10539**	**20276**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-I-S1-67-71FT	AA-I-S1-67-71FTEB	AA-I-S1-77-81FT	AA-I-S1-87-91FT	AA-I-S1-87-91FTFD	AA-I-S1-97-101FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/17/1999	12/17/1999	12/20/1999	12/21/1999	12/21/1999	12/21/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	25U	5U	1000U	5U	5U	5U
1,1,2,2-Tetrachloroethane	25U	5U	1000U	5U	5U	5U
1,1,2-Trichloroethane	25U	5U	1000U	5U	5U	5U
1,1-Dichloroethane	25U	5U	1000U	5U	5U	5U
1,1-Dichloroethene	25U	5U	1000U	5U	5U	5U
1,2-Dichloroethane	25U	5U	1000U	5U	5U	5U
1,2-Dichloropropane	25U	5U	1000U	5U	5U	5U
2-Butanone (MEK)	120U	25U	5000U	25U	25U	25U
2-Hexanone	120U	25U	5000U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	120U	25U	5000U	25U	25U	25U
Acetone	250U	50U	10000U	50U	50U	50U
Benzene	12	1.2U	140J	74	77	50
Bromodichloromethane	25U	5U	1000U	5U	5U	5U
Bromoform	25U	5U	1000U	5U	5U	5U
Bromomethane (Methyl bromide)	49U	9.8U	2000U	9.8U	9 8U	9 8U
Carbon disulfide	25U	5U	1000U	5U	5U	5U
Carbon tetrachloride	25U	5U	1000U	5U	5U	5U
Chlorobenzene	9900D	5U	34000	280D	280D	340D
Chloroethane	50U	10U	2000U	10U	10U	10U
Chloroform	25U	5U	1000U	5U	5U	5U
Chloromethane	50U	10U	2000U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	25U	5U	1000U	1J	5U	5U
Dibromochloromethane	25U	5U	1000U	5U	5U	5U
Ethylbenzene	160	5U	1000U	71	74	32
Methylene chloride (Dichloromethane)	24U	4.7U	940U	4 7U	4 7U	4 7U
Styrene	25U	5U	1000U	5U	5U	5U
Tetrachloroethene	25U	5U	1000U	0.91J	1J	5U
Toluene	25U	0.89J	1000U	5U	0 52J	0 88J
Trichloroethene	14U	2.7U	540U	2.7U	2.7U	2 7U
Vinyl chloride	50U	10U	2000U	10U	10U	1 2J
Xylenes, Total	25U	5U	1000U	14	14	10
cis-1,3-Dichloropropene	5U	1U	200U	1U	1U	1U
trans-1,3-Dichloropropene	25U	5U	1000U	5U	5U	5U
Total VOC's	**10072**	**0.89**	**34140**	**440.91**	**446.52**	**434.08**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-I-S2-16-20FT	AA-I-S2-26-30FT	AA-I-S2-36-40FT	AA-I-S2-46-50FT	AA-I-S2-56-60FT	AA-I-S2-66-70FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/3/1999	12/6/1999	12/7/1999	12/7/1999	12/8/1999	12/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	25U	100U	500U	500U	100U	100U
1,1,2,2-Tetrachloroethane	25U	100U	500U	500U	100U	100U
1,1,2-Trichloroethane	25U	100U	500U	500U	100U	100U
1,1-Dichloroethane	180	160	500U	500U	100U	27J
1,1-Dichloroethene	31	100U	500U	500U	100U	100U
1,2-Dichloroethane	25U	100U	500U	500U	100U	100U
1,2-Dichloropropane	25U	100U	500U	500U	100U	100U
2-Butanone (MEK)	120U	500U	2500U	2500U	500U	500U
2-Hexanone	120U	500U	2500U	2500U	500U	500U
4-Methyl-2-pentanone (MIBK)	120U	500U	2500U	2500U	500U	500U
Acetone	250U	1000U	5000U	5000U	1000U	1000U
Benzene	2 5J	120	250	300	200	270
Bromodichloromethane	25U	100U	500U	500U	100U	100U
Bromoform	25U	100U	500U	500U	100U	100U
Bromomethane (Methyl bromide)	49U	200U	980U	980U	200U	200U
Carbon disulfide	25U	100U	500U	500U	100U	100U
Carbon tetrachloride	25U	100U	500U	500U	100U	100U
Chlorobenzene	120	3200	12000	19000	13000D	12000D
Chloroethane	50U	200U	1000U	1000U	200U	200U
Chloroform	25U	100U	500U	500U	100U	100U
Chloromethane	50U	200U	1000U	1000U	200U	200U
Cis/Trans-1,2-Dichloroethene	510	300	160J	500U	100U	100U
Dibromochloromethane	25U	100U	500U	500U	100U	100U
Ethylbenzene	25U	210	500U	500U	37J	47J
Methylene chloride (Dichloromethane)	24U	94U	470U	470U	94U	94U
Styrene	25U	100U	500U	500U	100U	100U
Tetrachloroethene	7 4J	100U	500U	500U	81J	83J
Toluene	25U	100U	500U	500U	100U	100U
Trichloroethene	180	54U	270U	270U	54U	26J
Vinyl chloride	160	240	1000U	1000U	200U	17J
Xylenes, Total	25U	100U	500U	500U	100U	100U
cis-1,3-Dichloropropene	5U	20U	100U	100U	20U	20U
trans-1,3-Dichloropropene	25U	100U	500U	500U	100U	100U
Total VOC's	**1190 9**	**4230**	**12410**	**19300**	**13318**	**12470**

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-I-S2-76-80FT	AA-I-S2-76-80FTEB	AA-I-S2-76-80FTFD	AA-I-S2-86-90FT	AA-I-S2-96-100FT	AA-I-S3-104-108FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/10/1999	12/10/1999	12/10/1999	12/13/1999	12/13/1999	12/13/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	100U	5.0U	100U	120U	120U	120U
1,1,2,2-Tetrachloroethane	100U	5.0U	100U	120U	120U	120U
1,1,2-Trichloroethane	100U	5.0U	100U	120U	120U	120U
1,1-Dichloroethane	100U	5.0U	100U	120U	120U	120U
1,1-Dichloroethene	100U	5.0U	100U	120U	120U	120U
1,2-Dichloroethane	100U	5.0U	100U	120U	120U	120U
1,2-Dichloropropane	100U	5.0U	100U	120U	120U	120U
2-Butanone (MEK)	500U	25U	500U	620U	620U	620U
2-Hexanone	500U	25U	500U	620U	620U	620U
4-Methyl-2-pentanone (MIBK)	500U	25U	500U	620U	620U	620U
Acetone	1000U	50U	1000U	1200U	1200U	1200U
Benzene	120	1.2U	120	60	50	52
Bromodichloromethane	100U	5.0U	100U	120U	120U	120U
Bromoform	100U	5.0U	100U	120U	120U	120U
Bromomethane (Methyl bromide)	200U	9.8U	200U	240U	240U	240U
Carbon disulfide	100U	5.0U	100U	120U	120U	120U
Carbon tetrachloride	100U	5 0U	100U	120U	120U	120U
Chlorobenzene	11000D	2.2J	9200D	7300D	3300	4900D
Chloroethane	200U	10U	200U	250U	250U	250U
Chloroform	100U	5.0U	100U	120U	120U	120U
Chloromethane	200U	10U	200U	250U	250U	250U
Cis/Trans-1,2-Dichloroethene	100U	5.0U	100U	120U	120U	120U
Dibromochloromethane	100U	5.0U	100U	120U	120U	120U
Ethylbenzene	100U	5 0U	100U	120U	120U	120U
Methylene chloride (Dichloromethane)	94U	4.7U	94U	120U	120U	120U
Styrene	100U	5.0U	100U	120U	120U	120U
Tetrachloroethene	100U	5.0U	66J	120U	120U	120U
Toluene	100U	5.0U	100U	120U	120U	120U
Trichloroethene	54U	2.7U	54U	68U	68U	91
Vinyl chloride	200U	10U	200U	250U	250U	250U
Xylenes, Total	100U	5.0U	100U	120U	120U	120U
cis-1,3-Dichloropropene	20U	1.0U	20U	25U	25U	25U
trans-1,3-Dichloropropene	100U	5.0U	100U	120U	120U	120U
Total VOC's	**11120**	**2.2**	**9386**	**7360**	**3350**	**5043**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-I-S3-110-114FT	AA-I-S3-24-28FT	AA-I-S3-34-38FT	AA-I-S3-44-48FT	AA-I-S3-54-58FT	AA-I-S3-64-68FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/14/1999	12/3/1999	12/6/1999	12/6/1999	12/7/1999	12/7/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	25U	5U	5U	10U	50U	50U
1,1,2,2-Tetrachloroethane	25U	5U	5U	10U	50U	50U
1,1,2-Trichloroethane	25U	5U	5U	10U	50U	50U
1,1-Dichloroethane	25U	5U	3.2J	26	150	78
1,1-Dichloroethene	25U	5U	2.1J	46	330	9 8J
1,2-Dichloroethane	25U	5U	5U	10U	50U	50U
1,2-Dichloropropane	25U	5U	5U	10U	50U	50U
2-Butanone (MEK)	120U	25U	25U	50U	250U	250U
2-Hexanone	120U	25U	25U	50U	250U	250U
4-Methyl-2-pentanone (MIBK)	120U	25U	25U	50U	250U	250U
Acetone	250U	50U	50U	100U	500U	500U
Benzene	23	1.2U	1.2U	4.9	45	74
Bromodichloromethane	25U	5U	5U	10U	50U	50U
Bromoform	25U	5U	5U	10U	50U	50U
Bromomethane (Methyl bromide)	49U	9.8U	9.8U	20U	98U	98U
Carbon disulfide	25U	5U	5U	10U	50U	50U
Carbon tetrachloride	25U	5U	5U	10U	50U	50U
Chlorobenzene	700	5U	0.68J	22	350	1800
Chloroethane	50U	10U	10U	20U	100U	100U
Chloroform	25U	5U	5U	10U	50U	50U
Chloromethane	50U	10U	10U	20U	100U	100U
Cis/Trans-1,2-Dichloroethene	25U	5U	25	210	1400	69
Dibromochloromethane	25U	5U	5U	10U	50U	50U
Ethylbenzene	25U	5U	5U	10U	50U	8 6J
Methylene chloride (Dichloromethane)	24U	4.7U	4.7U	9.4U	47U	47U
Styrene	25U	5U	5U	10U	50U	50U
Tetrachloroethene	25U	5U	5U	10U	50U	50U
Toluene	2.7J	5U	0.94J	10U	50U	50U
Trichloroethene	14U	2.7U	2.7U	2.3J	27U	27U
Vinyl chloride	50U	10U	10U	5J	39J	190
Xylenes, Total	25U	5U	5U	10U	50U	50U
cis-1,3-Dichloropropene	5U	1U	1U	2U	10U	10U
trans-1,3-Dichloropropene	25U	5U	5U	10U	50U	50U
Total VOC's	**725.7**	**ND**	**31.92**	**316.2**	**2314**	**2229.4**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-I-S3-74-78FT	AA-I-S3-84-88FT	AA-I-S3-84-88FTEB	AA-I-S3-84-88FTFD	AA-I-S3-94-98FT	AA-I-S4-56-60FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/8/1999	12/9/1999	12/10/1999	12/9/1999	12/10/1999	3/7/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	50U	50U	5 0U	50U	250U	5 0U
1,1,2,2-Tetrachloroethane	50U	50U	5 0U	50U	250U	5 0U
1,1,2-Trichloroethane	50U	50U	5 0U	50U	250U	5 0U
1,1-Dichloroethane	64	34J	5 0U	32J	250U	5 0U
1,1-Dichloroethene	50U	50U	5 0U	50U	250U	5 0U
1,2-Dichloroethane	50U	50U	5 0U	50U	250U	5 0U
1,2-Dichloropropane	50U	50U	5 0U	50U	250U	5 0U
2-Butanone (MEK)	250U	250U	25U	250U	1200U	25U
2-Hexanone	250U	250U	25U	250U	1200U	25U
4-Methyl-2-pentanone (MIBK)	250U	250U	25U	250U	1200U	25U
Acetone	500U	500U	50U	500U	2500U	50U
Benzene	72	68	1 2U	69	53J	1 2U
Bromodichloromethane	50U	50U	5 0U	50U	250U	5 0U
Bromoform	50U	50U	5 0U	50U	250U	5 0U
Bromomethane (Methyl bromide)	98U	98U	9 8U	98U	490U	9 8U
Carbon disulfide	50U	50U	5 0U	50U	250U	5 0U
Carbon tetrachloride	50U	50U	5 0U	50U	250U	5 0U
Chlorobenzene	3300D	5500D	5 0U	5600D	5100	14
Chloroethane	100U	100U	10U	100U	500U	10U
Chloroform	50U	50U	5 0U	50U	250U	5 0U
Chloromethane	100U	100U	10U	100U	500U	10U
Cis/Trans-1,2-Dichloroethene	50U	50U	5 0U	50U	250U	5 0U
Dibromochloromethane	50U	50U	5 0U	50U	250U	5 0U
Ethylbenzene	50U	50U	5 0U	50U	250U	5 0U
Methylene chloride (Dichloromethane)	47U	47U	4 7U	47U	240U	4 7U
Styrene	50U	50U	5 0U	50U	250U	5 0U
Tetrachloroethene	24J	32J	5 0U	50U	250U	5 0U
Toluene	50U	50U	5 0U	50U	250U	5 0U
Trichloroethene	27U	27U	2 7U	27U	140U	2 7U
Vinyl chloride	130	43J	10U	42J	500U	10U
Xylenes, Total	50U	50U	5 0U	50U	250U	5 0U
cis-1,3-Dichloropropene	10U	10U	1 0U	10U	50U	1 0U
trans-1 3-Dichloropropene	50U	50U	5 0U	50U	250U	5 0U
Total VOC's	**3590**	**5677**	**ND**	**5743**	**5153**	**14**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-I-S4-56-60FTFD	AA-I-S4-66-70FT	AA-I-S4-76-80FT	AA-I-S4-86-90FT	AA-I-S4-96-100FT	AA-SW-S1-101-104FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/7/2000	3/7/2000	3/8/2000	3/8/2000	3/9/2000	11/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1 1-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5U
1,1,2,2-Tetrachloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5U
1,1,2-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5U
1,1-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5U
1,1-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5U
1,2-Dichloroethane	5 0U	5 0U	5 0U	5U	5 0U	5U
1,2-Dichloropropane	5 0U	5 0U	5 0U	5 0U	5 0U	5U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	32	97	1 2U
Bromodichloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5U
Bromoform	5 0U	5 0U	5 0U	5 0U	5 0U	5U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5 0U	5 0U	5 0U	5 0U	5 0U	5U
Carbon tetrachloride	5 0U	5 0U	5 0U	5 0U	5 0U	5U
Chlorobenzene	13	5 0U	5 0U	1 1J	5 0U	5U
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5 0U	5 0U	5 0U	5 0U	5 0U	5U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5U
Dibromochloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5U
Ethylbenzene	5 0U	5 0U	5 0U	5 0U	48	5U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5 0U	5 0U	5 0U	5 0U	5 0U	5U
Tetrachloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5U
Toluene	5 0U	0 72J	5 0U	5 0U	5 0U	5U
Trichloroethene	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5 0U	5 0U	5 0U	5U	18	5U
cis-1,3-Dichloropropene	1 0U	1 0U	1 0U	1 0U	1 0U	1U
trans-1 3-Dichloropropene	5 0U	5 0U	5 0U	5 0U	5 0U	5U
Total VOC's	**13**	**0.72**	**ND**	**33.1**	**163**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-SW-S1-101-104FTFD	AA-SW-S1-14-16FT	AA-SW-S1-24-26FT	AA-SW-S1-34-36FT	AA-SW-S1-42-46FT	AA-SW-S1-52-56FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/8/1999	11/1/1999	11/2/1999	11/2/1999	11/3/1999	11/3/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	28J	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5U	5U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U	5U	5U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5U	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	15	9 6
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5U	5U	5U	1 1J	1 4J	0 65J
Dibromochloromethane	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5U	5U	5U	5U	5U	5U
Tetrachloroethene	5U	5U	5U	5U	5U	5U
Toluene	5U	5U	5U	5U	5U	5U
Trichloroethene	0 33J	2 7U	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	1U	1U	1U	1U	1U	1U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U
Total VOC's	**0.33**	**ND**	**28**	**1.1**	**16.4**	**10.25**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-SW-S1-62-66FT	AA-SW-S1-72-76FT	AA-SW-S1-82-86FT	AA-SW-S1-91-95FT	AA-SW-S2-102-106FT	AA-SW-S2-14-16FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/4/1999	11/4/1999	11/5/1999	11/5/1999	11/15/1999	11/9/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5U	5U	5U	5U	5.0U	5 0U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5.0U	5 0U
1,1,2-Trichloroethane	5U	5U	5U	5U	5.0U	5 0U
1,1-Dichloroethane	5U	5U	5U	5U	5.0U	5 0U
1,1-Dichloroethene	5U	5U	5U	5U	5.0U	5 0U
1,2-Dichloroethane	5U	5U	5U	5U	5 0U	5 0U
1,2-Dichloropropane	5U	5U	5U	5U	5.0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1.2U	1 2U	1.2U	1.2U	1 2U	1 2U
Bromodichloromethane	5U	5U	5U	5U	5 0U	5 0U
Bromoform	5U	5U	5U	5U	5.0U	5 0U
Bromomethane (Methyl bromide)	9.8U	9.8U	9.8U	9 8U	9 8U	9 8U
Carbon disulfide	5U	5U	5U	5U	5 0U	5 0U
Carbon tetrachloride	5U	5U	5U	5U	5 0U	5 0U
Chlorobenzene	9.3	6 7	5U	5U	5 0U	5 0U
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5.0U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5U	5U	5U	5U	5.0U	5 0U
Dibromochloromethane	5U	5U	5U	5U	5 0U	5 0U
Ethylbenzene	5U	5U	5U	5U	5 0U	5 0U
Methylene chlonde (Dichloromethane)	4.7U	4.7U	4 7U	4.7U	4.7U	4 7U
Styrene	5U	5U	5U	5U	5.0U	5 0U
Tetrachloroethene	5U	5U	5U	5U	5.0U	5.0U
Toluene	5U	0.81J	5U	0.54J	5.0U	5 0U
Trichloroethene	2 7U	2.7U	2.7U	2.7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5U	5U	5U	5U	5 0U	5 0U
cis-1,3-Dichloropropene	1U	1U	1U	1U	1 0U	1 0U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5 0U	5 0U
Total VOC's	**9.3**	**7.51**	**ND**	**0.54**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-SW-S2-22-26FT	AA-SW-S2-32-36FT	AA-SW-S2-42-46FT	AA-SW-S2-52-56FT	AA-SW-S2-62-66FT	AA-SW-S2-62-66FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/9/1999	11/9/1999	11/10/1999	11/10/1999	11/10/1999	11/10/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1,2,2-Tetrachloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1,2-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,2-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,2-Dichloropropane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromoform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Carbon tetrachloride	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chlorobenzene	5 0U	5 0U	12	10	8 4	7 2
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5 0U	0 44J	5 0U	0 52J	5 0U	5 0U
Dibromochloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Ethylbenzene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Tetrachloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Toluene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Trichloroethene	2 7U	2 7U	2 7U	2 7U	0 32J	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
cis-1,3-Dichloropropene	1 0U	1 0U		1 0U	1 0U	1 0U
trans-1,3-Dichloropropene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Total VOC's	**ND**	**0.44**	**12**	**10.52**	**8 72**	**7 2**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-SW-S2-72-76FT	AA-SW-S2-72-76FTEB	AA-SW-S2-82-86FT	AA-SW-S2-92-96FT	AA-SW-S3-14-16FT	AA-SW-S3-22-26FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/12/1999	11/10/1999	11/10/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
1,1,2,2-Tetrachloroethane	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
1,1,2-Trichloroethane	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
1,1-Dichloroethane	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
1,1-Dichloroethene	0.57J	5.0U	5.0U	5.0U	5.0U	5.0U
1,2-Dichloroethane	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
1,2-Dichloropropane	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	0.60J	1.2U	1.2U	1.2U	1.2U	1.2U
Bromodichloromethane	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Bromoform	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Bromomethane (Methyl bromide)	9.8U	9.8U	9.8U	9.8U	9.8U	9.8U
Carbon disulfide	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Carbon tetrachloride	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Chlorobenzene	4.7J	5.0U	0.93J	5.0U	5.0U	5.0U
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Dibromochloromethane	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Ethylbenzene	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Methylene chloride (Dichloromethane)	4.7U	4.7U	4.7U	4.7U	4.7U	4.7U
Styrene	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Tetrachloroethene	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Toluene	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Trichloroethene	0.64J	2.7U	2.7U	2.7U	2.7U	0.34J
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
cis-1,3-Dichloropropene	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
trans-1,3-Dichloropropene	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
Total VOC's	**6.51**	**ND**	**0.93**	**ND**	**ND**	**0.34**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-SW-S3-32-36FT	AA-SW-S3-42-46FT	AA-SW-S3-52-56FT	AA-SW-S3-62-66FT	AA-SW-S3-72-76FT	AA-SW-S3-82-86FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/11/1999	11/11/1999	11/12/1999	11/12/1999	11/15/1999	11/15/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1,2,2-Tetrachloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1,2-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethene	5 0U	5 0U	0 80J	5 0U	5 0U	5 0U
1,2-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,2-Dichloropropane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1 2U	3 3	3 0	1 2U	1 2U	1 2U
Bromodichloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromoform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Carbon tetrachloride	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chlorobenzene	5 0U	34	1 0J	5 0U	5 0U	5 0U
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5 0U	0 67J	5 0U	5 0U	5 0U	5 0U
Dibromochloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Ethylbenzene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Tetrachloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Toluene	5 0U	5 0U	0 99J	5 0U	5 0U	5 0U
Trichloroethene	2 7U	2 7U	0 75J	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
cis-1,3-Dichloropropene	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
trans-1 3-Dichloropropene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Total VOC's	**ND**	**37.97**	**6.54**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	AA-SW-S3-92-96FT	AA-SW-S3-96-99FT	AA-SW-S3-96-99FTEB	AA-SW-S3-96-99FTFD	BR-G	BR-GEB	BR-GFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Bedrock GW	Bedrock GW	Bedrock GW
Sample Date	11/16/1999	11/17/1999	11/17/1999	11/17/1999	5/1/2000	5/2/2000	5/1/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1,2,2-Tetrachloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1,2-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,2-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,2-Dichloropropane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	50	25U	52
Acetone	50U	50U	50U	50U	38J	50U	41J
Benzene	1 2U	1 2U	1 2U	1 2U	55	1 2U	53
Bromodichloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromoform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5 0U	5 0U	5 0U	5 0U	5J	5 0U	1 5J
Carbon tetrachloride	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chlorobenzene	5 0U	5 0U	5 0U	5 0U	86	5 0U	85
Chloroethane	10U	10U	10U	10U	10U	10U	10U
Chloroform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Dibromochloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Ethylbenzene	5 0U	5 0U	5 0U	5 0U	5 3	5 0U	5 9
Methylene chloride (Dichloromethane)	4 7U	4 7U	0 52J	4 7U	4 7U	4 7U	4 7U
Styrene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Tetrachloroethene	5 0U	5 0U	5 0U	5 0U	5 4	5 0U	5 7
Toluene	5 0U	0 81J	2 6J	5 0U	6 0	5 0U	5 4
Trichloroethene	2 7U	2 7U	2 7U	2 7U	0 64J	2 7U	0 78J
Vinyl chloride	10U	10U	10U	10U	10U	10U	10U
Xylenes Total	5 0U	3 7J	3 8J	5 0U	5 0U	5 0U	5 0U
cis-1 3-Dichloropropene	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
trans-1 3-Dichloropropene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Total VOC's	**ND**	**4.51**	**6.92**	**ND**	**251 34**	**ND**	**250 28**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	BR-H	BR-I	DW-MCDO-1	DW-MCDO-1FD	DW-SCHM-1	DW-SETT-1	DW-WRIG-1
Description	Bedrock GW	Bedrock GW	Domestic Well GW	Domestic Well GW	Domestic Well GW	Domestic Well GW	Domestic Well GW
Sample Date	5/1/2000	4/25/2000	10/21/1999	10/21/1999	10/22/1999	10/21/1999	10/21/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5.0U	25U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5.0U	25U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5.0U	25U	5U	5U	5U	5U	5U
1,1-Dichloroethane	5.0U	25U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5.0U	25U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5.0U	25U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5.0U	25U	5U	5U	5U	5U	5U
2-Butanone (MEK)	25U	120U	25U	25U	25U	25U	25U
2-Hexanone	25U	120U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	120U	25U	25U	25U	25U	25U
Acetone	100	250U	50U	50U	50U	50U	50U
Benzene	9.4	63	1.2U	1 2U	1.2U	1.2U	1 2U
Bromodichloromethane	5.0U	25U	5U	5U	5U	5U	5U
Bromoform	5.0U	25U	5U	5U	5U	5U	5U
Bromomethane (Methyl bromide)	9.8U	49U	9.8UJ	9 8UJ	9.8U	9.8UJ	9 8UJ
Carbon disulfide	5.0U	25U	5U	12	5U	1 5J	5U
Carbon tetrachloride	5.0U	25U	5U	5U	5U	5U	5U
Chlorobenzene	110	240	5U	5U	5U	5U	5U
Chloroethane	10U	50U	10U	10U	10U	10U	10U
Chloroform	5.0U	25U	5U	5U	5U	5U	5U
Chloromethane	10U	50U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5.0U	25U	5U	5U	5U	5U	5U
Dibromochloromethane	5.0U	25U	5U	5U	5U	5U	5U
Ethylbenzene	0 98J	390	5U	5U	5U	5U	5U
Methylene chloride (Dichloromethane)	4.7U	4.7U	4.7U	4.7U	4.7U	4.7U	4 7U
Styrene	5.0U	25U	5U	5U	5U	5U	5U
Tetrachloroethene	5.0U	20J	5U	5U	5U	5U	5U
Toluene	3.9J	44	0.59J	0 68J	5U	5U	5U
Trichloroethene	2.7U	3.7J	2.7U	2.7U	2.7U	2.7U	2 7U
Vinyl chloride	10U	50U	10U	10U	10U	10U	10U
Xylenes, Total	5.0U	36	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	1.0U	5.0U	1U	1U	1U	1U	1U
trans-1,3-Dichloropropene	5.0U	25U	5U	5U	5U	5U	5U
Total VOC's	**224.28**	**796.7**	**0.59**	**12.68**	**ND**	**1.5**	**ND**

Notes. U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	EE-01	EE-02-GP	EE-02-GPFD	EE-03	EE-05	EE-05EB	EE-12-GP	EE-13-GP	EE-14-GP	EE-15-GP
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/12/1999	11/4/1999	11/4/1999	10/12/1999	10/13/1999	10/13/1999	11/5/1999	11/4/1999	11/5/1999	11/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
1,1,2,2-Tetrachloroethane	12J	250U	500U	5U	50U	5U	25U	5U	120U	10U
1,1,2-Trichloroethane	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
1,1-Dichloroethane	100U	250U	500U	5U	50U	5U	25U	5U	120U	11
1,1-Dichloroethene	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
1,2-Dichloroethane	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
1,2-Dichloropropane	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
2-Butanone (MEK)	500U	1200U	2500U	25U	250U	25U	120U	25U	620U	50U
2-Hexanone	500U	1200U	2500U	25U	250U	25U	120U	25U	620U	50U
4-Methyl-2-pentanone (MIBK)	500U	1200U	2500U	25U	250U	25U	120U	25U	620U	50U
Acetone	1000U	2500U	490J	50U	500U	50U	250U	50U	1200U	100U
Benzene	1500	2200	2300	1 2U	110	1.2U	680	1 2U	750	4
Bromodichloromethane	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
Bromoform	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
Bromomethane (Methyl bromide)	200U	490U	980U	9 8U	98U	9.8U	49U	9 8U	240U	20U
Carbon disulfide	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
Carbon tetrachloride	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
Chlorobenzene	1200	4100	4600	14	620	5U	1400D	5U	3800	200
Chloroethane	200U	500U	1000U	10U	100U	10U	50U	10U	250U	20U
Chloroform	100U	410	440J	5U	50U	5U	25U	5U	120U	10U
Chloromethane	200U	500U	1000U	10U	100U	10U	50U	10U	250U	20U
Cis/Trans-1,2-Dichloroethene	100U	250U	500U	5U	42J	5U	25U	5U	160	66
Dibromochloromethane	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
Ethylbenzene	1800	250U	500U	5U	50U	5U	4 6J	5U	83J	10U
Methylene chloride (Dichloromethane)	94U	240U	470U	4 7U	47U	4 7U	24U	4 7U	120U	9 4U
Styrene	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
Tetrachloroethene	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
Toluene	94J	1500	1600	5U	970	5U	5J	5U	42J	10U
Trichloroethene	54U	40J	59J	2 7U	18J	2 7U	14U	2 7U	68U	0 59J
Vinyl chloride	200U	500U	1000U	10U	100U	10U	50U	10U	250U	20U
Xylenes, Total	200	250U	500U	5U	50U	5U	14J	5U	120U	10U
cis-1,3-Dichloropropene	20U	50U	100U	1U	10U	1U	5U	1U	25U	2U
trans-1,3-Dichloropropene	100U	250U	500U	5U	50U	5U	25U	5U	120U	10U
Total VOC's	**4806**	**8250**	**9489**	**14**	**1760**	**ND**	**2103.6**	**ND**	**4835**	**281.59**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	EE-15-GPFD	EEG-101	EEG-102	EEG-103-GP	EEG-104	EEG-105-GP	EEG-106	EEG-107	EEG-109	EEG-110
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	11/8/1999	10/8/1999	10/7/1999	11/3/1999	10/8/1999	11/2/1999	10/7/1999	10/7/1999	10/11/1999	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
1,1,2,2-Tetrachloroethane	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
1,1,2-Trichloroethane	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
1,1-Dichloroethane	11	5U	5U	5U	5U	5U	5U	25U	5U	5U
1,1-Dichloroethene	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
1,2-Dichloroethane	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
1,2-Dichloropropane	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
2-Butanone (MEK)	50U	25U	25U	25U	25U	25U	25U	120U	25U	25U
2-Hexanone	50U	25U	25U	25U	25U	25U	25U	120U	25U	25U
4-Methyl-2-pentanone (MIBK)	50U	25U	25U	25U	25U	25U	25U	1300	50	25U
Acetone	100U	50U	50U	50U	50U	50U	50U	590	50U	50U
Benzene	3.8	1.2U	1.2U	1.2U	1.2U	1.2U	9.3	3700D	44	1 2U
Bromodichloromethane	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
Bromoform	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
Bromomethane (Methyl bromide)	20U	9.8U	9.8U	9.8U	9.8U	9.8U	9.8U	49U	9.8U	9 8U
Carbon disulfide	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
Carbon tetrachloride	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
Chlorobenzene	190	5U	11	5U	5U	5U	180	4300D	2.8J	5U
Chloroethane	20U	10U	10U	10U	10U	10U	10U	50U	10U	10U
Chloroform	10U	5U	5U	5U	5U	5U	5U	25U	76	5U
Chloromethane	20U	10U	10U	10U	10U	10U	10U	50U	10U	10U
Cis/Trans-1,2-Dichloroethene	62	5U	5U	5U	5U	5U	5U	190	5U	5U
Dibromochloromethane	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
Ethylbenzene	10U	5U	5U	5U	5U	5U	5U	32	5U	5UJ
Methylene chloride (Dichloromethane)	9.4U	4.7U	4.7U	4.7U	4.7U	4.7U	4.7U	24U	3.6J	3.2J
Styrene	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
Tetrachloroethene	10U	5U	5U	5U	5U	5U	5U	170	5U	5U
Toluene	10U	5U	5U	5U	5U	5U	5U	8500D	5U	5U
Trichloroethene	0.72J	2.7U	2.7U	2.7U	2.7U	2.7U	2.7U	200	1.6J	2.7U
Vinyl chloride	20U	10U	10U	10U	10U	10U	10U	41J	10U	10U
Xylenes, Total	10U	5U	5U	5U	5U	5U	5U	130	3 8J	5U
cis-1,3-Dichloropropene	2U	1U	1U	1U	1U	1U	1U	5U	1U	1U
trans-1,3-Dichloropropene	10U	5U	5U	5U	5U	5U	5U	25U	5U	5U
Total VOC's	**267.52**	**ND**	**11**	**ND**	**ND**	**ND**	**189.3**	**19153**	**181.8**	**3.2**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	EEG-111-GP	EEG-112	SGW-S1-15FT	SGW-S1-20FT	SGW-S1-40FT	SGW-S1-40FTFD
Description	Fill Area GW	Fill Area GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW
Sample Date	11/3/1999	10/8/1999	10/14/1999	10/14/1999	10/14/1999	10/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5U	5U	5.0U	5.0U	5.0U	5 0U
1,1,2,2-Tetrachloroethane	5U	5U	5.0U	5.0U	5.0U	5 0U
1,1,2-Trichloroethane	5U	5U	5.0U	5.0U	5.0U	5 0U
1,1-Dichloroethane	5U	5U	5.0U	5.0U	5.0U	5 0U
1,1-Dichloroethene	5U	5U	5.0U	5.0U	5.0U	5 0U
1,2-Dichloroethane	5U	5U	5.0U	5.0U	5.0U	5 0U
1,2-Dichloropropane	5U	5U	5.0U	5.0U	5.0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1.2U	1.9	1.2U	1.2U	1 2U	1 2U
Bromodichloromethane	5U	5U	5.0U	5.0U	5.0U	5 0U
Bromoform	5U	5U	5.0U	5.0U	5.0U	5 0U
Bromomethane (Methyl bromide)	9.8U	9.8U	9.8U	9.8U	9.8U	9 8U
Carbon disulfide	5U	5U	5.0U	5.0U	5.0U	5 0U
Carbon tetrachloride	5U	5U	5.0U	5.0U	5.0U	5 0U
Chlorobenzene	5U	2.8J	5.0U	5.0U	5.0U	5 0U
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5.0U	5 0U	5.0U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5U	5U	5.0U	5.0U	5.0U	5 0U
Dibromochloromethane	5U	5U	5.0U	5.0U	5.0U	5 0U
Ethylbenzene	5U	5U	5.0U	5.0U	5.0U	5 0U
Methylene chloride (Dichloromethane)	4.7U	4.7U	4.7U	4.7U	4 7U	4 7U
Styrene	5U	5U	5.0U	5.0U	5.0U	5 0U
Tetrachloroethene	5U	5U	5.0U	5.0U	5.0U	5 0U
Toluene	5U	5U	5.0U	5.0U	5.0U	5 0U
Trichloroethene	2.7U	2.7U	2.7U	2.7U	2.7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5U	5U	5.0U	5.0U	5.0U	5 0U
cis-1,3-Dichloropropene	1U	1U	1.0U	1.0U	1.0U	1 0U
trans-1,3-Dichloropropene	5U	5U	5.0U	5.0U	5.0U	5 0U
Total VOC's	**ND**	**4.7**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	SGW-S2-15FT	SGW-S2-20FT	SGW-S2-40FT	TS-S1-0HR	TS-S1-12HR	TS-S1-12HRFD
Description	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Time Series GW	Time Series GW	Time Series GW
Sample Date	10/15/1999	10/15/1999	10/15/1999	3/29/2000	3/29/2000	3/29/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1 1,2,2-Tetrachloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1,2-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,2-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,2-Dichloropropane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromoform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Carbon tetrachloride	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chlorobenzene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chloroethane	10U	10U	10U	10U	10U	10U
Chloroform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Dibromochloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Ethylbenzene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Tetrachloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Toluene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Trichloroethene	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
cis-1 3-Dichloropropene	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
trans-1 3-Dichloropropene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Total VOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	TS-S1-24HR	TS-S2-0HR	TS-S2-12HR	TS-S2-24HR	UGGW-EE-04	UGGW-EE-04-100FT	UGGW-EE-04-100FTFD
Description	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	3/30/2000	3/29/2000	3/29/2000	3/30/2000	10/13/1999	1/27/2000	1/27/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5 0U	5.0U	5 0U	5 0U	5U	5 0U	5 0U
1,1,2,2-Tetrachloroethane	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
1,1,2-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
1,1-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
1,1-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
1,2-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
1,2-Dichloropropane	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U	6 4	6 7
Bromodichloromethane	5 0U	5.0U	5 0U	5 0U	5U	5 0U	5 0U
Bromoform	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5 0U	5.0U	5 0U	5 0U	5U	5 0U	5 0U
Carbon tetrachloride	5 0U	5.0U	5 0U	5 0U	5U	5 0U	5 0U
Chlorobenzene	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
Chloroethane	10U	10U	10U	10U	10U	10U	10U
Chloroform	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
Dibromochloromethane	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
Ethylbenzene	5 0U	5 0U	5 0U	5 0U	5U	1 6J	1 6J
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
Tetrachloroethene	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
Toluene	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
Trichloroethene	2 7U	2 7U	0 64J	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U	10U
Xylenes, Total	5 0U	5 0U	5 0U	5 0U	5U	11	11
cis-1 3-Dichloropropene	1 0U	1 0U	1 0U	1 0U	1U	1 0U	1 0U
trans-1 3-Dichloropropene	5 0U	5 0U	5 0U	5 0U	5U	5 0U	5 0U
Total VOC's	**ND**	**ND**	**0.64**	**ND**	**ND**	**19**	**19.3**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	UGGW-EE-04-60FT	UGGW-EE-04FD	UGGW-EE-20	UGGW-EE-20-100FT	UGGW-EE-20-60FT	UGGW-EEG-108
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	10/13/1999	10/13/1999	10/18/1999	1/25/2000	1/24/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1,1-Trichloroethane	5U	5U	5U	5.0U	5 0U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5 0U	5 0U	5U
1,1,2-Trichloroethane	5U	5U	5U	5 0U	5 0U	5U
1,1-Dichloroethane	5U	5U	5U	5 0U	5.0U	5U
1,1-Dichloroethene	5U	5U	5U	5 0U	5 0U	5U
1,2-Dichloroethane	5U	5U	5U	5 0U	5 0U	5U
1,2-Dichloropropane	5U	5U	5U	5 0U	5 0U	5U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5U	5U	5U	5 0U	5 0U	5U
Bromoform	5U	5U	5U	5 0U	5 0U	5U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8UJ	9 8U	9 8U	9 8U
Carbon disulfide	5U	5U	5U	5 0U	5 0U	13
Carbon tetrachloride	5U	5U	5U	5 0U	5 0U	5U
Chlorobenzene	5U	5U	5U	5 0U	5 0U	5U
Chloroethane	10U	10U	10U	10U	10UJ	10U
Chloroform	5U	5U	5U	5 0U	5 0U	5U
Chloromethane	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5U	5U	5U	5 0U	5 0U	5U
Dibromochloromethane	5U	5U	5U	5 0U	5 0U	5U
Ethylbenzene	5U	5U	5U	5 0U	5 0U	5U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5U	5U	5U	5 0U	5 0U	5U
Tetrachloroethene	5U	5U	5U	5 0U	5 0U	5U
Toluene	5U	5U	5U	5 0U	5 0U	5U
Trichloroethene	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Xylenes, Total	5U	5U	5U	5 0U	5 0U	5U
cis-1,3-Dichloropropene	1U	1U	1U	1 0U	1 0U	1U
trans-1,3-Dichloropropene	5U	5U	5U	5 0U	5 0U	5U
Total VOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**13**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.1
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8260B Volatile Organic Compound

Sample Id	UGGW-EEG-108-100FT	UGGW-EEG-108-60FT	UGGW-EEG-108-60FTEB	UGGW-EEG-108FD
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	1/31/2000	1/28/2000	1/28/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l
1 1 1-Trichloroethane	5U	5 0U	5 0U	5U
1 1 2,2-Tetrachloroethane	5U	5 0U	5 0U	5U
1 1,2-Trichloroethane	5U	5 0U	5 0U	5U
1 1-Dichloroethane	5U	5 0U	5 0U	5U
1 1-Dichloroethene	5U	5 0U	5 0U	5U
1 2-Dichloroethane	5U	5 0U	5 0U	5U
1 2-Dichloropropane	5U	5 0U	5 0U	5U
2-Butanone (MEK)	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U
Acetone	50U	50U	50U	50U
Benzene	0 99J	0 47J	1 2U	1 2U
Bromodichloromethane	5U	5 0U	5 0U	5U
Bromoform	5U	5 0U	5 0U	5U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5U	5 0U	5 0U	5U
Carbon tetrachloride	5U	5 0U	5 0U	5U
Chlorobenzene	5U	5 0U	5 0U	5U
Chloroethane	10U	10U	10U	10U
Chloroform	5U	5 0U	5 0U	5U
Chloromethane	10U	10U	10U	10U
Cis/Trans-1 2-Dichloroethene	5U	5 0U	5 0U	5U
Dibromochloromethane	5U	5 0U	5 0U	5U
Ethylbenzene	5U	5 0U	5 0U	5U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U
Styrene	5U	5 0U	5 0U	5U
Tetrachloroethene	5U	5 0U	5 0U	5U
Toluene	5U	5 0U	5 0U	5U
Trichloroethene	2 7U	0 57J	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U
Xylenes Total	5U	5 0U	5 0U	5U
cis-1 3-Dichloropropene	1U	1 0U	1 0U	1U
trans-1 3-Dichloropropene	5U	5 0U	5 0U	5U
Total VOC's	**0 99**	**1 04**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S1-102-106FT	AA-GHL-S1-107-111FT	AA-GHL-S1-12-16FT	AA-GHL-S1-22-26FT	AA-GHL-S1-22-26FTEB	AA-GHL-S1-22-26FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	12/2/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	1 2J	10U	1 4J
1,2-Dichlorobenzene	10U	10U	10U	1 2J	10U	1 2J
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2.1U	2 1U	2.1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1.0U	1.0U	1.0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	0.39J	10U	10U	10U	10U
Benzo(a)anthracene	10U	1.9J	10U	10U	10U	10U
Benzo(a)pyrene	10U	5.7J	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	3.7J	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	5.9J	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	5.9J	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	10U
Chrysene	10U	2.4J	10U	10U	10U	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S1-102-106FT	AA-GHL-S1-107-111FT	AA-GHL-S1-12-16FT	AA-GHL-S1-22-26FT	AA-GHL-S1-22-26FTEB	AA-GHL-S1-22-26FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	12/2/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	4.8J	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	0 48J	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	0 52J	10U	10U	10U	10U
Fluorene	1U	1U	1 0U	1 0U	1 0U	1 0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	5.6J	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5U	5 0U	5 0U	5 0U	5 0U
Pentachlorophenol	5U	5U	5 0U	5 0U	5 0U	5 0U
Phenanthrene	10U	0.69J	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1.8U	1 8U	1 8U	1 8U	1 8U
Total SVOC's	**0.48**	**37.5**	**ND**	**2 4**	**ND**	**2.6**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S1-32-36FT	AA-GHL-S1-42-46FT	AA-GHL-S1-52-56FT	AA-GHL-S1-62-66FT	AA-GHL-S1-72-76FT	AA-GHL-S1-82-86FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	*11/18/1999*	*11/18/1999*	*11/19/1999*	*11/29/1999*	*11/30/1999*	*11/30/1999*
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	15	21	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	1 4J	10U	10U
1,4-Dichlorobenzene	10U	10U	7 3J	9 5J	2 5J	2J
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2 1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	1 0J	5 6J	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1 0U	1 0U	1 0U	1U	1U	1U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S1-32-36FT	AA-GHL-S1-42-46FT	AA-GHL-S1-52-56FT	AA-GHL-S1-62-66FT	AA-GHL-S1-72-76FT	AA-GHL-S1-82-86FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/18/1999	11/18/1999	11/19/1999	11/29/1999	11/30/1999	11/30/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	0.5J	0 65J
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U
Fluorene	1 0U	1 0U	1 0U	1U	1U	1U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1.9U	1.9U	1.9U	1.9U	1.9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U
Nitrobenzene	3.5U	3.5U	3.5U	3.5U	3.5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5.0U	5.0U	5.0U	5U	5U	5U
Pentachlorophenol	5.0U	5.0U	5.0U	5U	5U	5U
Phenanthrene	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1.8U	1.6J	1.8U	1.8U	1 8U
Total SVOC's	**ND**	**ND**	**24.9**	**37.5**	**3**	**2.65**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S1-92-96FT	AA-GHL-S1-92-96FTFD	AA-GHL-S2-12-16FT	AA-GHL-S2-22-26FT	AA-GHL-S2-32-36FT	AA-GHL-S2-32-36FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	12/1/1999	11/18/1999	11/18/1999	11/19/1999	11/19/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2.1U	2 1U	2.1U	2.1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1.0U	1 0U	1.0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S1-92-96FT	AA-GHL-S1-92-96FTFD	AA-GHL-S2-12-16FT	AA-GHL-S2-22-26FT	AA-GHL-S2-32-36FT	AA-GHL-S2-32-36FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	12/1/1999	11/18/1999	11/18/1999	11/19/1999	11/19/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	0.38J	0.4J	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U
Fluorene	1U	1U	1.0U	1 0U	1 0U	1 0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1.9U	1.9U	1.9U	1.9U	1.9U	1.9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U
Nitrobenzene	3.5U	3.5U	3.5U	3.5U	3.5U	3.5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5U	5.0U	5.0U	5.0U	5 0U
Pentachlorophenol	5U	5U	5.0U	5.0U	5.0U	5 0U
Phenanthrene	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	4.7	0.75J	1.8U	1 8U	1.8U	1 8U
Total SVOC's	**5.08**	**1.15**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S2-42-46FT	AA-GHL-S2-52-56FT	AA-GHL-S2-62-66FT	AA-GHL-S2-62-66FTFD	AA-GHL-S2-72-76FT	AA-GHL-S2-82-86FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/19/1999	11/29/1999	11/30/1999	11/30/1999	11/30/1999	12/1/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	1.4J	6.6J	6J	4 2J	1 8J
1,3-Dichlorobenzene	10U	10U	1 2J	0 98J	10U	10U
1,4-Dichlorobenzene	10U	10U	9.2J	8 2J	5 8J	2 5J
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2.1U	2.1U	2.1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	0.68J	0.62J	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1.0U	1U	1U	1U	1U	1U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	14J	14J	1J	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S2-42-46FT	AA-GHL-S2-52-56FT	AA-GHL-S2-62-66FT	AA-GHL-S2-62-66FTFD	AA-GHL-S2-72-76FT	AA-GHL-S2-82-86FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/19/1999	11/29/1999	11/30/1999	11/30/1999	11/30/1999	12/1/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	0 28J	10U	0 26J	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U
Fluorene	1 0U	1U	1U	1U	1U	1U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5 0U	5U	5U	5U	5U	5U
Pentachlorophenol	5 0U	5U	5U	5U	5U	5U
Phenanthrene	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U
Total SVOC's	**ND**	**ND**	**31.96**	**29.8**	**11 26**	**4 3**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S2-92-96FT	AA-GHL-S2-92-96FTEB	AA-GHL-S2-99-103FT	AA-GHL-S3-100-104FT	AA-GHL-S3-110-114FT	AA-GHL-S3-20-24FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/2/1999	12/2/1999	12/2/1999	12/20/1999	12/21/1999	12/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	0.78J	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	0.92J	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2.1U	2.1U	2.1U	2.1U	2.1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1U	1U	1U	1U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	0.5J	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	0.52J	10U
Benzo(g,h,i)perylene	10U	10U	0.9J	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	3.4U	3.4U	3 4U
Chrysene	10U	10U	10U	10U	10U	10U

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S2-92-96FT	AA-GHL-S2-92-96FTEB	AA-GHL-S2-99-103FT	AA-GHL-S3-100-104FT	AA-GHL-S3-110-114FT	AA-GHL-S3-20-24FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/2/1999	12/2/1999	12/2/1999	12/20/1999	12/21/1999	12/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U
Fluorene	1U	1U	1U	1U	1U	1U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1.9U	1.9U	1.9U	1.9U	1.9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3.5U	3.5U	3.5U	3.5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5U	5U	5U	5U	5U
Pentachlorophenol	5U	5U	5U	5U	5UJ	5U
Phenanthrene	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1.8U	1.8U	1.8U	1.8U	0.8J
Total SVOC's	**ND**	**ND**	**0.9**	**1.7**	**1.02**	**0.8**

Notes. U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S3-30-34FT	AA-GHL-S3-30-34FTFD	AA-GHL-S3-40-44FT	AA-GHL-S3-50-54FT	AA-GHL-S3-60-64FT	AA-GHL-S3-60-64FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/15/1999	12/15/1999	12/15/1999	12/16/1999	12/16/1999	12/16/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	1 5J	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U	1 4J	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2 1U	2 1U	2.1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20UJ	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1U	1U	1U	1U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10UJ	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10UJ	10U	10U	10U
Carbazole	3 4U	3 4U	3 4U	3 4U	3 4U	3 4U
Chrysene	10U	10U	10UJ	10U	10U	10U

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S3-30-34FT	AA-GHL-S3-30-34FTFD	AA-GHL-S3-40-44FT	AA-GHL-S3-50-54FT	AA-GHL-S3-60-64FT	AA-GHL-S3-60-64FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/15/1999	12/15/1999	12/15/1999	12/16/1999	12/16/1999	12/16/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10UJ	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	0 58J
Fluorene	1U	1U	1U	1U	1U	1U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10UJ	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5U	5U	5U	5U	5U
Pentachlorophenol	5U	5U	5U	5U	5U	5U
Phenanthrene	10U	10U	10U	10U	10U	2 3J
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10UJ	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1 8U	1 8UJ	1 8U	1 8U	1 8U
Total SVOC's	**ND**	**ND**	**ND**	**ND**	**2 9**	**2 88**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S3-70-74FT	AA-GHL-S3-80-84FT	AA-GHL-S3-90-94FT	AA-H-S1-101-105FT	AA-H-S1-101-105FTEB	AA-H-S1-53-57FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/17/1999	12/17/1999	12/20/1999	3/16/2000	3/17/2000	3/10/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	31	10U	2500D
1,2-Dichlorobenzene	1 8J	10U	0 89J	4 4J	10U	680D
1,3-Dichlorobenzene	10U	10U	10U	0 36J	10U	94J
1,4-Dichlorobenzene	10U	10U	1 1J	20	10U	2600D
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	6 1J
2,4,6-Trichlorophenol	2.1U	2 1U	2 1U	2 1U	2 1U	1 5J
2,4-Dichlorophenol	10U	10U	10U	10U	10U	22J
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	0.44J	0.53J	10U	10U	10U	1 0J
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1U	1 0U	1 0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	12J
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	0 37J	10U
Benzo(a)anthracene	10U	10U	10U	10U	0 35J	10U
Benzo(a)pyrene	10U	10U	10U	10U	1 2J	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	0 55J	10U
Benzo(g,h,i)perylene	10U	2 2J	10U	10U	3 4J	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	3 4U	3 4U	3 4U	3 4U	3 4U	2 4J
Chrysene	10U	10U	10U	10U	10U	10U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-GHL-S3-70-74FT	AA-GHL-S3-80-84FT	AA-GHL-S3-90-94FT	AA-H-S1-101-105FT	AA-H-S1-101-105FTEB	AA-H-S1-53-57FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/17/1999	12/17/1999	12/20/1999	3/16/2000	3/17/2000	3/10/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	2.4J	10U
Dibenzofuran	10U	10U	10U	10U	10U	0 31J
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	0.26J	0.34J	0 32J
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	0.38J	10U
Fluorene	1U	1U	1U	0 58J	1 0U	1 9
Hexachlorobenzene	10U	10U	10U	6 0J	10U	21
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1.9U	1.9U	1.9U	1.9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	1.8J	10U	10U	3 0J	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	3 2J
Nitrobenzene	3 5U	3.5U	3 5U	3.5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5U	5U	5 0U	5 0U	5 0U
Pentachlorophenol	5U	5U	5U	5.0U	5.0U	5 0U
Phenanthrene	10U	10U	10U	10U	0 74J	2 9J
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1.8U	1 8U	3 3	0 86J	2 0
Total SVOC's	**2.24**	**4.53**	**1.99**	**65.9**	**13.59**	**5950 63**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-H-S1-63-67FT	AA-H-S1-73-77FT	AA-H-S1-73-77FTFD	AA-H-S1-83-87FT	AA-H-S1-83-87FTEB	AA-H-S1-93-97FT	AA-I-S1-17-21FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/10/2000	3/13/2000	3/13/2000	3/13/2000	3/14/2000	3/15/2000	12/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	510	1200D	1000D	150	10U	160	10UJ
1,2-Dichlorobenzene	250J	27	30	170	10U	140	13J
1,3-Dichlorobenzene	140J	9.5J	10	120	10U	8 1J	10UJ
1,4-Dichlorobenzene	14000	1300D	1000D	2400D	10U	810D	20J
2,2'-Oxybis(1-Chloropropane)	500U	10U	10U	10U	10U	10U	10UJ
2,4,5-Trichlorophenol	500U	7.8J	8.0J	4 1J	10U	23	10UJ
2,4,6-Trichlorophenol	100U	2.1U	3.4	7 3	2.1U	52	2 1UJ
2,4-Dichlorophenol	57J	29	29	35	10U	69	10UJ
2,4-Dinitrophenol	700U	14U	14U	14U	14U	14U	14UJ
2,4-Dinitrotoluene	500U	10U	10U	10U	10U	10U	10UJ
2,6-Dinitrotoluene	500U	10U	10U	10U	10U	10U	10UJ
2-Chloronaphthalene	500U	10U	10U	10U	10U	10U	10UJ
2-Chlorophenol	500U	0.86J	1.1J	2 3J	10U	5 6J	10UJ
2-Methylnaphthalene	500U	10U	10U	10U	10U	10U	10UJ
2-Methylphenol (o-cresol)	500U	10U	10U	10U	10U	10U	10UJ
2-Nitroaniline	2500U	50U	50U	50U	50U	50U	50UJ
2-Nitrophenol	500U	10U	10U	10U	10U	10U	10UJ
3,3'-Dichlorobenzidine	1000U	20U	20U	20U	20U	20U	20UJ
3-Methylphenol/4-Methylphenol	500U	10U	10U	0 76J	10U	4 5J	10UJ
3-Nitroaniline	2500U	50U	50U	50U	50U	50U	50UJ
4,6-Dinitro-2-methylphenol	650U	13U	13U	13U	13U	14	13UJ
4-Bromophenylphenyl ether	50U	1 0U	1.0U	1 0U	1 0U	1 0U	1UJ
4-Chloro-3-methylphenol	500U	10U	10U	1.0J	10U	10U	10UJ
4-Chloroaniline	1000U	2.4J	20U	20	20U	80	4100JD
4-Chlorophenylphenyl ether	500U	10U	10U	10U	10U	10U	10UJ
4-Nitroaniline	2500U	50U	50U	50U	50U	50U	50UJ
4-Nitrophenol	2500U	50U	50U	50U	50U	50U	50UJ
Acenaphthene	500U	10U	10U	10U	10U	10U	10UJ
Acenaphthylene	500U	10U	10U	10U	10U	10U	10UJ
Anthracene	500U	10U	10U	10U	10U	10U	10UJ
Benzo(a)anthracene	500U	10U	10U	10U	10U	10U	10UJ
Benzo(a)pyrene	500U	10U	10U	10U	10U	10U	10UJ
Benzo(b)fluoranthene	500U	10U	10U	10U	10U	10U	10UJ
Benzo(g,h,i)perylene	500U	10U	10U	10U	3 8J	10U	10UJ
Benzo(k)fluoranthene	500U	10U	10U	10U	10U	10U	10UJ
Butylbenzylphthalate	500U	10U	10U	10U	10U	10U	10UJ
Carbazole	170U	3.4U	3.4U	3 4U	3 4U	2 8J	3 4UJ
Chrysene	500U	10U	10U	10U	10U	10U	10UJ

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-H-S1-63-67FT	AA-H-S1-73-77FT	AA-H-S1-73-77FTFD	AA-H-S1-83-87FT	AA-H-S1-83-87FTEB	AA-H-S1-93-97FT	AA-I-S1-17-21FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/10/2000	3/13/2000	3/13/2000	3/13/2000	3/14/2000	3/15/2000	12/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	500U	10U	10U	10U	2 2J	10U	10UJ
Dibenzofuran	500U	10U	10U	1.1J	10U	10U	10UJ
Diethylphthalate	500U	10U	10U	10U	10U	2 1J	10UJ
Dimethylphthalate	500U	10U	10U	10U	10U	10U	10UJ
Di-n-butylphthalate	500U	10U	0.52J	10U	0.36J	0 39J	10UJ
Di-n-octylphthalate	500U	10U	10U	10U	10U	0 39J	10UJ
Fluoranthene	500U	10U	10U	10U	10U	10U	10UJ
Fluorene	50U	1 2	0 89J	4 2	1 0U	7 0	1UJ
Hexachlorobenzene	500U	0 48J	0.49J	0 37J	10U	10U	10UJ
Hexachlorobutadiene	500U	10U	10U	10U	10U	10U	10UJ
Hexachlorocyclopentadiene	500U	10U	10U	10U	10U	10U	10UJ
Hexachloroethane	95U	1.9U	1 9U	1 9U	1.9U	1 9U	1 9UJ
Indeno(1,2,3-cd)pyrene	500U	10U	10U	10U	2.0J	10U	10UJ
Isophorone	500U	10U	10U	10U	10U	0 75J	10UJ
Naphthalene	500U	10U	10U	10U	10U	24	10UJ
Nitrobenzene	180U	3.5U	3 5U	3 5U	3.5U	3 5U	3 5UJ
N-Nitroso-di-n-propylamine	500U	10U	10U	10U	10U	10U	10UJ
N-Nitrosodiphenylamine	250U	5 0U	5.0U	5 0U	5.0U	5 0U	5UJ
Pentachlorophenol	250U	25	50	95	5.0U	710D	5UJ
Phenanthrene	500U	10U	10U	10U	10U	10U	10UJ
Phenol	500U	10U	10U	10U	10U	27	10UJ
Pyrene	500U	10U	10U	10U	10U	10U	10UJ
bis(2-Chloroethoxy)methane	500U	10U	10U	10U	10U	10U	10UJ
bis(2-Chloroethyl)ether	500U	10U	10U	10U	10U	10U	1 1J
bis(2-Ethylhexyl)phthalate	90U	1.8U	3.0	2.0	2.6	32	0 69J
Total SVOC's	**14957**	**2603.24**	**ND**	**3013.13**	**10.96**	**2172.63**	**4134.79**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S1-27-31FT	AA-I-S1-37-41FT	AA-I-S1-47-51FT	AA-I-S1-57-61FT	AA-I-S1-67-71FT	AA-I-S1-67-71FTEB	AA-I-S1-77-81FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/15/1999	12/15/1999	12/16/1999	12/16/1999	12/17/1999	12/17/1999	12/20/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	500U	10U	10U	10U
1,2-Dichlorobenzene	130	320JD	310	66J	91	10U	19
1,3-Dichlorobenzene	110	280	290JD	200J	210	10U	130
1,4-Dichlorobenzene	4400D	10000D	6700D	8100	6100D	10U	3100
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	500U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	500U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2 1U	100U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	500U	42	10U	8 8J
2,4-Dinitrophenol	14U	14U	14U	700U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	500U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	500U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	500U	10U	10U	10U
2-Chlorophenol	5 5J	13	16	500U	39	10U	52
2-Methylnaphthalene	10U	10U	10U	500U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	3J	10U	500U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	2500U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	500U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	1000U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	500U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	2500U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	650U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1U	50U	1U	1U	1U
4-Chloro-3-methylphenol	10U	10U	10U	500U	10U	10U	10U
4-Chloroaniline	2400D	1400JD	1700D	520J	180	20U	18J
4-Chlorophenylphenyl ether	10U	10U	10U	500U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	2500U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	2500U	50U	50U	50U
Acenaphthene	10U	10U	10U	500U	10U	10U	10U
Acenaphthylene	10U	10U	10U	500U	10U	10U	10U
Anthracene	10U	10U	10U	500U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	500U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	500U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	500U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	500U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	500U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	500U	10U	10U	10U
Carbazole	1 4J	5	12	170U	13	3 4U	3 4U
Chrysene	10U	10U	10U	500U	10U	10U	10U

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S1-27-31FT	AA-I-S1-37-41FT	AA-I-S1-47-51FT	AA-I-S1-57-61FT	AA-I-S1-67-71FT	AA-I-S1-67-71FTEB	AA-I-S1-77-81FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/15/1999	12/15/1999	12/16/1999	12/16/1999	12/17/1999	12/17/1999	12/20/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	500U	10U	10U	10U
Dibenzofuran	10U	10U	10U	19J	10U	10U	10U
Diethylphthalate	10U	10U	5.1J	500U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	500U	10U	10U	10U
Di-n-butylphthalate	10U	10U	0.34J	500U	10U	10U	0 51J
Di-n-octylphthalate	10U	10U	10U	500U	10U	10U	10U
Fluoranthene	10U	10U	10U	22J	10U	10U	10U
Fluorene	1U	1U	1U	50U	1U	1U	1U
Hexachlorobenzene	10U	10U	10U	500U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	500U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	500U	10U	10U	10U
Hexachloroethane	1 9U	1.9U	1.9U	95U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	500U	10U	10U	10U
Isophorone	10U	10U	10U	500U	10U	10U	10U
Naphthalene	4 2J	15	24	500U	1 9J	10U	0 57J
Nitrobenzene	3 5U	3.5U	3.5U	180U	3.5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	500U	10U	10U	10U
N-Nitrosodiphenylamine	5.3	14	22	250U	28	5U	18
Pentachlorophenol	5U	5U	5U	250U	5U	5U	5U
Phenanthrene	10U	10U	0.47J	89J	0.5J	10U	10U
Phenol	10U	4 4J	10U	500U	10U	10U	10U
Pyrene	10U	10U	10U	500U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	500U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	500U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1.8U	1.8U	1.8U	90U	1.8U	1 8U	1 8U
Total SVOC's	**7056.4**	**12054.4**	**9079.91**	**9016**	**6705.4**	**ND**	**3346.88**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S1-87-91FT	AA-I-S1-87-91FTFD	AA-I-S1-97-101FT	AA-I-S2-16-20FT	AA-I-S2-26-30FT	AA-I-S2-36-40FT	AA-I-S2-46-50FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/21/1999	12/21/1999	12/21/1999	12/3/1999	12/6/1999	12/7/1999	12/7/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	2700	2300D	980	10U	10U	10U	10U
1,2-Dichlorobenzene	500	390D	170J	10U	140	120	48
1,3-Dichlorobenzene	80J	63JD	150J	10U	120	150	150
1,4-Dichlorobenzene	6900	5800D	9700	92	4200D	4900D	2900D
2,2'-Oxybis(1-Chloropropane)	400U	10U	400U	10U	10U	10U	10U
2,4,5-Trichlorophenol	400U	1.8J	400U	10U	10U	10U	10U
2,4,6-Trichlorophenol	84U	2.1U	84U	2.1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	400U	15	47J	10U	6 6J	10U	21
2,4-Dinitrophenol	560U	14U	560U	14U	14U	14U	14U
2,4-Dinitrotoluene	400U	10U	400U	10U	10U	10U	10U
2,6-Dinitrotoluene	400U	10U	400U	10U	10U	10U	10U
2-Chloronaphthalene	400U	10U	400U	10U	10U	10U	10U
2-Chlorophenol	400U	10U	400U	10U	5 3J	31	84
2-Methylnaphthalene	400U	1.3J	400U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	400U	10U	400U	10U	10U	10U	10U
2-Nitroaniline	2000U	50U	2000U	50U	50U	50U	50U
2-Nitrophenol	400U	10U	400U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	800U	20U	800U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	400U	10U	400U	10U	10U	10U	10U
3-Nitroaniline	2000U	50U	2000U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	520U	13U	520U	13U	13U	13U	13U
4-Bromophenylphenyl ether	40U	1U	40U	1U	1U	1U	1U
4-Chloro-3-methylphenol	400U	10U	400U	10U	10U	10U	10U
4-Chloroaniline	800U	20U	800U	21	680D	340	130
4-Chlorophenylphenyl ether	400U	10U	400U	10U	10U	10U	10U
4-Nitroaniline	2000U	50U	2000U	50U	50U	50U	50U
4-Nitrophenol	2000U	50U	2000U	50U	50U	50U	50U
Acenaphthene	400U	0.33J	400U	10U	10U	10U	10U
Acenaphthylene	400U	10U	400U	10U	10U	10U	10U
Anthracene	400U	10U	400U	10U	10U	10U	10U
Benzo(a)anthracene	400U	10U	400U	0 59J	10U	10U	10U
Benzo(a)pyrene	400U	10U	400U	0.98J	10U	10U	10U
Benzo(b)fluoranthene	400U	10U	400U	10U	10U	10U	10U
Benzo(g,h,i)perylene	400U	10U	400U	10U	10U	10U	10U
Benzo(k)fluoranthene	400U	10U	400U	1.2J	10U	10U	10U
Butylbenzylphthalate	400U	10U	400U	10U	10U	10U	10U
Carbazole	140U	13	140U	10U	10U	10U	10U
Chrysene	400U	10U	400U	0 73J	10U	10U	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S1-87-91FT	AA-I-S1-87-91FTFD	AA-I-S1-97-101FT	AA-I-S2-16-20FT	AA-I-S2-26-30FT	AA-I-S2-36-40FT	AA-I-S2-46-50FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/21/1999	12/21/1999	12/21/1999	12/3/1999	12/6/1999	12/7/1999	12/7/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	400U	10U	400U	1 1J	0 85J	10U	10U
Dibenzofuran	400U	10U	400U	10U	10U	10U	10U
Diethylphthalate	400U	10U	400U	10U	10U	10U	10U
Dimethylphthalate	400U	10U	400U	10U	10U	10U	10U
Di-n-butylphthalate	400U	10U	400U	10U	10U	10U	10U
Di-n-octylphthalate	400U	10U	400U	10U	10U	10U	10U
Fluoranthene	400U	10U	400U	10U	10U	10U	10U
Fluorene	40U	1U	40U	1U	1U	1U	1U
Hexachlorobenzene	400U	1J	400U	10U	10U	10U	10U
Hexachlorobutadiene	400U	10U	400U	10U	10U	10U	10U
Hexachlorocyclopentadiene	400U	10U	400U	10U	10U	10U	10U
Hexachloroethane	76U	1 9U	76U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	400U	10U	400U	10U	10U	10U	10U
Isophorone	400U	10U	400U	10U	10U	10U	10U
Naphthalene	400U	66	400U	10U	10U	1 3J	38
Nitrobenzene	140U	3 5U	140U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	400U	10U	400U	10U	10U	10U	10U
N-Nitrosodiphenylamine	200U	20	200U	5U	5U	1 1J	2 2J
Pentachlorophenol	200U	5U	200U	5U	5U	5U	5U
Phenanthrene	400U	1 3J	400U	10U	10U	10U	10U
Phenol	400U	10U	400U	10U	10U	10U	6J
Pyrene	400U	10U	400U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	400U	10U	400U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	400U	10U	400U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	72U	1 8U	72U	1 8U	1 8U	0 51J	1 8U
Total SVOC's	**10180**	**8672.73**	**11047**	**117.6**	**5152.75**	**5543.91**	**3379 2**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S2-56-60FT	AA-I-S2-66-70FT	AA-I-S2-76-80FT	AA-I-S2-76-80FTEB	AA-I-S2-76-80FTFD	AA-I-S2-86-90FT	AA-I-S2-96-100FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/8/1999	12/8/1999	12/10/1999	12/10/1999	12/10/1999	12/13/1999	12/13/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2 4-Trichlorobenzene	10U	10U	10U	10U	10U	10UJ	33J
1,2-Dichlorobenzene	59	71	1 6J	10U	10U	10UJ	21J
1,3-Dichlorobenzene	130	160	40	10U	50	41J	81J
1,4-Dichlorobenzene	3700D	4500D	510D	10U	560D	610JD	5300JD
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10UJ	10UJ
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10UJ	10UJ
2,4,6-Trichlorophenol	2 1U	2 1U	2 1U	2 1U	2 1U	2 1UJ	2 1UJ
2,4-Dichlorophenol	10U	10U	1 2J	10U	2 0J	5 9J	39J
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14UJ	14UJ
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10UJ	10UJ
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10UJ	10UJ
2-Chloronaphthalene	10U	10U	10U	10U	10U	10UJ	10UJ
2-Chlorophenol	13	16	9 2J	10U	16	36J	21J
2-Methylnaphthalene	10U	10U	10U	10U	10U	10UJ	10UJ
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10UJ	10UJ
2-Nitroaniline	50U	50U	50U	50U	50U	50UJ	50UJ
2-Nitrophenol	10U	10U	10U	10U	10U	10UJ	10UJ
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20UJ	20UJ
3-Methylphenol/4-Methylphenol	10U	1 7J	10U	10U	10U	10UJ	10UJ
3-Nitroaniline	50U	50U	50U	50U	50U	50UJ	50UJ
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13UJ	13UJ
4-Bromophenylphenyl ether	1 0U	1 0U	1 0U	1 0U	1 0U	1UJ	1UJ
4-Chloro-3-methylphenol	10U	1 5J	10U	10U	10U	10UJ	10UJ
4-Chloroaniline	280	320	26	20U	36	15J	58J
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10UJ	10UJ
4-Nitroaniline	50U	50U	50U	50U	50U	50UJ	50UJ
4-Nitrophenol	50U	50U	50U	50U	50U	50UJ	50UJ
Acenaphthene	10U	10U	10U	10U	10U	10UJ	10UJ
Acenaphthylene	10U	10U	10U	10U	10U	10UJ	10UJ
Anthracene	10U	10U	10U	10U	10U	10UJ	10UJ
Benzo(a)anthracene	10U	10U	10U	10U	10U	10UJ	10UJ
Benzo(a)pyrene	10U	10U	10U	10U	10U	10UJ	0 63J
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10UJ	10UJ
Benzo(g,h,i)perylene	10U	10U	10U	10U	0 94J	10UJ	10UJ
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10UJ	10UJ
Butylbenzylphthalate	10U	10U	10U	10U	10U	10UJ	10UJ
Carbazole	3 4U	10U	3 4U	3 4U	3 4U	3 4UJ	3 4UJ
Chrysene	10U	10U	10U	10U	10U	10UJ	10UJ

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S2-56-60FT	AA-I-S2-66-70FT	AA-I-S2-76-80FT	AA-I-S2-76-80FTEB	AA-I-S2-76-80FTFD	AA-I-S2-86-90FT	AA-I-S2-96-100FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/8/1999	12/8/1999	12/10/1999	12/10/1999	12/10/1999	12/13/1999	12/13/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10UJ	10UJ
Dibenzofuran	10U	10U	10U	10U	10U	10UJ	10UJ
Diethylphthalate	10U	10U	10U	10U	1.5J	10UJ	10UJ
Dimethylphthalate	10U	10U	10U	10U	10U	10UJ	10UJ
Di-n-butylphthalate	10U	10U	10U	10U	10U	10UJ	10UJ
Di-n-octylphthalate	10U	10U	10U	10U	10U	10UJ	10UJ
Fluoranthene	10U	10U	10U	10U	10U	10UJ	10UJ
Fluorene	1.0U	5.4J	1.0U	1.0U	1 0U	1UJ	1UJ
Hexachlorobenzene	10U	10U	10U	10U	10U	10UJ	10UJ
Hexachlorobutadiene	10U	10U	10U	10U	10U	10UJ	10UJ
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10UJ	10UJ
Hexachloroethane	1.9U	1.9U	1.9U	1.9U	1.9U	1 9UJ	1 9UJ
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	0.66J	10UJ	10UJ
Isophorone	10U	10U	10U	10U	10U	10UJ	10UJ
Naphthalene	7.6J	8.7J	5.9J	10U	9.1J	20J	11J
Nitrobenzene	3.5U	3.5U	3.5U	3.5U	3.5U	3 5UJ	3 5UJ
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10UJ	10UJ
N-Nitrosodiphenylamine	5.0U	2.4J	5.0U	5.0U	5.0U	5UJ	0.47J
Pentachlorophenol	5.0U	5.0U	5.0U	5.0U	5.0U	5UJ	5UJ
Phenanthrene	10U	10U	10U	10U	10U	10UJ	10UJ
Phenol	10U	10U	10U	10U	10U	10UJ	10UJ
Pyrene	10U	10U	10U	10U	10U	10UJ	10UJ
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10UJ	10UJ
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10UJ	10UJ
bis(2-Ethylhexyl)phthalate	1.8U	1.8U	3.6	1.8U	0.77J	1.8UJ	1.8UJ
Total SVOC's	**4189.6**	**5086.7**	**597.5**	**ND**	**676.97**	**727.9**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S3-104-108FT	AA-I-S3-110-114FT	AA-I-S3-24-28FT	AA-I-S3-34-38FT	AA-I-S3-44-48FT	AA-I-S3-54-58FT	AA-I-S3-64-68FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/13/1999	12/14/1999	12/3/1999	12/6/1999	12/6/1999	12/7/1999	12/7/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	2 6J	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10J	11	10U	10U	10U	1 1J	34
1,3-Dichlorobenzene	42J	16	10U	10U	10U	10U	31
1,4-Dichlorobenzene	1300JD	1000D	10U	10U	10U	36	1500D
2,2'-Oxybis(1-Chloropropane)	10UJ	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10UJ	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1UJ	2 1U	2 1U	2 1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	16J	10U	10U	10U	10U	10U	20
2,4-Dinitrophenol	14UJ	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10UJ	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10UJ	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10UJ	10U	10U	10U	10U	10U	10U
2-Chlorophenol	28J	4 1J	10U	10U	10U	3J	12
2-Methylnaphthalene	10UJ	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10UJ	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50UJ	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10UJ	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20UJ	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10UJ	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50UJ	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13UJ	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1UJ	1U	1U	1U	1U	1U	1U
4-Chloro-3-methylphenol	10UJ	10U	10U	10U	10U	10U	10U
4-Chloroaniline	21J	75	20U	20U	3J	36	170
4-Chlorophenylphenyl ether	10UJ	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50UJ	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50UJ	50U	50U	50U	50U	50U	50U
Acenaphthene	10UJ	10U	10U	10U	10U	10U	10U
Acenaphthylene	10UJ	10U	10U	10U	10U	10U	10U
Anthracene	10UJ	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10UJ	10U	10U	1 3J	10U	10U	0 36J
Benzo(a)pyrene	10UJ	10U	0.45J	2J	10U	10U	0 98J
Benzo(b)fluoranthene	10UJ	10U	0 3J	1 7J	10U	10U	10U
Benzo(g,h,i)perylene	10UJ	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10UJ	10U	10U	2 2J	10U	10U	0 74J
Butylbenzylphthalate	10UJ	10U	10U	10U	10U	10U	10U
Carbazole	3 4UJ	3 4U	10U	10U	10U	10U	10U
Chrysene	10UJ	10U	10U	1 5J	10U	10U	10U

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S3-104-108FT	AA-I-S3-110-114FT	AA-I-S3-24-28FT	AA-I-S3-34-38FT	AA-I-S3-44-48FT	AA-I-S3-54-58FT	AA-I-S3-64-68FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/13/1999	12/14/1999	12/3/1999	12/6/1999	12/6/1999	12/7/1999	12/7/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10UJ	10U	10U	1 6J	10U	10U	10U
Dibenzofuran	10UJ	10U	10U	10U	10U	10U	10U
Diethylphthalate	10UJ	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10UJ	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10UJ	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10UJ	10U	10U	10U	10U	10U	0 5J
Fluoranthene	10UJ	10U	10U	10U	10U	10U	10U
Fluorene	0 58J	1U	1U	1U	1U	1U	1U
Hexachlorobenzene	10UJ	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10UJ	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10UJ	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9UJ	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10UJ	10U	10U	10U	10U	10U	0 86J
Isophorone	10UJ	10U	10U	10U	10U	10U	10U
Naphthalene	16J	2 5J	10U	10U	10U	1 5J	6 8J
Nitrobenzene	3 5UJ	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10UJ	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5UJ	5U	5U	5U	5U	5U	5U
Pentachlorophenol	5UJ	5U	5U	5U	5U	5U	5U
Phenanthrene	10UJ	10U	10U	10U	10U	10U	10U
Phenol	10UJ	10U	10U	10U	10U	10U	10U
Pyrene	10UJ	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10UJ	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10UJ	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8UJ	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U
Total SVOC's	**1436.18**	**1108 6**	**0.75**	**10.3**	**3**	**77 6**	**1777 24**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S3-74-78FT	AA-I-S3-84-88FT	AA-I-S3-84-88FTEB	AA-I-S3-84-88FTFD	AA-I-S3-94-98FT	AA-I-S4-56-60FT	AA-I-S4-56-60FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/8/1999	12/9/1999	12/10/1999	12/9/1999	12/10/1999	3/7/2000	3/7/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	54	8 6J	10U	8.0J	3 4J	13	10
1,3-Dichlorobenzene	79	47	10U	43	38	56	47
1,4-Dichlorobenzene	3200D	1200D	10U	1500D	790D	290	250
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2.1U	2.1U	2.1U	2.1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	32	6.4J	10U	12	9.2J	4 1J	3 5J
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U	10U
2-Chlorophenol	22	20	10U	34	28	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1.0U	1.0U	1.0U	1.0U	1 0U	1 0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	100	22	20U	22	12J	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U	2 3J
Benzo(a)pyrene	10U	10U	0.035J	10U	10U	10U	3 4J
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U	3 8J
Benzo(g,h,i)perylene	10U	2 0J	0.88J	10U	2.5J	10U	3 0J
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U	4 0J
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U	0 53J
Carbazole	3 4U	3.4U	3 4U	3 4U	3 4U	3 4U	3 4U
Chrysene	10U	10U	10U	10U	10U	10U	3 1J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S3-74-78FT	AA-I-S3-84-88FT	AA-I-S3-84-88FTEB	AA-I-S3-84-88FTFD	AA-I-S3-94-98FT	AA-I-S4-56-60FT	AA-I-S4-56-60FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/8/1999	12/9/1999	12/10/1999	12/9/1999	12/10/1999	3/7/2000	3/7/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	1.6J	0.61J	10U	1.7J	10U	3 0J
Dibenzofuran	10U	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10U	0 33J	0 27J
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U	2 4J
Fluoranthene	10U	10U	10U	10U	10U	10U	10U
Fluorene	1.0U	1.0U	1.0U	1.0U	1.0U	1 0U	1.0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1.9U	1.9U	1.9U	1.9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	0.53J	10U	10U	10U	0.92J
Isophorone	10U	10U	10U	10U	10U	10U	10U
Naphthalene	13	13	10U	23	18	10U	10U
Nitrobenzene	3 5U	3.5U	3.5U	3.5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5 0U	5.0U	5.0U	5.0U	5.0U	5.0U	5 0U
Pentachlorophenol	5.0U	5.0U	5.0U	5.0U	5 0U	5 0U	5 0U
Phenanthrene	10U	10U	10U	10U	10U	10U	10U
Phenol	2 0J	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	9.7J	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	3 4
Total SVOC's	**3502**	**1320.6**	**2.055**	**1651.7**	**902.8**	**363.43**	**340.62**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S4-66-70FT	AA-I-S4-76-80FT	AA-I-S4-86-90FT	AA-I-S4-96-100FT	AA-SW-S1-101-104FT	AA-SW-S1-101-104FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/7/2000	3/8/2000	3/8/2000	3/9/2000	11/8/1999	11/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	0 42J	10U	0.49J	10U	10U	10U
1,4-Dichlorobenzene	9.3J	3.0J	4.8J	3.9J	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2.1U	2.1U	2.1U	2.1U	2.1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	5.6J	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1 0U	1.0U	1.0U	1.0U	1U	1U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	2.1J	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	0.58J	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	0.42J	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	3 4U	3.4U	3.4U	3.4U	3.4U	3 4U
Chrysene	10U	10U	10U	10U	10U	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-I-S4-66-70FT	AA-I-S4-76-80FT	AA-I-S4-86-90FT	AA-I-S4-96-100FT	AA-SW-S1-101-104FT	AA-SW-S1-101-104FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/7/2000	3/8/2000	3/8/2000	3/9/2000	11/8/1999	11/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	0.31J	0.29J	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U
Fluorene	1.0U	1.0U	1.0U	1.0U	1U	1U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1.9U	1.9U	1.9U	1.9U	1.9U	1.9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	1.9J	10U	1400D	10U	10U
Nitrobenzene	3.5U	3.5U	3.5U	3.5U	3.5U	3.5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5.0U	5.0U	5.0U	5.0U	5U	5U
Pentachlorophenol	5.0U	5.0U	5.0U	5.0U	5U	5U
Phenanthrene	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	2.1J	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	3.8	1.0J	2.7	1.3J	1.8U	1.8U
Total SVOC's	**13.83**	**6.19**	**8.99**	**1415**	**ND**	**ND**

Notes. U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S1-14-16FT	AA-SW-S1-24-26FT	AA-SW-S1-34-36FT	AA-SW-S1-42-46FT	AA-SW-S1-52-56FT	AA-SW-S1-62-66FT	AA-SW-S1-72-76FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/1/1999	11/2/1999	11/2/1999	11/3/1999	11/3/1999	11/4/1999	11/4/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	3 5J	3 3J	3 3J	2J
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	7J	7 4J	6 9J	3 5J
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2.1U	2.1U	2.1U	2 1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1U	1U	1U	1U	1U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	3 4U	3 4U
Chrysene	10U	10U	10U	10U	10U	10U	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S1-14-16FT	AA-SW-S1-24-26FT	AA-SW-S1-34-36FT	AA-SW-S1-42-46FT	AA-SW-S1-52-56FT	AA-SW-S1-62-66FT	AA-SW-S1-72-76FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/1/1999	11/2/1999	11/2/1999	11/3/1999	11/3/1999	11/4/1999	11/4/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	0 27J	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U	10U
Fluorene	1U	1U	1U	1U	1U	1U	1U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5U	5U	5U	5U	5U	5U
Pentachlorophenol	5U	5U	5U	5U	5U	5U	5U
Phenanthrene	0 42J	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U
Total SVOC's	**0 42**	**ND**	**ND**	**10 5**	**10.97**	**ND**	**5 5**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S1-82-86FT	AA-SW-S1-91-95FT	AA-SW-S2-102-106FT	AA-SW-S2-14-16FT	AA-SW-S2-22-26FT	AA-SW-S2-32-36FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/5/1999	11/5/1999	11/15/1999	11/9/1999	11/9/1999	11/9/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2.1U	2 1U	2.1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1.0U	1.0U	1 0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	3 4U	3 4U	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S1-82-86FT	AA-SW-S1-91-95FT	AA-SW-S2-102-106FT	AA-SW-S2-14-16FT	AA-SW-S2-22-26FT	AA-SW-S2-32-36FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/5/1999	11/5/1999	11/15/1999	11/9/1999	11/9/1999	11/9/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U
Fluorene	1U	1U	1 0U	1 0U	1 0U	1 0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5U	5 0U	5 0U	5 0U	5 0U
Pentachlorophenol	5U	5U	5 0U	5 0U	5 0U	5 0U
Phenanthrene	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U
Total SVOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S2-42-46FT	AA-SW-S2-52-56FT	AA-SW-S2-62-66FT	AA-SW-S2-62-66FTFD	AA-SW-S2-72-76FT	AA-SW-S2-72-76FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/10/1999	11/11/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2 4-Trichlorobenzene	10U	10U	10U	10U	10U	10U
1 2-Dichlorobenzene	3 9J	5 8J	3 8J	3 4J	0 86J	10U
1 3-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	11	10	7 9J	8 6J	0 95J	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2 4 6-Trichlorophenol	2 1U	2 1U	2 1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2 6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	0 25J	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3 3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S2-42-46FT	AA-SW-S2-52-56FT	AA-SW-S2-62-66FT	AA-SW-S2-62-66FTFD	AA-SW-S2-72-76FT	AA-SW-S2-72-76FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/10/1999	11/11/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U
Fluorene	1 0U	1 0U	1 0U	1 0U	1.0U	1 0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1.9U	1.9U	1.9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3.5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5 0U	5 0U	5 0U	5.0U	5.0U	5 0U
Pentachlorophenol	5 0U	5.0U	5.0U	5 0U	5 0U	5 0U
Phenanthrene	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1.8U	1.8U	1.8U	1.8U	1 8U
Total SVOC's	**14.9**	**16.05**	**11.7**	**12**	**1.81**	**ND**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S2-82-86FT	AA-SW-S2-92-96FT	AA-SW-S3-14-16FT	AA-SW-S3-22-26FT	AA-SW-S3-32-36FT	AA-SW-S3-42-46FT	AA-SW-S3-52-56FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/11/1999	11/12/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/12/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	0 53J	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U	10U	1 3J	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2 1U	2 1U	2.1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1 0U	1.0U	1.0U	1 0U	1 0U	1 0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	5 3J	1 2J
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U	10U

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S2-82-86FT	AA-SW-S2-92-96FT	AA-SW-S3-14-16FT	AA-SW-S3-22-26FT	AA-SW-S3-32-36FT	AA-SW-S3-42-46FT	AA-SW-S3-52-56FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/11/1999	11/12/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/12/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	0.32J	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U	10U
Fluorene	1 0U	1.0U	1.0U	1 0U	1 0U	1 0U	1 0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1.9U	1.9U	1 9U	1.9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3.5U	3.5U	3.5U	3.5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U	5 0U
Pentachlorophenol	5 0U	5.0U	5.0U	5.0U	5.0U	5.0U	5 0U
Phenanthrene	10U	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1.8U	1.8U	1.8U	1.8U	1 8U	1 8U
Total SVOC's	**ND**	**ND**	**ND**	**0.32**	**ND**	**7.13**	**1.2**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S3-62-66FT	AA-SW-S3-72-76FT	AA-SW-S3-82-86FT	AA-SW-S3-92-96FT	AA-SW-S3-96-99FT	AA-SW-S3-96-99FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/12/1999	11/15/1999	11/15/1999	11/16/1999	11/17/1999	11/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2.1U	2.1U	2.1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1.0U	1.0U	1.0U	1.0U	1.0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S3-62-66FT	AA-SW-S3-72-76FT	AA-SW-S3-82-86FT	AA-SW-S3-92-96FT	AA-SW-S3-96-99FT	AA-SW-S3-96-99FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/12/1999	11/15/1999	11/15/1999	11/16/1999	11/17/1999	11/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U
Dibenzofuran	10UJ	10U	10U	10U	10U	10U
Diethylphthalate	10U	0.48J	10U	0.49J	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	0.43J	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U
Fluorene	1 0U	1.0U	1.0U	1.0U	1.0U	1 0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1.9U	1.9U	1.9U	1.9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U
Nitrobenzene	3.5U	3.5U	3 5U	3.5U	3.5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5.0U	5.0U	5.0U	5.0U	5.0U	5 0U
Pentachlorophenol	5.0U	5.0U	5.0U	5.0U	5.0U	5 0U
Phenanthrene	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U
Total SVOC's	**ND**	**0.91**	**ND**	**0.49**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S3-96-99FTFD	BR-G	BR-GEB	BR-GFD	BR-H	BR-I	DW-MCDO-1	DW-MCDO-1FD
Description	Alluvial Aquifer GW	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Domestic Well GW	Domestic Well GW
Sample Date	11/17/1999	5/1/2000	5/2/2000	5/1/2000	5/1/2000	4/25/2000	10/21/1999	10/21/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	9400D	0 88J	87000D	600D	1100000D	10U	10U
1,2-Dichlorobenzene	10U	29J	10U	140J	8 7J	12000	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	36J	1 2J	1100	10U	10U
1,4-Dichlorobenzene	10U	210	10U	960	23	51000D	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	200U	10U	1000U	10U	10U
2,4,5-Trichlorophenol	10U	120	10U	150J	1 0J	1000U	10U	10U
2,4,6-Trichlorophenol	2 1U	2 1UJ	2 1U	42U	2.1U	1700	2 1U	2 1U
2,4-Dichlorophenol	10U	63J	10U	97J	1.3J	2400	10U	10U
2,4-Dinitrophenol	14U	14U	14U	280U	14U	1400U	14U	14U
2,4-Dinitrotoluene	10U	10UJ	10U	200U	10U	1000U	10U	10U
2,6-Dinitrotoluene	10U	10UJ	10U	200U	10U	1000U	10U	10U
2-Chloronaphthalene	10U	10UJ	10U	200U	10U	1000U	10U	10U
2-Chlorophenol	10U	11	10U	12J	10U	1000U	10U	10U
2-Methylnaphthalene	10U	10U	10U	19J	10U	670J	10U	10U
2-Methylphenol (o-cresol)	10U	4.1J	10U	200U	10U	1000U	10U	10U
2-Nitroaniline	50U	50U	50U	1000U	50U	5000U	50U	50U
2-Nitrophenol	10U	10UJ	10U	200U	10U	1000U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	400U	20U	2000U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	200U	10U	1000U	10U	10U
3-Nitroaniline	50U	50U	50U	1000U	50U	5000U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	260U	13U	5000U	13U	13U
4-Bromophenylphenyl ether	1 0U	1 0U	1.0U	20U	3.2	100U	1U	1U
4-Chloro-3-methylphenol	10U	10U	10U	200U	10U	1000U	10U	10U
4-Chloroaniline	20U	20U	20U	400U	14J	2000U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	200U	10U	1000U	10U	10U
4-Nitroaniline	50U	50U	50U	1000U	50U	5000U	50U	50U
4-Nitrophenol	50U	50U	50U	1000U	50U	5000U	50U	50U
Acenaphthene	10U	10U	10U	200U	10U	130J	10U	10U
Acenaphthylene	10U	10UJ	10U	200U	10U	1000U	10U	10U
Anthracene	10U	0.76J	10U	8.7J	10U	130J	10U	10U
Benzo(a)anthracene	10U	10U	0.83J	200U	10U	400J	10U	10U
Benzo(a)pyrene	10U	10U	1.6J	200U	10U	380J	10U	10U
Benzo(b)fluoranthene	10U	10U	1.7J	200U	10U	290J	10U	10U
Benzo(g,h,i)perylene	10U	10U	2.2J	200U	10U	300J	10U	10U
Benzo(k)fluoranthene	10U	2.8J	2.2J	200U	10U	220J	10U	10U
Butylbenzylphthalate	10U	1 2J	10U	200U	10U	160J	10U	10U
Carbazole	10U	1 0J	3 4U	68U	3 4U	240J	10U	10U
Chrysene	10U	5.4J	1 4J	120J	10U	740J	10U	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	AA-SW-S3-96-99FTFD	BR-G	BR-GEB	BR-GFD	BR-H	BR-I	DW-MCDO-1	DW-MCDO-1FD
Description	Alluvial Aquifer GW	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Domestic Well GW	Domestic Well GW
Sample Date	11/17/1999	5/1/2000	5/2/2000	5/1/2000	5/1/2000	4/25/2000	10/21/1999	10/21/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	3.0J	2.1J	200U	10U	210J	10U	10U
Dibenzofuran	10U	10UJ	10U	200U	10U	1000U	10U	10U
Diethylphthalate	10U	10U	10U	200U	10U	1000U	10U	10U
Dimethylphthalate	10U	10UJ	10U	200U	10U	1000U	10U	10U
Di-n-butylphthalate	10U	10U	10U	200U	10U	300J	10U	10U
Di-n-octylphthalate	10U	10U	0.64J	200U	10U	180J	10U	10U
Fluoranthene	10U	10U	10U	8 2J	10U	170J	0 44J	0 33J
Fluorene	1 0U	1.0UJ	1 0U	20U	0 61J	360	1U	1U
Hexachlorobenzene	10U	520D	10U	8400D	0 35J	90000D	10U	10U
Hexachlorobutadiene	10U	10U	10U	200U	10U	1000U	10U	10U
Hexachlorocyclopentadiene	10U	10R	10U	200U	10U	1000U	10U	10U
Hexachloroethane	1 9U	1 9U	1.9U	38U	1.9U	190U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	2.4J	200U	10U	240J	10U	10U
Isophorone	10U	0.43J	10U	200U	10U	1000U	10U	10U
Naphthalene	10U	38	10U	69J	7.4J	5800	10U	10U
Nitrobenzene	3 5U	3.5UJ	3 5U	70U	3.5U	140J	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	200U	10U	1000U	10U	10U
N-Nitrosodiphenylamine	5 0U	3.3J	5.0U	26J	5.0U	760	5U	5U
Pentachlorophenol	5.0U	5.0U	5 0U	100U	5.0U	500U	5U	5U
Phenanthrene	10U	3.5J	0.36J	71J	10U	790J	0 38J	10U
Phenol	10U	48	10U	51J	10U	180J	10U	10U
Pyrene	10U	3.1J	10U	75J	10U	540J	10U	10U
bis(2-Chloroethoxy)methane	10U	10UJ	10U	200U	10U	1000U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	200U	10U	1000U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	3.9U	2.7J	36U	1.8U	420	1 8U	1 8U
Total SVOC's	**ND**	**10467.59**	**19.01**	**97242.9**	**660.76**	**1271950**	**0.82**	**0.33**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DW-SCHM-1	DW-SETT-1	DW-WRIG-1	EE-01	EE-02-GP	EE-02-GPFD	EE-03	EE-05	EE-05EB
Description	Domestic Well GW	Domestic Well GW	Domestic Well GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/22/1999	10/21/1999	10/21/1999	10/12/1999	11/4/1999	11/4/1999	10/12/1999	10/13/1999	10/13/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	19	290	340	10U	1 6J	10U
1,2-Dichlorobenzene	10U	10U	10U	720D	200	240	2 2J	5 7J	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	4 7J	6 2J	10U	1 9J	10U
1,4-Dichlorobenzene	10U	10U	10U	2200D	550D	720D	21	16	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	62	180	200	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2.1U	270	420D	510D	2 1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	310	430D	0 75J	3 1J	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	12	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	73	20	25	10U	38	10U
2-Methylnaphthalene	10U	10U	10U	8J	1 8J	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	30	25	31	10U	26	10U
2-Nitroaniline	50U	50U	50U	50U	14J	13J	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	62	200	230	10U	130	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1U	1U	1U	1U	1U	1U	1U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	1800D	690D	860D	20U	1600JD	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	8 4J	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	2 2J	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	5 2J	1 1J	1 2J	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U	10U	10U	10U

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DW-SCHM-1	DW-SETT-1	DW-WRIG-1	EE-01	EE-02-GP	EE-02-GPFD	EE-03	EE-05	EE-05EB
Description	Domestic Well GW	Domestic Well GW	Domestic Well GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/22/1999	10/21/1999	10/21/1999	10/12/1999	11/4/1999	11/4/1999	10/12/1999	10/13/1999	10/13/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	20	22	10U	7 1J	10U
Dimethylphthalate	10U	10U	10U	10U	3.5J	3.8J	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	0.36J	10U	10U	10U	10U	10U	10U
Fluorene	1U	1U	1U	30	1U	1.5	1U	1U	1U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1.9U	1.9U	1.9U	1.9U	1.9U	1.9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	2300D	190	200	10U	390J	10U
Nitrobenzene	3.5U	3.5U	3.5U	3.5U	52	61	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5U	5U	7.6	5U	5U	5U	5U	5U
Pentachlorophenol	5U	5U	5U	4300D	580D	760D	3J	5U	5U
Phenanthrene	10U	10U	10U	4.8J	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	72	290	340	10U	380JD	10U
Pyrene	10U	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1.8U	1.8U	1.8U	1.8U	0.74J	1.8U	1.8U	1.8U	1.8U
Total SVOC's	**ND**	**ND**	**0.36**	**11977.8**	**4042.84**	**4994.7**	**26.95**	**2607.8**	**ND**

Notes. U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	EE-12-GP	EE-13-GP	EE-14-GP	EE-15-GP	EE-15-GPFD	EEG-101	EEG-102	EEG-103-GP	EEG-104	EEG-105-GP
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	11/5/1999	11/4/1999	11/5/1999	11/8/1999	11/8/1999	10/8/1999	10/7/1999	11/3/1999	10/8/1999	11/2/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	0 55J	10U	510D	10U	10U	10U	10	10U	10U	10U
1,2-Dichlorobenzene	3 9J	10U	500D	24	24	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	13	10U	45	11	11	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	96	10U	14000D	440D	420D	10U	58	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	1 6J	10U	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2.1U	2.1U	15	2.1U	2 1U	2 1U	2 1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10	10U	27	4 3J	2J	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	4.2J	10U	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	0 39J	10U	21	10U	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	4 8J	10U	110	10U	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	1400D	20U	1800D	6.9J	7 6J	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10	10U	10U	10U	10U	10U	10U	10U
Carbazole	3 5	3 4U	26	3 4U	3 4U	10U	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	EE-12-GP	EE-13-GP	EE-14-GP	EE-15-GP	EE-15-GPFD	EEG-101	EEG-102	EEG-103-GP	EEG-104	EEG-105-GP
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	11/5/1999	11/4/1999	11/5/1999	11/8/1999	11/8/1999	10/8/1999	10/7/1999	11/3/1999	10/8/1999	11/2/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	1 4J	10U	10U	10U	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Fluoranthene	0 41J	10U	10U	10U	10U	10U	10U	10U	10U	10U
Fluorene	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Naphthalene	6 5J	10U	36	10U	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5U	23	5U	5U	5U	5U	5U	5U	5U
Pentachlorophenol	5U	5U	500D	5U	5U	5U	5U	5U	5U	5U
Phenanthrene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
Phenol	19	10U	17	10U	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	0 79J	1 8U	1 1J	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U
Total SVOC's	**1560.24**	**ND**	**17646.9**	**486 2**	**464 6**	**ND**	**68**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	EEG-106	EEG-107	EEG-109	EEG-110	EEG-111-GP	EEG-112	SGW-S1-15FT	SGW-S1-20FT
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Shallow Residential GW	Shallow Residential GW
Sample Date	10/7/1999	10/7/1999	10/11/1999	10/11/1999	11/3/1999	10/8/1999	10/14/1999	10/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	47	180J	10U	10U	10U	10U	10U	10U
1 2-Dichlorobenzene	4 6J	300J	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	400U	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	330	850	10U	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	400U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	400U	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	0 47J	84U	2.1U	2 1U	2 1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	11	3600	26	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	560U	14U	14U	14U	14U	14U	
2,4-Dinitrotoluene	10U	400U	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	400U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	400U	10U	10U	10U	10U	10U	10U
2-Chlorophenol	2 3J	630	21	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	400U	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	230J	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	2000U	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	400U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	800U	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	2400	5 5J	10U	10U	10U	10U	10U
3-Nitroaniline	50U	2000U	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	520U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	40U	1U	1U	1U	1U	1 0U	1 0U
4-Chloro-3-methylphenol	10U	400U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	23000D	55	20U	20U	1 1J	20U	20U
4-Chlorophenylphenyl ether	10U	400U	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	2000U	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	2000U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	400U	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	400U	10U	10U	10U	10U	10U	10U
Anthracene	10U	400U	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	400U	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	400U	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	400U	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	400U	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	400U	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	400U	10U	10U	10U	10U	10U	10U
Carbazole	10U	400U	10U	10U	10U	10U	10U	10U
Chrysene	10U	400U	10U	10U	10U	10U	10U	10U

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	EEG-106	EEG-107	EEG-109	EEG-110	EEG-111-GP	EEG-112	SGW-S1-15FT	SGW-S1-20FT
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Shallow Residential GW	Shallow Residential GW
Sample Date	10/7/1999	10/7/1999	10/11/1999	10/11/1999	11/3/1999	10/8/1999	10/14/1999	10/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	400U	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	400U	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	400U	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	400U	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	400U	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	400U	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	400U	10U	10U	10U	10U	10U	10U
Fluorene	1U	40U	1U	1U	1U	1U	1.0U	1 0U
Hexachlorobenzene	10U	400U	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	400U	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	400U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1.9U	76U	1.9U	1.9U	1.9U	1.9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	400U	10U	10U	10U	10U	10U	10U
Isophorone	10U	400U	10U	10U	10U	10U	10U	10U
Naphthalene	10U	2100	28	10U	10U	10U	10U	10U
Nitrobenzene	3.5U	140U	3.5U	3.5U	3.5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	400U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	200U	5U	5U	5U	5U	5.0U	5 0U
Pentachlorophenol	5U	2000	5U	5U	5U	5U	5.0U	5 0U
Phenanthrene	10U	400U	10U	10U	10U	10U	10U	10U
Phenol	10U	14000D	10U	10U	10U	10U	10U	10U
Pyrene	10U	400U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	400U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	400U	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1.8U	72U	1.8U	1.8U	1.8U	1.8U	1.8U	1 8U
Total SVOC's	**395.37**	**49290**	**135.5**	**ND**	**ND**	**1.1**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SGW-S1-40FT	SGW-S1-40FTFD	SGW-S2-15FT	SGW-S2-20FT	SGW-S2-40FT	TS-S1-0HR
Description	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Time Series GW
Sample Date	10/14/1999	10/14/1999	10/15/1999	10/15/1999	10/15/1999	3/29/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2.1U	2.1U	2 1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14UJ	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1 0U	1 0U	1.0U	1 0U	1 0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	3 4U
Chrysene	10U	10U	10U	10U	10U	10U

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SGW-S1-40FT	SGW-S1-40FTFD	SGW-S2-15FT	SGW-S2-20FT	SGW-S2-40FT	TS-S1-0HR
Description	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Time Series GW
Sample Date	10/14/1999	10/14/1999	10/15/1999	10/15/1999	10/15/1999	3/29/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U
Fluorene	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Pentachlorophenol	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Phenanthrene	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1 8U	1.8U	1 8U	1 8U	1 8U
Total SVOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	TS-S1-12HR	TS-S1-12HRFD	TS-S1-24HR	TS-S2-0HR	TS-S2-12HR	TS-S2-24HR	UGGW-EE-04	UGGW-EE-04-100FT
Description	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Upgradient GW	Upgradient GW
Sample Date	3/29/2000	3/29/2000	3/30/2000	3/29/2000	3/29/2000	3/30/2000	10/13/1999	1/27/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	0 39J	0.35J	0.32J	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2.1U	2 1U	2.1U	2.1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1.0U	1.0U	1.0U	1.0U	1 0U	1.0U	1U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	0.87J	10U	10U	0 65J	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	0 52J	10U	10U	0 37J	10U	10U
Benzo(a)pyrene	10U	10U	0 49J	10U	10U	10U	10UJ	10U
Benzo(b)fluoranthene	10U	10U	0.44J	10U	10U	10U	10UJ	10U
Benzo(g,h,i)perylene	10U	10U	1.1J	10U	10U	0.72J	10UJ	0.82J
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U	10UJ	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U	10U	10U
Carbazole	3 4U	3 4U	3.4U	3 4U	3 4U	3.4U	10U	3 4U
Chrysene	10U	10U	0 70J	10U	10U	0 45J	10U	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	TS-S1-12HR	TS-S1-12HRFD	TS-S1-24HR	TS-S2-0HR	TS-S2-12HR	TS-S2-24HR	UGGW-EE-04	UGGW-EE-04-100FT
Description	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Upgradient GW	Upgradient GW
Sample Date	3/29/2000	3/29/2000	3/30/2000	3/29/2000	3/29/2000	3/30/2000	10/13/1999	1/27/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U	10UJ	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	0 37J	10U	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U	10U	10U
Fluorene	1 0U	1 0U	1 6	1 0U	1 0U	1 3	1U	1 0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U	1.9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	0.66J	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U	10U	100
Nitrobenzene	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5 0U	5 0U	5.0U	5.0U	5 0U	5 0U	5U	5 0U
Pentachlorophenol	5 0U	5.0U	5 0U	5.0U	5 0U	5 0U	5U	5 0U
Phenanthrene	10U	10U	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1 8U	1 8U	1 8U	1 8U	0 70J	1 8U	1 8U
Total SVOC's	**0.76**	**ND**	**6.7**	**ND**	**ND**	**4.19**	**ND**	**100 82**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UGGW-EE-04-100FTFD	UGGW-EE-04-60FT	UGGW-EE-04FD	UGGW-EE-20	UGGW-EE-20-100FT	UGGW-EE-20-60FT	UGGW-EEG-108
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	1/27/2000	10/13/1999	10/13/1999	10/18/1999	1/25/2000	1/24/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2 1U	2.1U	2.1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14R	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1 0U	1U	1U	1U	1.0U	1 0U	1U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	8.0J	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	0 97J	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U	10U
Carbazole	3 4U	10U	10U	10U	3 4U	3 4U	10U
Chrysene	10U	10U	10U	10U	10U	1 3J	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UGGW-EE-04-100FTFD	UGGW-EE-04-60FT	UGGW-EE-04FD	UGGW-EE-20	UGGW-EE-20-100FT	UGGW-EE-20-60FT	UGGW-EEG-108
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	1/27/2000	10/13/1999	10/13/1999	10/18/1999	1/25/2000	1/24/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	0 36J	10U	10U	10U
Diethylphthalate	10U	10U	10U	0 35J	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U	10U
Fluorene	1 0U	1U	1U	0 24J	1 0U	1 0U	1U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U	10U
Naphthalene	98	10U	10U	10U	10U	10U	10U
Nitrobenzene	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5 0U	5U	5U	0 25J	5 0U	5 0U	5U
Pentachlorophenol	5 0U	5U	5U	5U	5 0U	5 0U	5U
Phenanthrene	10U	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U
Total SVOC's	**98**	**ND**	**ND**	**1.2**	**8**	**2.27**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UGGW-EEG-108-100FT	UGGW-EEG-108-60FT	UGGW-EEG-108-60FTEB	UGGW-EEG-108FD
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	1/31/2000	1/28/2000	1/28/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2.1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20R	20U	20U	20U
3-Methylphenol/4-Methylphenol	10U	10U	10U	10U
3-Nitroaniline	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1.0U	1.0U	1U
4-Chloro-3-methylphenol	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U
Carbazole	3 4U	3 4U	3 4U	10U
Chrysene	10U	10U	10U	10U

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.2
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UGGW-EEG-108-100FT	UGGW-EEG-108-60FT	UGGW-EEG-108-60FTEB	UGGW-EEG-108FD
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	1/31/2000	1/28/2000	1/28/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U
Fluorene	1U	1 0U	1 0U	1U
Hexachlorobenzene	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U
Nitrobenzene	3 5U	3 5U	3 5U	3 5U
N-Nitroso-di-n-propylamine	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5.0UJ	5 0U	5U
Pentachlorophenol	5U	5 0U	5 0U	5U
Phenanthrene	10U	10U	10U	10U
Phenol	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1 8U	1 8U	1 8U
Total SVOC's	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-GHL-S1-102-106FT	AA-GHL-S1-107-111FT	AA-GHL-S1-12-16FT	AA-GHL-S1-22-26FT	AA-GHL-S1-22-26FTEB	AA-GHL-S1-22-26FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	12/2/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.5U	0.5U	0.50U	0 50U	0.50U	0 50U
Dichlorobiphenyl	0.1U	0.1U	0.10U	0 10U	0.10U	0 10U
Heptachlorobiphenyl	0.3U	0.3U	0.30U	0.30U	0.30U	0.30U
Hexachlorobiphenyl	0.2U	0.2U	0.20U	0.20U	0.20U	0 20U
Monochlorobiphenyl	0.1U	0.1U	0.10U	0.10U	0.10U	0 10U
Nonachlorobiphenyl	0.5U	0.5U	0.50U	0.18J	0.50U	0 50U
Octachlorobiphenyl	0.3U	0.3U	0.30U	0.30U	0.30U	0.30U
Pentachlorobiphenyl	0.2U	0.2U	0.20U	0.20U	0.20U	0.20U
Tetrachlorobiphenyl	0.2U	0.2U	0.20U	0.20U	0.20U	0 20U
Trichlorobiphenyl	0.1U	0.1U	0.10U	0.10U	0.10U	0 10U
Total PCB's	**ND**	**ND**	**ND**	**0.18**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-GHL-S1-32-36FT	AA-GHL-S1-42-46FT	AA-GHL-S1-52-56FT	AA-GHL-S1-62-66FT	AA-GHL-S1-72-76FT	AA-GHL S1 82 86FT	AA-GHL S1-92-96FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/18/1999	11/18/1999	11/19/1999	11/29/1999	11/30/1999	11/30/1999	12/1/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 50U	0 50U	0 50UJ	0 5U	0 5U	0 5UJ	0 5UJ
Dichlorobiphenyl	0 10U	0 10U	0 10UJ	0 1U	0 1U	0 1UJ	0 1UJ
Heptachlorobiphenyl	0 30U	0 30U	0 30UJ	0 3U	0 3U	0 3UJ	0 3UJ
Hexachlorobiphenyl	0 20U	0 20U	0 20UJ	0 2U	0 2U	0 2UJ	0 2UJ
Monochlorobiphenyl	0 10U	0 10U	0 10UJ	0 1U	0 1U	0 1UJ	0 1UJ
Nonachlorobiphenyl	0 50U	0 50U	0 50UJ	0 5U	0 5U	0 5UJ	0 5UJ
Octachlorobiphenyl	0 30U	0 30U	0 30UJ	0 3U	0 3U	0 3UJ	0 3UJ
Pentachlorobiphenyl	0 20U	0 20U	0 20UJ	0 2U	0 2U	0 2UJ	0 2UJ
Tetrachlorobiphenyl	0 20U	0 20U	0 20UJ	0 2U	0 2U	0 2UJ	0 2UJ
Trichlorobiphenyl	0 10U	0 10U	0 10UJ	0 1U	0 1U	0 1UJ	0 1UJ
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-GHL-S1-92-96FTFD	AA-GHL-S2-12-16FT	AA-GHL-S2-22-26FT	AA-GHL-S2-32-36FT	AA-GHL-S2-32-36FTEB	AA-GHL-S2-42-46FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	11/18/1999	11/18/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.5U	0.50U	0.50U	0.50UJ	0.50U	0 50U
Dichlorobiphenyl	0.1U	0.10U	0.10U	0.10UJ	0 10U	0 10U
Heptachlorobiphenyl	0.3U	0.30U	0.30U	0.30UJ	0.30U	0 30U
Hexachlorobiphenyl	0.2U	0.20U	0.20U	0.20UJ	0 20U	0 20U
Monochlorobiphenyl	0.1U	0.10U	0.10U	0.10UJ	0.10U	0 10U
Nonachlorobiphenyl	0.14J	0.50U	0.50U	0.26J	0 50U	0 50U
Octachlorobiphenyl	0.3U	0.30U	0.30U	0.30UJ	0.30U	0 30U
Pentachlorobiphenyl	0.2U	0.20U	0.20U	0.20UJ	0.20U	0 20U
Tetrachlorobiphenyl	0.2U	0.20U	0.20U	0.20UJ	0 20U	0 20U
Trichlorobiphenyl	0.1U	0.10U	0.10U	0.10UJ	0.10U	0 10U
Total PCB's	**0.14**	**ND**	**ND**	**0.26**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-GHL-S2-52-56FT	AA-GHL-S2-62-66FT	AA-GHL-S2-62-66FTFD	AA-GHL-S2-72-76FT	AA-GHL-S2-82-86FT	AA-GHL-S2-92-96FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/29/1999	11/30/1999	11/30/1999	11/30/1999	12/1/1999	12/2/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 5U	0 5UJ	0 5UJ	0 5UJ	0 5UJ	0 5U
Dichlorobiphenyl	0 1U	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1U
Heptachlorobiphenyl	0 3U	0 3UJ	0 3UJ	0 3UJ	0 3UJ	0 3U
Hexachlorobiphenyl	0 2U	0 2UJ	0 2UJ	0 2UJ	0 2UJ	0 2U
Monochlorobiphenyl	0 1U	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1U
Nonachlorobiphenyl	0 16J	0 5UJ	0 5UJ	0 5UJ	0 5UJ	0 5U
Octachlorobiphenyl	0 3U	0 3UJ	0 3UJ	0 3UJ	0 3UJ	0 3U
Pentachlorobiphenyl	0 2U	0 2UJ	0 2UJ	0 2UJ	0 2UJ	0 2U
Tetrachlorobiphenyl	0 2U	0 2UJ	0 2UJ	0 2UJ	0 2UJ	0 2U
Trichlorobiphenyl	0 1U	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-GHL-S2-92-96FTEB	AA-GHL-S2-99-103FT	AA-GHL-S3-100-104FT	AA-GHL-S3-110-114FT	AA-GHL-S3-20-24FT	AA-GHL-S3-30-34FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/2/1999	12/2/1999	12/20/1999	12/21/1999	12/14/1999	12/15/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U
Dichlorobiphenyl	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
Heptachlorobiphenyl	0 3U	0 3U	0 3U	0 3U	0 3U	0 3U
Hexachlorobiphenyl	0 2U	0 2U	0 2U	0 2U	0 2U	0 2U
Monochlorobiphenyl	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
Nonachlorobiphenyl	0 5U	0 5U	0 5U	0 5U	0 5U	0 14J
Octachlorobiphenyl	0 3U	0 3U	0 3U	0 3U	0 3U	0 3U
Pentachlorobiphenyl	0 2U	0 2U	0 2U	0 2U	0 08J	0 2U
Tetrachlorobiphenyl	0 2U	0 2U	0 2U	0 2U	0 2U	0 2U
Trichlorobiphenyl	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
Total PCB s	**ND**	**ND**	**ND**	**ND**	**0 08**	**0 14**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-GHL-S3-30-34FTFD	AA-GHL-S3-40-44FT	AA-GHL-S3-50-54FT	AA-GHL-S3-60-64FT	AA-GHL-S3-60-64FTEB	AA-GHL-S3-70-74FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/15/1999	12/15/1999	12/16/1999	12/16/1999	12/16/1999	12/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 5U	0 5U	0 5UJ	0 5UJ	0 5U	0 5U
Dichlorobiphenyl	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
Heptachlorobiphenyl	0 3U	0 3U	0 3UJ	0 3UJ	0 3U	0 3U
Hexachlorobiphenyl	0 2U	0 2U	0 2UJ	0 2UJ	0 2U	0 2U
Monochlorobiphenyl	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
Nonachlorobiphenyl	0 5U	0 5U	0 5UJ	0 5UJ	0 5U	0 5U
Octachlorobiphenyl	0 3U	0 3U	0 3UJ	0 3UJ	0 3U	0 3U
Pentachlorobiphenyl	0 2U	0 2U	0 2UJ	0 2UJ	0 2U	0 2U
Tetrachlorobiphenyl	0 2U	0 2U	0 2UJ	0 2UJ	0 2U	0 2U
Trichlorobiphenyl	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-GHL-S3-80-84FT	AA-GHL-S3-90-94FT	AA-H-S1-101-105FT	AA-H-S1-101-105FTEB	AA-H-S1-53-57FT	AA-H-S1-63-67FT	AA-H-S1-73-77FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/17/1999	12/20/1999	3/16/2000	3/17/2000	3/10/2000	3/10/2000	3/13/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 5U	0 5U	0 50U	0 50U	0 50U	0 50U	0 50U
Dichlorobiphenyl	0 1U	0 1U	0 50	0 10U	0 72J	0 23J	0 07J
Heptachlorobiphenyl	0 3U	0 3U	2 7	0 30U	1 3J	0 14J	0 30U
Hexachlorobiphenyl	0 2U	0 2U	3 5	0 20U	2 4J	0 20J	0 20U
Monochlorobiphenyl	0 1U	0 1U	0 14	0 10U	1 3J	1 0J	0 72J
Nonachlorobiphenyl	0 5U	0 5U	0 12J	0 50U	0 50U	0 50U	0 50U
Octachlorobiphenyl	0 3U	0 3U	0 65	0 30U	0 46J	0 30U	0 30U
Pentachlorobiphenyl	0 2U	0 2U	2 5	0 20U	2 0J	0 14J	0 20U
Tetrachlorobiphenyl	0 2U	0 2U	1 3	0 20U	1 2J	0 20U	0 20U
Trichlorobiphenyl	0 1U	0 1U	0 75	0 10U	0 44J	0 22J	0 10U
Total PCB's	**ND**	**ND**	**12.16**	**ND**	**9 82**	**1 93**	**0.79**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-H-S1-73-77FTFD	AA-H-S1-83-87FT	AA-H-S1-83-87FTEB	AA-H-S1-93-97FT	AA-I-S1-17-21FT	AA-I-S1-27-31FT	AA-I-S1-37-41FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/13/2000	3/13/2000	3/14/2000	3/15/2000	12/14/1999	12/15/1999	12/15/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.50U	0.50U	0.50U	0.50U	0.5U	0.5U	0.5U
Dichlorobiphenyl	0.11J	0.04J	0.10U	0.10U	0.1U	0.1U	0.1U
Heptachlorobiphenyl	0.05J	0.14J	0.30U	0.30	0.3U	0.3U	0.3U
Hexachlorobiphenyl	0.12J	0.31J	0.20U	0.38	0.2U	0.2U	0.2U
Monochlorobiphenyl	1.1J	0.10U	0.10U	0.10U	0.1U	0.1U	0.07J
Nonachlorobiphenyl	0.50U	0.50U	0.50U	0.50U	0.5U	0.13J	0.5U
Octachlorobiphenyl	0.30U	0.30U	0.30U	0.10J	0.3U	0.3U	0.3U
Pentachlorobiphenyl	0.10J	0.21J	0.20U	0.26	0.2U	0.2U	0.2U
Tetrachlorobiphenyl	0.20U	0.20U	0.20U	0.20U	0.2U	0.2U	0.2U
Trichlorobiphenyl	0.09J	0.10U	0.10U	0.05J	0.1U	0.1U	0.1U
Total PCB's	**1.57**	**ND**	**ND**	**1.09**	**ND**	**0.13**	**0.07**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-I-S1-47-51FT	AA-I-S1-57-61FT	AA-I-S1-67-71FT	AA-I-S1-67-71FTEB	AA-I-S1-77-81FT	AA-I-S1-87-91FT	AA-I-S1-87-91FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/16/1999	12/16/1999	12/17/1999	12/17/1999	12/20/1999	12/21/1999	12/21/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 5UJ	0 5UJ	0 5U	0 5U	0 5U	0 5U	0 5U
Dichlorobiphenyl	0 1UJ	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 1U
Heptachlorobiphenyl	0 3UJ	0 3UJ	0 3U	0 3U	0 3U	0 3U	0 3U
Hexachlorobiphenyl	0 2UJ	0 2UJ	0 2U	0 2U	0 2U	0 2U	0 2U
Monochlorobiphenyl	0 1UJ	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 1U
Nonachlorobiphenyl	0 5UJ	0 5UJ	0.19J	0 5U	0 5U	0 5U	0 26J
Octachlorobiphenyl	0 3UJ	0 3UJ	0 3U	0 3U	0 3U	0 3U	0 3U
Pentachlorobiphenyl	0 2UJ	0 2UJ	0 2U	0 11J	0 2U	0 2U	0 2U
Tetrachlorobiphenyl	0 2UJ	0 2UJ	0 2U	0 2U	0 2U	0 2U	0 2U
Trichlorobiphenyl	0 1UJ	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 1U
Total PCB's	**ND**	**ND**	**0.19**	**0.11**	**ND**	**ND**	**0.26**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-I-S1-97-101FT	AA-I-S2-16-20FT	AA-I-S2-26-30FT	AA-I-S2-36-40FT	AA-I-S2-46-50FT	AA-I-S2-56-60FT	AA-I-S2-66-70FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/21/1999	12/3/1999	12/6/1999	12/7/1999	12/7/1999	12/8/1999	12/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.5U	0 5U	0.5U	0.5U	0.5U	0 50U	0 50U
Dichlorobiphenyl	0 1U	0 1U	0.1U	0 1U	0 1U	0 10U	0 10U
Heptachlorobiphenyl	0 3U	0 3U	0.3U	0 3U	0.3U	0.30U	0 30U
Hexachlorobiphenyl	0.2U	0.2U	0.2U	0.2U	0 2U	0.20U	0 20U
Monochlorobiphenyl	0 1U	0 1U	0.1U	0.1U	0.1U	0.10U	0 10U
Nonachlorobiphenyl	0.5U	0.5U	0.5U	0 5U	0 5U	0 50U	0 50U
Octachlorobiphenyl	0.3U	0 3U	0 3U	0 3U	0 3U	0 30U	0 30U
Pentachlorobiphenyl	0 2U	0 2U	0 2U	0 1J	0 2U	0 07J	0 20U
Tetrachlorobiphenyl	0 2U	0 2U	0 2U	0 2U	0 2U	0 20U	0 20U
Trichlorobiphenyl	0 1U	0 1U	0 1U	0.1U	0 1U	0 10U	0 10U
Total PCB's	**ND**	**ND**	**ND**	**0.1**	**ND**	**0.07**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-I-S2-76-80FT	AA-I-S2-76-80FTEB	AA-I-S2-76-80FTFD	AA-I-S2-86-90FT	AA-I-S2-96-100FT	AA-I-S3-104-108FT	AA-I-S3-110-114FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/10/1999	12/10/1999	12/10/1999	12/13/1999	12/13/1999	12/13/1999	12/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 50U	0 50U	0 50U	0 5U	0 5U	0 5U	0 5U
Dichlorobiphenyl	0 10U	0 10U	0 10U	0 1U	0 1U	0 1U	0 1U
Heptachlorobiphenyl	0 30U	0 30U	0 30U	0 3U	0 3U	0 3U	0 3U
Hexachlorobiphenyl	0 20U	0 20U	0 20U	0 2U	0 2U	0 2U	0 2U
Monochlorobiphenyl	0 10U	0 10U	0 10U	0 06J	0 06J	0 1U	0 1U
Nonachlorobiphenyl	0 50U	0 50U	0 50U	0 16J	0 5U	0 13J	0 13J
Octachlorobiphenyl	0 30U	0 30U	0 30U	0 3U	0 3U	0 3U	0 3U
Pentachlorobiphenyl	0 20U	0 20U	0 20U	0 2U	0 2U	0 11J	0 2U
Tetrachlorobiphenyl	0 20U	0 20U	0 20U	0 2U	0 2U	0 2U	0 2U
Trichlorobiphenyl	0 10U	0 10U	0 10U	0 1U	0 1U	0 1U	0 1U
Total PCB's	**ND**	**ND**	**ND**	**0 22**	**0 06**	**0 24**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-I-S3-24-28FT	AA-I-S3-34-38FT	AA-I-S3-44-48FT	AA-I-S3-54-58FT	AA-I-S3-64-68FT	AA-I-S3-74-78FT	AA-I-S3-84-88FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/3/1999	12/6/1999	12/6/1999	12/7/1999	12/7/1999	12/8/1999	12/9/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.5U	0.5U	0.5U	0.5U	0 5U	0.50U	0 50U
Dichlorobiphenyl	0.1U	0.1U	0.1U	0.1U	0.1U	0.10U	0 10U
Heptachlorobiphenyl	0.3U	0.3U	0.3U	0.3U	0.3U	0.30U	0 30U
Hexachlorobiphenyl	0.2U	0 2U	0.2U	0.2U	0 2U	0.20U	0 20U
Monochlorobiphenyl	0.1U	0.1U	0.1U	0.1U	0.1U	0 10U	0 10U
Nonachlorobiphenyl	0.5U	0.5U	0.5U	0 5U	0 2J	0 50U	0 50U
Octachlorobiphenyl	0 3U	0 3U	0.3U	0.3U	0 3U	0 30U	0 30U
Pentachlorobiphenyl	0 2U	0 2U	0.2U	0 2U	0 2U	0 20U	0 20U
Tetrachlorobiphenyl	0 2U	0 2U	0 2U	0.2U	0 2U	0 20U	0 20U
Trichlorobiphenyl	0 1U	0 1U	0 1U	0.1U	0 1U	0 10U	0 10U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**0.2**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-I-S3-84-88FTEB	AA-I-S3-84-88FTFD	AA-I-S3-94-98FT	AA-I-S4-56-60FT	AA-I-S4-56-60FTFD	AA-I-S4-66-70FT	AA-I-S4-76-80FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/10/1999	12/9/1999	12/10/1999	3/7/2000	3/7/2000	3/7/2000	3/8/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
Dichlorobiphenyl	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Heptachlorobiphenyl	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U
Hexachlorobiphenyl	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Monochlorobiphenyl	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Nonachlorobiphenyl	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
Octachlorobiphenyl	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U
Pentachlorobiphenyl	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Tetrachlorobiphenyl	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Trichlorobiphenyl	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-I-S4-86-90FT	AA-I-S4-96-100FT	AA-SW-S1-101-104FT	AA-SW-S1-101-104FTFD	AA-SW-S1-14-16FT	AA-SW-S1-24-26FT	AA-SW-S1-34-36FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/8/2000	3/9/2000	11/8/1999	11/8/1999	11/1/1999	11/2/1999	11/2/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.50U	0.50U	0.5U	0.5U	0.5U	0 5U	0.5U
Dichlorobiphenyl	0.10U	0.10U	0.1U	0.1U	0.1U	0 1U	0 1U
Heptachlorobiphenyl	0.30U	0.30U	0.3U	0.3U	0.3U	0 3U	0 3U
Hexachlorobiphenyl	0.20U	0 20U	0.2U	0.2U	0.2U	0 2U	0 2U
Monochlorobiphenyl	0.10U	0 10UJ	0.1U	0.1U	0.1U	0 1U	0 1U
Nonachlorobiphenyl	0.50U	0.50U	0.5U	0.5U	0.5U	0 5U	0 5U
Octachlorobiphenyl	0.30U	0 30U	0.3U	0.3U	0 3U	0 3U	0 3U
Pentachlorobiphenyl	0 20U	0.20U	0 2U	0 2U	0 2U	0 2U	0 2U
Tetrachlorobiphenyl	0 20U	0 20U	0 2U	0 2U	0 2U	0 2U	0 2U
Trichlorobiphenyl	0 10U	0 10U	0 1U	0 1U	0 1U	0 1U	0 1U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-SW-S1-42-46FT	AA-SW-S1-52-56FT	AA-SW-S1-62-66FT	AA-SW-S1-72-76FT	AA-SW-S1-82-86FT	AA-SW-S1-91-95FT	AA-SW-S2-102-106FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/3/1999	11/3/1999	11/4/1999	11/4/1999	11/5/1999	11/5/1999	11/15/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 5U	0 5U	0 5UJ	0 5UJ	0 5U	0 5U	0 50U
Dichlorobiphenyl	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U	0 10U
Heptachlorobiphenyl	0 3U	0 3U	0 3UJ	0 3UJ	0 3U	0 3U	0 30U
Hexachlorobiphenyl	0 2U	0 2U	0 2UJ	0 2UJ	0 2U	0 2U	0 20U
Monochlorobiphenyl	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U	0 10U
Nonachlorobiphenyl	0 5U	0 5U	0 5UJ	0 5UJ	0 5U	0 5U	0 50U
Octachlorobiphenyl	0 3U	0 3U	0 3UJ	0 3UJ	0 3U	0 3U	0 30U
Pentachlorobiphenyl	0 2U	0 2U	0 2UJ	0 2UJ	0 2U	0 2U	0 20U
Tetrachlorobiphenyl	0 2U	0 2U	0 2UJ	0 2UJ	0 2U	0 2U	0 20U
Trichlorobiphenyl	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U	0 10U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-SW-S2-14-16FT	AA-SW-S2-22-26FT	AA-SW-S2-32-36FT	AA-SW-S2-42-46FT	AA-SW-S2-52-56FT	AA-SW-S2-62-66FT	AA-SW-S2-62-66FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/9/1999	11/9/1999	11/9/1999	11/10/1999	11/11/1999	11/10/1999	11/10/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	0 50U
Dichlorobiphenyl	0.10U	0.10U	0.10U	0.10U	0 10U	0.10U	0.10U
Heptachlorobiphenyl	0.08J	0.05J	0.30U	0.30U	0.30U	0 30U	0 30U
Hexachlorobiphenyl	0.20U	0.20U	0.20U	0.20U	0.20U	0.20U	0 20U
Monochlorobiphenyl	0 10U	0.10U	0.10U	0 10U	0.10U	0 10U	0 10U
Nonachlorobiphenyl	0.50U	0.50U	0 50U	0 50U	0 50U	0 50U	0 50U
Octachlorobiphenyl	0.30U	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U
Pentachlorobiphenyl	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Tetrachlorobiphenyl	0 20U	0 20U	0.20U	0.20U	0 20U	0 20U	0 20U
Trichlorobiphenyl	0 10U	0.10U	0.10U	0.10U	0 10U	0 10U	0 10U
Total PCB's	**0.08**	**0.05**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-SW-S2-72-76FT	AA-SW-S2-72-76FTEB	AA-SW-S2-82-86FT	AA-SW-S2-92-96FT	AA-SW-S3-14-16FT	AA-SW-S3-22-26FT	AA-SW-S3-32-36FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/12/1999	11/10/1999	11/10/1999	11/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
Dichlorobiphenyl	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Heptachlorobiphenyl	0 30U	0 30U	0 30U	0 30U	0 07J	0 06J	0 30U
Hexachlorobiphenyl	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Monochlorobiphenyl	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Nonachlorobiphenyl	0 24J	0 50U	0 50U	0 21J	0 50U	0 50U	0 50U
Octachlorobiphenyl	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U
Pentachlorobiphenyl	0 20U	0 20U	0 20U	0 20U	0 11J	0 20U	0 20U
Tetrachlorobiphenyl	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Trichlorobiphenyl	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Total PCB's	**0.24**	**ND**	**ND**	**0 21**	**0.18**	**0 06**	**ND**

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-SW-S3-42-46FT	AA-SW-S3-52-56FT	AA-SW-S3-62-66FT	AA-SW-S3-72-76FT	AA-SW-S3-82-86FT	AA-SW-S3-92-96FT	AA-SW-S3-96-99FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/11/1999	11/12/1999	11/12/1999	11/15/1999	11/15/1999	11/16/1999	11/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U
Dichlorobiphenyl	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0 10U
Heptachlorobiphenyl	0.30U	0.30U	0.30U	0.30U	0.30U	0.30U	0.30U
Hexachlorobiphenyl	0.20U	0.20U	0.20U	0.20U	0 20U	0.20U	0.20U
Monochlorobiphenyl	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0 10U
Nonachlorobiphenyl	0.50U	0.50U	0.50U	0.50U	0.50U	0 50U	0 26J
Octachlorobiphenyl	0.30U	0.30U	0.30U	0.30U	0.30U	0 30U	0 30U
Pentachlorobiphenyl	0.20U	0.20U	0.20U	0 20U	0.20U	0 20U	0 20U
Tetrachlorobiphenyl	0 20U	0 20U	0 20U	0.20U	0 20U	0 20U	0 20U
Trichlorobiphenyl	0 10U	0.10U	0.10U	0 10U	0.10U	0.10U	0 10U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.26**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	AA-SW-S3-96-99FTEB	AA-SW-S3-96-99FTFD	BR-G	BR-GEB	BR-GFD	BR-H	BR-I	DW-MCDO-1
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Domestic Well GW
Sample Date	11/17/1999	11/17/1999	5/1/2000	5/2/2000	5/1/2000	5/1/2000	4/25/2000	10/21/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 50U	0 50U	100UJ	0 50U	250UJ	0 50UJ	1000UJ	0 5U
Dichlorobiphenyl	0 10U	0 10U	20UJ	0 10U	50UJ	0 10UJ	170J	0 1U
Heptachlorobiphenyl	0 30U	0 30U	60UJ	0 30U	150UJ	0 30UJ	1900J	0 3U
Hexachlorobiphenyl	0 20U	0 20U	40UJ	0 20U	100UJ	0 20UJ	2800J	0 2U
Monochlorobiphenyl	0 10U	0 10U	12J	0 10U	22J	0 11J	200UJ	0 1U
Nonachlorobiphenyl	0 50U	0 50U	100UJ	0 50U	250UJ	0 50UJ	250J	0 5U
Octachlorobiphenyl	0 30U	0 30U	60UJ	0 30U	150UJ	0 30UJ	730J	0 3U
Pentachlorobiphenyl	0 20U	0 20U	13J	0 20U	33J	0 20UJ	4800J	0 2U
Tetrachlorobiphenyl	0 20U	0 20U	40UJ	0 20U	100UJ	0 20UJ	3900J	0 2U
Trichlorobiphenyl	0 10U	0 10U	11J	0 10U	18J	0 10UJ	1200J	0 1U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**73**	**0 11**	**15750**	**ND**

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	DW-MCDO-1FD	DW-SCHM-1	DW-SETT-1	DW-WRIG-1	EE-01	EE-02-GP	EE-02-GPFD	EE-03	EE-05
Description	Domestic Well GW	Domestic Well GW	Domestic Well GW	Domestic Well GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/21/1999	10/22/1999	10/21/1999	10/21/1999	10/12/1999	11/4/1999	11/4/1999	10/12/1999	10/13/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 5U	0 5U	0 5U	0 5U	10U	5U	5U	0 5U	1U
Dichlorobiphenyl	0 1U	0 1U	0 1U	0 1U	2U	1U	1U	0 1U	0 2U
Heptachlorobiphenyl	0 3U	0 3U	0 3U	0 3U	6U	3U	3U	0 3U	0 6U
Hexachlorobiphenyl	0 2U	0 2U	0 2U	0 2U	4U	2U	2U	0 2U	0 4U
Monochlorobiphenyl	0 1U	0 1U	0 1U	0 1U	2U	1U	1U	0 1U	0 2U
Nonachlorobiphenyl	0 5U	0 5U	0 5U	0 5U	10U	5U	5U	0 5U	1U
Octachlorobiphenyl	0 3U	0 3U	0 3U	0 3U	6U	3U	3U	0 3U	0 6U
Pentachlorobiphenyl	0 2U	0 2U	0 2U	0 2U	4U	2U	2U	0 2U	0 4U
Tetrachlorobiphenyl	0 2U	0 2U	0 2U	0 2U	4U	2U	2U	0 2U	0 4U
Trichlorobiphenyl	0 1U	0 1U	0 1U	0 1U	2U	1U	1U	0 1U	0 2U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	EE-05EB	EE-12-GP	EE-13-GP	EE-14-GP	EE-15-GP	EE-15-GPFD	EEG-101	EEG-102	EEG-103-GP	EEG-104	EEG-105-GP
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/13/1999	11/5/1999	11/4/1999	11/5/1999	11/8/1999	11/8/1999	10/8/1999	10/7/1999	11/3/1999	10/8/1999	11/2/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.5U	5U	0 5U	2 5U	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U
Dichlorobiphenyl	0 1U	1U	0.1U	0.5U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
Heptachlorobiphenyl	0 3U	3U	0.3U	1 5U	0.3U	0 3U	0 3U	0 3U	0 3U	0 3U	0 3U
Hexachlorobiphenyl	0 2U	2U	0.2U	0.2J	0.2U	0 2U	0 2U	0.2U	0 2U	0 2U	0 2U
Monochlorobiphenyl	0.1U	1U	0.1U	0 5U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
Nonachlorobiphenyl	0 5U	5U	0.5U	2 5U	0 5U	0 5U	0 5U	0.5U	0 5U	0 5U	0 5U
Octachlorobiphenyl	0 3U	3U	0.3U	1.5U	0 3U	0 3U	0 3U	0 3U	0.3U	0 3U	0.3U
Pentachlorobiphenyl	0 2U	2U	0.2U	0.49J	0.2U	0.2U	0.2U	0 2U	0 2U	0 2U	0 2U
Tetrachlorobiphenyl	0 2U	2U	0.2U	1U	0.2U	0.2U	0.2U	0 2U	0 2U	0 2U	0 2U
Trichlorobiphenyl	0.1U	1U	0.1U	0.19J	0 1U	0.1U	0.1U	0.1U	0 1U	0 1U	0 1U
Total PCB's	**ND**	**ND**	**ND**	**0.88**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	EEG-106	EEG-107	EEG-109	EEG-110	EEG-111-GP	EEG-112	SGW-S1-15FT	SGW-S1-20FT	SGW-S1-40FT
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW
Sample Date	10/7/1999	10/7/1999	10/11/1999	10/11/1999	11/3/1999	10/8/1999	10/14/1999	10/14/1999	10/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.5U	5U	0.5U	0.5U	0.5U	0.5U	0.50UJ	0.50U	0.50UJ
Dichlorobiphenyl	0.1U	1U	0.1U	0.1U	0.1U	0.1U	0.10UJ	0.10U	0.10UJ
Heptachlorobiphenyl	0.3U	3U	0.3U	0.3U	0.3U	0.3U	0.30UJ	0.30U	0.30UJ
Hexachlorobiphenyl	0.2U	2U	0.2U	0.2U	0.2U	0.2U	0.20UJ	0.20U	0.20UJ
Monochlorobiphenyl	0.1U	1U	0.1U	0.1U	0.1U	0.1U	0.10UJ	0.10U	0.10UJ
Nonachlorobiphenyl	0.5U	5U	0.5U	0.5U	0.5U	0.5U	0.50UJ	0.50U	0.50UJ
Octachlorobiphenyl	0.3U	3U	0.3U	0.3U	0.3U	0.3U	0.30UJ	0.30U	0.30UJ
Pentachlorobiphenyl	0.2U	2U	0.2U	0.2U	0.2U	0.2U	0.20UJ	0.20U	0.056J
Tetrachlorobiphenyl	0.2U	2U	0.2U	0.2U	0.2U	0.2U	0.20UJ	0.20U	0.20UJ
Trichlorobiphenyl	0.1U	1U	0.1U	0.1U	0.1U	0.1U	0.10UJ	0.10U	0.10UJ
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.056**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	SGW-S1-40FTFD	SGW-S2-15FT	SGW-S2-20FT	SGW-S2-40FT	TS-S1-0HR	TS-S1-12HR	TS-S1-12HRFD
Description	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Time Series GW	Time Series GW	Time Series GW
Sample Date	10/14/1999	10/15/1999	10/15/1999	10/15/1999	3/29/2000	3/29/2000	3/29/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 50U	0.50UJ	0 50UJ	0 50UJ	0 50U	0 50U	0 50U
Dichlorobiphenyl	0 10U	0.10UJ	0 10UJ	0 10UJ	0 10U	0 10U	0 10U
Heptachlorobiphenyl	0 30U	0.30UJ	0.30UJ	0 30UJ	0 30U	0 30U	0 30U
Hexachlorobiphenyl	0 20U	0.20UJ	0.20UJ	0 20UJ	0 20U	0 20U	0 20U
Monochlorobiphenyl	0 10U	0.10UJ	0.10UJ	0 10UJ	0 10U	0 10U	0 10U
Nonachlorobiphenyl	0 50U	0.50UJ	0.50UJ	0 50UJ	0 50U	0 50U	0 50U
Octachlorobiphenyl	0.30U	0.30UJ	0.30UJ	0 30UJ	0 30U	0 30U	0 30U
Pentachlorobiphenyl	0 20U	0.20UJ	0.20UJ	0 20UJ	0 20U	0 20U	0 20U
Tetrachlorobiphenyl	0.20U	0.20UJ	0.20UJ	0 20UJ	0 20U	0 20U	0 20U
Trichlorobiphenyl	0 10U	0.10UJ	0 10UJ	0.10UJ	0 10U	0 10U	0 10U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	TS-S1-24HR	TS-S2-0HR	TS-S2-12HR	TS-S2-24HR	UGGW-EE-04	UGGW-EE-04-100FT	UGGW-EE-04-100FTFD	UGGW-EE-04-60FT
Description	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	3/30/2000	3/29/2000	3/29/2000	3/30/2000	10/13/1999	1/27/2000	1/27/2000	10/13/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0.50U	0.50U	0.50U	0.50U	0.5U	0.50U	0.50U	0.5U
Dichlorobiphenyl	0.10U	0.10U	0.10U	0.10U	0.1U	0.10U	0.10U	0 1U
Heptachlorobiphenyl	0.30U	0.30U	0.30U	0.30U	0.3U	0.30U	0.30U	0 3U
Hexachlorobiphenyl	0.20U	0.20U	0.20U	0.20U	0.2U	0.20U	0.20U	0 2U
Monochlorobiphenyl	0.10U	0 10U	0.10U	0.10U	0.1U	0.10U	0 10U	0 1U
Nonachlorobiphenyl	0.50U	0.50U	0.50U	0.50U	0 5U	0.50U	0.50U	0 5U
Octachlorobiphenyl	0.30U	0.30U	0.30U	0.30U	0.3U	0.30U	0 30U	0 3U
Pentachlorobiphenyl	0.20U	0.20U	0.20U	0.20U	0.2U	0.20U	0 20U	0 2U
Tetrachlorobiphenyl	0 20U	0 20U	0.20U	0 20U	0.2U	0.20U	0.20U	0 2U
Trichlorobiphenyl	0.10U	0 10U	0.10U	0.10U	0.1U	0.10U	0.10U	0 1U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UGGW-EE-04FD	UGGW-EE-20	UGGW-EE-20-100FT	UGGW-EE-20-60FT	UGGW-EEG-108	UGGW-EEG-108-100FT	UGGW-EEG-108-60FT
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	10/13/1999	10/18/1999	1/25/2000	1/24/2000	10/11/1999	1/31/2000	1/28/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 5U	0 5U	0 50U	0 50U	0 5U	0 5U	0 50U
Dichlorobiphenyl	0 1U	0 1U	0 10U	0 10U	0 1U	0 1U	0 10U
Heptachlorobiphenyl	0 3U	0 3U	0 30U	0 30U	0 3U	0 3U	0 30U
Hexachlorobiphenyl	0 2U	0 2U	0 20U	0 20U	0 2U	0 2U	0 20U
Monochlorobiphenyl	0 1U	0 1U	0 10U	0 10U	0 1U	0 1U	0 10U
Nonachlorobiphenyl	0 5U	0 5U	0 50U	0 50U	0 5U	0 5U	0 50U
Octachlorobiphenyl	0 3U	0 3U	0 30U	0 30U	0 3U	0 3U	0 30U
Pentachlorobiphenyl	0 2U	0 2U	0 20U	0 20U	0 2U	0 2U	0 20U
Tetrachlorobiphenyl	0 2U	0 2U	0 20U	0 20U	0 2U	0 2U	0 20U
Trichlorobiphenyl	0 1U	0 1U	0 10U	0 10U	0 1U	0 1U	0 10U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table A-3.3
Sauget Area 1
Ground-Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UGGW-EEG-108-60FTEB	UGGW-EEG-108FD
Description	Upgradient GW	Upgradient GW
Sample Date	1/28/2000	10/11/1999
Units	ug/l	ug/l
Decachlorobiphenyl	0 50U	0 5U
Dichlorobiphenyl	0 10U	0 1U
Heptachlorobiphenyl	0 30U	0 3U
Hexachlorobiphenyl	0 20U	0 2U
Monochlorobiphenyl	0 10U	0 1U
Nonachlorobiphenyl	0 50U	0 5U
Octachlorobiphenyl	0 30U	0 3U
Pentachlorobiphenyl	0 20U	0 2U
Tetrachlorobiphenyl	0 20U	0 2U
Trichlorobiphenyl	0 10U	0 1U
Total PCB's	**ND**	**ND**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-GHL-S1-102-106FT	AA-GHL-S1-107-111FT	AA-GHL-S1-12-16FT	AA-GHL-S1-22-26FT	AA-GHL-S1-22-26FTEB	AA-GHL-S1-22-26FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	12/2/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0.1UJ	0.1U	0.10U	0.10U	0.10U	0 10U
4,4'-DDE	0.1UJ	0.1U	0.10U	0.10U	0.10U	0 10U
4,4'-DDT	0.1UJ	0.1U	0.10U	0.10U	0.10U	0 10U
Aldrin	0.05UJ	0.05U	0.050U	0.050U	0.050U	0.050U
Alpha Chlordane	0.05UJ	0.05U	0.050U	0.050U	0.050U	0.050U
Dieldrin	0.1UJ	0.1U	0.10U	0 10U	0.10U	0 10U
Endosulfan I	0.05UJ	0.05U	0.050U	0.050U	0.050U	0 050U
Endosulfan II	0.1UJ	0.1U	0.10U	0.10U	0.10U	0 10U
Endosulfan sulfate	0.1UJ	0.1U	0.10U	0.10U	0.10U	0 10U
Endrin	0.1UJ	0.1U	0.10U	0.10U	0.10U	0 10U
Endrin aldehyde	0.1UJ	0.1U	0.10U	0.10U	0.10U	0 10U
Endrin ketone	0.1UJ	0.1U	0.10U	0.10U	0.10U	0.10U
Gamma Chlordane	0.05UJ	0.05U	0.050U	0.050U	0.050U	0.050U
Heptachlor	0.05UJ	0.05U	0.050U	0.050U	0.050U	0 050U
Heptachlor epoxide	0.05UJ	0.05U	0.050U	0 050U	0.050U	0.050U
Methoxychlor	0.5UJ	0.5U	0.50U	0.50U	0.50U	0 50U
Toxaphene	5UJ	5U	5.0U	5.0U	5.0U	5 0U
alpha-BHC	0.039UJ	0.039U	0.039U	0.039U	0.039U	0 039U
beta-BHC	0.014UJ	0.014U	0.014U	0.014U	0.014U	0 014U
delta-BHC	0.012UJ	0.012U	0.012U	0.034J	0.0077J	0 030J
gamma-BHC (Lindane)	0.019UJ	0.019U	0.019U	0.032J	0.019U	0 028JN
Total Pesticides	**ND**	**ND**	**ND**	**0.066**	**0.0077**	**0.058**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-GHL-S1-32-36FT	AA-GHL-S1-42-46FT	AA-GHL-S1-52-56FT	AA-GHL-S1-62-66FT	AA-GHL-S1-72-76FT	AA-GHL-S1-82-86FT	AA-GHL-S1-92-96FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/18/1999	11/18/1999	11/19/1999	11/29/1999	11/30/1999	11/30/1999	12/1/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0 10UJ	0 10UJ	0 10UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ
4 4'-DDE	0 10UJ	0 10UJ	0 10UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ
4 4'-DDT	0 10UJ	0 10UJ	0 10UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ
Aldrin	0 050UJ	0 050UJ	0 050UJ	0 05UJ	0 05UJ	0 05UJ	0 05UJ
Alpha Chlordane	0 050UJ	0 050UJ	0 050UJ	0 05UJ	0 05UJ	0 05UJ	0 05UJ
Dieldrin	0 10UJ	0 10UJ	0 10UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ
Endosulfan I	0 050UJ	0 050UJ	0 050UJ	0 05UJ	0 05UJ	0 05UJ	0 05UJ
Endosulfan II	0 10UJ	0 10UJ	0 10UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ
Endosulfan sulfate	0 10UJ	0 10UJ	0 10UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ
Endrin	0 10UJ	0 10UJ	0 10UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ
Endrin aldehyde	0 10UJ	0 10UJ	0 10UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ
Endrin ketone	0 10UJ	0 10UJ	0 10UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ
Gamma Chlordane	0 050UJ	0 050UJ	0 050UJ	0 05UJ	0 05UJ	0 05UJ	0 05UJ
Heptachlor	0 050UJ	0 050UJ	0 037J	0 0075J	0 0032J	0 003J	0 05UJ
Heptachlor epoxide	0 050UJ	0 050UJ	0 050UJ	0 05UJ	0 05UJ	0 05UJ	0 05UJ
Methoxychlor	0 50UJ	0 50UJ	0 50UJ	0 5UJ	0 5UJ	0 5UJ	0 5UJ
Toxaphene	5 0UJ	5 0UJ	5 0UJ	5UJ	5UJ	5UJ	5UJ
alpha-BHC	0 039UJ	0 039UJ	0 039UJ	0 039UJ	0 039UJ	0 039UJ	0 039UJ
beta-BHC	0 014UJ	0 014UJ	0 014UJ	0 014UJ	0 014UJ	0 014UJ	0 014UJ
delta-BHC	0 0056J	0 0024J	0 019J	0 015J	0 0034J	0 012UJ	0 012UJ
gamma-BHC (Lindane)	0 013J	0 0011J	0 0029J	0 019UJ	0 0018J	0 019UJ	0 019UJ
Total Pesticides	**0.0186**	**0.0035**	**0.0589**	**0 0225**	**0 0084**	**0 003**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-GHL-S1-92-96FTFD	AA-GHL-S2-12-16FT	AA-GHL-S2-22-26FT	AA-GHL-S2-32-36FT	AA-GHL-S2-32-36FTEB	AA-GHL-S2-42-46FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	11/18/1999	11/18/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0.1UJ	0.10U	0.10UJ	0 10U	0 10U	0 10UJ
4,4'-DDE	0.1UJ	0.10U	0.10UJ	0 10U	0 10U	0 10UJ
4,4'-DDT	0.1UJ	0.10U	0.10UJ	0 10U	0 10U	0 10UJ
Aldrin	0.05UJ	0.050U	0.050UJ	0 050U	0 050U	0 050UJ
Alpha Chlordane	0 05UJ	0.050U	0.050UJ	0 050U	0 050U	0 050UJ
Dieldrin	0.1UJ	0.10U	0.10UJ	0 10U	0 10U	0 10UJ
Endosulfan I	0.05UJ	0.050U	0.050UJ	0.050U	0 050U	0 050UJ
Endosulfan II	0.1UJ	0.10U	0.10UJ	0 10U	0 10U	0 10UJ
Endosulfan sulfate	0.1UJ	0.10U	0.10UJ	0.10U	0.10U	0 10UJ
Endrin	0.1UJ	0.10U	0.10UJ	0.10U	0.10U	0 10UJ
Endrin aldehyde	0.1UJ	0.10U	0.10UJ	0.10U	0.10U	0 10UJ
Endrin ketone	0.1UJ	0.10U	0.10UJ	0.10U	0.10U	0 10UJ
Gamma Chlordane	0.05UJ	0.050U	0 050UJ	0 050U	0 050U	0 050UJ
Heptachlor	0.05UJ	0.050U	0.050UJ	0.050U	0.050U	0 050UJ
Heptachlor epoxide	0.05UJ	0.050U	0.050UJ	0.050U	0 050U	0 050UJ
Methoxychlor	0.5UJ	0.50U	0.50UJ	0.50U	0.50U	0 50UJ
Toxaphene	5UJ	5.0U	5.0UJ	5 0U	5 0U	5 0UJ
alpha-BHC	0.039UJ	0.039U	0.039UJ	0 039U	0 039U	0 039UJ
beta-BHC	0.014UJ	0.014U	0.014UJ	0.014U	0.014U	0 014UJ
delta-BHC	0.012UJ	0.012U	0.012UJ	0.012UJ	0 012UJ	0 012UJ
gamma-BHC (Lindane)	0.019UJ	0.019U	0.019UJ	0.0050J	0.012J	0 034J
Total Pesticides	**ND**	**ND**	**ND**	**0.005**	**0.012**	**0.034**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-GHL-S2-52-56FT	AA-GHL-S2-62-66FT	AA-GHL-S2-62-66FTFD	AA-GHL-S2-72-76FT	AA-GHL-S2-82-86FT	AA-GHL-S2-92-96FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/29/1999	11/30/1999	11/30/1999	11/30/1999	12/1/1999	12/2/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1U
4,4'-DDE	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1U
4,4'-DDT	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1U
Aldrin	0 05UJ	0 05UJ	0 05UJ	0 05UJ	0 05UJ	0 05U
Alpha Chlordane	0 05UJ	0 05UJ	0 05UJ	0 05UJ	0 05UJ	0 05U
Dieldrin	0 1UJ	0 011J	0 012J	0 1UJ	0 1UJ	0 1U
Endosulfan I	0 05UJ	0 05UJ	0 05UJ	0 05UJ	0 05UJ	0 05U
Endosulfan II	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1U
Endosulfan sulfate	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1U
Endrin	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1U
Endrin aldehyde	0 1UJ	0 1UJ	0 006J	0 1UJ	0 1UJ	0 1U
Endrin ketone	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1UJ	0 1U
Gamma Chlordane	0 05UJ	0 05UJ	0 05UJ	0 05UJ	0 05UJ	0 05U
Heptachlor	0 05UJ	0 05UJ	0 02J	0 01J	0 0058J	0 05U
Heptachlor epoxide	0 05UJ	0 046J	0 04J	0 05UJ	0 05UJ	0 05U
Methoxychlor	0 5UJ	0 5UJ	0 5UJ	0 5UJ	0 5UJ	0 5U
Toxaphene	5UJ	5UJ	5UJ	5UJ	5UJ	5U
alpha-BHC	0 039UJ	0 039UJ	0 039UJ	0 039UJ	0 039UJ	0 039U
beta-BHC	0 014UJ	0 014UJ	0 014UJ	0 014UJ	0 014UJ	0 014U
delta-BHC	0 0054J	0 014J	0 018J	0 012J	0 0044J	0 012U
gamma-BHC (Lindane)	0 028J	0 023J	0 012J	0 0033J	0 019UJ	0 019U
Total Pesticides	**ND**	**0 094**	**0 108**	**0 0253**	**0 0102**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-GHL-S2-92-96FTEB	AA-GHL-S2-99-103FT	AA-GHL-S3-100-104FT	AA-GHL-S3-110-114FT	AA-GHL-S3-20-24FT	AA-GHL-S3-30-34FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/2/1999	12/2/1999	12/20/1999	12/21/1999	12/14/1999	12/15/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0.1U	0.1U	0.1UJ	0.1U	0 1U	0 1UJ
4,4'-DDE	0 1U	0.1U	0 1UJ	0 1U	0 1U	0 1UJ
4,4'-DDT	0 1U	0.1U	0 1UJ	0 1U	0 1U	0 1UJ
Aldrin	0 05U	0.05U	0 05UJ	0 05U	0 05U	0 05UJ
Alpha Chlordane	0 05U	0.05U	0 05UJ	0.05U	0 05U	0 05UJ
Dieldrin	0 1U	0 1U	0 1UJ	0 1U	0 1U	0 1UJ
Endosulfan I	0 05U	0.05U	0 05UJ	0 05U	0 05U	0 05UJ
Endosulfan II	0 1U	0.1U	0.1UJ	0 1U	0 1U	0 1UJ
Endosulfan sulfate	0.1U	0.1U	0.1UJ	0 1U	0 1U	0 1UJ
Endrin	0 1U	0.1U	0 1UJ	0.1U	0 1U	0 1UJ
Endrin aldehyde	0.1U	0.1U	0 1UJ	0.1U	0 1U	0 1UJ
Endrin ketone	0.1U	0.1U	0.1UJ	0.1U	0 1U	0 1UJ
Gamma Chlordane	0.05U	0.05U	0.05UJ	0.05U	0 05U	0 05UJ
Heptachlor	0.05U	0 05U	0.05UJ	0 05U	0 05U	0 05UJ
Heptachlor epoxide	0.05U	0.05U	0.05UJ	0.05U	0 05U	0 05UJ
Methoxychlor	0 5U	0.5U	0.5UJ	0.5U	0 5U	0 5UJ
Toxaphene	5U	5U	5UJ	5U	5U	5UJ
alpha-BHC	0 039U	0 039U	0.039UJ	0 039U	0 039U	0 039UJ
beta-BHC	0 014U	0.014U	0.014UJ	0 014U	0 014U	0 014UJ
delta-BHC	0 012U	0.012U	0.012UJ	0 012U	0 012U	0 012UJ
gamma-BHC (Lindane)	0 019U	0.019U	0 019UJ	0 019U	0 019U	0 016J
Total Pesticides	**ND**	**ND**	**ND**	**ND**	**ND**	**0 016**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-GHL-S3-30-34FTFD	AA-GHL-S3-40-44FT	AA-GHL-S3-50-54FT	AA-GHL-S3-60-64FT	AA-GHL-S3-60-64FTEB	AA-GHL-S3-70-74FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/15/1999	12/15/1999	12/16/1999	12/16/1999	12/16/1999	12/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4'-DDD	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
4,4'-DDE	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
4,4'-DDT	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
Aldrin	0 05U	0 05U	0 05UJ	0 05UJ	0 05U	0 05U
Alpha Chlordane	0 05U	0 05U	0 05UJ	0 05UJ	0 05U	0 05U
Dieldrin	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
Endosulfan I	0 05U	0 05U	0 05UJ	0 05UJ	0 05U	0 05U
Endosulfan II	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
Endosulfan sulfate	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
Endrin	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
Endrin aldehyde	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
Endrin ketone	0 1U	0 1U	0 1UJ	0 1UJ	0 1U	0 1U
Gamma Chlordane	0 05U	0 05U	0 05UJ	0 05UJ	0 05U	0 05U
Heptachlor	0 05U	0 05U	0 05UJ	0 05UJ	0 05U	0 05U
Heptachlor epoxide	0 05U	0 05U	0 05UJ	0 05UJ	0 05U	0 05U
Methoxychlor	0 5U	0 5U	0 5UJ	0 5UJ	0 5U	0 5U
Toxaphene	5U	5U	5UJ	5UJ	5U	5U
alpha-BHC	0 039U	0 039U	0 039UJ	0 039UJ	0 039U	0 039U
beta-BHC	0 014U	0 014U	0 014UJ	0 014UJ	0 014U	0 014U
delta-BHC	0 012U	0 012U	0 012UJ	0 012UJ	0 012U	0 012U
gamma-BHC (Lindane)	0 019U	0 019U	0 0026J	0 0055J	0 019U	0 019U
Total Pesticides	**ND**	**ND**	**0 0026**	**0.0055**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-GHL-S3-80-84FT	AA-GHL-S3-90-94FT	AA-H-S1-101-105FT	AA-H-S1-101-105FTEB	AA-H-S1-53-57FT	AA-H-S1-63-67FT	AA-H-S1-73-77FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/17/1999	12/20/1999	3/16/2000	3/17/2000	3/10/2000	3/10/2000	3/13/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0.1U	0.1U	0 44	0.10U	0 90JD	0 041J	0 039J
4,4'-DDE	0.1U	0 1U	0.10UJ	0 10U	0 12J	0 030J	0 10UJ
4,4'-DDT	0.1U	0.1U	1.2JD	0 10U	4.4JD	0 099J	0 035J
Aldrin	0.05U	0 05U	0.050U	0.050U	0 066J	0 050U	0 050UJ
Alpha Chlordane	0.05U	0 05U	0.050U	0.050U	0 030J	0 050U	0 050UJ
Dieldrin	0.1U	0 1U	0.10U	0 10U	0.10U	0 0050J	0 10UJ
Endosulfan I	0.05U	0 05U	0.050U	0.050U	0.017J	0.050U	0 050UJ
Endosulfan II	0.1U	0.1U	0.10UJ	0.10U	0.10U	0 10U	0 10UJ
Endosulfan sulfate	0.1U	0.1U	0.10U	0.10U	0.10U	0 10U	0 10UJ
Endrin	0.1U	0.1U	0.10U	0 10U	0.10U	0 013J	0 10UJ
Endrin aldehyde	0.1U	0.1U	0.74J	0.10U	0.10U	0 10U	0 10UJ
Endrin ketone	0.1U	0.1U	0.10U	0 10U	0 10U	0 10U	0 10UJ
Gamma Chlordane	0.05U	0.05U	0.050U	0.050U	0 14J	0 012J	0 050UJ
Heptachlor	0.05U	0.05U	0.050UJ	0.050U	0 023J	0 044J	0 050UJ
Heptachlor epoxide	0.05U	0.05U	0.050U	0 050U	0.090J	0 0071J	0 050UJ
Methoxychlor	0.5U	0.5U	1.2JD	0.50U	0.50U	0 50U	0 50UJ
Toxaphene	5U	5U	5.0U	5 0U	5 0U	5 0U	5 0UJ
alpha-BHC	0.039U	0.039U	0.039UJ	0.039U	0.010J	0 021J	0.039UJ
beta-BHC	0.014U	0.014U	0.014UJ	0 014U	0 014U	0 014U	0 14UJD
delta-BHC	0.0031J	0.012U	0.012U	0.012U	0.15J	0 077J	0 019J
gamma-BHC (Lindane)	0.0024J	0.019U	0.019U	0.019U	0.038J	0 019U	0 19UJD
Total Pesticides	**0.0055**	**ND**	**3.58**	**ND**	**5.984**	**0.3491**	**0.093**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-H-S1-73-77FTFD	AA-H-S1-83-87FT	AA-H-S1-83-87FTEB	AA-H-S1-93-97FT	AA-I-S1-17-21FT	AA-I-S1-27-31FT	AA-I-S1-37-41FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/13/2000	3/13/2000	3/14/2000	3/15/2000	12/14/1999	12/15/1999	12/15/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0 061J	0 044J	0 0095J	0 090J	0 0036J	0 1UJ	0 042J
4,4'-DDE	0 021J	0 022J	0 10U	0 16J	0 1U	0 1UJ	0 0024J
4 4'-DDT	0 024J	0 19J	0 10U	0 17J	0 0022J	0 1UJ	0 025J
Aldrin	0 026J	0 050UJ	0 050U	0 053J	0 0055J	0 0027J	0 002J
Alpha Chlordane	0 050UJ	0 050UJ	0 050U	0 019J	0 05U	0 05UJ	0 05UJ
Dieldrin	0 10UJ	0 10UJ	0 10U	0 10UJ	0 0039J	0 1UJ	0 0077J
Endosulfan I	0 050UJ	0 050UJ	0 050U	0 035J	0 05U	0 05UJ	0 05UJ
Endosulfan II	0 10UJ	0 10UJ	0 10U	0 10UJ	0 001J	0 1UJ	0 022J
Endosulfan sulfate	0 10UJ	0 10UJ	0 10U	0 10UJ	0 1U	0 1UJ	0 1UJ
Endrin	0 10UJ	0 10UJ	0 10U	0 10UJ	0 0027J	0 1UJ	0 1UJ
Endrin aldehyde	0 10UJ	0 10UJ	0 10U	0 10UJ	0 1U	0 1UJ	0 1UJ
Endrin ketone	0 10UJ	0 10UJ	0 10U	0 10UJ	0 0044J	0 1UJ	0 0037J
Gamma Chlordane	0 0080J	0 013J	0 0024J	0 050UJ	0 05U	0 05UJ	0 05UJ
Heptachlor	0 050UJ	0 050UJ	0 050U	0 050UJ	0 028J	0 024J	0 016J
Heptachlor epoxide	0 050UJ	0 050UJ	0 050U	0 019J	0 0077J	0 014J	0 016J
Methoxychlor	0 50UJ	0 50UJ	0 50U	0 50UJ	0 5U	0 5UJ	0 5UJ
Toxaphene	5 0UJ	5 0UJ	5 0U	5 0UJ	5U	5UJ	5UJ
alpha-BHC	0 044J	0 039UJ	0 039U	0 039UJ	0 012J	0 054J	0 066J
beta-BHC	0 14UJD	0 70UJD	0 014U	2 8UJD	0 091J	0 014UJ	0 028J
delta-BHC	0 27J	0 062J	0 012U	0 012UJ	0 036	0 1J	0 079J
gamma-BHC (Lindane)	0 019UJ	0 95UJD	0 019U	3 8UJD	0 069J	0 019UJ	0 019UJ
Total Pesticides	**0 454**	**ND**	**0.0119**	**0.546**	**0 267**	**0 1947**	**0 3098**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-I-S1-47-51FT	AA-I-S1-57-61FT	AA-I-S1-67-71FT	AA-I-S1-67-71FTEB	AA-I-S1-77-81FT	AA-I-S1-87-91FT	AA-I-S1-87-91FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/16/1999	12/16/1999	12/17/1999	12/17/1999	12/20/1999	12/21/1999	12/21/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4 -DDD	0 1UJ	0 031J	0 1UJ	0 1U	0 1UJ	1U	1U
4 4'-DDE	0 1UJ	0 1U	0 1UJ	0 1U	0 1UJ	1U	1U
4 4'-DDT	0 11J	0 06J	0 1UJ	0 1U	0 1UJ	1U	1U
Aldrin	0 05UJ	0 05U	0 05UJ	0 05U	0 05UJ	0 5U	0 5U
Alpha Chlordane	0 05UJ	0 05U	0 05UJ	0 05U	0 05UJ	0 5U	0 5U
Dieldrin	0 1UJ	0 1U	0 1UJ	0 1U	0 1UJ	1U	1U
Endosulfan I	0 05UJ	0 05U	0 05UJ	0 05U	0 05UJ	0 5U	0 5U
Endosulfan II	0 039J	0 1U	0 1UJ	0 1U	0 1UJ	1U	1U
Endosulfan sulfate	0 1UJ	0 1U	0 1UJ	0 1U	0 1UJ	1U	1U
Endrin	0 1UJ	0 1U	0 1UJ	0 1U	0 1UJ	1U	1U
Endrin aldehyde	0 1UJ	0 1U	0 1UJ	0 1U	0 1UJ	1U	1U
Endrin ketone	0 1UJ	0 1U	0 1UJ	0 1U	0 1UJ	1U	1U
Gamma Chlordane	0 05UJ	0 05U	0 05UJ	0 05U	0 05UJ	0 5U	0 5U
Heptachlor	0 096J	0 011J	0 026J	0 05U	0 05UJ	0 5U	0 5U
Heptachlor epoxide	0 037J	0 016J	0 05UJ	0 05U	0 05UJ	0 5U	0 5U
Methoxychlor	0 5UJ	0 5U	0 5UJ	0 5U	0 5UJ	5U	5U
Toxaphene	5UJ	5U	5UJ	5U	5UJ	50U	50U
alpha-BHC	0 039UJ	0 039U	0 039UJ	0 039U	0 0061J	65D	70D
beta-BHC	46J	0 024J	0 014UJ	0 014U	0 014UJ	13D	14D
delta-BHC	0 012UJ	0 012U	0 0076J	0 012U	0 03J	0 99J	2
gamma-BHC (Lindane)	0 019J	0 0019J	0 012J	0 019U	0 0028J	0 19U	0 31J
Total Pesticides	**46.301**	**0 1439**	**0 0456**	**ND**	**0 0389**	**78 99**	**86 31**

Notes U not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-I-S1-97-101FT	AA-I-S2-16-20FT	AA-I-S2-26-30FT	AA-I-S2-36-40FT	AA-I-S2-46-50FT	AA-I-S2-56-60FT	AA-I-S2-66-70FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/21/1999	12/3/1999	12/6/1999	12/7/1999	12/7/1999	12/8/1999	12/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	1U	0.1U	0.1U	0.1UJ	0.1UJ	0.032J	0.10UJ
4,4'-DDE	1U	0.1U	0.1U	0.1UJ	0.1UJ	0.10UJ	0.10UJ
4,4'-DDT	1U	0.1U	0.1U	0.1UJ	0.1UJ	0.10UJ	0.10UJ
Aldrin	0.5U	0.05U	0.05U	0.05UJ	0.05UJ	0.050UJ	0.050UJ
Alpha Chlordane	0.5U	0.05U	0.05U	0.05UJ	0.05UJ	0.050UJ	0.050UJ
Dieldrin	1U	0.1U	0.1U	0.1UJ	0.1UJ	0.0077J	0.10UJ
Endosulfan I	0.5U	0.05U	0.05U	0.05UJ	0.05UJ	0.050UJ	0.050UJ
Endosulfan II	1U	0.1U	0.1U	0.1UJ	0.1UJ	0.10UJ	0.10UJ
Endosulfan sulfate	1U	0.1U	0.1U	0.1UJ	0.1UJ	0.10UJ	0.10UJ
Endrin	1U	0.1U	0.1U	0.1UJ	0.1UJ	0.10UJ	0.10UJ
Endrin aldehyde	1U	0.1U	0.1U	0.1UJ	0.1UJ	0.10UJ	0.10UJ
Endrin ketone	1U	0.1U	0.1U	0.1UJ	0.1UJ	0.10UJ	0.10UJ
Gamma Chlordane	0.5U	0.05U	0.05U	0.05UJ	0.05UJ	0.050UJ	0.050UJ
Heptachlor	0.5U	0.0083J	0.0068J	0.0091J	0.0065J	0.050UJ	0.050UJ
Heptachlor epoxide	0.5U	0.05U	0.05U	0.003J	0.0086J	0.050UJ	0.050UJ
Methoxychlor	5U	0.5U	0.5U	0.5UJ	0.5UJ	0.50UJ	0.50UJ
Toxaphene	50U	5U	5U	5UJ	5UJ	5.0UJ	5.0UJ
alpha-BHC	72D	0.039U	0.0084J	0.012J	0.041J	0.028J	0.030J
beta-BHC	4.4D	0.014U	0.014U	0.049J	0.071J	0.014UJ	0.014UJ
delta-BHC	3.8	0.012U	0.042J	0.038J	0.026J	0.012UJ	0.012UJ
gamma-BHC (Lindane)	0.19U	0.019U	0.019U	0.019UJ	0.019UJ	0.019UJ	0.019UJ
Total Pesticides	**80.2**	**0.0083**	**0.0572**	**0.1111**	**0.1531**	**0.0677**	**0.03**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-I-S2-76-80FT	AA-I-S2-76-80FTEB	AA-I-S2-76-80FTFD	AA-I-S2-86-90FT	AA-I-S2-96-100FT	AA-I-S3-104-108FT	AA-I-S3-110-114FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/10/1999	12/10/1999	12/10/1999	12/13/1999	12/13/1999	12/13/1999	12/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4'-DDD	0 015J	0 015J	0 10U	0 1U	0 1U	0 1U	0 1UJ
4 4'-DDE	0 10U	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ
4 4 -DDT	0 10U	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ
Aldrin	0 050U	0 050U	0 050U	0 05U	0 05U	0 05U	0 05UJ
Alpha Chlordane	0 050U	0 0090J	0 050U	0 05U	0 05U	0 05U	0 05UJ
Dieldrin	0 10U	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ
Endosulfan I	0 050U	0 050U	0 050U	0 05U	0 05U	0 05U	0 05UJ
Endosulfan II	0 10U	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ
Endosulfan sulfate	0 10U	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ
Endrin	0 10U	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ
Endrin aldehyde	0 10U	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ
Endrin ketone	0 10U	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ
Gamma Chlordane	0 050U	0 050U	0 050U	0 05U	0 05U	0 05U	0 05UJ
Heptachlor	0 050U	0 050U	0 050U	0 05U	0 05U	0 05U	0 05UJ
Heptachlor epoxide	0 050U	0 050U	0 050U	0 05U	0 05U	0 05U	0 05UJ
Methoxychlor	0 50U	0 50U	0 50U	0 5U	0 5U	0 5U	0 5UJ
Toxaphene	5 0U	5 0U	5 0U	5U	5U	5U	5UJ
alpha-BHC	0 039U	0 039U	0 039U	0 039U	0 038J	0 039U	0 039UJ
beta-BHC	0 014U	0 014U	0 014U	0 014U	0 014U	0 014U	0 014UJ
delta-BHC	0 0091J	0 0061J	0 012U	0 034	0 032J	0 011J	0 012UJ
gamma-BHC (Lindane)	0 013J	0 019U	0 019U	0 019U	0 019U	0 019U	0 019UJ
Total Pesticides	**0 0371**	**0 0301**	**ND**	**0.034**	**0 07**	**0 011**	**ND**

Notes U not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-I-S3-24-28FT	AA-I-S3-34-38FT	AA-I-S3-44-48FT	AA-I-S3-54-58FT	AA-I-S3-64-68FT	AA-I-S3-74-78FT	AA-I-S3-84-88FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/3/1999	12/6/1999	12/6/1999	12/7/1999	12/7/1999	12/8/1999	12/9/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0.1U	0.1U	0.1U	0.1UJ	0.1UJ	0 10U	0 10UJ
4,4'-DDE	0.1U	0.1U	0.1U	0.1UJ	0.1UJ	0.10U	0 10UJ
4,4'-DDT	0.1U	0.1U	0.1U	0.1UJ	0 1UJ	0.10U	0 10UJ
Aldrin	0.05U	0.05U	0.05U	0.05UJ	0 05UJ	0 050U	0 050UJ
Alpha Chlordane	0.05U	0.05U	0.05U	0.05UJ	0.05UJ	0.050U	0 050UJ
Dieldrin	0.1U	0.1U	0.1U	0.1UJ	0 1UJ	0.10U	0 10UJ
Endosulfan I	0.05U	0 05U	0.05U	0.05UJ	0 05UJ	0 050U	0 050UJ
Endosulfan II	0 1U	0 1U	0 1U	0 1UJ	0 1UJ	0 10U	0 10UJ
Endosulfan sulfate	0 1U	0 1U	0.1U	0.1UJ	0.1UJ	0 10U	0 10UJ
Endrin	0 1U	0.1U	0.1U	0.1UJ	0 1UJ	0 10U	0 10UJ
Endrin aldehyde	0 1U	0.1U	0.1U	0.1UJ	0 1UJ	0 10U	0 10UJ
Endrin ketone	0.1U	0.1U	0.1U	0 1UJ	0 1UJ	0 10U	0 10UJ
Gamma Chlordane	0.05U	0.05U	0.05U	0.05UJ	0.05UJ	0 0068J	0 050UJ
Heptachlor	0.0092J	0.05U	0.05U	0.05UJ	0 0038J	0 050U	0 050UJ
Heptachlor epoxide	0.05U	0.05U	0.05U	0 05UJ	0 0027J	0 050U	0 050UJ
Methoxychlor	0.5U	0.5U	0.5U	0.5UJ	0 5UJ	0 50U	0 50UJ
Toxaphene	5U	5U	5U	5UJ	5UJ	5 0U	5 0UJ
alpha-BHC	0 039U	0.039U	0.039U	0.039UJ	0.039UJ	0 039U	0.039UJ
beta-BHC	0.014U	0.014U	0.014U	0.014UJ	0.014UJ	0 014U	0 014UJ
delta-BHC	0.012U	0.0033J	0.012U	0.012UJ	0.015J	0.012U	0.012UJ
gamma-BHC (Lindane)	0.019U	0.019U	0.019U	0.019UJ	0.019UJ	0.019U	0.019UJ
Total Pesticides	**0.0092**	**0.0033**	**ND**	**ND**	**0.0215**	**0.0068**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-I-S3-84-88FTEB	AA-I-S3-84-88FTFD	AA-I-S3-94-98FT	AA-I-S4-56-60FT	AA-I-S4-56-60FTFD	AA-I-S4-66-70FT	AA-I-S4-76-80FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/10/1999	12/9/1999	12/10/1999	3/7/2000	3/7/2000	3/7/2000	3/8/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0 10U	0 10UJ	0.10U	0.10U	0 10U	0 10U	0 10U
4,4'-DDE	0 10U	0 10UJ	0 10U	0.10U	0 10U	0 10U	0 10U
4,4'-DDT	0 10U	0 10UJ	0 10U	0 10U	0 10U	0 10U	0 10U
Aldrin	0 050U	0 050UJ	0 050U	0 050U	0 050U	0 050U	0 050U
Alpha Chlordane	0 050U	0 050UJ	0.011J	0 050U	0 050U	0 050U	0 050U
Dieldrin	0 10U	0 10UJ	0 10U	0 10U	0 10U	0 10U	0 10U
Endosulfan I	0 050U	0 050UJ	0.050U	0 050U	0 050U	0 050U	0 050U
Endosulfan II	0.10U	0.10UJ	0.10U	0 10U	0 10U	0 10U	0 10U
Endosulfan sulfate	0.10U	0.10UJ	0.10U	0.10U	0 10U	0 10U	0 10U
Endrin	0.10U	0.10UJ	0.10U	0 10U	0 10U	0 10U	0 10U
Endrin aldehyde	0.10U	0.10UJ	0.10U	0 10U	0 10U	0 10U	0 10U
Endrin ketone	0.10U	0.10UJ	0.10U	0.10U	0 10U	0 10U	0 10U
Gamma Chlordane	0 050U	0.050UJ	0 050U	0 050U	0 050U	0 050U	0 050U
Heptachlor	0.050U	0.050UJ	0.050U	0.050U	0 050U	0 050U	0 050U
Heptachlor epoxide	0 050U	0.050UJ	0.050U	0.050U	0 050U	0 050U	0 050U
Methoxychlor	0 50U	0 50UJ	0.50U	0.50U	0 50U	0 50U	0 50U
Toxaphene	5.0U	5.0UJ	5 0U	5.0U	5 0U	5 0U	5 0U
alpha-BHC	0.039U	0 039UJ	0 039U	0.039U	0 039U	0 039U	0 039U
beta-BHC	0 014U	0.014UJ	0.014U	0.014U	0 014U	0 014U	0 014U
delta-BHC	0.0031J	0.012UJ	0.012U	0.012U	0 012U	0 012U	0 012U
gamma-BHC (Lindane)	0.019U	0.019UJ	0.019U	0.019U	0.019U	0 019U	0 019U
Total Pesticides	**0.0031**	**ND**	**0.011**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-I-S4-86-90FT	AA-I-S4-96-100FT	AA-SW-S1-101-104FT	AA-SW-S1-101-104FTFD	AA-SW-S1-14-16FT	AA-SW-S1-24-26FT	AA-SW-S1-34-36FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/8/2000	3/9/2000	11/8/1999	11/8/1999	11/1/1999	11/2/1999	11/2/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0.10U	0.10U	0.1U	0.1U	0.1U	0.1U	0 1U
4,4'-DDE	0.10U	0.10U	0.1U	0.1U	0.1U	0.1U	0 1U
4,4'-DDT	0.10U	0.10U	0.1U	0.1U	0.1U	0 1U	0.1U
Aldrin	0.050U	0.050U	0.05U	0.05U	0.05U	0.05U	0.05U
Alpha Chlordane	0.050U	0.050U	0.05U	0.05U	0.05U	0.05U	0 05U
Dieldrin	0.10U	0 10U	0.1U	0.1U	0.1U	0 1U	0 1U
Endosulfan I	0 050U	0 050U	0.05U	0 05U	0.05U	0 05U	0 05U
Endosulfan II	0.10U	0 10U	0.1U	0 1U	0.1U	0 1U	0 1U
Endosulfan sulfate	0.10U	0.10U	0.1U	0.1U	0.1U	0 1U	0 1U
Endrin	0.10U	0.10U	0 1U	0 1U	0.1U	0 1U	0 1U
Endrin aldehyde	0.10U	0 10U	0.1U	0.1U	0.1U	0 1U	0 1U
Endrin ketone	0.10U	0.10U	0.1U	0.1U	0 1U	0 1U	0 1U
Gamma Chlordane	0.050U	0.050U	0.05U	0.05U	0.05U	0 05U	0 00075J
Heptachlor	0.050U	0.050U	0.05U	0.05U	0 05U	0 05U	0 05U
Heptachlor epoxide	0 050U	0 050U	0.05U	0.05U	0 05U	0 05U	0 05U
Methoxychlor	0.50U	0.50U	0.5U	0.5U	0.5U	0.5U	0 5U
Toxaphene	5 0U	0.50U	5U	5U	5U	5U	5U
alpha-BHC	0.039U	0.039U	0.039U	0.039U	0.039U	0 039U	0.039U
beta-BHC	0.014U	0.014U	0.014U	0.014U	0.014U	0.014U	0 014U
delta-BHC	0.012U	0.012U	0.0031J	0.012U	0.012U	0 012U	0 012U
gamma-BHC (Lindane)	0.019U	0.019U	0.0034J	0.019U	0 019U	0 019U	0 019U
Total Pesticides	**ND**	**ND**	**0.0065**	**ND**	**ND**	**ND**	**0.00075**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-SW-S1-42-46FT	AA-SW-S1-52-56FT	AA-SW-S1-62-66FT	AA-SW-S1-72-76FT	AA-SW-S1-82-86FT	AA-SW-S1 91-95FT	AA-SW-S2-102-106FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/3/1999	11/3/1999	11/4/1999	11/4/1999	11/5/1999	11/5/1999	11/15/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4'-DDD	0 1U	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 10U
4 4'-DDE	0 1U	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 10U
4 4 -DDT	0 1U	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 10U
Aldrin	0 05U	0 05UJ	0 05U	0 05U	0 05U	0 05U	0 050U
Alpha Chlordane	0 05U	0 05UJ	0 05U	0 05U	0 05U	0 05U	0 050U
Dieldrin	0 1U	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 10U
Endosulfan I	0 05U	0 05UJ	0 05U	0 05U	0 05U	0 05U	0 050U
Endosulfan II	0 1U	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 10U
Endosulfan sulfate	0 1U	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 10U
Endrin	0 1U	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 10U
Endrin aldehyde	0 1U	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 10U
Endrin ketone	0 1U	0 1UJ	0 1U	0 1U	0 1U	0 1U	0 10U
Gamma Chlordane	0 05U	0 05UJ	0 05U	0 05U	0 05U	0 05U	0 050U
Heptachlor	0 05U	0 05UJ	0 05U	0 05U	0 05U	0 05U	0 050U
Heptachlor epoxide	0 05U	0 05UJ	0 05U	0 05U	0 05U	0 05U	0 050U
Methoxychlor	0 5U	0 5UJ	0 5U	0 5U	0 5U	0 5U	0 50U
Toxaphene	5U	5UJ	5U	5U	5U	5U	5 0U
alpha-BHC	0 039U	0 039UJ	0 039U	0 039U	0 0048J	0 039U	0 039U
beta-BHC	0 014U	0 014UJ	0 014U	0 014U	0 014U	0 014U	0 014U
delta-BHC	0 012U	0 012UJ	0 012U	0 012U	0 012U	0 0071J	0 012U
gamma-BHC (Lindane)	0 019U	0 019UJ	0 019U	0 019U	0 019U	0 019U	0 019U
Total Pesticides	**ND**	**ND**	**ND**	**ND**	**ND**	**0 0071**	**ND**

Notes U-not detected J-estimated value N tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-SW-S2-14-16FT	AA-SW-S2-22-26FT	AA-SW-S2-32-36FT	AA-SW-S2-42-46FT	AA-SW-S2-52-56FT	AA-SW-S2-62-66FT	AA-SW-S2-62-66FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/9/1999	11/9/1999	11/9/1999	11/10/1999	11/11/1999	11/10/1999	11/10/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0 10U	0 10U	0.10U	0.10U	0.10U	0 10U	0 10U
4,4'-DDE	0.10U	0 10U	0.10U	0.10U	0 10U	0 10U	0 10U
4,4'-DDT	0 10U	0 10U	0.10U	0.10U	0.10U	0 10U	0 10U
Aldrin	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U
Alpha Chlordane	0.050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U
Dieldrin	0 10U	0 10U	0.10U	0 10U	0 10U	0 10U	0 10U
Endosulfan I	0.050U	0 050U	0.050U	0.050U	0 050U	0 050U	0 050U
Endosulfan II	0.10U	0 10U	0.10U	0 10U	0 10U	0 10U	0 10U
Endosulfan sulfate	0 10U	0 10U	0.10U	0.10U	0 10U	0 10U	0 10U
Endrin	0 10U	0 10U	0 10U	0.10U	0 10U	0 10U	0 10U
Endrin aldehyde	0 10U	0 10U	0.10U	0.10U	0 10U	0 10U	0 10U
Endrin ketone	0.10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Gamma Chlordane	0 050U	0 050U	0.050U	0.050U	0 050U	0 050U	0 050U
Heptachlor	0 050U	0.050U	0.050U	0 0025J	0 0053J	0 0051J	0 0041J
Heptachlor epoxide	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U
Methoxychlor	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
Toxaphene	5.0U	5 0U	5 0U	5.0U	5 0U	5 0U	5 0U
alpha-BHC	0 039U	0 039U	0 039U	0 0039J	0.039U	0 039U	0 039U
beta-BHC	0 014U	0 014U	0 014U	0.014U	0 014U	0 014U	0 014U
delta-BHC	0 012U	0 012U	0 012U	0 008J	0 0023J	0 0027J	0 0023J
gamma-BHC (Lindane)	0 019U	0.019U	0 019U	0 019U	0 019U	0 019U	0 019U
Total Pesticides	**ND**	**ND**	**ND**	**0.0144**	**0.0076**	**0.0078**	**0.0064**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-SW-S2-72-76FT	AA-SW-S2-72-76FTEB	AA-SW-S2-82-86FT	AA-SW-S2-92-96FT	AA-SW-S3-14-16FT	AA-SW-S3-22-26FT	AA-SW-S3-32-36FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/12/1999	11/10/1999	11/10/1999	11/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4'-DDD	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
4 4'-DDE	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
4 4'-DDT	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Aldrin	0 050U	0 050U	0.050U	0 050U	0 050U	0 050U	0 050U
Alpha Chlordane	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U
Dieldrin	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Endosulfan I	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U
Endosulfan II	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Endosulfan sulfate	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Endrin	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Endrin aldehyde	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Endrin ketone	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Gamma Chlordane	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U
Heptachlor	0 0011J	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U
Heptachlor epoxide	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U
Methoxychlor	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
Toxaphene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
alpha-BHC	0 039U	0 039U	0 039U	0 039U	0 039U	0 039U	0 039U
beta-BHC	0 014U	0 014U	0 014U	0 014U	0 014U	0 014U	0 014U
delta-BHC	0 012U	0 0084J	0 012U	0 0039J	0 012U	0 012U	0 012U
gamma-BHC (Lindane)	0 019U	0 019U	0 019U	0 019U	0 019U	0 019U	0 019U
Total Pesticides	**0.0011**	**0.0084**	**ND**	**0.0039**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-SW-S3-42-46FT	AA-SW-S3-52-56FT	AA-SW-S3-62-66FT	AA-SW-S3-72-76FT	AA-SW-S3-82-86FT	AA-SW-S3-92-96FT	AA-SW-S3-96-99FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/11/1999	11/12/1999	11/12/1999	11/15/1999	11/15/1999	11/16/1999	11/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
4,4'-DDE	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
4,4'-DDT	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
Aldrin	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Alpha Chlordane	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Dieldrin	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
Endosulfan I	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Endosulfan II	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
Endosulfan sulfate	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
Endrin	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
Endrin aldehyde	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
Endrin ketone	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
Gamma Chlordane	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Heptachlor	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Heptachlor epoxide	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Methoxychlor	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U
Toxaphene	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
alpha-BHC	0.039U	0.039U	0.039U	0.039U	0.039U	0.039U	0.039U
beta-BHC	0.014U	0.014U	0.014U	0.014U	0.014U	0.014U	0.014U
delta-BHC	0.0043J	0.0028J	0.0033J	0.0052J	0.012U	0.012U	0.0019J
gamma-BHC (Lindane)	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U
Total Pesticides	**0.0043**	**0.0028**	**0.0033**	**0.0052**	**ND**	**ND**	**0.0019**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	AA-SW-S3-96-99FTEB	AA-SW-S3-96-99FTFD	BR-G	BR-GEB	BR-GFD	BR-H	BR-I	DW-MCDO-1
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Domestic Well GW
Sample Date	11/17/1999	11/17/1999	5/1/2000	5/2/2000	5/1/2000	5/1/2000	4/25/2000	10/21/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4 -DDD	0 10U	0 10U	20U	0 10U	20U	0 10U	180	0 1U
4 4 -DDE	0 10U	0 10U	20U	0 10U	20U	0 10U	50U	0 1U
4 4 -DDT	0 10U	0 10U	18J	0 10U	20U	0 10U	50U	0 1U
Aldrin	0 050U	0 050U	10U	0 050U	10U	0 050U	25U	0 05U
Alpha Chlordane	0 050U	0 050U	10U	0 050U	10U	0 050U	25U	0 05U
Dieldrin	0 10U	0 10U	20U	0 10U	6 0J	0 10U	50U	0 1U
Endosulfan I	0 050U	0 050U	10U	0 050U	10U	0 050U	25U	0 05U
Endosulfan II	0 10U	0 10U	20U	0 10U	20U	0 10U	50U	0 1U
Endosulfan sulfate	0 10U	0 10U	20U	0 10U	20U	0 10U	50U	0 1U
Endrin	0 10U	0 10U	20U	0 10U	20U	0 10U	50U	0 1UJ
Endrin aldehyde	0 10U	0 10U	20U	0 10U	20U	0 10U	50U	0 1U
Endrin ketone	0 10U	0 10U	20U	0 10U	20U	0 10U	50U	0 1U
Gamma Chlordane	0 050U	0 050U	10U	0 050U	10U	0 050U	25U	0 05U
Heptachlor	0 050U	0 050U	10U	0 050U	10U	0 050U	25U	0 05U
Heptachlor epoxide	0 050U	0 050U	10U	0 050U	10U	0 050U	25U	0 05U
Methoxychlor	0 50U	0 50U	100U	0 50U	100U	0 50U	250U	0 5U
Toxaphene	5 0U	5 0U	1000U	5 0U	1000U	5 0U	2500U	5U
alpha-BHC	0 039U	0 039U	390D	0 039U	2200D	0 039U	3300D	0 039U
beta-BHC	0 014U	0 014U	2 8U	0 014U	170JD	0 14J	7 0U	0 014U
delta-BHC	0 012U	0 012U	2 4U	0 012U	2 4U	0 012U	41	0 0028J
gamma-BHC (Lindane)	0 019U	0 019U	3 8U	0 019U	3 8U	0 019U	9 5U	0 019U
Total Pesticides	**ND**	**ND**	**408**	**ND**	**2376**	**0 14**	**3521**	**0 0028**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	DW-MCDO-1FD	DW-SCHM-1	DW-SETT-1	DW-WRIG-1	EE-01	EE-02-GP	EE-02-GPFD	EE-03	EE-05
Description	Domestic Well GW	Domestic Well GW	Domestic Well GW	Domestic Well GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/21/1999	10/22/1999	10/21/1999	10/21/1999	10/12/1999	11/4/1999	11/4/1999	10/12/1999	10/13/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0 1U	0 1U	0 1U	0 1U	10U	5U	5U	0 1U	0 024J
4 4'-DDE	0 1U	0 1U	0 1U	0 1U	10U	5U	5U	0 1U	0 0014J
4 4'-DDT	0 1U	0 1U	0 1U	0 1U	10U	5U	5U	0 1U	0 1UJ
Aldrin	0 05U	0 05U	0 05U	0 05U	5U	2 5U	2 5U	0 05U	0 05UJ
Alpha Chlordane	0 05U	0 05U	0 05U	0 05U	5U	1 6J	3 2J	0 05U	0 05UJ
Dieldrin	0 1U	0 1U	0 1U	0 1U	10U	5U	5U	0 1U	0 02J
Endosulfan I	0 05U	0 05U	0 05U	0 05U	5U	2 5U	2 5U	0 05U	0 05UJ
Endosulfan II	0 1U	0 1U	0 1U	0 1U	10U	5U	5U	0 1U	0 1UJ
Endosulfan sulfate	0 1U	0 1UJ	0 1U	0 1U	10U	5U	5U	0 1U	0 1UJ
Endrin	0 1UJ	0 1U	0 1UJ	0 1UJ	10U	0 49J	0 23J	0 1U	0 024J
Endrin aldehyde	0 1U	0 1U	0 1U	0 1U	10U	5U	5U	0 1U	0 092J
Endrin ketone	0 1U	0 1U	0 1U	0 1U	10U	5U	5U	0 1U	0 1UJ
Gamma Chlordane	0 05U	0 05U	0 05U	0 05U	5U	2 5U	2 5U	0 05U	0 008J
Heptachlor	0 05U	0 05U	0 05U	0 05U	5U	12UD	12UD	0 05U	0 026J
Heptachlor epoxide	0 05U	0 05U	0 05U	0 05U	5U	4 2J	4 6J	0 05U	0 024J
Methoxychlor	0 5U	0 5U	0 5U	0 5U	50U	25U	0 36J	0 5U	0 069J
Toxaphene	5U	5U	5U	5U	500U	250U	250U	5U	5UJ
alpha-BHC	0 039U	0 039U	0 039U	0 039U	3 9U	0 54JD	0 45JD	0 039U	0 024J
beta-BHC	0 014U	0 014U	0 014U	0 014U	1 4U	3 5UD	3 5UD	0 014U	0 014UJ
delta-BHC	0 0029J	0 012U	0 012U	0 004J	1 2U	3UD	3UD	0 012U	0 36J
gamma-BHC (Lindane)	0 019U	0 019U	0 019U	0 019U	1 9U	4 8UD	4 8UD	0 019U	0 019UJ
Total Pesticides	**0.0029**	**ND**	**ND**	**0 004**	**ND**	**6.83**	**8 84**	**ND**	**0 6724**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	EE-05EB	EE-12-GP	EE-13-GP	EE-14-GP	EE-15-GP	EE-15-GPFD	EEG-101	EEG-102	EEG-103-GP	EEG-104	EEG-105 GP
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/13/1999	11/5/1999	11/4/1999	11/5/1999	11/8/1999	11/8/1999	10/8/1999	10/7/1999	11/3/1999	10/8/1999	11/2/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4 DDD	0 1U	2U	0 1U	1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
4 4' DDE	0 1U	2 2	0 1U	0 18J	0 1U	0 1U	0 004J	0 1U	0 1U	0 0039J	0 1U
4 4'-DDT	0 1U	2U	0 1U	1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
Aldrin	0 05U	1U	0 05U	0 5U	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
Alpha Chlordane	0 05U	1U	0 05U	0 5U	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
Dieldrin	0 1U	2U	0 1U	1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 0026J	0 1U
Endosulfan I	0 05U	1U	0 05U	0 5U	0 05U	0 05U	0 0016J	0 05U	0 05U	0 05U	0 05U
Endosulfan II	0 1U	2J	0 1U	1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 0069J	0 1U
Endosulfan sulfate	0 1U	2U	0 1U	1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
Endrin	0 1U	2U	0 1U	1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U	0 1U
Endrin aldehyde	0 1U	2U	0 1U	1U	0 1U	0 1U	0 0038J	0 1U	0 1U	0 011J	0 1U
Endrin ketone	0 1U	1 8J	0 1U	0 11J	0 1U	0 1U	0 1U	0 1U	0 1U	0 0093J	0 1U
Gamma Chlordane	0 05U	3 5	0 05U	0 25J	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
Heptachlor	0 05U	2 5J	0 05U	0 5U	0 05U	0 05U	0 0012J	0 05U	0 05U	0 05U	0 05U
Heptachlor epoxide	0 05U	5 6J	0 05U	0 68J	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U	0 05U
Methoxychlor	0 5U	2 8J	0 5U	0 22J	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U
Toxaphene	5U	100U	5U	50U	5U	5U	5U	5U	5U	5U	5U
alpha BHC	0 039U	2 4	0 039U	1 1	0 039U	0 039U	0 039U	0 22	0 039U	0 0008J	0 0031J
beta-BHC	0 014U	0 28U	0 014U	1J	0 014U	0 014U	0 014U	0 014U	0 014U	0 014U	0 014U
delta-BHC	0 01J	0 24U	0 021	0 12U	0 012U	0 012U	0 0082J	0 012U	0 012U	0 012U	0 012J
gamma-BHC (Lindane)	0 0013J	0 38U	0 019U	0 4	0 0057J	0 0049J	0 019U	0 019U	0 019U	0 00085J	0 0074J
Total Pesticides	**0 0113**	**22 8**	**0 021**	**3.94**	**0 0057**	**0 0049**	**0 0188**	**0 22**	**ND**	**0 03535**	**ND**

Notes U not detected J-estimated value N tentatively identified R-rejected M-EMPC D-result from diluted analysis EB equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	EEG-106	EEG-107	EEG-109	EEG-110	EEG-111-GP	EEG-112	SGW-S1-15FT	SGW-S1-20FT
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Shallow Residential GW	Shallow Residential GW
Sample Date	10/7/1999	10/7/1999	10/11/1999	10/11/1999	11/3/1999	10/8/1999	10/14/1999	10/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4'-DDD	0 1UJ	5U	0 044J	0 1U	0 1U	0 1U	0 10U	0 0040J
4,4'-DDE	0 1UJ	5U	0 1U	0 1U	0 1U	0 1U	0 10U	0 10U
4 4'-DDT	0 1UJ	5U	0 1U	0 1U	0 1U	0 1U	0 10U	0 10U
Aldrin	0 05UJ	2 5U	0 05U	0 05U	0 05U	0 05U	0 50U	0 50U
Alpha Chlordane	0 05UJ	2 5U	0 038J	0 05U	0 05U	0 05U	0 050U	0 050U
Dieldrin	0 1UJ	5U	0 0029J	0 1U	0 1U	0 1U	0 10U	0 0032J
Endosulfan I	0 05UJ	2 5U	0 05U	0 05UJ	0 05U	0 05U	0 050U	0 050U
Endosulfan II	0 1UJ	5U	0 1U	0 1U	0 1U	0 1U	0 10U	0 10U
Endosulfan sulfate	0 1UJ	5U	0 1U	0 1U	0 1U	0 1U	0 10U	0 10U
Endrin	0 1UJ	5U	0 1U	0 1U	0 1U	0 1U	0 10U	0 10U
Endrin aldehyde	0 1UJ	5U	0 1U	0 1U	0 1U	0 1U	0 10U	0 10U
Endrin ketone	0 1UJ	5U	0 0094J	0 1U	0 1U	0 1U	0 10U	0 10U
Gamma Chlordane	0 05UJ	2 5U	0 01J	0 05U	0 05U	0 05U	0 050U	0 050U
Heptachlor	0 05UJ	2 5U	0 05U	0 0099J	0 05U	0 05U	0 050U	0 050U
Heptachlor epoxide	0 05UJ	2 5U	0 05U	0 05U	0 05U	0 05U	0 050U	0 0014J
Methoxychlor	0 5UJ	25U	0 5U	0 5U	0 5U	0 5U	0 50U	0 0054J
Toxaphene	5UJ	250U	5U	5U	5U	5U	0 50U	0 50U
alpha-BHC	8 3JD	6J	0 039U	0 039U	0 039U	0 039U	0 039U	0 0021J
beta-BHC	0 36J	0 7U	0 014U	0 014U	0 014U	0 014U	0 014U	0 014U
delta-BHC	0 13J	17	0 012U	0 0016J	0 0098J	0 012U	0 0012U	0 012U
gamma-BHC (Lindane)	0 068J	2 5U	0 011J	0 019UJ	0 019U	0 019U	0 0041JN	0 0034JN
Total Pesticides	**8.858**	**23**	**0.1153**	**0.0115**	**0.0098**	**ND**	**0 0041**	**0 0195**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	SGW-S1-40FT	SGW-S1-40FTFD	SGW-S2-15FT	SGW-S2-20FT	SGW-S2-40FT	TS-S1-0HR
Description	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Time Series GW
Sample Date	10/14/1999	10/14/1999	10/15/1999	10/15/1999	10/15/1999	3/29/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4'-DDD	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
4 4 -DDE	0 10U	0 10U	0 0020J	0 10U	0 10U	0 10U
4 4'-DDT	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Aldrin	0 50U	0 50U	0 50U	0 50U	0 50U	0 050U
Alpha Chlordane	0 050U	0 0014J	0 050U	0 050U	0 050U	0 050U
Dieldrin	0 0013J	0 10U	0 10U	0 10U	0 10U	0 10U
Endosulfan I	0 050U	0 0011J	0 050U	0 050U	0 050U	0 050U
Endosulfan II	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Endosulfan sulfate	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Endrin	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Endrin aldehyde	0 0032J	0 10U	0 10U	0 10U	0 10U	0 10U
Endrin ketone	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Gamma Chlordane	0 0022J	0 050U	0 0012J	0 050U	0 050U	0 050U
Heptachlor	0 0019J	0 050U	0 050U	0 050U	0 050U	0 050U
Heptachlor epoxide	0 0010J	0 050U	0 050U	0 050U	0 050U	0 050U
Methoxychlor	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
Toxaphene	0 50U	0 50U	0 50U	0 50U	0 50U	5 0U
alpha-BHC	0 0027J	0 0037J	0 039U	0 039U	0 039U	0 039U
beta-BHC	0 014U	0 0064JN	0 0020J	0 014U	0 014U	0 014U
delta-BHC	0 012U	0 012U	0 012U	0 012U	0 012U	0 012U
gamma-BHC (Lindane)	0 032	0 0095J	0 0017J	0 019U	0 0059J	0 019U
Total Pesticides	**0 0443**	**0.0221**	**0.0069**	**ND**	**0 0059**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	TS-S1-12HR	TS-S1-12HRFD	TS-S1-24HR	TS-S2-0HR	TS-S2-12HR	TS-S2-24HR	UGGW-EE 04	UGGW-EE-04-100FT
Description	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Upgradient GW	Upgradient GW
Sample Date	3/29/2000	3/29/2000	3/30/2000	3/29/2000	3/29/2000	3/30/2000	10/13/1999	1/27/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 1U	0 10UJ
4 4 -DDE	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 1U	0 10UJ
4,4'-DDT	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 1U	0 10UJ
Aldrin	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 05U	0 050UJ
Alpha Chlordane	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 05U	0 050UJ
Dieldrin	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 1U	0 10UJ
Endosulfan I	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 05U	0 050UJ
Endosulfan II	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 1U	0 10UJ
Endosulfan sulfate	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 1U	0 10UJ
Endrin	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 1U	0 10UJ
Endrin aldehyde	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 1U	0 10UJ
Endrin ketone	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 1U	0 10UJ
Gamma Chlordane	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 05U	0 050UJ
Heptachlor	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 05U	0 050UJ
Heptachlor epoxide	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 05U	0 050UJ
Methoxychlor	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 5U	0 50UJ
Toxaphene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5U	5 0UJ
alpha-BHC	0 039U	0 039U	0 039U	0 039U	0 039U	0 039U	0 039U	0 039UJ
beta-BHC	0 014U	0 014U	0 014U	0 014U	0 014U	0 014U	0 014U	0 014UJ
delta-BHC	0 012U	0 012U	0 012U	0 012U	0 012U	0 012U	0 012U	0 012UJ
gamma-BHC (Lindane)	0 019U	0 019U	0 019U	0 019U	0 019U	0 019U	0 00062J	0 019UJ
Total Pesticides	ND	ND	ND	ND	ND	ND	0 00062	ND

Notes U-not detected J-estimated value N tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UGGW-EE-04-100FTFD	UGGW-EE-04-60FT	UGGW-EE-04FD	UGGW-EE-20	UGGW-EE-20-100FT	UGGW-EE-20-60FT	UGGW-EEG-108
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	1/27/2000	10/13/1999	10/13/1999	10/18/1999	1/25/2000	1/24/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4'-DDD	0 10UJ	0 1U	0 1U	0 1U	0 10U	0 10U	0 1U
4 4'-DDE	0 10UJ	0 1U	0 1U	0 1U	0 10U	0 10U	0 1U
4 4 -DDT	0 10UJ	0 1U	0 1U	0 1U	0 10U	0 10U	0 1U
Aldrin	0 050UJ	0 05U	0 05U	0 05U	0 050U	0 050UJ	0 05U
Alpha Chlordane	0 050UJ	0 05U	0 05U	0 05U	0 050U	0 050UJ	0 05U
Dieldrin	0 10UJ	0 1U	0 1U	0 1U	0 10U	0 10U	0 1U
Endosulfan I	0 050UJ	0 05U	0 05U	0 05U	0 050U	0 050U	0 05U
Endosulfan II	0 10UJ	0 1U	0 1U	0 1U	0 10U	0 10U	0 1U
Endosulfan sulfate	0 10UJ	0 1U	0 1U	0 1U	0 10U	0 10U	0 001J
Endrin	0 10UJ	0 1U	0 1U	0 1UJ	0 10U	0 10U	0 1U
Endrin aldehyde	0 10UJ	0 1U	0 1U	0 1U	0 10U	0 10U	0 1U
Endrin ketone	0 10UJ	0 1U	0 1U	0 1U	0 10U	0 10U	0 0021J
Gamma Chlordane	0 050UJ	0 05U	0 05U	0 05U	0 050U	0 050UJ	0 05U
Heptachlor	0 050UJ	0 05U	0 00099J	0 05U	0 050U	0 050UJ	0 001J
Heptachlor epoxide	0 050UJ	0 05U	0 05U	0 05U	0 050U	0 050U	0 0016J
Methoxychlor	0 50UJ	0 5U	0 5U	0 5U	0 50U	0 50U	0 5U
Toxaphene	5 0UJ	5U	5U	5U	5 0U	5 0U	5U
alpha-BHC	0 039UJ	0 039U	0 039U	0 039U	0 039U	0 039UJ	0 039U
beta-BHC	0 014UJ	0 014U	0 014U	0 014U	0 014U	0 014U	0 014U
delta-BHC	0 012UJ	0 0015J	0 012U	0 012U	0 012U	0 012U	0 0025J
gamma-BHC (Lindane)	0 019UJ	0 019U	0 019U	0 019U	0 019U	0 019UJ	0 019U
Total Pesticides	**ND**	**0.0015**	**0 00099**	**ND**	**ND**	**ND**	**0 0082**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.4
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UGGW-EEG-108-100FT	UGGW-EEG-108-60FT	UGGW-EEG-108-60FTEB	UGGW-EEG-108FD
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	1/31/2000	1/28/2000	1/28/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l
4,4'-DDD	0 1UJ	0 10U	0 10U	0 1U
4 4'-DDE	0 1UJ	0 10U	0 10U	0 1U
4 4'-DDT	0 1UJ	0 10U	0 10U	0 1U
Aldrin	0 05UJ	0 050U	0 050U	0 05U
Alpha Chlordane	0 05UJ	0 050U	0 050U	0 05U
Dieldrin	0 1UJ	0 10U	0 10U	0 1U
Endosulfan I	0 05UJ	0 050U	0 050U	0 05U
Endosulfan II	0 1UJ	0 10U	0 10U	0 1U
Endosulfan sulfate	0 1UJ	0 10U	0 10U	0 1U
Endrin	0 1UJ	0 10U	0 10U	0 1U
Endrin aldehyde	0 1UJ	0 10U	0 10U	0 1U
Endrin ketone	0 1UJ	0 10U	0 10U	0 1U
Gamma Chlordane	0 05UJ	0 050U	0 050U	0 05U
Heptachlor	0 05UJ	0 050U	0 050U	0 05U
Heptachlor epoxide	0 05UJ	0 050U	0 050U	0 05U
Methoxychlor	0 5UJ	0 50U	0 50U	0 5U
Toxaphene	5UJ	5 0U	5 0U	5U
alpha-BHC	0 039UJ	0 039U	0 039U	0 039U
beta-BHC	0 014UJ	0 014U	0 014U	0 014U
delta-BHC	0 012UJ	0 012UJ	0 012UJ	0 011J
gamma-BHC (Lindane)	0 019UJ	0 019U	0 019U	0 019U
Total Pesticides	**ND**	**ND**	**ND**	**0 011**

Notes U-not detected J estimated value N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-GHL-S1-102-106FT	AA-GHL-S1-107-111FT	AA-GHL-S1-12-16FT	AA-GHL-S1-22-26FT	AA-GHL-S1-22-26FTEB	AA-GHL-S1-22-26FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	12/2/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2 4,5-T	0 5U	0 5U	0 50U	0 50U	0 50U	0 50U
2,4 5-TP (Silvex)	0 5U	0 5U	0 50U	0 50U	0 50U	0 50U
2,4-D	0 5U	0 5U	0 50U	0 50U	0 50U	0 50U
2,4-DB	0 5U	0 5U	0 50U	0 50U	0 50U	0 50U
Dalapon	120U	120U	120U	120UJ	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6U	6 0U	6 0U	6 0U	6 0U
Dinoseb	6U	6U	6 0U	6 0U	6 0U	6 0U
MCPA	120U	120U	120U	120UJ	120U	120U
MCPP	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1U	1U	1 0U	0 48J	1 0U	0 11J
Total Herbicides	**ND**	**ND**	**ND**	**0 48**	**ND**	**0 11**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-GHL-S1-32-36FT	AA-GHL-S1-42-46FT	AA-GHL-S1-52-56FT	AA-GHL-S1-62-66FT	AA-GHL-S1-72-76FT	AA-GHL-S1-82-86FT	AA-GHL-S1-92-96FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/18/1999	11/18/1999	11/19/1999	11/29/1999	11/30/1999	11/30/1999	12/1/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.50U	0.50U	0.50U	0.5U	0.5U	0.5U	0.5U
2,4,5-TP (Silvex)	0.50U	0.048J	0.50U	0.5U	0.5U	0 5U	0 5U
2,4-D	0.50U	0.50U	0.50U	0.5U	0.5U	0.5U	0 5U
2,4-DB	0.50U	0.50U	0.50U	0.5U	0.5U	0.5U	0.5U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1 2U	1.2U	1.2U	1 2U	1 2U	1 2U
Dichloroprop	6.0U	6 0U	6.0U	6U	6U	6U	6U
Dinoseb	6 0U	6 0U	6.0U	6U	6U	6U	6U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	0 13J	0.081J	1.0U	1U	1U	0 066J	1U
Total Herbicides	**0.13**	**0.129**	**ND**	**ND**	**ND**	**0.066**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-GHL-S1-92-96FTFD	AA-GHL-S2-12-16FT	AA-GHL-S2-22-26FT	AA-GHL-S2-32-36FT	AA-GHL-S2-32-36FTEB	AA-GHL-S2-42-46FT	AA-GHL-S2-52-56FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	11/18/1999	11/18/1999	11/19/1999	11/19/1999	11/19/1999	11/29/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.5U	0.50U	0.50U	0.50U	0.50U	0.50U	0 5U
2,4,5-TP (Silvex)	0.5U	0.50U	0.50U	0.50U	0.50U	0 50U	0 5U
2,4-D	0.5U	0.50U	0.50U	0.50U	0.50U	0 50U	0 5U
2,4-DB	0 5U	0.50U	0.50U	0 50U	0 50U	0 50U	0 5U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1.2U	1.2U	1.2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6.0U	6.0U	6.0U	6.0U	6 0U	6U
Dinoseb	6U	6.0U	6.0U	6.0U	6.0U	6 0U	6U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1U	1.0U	1.0U	1.0U	1 0U	1 0U	1U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-GHL-S2-62-66FT	AA-GHL-S2-62-66FTFD	AA-GHL-S2-72-76FT	AA-GHL-S2-82-86FT	AA-GHL-S2-92-96FT	AA-GHL-S2-92-96FTEB	AA-GHL-S2-99-103FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/30/1999	11/30/1999	11/30/1999	12/1/1999	12/2/1999	12/2/1999	12/2/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.5U	0 5U	0.5U	0.5U	0 5U	0.5U	0.5U
2,4,5-TP (Silvex)	0.64	0.8	0.5U	0.5U	0.5U	0 5U	0 5U
2,4-D	0 5U	0 5U	0.5U	0 5U	0 5U	0 5U	0 5U
2,4-DB	0 5U	0 5U	0.5U	0.5U	0 5U	0 5U	0 5U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6U	6U	6U	6U	6U	6U
Dinoseb	6U	6U	6U	6U	6U	6U	6U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	0 043J	0 037J	1U	1U	1U	1U	1U
Total Herbicides	**0.683**	**0.837**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-GHL-S3-100-104FT	AA-GHL-S3-110-114FT	AA-GHL-S3-20-24FT	AA-GHL-S3-30-34FT	AA-GHL-S3-30-34FTFD	AA-GHL-S3-40-44FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/20/1999	12/21/1999	12/14/1999	12/15/1999	12/15/1999	12/15/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2 4 5-T	0 5U	0 5UJ	0 5U	0 5U	0 5U	0 5U
2 4,5-TP (Silvex)	0 5U	0 5UJ	0 5U	0 5U	0 5U	0 5U
2,4-D	0 5U	0 5UJ	0 5U	0 5U	0 5U	0 5U
2 4-DB	0 5U	0 5UJ	0 5U	0 5U	0 5U	0 5U
Dalapon	120U	120U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6UJ	6U	6U	6U	6U
Dinoseb	6U	6U	6U	6U	6U	6U
MCPA	120U	120UJ	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1U	1U	1U	1U	0 065J	1U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**0.065**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-GHL-S3-50-54FT	AA-GHL-S3-60-64FT	AA-GHL-S3-60-64FTEB	AA-GHL-S3-70-74FT	AA-GHL-S3-80-84FT	AA-GHL-S3-90-94FT	AA-H-S1-101-105FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/16/1999	12/16/1999	12/16/1999	12/17/1999	12/17/1999	12/20/1999	3/16/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.50U
2,4,5-TP (Silvex)	0.5U	0.5U	0.5U	0.5U	0.5U	0 5U	0 50U
2,4-D	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0 50U
2,4-DB	0.5U	0 5U	0.5U	0.5U	0.5U	0.5U	0.50U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1.2U	1 2U	1.2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6U	6U	6U	6U	6U	6 0U
Dinoseb	6U	6U	6U	6U	6U	6U	6 0U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	150J
Pentachlorophenol	1U	1U	1U	1U	1U	1U	1 4
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**1501.4**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-H-S1-101-105FTEB	AA-H-S1-53-57FT	AA-H-S1-63-67FT	AA-H-S1-73-77FT	AA-H-S1-73-77FTFD	AA-H-S1-83-87FT	AA-H-S1-83-87FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/17/2000	3/10/2000	3/10/2000	3/13/2000	3/13/2000	3/13/2000	3/14/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.50U	2.5U	1.0U	2.5U	2.5U	25U	0.50U
2,4,5-TP (Silvex)	0.50U	2.5U	1.0U	2.5U	2.5U	25U	0.50U
2,4-D	0.50U	2.5U	1.0U	2.5U	1.8J	25U	0.50U
2,4-DB	0.50U	2.5U	1.0U	2.5U	2.5U	25U	0.50U
Dalapon	120U	600U	240U	600U	600U	6000U	120U
Dicamba	1.2U	6.0U	2.4U	6.0U	6.0U	60U	1.2U
Dichloroprop	6.0U	30U	12U	30U	30U	300U	6.0U
Dinoseb	6.0U	30U	12U	30U	30U	300U	6.0U
MCPA	120U	600U	240U	600U	600U	6000U	120U
MCPP	120U	3600J	650J	4100JD	4400JD	6000U	120U
Pentachlorophenol	1.0U	4.2J	1.2J	23	28	89	1.0U
Total Herbicides	**ND**	**36004.2**	**6501.2**	**410023**	**440029.8**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-H-S1-93-97FT	AA-I-S1-17-21FT	AA-I-S1-27-31FT	AA-I-S1-37-41FT	AA-I-S1-47-51FT	AA-I-S1-57-61FT	AA-I-S1-67-71FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/15/2000	12/14/1999	12/15/1999	12/15/1999	12/16/1999	12/16/1999	12/17/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	2.5U	0.5U	0.5U	0.5U	0.5U	0 5U	0.5U
2,4,5-TP (Silvex)	2.5U	1.1	0.35J	0.5U	0.5U	0.5U	0.5U
2,4-D	11	0.5U	0.5U	0.5U	0.5U	0.5U	0 5U
2,4-DB	2.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0 5U
Dalapon	600U	120U	120U	120U	120U	120U	120U
Dicamba	6 0U	0.14J	1 2U	1.2U	1.2U	1 2U	1 2U
Dichloroprop	30U	6U	6U	6U	6U	6U	6U
Dinoseb	30U	0 27J	6R	6U	6U	6U	6U
MCPA	600U	120U	120U	120U	120U	120U	120U
MCPP	1200J	120U	120U	120U	120U	120U	120U
Pentachlorophenol	320D	0 13J	1U	1U	1U	1U	1U
Total Herbicides	**15211**	**1.64**	**0.35**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-I-S1-67-71FTEB	AA-I-S1-77-81FT	AA-I-S1-87-91FT	AA-I-S1-87-91FTFD	AA-I-S1-97-101FT	AA-I-S2-16-20FT	AA-I-S2-26-30FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/17/1999	12/20/1999	12/21/1999	12/21/1999	12/21/1999	12/3/1999	12/6/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.5U	0 5U	3.9J	3.5J	5.8J	0.5U	0 5U
2,4,5-TP (Silvex)	0.5U	0.5U	0 5U	0 5U	0.5U	0.5U	0 18J
2,4-D	0.5U	0.5U	10D	11D	4	0 5U	0 27J
2,4-DB	0.5U	0.5U	0 5U	0.5U	0.5U	0.5U	0.5U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1.2U	1 2U	1.2U	1 2U	1.2U	1 2U
Dichloroprop	6U	6U	6U	6U	6U	6U	6U
Dinoseb	6U	6U	6U	6U	6U	6U	6U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	640J	350J	290JD	120U	120U
Pentachlorophenol	1U	1U	0.34J	0.37J	0.24J	1U	1U
Total Herbicides	**ND**	**ND**	**6504.24**	**3613.87**	**29010.04**	**ND**	**0.45**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-I-S2-36-40FT	AA-I-S2-46-50FT	AA-I-S2-56-60FT	AA-I-S2-66-70FT	AA-I-S2-76-80FT	AA-I-S2-76-80FTEB	AA-I-S2-76-80FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/7/1999	12/7/1999	12/8/1999	12/8/1999	12/10/1999	12/10/1999	12/10/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.5U	0.5U	0.50U	0 50U	0.50U	0.50U	0 50U
2,4,5-TP (Silvex)	0.084J	0.5U	0 50U	0 50U	0 50U	0.50U	0 50U
2,4-D	0.14J	0.34J	0.50U	2 3J	0.50U	0 50U	0 49J
2,4-DB	0.5U	0 5U	0.50UJ	0 50UJ	0 50UJ	0 50U	0 50UJ
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1 2U	1.2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6U	6 0U	6 0U	6 0U	6 0U	6 0U
Dinoseb	6U	6U	6 0U	6 0U	6 0U	6 0U	6 0U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	260J	120U	120U	120U
Pentachlorophenol	1U	1U	1.0U	1.0U	1.0U	1 0U	1 0U
Total Herbicides	**0.224**	**0.34**	**ND**	**2602.3**	**ND**	**ND**	**0.49**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-I-S2-86-90FT	AA-I-S2-96-100FT	AA-I-S3-104-108FT	AA-I-S3-110-114FT	AA-I-S3-24-28FT	AA-I-S3-34-38FT	AA-I-S3-44-48FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/13/1999	12/13/1999	12/13/1999	12/14/1999	12/3/1999	12/6/1999	12/6/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U
2,4,5-TP (Silvex)	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U
2,4-D	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U
2 4-DB	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U	0 5U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6U	6U	6U	6U	6U	6U
Dinoseb	6U	6U	6U	6U	6U	6U	6U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	62J	120U	120U	120U	120U	120U
Pentachlorophenol	1U	1U	1U	1U	1U	1U	1U
Total Herbicides	**ND**	**620**	**ND**	**ND**	**ND**	**ND**	**ND**

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-I-S3-54-58FT	AA-I-S3-64-68FT	AA-I-S3-74-78FT	AA-I-S3-84-88FT	AA-I-S3-84-88FTEB	AA-I-S3-84-88FTFD	AA-I-S3-94-98FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/7/1999	12/7/1999	12/8/1999	12/9/1999	12/10/1999	12/9/1999	12/10/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.5U	0 5U	0.50U	0 50U	0 50U	0 50U	0 50U
2,4,5-TP (Silvex)	0.5U	0.5U	0.50U	0.50U	0.50U	0 50U	0 50U
2,4-D	0.5U	0 5U	0.50U	0.50U	0.50U	0.50U	0 50U
2,4-DB	0.5U	0.5U	0 50UJ	0.50UJ	0.50U	0.50UJ	0 50UJ
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1.2U	1.2U	1 2U	1.2U	1.2U	1 2U
Dichloroprop	6U	6U	6.0U	6.0U	6 0U	6 0U	6 0U
Dinoseb	6U	6U	6.0U	6 0U	6 0U	6.0U	6 0U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1U	1U	1 0U	1.0UJ	1.0U	1.0U	1 0U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-I-S4-56-60FT	AA-I-S4-56-60FTFD	AA-I-S4-66-70FT	AA-I-S4-76-80FT	AA-I-S4-86-90FT	AA-I-S4-96-100FT	AA-SW-S1-101-104FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/7/2000	3/7/2000	3/7/2000	3/8/2000	3/8/2000	3/9/2000	11/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	0.5U
2,4,5-TP (Silvex)	0.50U	0.50U	0.50U	0.50U	0.50U	0.19J	0.5U
2,4-D	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	0.5U
2,4-DB	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	0.5UJ
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U
Dichloroprop	6.0U	6.0U	6.0U	6.0U	6.0U	6.0U	6U
Dinoseb	6.0U	6.0U	6.0U	6.0U	6.0U	6.0U	6U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1UJ
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**0.19**	**ND**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-SW-S1-101-104FTFD	AA-SW-S1-14-16FT	AA-SW-S1-24-26FT	AA-SW-S1-34-36FT	AA-SW-S1-42-46FT	AA-SW-S1-52-56FT	AA-SW-S1-62-66FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/8/1999	11/1/1999	11/2/1999	11/2/1999	11/3/1999	11/3/1999	11/4/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.5U	0.5U	0.5U	0 5U	0.5U	0 5U	0.5U
2,4,5-TP (Silvex)	0.5U	0.5U	0.5U	0 5U	0.5U	0 5U	0.5U
2,4-D	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U
2,4-DB	0.5UJ	0.5U	0.5U	0.5U	0.5U	0 5U	0.5U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1.2U	1.2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6U	6U	6U	6U	6U	6U
Dinoseb	6U	6U	6U	6U	6U	6U	6UJ
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1U	1U	1U	1U	1U	1U	1U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-SW-S1-72-76FT	AA-SW-S1-82-86FT	AA-SW-S1-91-95FT	AA-SW-S2-102-106FT	AA-SW-S2-14-16FT	AA-SW-S2-22-26FT	AA-SW-S2-32-36FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/4/1999	11/5/1999	11/5/1999	11/15/1999	11/9/1999	11/9/1999	11/9/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0 5U	0 5U	0 5U	0 50U	0 50U	0 50U	0 50U
2,4,5-TP (Silvex)	0 5U	0 5U	0 21J	0 50U	0 50U	0 50U	0 50U
2,4-D	0 5U	0 5U	0 18J	0 50U	0 50U	0 50U	0 50U
2,4-DB	0 5UJ	0 5UJ	0 41J	0 50U	0 50U	0 50U	0 50U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	0 12J
Dichloroprop	6U	6U	6U	6 0U	6 0U	6 0U	6 0U
Dinoseb	6U	6U	6U	6 0U	6 0U	6 0U	6 0U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1U	1U	1 4	1 0U	1 0U	1 0U	1 0U
Total Herbicides	**ND**	**ND**	**2.2**	**ND**	**ND**	**ND**	**0 12**

Notes U-not detected, J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-SW-S2-42-46FT	AA-SW-S2-52-56FT	AA-SW-S2-62-66FT	AA-SW-S2-62-66FTFD	AA-SW-S2-72-76FT	AA-SW-S2-72-76FTEB	AA-SW-S2-82-86FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/10/1999	11/11/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0 50U	0 50U	0.50U	0.50U	0.50U	0 50U	0 50U
2,4,5-TP (Silvex)	0.50U	0.50U	0.50U	0.50U	0.50U	0 50U	0 50U
2,4-D	0 50U	0.50U	0.50U	0.50U	0.50U	0 50U	0 50U
2,4-DB	0.50U	0 50U	0.50U	0.50U	0 50U	0 50U	0 50U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1 2U	1.2U	1.2U	1 2U	1 2U	1 2U
Dichloroprop	6.0U	6.0U	6 0U	6 0U	6.0U	6 0U	6 0U
Dinoseb	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1 0U	1 0U	1 0U	1 0U	1.0U	1 0U	0 77J
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.77**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-SW-S2-92-96FT	AA-SW-S3-14-16FT	AA-SW-S3-22-26FT	AA-SW-S3-32-36FT	AA-SW-S3-42-46FT	AA-SW-S3-52-56FT	AA-SW-S3-62-66FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/12/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/12/1999	11/12/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
2,4,5-TP (Silvex)	0 50U	0 50U	0 50U	0 50U	0 50U	0 051J	0 50U
2,4-D	0 50U	0 50U	0 50U	0 50U	0 50U	0 30J	0 50U
2 4-DB	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U
Dinoseb	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U
MCPA	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1 0U	1 0U	1 0U	1 0U	0 064J	1 0U	1 0U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**0.064**	**0.351**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	AA-SW-S3-72-76FT	AA-SW-S3-82-86FT	AA-SW-S3-92-96FT	AA-SW-S3-96-99FT	AA-SW-S3-96-99FTEB	AA-SW-S3-96-99FTFD	BR-G	BR-GEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Bedrock GW	Bedrock GW
Sample Date	11/15/1999	11/15/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999	5/1/2000	5/2/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.50U	0.50U	0.50U	0.50U	0.50U	0 50U	18J	0 50U
2,4,5-TP (Silvex)	0.50U	0.50U	0.50U	0 50U	0 50U	0 50U	5 0U	0 50U
2,4-D	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	440D	0 50U
2,4-DB	0.50U	0.50U	0.50U	0.50U	0 50U	0 50U	5 0U	0 50U
Dalapon	120U	120U	120U	120U	120U	120U	1200U	120U
Dicamba	1 2U	1 2U	1.2U	1.2U	1 2U	1 2U	12U	1 2U
Dichloroprop	6 0U	6 0U	6.0U	6 0U	6 0U	6 0U	11J	6 0U
Dinoseb	6 0U	6 0U	6.0U	6 0U	6 0U	6 0U	60U	6 0U
MCPA	120U	120U	120U	120U	120U	120U	1200U	120U
MCPP	120U	120U	120U	120U	120U	120U	1200U	120U
Pentachlorophenol	0.044J	1.0U	1.0U	1.0U	1.0U	1 0U	6 6J	1 0U
Total Herbicides	**0.044**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	BR-GFD	BR-H	BR-I	DW-MCDO-1	DW-MCDO-1FD	DW-SCHM-1	DW-SETT-1	DW-WRIG-1	EE-01
Description	Bedrock GW	Bedrock GW	Bedrock GW	Domestic Well GW	Domestic Well GW	Domestic Well GW	Domestic Well GW	Domestic Well GW	Fill Area GW
Sample Date	5/1/2000	5/1/2000	4/25/2000	10/21/1999	10/21/1999	10/22/1999	10/21/1999	10/21/1999	10/12/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2 4 5-T	17J	0 50U	16	0 5UJ	0 5UJ	0 5UJ	0 5UJ	0 5UJ	250U
2,4,5-TP (Silvex)	5 0U	0 50U	2 5U	0 5U	0 5U	0 5UJ	0 5UJ	0 5U	250U
2,4-D	320D	0 74J	18	0 5U	0 5U	0 5U	0 5UJ	0 5U	250U
2,4-DB	5 0U	0 50U	2 5U	0 5UJ	0 5UJ	0 5R	0 5UJ	0 5UJ	250U
Dalapon	1200U	120U	600U	120U	120U	120U	120UJ	120U	60000U
Dicamba	12U	1 2U	6 0U	1 2U	1 2U	1 2U	1 2UJ	1 2U	600U
Dichloroprop	11J	6 0U	30U	6UJ	6UJ	6UJ	6UJ	6UJ	3000U
Dinoseb	60U	6 0U	30U	6U	6U	6U	6UJ	6U	3000U
MCPA	840J	120U	600U	120UJ	120UJ	120U	120UJ	120UJ	60000U
MCPP	2500J	120U	18000JD	120U	120U	120U	120UJ	120U	60000U
Pentachlorophenol	7 6J	0 12J	900D	1U	1U	1U	1UJ	1U	2400
Total Herbicides	**36887.6**	**0.86**	**1809034**	**ND**	**ND**	**ND**	**ND**	**ND**	**2400**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	EE-02-GP	EE-02-GPFD	EE-03	EE-05	EE-05EB	EE-12-GP	EE-13-GP	EE-14-GP	EE-15-GP	EE-15-GPFD	EEG-101
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	11/4/1999	11/4/1999	10/12/1999	10/13/1999	10/13/1999	11/5/1999	11/4/1999	11/5/1999	11/8/1999	11/8/1999	10/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	36J	34J	0.5U	50U	0.5U	0.5U	0.5U	25U	0 5U	0 5UJ	0 5U
2,4,5-TP (Silvex)	120U	120U	0.5U	390	0.5U	0 45J	0.5U	25U	0 5U	0 5UJ	0 14J
2,4-D	190	170	0.5U	50U	0 5U	0.5U	0 5U	25U	0 5U	0.5UJ	0 5U
2,4-DB	120UJ	120UJ	0.5U	50U	0 5U	0 5UJ	0.5UJ	25UJ	0 5UJ	0 5UJ	0.5U
Dalapon	30000U	30000U	120U	12000U	120U	120U	120U	6000U	120U	120UJ	120U
Dicamba	300U	300U	1.2U	120U	1.2U	1 2U	1.2U	60U	1 2U	1 2UJ	1 2U
Dichloroprop	1500U	1500U	6U	600U	6U	6U	6U	300U	6U	6UJ	6U
Dinoseb	1500U	1500U	6U	600U	6U	6U	6U	300U	6U	6UJ	6U
MCPA	30000U	30000U	120U	12000U	120U	120U	120U	6000U	120U	120UJ	120U
MCPP	30000U	30000U	120U	12000U	120U	120U	120U	6000U	120U	120UJ	120U
Pentachlorophenol	500	450	1U	100U	1U	0.067J	0.066J	160	1U	1UJ	1 0U
Total Herbicides	**1050**	**960**	**ND**	**390**	**ND**	**0.517**	**0.066**	**160**	**ND**	**ND**	**0.14**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	EEG-102	EEG-103-GP	EEG-104	EEG-105-GP	EEG-106	EEG-107	EEG-109	EEG-110	EEG-111-GP	EEG-112
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/7/1999	11/3/1999	10/8/1999	11/2/1999	10/7/1999	10/7/1999	10/11/1999	10/11/1999	11/3/1999	10/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0 5U	0 5U	0 5U	0 5U	0 5U	24J	3 2	0 5U	0 5U	0 5U
2,4 5-TP (Silvex)	0 5U	0 5U	0 5U	0 5U	0 5U	25U	0 5U	0 5U	0 5U	0 5U
2 4-D	0 5U	0 5U	0 5U	0 5U	0 5U	120	6 1	0 5U	0 5U	0 5U
2,4-DB	0 5U	0 5U	0 5U	0 5U	0 5U	25U	0 5U	0 5U	0 5U	0 5U
Dalapon	120U	120U	120U	120U	120U	6000U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U	60U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6U	6U	6U	6U	47J	6U	6U	6U	6U
Dinoseb	6U	6U	6U	6U	0 32J	300U	6U	6U	6U	6U
MCPA	120U	120U	120U	120U	120U	6000U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	6000U	120U	120U	120U	120U
Pentachlorophenol	1 0U	1U	1 0U	0 097J	0 067J	19J	0 37J	1U	0 13J	1 0U
Total Herbicides	**ND**	**ND**	**ND**	**0.097**	**ND**	**1020**	**9.67**	**ND**	**0 13**	**ND**

Notes U not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	SGW-S1-15FT	SGW-S1-20FT	SGW-S1-40FT	SGW-S1-40FTFD	SGW-S2-15FT	SGW-S2-20FT
Description	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW
Sample Date	10/14/1999	10/14/1999	10/14/1999	10/14/1999	10/15/1999	10/15/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4 5-T	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
2,4,5-TP (Silvex)	0 50U	0 50U	0 11J	0 062J	0 50U	0 50U
2 4-D	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
2,4-DB	0 50U	0 50U	0 50U	0 50U	0 66J	0 50U
Dalapon	120U	120U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U
Dinoseb	6 0UJ	6 0UJ	6 0UJ	6 0UJ	6 0UJ	6 0UJ
MCPA	120UJ	120UJ	120UJ	120UJ	120UJ	120UJ
MCPP	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1 0UJ	1 0UJ	1 0UJ	1 0UJ	1 0UJ	1 0UJ
Total Herbicides	**ND**	**ND**	**0.11**	**0.062**	**0.66**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	SGW-S2-40FT	TS-S1-0HR	TS-S1-12HR	TS-S1-12HRFD	TS-S1-24HR	TS-S2-0HR	TS-S2-12HR	TS-S2-24HR
Description	Shallow Residential GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW
Sample Date	10/15/1999	3/29/2000	3/29/2000	3/29/2000	3/30/2000	3/29/2000	3/29/2000	3/30/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2 4,5-T	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
2,4,5-TP (Silvex)	0 50U	0 50U	0 50U	0 50U	0 098J	0 50U	0 50U	0 50U
2,4-D	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
2 4-DB	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
Dalapon	120U	120U	120U	120U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U
Dinoseb	6 0UJ	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U
MCPA	120UJ	120U	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1 0UJ	1 0U	1 0U	1 0U	0 077J	1 0U	1 0U	1 0U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**0.175**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate, ND-none detected

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UGGW-EE-04	UGGW-EE-04-100FT	UGGW-EE-04-100FTFD	UGGW-EE-04-60FT	UGGW-EE-04FD	UGGW-EE-20	UGGW-EE-20-100FT
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	10/13/1999	1/27/2000	1/27/2000	10/13/1999	10/13/1999	10/18/1999	1/25/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.5U	0.50UJ	0.50UJ	0.5U	0 5U	0.21J	0 50U
2,4,5-TP (Silvex)	0.5U	0.50U	0.50U	0.5U	0 5U	0.16J	0 50U
2,4-D	0.5U	0.50U	0.50U	0.5U	0 5U	0.5U	0 50U
2,4-DB	0.5U	0.50UJ	0.50UJ	0.5U	0.5U	0.5UJ	0 50U
Dalapon	120U	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1 2U	1.2U	1.2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6 0U	6.0U	6U	6U	6UJ	6 0U
Dinoseb	6U	6 0UJ	6.0UJ	6U	6U	6U	6 0U
MCPA	120U	120U	120U	120U	120U	120UJ	120U
MCPP	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1U	1 0U	1.0U	1U	1U	1U	1 0U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**0.37**	**ND**

Notes. U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.5
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UGGW-EE-20-60FT	UGGW-EEG-108	UGGW-EEG-108-100FT	UGGW-EEG-108-60FT	UGGW-EEG-108-60FTEB	UGGW-EEG-108FD
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	1/24/2000	10/11/1999	1/31/2000	1/28/2000	1/28/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0.50U	0.5U	0.5U	0.50UJ	0.50U	0 5U
2,4,5-TP (Silvex)	0.50U	0.5U	0 5U	0.50U	0.50U	0 5U
2,4-D	0.50U	0.5U	0.5U	0.50U	0.50U	0.5U
2,4-DB	0.50U	0.5U	0.5U	0.50UJ	0.50U	0 5U
Dalapon	120U	120U	120U	120U	120U	120U
Dicamba	1.2U	1.2U	1.2U	1.2U	1.2U	1 2U
Dichloroprop	6.0U	6U	6U	6.0U	6.0U	6U
Dinoseb	6.0U	6U	6U	6.0UJ	6.0U	6U
MCPA	120U	120U	120UJ	120UJ	120U	120U
MCPP	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1.0U	1U	1U	1.0U	1.0U	1U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	AA-GHL-S1-102-106FT	AA-GHL-S1-22-26FT	AA-GHL-S1-22-26FTEB	AA-GHL-S1-22-26FTFD	AA-GHL-S1-62-66FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	11/17/1999	11/17/1999	11/17/1999	11/29/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l
1 2 3,4 6,7,8,9-OCDD	0 000188J	0 0000089M	0 0000054M	0 0000112M	0 0000421J
1 2 3 4 6,7,8,9-OCDF	0 0000313J	0 0000048U	0 000003M	0 000005U	0 0000093J
1 2 3,4,6,7,8-HpCDD	0 0000104J	0 0000034U	0 0000054M	0 0000077M	0 0000036J
1,2,3,4,6,7,8-HpCDF	0 0000044UJ	0 0000022U	0 0000026	0.0000031M	0 000002UJ
1,2,3,4,7 8,9-HpCDF	0 0000057UJ	0 0000031U	0 0000014U	0 0000026U	0 0000026UJ
1,2 3,4,7,8-HxCDD	0 000004UJ	0 0000024U	0 0000012U	0 0000021U	0 0000025UJ
1 2,3,4,7,8-HxCDF	0 0000031UJ	0 0000016U	0 0000017M	0 0000014U	0 0000015UJ
1,2,3,6 7,8-HxCDD	0 0000038UJ	0 0000022U	0 0000011U	0 000002U	0 0000023UJ
1 2,3,6 7 8-HxCDF	0 0000028UJ	0 0000014U	0 0000007U	0 0000022	0 0000014UJ
1,2,3,7,8,9-HxCDD	0 0000039UJ	0 0000024U	0 0000012U	0 0000021U	0 0000024UJ
1,2 3,7,8,9-HxCDF	0 0000034UJ	0 0000018U	0.0000009U	0 0000017U	0 0000016UJ
1 2 3,7 8-PeCDD	0 0000033UJ	0 0000025U	0 0000016U	0 0000022U	0 0000026UJ
1,2,3,7,8-PeCDF	0 0000024UJ	0 0000019U	0 0000012U	0 0000021U	0 000002UJ
2 3,4,6,7,8-HxCDF	0 000003UJ	0 0000016U	0 0000018U	0 0000014U	0 0000015UJ
2,3,4,7 8-PeCDF	0 0000025UJ	0 0000019U	0 0000013U	0 0000021U	0 0000021UJ
2,3,7,8-TCDD	0 0000034UJ	0 0000026U	0 0000018U	0 0000028U	0 0000024UJ
2,3,7,8-TCDF	0 000003UJ	0 0000017U	0 0000055	0 0000017M	0 0000019UJ
Total HpCDD	0 0000243	0 0000034U	0 0000113M	0 0000148M	0 000007
Total HpCDF	0 0000112	0 0000026U	0 0000026	0 0000031M	0 0000023M
Total HxCDD	0 0000039U	0 0000096	0 0000089	0 0000318	0 0000024U
Total HxCDF	0 0000031U	0 0000016U	0 0000017M	0 0000022	0 0000015U
Total PeCDD	0 0000033U	0 0000025U	0 000013	0 0000556	0 0000026U
Total PeCDF	0 0000024U	0 0000019U	0 0000012U	0 0000021U	0 000002U
Total TCDD	0 0000034U	0.0000026U	0 0000099M	0 000055	0 0000024U
Total TCDF	0 000003U	0 0000017U	0 0000055	0 0000017M	0 0000019U
1998 Total TEQ w/ EMPC as ND	**5.5614E-06**	**3.8716E-06**	**3.0955E-06**	**3.9854E-06**	**3 8941E-06**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	AA-GHL-S2-22-26FT	AA-GHL-S2-62-66FT	AA-GHL-S2-92-96FTEB	AA-GHL-S2-99-103FT	AA-GHL-S3-100-104FT	AA-GHL-S3-20-24FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/18/1999	12/2/1999	12/2/1999	12/2/1999	12/20/1999	12/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0.0000046U	0 0000405U	0.0000212U	0.0000548U	0 000107	0.0000069U
1,2,3,4,6,7,8,9-OCDF	0.0000037U	0.0000321U	0 0000168U	0 0000434U	0 0000133	0 0000056U
1,2,3,4,6,7,8-HpCDD	0.0000022U	0.0000192U	0.0000109U	0 0000214U	0 0000122	0 000004U
1,2,3,4,6,7,8-HpCDF	0.000001U	0.00001U	0 0000058U	0 0000113U	0.0000029U	0 0000025U
1,2,3,4,7,8,9-HpCDF	0.0000015U	0.0000156U	0.0000091U	0 0000176U	0 0000042U	0 0000036U
1,2,3,4,7,8-HxCDD	0.0000012U	0.000009U	0.0000069U	0.0000134U	0 0000034U	0 0000022U
1,2,3,4,7,8-HxCDF	0.0000007U	0.000005U	0.0000043U	0 0000072U	0 0000024U	0 0000016U
1,2,3,6,7,8-HxCDD	0.0000011U	0 0000087U	0 0000067U	0 000013U	0 0000031U	0 000002U
1,2,3,6,7,8-HxCDF	0 0000007U	0.0000046U	0.0000039U	0 0000066U	0 0000022U	0 0000015U
1,2,3,7,8,9-HxCDD	0.0000012U	0 0000093U	0.0000071U	0 0000138U	0.0000033U	0 0000021U
1,2,3,7,8,9-HxCDF	0.0000009U	0 0000062U	0 0000053U	0 0000089U	0 0000028U	0 0000019U
1,2,3,7,8-PeCDD	0 0000015U	0 0000074U	0 0000072U	0 0000129U	0.0000025U	0 0000014U
1,2,3,7,8-PeCDF	0 0000009U	0 0000052U	0.000005U	0 0000087U	0.0000019U	0 0000011U
2,3,4,6,7,8-HxCDF	0 0000008U	0.0000052U	0 0000045U	0 0000075U	0 0000024U	0 0000016U
2,3,4,7,8-PeCDF	0.0000009U	0 0000051U	0 0000049U	0 0000086U	0 0000019U	0 0000011U
2,3,7,8-TCDD	0.0000012U	0.0000057U	0 0000055U	0.0000092U	0 0000025U	0 0000012U
2,3,7,8-TCDF	0.0000009U	0.0000038U	0.0000041U	0 0000068U	0 0000021U	0 000001U
Total HpCDD	0.0000022U	0.0000192U	0.0000109U	0 0000214U	0 0000234	0.000004U
Total HpCDF	0 0000012U	0 0000122U	0.0000071U	0 0000138U	0.0000056	0 000003U
Total HxCDD	0.0000012U	0.000009U	0.0000069U	0.0000134U	0 0000032U	0 0000021U
Total HxCDF	0.0000008U	0.0000052U	0.0000044U	0 0000075U	0.0000024U	0 0000017U
Total PeCDD	0.0000015U	0.0000074U	0.0000072U	0.0000129U	0 0000025U	0 0000014U
Total PeCDF	0.0000009U	0 0000051U	0.0000049U	0 0000087U	0 0000014M	0 0000011U
Total TCDD	0 0000012U	0 0000057U	0 0000055U	0 0000092U	0.000004	0 0000012U
Total TCDF	0.0000009U	0.0000038U	0.0000041U	0 0000068U	0 0000021U	0 000001U
1998 Total TEQ w/ EMPC as ND	**1.9964E-06**	**1.07726E-05**	**9.9709E-06**	**1.75339E-05**	**0.000004277**	**2.3486E-06**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	AA-GHL-S3-60-64FT	AA-GHL-S3-60-64FTEB	AA-H-S1-101-105FT	AA-H-S1-101-105FTEB	AA-H-S1-53-57FT	AA-H-S1-63-67FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/16/1999	12/16/1999	3/17/2000	3/13/2000	3/10/2000	3/10/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 0000073U	0 0000751	0 27284	0 000208	0 86337	0 0106
1,2,3,4,6,7,8,9-OCDF	0.0000063U	0 000013	0 12223	0 0000881	0 30155	0 00597
1 2,3,4,6,7,8-HpCDD	0.000004U	0 0000054	0 04796	0 0000315M	0 10594	0 00153
1,2,3,4,6,7,8-HpCDF	0 0000028U	0 0000035	0.02024	0 0000213	0 04578M	0 00061
1,2,3,4,7,8,9-HpCDF	0.0000044U	0.0000031U	0.00262J	0.0000064U	0 00845	0 000178
1,2,3,4,7,8-HxCDD	0 0000026U	0 0000018U	0 000182	0 0000034U	0 000309	0 0000092U
1,2,3,4,7,8-HxCDF	0.0000018U	0 0000013U	0.00326J	0 0000063	0 01521	0 00018
1,2,3,6,7,8-HxCDD	0 0000025U	0.0000018U	0.00144J	0 0000034U	0 00386	0 0000475
1,2,3,6,7,8-HxCDF	0.0000018U	0.0000012U	0 000454	0 0000027U	0 00152	0 0000236M
1,2,3,7,8,9-HxCDD	0.0000028U	0.000002U	0.000834	0.0000037U	0 00176M	0 0000091U
1,2,3,7,8,9-HxCDF	0.0000023U	0.0000016U	0.0000646JM	0.0000034U	0 000427M	0 0000075U
1,2,3,7,8-PeCDD	0.0000019U	0.0000014U	0 000147JM	0 000003U	0 0000009U	0 0000087U
1,2,3,7,8-PeCDF	0.0000013U	0.000001U	0 0000333	0 0000022U	0 000495	0 0000056U
2,3,4,6,7,8-HxCDF	0.0000019U	0.0000014U	0.000326J	0.0000029U	0 00104	0 0000176
2,3,4,7,8-PeCDF	0.0000014U	0.0000011U	0.000222J	0 0000023U	0 000942	0 0000215
2,3,7,8-TCDD	0.0000016U	0.0000012U	0.0000131M	0 000003U	0 0000299M	0 0000075U
2,3,7,8-TCDF	0.0000013U	0.0000011U	0.000083	0 0000023U	0 000247	0 0000052U
Total HpCDD	0.000004U	0.0000054	0 09227	0 0000667M	0 21232	0 00307
Total HpCDF	0.0000034U	0.0000099M	0 11241	0 0000703	0 20834M	0 00346
Total HxCDD	0.0000026U	0.0000019U	0.06452M	0 0000784M	0 18146M	0 00684M
Total HxCDF	0 0000019U	0.0000014U	0 01588M	0 0000184	0 03739	0 000547M
Total PeCDD	0 0000019U	0 0000014U	0.03167M	0 00008M	0 08695M	0 00143M
Total PeCDF	0.0000014U	0.0000011U	0.0019M	0.0000023U	0 00136U	0 000194M
Total TCDD	0 0000016U	0.0000012U	0 000435M	0 000003U	0 00178U	0 0000075U
Total TCDF	0.0000013U	0.0000011U	0 00113M	0 0000023U	0 00159U	0 0000052U
1998 Total TEQ w/ EMPC as ND	**3.0392E-06**	**2.3233E-06**	**0.001601552**	**5.7821E-06**	**0.004328392**	**0.000071067**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate, ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	AA-H-S1-73-77FT	AA-H-S1-73-77FTFD	AA-H-S1-83-87FT	AA-H-S1-83-87FTEB	AA-H-S1-93-97FT	AA-I-S1-17-21FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/13/2000	3/13/2000	3/13/2000	3/14/2000	3/16/2000	12/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6 7,8,9-OCDD	0 00269	0 00264	0 01765J	0 0000506	0 00759J	0 0000049U
1,2,3,4,6,7,8,9-OCDF	0 00122	0 0012	0 00764J	0 0000201	0 01972	0 000004U
1,2,3,4,6,7,8-HpCDD	0 000451	0 000426	0 00369	0 0000108	0 00711	0 0000029U
1,2,3,4,6,7,8-HpCDF	0 000231	0 000219	0 00148	0 000003U	0 00374	0 0000018U
1,2,3,4,7,8,9-HpCDF	0 0000437	0 0000462	0 000214	0 0000043U	0 000567	0 0000026U
1 2,3,4,7,8-HxCDD	0 0000056	0 0000035U	0 0000038U	0 0000033U	0 0000222	0 0000018U
1 2,3,4,7,8-HxCDF	0 0000516	0 0000496	0 000172	0 0000026U	0 00053	0 0000013U
1,2,3,6 7,8-HxCDD	0 0000161	0 0000137	0 0000929	0 000003U	0 000174	0 0000016U
1 2,3 6,7,8-HxCDF	0 0000126M	0 0000109	0 000029	0 0000024U	0 0000743	0 0000012U
1 2,3,7,8,9-HxCDD	0 0000148	0 0000038U	0 0000648	0 0000032U	0 0000817	0 0000017U
1 2,3,7,8,9-HxCDF	0 000007J	0 0000039U	0 0000035U	0 000003U	0 0000028U	0 0000016U
1 2,3,7,8-PeCDD	0 0000073	0 0000032U	0 0000159	0 0000029U	0 0000201	0 0000013U
1 2,3,7,8-PeCDF	0 0000075	0 0000024U	0 0000111	0 000002U	0 000018	0 000001U
2 3,4,6,7 8-HxCDF	0 0000176J	0 0000131J	0 00003J	0 0000026U	0 0000585J	0 0000013U
2 3,4 7 8-PeCDF	0 0000126	0 000008	0 0000183	0 000002U	0 0000424	0 000001U
2,3 7 8-TCDD	0 0000035U	0 0000032U	0 0000028U	0 0000029U	0 0000027U	0 0000014U
2 3 7 8-TCDF	0 0000058U	0 0000047U	0 0000072JM	0 0000021U	0 0000133	0 0000011U
Total HpCDD	0 000927	0 000869	0 00721	0 0000192	0 01322	0 0000029U
Total HpCDF	0 00113	0 00114	0 00837	0 0000142	0 01585	0 0000022U
Total HxCDD	0 000559M	0 000529M	0 00513M	0 0000192M	0 00796M	0 0000017U
Total HxCDF	0 000311M	0 0003	0 000978M	0 0000026U	0 00218M	0 0000014U
Total PeCDD	0 000322M	0 000296M	0 00316M	0 0000328M	0 0038M	0 0000013U
Total PeCDF	0 000176M	0 000156M	0 000128M	0 000002U	0 00042M	0 000001U
Total TCDD	0 0000048	0 0000032U	0 0000066M	0 0000029U	0 0000201M	0 0000014U
Total TCDF	0 000121	0 0000987M	0 0000469M	0 0000021U	0 000268M	0 0000011U
1998 Total TEQ w/ EMPC as ND	**0.000035563**	**0 000024081**	**0.000122969**	**4.7116E-06**	**0 000255991**	**2.2419E-06**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	AA-I-S1-57-61FT	AA-I-S1-97-101FT	AA-I-S1-97-101FTFD	AA-I-S2-16-20FT	AA-I-S2-56-60FT	AA-I-S2-96-100FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/16/1999	12/21/1999	12/21/1999	12/3/1999	12/8/1999	12/13/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2,3 4 6,7,8,9-OCDD	0 0000208	0 0000526M	0 0000133M	0 0000053J	0 0000141U	0 0000232
1 2 3 4 6 7 8 9-OCDF	0 0000058U	0 0000212	0 0000099U	0 0000021UJ	0 0000116U	0 0000044U
1 2 3 4 6,7,8-HpCDD	0 0000038U	0 0000062M	0 0000061U	0 0000016UJ	0 0000082U	0 0000035U
1 2,3,4,6,7,8-HpCDF	0 0000026U	0 0000033U	0 0000047U	0 0000011UJ	0 0000056U	0 0000044M
1,2,3,4 7,8,9-HpCDF	0 000004U	0 0000045U	0 0000063U	0 0000014UJ	0 0000081U	0 0000029U
1,2,3,4,7,8-HxCDD	0 0000022U	0 0000038U	0 0000042U	0 0000012UJ	0 0000066U	0 0000021U
1 2,3,4 7,8-HxCDF	0 0000016U	0 0000029U	0 0000031U	0 0000009UJ	0 0000046U	0 000004M
1 2,3,6,7,8-HxCDD	0 0000022U	0 0000033U	0 0000036U	0 0000012UJ	0 0000057U	0 000002U
1 2,3,6,7,8-HxCDF	0 0000015U	0 0000026U	0 0000028U	0 0000008UJ	0 000004U	0 0000014U
1 2,3,7,8,9-HxCDD	0 0000025U	0 0000038U	0 0000042U	0 0000012UJ	0 0000066U	0 0000021U
1,2,3,7,8,9-HxCDF	0 0000019U	0 0000032U	0 0000034U	0 000001UJ	0 0000053U	0 0000018U
1,2,3,7,8-PeCDD	0 0000016U	0 0000031U	0 0000043U	0 000001UJ	0 0000087U	0 0000017U
1,2 3,7,8-PeCDF	0 0000012U	0 0000028U	0 0000035U	0 0000008UJ	0 0000063U	0 0000013U
2,3,4,6,7,8-HxCDF	0 0000016U	0 0000026U	0 0000028U	0 0000008UJ	0 0000046U	0 0000015U
2,3,4 7 8-PeCDF	0 0000013U	0 0000025U	0 0000031U	0 0000009UJ	0 0000064U	0 0000039
2 3 7 8-TCDD	0 0000024M	0 0000043U	0 0000039U	0 0000014UJ	0 0000086U	0 0000016U
2,3,7,8-TCDF	0 0000013U	0 0000029U	0 0000031U	0 0000011UJ	0 0000063U	0 0000064
Total HpCDD	0 0000038U	0 0000098M	0 0000061U	0 0000016U	0 0000082U	0 0000035U
Total HpCDF	0 0000031U	0 000008	0 0000054U	0 0000013U	0 0000067U	0 0000044M
Total HxCDD	0 0000031M	0 000003M	0 000004U	0 0000012U	0 0000062U	0 0000021U
Total HxCDF	0 0000016U	0 0000028U	0 000003U	0 0000009U	0 0000046U	0 000008M
Total PeCDD	0 0000016U	0 0000394M	0 0000326M	0 0000025	0 0000087U	0 0000017U
Total PeCDF	0 0000013U	0 0000026U	0 0000033U	0 0000008U	0 0000063U	0 0000162
Total TCDD	0 0000189M	0 0000043U	0 0000039U	0 0000014U	0 0000086U	0 0000016U
Total TCDF	0 0000013U	0 0000029U	0 0000031U	0 0000011U	0 0000063U	0 0000091M
1998 Total TEQ w/ EMPC as ND	**3.1494E-06**	**5.7247E-06**	**6 4092E-06**	**1.8761E-06**	**1 27033E-05**	**0 000005074**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

	Sample Id	AA-I-S3-104-108FT	AA-I-S3-24-28FT	AA-I-S3-64-68FT	AA-I-S4-56-60FT	AA-I-S4-56-60FTFD	AA-I-S4-66-70FT
	Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
	Sample Date	12/13/1999	12/3/1999	12/7/1999	3/7/2000	3/7/2000	3/7/2000
	Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2,3,4,6,7,8,9-OCDD		0 0000132	0 0000035JM	0 0000128UJ	0 0000386	0 0000367	0 000209
1,2,3,4,6,7,8,9-OCDF		0 0000055M	0 0000041J	0 0000105UJ	0 0000038U	0 0000133	0 000223
1,2,3,4,6,7,8-HpCDD		0 0000023U	0 0000021UJ	0 0000069UJ	0 0000029U	0 0000021U	0 0000255
1,2,3,4,6,7,8-HpCDF		0 0000015U	0 0000014UJ	0 0000035UJ	0 0000018U	0 0000012U	0 0000261
1,2,3,4,7,8,9-HpCDF		0 0000021U	0 0000018UJ	0 000005UJ	0 0000026U	0 0000017U	0 0000169
1,2,3,4,7,8-HxCDD		0 0000014U	0 0000018JM	0 0000042UJ	0 0000022U	0 0000015U	0 0000021U
1,2,3,4,7,8-HxCDF		0 000001U	0 0000016JM	0 0000021UJ	0 0000015U	0 0000009U	0 0000128
1 2,3 6,7,8-HxCDD		0 0000013U	0 0000014UJ	0 0000038UJ	0 000002U	0 0000014U	0 0000018U
1,2,3,6,7,8-HxCDF		0 0000009U	0 0000016J	0 0000019UJ	0 0000014U	0 0000009U	0 0000015U
1 2,3,7,8,9-HxCDD		0 0000013U	0 0000015UJ	0 0000041UJ	0 0000021U	0 0000015U	0 0000021U
1 2,3,7,8,9-HxCDF		0 0000011U	0 0000011UJ	0 0000025UJ	0 0000018U	0 0000011U	0 0000019U
1,2,3,7,8-PeCDD		0 000001U	0 0000012UJ	0 0000028UJ	0 0000023U	0 0000015U	0 0000017U
1,2,3,7,8-PeCDF		0 0000007U	0 0000023JM	0 0000018UJ	0 0000016U	0 000001U	0 0000013U
2 3,4,6,7,8-HxCDF		0 000001U	0 000001UJ	0 0000021UJ	0 0000015U	0 000001U	0 0000016U
2 3 4,7 8-PeCDF		0 0000007U	0 0000011UJ	0 0000019UJ	0 0000016U	0 000001U	0 0000013U
2,3 7,8-TCDD		0 000001M	0 0000016UJ	0 000002UJ	0 0000016U	0 0000012U	0 0000012U
2 3 7 8-TCDF		0 0000008U	0 0000015UJ	0 0000016UJ	0 0000013U	0 0000009U	0 0000009U
Total HpCDD		0 0000023U	0 0000021U	0 0000069U	0 0000029U	0 0000021U	0 000053
Total HpCDF		0 0000017U	0 0000016U	0 0000041U	0 0000021U	0 0000052	0 00008
Total HxCDD		0 0000013U	0 0000018M	0 000004U	0 0000021U	0 0000014U	0 0000227M
Total HxCDF		0 000001U	0 0000032M	0 0000021U	0 0000015U	0 000001U	0 0000193
Total PeCDD		0 000001U	0 0000012U	0 0000028U	0 0000023U	0 0000015U	0 000016M
Total PeCDF		0 0000007U	0 0000023M	0 0000018U	0 0000016U	0 000001U	0 0000013U
Total TCDD		0 000001M	0 0000016U	0 000002U	0 0000016U	0 0000012U	0 0000012U
Total TCDF		0 0000008U	0 0000015U	0 0000016U	0 0000029	0 0000039	0 0000009U
1998 Total TEQ w/ EMPC as ND		**1.6636E-06**	**2.4146E-06**	**4.1131E-06**	**3.1206E-06**	**0.000002115**	**4 4107E-06**

Notes U not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	AA-I-S4-76-80FT	AA-I-S4-86-90FT	AA-I-S4-96-100FT	AA-SW-S1-101-104FT	AA-SW-S1-101-104FTFD	AA-SW-S1-14-16FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/8/2000	3/8/2000	3/9/2000	11/8/1999	11/8/1999	11/1/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 000178	0 0000389	0 000244	0 0000354JM	0 0000264	0 0000026M
1,2,3,4,6 7,8,9-OCDF	0 000232	0 0000454	0 000351	0 0000029UJ	0 0000051M	0 0000019U
1 2,3,4,6,7,8-HpCDD	0 0000399	0 0000039U	0 0000417	0 0000046J	0 0000013U	0 0000016U
1 2,3,4,6,7,8-HpCDF	0 0000234	0 0000022U	0 0000285	0 0000017UJ	0 0000009U	0 0000009U
1 2,3,4,7,8,9-HpCDF	0 0000182	0 0000032U	0.0000175M	0 0000025UJ	0 0000012U	0 0000014U
1,2,3,4 7,8-HxCDD	0 0000047U	0 0000026U	0 0000018U	0 000002UJ	0 000001U	0 0000013U
1,2,3,4,7,8-HxCDF	0.0000121M	0 0000017U	0 0000158	0 0000012UJ	0 0000007U	0 0000013M
1,2,3,6,7,8-HxCDD	0 0000044U	0 0000024U	0 0000017U	0 0000018UJ	0 0000009U	0 0000011U
1,2,3,6,7,8-HxCDF	0 0000028U	0 0000016U	0 0000011U	0 0000011UJ	0 0000007U	0 00000076M
1,2,3,7,8,9-HxCDD	0 0000047U	0 0000026U	0 0000018U	0 0000019UJ	0 000001U	0 0000014U
1,2,3,7,8,9-HxCDF	0 0000035U	0 000002U	0 0000014U	0 0000015UJ	0 0000008U	0 000001U
1,2,3,7,8-PeCDD	0.0000042U	0.0000027U	0 0000016UJ	0 0000018UJ	0 0000009U	0 0000016U
1,2,3,7,8-PeCDF	0 000003U	0 0000018U	0 000001UJ	0 0000018UJ	0 0000009U	0 000001U
2,3,4,6 7,8-HxCDF	0 000003U	0 0000017U	0 0000012U	0 0000013UJ	0 0000007U	0 0000008U
2,3,4,7 8-PeCDF	0 0000031U	0 0000018U	0 000001UJ	0 0000019UJ	0 000001U	0 000001U
2,3,7,8-TCDD	0 0000032U	0 000002U	0 00000089JM	0 0000035R	0 0000015U	0 0000012U
2,3,7,8-TCDF	0 0000025U	0 0000015U	0 0000012UJ	0 0000032R	0 0000013U	0 000001U
Total HpCDD	0 0000681	0 0000039U	0 0000784	0 0000097M	0 0000028M	0 0000021M
Total HpCDF	0 0000769	0 0000074	0 000103M	0 000002U	0 000001U	0 0000011U
Total HxCDD	0 0000326M	0 0000025U	0 000132M	0 0000019U	0 000001U	0 0000013U
Total HxCDF	0 0000121M	0 0000017U	0 0000236	0 0000013U	0 0000007U	0 0000037M
Total PeCDD	0 0000368M	0 0000027U	0 0000399M	0 0000018U	0 0000009U	0 0000016U
Total PeCDF	0 0000031U	0 0000018U	0 000001U	0 0000019U	0 0000009U	0 000001U
Total TCDD	0 0000032U	0 000002U	0 00000089M	0 0000035U	0 0000015U	0 0000012U
Total TCDF	0 0000025U	0 0000015U	0 0000012U	0 0000032U	0 0000013U	0 000001U
1998 Total TEQ w/ EMPC as ND	**0.000007291**	**3.7049E-06**	**0.000004459**	**2.0289E-06**	**1.8474E-06**	**2.1277E-06**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	AA-SW-S1-62-66FT	AA-SW-S2-102-106FT	AA-SW-S2-22-26FT	AA-SW-S2-22-26FTFD	AA-SW-S2-62-66FT	AA-SW-S2-72-76FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/4/1999	11/15/1999	11/9/1999	11/10/1999	11/10/1999	11/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 0000268	0 0000225M	0.0000085U	0 000042J	0 0000184J	0 0000128
1,2,3,4,6,7,8,9-OCDF	0 0000073	0 0000076	0 000006U	0 00001J	0 0000088UJ	0 0000055U
1,2,3,4,6,7,8-HpCDD	0 0000037	0 0000026U	0.0000046U	0 0000034UJ	0 0000067UJ	0 0000038U
1,2,3,4,6,7,8-HpCDF	0 0000025	0 0000015U	0.0000025U	0 000002UJ	0 0000043UJ	0 0000024U
1,2,3 4,7,8,9-HpCDF	0 0000019U	0 0000022U	0 0000042U	0 0000029UJ	0 0000062UJ	0 0000033U
1,2,3,4,7,8-HxCDD	0 0000016U	0 0000017U	0 000003U	0 0000022UJ	0 0000043UJ	0 0000023U
1,2,3,4,7,8-HxCDF	0 0000013M	0 000001U	0 0000019U	0 0000026J	0 0000042J	0 0000019U
1,2,3,6,7,8-HxCDD	0 0000015U	0 0000016U	0 0000026U	0 0000018UJ	0 0000036UJ	0 0000021U
1,2,3,6,7,8-HxCDF	0 0000011	0 000001U	0 0000017U	0 0000013UJ	0 0000028J	0 0000017U
1,2,3,7,8,9-HxCDD	0 0000016U	0 0000017U	0 000003U	0 0000022UJ	0 0000044UJ	0 0000021U
1 2,3,7,8,9-HxCDF	0 0000011M	0 0000012U	0 0000022U	0 0000018UJ	0 0000036J	0 0000021U
1 2,3,7,8-PeCDD	0 0000017U	0 0000016U	0 0000029U	0 0000021U	0 0000044UJ	0 000002U
1 2,3,7,8-PeCDF	0 0000012U	0 0000012U	0 0000025U	0 0000017U	0 0000032UJ	0 0000016U
2 3,4,6,7,8-HxCDF	0 0000009U	0 000001U	0 0000018U	0 0000015UJ	0 0000034UJ	0 0000019U
2,3,4,7,8-PeCDF	0 0000012U	0 0000012U	0 0000028U	0 0000018U	0 0000028JM	0 0000016U
2,3,7,8-TCDD	0 0000015U	0 0000015U	0 0000027U	0 000002U	0 0000041UJ	0 0000028U
2,3,7,8-TCDF	0 000001U	0 000001U	0 0000019U	0 0000014U	0 0000029UJ	0 000002U
Total HpCDD	0 0000037	0 0000034M	0 0000046U	0 0000034U	0 0000067U	0 0000038U
Total HpCDF	0 0000045M	0.0000031	0 0000031U	0 0000023U	0 0000051U	0 0000028U
Total HxCDD	0 0000015U	0 0000016U	0 0000175M	0 0000131M	0 0000041U	0 0000027M
Total HxCDF	0 0000042M	0 0000011U	0 0000019U	0 0000026	0 0000105	0 0000019U
Total PeCDD	0 0000017U	0 0000016U	0 0000029U	0 0000038M	0 0000044U	0 000002U
Total PeCDF	0 0000015M	0 0000012U	0 0000027U	0 0000018U	0 0000028M	0 0000016U
Total TCDD	0 0000026	0 0000015U	0 0000027U	0 000002U	0.0000041U	0 0000028U
Total TCDF	0 000001U	0 000001U	0 0000019U	0 0000014U	0 0000029U	0 000002U
1998 Total TEQ w/ EMPC as ND	**2.5649E-06**	**2.4234E-06**	**4.5247E-06**	**3.4592E-06**	**7.1082E-06**	**3.6941E-06**

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	AA-SW-S3-22-26FT	AA-SW-S3-62-66FT	AA-SW-S3-96-99FT	AA-SW-S3-96-99FTEB	AA-SW-S3-96-99FTFD	BR-G
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Bedrock GW
Sample Date	11/10/1999	11/12/1999	11/17/1999	11/17/1999	11/17/1999	5/1/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3 4 6,7,8,9-OCDD	0 0000078	0 0000158	0 0000064M	0 0000113	0 0000042JM	0 11233
1 2,3 4,6 7,8,9-OCDF	0 0000069UJ	0 000014U	0 0000035U	0 000003M	0 0000024U	0 08746
1,2,3,4,6,7,8-HpCDD	0 0000052U	0 0000106U	0 0000023U	0 000007U	0 0000017UJ	0 01511
1,2,3,4,6,7,8-HpCDF	0 0000032UJ	0 0000076U	0 0000015U	0 0000025M	0 000001UJ	0 00756
1,2,3,4,7,8,9-HpCDF	0 0000047UJ	0 0000102U	0 0000021U	0 0000064U	0 0000015UJ	0 00548U
1,2,3,4 7,8-HxCDD	0 0000035UJ	0 0000061U	0 0000015U	0 0000047U	0 0000012UJ	0 004U
1,2,3,4 7,8-HxCDF	0 0000027UJ	0 0000052U	0 000001U	0 0000032U	0 00000091JM	0 00376U
1,2,3 6,7,8-HxCDD	0 0000029UJ	0 0000057U	0 0000013U	0 0000043U	0 0000011UJ	0 00351U
1,2,3,6,7,8-HxCDF	0 0000022UJ	0 0000047U	0 000001U	0 0000029U	0 0000007UJ	0 00329U
1,2,3,7,8,9-HxCDD	0 0000035UJ	0 0000058U	0.0000014U	0 0000047U	0 0000011UJ	0 00367U
1,2,3,7 8,9-HxCDF	0 0000032UJ	0 0000058U	0 0000012U	0 0000037U	0 0000009UJ	0 00429U
1,2,3,7,8-PeCDD	0 0000038U	0.0000043U	0.0000013U	0 0000048U	0 0000011U	0 0027U
1,2,3,7,8-PeCDF	0 0000032U	0 0000037U	0 0000011U	0 000004U	0 0000008U	0 00173U
2,3,4,6,7,8-HxCDF	0 0000026UJ	0 0000051U	0 000001U	0 0000032U	0 0000008UJ	0 0039U
2,3,4,7,8-PeCDF	0 0000035U	0 0000037U	0 0000011U	0 0000041U	0 0000009U	0 00202U
2,3,7,8-TCDD	0 0000039UJ	0 0000049U	0 0000014U	0 000005U	0 0000011U	0 0021U
2,3,7,8-TCDF	0 0000029U	0 0000037U	0 0000011U	0 0000033U	0 0000008U	0 00259U
Total HpCDD	0 0000052U	0 0000106U	0 0000041M	0 0000086M	0 0000017U	0 04085
Total HpCDF	0 0000038U	0 0000087U	0 0000017U	0 0000025M	0 0000012M	0 01898
Total HxCDD	0 0000107M	0 0000059U	0 0000014U	0 0000153M	0 0000011U	0 0063
Total HxCDF	0 0000026U	0 0000052U	0 000001U	0 0000032U	0 00000091M	0 00377U
Total PeCDD	0 0000038U	0 0000043U	0 0000013U	0 0000048U	0 0000011U	0 0027U
Total PeCDF	0 0000034U	0 0000037U	0 0000011U	0 000004U	0 0000008U	0 04705
Total TCDD	0 0000039U	0 0000049U	0 0000014U	0 000005U	0 0000011	0 0021U
Total TCDF	0 0000029U	0 0000037U	0 0000011U	0 0000033U	0 0000008U	0 14583
1998 Total TEQ w/ EMPC as ND	**6.0466E-06**	**7.8668E-06**	**2.1575E-06**	**7 6058E-06**	**1.7418E-06**	**0.004672829**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	BR-GEB	BR-GFD	BR-H	BR-I	DW-MCDO-1	DW-MCDO-1FD	DW-SCHM-1
Description	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Domestic Well GW	Domestic Well GW	Domestic Well GW
Sample Date	5/2/2000	5/1/2000	5/1/2000	4/25/2000	10/21/1999	10/21/1999	10/22/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 0000864	0 44073	0 00063	0 56075	0 0000063M	0 0000167	0 0000131M
1,2,3,4,6,7,8,9-OCDF	0 0000512	0 1927	0 00025	0 21592	0 0000057U	0 0000026U	0 000005
1,2,3,4,6,7,8-HpCDD	0 0000114	0 04063	0 0000745	0 03732	0 0000036U	0 0000018M	0 0000012U
1,2,3,4,6,7,8-HpCDF	0 0000064M	0 01295M	0 0000656	0 05061	0 0000018U	0 000001U	0 0000007U
1,2,3,4,7,8,9-HpCDF	0 0000065U	0 00596U	0 0000086U	0 00961	0 0000027U	0 0000015U	0 000001U
1,2,3,4,7,8-HxCDD	0 000005U	0 00475U	0 0000062U	0 00196U	0 000002U	0 0000012U	0 0000008U
1 2,3 4,7,8-HxCDF	0 0000033U	0 00455	0 0000068	0 01713	0 0000014U	0 0000024	0 0000015M
1 2,3,6,7,8-HxCDD	0 0000047U	0 00416U	0 0000059U	0 00172U	0 0000019U	0 0000012U	0 0000008U
1 2,3,6,7,8-HxCDF	0 0000031U	0 00344U	0 0000038U	0 00473	0 0000012U	0 0000018M	0 0000006U
1,2,3,7,8,9-HxCDD	0 0000047U	0 00435U	0 0000058U	0 0018U	0 0000021U	0 0000025	0 0000009U
1,2,3,7,8,9-HxCDF	0 0000041U	0 00448U	0 000005U	0 00185U	0 0000016U	0 000002M	0 0000008U
1,2,3,7,8-PeCDD	0 0000064U	0 00352U	0 0000078U	0 0012U	0 0000024UJ	0 000003JM	0 0000016U
1,2,3,7,8-PeCDF	0 000003U	0 00213U	0 0000035U	0 0035	0 0000015U	0 0000009U	0 000001U
2,3,4,6,7,8-HxCDF	0 0000035U	0 00408U	0 0000043U	0 00442	0 0000014U	0 0000017	0 0000006U
2 3 4,7 8-PeCDF	0 0000036U	0 00249U	0 0000042U	0 00317	0 0000016U	0 000001U	0 0000009U
2,3,7,8-TCDD	0 000004U	0 00264U	0 0000054U	0 000853U	0 0000014U	0 0000016M	0 0000012U
2,3,7 8-TCDF	0 0000319	0 0077U	0 0000043U	0 000781U	0 0000012U	0 0000031	0 0000017M
Total HpCDD	0 0000278	0 104	0 000145	0 0763	0 0000036U	0 0000018M	0 0000012U
Total HpCDF	0 0000064M	0 04623M	0 000158	0 12399	0 0000022U	0 0000012U	0 0000008U
Total HxCDD	0 0000048U	0 02632M	0 0000148M	0 10104M	0 0000015M	0 0000025	0 0000009U
Total HxCDF	0 0000035U	0 0092	0 0000267	0 03449M	0 0000014U	0 000008M	0 0000015M
Total PeCDD	0 0000064U	0 00775M	0 0000247M	0 03503M	0 0000024U	0 000003M	0 0000016U
Total PeCDF	0 0000176	0 08632	0 0000038U	0 00667	0 0000015U	0 0000009U	0 0000009U
Total TCDD	0 000004U	0 01373	0 0000054U	0 000853U	0 0000014U	0 0000016	0 0000012U
Total TCDF	0 000075M	0 2771	0 0000043U	0 000781U	0 000002M	0 0000031	0 0000017M
1998 Total TEQ w/ EMPC as ND	**1.09772E-05**	**0 006422943**	**1.17145E-05**	**0.006873117**	**3.0186E-06**	**3.8758E-06**	**2.0507E-06**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	DW-SETT-1	DW-WRIG-1	EE-01	EE-02-GP	EE-02-GPEB	EE-03	EE-05
Description	Domestic Well GW	Domestic Well GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/21/1999	10/21/1999	10/12/1999	11/4/1999	11/4/1999	10/12/1999	10/13/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 0000081U	0 0000073M	0 00271	0 0000416	0 0000278	0 00421	0 18156J
1,2,3 4,6,7,8 9-OCDF	0 0000057U	0 0000034U	0 00161	0 0000024U	0 0000089U	0 000365	0 02243
1,2,3 4 6,7,8-HpCDD	0 0000034U	0 0000023U	0 00026	0 0000022U	0 0000076U	0 0000954	0 00857
1,2,3 4,6,7,8-HpCDF	0 000002U	0 0000012U	0 000259	0 0000013U	0 0000049U	0 0000561	0 00341
1,2,3 4,7,8,9-HpCDF	0 000003U	0 0000018U	0 000104	0 000002U	0 000007U	0 0000015U	0 000105
1 2 3 4,7,8-HxCDD	0 0000019U	0 0000014U	0 0000108U	0 0000015U	0 0000049U	0 0000016U	0 000004M
1 2 3,4,7,8-HxCDF	0 0000015U	0 0000014	0 000112	0 0000025	0 0000037U	0 0000086M	0 0000246
1 2,3 6,7,8-HxCDD	0 0000018U	0 0000013U	0 0000205	0 0000012U	0 000004U	0 0000014U	0 000162
1,2,3 6,7,8-HxCDF	0 0000014U	0 00000077M	0 0000346	0 0000008U	0 0000032U	0 0000018M	0 0000172
1 2,3,7,8,9-HxCDD	0 000002U	0 0000014U	0 0000191JM	0 0000015U	0 0000048U	0 0000015U	0 0000208J
1,2,3,7,8,9-HxCDF	0 0000019U	0 0000017	0 0000206	0 0000011U	0 0000056	0 0000012U	0 0000014U
1,2,3,7,8-PeCDD	0 0000023UJ	0 0000019UJ	0 0000137U	0 0000014U	0 0000045U	0 0000017U	0 0000068
1,2,3,7,8-PeCDF	0 0000015U	0 0000012U	0.0000075U	0 0000011U	0 0000035U	0 0000011U	0 0000103M
2,3,4,6,7,8-HxCDF	0 0000016U	0 0000009U	0 0000258	0 0000009U	0 0000035U	0 000001U	0 0000314
2,3,4,7,8-PeCDF	0 0000016U	0 0000013U	0 000017M	0 0000012U	0 0000036U	0 0000011U	0 000005M
2,3,7 8-TCDD	0 0000014U	0 0000012U	0 0000077U	0 0000012U	0 0000042U	0 0000011U	0 0000039M
2,3,7,8-TCDF	0 0000011U	0 0000009U	0 0000102	0 0000011U	0 0000038U	0 0000048	0 0000054M
Total HpCDD	0 0000034U	0 0000023U	0 000544	0 0000022U	0 0000076U	0 000157	0 01443
Total HpCDF	0 0000024U	0 0000015U	0 000976M	0 0000016U	0 0000058U	0 000169	0 00352M
Total HxCDD	0 0000019U	0 0000014U	0 00162M	0 0000014U	0 0000045U	0 0000096M	0 000459M
Total HxCDF	0 0000016U	0 0000038M	0 000327M	0 0000025	0 0000056	0 0000224M	0 00176M
Total PeCDD	0 0000023U	0 0000028M	0 0018M	0 0000014U	0 0000045U	0 0000028M	0 0000098
Total PeCDF	0 0000015U	0 0000012U	0 000502M	0 0000039M	0 0000036U	0 0000011U	0 0000336M
Total TCDD	0 0000014U	0 0000012U	0 0000137M	0 0000012U	0 0000042U	0 0000011U	0 000006M
Total TCDF	0 0000011U	0 0000009U	0 000286M	0 0000119	0 0000111	0 0000076	0 0000054M
1998 Total TEQ w/ EMPC as ND	**2 9902E-06**	**2.5756E-06**	**4.56645E-05**	**2.3143E-06**	**7.3932E-06**	**5 0175E-06**	**0 000177647**

Notes U not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	EE-05EB	EE-12-GP	EE-13-GP	EE-14-GP	EE-15-GP	EE-15-GPFD	EEG-101	EEG-102
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/13/1999	11/5/1999	11/4/1999	11/5/1999	11/8/1999	11/8/1999	10/8/1999	10/7/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 0000694	0 53785J	0 02728	0 39915J	0 00118	0 000458	0 00132J	0 000325
1,2,3,4,6,7,8,9-OCDF	0 0000048M	0 30903J	0 00198J	0 08439J	0 000244	0 000048	0 000272J	0 0001
1,2,3,4,6,7,8-HpCDD	0 0000043M	0 09338J	0 00261	0 04082J	0 000106	0 0000257	0 0000832J	0 0000488
1,2,3,4,6,7,8-HpCDF	0 0000007U	0 06045J	0 000332	0 01511	0 0000324	0 0000092	0 0000407J	0 0000185
1,2,3,4,7,8,9-HpCDF	0 0000009U	0 00401	0 0000406	0 000609	0 0000023U	0 0000012U	0 0000039UJ	0 0000228
1 2 3,4,7,8-HxCDD	0 0000009U	0 00023	0 0000039U	0 0000283	0 0000016U	0 000001U	0 000003UJ	0 0000057U
1 2,3,4,7,8-HxCDF	0 0000006U	0 00687	0 0000514	0 000233	0 0000011U	0 0000007U	0 0000055JM	0 0000043U
1,2,3,6,7,8-HxCDD	0 0000009U	0 00205	0 0000345	0 000645	0 0000015U	0 0000009U	0 0000029UJ	0 0000053U
1,2,3,6,7,8-HxCDF	0 0000005U	0 000912	0 0000115	0 0000617	0 000001U	0 0000006U	0 0000021UJ	0 000004U
1 2,3 7,8,9-HxCDD	0 0000009U	0 000821	0 0000038U	0 000105	0 0000016U	0 000001U	0 0000032UJ	0 0000055U
1 2 3 7 8,9-HxCDF	0 0000007U	0 0000547	0 0000034U	0 0000016U	0 0000013U	0 0000008U	0 0000027UJ	0 0000048U
1 2 3,7,8-PeCDD	0 0000012U	0 000124	0 0000034U	0 0000104	0 0000014U	0 0000009U	0 0000036UJ	0 0000076U
1 2 3 7,8-PeCDF	0 0000007U	0 000156JM	0 0000026U	0 0000267JM	0 0000012U	0 0000008U	0 0000022UJ	0 0000044U
2 3 4,6 7,8-HxCDF	0 0000006U	0 000536	0 0000043M	0 0000704	0 0000011U	0 0000007U	0 0000023UJ	0 0000043U
2,3,4,7,8-PeCDF	0 0000007U	0 000205	0 0000027U	0 0000485	0 0000012U	0 0000008U	0 0000023UJ	0 0000047U
2,3,7,8-TCDD	0 0000007U	0 0000032U	0 0000032U	0 0000062M	0 0000017U	0 0000011U	0 0000028UJ	0 0000054U
2,3,7,8-TCDF	0 0000006U	0 0000718	0 0000028U	0 0000237	0 0000013U	0 0000009U	0 0000026UJ	0 0000047U
Total HpCDD	0 0000066M	0 16496	0 00376	0 10695	0 000245	0 0000668	0 000164	0 0000878
Total HpCDF	0 0000008U	0 17345	0 00142	0 0867	0 000171	0 0000385	0 000153	0 000131
Total HxCDD	0 0000022M	0 02358M	0 000254M	0 0048M	0 0000051	0 000001U	0 000003U	0 0000055U
Total HxCDF	0 0000179	0 04289M	0 000178M	0 0067M	0 0000115	0 0000029	0 0000159	0 0000312
Total PeCDD	0 0000012U	0 01743M	0 000029M	0 000467M	0 0000014U	0 0000009U	0 0000036U	0 0000076U
Total PeCDF	0 0000007U	0 00427M	0 0000128M	0 000349M	0 0000012U	0 0000008U	0 0000023U	0 0000046U
Total TCDD	0 0000007U	0 00093M	0 0000032U	0 000198M	0 0000017U	0 0000011U	0 0000028U	0 0000054U
Total TCDF	0 0000006U	0 00362M	0 0000028U	0 00045M	0 0000013U	0 0000009U	0 0000026U	0 0000047U
1998 Total TEQ w/ EMPC as ND	**1.4641E-06**	**0.003049638**	**0.000047442**	**0.000768952**	**3.9429E-06**	**1 9556E-06**	**6 4627E-06**	**1 06585E-05**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-re. . from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	EEG-103-GP	EEG-104	EEG-105-GP	EEG-106	EEG-107	EEG-109	EEG-110	EEG-111-GP
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	11/3/1999	10/8/1999	11/2/1999	10/7/1999	10/7/1999	10/11/1999	10/11/1999	11/3/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2 3,4 6 7 8,9-OCDD	0 0000088U	0 00736J	0 0000083M	0 00011M	0 01757J	0 000088	0 0000173M	0 0000111M
1 2 3 4 6 7 8 9-OCDF	0 0000078U	0 00174J	0 0000037	0 0000321	0 00392J	0 0000117M	0 000006M	0 0000086U
1 2 3 4 6 7 8-HpCDD	0 0000057U	0 000595J	0 0000026U	0 0000134	0 00318J	0 0000082	0 000002M	0 0000057U
1 2 3 4,6 7,8-HpCDF	0 000005U	0 000277J	0 0000016U	0 0000238	0 00115J	0 0000012U	0 0000012U	0 0000037U
1 2,3 4 7 8,9-HpCDF	0 0000072U	0 0000333J	0 0000023U	0 0000083U	0 00485	0 0000017U	0 0000016U	0 0000053U
1 2,3,4,7 8-HxCDD	0 000003U	0 0000054J	0 000002U	0 0000061U	0 00196	0 000002U	0 0000016U	0 0000032U
1,2 3,4,7,8-HxCDF	0 0000011	0 0000191J	0 0000014U	0 0000135	0 00232	0 0000011U	0 000001U	0 0000021U
1 2,3 6,7 8-HxCDD	0 0000029U	0 0000177J	0 0000017U	0 0000057U	0 00602	0 0000018U	0 0000014U	0 0000031U
1,2,3,6,7,8-HxCDF	0 0000021U	0 0000086J	0 0000012U	0 0000046U	0 000808	0 000001U	0 000001U	0 000002U
1,2,3,7,8,9-HxCDD	0 0000032U	0 0000145J	0 000002U	0 0000059U	0 00542J	0 0000021U	0 0000016U	0 0000034U
1,2,3,7,8,9-HxCDF	0 0000025U	0 0000024UJ	0 0000016U	0 0000054U	0 0000527M	0 0000012U	0 0000012U	0 0000024U
1 2,3,7 8-PeCDD	0 000002U	0 0000035UJ	0 0000021U	0 0000064U	0 00136	0 0000026U	0 000002U	0 0000021U
1 2,3 7,8-PeCDF	0 0000013U	0 000002UJ	0 0000014U	0 0000044U	0 000435JM	0 0000014U	0 0000011U	0 0000013U
2,3 4,6,7,8-HxCDF	0 0000021U	0 0000065JM	0 0000013U	0 0000048U	0 000773	0 0000011U	0 000001U	0 0000021U
2 3 4 7,8-PeCDF	0 0000013U	0 0000068J	0 0000014U	0 0000046U	0 000432	0 0000014U	0 0000011U	0 0000013U
2,3,7 8-TCDD	0 0000023U	0 0000023UJ	0 0000016U	0 0000044U	0 000221	0 0000016U	0 0000013U	0 0000022U
2 3 7 8-TCDF	0 0000017U	0 0000072J	0 0000015U	0 000004U	0 000125	0 0000011U	0 0000009U	0 0000015U
Total HpCDD	0 0000057U	0 00122	0 0000046M	0 0000233	0 42143	0 0000129M	0 000002M	0 0000057U
Total HpCDF	0 0000059U	0 00106M	0 0000019U	0 0000723	0 3672	0 0000073M	0 0000014U	0 0000043U
Total HxCDD	0 0000021	0 000126	0 0000019U	0 0000059U	0 05552	0 0000022M	0 0000015U	0 0000032U
Total HxCDF	0 0000011	0 000131M	0 0000014U	0 0000572M	0 04078M	0 0000011U	0 000001U	0 0000021U
Total PeCDD	0 000002U	0 0000072M	0 0000021U	0 0000064U	0 01613	0 0000026U	0 000002U	0 0000021U
Total PeCDF	0 0000013U	0 0000155	0 0000014U	0 0000435M	0 00366M	0 0000014U	0 0000011U	0 0000013U
Total TCDD	0 0000023U	0 0000023U	0 0000016U	0 0000044U	0 00471M	0 0000016U	0 0000013U	0 0000022U
Total TCDF	0 0000017U	0 0000144	0 0000019	0 0000211	0 00208M	0 00000036M	0 0000009U	0 0000015U
1998 Total TEQ w/ EMPC as ND	**3.5828E-06**	**0 000024008**	**2 9033E-06**	**1.02572E-05**	**0.003647059**	**3 1609E-06**	**2 4627E-06**	**0 000003572**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	EEG-112	SGW-S1-15FT	SGW-S1-20FT	SGW-S1-40FT	SGW-S1-40FTFD
Description	Fill Area GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW
Sample Date	10/8/1999	10/14/1999	10/14/1999	10/14/1999	10/14/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 000205JM	0 000017JM	0 0000168JM	0 0398J	0 000125J
1,2,3,4,6,7,8,9-OCDF	0 0000384JM	0.0000045UJ	0 0000061UJ	0 01277J	0 0000363J
1 2,3,4,6,7,8-HpCDD	0 0000154JM	0 0000017M	0 0000037U	0 00432	0 0000162
1,2,3,4,6,7,8-HpCDF	0 0000074J	0 0000014U	0 0000021U	0 00174	0 0000016U
1,2,3,4,7,8,9-HpCDF	0 0000027UJ	0 0000021U	0 0000032U	0 0000877	0 0000024U
1,2,3,4,7,8-HxCDD	0 0000022UJ	0 0000019U	0.0000024U	0 0000118U	0 0000024U
1,2,3,4,7,8-HxCDF	0 0000034JM	0 0000012M	0 0000017M	0 0000644	0 0000022M
1,2,3,6,7,8-HxCDD	0 0000021UJ	0 0000016U	0 0000021U	0 000181	0 0000023M
1 2,3 6 7,8-HxCDF	0 0000015UJ	0 0000009U	0 0000013U	0 0000184M	0 0000019
1,2,3,7 8,9-HxCDD	0 0000023UJ	0 0000019U	0 0000025U	0 0000407	0 0000025U
1 2,3,7,8,9-HxCDF	0 000002UJ	0 0000012U	0 0000025M	0 0000088U	0 0000018U
1,2,3,7,8-PeCDD	0 0000027UJ	0 0000024U	0 0000032U	0 0000059M	0 0000034U
1,2,3,7,8-PeCDF	0 0000017UJ	0 0000013U	0 0000017U	0 000022	0 0000021M
2 3,4 6 7 8-HxCDF	0 0000028JM	0 000001U	0 0000014U	0 0000413	0 0000018M
2 3 4 7 8-PeCDF	0 0000017UJ	0 0000013U	0 0000017U	0 0000077U	0 0000018U
2,3,7 8-TCDD	0 000002UJ	0 0000014U	0 000002U	0 0000075U	0 0000021U
2 3 7 8-TCDF	0 0000018UJ	0 0000011U	0 0000016U	0 0000283	0 0000017U
Total HpCDD	0 0000283J	0 0000033M	0.0000037U	0 00715	0 0000286M
Total HpCDF	0 000023J	0 0000017U	0 0000026U	0 00825	0 0000181
Total HxCDD	0 0000022U	0 0000021M	0 0000023U	0 000641	0 0000049
Total HxCDF	0 0000063	0 0000012	0 0000042M	0 00139M	0 0000085M
Total PeCDD	0 0000027U	0 0000012M	0 0000032U	0 000229M	0 0000034U
Total PeCDF	0 0000017U	0 0000013U	0 0000017U	0 000196M	0 0000021
Total TCDD	0 000002U	0 0000014U	0 000002U	0 000224M	0 0000021U
Total TCDF	0 0000018U	0 0000011U	0 0000016U	0 000191M	0 0000017U
1998 Total TEQ w/ EMPC as ND	**3.8992E-06**	**2.8246E-06**	**3.8886E-06**	**0 000113979**	**4.3756E-06**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SGW-S2-15FT	SGW-S2-20FT	SGW-S2-40FT	TS-S1-0HR	TS-S1-12HR	TS-S1-12HRFD
Description	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Time Series GW	Time Series GW	Time Series GW
Sample Date	10/15/1999	10/15/1999	10/15/1999	3/29/2000	3/29/2000	3/29/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2 3 4,6 7,8,9-OCDD	0 0000151U	0 0000261	0 000114	0 000057M	0 0000333M	0 0000219M
1 2 3 4 6 7 8 9-OCDF	0 0000128U	0 00002U	0 0000248M	0 0000135JM	0 0000099JM	0 0000141JM
1 2 3 4 6,7 8-HpCDD	0 0000098U	0 000014U	0 000013U	0 0000027U	0 0000041U	0 0000053
1,2,3 4 6 7,8-HpCDF	0 000007U	0 0000091U	0 0000088U	0 0000016U	0 0000027U	0 0000023U
1 2,3 4,7,8,9-HpCDF	0 000009U	0 0000118U	0 0000114U	0 0000021U	0 0000035U	0 000003U
1 2,3,4,7,8-HxCDD	0 0000081U	0 0000113U	0 0000107U	0 0000019U	0 0000027U	0 0000022U
1 2,3,4,7,8-HxCDF	0 0000055U	0 000007U	0 0000072U	0 0000027M	0 0000021U	0 0000017U
1,2,3,6,7,8-HxCDD	0 0000076U	0 0000105U	0 00001U	0 0000018U	0 0000025U	0 0000021U
1 2,3,6,7,8-HxCDF	0 0000051U	0 0000066U	0 0000067U	0 0000013U	0 0000019U	0 0000016U
1 2,3,7 8,9-HxCDD	0 0000079U	0 0000109U	0 0000104U	0 0000018U	0 0000026U	0 0000022U
1 2,3,7,8,9-HxCDF	0 0000061U	0 0000078U	0 000008U	0 0000016U	0 0000023U	0 0000019U
1 2,3,7,8-PeCDD	0 0000077U	0 0000097U	0 0000104U	0 0000017U	0 0000024U	0 0000056
1,2,3,7,8-PeCDF	0 000005U	0 000006U	0 0000065U	0 0000034M	0 0000018U	0 0000015U
2,3,4,6,7,8-HxCDF	0 0000054U	0 0000069U	0 0000071U	0 0000014U	0 000002U	0 0000017U
2,3,4 7,8-PeCDF	0 0000053U	0 0000063U	0 0000068U	0 0000013U	0 0000019U	0 0000015U
2,3,7,8-TCDD	0 0000059U	0 000007U	0 0000075U	0 0000015U	0 000002U	0 0000095
2 3,7 8-TCDF	0 0000047U	0 0000057U	0 0000058U	0 0000014U	0 0000018U	0 0000016U
Total HpCDD	0 0000098U	0 000014U	0 000013U	0 0000027U	0 0000041U	0 0000053
Total HpCDF	0 0000079U	0 0000103U	0 0000099U	0 0000019U	0 000003U	0 0000026U
Total HxCDD	0 0000078U	0 0000109U	0 0000103U	0 0000018U	0 0000026U	0 0000021U
Total HxCDF	0 0000055U	0.0000071U	0 0000072U	0 0000027	0 0000021U	0 000003
Total PeCDD	0 0000059U	0 0000097U	0 0000104U	0 0000017U	0 0000024U	0 0000056
Total PeCDF	0 0000051U	0 0000061U	0 0000066U	0 0000034M	0 0000019U	0 0000015U
Total TCDD	0 0000059U	0 000007U	0 0000075U	0 0000015U	0 000002U	0 0000095
Total TCDF	0 0000047U	0 0000057U	0 0000058U	0 0000014U	0 0000018U	0 0000016U
1998 Total TEQ w/ EMPC as ND	**1.09004E-05**	**1.35881E-05**	**1.42861E-05**	**2.7406E-06**	**3 6687E-06**	**1.63438E-05**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	TS-S1-24HR	TS-S2-0HR	TS-S2-12HR	TS-S2-24HR	UGGW-EE-04	UGGW-EE-04-100FT	UGGW-EE-04-100FTFD
Description	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	3/30/2000	3/29/2000	3/29/2000	3/30/2000	10/13/1999	1/27/2000	1/27/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3 4,6,7 8,9-OCDD	0 0000094M	0 0000651JM	0 0000061M	0 0000061U	0 00149J	0 0000182U	0 0000216U
1,2 3 4,6,7,8,9-OCDF	0 0000042U	0 0000361JM	0 0000037U	0 0000051U	0 0000976J	0 0000148U	0 0000176U
1 2 3 4,6 7,8-HpCDD	0 0000035U	0 0000047U	0 0000032U	0 0000044U	0 0000333J	0 0000089U	0 0000121U
1 2,3,4,6,7,8-HpCDF	0 0000021U	0 0000029U	0 0000021U	0 0000027U	0 0000118JM	0 0000043U	0 0000057U
1,2,3,4,7,8,9-HpCDF	0 0000028U	0 0000038U	0 0000027U	0 0000035U	0 0000018U	0 0000062U	0 0000081U
1,2,3,4,7,8-HxCDD	0 0000024U	0 0000031U	0 0000021U	0 0000029U	0 0000019U	0 000005U	0 0000067U
1 2 3,4,7,8-HxCDF	0 0000029M	0 0000024U	0 0000017U	0 0000023U	0 0000012U	0 0000028U	0 0000039U
1 2 3 6,7,8-HxCDD	0 0000023U	0 0000029U	0 000002U	0 0000027U	0 0000018U	0 0000046U	0 0000061U
1 2,3,6,7,8-HxCDF	0 0000017U	0 0000022U	0 0000016U	0 0000021U	0 0000011U	0 0000026U	0 0000036U
1 2,3,7,8,9-HxCDD	0 0000024U	0 000003U	0 0000021U	0 0000028U	0 0000019U	0 000005U	0 0000066U
1,2,3,7,8,9-HxCDF	0 000002U	0 0000026U	0 0000019U	0 0000025U	0 0000014U	0 0000033U	0 0000046U
1,2,3,7,8-PeCDD	0 0000025U	0 0000027U	0 0000019U	0 0000027U	0 000002U	0 0000035U	0 0000043U
1 2,3,7,8-PeCDF	0 0000017U	0 000002U	0 0000015U	0 000002U	0 0000015U	0 000002U	0 0000027U
2,3,4,6,7,8-HxCDF	0 0000018U	0 0000023U	0 0000017U	0 0000022U	0 0000012U	0 0000028U	0 0000039U
2 3,4,7,8-PeCDF	0 0000018U	0 0000021U	0 0000015U	0 0000021U	0 0000015U	0 000002U	0 0000028U
2 3,7,8-TCDD	0 000002U	0 0000024U	0 0000017U	0 0000023U	0 0000017U	0 0000024U	0 0000032U
2 3 7,8-TCDF	0 0000018U	0 000002U	0 0000015U	0 000002U	0 0000012U	0 0000017U	0 0000024U
Total HpCDD	0 0000035U	0 0000047U	0 0000032U	0 0000044U	0 0000591	0 0000089U	0 0000121U
Total HpCDF	0 0000024U	0 0000117	0 0000024U	0 0000031U	0 0000455	0 0000051U	0 0000067U
Total HxCDD	0 0000024U	0 0000036M	0 0000021U	0 0000028U	0 000003M	0 0000049U	0 0000064U
Total HxCDF	0 0000029	0 0000024U	0 0000017U	0 0000023U	0 0000111	0 0000028U	0 000004U
Total PeCDD	0 0000025U	0 0000027U	0 0000019U	0 0000027U	0 000002U	0 0000035U	0 0000043U
Total PeCDF	0 0000018U	0 0000041M	0 0000015U	0 000002U	0 0000015U	0 000002U	0 0000028U
Total TCDD	0 000002U	0 0000024U	0 0000017U	0 0000023U	0 0000011M	0 0000024U	0 0000032U
Total TCDF	0 0000018U	0 000002U	0 0000015U	0 000002U	0 0000012U	0 0000017U	0 0000024U
1998 Total TEQ w/ EMPC as ND	**3.6502E-06**	**4.2121E-06**	**0.000002983**	**4 1036E-06**	**3.4073E-06**	**4.9886E-06**	**0 000006539**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	UGGW-EE-04-60FT	UGGW-EE-04FD	UGGW-EE-20	UGGW-EE-20-100FT	UGGW-EE-20-60FT	UGGW-EEG-108
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	10/13/1999	10/13/1999	10/18/1999	1/25/2000	3/13/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0 00489	0 000473	0 000152	0 00151	0 000335	0 00069
1 2,3,4,6,7,8,9-OCDF	0 00167	0 0000348	0 0000125U	0 000231	0 000197	0 0000365M
1,2,3 4,6,7,8-HpCDD	0 00051	0 0000143	0 0000019M	0 000111	0 000056	0 0000192
1,2,3,4,6,7,8-HpCDF	0 000234	0 0000008U	0 0000027M	0 0000258	0 0000336	0 0000015U
1,2,3,4,7,8,9-HpCDF	0 0000144M	0 0000011U	0 0000032U	0 0000046U	0 0000103M	0 0000021U
1,2,3,4,7,8-HxCDD	0 0000053M	0 0000012U	0 0000028U	0 0000042U	0 0000048U	0 0000019U
1,2,3,4,7,8-HxCDF	0 0000088M	0 0000007U	0 0000015U	0 0000022U	0 0000101	0 0000011U
1,2,3,6,7,8-HxCDD	0.0000177	0 0000011U	0 0000026U	0 0000039U	0 0000047U	0 0000018U
1,2,3,6,7,8-HxCDF	0 0000055	0 0000007U	0 0000014U	0 0000021U	0 000004U	0 000001U
1,2,3,7,8,9-HxCDD	0 0000174	0 0000011U	0 0000028U	0 0000041U	0 0000052U	0 000002U
1,2,3,7,8,9-HxCDF	0 0000015U	0 0000008U	0 0000017U	0 0000026U	0 0000051U	0 0000012U
1,2,3,7,8-PeCDD	0 000003M	0 0000015U	0 0000035U	0 0000033U	0 0000044U	0 0000027U
1,2,3,7,8-PeCDF	0 0000017U	0 0000009U	0 0000021U	0 0000021U	0 0000035U	0 0000014U
2,3,4,6,7,8-HxCDF	0 0000049M	0 0000007U	0 0000015U	0 0000023U	0 0000043U	0 000001U
2,3,4,7,8-PeCDF	0 0000017U	0 0000009U	0 0000022U	0 0000021U	0 0000036U	0 0000013U
2,3,7,8-TCDD	0 0000017U	0 000001U	0 0000019U	0 0000025U	0 0000047U	0 0000015U
2 3,7,8-TCDF	0 0000046	0 0000008U	0 0000014U	0 0000018U	0 000004U	0 0000011U
Total HpCDD	0 00105	0 0000205M	0 0000019M	0 000277	0 000107	0 0000331M
Total HpCDF	0 00096M	0 0000168M	0 0000072M	0 00011	0 000146M	0 0000277M
Total HxCDD	0 000161M	0 0000011L	0 0000018M	0 0000074	0 0000607M	0 0000019U
Total HxCDF	0 00013M	0 000028M	0 0000015U	0 0000093M	0 0000217	0 0000011U
Total PeCDD	0 0000381M	0 0000015U	0 0000035U	0 0000033U	0 0000417M	0 0000027U
Total PeCDF	0 0000073	0 0000009U	0 0000022U	0 0000021U	0 0000036U	0 0000014U
Total TCDD	0 000036	0 000001U	0 0000019U	0 0000025U	0 0000047U	0 0000015U
Total TCDF	0 0000096M	0 0000008U	0 0000014U	0 0000018U	0 000004U	0 0000011U
1998 Total TEQ w/ EMPC as ND	**1.65305E-05**	**2.0558E-06**	**4.1423E-06**	**6.2026E-06**	**9.1532E-06**	**3.2958E-06**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.6
Sauget Area 1
Ground-Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	UGGW-EEG-108-100FT	UGGW-EEG-108-60FT	UGGW-EEG-108-60FTEB	UGGW-EEG-108FD
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	1/31/2000	1/28/2000	1/28/2000	10/11/1999
Units	ug/l	ug/l	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0.0000056U	0.0000191U	0.0000106U	0.000555
1,2,3,4,6,7,8,9-OCDF	0.0000046U	0.0000155U	0.0000086U	0.0000634
1,2,3,4,6,7,8-HpCDD	0.0000033U	0.0000095U	0.0000058U	0.0000183
1,2,3,4,6,7,8-HpCDF	0.0000016U	0.0000046U	0.0000029U	0.0000166
1,2,3,4,7,8,9-HpCDF	0.0000024U	0.0000066U	0.0000041U	0.0000041U
1,2,3,4,7,8-HxCDD	0.0000022U	0.0000049U	0.0000037U	0.0000033U
1,2,3,4,7,8-HxCDF	0.0000013U	0.000003U	0.0000021U	0.000002U
1,2,3,6,7,8-HxCDD	0.000002U	0.0000045U	0.0000034U	0 000003U
1,2,3,6,7,8-HxCDF	0 0000012U	0.0000027U	0.000002U	0.0000019U
1,2,3,7,8,9-HxCDD	0.0000021U	0.0000049U	0.0000036U	0.0000035U
1,2,3,7,8,9-HxCDF	0.0000015U	0.0000035U	0.0000025U	0.0000023U
1,2,3,7,8-PeCDD	0.0000017U	0.0000032U	0.0000029U	0.0000043U
1,2,3,7,8-PeCDF	0.0000012U	0.0000021U	0.0000019U	0.0000025U
2,3,4,6,7,8-HxCDF	0.0000013U	0.000003U	0.0000021U	0.000002U
2,3,4,7,8-PeCDF	0.0000012U	0.0000022U	0.0000019U	0 0000025U
2,3,7,8-TCDD	0.0000012U	0.0000021U	0.0000022U	0 0000022U
2,3,7,8-TCDF	0.000001U	0.0000015U	0.0000021U	0 0000016U
Total HpCDD	0.0000033U	0.0000095U	0.0000058U	0.0000371M
Total HpCDF	0.0000019U	0.0000055U	0.0000034U	0.0000421M
Total HxCDD	0.0000021U	0.0000048U	0.0000036U	0.0000033U
Total HxCDF	0.0000013U	0.000003U	0.0000022U	0.000002U
Total PeCDD	0.0000017U	0.0000032U	0.0000029U	0.0000043U
Total PeCDF	0.0000012U	0.0000021U	0.0000019U	0.0000025U
Total TCDD	0.0000012U	0.0000021U	0.0000022U	0.0000022U
Total TCDF	0.000001U	0.0000015U	0.0000021U	0.0000016U
1998 Total TEQ w/ EMPC as ND	**0.000002447**	**4.7578E-06**	**4.2124E-06**	**5.3488E-06**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-GHL-S1-102-106FT	AA-GHL-S1-107-111FT	AA-GHL-S1-12-16FT	AA-GHL-S1-22-26FT	AA-GHL-S1-22-26FTEB	AA-GHL-S1-22-26FTFD	AA-GHL-S1-32-36FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/1/1999	12/2/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999	11/18/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	11J	8.1J	0.16UJ	0.33J	0.081J	0.12UJ	0.13J
Antimony	0.02U	0.0079J	0.020U	0.020U	0.020U	0.020U	0.020U
Arsenic	0.009J	0.006J	0.010U	0.010U	0.010U	0.010U	0.0037J
Barium	0.64	0.62	0.10	0.14	0.015	0.13	0.13
Beryllium	0.0018J	0.0015UJ	0.0040U	0.0040U	0.0040U	0.0040U	0.00063U
Cadmium	0.005U	0.005U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Calcium	170J	170J	140J	130J	24	120J	160J
Chromium	0.11	0.09	0.0036J	0.010U	0.010U	0.010U	0.0019UJ
Cobalt	0.014	0.0092J	0.010U	0.0038J	0.010U	0.0032J	0.0075J
Copper	0.023U	0.019UJ	0.0023J	0.020U	0.017J	0.020U	0.020U
Cyanide, Total	0.01U	0.01U	0.010U	0.010U	0.010U	0.010U	0.010U
Iron	54J	45J	0.77J	1.1J	0.034J	0.40J	3.6J
Lead	0.017	0.011	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Magnesium	51	50	30	25	7.8	25	36
Manganese	2.9J	1.9J	0.041	0.75	0.017	0.71	1.7
Mercury	0.0002U	0.0002U	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U
Molybdenum	0.018	0.012	0.016	0.010U	0.010U	0.010U	0.0044J
Nickel	0.048	0.038J	0.0091J	0.012J	0.040U	0.011J	0.010J
Potassium	10	9.2	3.2	6.4	2.5	6.1	7.7
Selenium	0.01U	0.01U	0.010U	0.010U	0.010U	0.010U	0.010U
Silver	0.01U	0.01U	0.010U	0.010U	0.010U	0.010U	0.010U
Sodium	30J	33J	11J	16J	13	15J	23J
Thallium	0.01U	0.01U	0.010U	0.010U	0.010U	0.010U	0.010U
Vanadium	0.029	0.022	0.010U	0.010U	0.010U	0.010U	0.010U
Zinc	0.13U	0.12U	0.020U	0.020U	0.029	0.020U	0.020U

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-GHL-S1-42-46FT	AA-GHL-S1-52-56FT	AA-GHL-S1-62-66FT	AA-GHL-S1-72-76FT	AA-GHL-S1-82-86FT	AA-GHL-S1-92-96FT	AA-GHL-S1-92-96FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/18/1999	11/19/1999	11/29/1999	11/30/1999	11/30/1999	12/1/1999	12/1/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0 066J	0 28	0 43	0 2U	15	2 2J	1 7J
Antimony	0 020U	0 020U	0 02U	0 0053J	0 02U	0 02U	0 02U
Arsenic	0 0049J	0 010U	0 01U	0 01U	0 0091J	0 01U	0 01U
Barium	0 12	0 24	0 25	0 15	0 65	0 35	0 33
Beryllium	0 00068UJ	0 00066UJ	0 0011UJ	0 0011UJ	0 0019UJ	0 0013UJ	0 0012UJ
Cadmium	0 0050U	0 0050U	0 005U	0 005U	0 005U	0 005U	0 005U
Calcium	170J	190J	200J	150J	210J	150J	150J
Chromium	0 0028UJ	0 0026J	0 0042J	0 01U	0 16	0 031	0 023
Cobalt	0 0018J	0 010U	0 01U	0 01U	0 018	0 0019J	0 01U
Copper	0 0015UJ	0 020U	0 001UJ	0 02U	0 035J	0 0045UJ	0 0036UJ
Cyanide, Total	0 010U	0 010U	0 01U	0 01U	0 01U	0 01U	0 01U
Iron	11J	27J	23J	14J	67J	21J	19J
Lead	0 0029UJ	0 0050U	0 005U	0 005U	0 022	0 005U	0 0039J
Magnesium	37	62	86	46	61	44	44
Manganese	2 0	1 9	1 4J	0 76J	2 2J	0 68J	0 6J
Mercury	0 00020U	0 00020U	0 0002U	0 0002U	0 0002U	0 0002U	0 0002U
Molybdenum	0 0029J	0 010U	0 0035J	0 0031J	0 024	0 0066J	0 0082J
Nickel	0 0052J	0 0052J	0 04U	0 04U	0 072	0 01J	0 0072J
Potassium	8 3	13	13	7 7	14	7 6	7 3
Selenium	0 010U	0 010U	0 01U	0 01U	0 01U	0 01U	0 01U
Silver	0 010U	0 010U	0 01U	0 01U	0 01U	0 01U	0 01U
Sodium	24J	79J	100J	39J	51J	24J	23J
Thallium	0 010U	0 010U	0 01U	0 01U	0 01U	0 01U	0 01U
Vanadium	0 010U	0 010U	0 01U	0 01U	0 039	0 0047J	0 0031J
Zinc	0 011J	0 013J	0 0078UJ	0 02U	0 22J	0 051U	0 038U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-GHL-S2-12-16FT	AA-GHL-S2-22-26FT	AA-GHL-S2-32-36FT	AA-GHL-S2-32-36FTEB	AA-GHL-S2-42-46FT	AA-GHL-S2-52-56FT	AA-GHL-S2-62-66FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/18/1999	11/18/1999	11/19/1999	11/19/1999	11/19/1999	11/29/1999	11/30/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	1 6	0 20U	0 18J	0 20U	0 20U	0 26	0 24
Antimony	0 020U	0 020U	0 020U	0 020U	0 020U	0 02U	0 02U
Arsenic	0 0038J	0 010U	0 010U	0 010U	0 0056J	0 01U	0 01U
Barium	0 16	0 087	0 15	0 010U	0 18	0 19	0 32
Beryllium	0 00075UJ	0 00072UJ	0 00056UJ	0 0040U	0 00068UJ	0 0015UJ	0 0011UJ
Cadmium	0 0050U	0 0050U	0 0050U	0 0050U	0.0050U	0 005U	0 005U
Calcium	140J	110J	130J	0.34J	140J	180J	210J
Chromium	0 0028UJ	0 010U	0 0012J	0 010U	0 010U	0 0059J	0 003J
Cobalt	0 0030J	0 0042J	0 0048J	0 010U	0 010U	0 01U	0 01U
Copper	0 0018UJ	0 020U	0 020U	0 020U	0 020U	0 084J	0 02U
Cyanide, Total	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U	0 01U
Iron	2 7J	0 28J	1 4J	0 050U	11J	21J	32J
Lead	0 0020UJ	0 0017UJ	0 0050U	0 0050U	0 0050U	0 0025J	0 005U
Magnesium	32	22	26	0 50U	28	38	60
Manganese	1 2	0 22	1 9	0 010U	1 6	2 2J	1 5J
Mercury	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U	0 0002U	0 0002U
Molybdenum	0 0045J	0 0045J	0 0037J	0 010U	0 010U	0 01U	0 01U
Nickel	0 0098J	0 0092J	0 0093J	0 040U	0 040U	0 04U	0 04U
Potassium	5 0	3 0	4 1	1 0U	6 4	7 5	9 6
Selenium	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U	0 01U
Silver	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U	0 01U
Sodium	8 2J	7 3J	9 6J	0 47J	14J	21J	41J
Thallium	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U	0 01U
Vanadium	0 0040J	0 010U	0 010U	0 010U	0 010U	0 0038J	0 01U
Zinc	0 0091J	0 020U	0 020	0 020U	0 0079J	0 006UJ	0 008UJ

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-GHL-S2-62-66FTFD	AA-GHL-S2-72-76FT	AA-GHL-S2-82-86FT	AA-GHL-S2-92-96FT	AA-GHL-S2-92-96FTEB	AA-GHL-S2-99-103FT	AA-GHL-S3-100-104FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/30/1999	11/30/1999	12/1/1999	12/2/1999	12/2/1999	12/2/1999	12/20/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0.038J	8.7	0.2UJ	0.2UJ	0.2U	4.2J	23
Antimony	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U
Arsenic	0.01U	0.007J	0.01U	0.01U	0.01U	0.01U	0.02J
Barium	0.31	0.32	0.25	0.64	0.01U	0.79	0.98J
Beryllium	0.0011UJ	0.0015UJ	0.0011UJ	0.0011UJ	0.0011J	0.0012UJ	0.0011J
Cadmium	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Calcium	210J	210J	170J	170J	0.28J	160J	200J
Chromium	0.01U	0.11	0.002J	0.01U	0.01U	0.036	0.28
Cobalt	0.01U	0.014	0.01U	0.01U	0.01U	0.0038J	0.018
Copper	0.02U	0.03J	0.02U	0.02U	0.0048J	0.0087UJ	0.051J
Cyanide, Total	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U
Iron	31J	54J	16J	16J	0.04J	24J	69J
Lead	0.005U	0.019	0.0018J	0.005U	0.005U	0.0044J	0.026
Magnesium	61	65	54	50	0.5U	48	62
Manganese	1.5J	1.6J	0.53J	0.34J	0.0024J	0.5J	1.1J
Mercury	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.00017UJ
Molybdenum	0.0027J	0.019	0.01U	0.01U	0.01U	0.0082J	0.038
Nickel	0.04U	0.052	0.04U	0.04U	0.04U	0.017J	0.082
Potassium	9.7	11	7.7	7.3	1U	7.9	13
Selenium	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U
Silver	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U
Sodium	42J	40J	46J	30J	0.36J	28J	19J
Thallium	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U
Vanadium	0.01U	0.024	0.01U	0.01U	0.01U	0.011	0.056
Zinc	0.02U	0.21J	0.0074UJ	0.011UJ	0.027	0.087U	0.22J

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-GHL-S3-110-114FT	AA-GHL-S3-20-24FT	AA-GHL-S3-30-34FT	AA-GHL-S3-30-34FTFD	AA-GHL-S3-40-44FT	AA-GHL-S3-50-54FT	AA-GHL-S3-60-64FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/21/1999	12/14/1999	12/15/1999	12/15/1999	12/15/1999	12/16/1999	12/16/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0 9	0.2U	0.2U	0 22	0 028J	0 15J	0 2U
Antimony	0 02U	0.02U	0 02U	0.02U	0 02U	0 02U	0 02U
Arsenic	0.01U	0.01U	0 01U	0.01U	0 01U	0 0042UJ	0 0069UJ
Barium	0.64J	0.13	0.14	0.14	0.17	0 14J	0 12J
Beryllium	0.004U	0.004U	0.004U	0 004U	0 004U	0 004U	0 004U
Cadmium	0.005U	0.005U	0.005U	0.005U	0.005U	0 005U	0.005U
Calcium	130J	170J	130J	130J	120J	110J	180J
Chromium	0.011	0.01U	0.01U	0.01U	0 01U	0 0027J	0 01U
Cobalt	0.01U	0.0058J	0.007J	0.0075J	0 0068J	0 01U	0 01U
Copper	0.0023UJ	0.0024UJ	0.002UJ	0.002UJ	0.002UJ	0 0012UJ	0 0011UJ
Cyanide, Total	0 01U	0 01U	0.01U	0.01U	0.01U	0 01U	0 01U
Iron	14J	0.2J	1.8J	1.6J	1.2J	5 2J	26J
Lead	0.005U	0.005U	0.005U	0.005U	0.005U	0 005U	0 005U
Magnesium	41	37	29	30	22	22	35
Manganese	0.34J	1 5	0.7	0.7	1 9	1 8J	1 9J
Mercury	0.00016UJ	0.0002U	0.0002U	0.0002U	0 0002U	0 00013UJ	0 00015UJ
Molybdenum	0 0042J	0.01U	0.0085J	0.0063J	0 01U	0 0073J	0 01U
Nickel	0.0056J	0.012J	0.018J	0.015J	0.011J	0.012J	0 04U
Potassium	5.3	12J	10J	10J	6 4J	4 8	6 1
Selenium	0 01U	0.01U	0.01U	0 01U	0 01U	0.01U	0 01U
Silver	0.01U	0.01U	0.01U	0.01U	0.01U	0 01U	0.01U
Sodium	15J	19J	17J	17J	11J	8 9J	17J
Thallium	0.01U	0 01U	0.0054UJ	0.01U	0 01U	0 01U	0 01U
Vanadium	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0.01U
Zinc	0 012UJ	0 006UJ	0 02U	0 02U	0 0097UJ	0 0064UJ	0 02U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-GHL-S3-60-64FTEB	AA-GHL-S3-70-74FT	AA-GHL-S3-80-84FT	AA-GHL-S3-90-94FT	AA-H-S1-101-105FT	AA-H-S1-101-105FTEB	AA-H-S1-53-57FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/16/1999	12/17/1999	12/17/1999	12/20/1999	3/16/2000	3/17/2000	3/10/2000
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0 2U	0 2U	1 4	33	1 1J	0 20U	2 1J
Antimony	0 02U	0 02U	0 02U	0 02U	0 020U	0 020U	0 0062J
Arsenic	0 01U	0 01U	0 0038UJ	0 034J	0 59	0 010U	0 33
Barium	0 01U	0 21J	0 46J	0 96J	0 17J	0 010U	0 17J
Beryllium	0 004U	0 004U	0 004U	0 0016J	0 0040U	0 0040U	0 0040U
Cadmium	0 005U	0 005U	0 005U	0 0016J	0 0050U	0 0050U	0 0050U
Calcium	0 28J	170J	200J	210J	170J	0 38J	190J
Chromium	0 01U	0 01U	0 0099J	0 57	0 018J	0 010U	0 0042UJ
Cobalt	0 01U	0 01U	0 0072J	0 034	0 010U	0 010U	0 0027J
Copper	0 00099J	0 00093UJ	0 0042UJ	0 1J	0 023J	0 020U	0 012J
Cyanide Total	0 01U	0 01U	0 01U	0 01U	0 010U	0 010U	0 010U
Iron	0 031J	23J	28J	110J	6 4J	0 026J	18J
Lead	0 005U	0 005U	0 004J	0 045	0 0019J	0 0050U	0 0050U
Magnesium	0 5U	37	43	53	37	0 50U	56
Manganese	0 01U	1 2J	1 5J	2J	0 45J	0 010U	0 72J
Mercury	0 00012J	0 00014UJ	0 00018UJ	0 00014UJ	0 00020J	0 00020U	0 00020U
Molybdenum	0 01U	0 01U	0 0026J	0 071	0 0045J	0 010U	0 0051J
Nickel	0 04U	0 04U	0 016J	0 15	0 13J	0 040U	0 72J
Potassium	1U	6 1	6 4	14	5 5	1 0U	7 8
Selenium	0 01U	0 01U	0 01U	0 01U	0 010U	0 010U	0 010U
Silver	0 01U	0 01U	0 01U	0 01U	0 010U	0 010U	0 010U
Sodium	0 45J	15J	14J	16J	22	0 48J	29J
Thallium	0 0064J	0 01U	0 01U	0 01U	0 010U	0 010U	0 010U
Vanadium	0 01U	0 01U	0 0051J	0 091	0 0060J	0 010U	0 0068J
Zinc	0 011J	0 02U	0 029U	0 47J	0 11U	0 089	0 054U

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-H-S1-63-67FT	AA-H-S1-73-77FT	AA-H-S1-73-77FTFD	AA-H-S1-83-87FT	AA-H-S1-83-87FTEB	AA-H-S1-93-97FT	AA-I-S1-17-21FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	3/10/2000	3/13/2000	3/13/2000	3/13/2000	3/14/2000	3/15/2000	12/14/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0.20U	0.20U	0.20U	0.041J	0.20U	1.0J	1.4
Antimony	0.020U	0.15	0.15	0.0059J	0.020U	0.0094J	0.02U
Arsenic	0.39	0.095	0.097	0.31	0.010U	0.084	0.14
Barium	0.11J	0.18J	0.18J	0.10J	0.0037J	0.73J	0.31
Beryllium	0.0040U	0.0040U	0.0040U	0.0040U	0.0040U	0.0040U	0.004U
Cadmium	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.005U
Calcium	230J	180J	170J	620J	0.60	200J	320J
Chromium	0.010U	0.010U	0.010U	0.0021UJ	0.0027J	0.11J	0.0031J
Cobalt	0.010U	0.010U	0.010U	0.010U	0.010U	0.0064J	0.01
Copper	0.0036UJ	0.0019UJ	0.0015UJ	0.0050UJ	0.0018J	0.042J	0.0033UJ
Cyanide, Total	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.01U
Iron	9.8J	19J	19J	22J	0.15	89J	33J
Lead	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0082	0.0028J
Magnesium	45	49	48	37	0.50U	43	71
Manganese	0.44J	0.47J	0.46J	0.50J	0.0024J	1.8J	3.7
Mercury	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.0002U
Molybdenum	0.0032J	0.0067J	0.0061J	0.053	0.010U	0.13	0.0078J
Nickel	0.042U	0.25J	0.24J	0.23J	0.012J	0.26J	0.048
Potassium	5.9	7.3	7.1	7.9	1.0U	13	13J
Selenium	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.01U
Silver	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.01U
Sodium	13J	17J	17J	28J	0.81	76J	130J
Thallium	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.01U
Vanadium	0.010U	0.010U	0.010U	0.010U	0.010U	0.0066J	0.0045J
Zinc	0.035U	0.042U	0.043U	0.21U	0.031	1.0J	0.021U

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-I-S1-27-31FT	AA-I-S1-37-41FT	AA-I-S1-47-51FT	AA-I-S1-57-61FT	AA-I-S1-67-71FT	AA-I-S1-67-71FTEB	AA-I-S1-77-81FT	AA-I-S1-87-91FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/15/1999	12/15/1999	12/16/1999	12/16/1999	12/17/1999	12/17/1999	12/20/1999	12/21/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0.13J	0 092J	0.58	3	0.61	0.2U	10	0 2U
Antimony	0.02U	0 02U	0.02U	0 02U	0 02U	0.02U	0 02U	0 02U
Arsenic	0.068	0 0081J	0.0046UJ	0 0045UJ	0 0047UJ	0 01U	0 013U	0 01U
Barium	0.76	0 7	0.58J	0 4J	0 41J	0 0033J	1J	1J
Beryllium	0.004U	0 004U	0.004U	0.004U	0 004U	0.004U	0 0017J	0 004U
Cadmium	0.005U	0 005U	0.005U	0.005U	0 005U	0 005U	0 00072J	0 005U
Calcium	190J	200J	230J	170J	170J	0 41J	190J	150J
Chromium	0.01U	0 0017J	0 0077J	0 024	0 0054J	0 01U	0 16	0 01U
Cobalt	0.01U	0 01U	0 01U	0 0023J	0.01U	0 01U	0 027	0 01U
Copper	0.0033UJ	0 0016UJ	0.003UJ	0 0089UJ	0 0043UJ	0.0053J	0 047J	0 02U
Cyanide, Total	0.01U	0 01U	0.01U	0 01U	0.01U	0 01U	0 01U	0 01U
Iron	65J	59J	34J	30J	26J	0 073	190J	18J
Lead	0.005U	0.005U	0.005U	0 0055U	0 005U	0 005U	0 019	0 005U
Magnesium	55	46	58	40	37	0 5U	52	47
Manganese	1 4	2 1	3.4J	3J	2 5J	0 0024J	7 7J	0 4J
Mercury	0 0002U	0 0002U	0.00014UJ	0 00016UJ	0 000097UJ	0 00015J	0 00019UJ	0 0002U
Molybdenum	0 01U	0 01U	0.0027J	0 0058J	0 0055J	0 01U	0 023	0 004J
Nickel	0.04U	0 04U	0.0053J	0 013J	0 0082J	0 04U	0 09	0 04U
Potassium	9.8J	9 7J	12	10	8 5	1U	9 7	6 7
Selenium	0.01U	0 01U	0.01U	0.01U	0 01U	0 01U	0 01U	0 01U
Silver	0 01U	0 01U	0.01U	0.01U	0 01U	0.01U	0 01U	0 01U
Sodium	54J	62J	78J	55J	45J	0 72	28J	21J
Thallium	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U
Vanadium	0 01U	0 01U	0.0028J	0 0081J	0 01U	0 01U	0 05	0 01U
Zinc	0 0064UJ	0 01UJ	0.018UJ	0 05U	0 011UJ	0 011J	0 3J	0 01UJ

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-I-S1-87-91FTFD	AA-I-S1-97-101FT	AA-I-S2-16-20FT	AA-I-S2-26-30FT	AA-I-S2-36-40FT	AA-I-S2-46-50FT	AA-I-S2-56-60FT	AA-I-S2-66-70FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/21/1999	12/21/1999	12/3/1999	12/6/1999	12/7/1999	12/7/1999	12/8/1999	12/8/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0 2U	4 8	0 36U	0 2U	0 2U	0 073UJ	0 066UJ	2 7J
Antimony	0 02U	0 02U	0 2U	0 02U	0 02U	0 02U	0 020U	0 020U
Arsenic	0 0037UJ	0 0047UJ	0 01U	0 041	0 029	0 005J	0 0046J	0 0063J
Barium	1J	1 1J	0 047J	0 079J	0 16J	0 23J	0 49J	1 2J
Beryllium	0 004U	0 004U	0 0014UJ	0 0014UJ	0 0013UJ	0 0013UJ	0 00091UJ	0 00087UJ
Cadmium	0 005U	0 005U	0 07	0 005U	0 005U	0 005U	0 0050U	0 0050U
Calcium	150J	190J	350J	260J	170J	200J	210J	280J
Chromium	0 01U	0 089	0 01U	0 01U	0 01U	0 0029UJ	0 010U	0 022J
Cobalt	0 01U	0 0057J	0 047	0 04	0 0081J	0 01U	0 010U	0 010
Copper	0 001UJ	0 022U	0 0042UJ	0 02U	0 00092UJ	0 031J	0 0014UJ	0 018J
Cyanide Total	0 01U	0 01U	0 01U	0 01U	0 01U	0 048	0 010U	0 010U
Iron	18J	47J	0 89U	23J	20J	29	30J	34J
Lead	0 005U	0 0065	0 0032UJ	0 0021UJ	0 005U	0 0036UJ	0 0050U	0 019J
Magnesium	48	58	65	51	49	54	58	78
Manganese	0 4J	0 98J	7 4J	2 3J	1 2J	1 7J	1 9J	2 5J
Mercury	0 00031U	0 000086UJ	0 0002U	0 0002U	0 0002U	0 0002U	0 00020U	0 00020U
Molybdenum	0 0033J	0 016	0 0029J	0 0031J	0 01U	0 01U	0 010U	0 0048J
Nickel	0 04U	0 045	7 8	1	0 63	0 45	0 0061J	0 038J
Potassium	7	8 5	13	11	11	11	11	12
Selenium	0 01U	0 01U	0 1U	0 01U	0 01U	0 01U	0 010U	0 010U
Silver	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 010U	0 010U
Sodium	21J	24J	120J	60J	43J	45J	57J	69J
Thallium	0 01U	0 01U	0 01UJ	0 01UJ	0 01UJ	0 01UJ	0 010U	0 010U
Vanadium	0 01U	0 012	0 0027J	0 01U	0 01U	0 01U	0 010U	0 011
Zinc	0 0081UJ	0 24J	33J	3 6J	3 6J	1UJ	0 021U	0 15J

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-I-S2-76-80FT	AA-I-S2-76-80FTEB	AA-I-S2-76-80FTFD	AA-I-S2-86-90FT	AA-I-S2-96-100FT	AA-I-S3-104-108FT	AA-I-S3-110-114FT	AA-I-S3-24-28FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/10/1999	12/10/1999	12/10/1999	12/13/1999	12/13/1999	12/13/1999	12/14/1999	12/3/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	7 4J	0 20U	8 2J	5 6	4 3	13	3 6	0 084UJ
Antimony	0 056	0 020U	0 058	0 02U	0 02U	0 02U	0 02U	0 02U
Arsenic	0 023	0 010U	0 024	0 015	0 028	0 03	0 0078J	0 01U
Barium	0 62J	0 0025J	0 63J	0 59	0 54	0 43	0 13	0 33J
Beryllium	0 00095UJ	0 00066J	0 00098UJ	0 004U	0 004U	0 00057J	0 004U	0 0013UJ
Cadmium	0 010	0 0050U	0 012	0 00085J	0 00093J	0 005U	0 005U	0 005U
Calcium	180J	0 25J	190J	170J	170J	170J	520J	240J
Chromium	0 041J	0 0029J	0 045J	0 066	0 038	0 2	0 16	0 01U
Cobalt	0 020	0 010U	0 022	0 0078J	0 0094J	0 01	0 024	0 01U
Copper	3 0J	0 0027J	3 5J	0 078J	0 062J	0 067J	0 16J	0 0015UJ
Cyanide, Total	0 010U	0 010U	0 010U	0 01U	0 01U	0 01J	0 01U	0 01U
Iron	47J	0 033J	50J	33J	22J	53	140J	0 33U
Lead	3 6J	0 0050U	4 1J	0 073	0 06	0 024	0 024J	0 0027UJ
Magnesium	52	0 50U	53	51	48	49	210	33
Manganese	0 87J	0 0036J	0 91J	1 1	0 89	0 97	2 3	0 43J
Mercury	0 00052	0 00020U	0 00054	0 0002U	0 0002U	0 00011UJ	0 000074UJ	0 0002U
Molybdenum	0 011	0 010U	0 013	0 011	0 007J	0 029	0 036	0 011
Nickel	0 22	0 040U	0 24	0 15	2	0 48	27	0 04U
Potassium	9 4	1 0U	9 4	9 2J	9 1J	10J	19J	170
Selenium	0 010U	0 010U	0 010U	0 01U	0 01U	0 01U	0 01U	0 01U
Silver	0 019	0 010U	0 020	0 01U	0 01U	0 01U	0 01U	0 01U
Sodium	29J	0 38J	28J	28J	28J	31J	39J	180J
Thallium	0 010U	0 010U	0 010U	0 01U	0 01U	0 01U	0 01U	0 01UJ
Vanadium	0 021	0 010U	0 023	0 016	0 012	0 03	0 0088J	0 01U
Zinc	5 7J	0 0071J	6 3J	0 35J	0 32J	0 3J	0 54J	0 019UJ

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-I-S3-34-38FT	AA-I-S3-44-48FT	AA-I-S3-54-58FT	AA-I-S3-64-68FT	AA-I-S3-74-78FT	AA-I-S3-84-88FT	AA-I-S3-84-88FTEB	AA-I-S3-84-88FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/6/1999	12/6/1999	12/7/1999	12/7/1999	12/8/1999	12/9/1999	12/10/1999	12/9/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	7.5J	0.064UJ	0.032UJ	0.42J	0.63J	0 060UJ	0 080J	0.074UJ
Antimony	0.02U	0 02U	0.02U	0.02U	0.020U	0.020U	0 020U	0 020U
Arsenic	0.011	0.011	0.01U	0.01U	0.010U	0.0055J	0 010U	0.0054J
Barium	0.37J	0.16J	0.12J	0.21J	0.10J	0.27J	0 0036J	0 27J
Beryllium	0.0018UJ	0.0014UJ	0.0013UJ	0.0013UJ	0.00099UJ	0.00081UJ	0 0040U	0 00091UJ
Cadmium	0.005U	0.005U	0.005U	0.005U	0.0050U	0.0050U	0 0050U	0 0050U
Calcium	250J	200J	240J	270J	290J	200J	0 67	200J
Chromium	0.013U	0.01U	0.0018UJ	0.004UJ	0.0073UJ	0 0035UJ	0 010U	0.0026UJ
Cobalt	0.0041J	0.01U	0.01U	0.01U	0 010U	0.010U	0.010U	0 010U
Copper	0.0072UJ	0.00092UJ	0.0012UJ	0.0019UJ	0.0027UJ	0.0018UJ	0.0017J	0 0014UJ
Cyanide, Total	0 01U	0.01U	0.01U	0.01U	0.010U	0.010U	0.010U	0 010J
Iron	22J	23J	22J	34J	39J	23J	0.40	23
Lead	0.0081U	0 005U	0.002UJ	0.0029UJ	0.0016UJ	0.0027UJ	0.0050U	0 0050U
Magnesium	80	67	44	63	72	58	0.50U	58
Manganese	0.46J	0 6J	0.9J	1.4J	2.6J	0.86J	0 018	0 87J
Mercury	0.0002U	0.0002U	0.0002U	0.0002U	0.00020U	0.00020U	0 00020U	0 00020U
Molybdenum	0.0048J	0.005J	0.0063J	0.0028J	0.0035UJ	0.0053UJ	0 010U	0 0039UJ
Nickel	0.015J	0.04U	0.04U	0.04U	0.040U	0.0049J	0 040U	0 040U
Potassium	23	15	15	18	13	9.1	1 0U	9 2
Selenium	0.01U	0 01U	0.01U	0.01U	0.010U	0.010U	0 010U	0 010U
Silver	0.01U	0.01U	0.01U	0.01U	0.010U	0.010U	0 010U	0 010U
Sodium	600J	190J	130J	51J	45J	36J	0 47J	36J
Thallium	0.01UJ	0.01UJ	0.01UJ	0.01UJ	0 010U	0 010U	0 010U	0 010U
Vanadium	0.02	0.01U	0.01U	0.01U	0.0025J	0.010U	0 010U	0 010U
Zinc	0.049UJ	0.006UJ	0.0096UJ	0 01UJ	0.019UJ	0.019UJ	0 015J	0 014UJ

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-I-S3-94-98FT	AA-I-S4-56-60FT	AA-I-S4-56-60FTFD	AA-I-S4-66-70FT	AA-I-S4-76-80FT	AA-I-S4-86-90FT	AA-I S4-96 100FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	12/10/1999	3/7/2000	3/7/2000	3/7/2000	3/8/2000	3/8/2000	3/9/2000
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	1 6J	3 5J	5 1J	1 8J	0 46J	0 11J	0 13J
Antimony	0 020U	0 020U	0 020U	0 020U	0 020U	0 020U	0 020U
Arsenic	0 0051J	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Barium	0 28J	0 52J	0 56J	0 63J	1 1J	1 2J	0 97J
Beryllium	0 0024UJ	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U
Cadmium	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U
Calcium	170J	140J	140J	130J	140J	160J	150J
Chromium	0 017J	0 033J	0 050J	0 028J	0 0074UJ	0 0079UJ	0 0018UJ
Cobalt	0 010U	0 0023J	0 0038J	0 0019J	0 010U	0 010U	0 010U
Copper	0 0075UJ	0 0060UJ	0 0088UJ	0 0059UJ	0 0048UJ	0 012J	0 0016UJ
Cyanide Total	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Iron	19J	28J	32J	23J	19J	20J	14J
Lead	0 0043UJ	0 0033J	0 0059	0 0040J	0 0016J	0 0050U	0 0050U
Magnesium	49	29	29	35	43	48	43
Manganese	0 75J	1 1J	1 2J	0 84J	0 51J	0 49J	0 34J
Mercury	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U
Molybdenum	0 0043J	0 012	0 018	0 011	0 0038J	0 0055J	0 010U
Nickel	0 0080J	0 012UJ	0 016UJ	0 010UJ	0 0052UJ	0 0062UJ	0 040U
Potassium	7 9	9 3	9 9	8 9	8 0	8 0	7 3
Selenium	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Silver	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Sodium	30J	38J	39J	51J	35J	20J	22J
Thallium	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Vanadium	0 0045J	0 0079J	0 012	0 0047J	0 010U	0 010U	0 010U
Zinc	0 035U	0 35J	0 52J	0 18J	0 15UJ	0 26J	0 060UJ

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-SW-S1-101-104FT	AA-SW-S1-101-104FTFD	AA-SW-S1-14-16FT	AA-SW-S1-24-26FT	AA-SW-S1-34-36FT	AA-SW-S1-42-46FT	AA-SW-S1-52-56FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/8/1999	11/8/1999	11/1/1999	11/2/1999	11/2/1999	11/3/1999	11/3/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	9.8J	10J	0.21UJ	4.8J	0.19UJ	0.052UJ	0.83J
Antimony	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U
Arsenic	0.0068J	0.0069J	0.01U	0.0045J	0.0041J	0.006J	0.01U
Barium	0.76J	0.76J	0.17J	0.31J	0.19J	0.22J	0.4J
Beryllium	0.004U	0.004U	0.004U	0.004U	0.004U	0.004U	0.004U
Cadmium	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Calcium	140J	130J	140J	130J	150J	150J	160J
Chromium	0.18J	0.17J	0.01U	0.0072UJ	0.01U	0.01U	0.0087UJ
Cobalt	0.012	0.011	0.01U	0.0097J	0.0077J	0.01U	0.01U
Copper	0.029	0.025	0.001J	0.0043J	0.02U	0.02U	0.0028J
Cyanide, Total	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U
Iron	47J	45J	0.71J	9.1J	11J	25J	20J
Lead	0.013	0.012	0.005U	0.0077	0.005U	0.005U	0.005U
Magnesium	40	40	33	39	29	32	35
Manganese	1J	0.96J	0.78J	0.62J	1.5J	1.2J	1.1J
Mercury	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Molybdenum	0.028	0.027	0.0052J	0.01U	0.01U	0.01U	0.0031J
Nickel	0.065	0.061	0.012J	0.023J	0.0062J	0.024J	0.006J
Potassium	8	8.1	5.3	6.2	7.6	5.3	7.4
Selenium	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U
Silver	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U
Sodium	16J	16J	12J	10J	18J	12J	10J
Thallium	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U	0.01U
Vanadium	0.025	0.025	0.01U	0.013	0.01U	0.01U	0.01U
Zinc	0.3J	0.26J	0.02U	0.036J	0.02U	0.02U	0.016UJ

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-SW-S1-62-66FT	AA-SW-S1-72-76FT	AA-SW-S1-82-86FT	AA-SW-S1-91-95FT	AA-SW-S2-102-106FT	AA-SW-S2-14-16FT	AA-SW-S2-22-26FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/4/1999	11/4/1999	11/5/1999	11/5/1999	11/15/1999	11/9/1999	11/9/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0 34J	0 53J	29J	8 2J	9 0J	0 27UJ	2 6J
Antimony	0 02U	0 02U	0 02U	0 02U	0 020U	0 020U	0 020U
Arsenic	0 01U	0 01U	0 021	0 01U	0 0059J	0 010U	0 010U
Barium	0 14J	0 14J	0 88J	0 52J	0 95	0 21J	0 20J
Beryllium	0 004U	0 004U	0 0012J	0 004U	0 0040U	0 0040U	0 0040U
Cadmium	0 005U	0 005U	0 005U	0 005U	0 0050U	0 0050U	0 0050U
Calcium	130J	130J	170J	140J	130J	120J	140J
Chromium	0 0017UJ	0 0079UJ	0 3J	0 088J	0 077J	0 010U	0 011U
Cobalt	0 01U	0 01U	0 032	0 0085J	0 0098J	0 010U	0 0073J
Copper	0 02U	0 0016J	0 066	0 021	0 018J	0 020U	0 0023J
Cyanide Total	0 01U	0 01U	0 01U	0 01U	0 010U	0 010U	0 010U
Iron	20J	17J	87J	39J	30J	0 96J	6 7J
Lead	0 005U	0 005U	0 035J	0 01U	0 0087	0 0050U	0 0026J
Magnesium	36	42	51	41	40	36	28
Manganese	1 1J	0 74J	1 9J	1J	0 76J	0 13J	1 3J
Mercury	0 0002U	0 0002U	0 0002U	0 0002U	0 00020U	0 00020U	0 00020U
Molybdenum	0 01U	0 01U	0 069	0 017	0 014	0 0033J	0 0037J
Nickel	0 04U	0 04U	0 11	0 038J	0 042	0 0087J	0 019J
Potassium	5 4	4 7	14	7 9	7 9	3 5	5 6
Selenium	0 01U	0 01U	0 01U	0 01U	0 010U	0 010U	0 010U
Silver	0 01U	0 01U	0 01U	0 01U	0 010U	0 010U	0 010U
Sodium	9 2J	9 6J	14J	13J	16J	6 5J	4 8J
Thallium	0 01U	0 01U	0 01U	0 01U	0 010U	0 010U	0 010U
Vanadium	0 01U	0 01U	0 07	0 021	0 022	0 010U	0 0069J
Zinc	0 02UJ	0 0087UJ	0 29J	0 11J	0 085J	0 020U	0 019UJ

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-SW-S2-32-36FT	AA-SW-S2-42-46FT	AA-SW-S2-52-56FT	AA-SW-S2-62-66FT	AA-SW-S2-62-66FTFD	AA-SW-S2-72-76FT	AA-SW-S2-72-76FTEB
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/9/1999	11/10/1999	11/11/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	1 1J	0 42UJ	1 4J	4 2J	3 3J	22J	0 10J
Antimony	0 020U	0 020U	0 020U	0 020U	0 020U	0 020U	0 020U
Arsenic	0 033	0 010	0 010U	0 0054J	0 010U	0 020	0 010U
Barium	0 18J	0 24J	0 22J	0 27J	0 24J	0 67J	0 0023J
Beryllium	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0010J	0 0040U
Cadmium	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U
Calcium	140J	140J	110J	130J	130J	160J	0 63
Chromium	0 0053UJ	0 0018UJ	0 0088UJ	0 030J	0 022J	0 25J	0 0026J
Cobalt	0 010U	0 010U	0 010U	0 0021J	0 0019J	0 026	0 010U
Copper	0 0011J	0 020U	0 0014J	0 0043J	0 0029J	0 048	0 020U
Cyanide Total	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Iron	9 3J	24J	31J	28J	26J	73J	0 063
Lead	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 029	0 0050U
Magnesium	26	26	27	32	31	42	0 50U
Manganese	1 4J	0 97J	1 0J	0 80J	0 77J	2 4J	0 0028J
Mercury	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U
Molybdenum	0 010U	0 010U	0 010U	0 0052J	0 0040J	0 039	0 010U
Nickel	0 040U	0 040U	0 0051J	0 013J	0 0099J	0 098	0 040U
Potassium	6 7	9 9	7 9	7 1	6 9	11	1 0U
Selenium	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Silver	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Sodium	13J	10J	8 8J	10J	10J	14J	0 76
Thallium	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Vanadium	0 010U	0 010U	0 0038J	0 0099J	0 0084J	0 055	0 010U
Zinc	0 0065UJ	0 020U	0 013UJ	0 039J	0 028U	0 27J	0 0062J

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-SW-S2-82-86FT	AA-SW-S2-92-96FT	AA-SW-S3-14-16FT	AA-SW-S3-22-26FT	AA-SW-S3-32-36FT	AA-SW-S3-42-46FT	AA-SW-S3-52-56FT
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/11/1999	11/12/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/12/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	32J	23J	4.4J	0.70J	3.7J	0.51J	0.87J
Antimony	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Arsenic	0.025	0.020	0.0089J	0.010U	0.023	0.010U	0.010U
Barium	1.0J	1.1J	0.29J	0.19J	0.41J	0.59J	0.82J
Beryllium	0.0016J	0.0010J	0.0040U	0.0040U	0.0040U	0.0040U	0.0040U
Cadmium	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Calcium	200J	160J	180J	150J	130J	100J	140J
Chromium	0.41J	0.27J	0.0062UJ	0.010U	0.0062UJ	0.010U	0.0066UJ
Cobalt	0.041	0.029	0.0053J	0.0085J	0.0042J	0.010U	0.010U
Copper	0.073	0.050	0.0045J	0.020U	0.0016J	0.020U	0.0012J
Cyanide, Total	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Iron	110J	82J	8.7J	2.0J	23J	13J	20J
Lead	0.042	0.024	0.0027J	0.0050U	0.0032J	0.0050U	0.0050U
Magnesium	52	46	42	27	27	21	30
Manganese	3.7J	2.8J	0.36J	2.0	1.2J	0.64J	0.59J
Mercury	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U
Molybdenum	0.064	0.047	0.0063J	0.010U	0.010U	0.010U	0.010U
Nickel	0.16	0.11	0.017J	0.019J	0.014J	0.0049J	0.0050J
Potassium	14	11	6.6	7.1	6.1	6.8	6.0
Selenium	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Silver	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Sodium	15J	15J	7.7J	6.8J	13J	27J	27J
Thallium	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Vanadium	0.088	0.057	0.014	0.010U	0.0079J	0.010U	0.0022J
Zinc	0.51J	0.37J	0.022U	0.0061UJ	0.016UJ	0.0059UJ	0.012UJ

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	AA-SW-S3-62-66FT	AA-SW-S3-72-76FT	AA-SW-S3-82-86FT	AA-SW-S3-92-96FT	AA-SW-S3-96-99FT	AA-SW-S3-96-99FTEB	AA-SW-S3-96-99FTFD
Description	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW	Alluvial Aquifer GW
Sample Date	11/12/1999	11/15/1999	11/15/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	2 5J	11J	11J	13J	0 43J	0 35	2 5J
Antimony	0 020U	0 020U	0 020U	0 020U	0 020U	0 020U	0 020U
Arsenic	0 010U	0 016	0 012	0 011	0 010U	0 010U	0 010U
Barium	0 70J	0 96	0 66	0 96	0 66	0 024	0 72
Beryllium	0 0040U	0 00058UJ	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U
Cadmium	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U
Calcium	150J	180J	160J	140J	120J	24	120J
Chromium	0 019J	0 085J	0 10J	0 14J	0 0061J	0 0033J	0 040J
Cobalt	0 0016J	0 014	0 013	0 012	0 010U	0 010U	0 0025J
Copper	0 0027J	0 028	0 028	0 035	0 020U	0 0014J	0 0071J
Cyanide Total	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Iron	21J	52J	45J	50J	12J	0 42	22J
Lead	0 0050U	0 020	0 019	0 014	0 0050U	0 0050U	0 0050U
Magnesium	35	43	45	41	36	7 6	37
Manganese	0 49J	2 1J	1 3J	0 95J	0 24J	0 025	0 38J
Mercury	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U
Molybdenum	0 0048J	0 013	0 017	0 035	0 0049J	0 0037J	0 016
Nickel	0 012J	0 050	0 048	0 058	0 040U	0 0052J	0 022J
Potassium	6 2	8 8	8 4	8 7	4 8	2 6	5 5
Selenium	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Silver	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Sodium	23J	17J	12J	13J	12J	13	12J
Thallium	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Vanadium	0 0052J	0 028	0 028	0 029	0 010U	0 0030J	0 0064J
Zinc	0 020UJ	0 14J	0 16J	0 47J	0 032J	0 032	0 17J

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	BR-G	BR-GEB	BR-GFD	BR-H	BR-I	DW-MCDO-1	DW-MCDO-1FD	DW-SCHM-1	DW-SETT-1
Description	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Bedrock GW	Domestic Well GW	Domestic Well GW	Domestic Well GW	Domestic Well GW
Sample Date	5/1/2000	5/2/2000	5/1/2000	5/1/2000	4/25/2000	10/21/1999	10/21/1999	10/22/1999	10/21/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	8 2J	0 20U	3 7J	0 040J	0 091J	0 06UJ	0 064UJ	0 2U	0 061UJ
Antimony	0 020U	0 020U	0 020U	0 020U	0 020U	0 02U	0 02U	0 02U	0 02U
Arsenic	0 010U	0 010U	0 0039J	0 0059J	0 010U	0 027	0 031	0 0064J	0 01U
Barium	0 25	0 010U	22	0 054	0 093	0 26	0 27	0 22	0 18
Beryllium	0 00070UJ	0 00055J	0 00071UJ	0 0040U	0 0040U	0 004U	0 004U	0 004U	0 004U
Cadmium	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 005U	0 005U	0 005U	0 005U
Calcium	260J	0 11J	160J	470J	32J	100J	100J	170	180J
Chromium	0 41J	0 010U	0 095J	0 010UJ	0 014J	0 01U	0 01U	0 01U	0 01U
Cobalt	0 0057J	0 010U	0 0016J	0 0057J	0 010U	0 01U	0 01U	0 01U	0 003J
Copper	0 025	0 020U	0 0079J	0 020U	0 011J	0 01J	0 027	0 0028J	0 0026J
Cyanide, Total	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U	0 01U	0 01U	0 01U
Iron	14J	0 031J	5 7J	23J	0 24J	9 2	11	17J	2 4
Lead	0 0077	0 0050U	0 0029J	0 0020J	0 0052	0 077J	0 18J	0 005U	0 0027J
Magnesium	55	0 50U	49	84	46	22	22	39	41
Manganese	0 091J	0 010U	0 040J	2 9J	0 0027J	0 57	0 58	1 2	0 86
Mercury	0 00020U	0 00020U	0 00020U	0 00020U	0 00020U	0 0002U	0 0002U	0 0002U	0 0002U
Molybdenum	0 0095J	0 010U	0 0045J	0 0043J	0 0052J	0 01U	0 01U	0 01U	0 01U
Nickel	0 087	0 040U	0 043	9 6	0 039J	0 04U	0 04U	0 04U	0 0062J
Potassium	13	1 0U	11	14	17J	4	4 1	6 8	5 7
Selenium	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U	0 01U	0 01U	0 01U
Silver	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U	0 01U	0 01U	0 01U
Sodium	43J	0 42J	44J	40J	93J	9 5	9 6	22	24
Thallium	0 010U	0 010U	0 0053J	0 010U	0 010U	0 01U	0 01U	0 01U	0 01U
Vanadium	0 027	0 010U	0 012	0 010U	0 0036J	0 01U	0 0025J	0 01U	0 01U
Zinc	0 26J	0 020U	0 11J	0 025J	0 0092J	2 3J	5 8J	0 12	0 075J

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	DW-WRIG-1	EE-01	EE-02-GP	EE-02-GPFD	EE-03	EE-05	EE-05EB	EE-12-GP	EE-13-GP	EE-14-GP	EE-15-GP
Description	Domestic Well GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	10/21/1999	10/12/1999	11/4/1999	11/4/1999	10/12/1999	10/13/1999	10/13/1999	11/5/1999	11/4/1999	11/5/1999	11/8/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0 06UJ	0 3J	0 18UJ	0 17UJ	0 082UJ	0 2U	0 2U	4 9J	1 5J	0 18UJ	7 1J
Antimony	0 02U	0 02U	0 11	0 1	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U
Arsenic	0 01U	0 037	1 2	1 3	0 028	0 045	0 01U	0 0097J	0 01U	0 016	0 026
Barium	0 13	0 57J	0 071J	0 056J	0 13J	0 4	0 01U	0 92J	0 17J	0 58J	0 3J
Beryllium	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U
Cadmium	0 001J	0 0022J	0 005U	0 005U	0 005U	0 005U	0 005U	0 00096J	0 005U	0 005U	0 005U
Calcium	150J	330	710	730	260	270J	0 32J	480	150	190	150
Chromium	0 01U	0 0042J	0 003J	0 003J	0 01UJ	0 01UJ	0 01U	0 0073J	0 0025J	0 0078J	0 013J
Cobalt	0 0041J	0 13	0 037	0 042	0 01U	0 007J	0 01U	0 0028J	0 0041J	0 004J	0 0075J
Copper	0 0011J	0 018J	0 0072J	0 0054J	0 02U	0 001UJ	0 02U	0 01J	0 0038J	0 019J	0 014J
Cyanide, Total	0 01U	0 01U	0 018	0 018	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U
Iron	1 9	77J	23J	25J	36J	46J	0 05U	62J	2 1J	64J	42J
Lead	0 015J	0 005U	0 0085U	0 0071U	0 005U	0 005U	0 005U	0 0092U	0 0033UJ	0 022J	0 0092U
Magnesium	38	60	39	40	79	52	0 5U	110	31	49	41
Manganese	1 1	1 6J	8 7J	8 9J	1 4J	1 1	0 01U	6 8J	0 32J	1 2J	1 2J
Mercury	0 0002U	0 0002U	0 000087J	0 0002U	0 0002U	0 0002U	0 0002U	0 00013J	0 0002U	0 00018J	0 00012J
Molybdenum	0 01U	0 01U	0 0057J	0 0052J	0 01U	0 45	0 01U	0 01U	0 01U	0 01U	0 01U
Nickel	0 053	0 67	0 4	0 46	0 0054J	0 0059J	0 04U	0 0095J	0 011J	0 15	0 019J
Potassium	5 7	27	26	26	12	3 5	1U	26	7 6	11	7J
Selenium	0 01U	0 01U	0 0077J	0 0066J	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U
Silver	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U
Sodium	29	51	32	33	98	59	0 54	240	37	88	31
Thallium	0 01U	0 006UJ	0 01U	0 0051J	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U
Vanadium	0 01U	0 012U	0 0036J	0 0034J	0 01U	0 0037J	0 01U	0 022	0 005J	0 0057J	0 027J
Zinc	0 95J	0 48	0 057J	0 064J	0 02U	0 02U	0 02U	0 12J	0 01J	0 093J	0 046J

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	EE-15-GPFD	EEG-101	EEG-102	EEG-103-GP	EEG-104	EEG-105-GP	EEG-106	EEG-107	EEG-109	EEG-110	EEG-111-GP	EEG-112
Description	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW	Fill Area GW
Sample Date	11/8/1999	10/8/1999	10/7/1999	11/3/1999	10/8/1999	11/2/1999	10/7/1999	10/7/1999	10/11/1999	10/11/1999	11/3/1999	10/8/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	1 4J	0 58	0 2U	0 042J	0 031J	0 15UJ	0 2U	0 61	1 5J	0 041UJ	5 5	0 2U
Antimony	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U	0 02U	0 0086J	0 02U	0 02U	0 02U	0 02U
Arsenic	0 016	0 021J	0 028	0 014	0 01U	0 01U	0 042	0 014	4 3	0 0045J	0 0042J	0 055J
Barium	0 21J	0 13J	0 095	0 17	0 16J	0 13	0 13	0 42	0 021J	0 12J	0 47	0 34J
Beryllium	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U	0 004U
Cadmium	0 005U	0 005U	0 005U	0 005U	0 005U	0 005U	0 005U	0 0026J	0 025U	0 0021J	0 005U	0 005U
Calcium	150	120	84	97	150	86	280	520	530	120	150	100
Chromium	0 0032J	0 0053J	0 01UJ	0 01UJ	0 01UJ	0 01UJ	0 01UJ	0 022J	0 01UJ	0 01UJ	0 018J	0 01UJ
Cobalt	0 01U	0 0044J	0 005J	0 0019J	0 0025J	0 0016J	0 01U	0 14	0 22	0 0019J	0 0093J	0 01U
Copper	0 0029J	0 0015J	0 02U	0 0016J	0 02U	0 02U	0 02U	0 011J	0 044J	0 02U	0 0094J	0 02U
Cyanide Total	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U
Iron	28J	6 4	6 5	1 4	0 1	0 28	56	270	290J	0 48J	11	27
Lead	0 005U	0 005U	0 005U	0 005U	0 005U	0 005U	0 003J	0 024	0 1U	0 005U	0 008U	0 005U
Magnesium	40	25	18	21	38	15	60	49	160	21	29	23
Manganese	1 1J	2 4J	0 83J	0 27	0 72J	0 45	2 1J	6 1J	10J	1 6J	0 4	1 1J
Mercury	0 0002U	0 0002U	0 0002U	0 0002U	0 0002U	0 0002U	0 0002U	0 0002U	0 0002U	0 0002U	0 0002U	0 0002U
Molybdenum	0 01U	0 0052J	0 0095J	0 0079J	0 01U	0 0057J	0 01U	0 056	0 01U	0 01	0 01	0 0031J
Nickel	0 04U	0 02J	0 017J	0 0049J	0 015J	0 0067J	0 04U	0 12	180	0 15	0 024J	0 04U
Potassium	5 3J	4	6 7	4 1	4 5	7 7	14	28	29	3 6	5 8	6 3
Selenium	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 005J	0 01U	0 01U	0 01U	0 01U
Silver	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U
Sodium	30	16	18	16	12	19	230	150	47	15	28	58
Thallium	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 0061UJ	0 01U	0 01U	0 01U
Vanadium	0 0054J	0 01U	0 01U	0 01U	0 01U	0 01U	0 01U	0 33	0 01U	0 01U	0 017	0 01U
Zinc	0 0082J	0 02U	0 019J	0 02U	0 011J	0 02U	0 02U	1 3	1 2	0 54	0 037	0 02U

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SGW-S1-15FT	SGW-S1-20FT	SGW-S1-40FT	SGW-S1-40FTFD	SGW-S2-15FT	SGW-S2-20FT
Description	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW	Shallow Residential GW
Sample Date	10/14/1999	10/14/1999	10/14/1999	10/14/1999	10/15/1999	10/15/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	4.0J	0.70J	17J	7.3J	3.2J	4.6J
Antimony	0.020U	0 020U	0.020U	0 020U	0 020U	0 020U
Arsenic	0.013J	0 044J	0.023J	0.012J	0 010UJ	0.0047J
Barium	0.54J	0.25J	0.55J	0.35J	0.43J	0 38J
Beryllium	0.0040U	0.0040U	0.0011J	0.0040U	0 0040U	0 0040U
Cadmium	0.0050U	0.0050U	0.0050U	0.0050U	0 0050U	0.0050U
Calcium	130J	80J	130J	100J	140J	170J
Chromium	0.018J	0.0044J	0.082J	0.030J	0.0092J	0.011J
Cobalt	0.012J	0.0042J	0.020J	0.0091J	0.0072J	0.010J
Copper	0.011J	0.0021J	0.056J	0.030J	0.0047J	0 0059J
Cyanide, Total	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Iron	12J	7.6J	42J	18J	6.7J	8 4J
Lead	0.015J	0.0034J	0.036J	0.015J	0.0047J	0.0045J
Magnesium	14J	8.8J	28J	22J	27J	27J
Manganese	1.7J	0.85J	1.4J	1.0J	0.35J	1 2J
Mercury	0 00020U	0.00020U	0.00020U	0.00038	0.00020U	0 00020U
Molybdenum	0.0029J	0.0092J	0 013	0.0064J	0.010U	0.0067J
Nickel	0 027J	0.010J	0.059	0.027J	0.016J	0 022J
Potassium	16J	6.4J	9.1	6.2J	5.6J	4 8J
Selenium	0.010U	0.010U	0.010U	0.010U	0.010U	0 010U
Silver	0.010U	0.010U	0.010U	0.010U	0.010U	0 010U
Sodium	13	15	19	19	18	19
Thallium	0.010U	0.010U	0.010U	0.010U	0.010U	0 010U
Vanadium	0.014J	0.0038J	0.057J	0.023J	0.011J	0 014J
Zinc	0.051J	0.012J	0 17J	0.061J	0.026J	0 030J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SGW-S2-40FT	TS-S1-0HR	TS-S1-12HR	TS-S1-12HRFD	TS-S1-24HR	TS-S2-0HR	TS-S2-12HR	TS-S2-24HR	UGGW-EE-04
Description	Shallow Residential GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Time Series GW	Upgradient GW
Sample Date	10/15/1999	3/29/2000	3/29/2000	3/29/2000	3/30/2000	3/29/2000	3/29/2000	3/30/2000	10/13/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	2 0J	4 3J	0 20U	0 028UJ	0 20U	1 5J	0 051UJ	0 20U	0 2U
Antimony	0 020U	0 020U	0 020U	0 020U	0 020U	0 020U	0 020U	0 020U	0 02U
Arsenic	0 010UJ	0 011	0 012	0 0095J	0 013	0 0085J	0 0071J	0 0072J	0 01U
Barium	0 23J	0 43J	0 27J	0 28J	0 27J	0 29J	0 23J	0 22J	0 27
Beryllium	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 004U
Cadmium	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 005U
Calcium	160J	180	150	150	150	150	150	140	330J
Chromium	0 0072J	0 0097J	0 010U	0 010U	0 010U	0 0033J	0 010U	0 010U	0 14J
Cobalt	0 0095J	0 014	0 0025J	0 0023J	0 0022J	0 0023J	0 010U	0 010U	0 0072J
Copper	0 0041J	0 0068UJ	0 020U	0 020U	0 020U	0 0024UJ	0 020U	0 020U	0 003UJ
Cyanide Total	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U
Iron	5 2J	14	5 6	5 5	5 4	8 7	6 9	6 8	1J
Lead	0 0053J	0 014	0 0050U	0 0050U	0 0050U	0 0022J	0 0050U	0 0050U	0 005U
Magnesium	36J	39	29	29	29	30	29	28	62
Manganese	1 6J	1 7J	1 4J	1 4J	1 4J	1 5J	1 5J	1 4J	1 2
Mercury	0 00020U	0 000091J	0 000079J	0 000086J	0 000088J	0 000094J	0 00020UJ	0 00010J	0 0002U
Molybdenum	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U
Nickel	0 017J	0 034J	0 0048J	0 040U	0 040U	0 0048J	0 040U	0 040U	0 17
Potassium	7 8J	6 2	4 8	4 9	4 7	7 2	6 6	6 3	170
Selenium	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U
Silver	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U
Sodium	26	17	17	17	17	24	24	23	100
Thallium	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 01U
Vanadium	0 0069J	0 012	0 010U	0 010U	0 010U	0 0038J	0 010U	0 010U	0 01U
Zinc	0 017J	0 049	0 020U	0 020U	0 013J	0 016J	0 020U	0 020U	0 02U

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UGGW-EE-04-100FT	UGGW-EE-04-100FTFD	UGGW-EE-04-60FT	UGGW-EE-04FD	UGGW-EE-20	UGGW-EE-20-100FT	UGGW-EE-20-60FT
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	1/27/2000	1/27/2000	10/13/1999	10/13/1999	10/18/1999	1/25/2000	1/24/2000
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0 38J	0 84J	24	0.2U	0.1UJ	17J	0 46J
Antimony	0.020U	0.020U	0.02U	0 02U	0 02U	0 020U	0 020U
Arsenic	0 010U	0 010U	0.014	0 01U	0 01U	0 016	0 010U
Barium	0.65J	0 70J	0.97	0.27	0 11	0 77J	0 37J
Beryllium	0.0040U	0.0040U	0.00097J	0.004U	0 004U	0.00096J	0 0040U
Cadmium	0.0050U	0.0050U	0.005U	0.005U	0 005U	0 0050U	0 0050U
Calcium	120J	120J	180J	330J	100	190J	130J
Chromium	0.0051J	0.0084J	0 18J	0 11J	0 01UJ	0 17	0 0029J
Cobalt	0.010U	0 010U	0 018	0.0071J	0.01U	0 015	0 010U
Copper	0.0023J	0.0012J	0.036J	0.0029UJ	0.02U	0 052	0 0014J
Cyanide, Total	0.010U	0.010U	0 01U	0.01U	0 01U	0 010U	0 010U
Iron	8.4J	9.9J	57J	0.8J	0 073J	80J	12J
Lead	0.0050U	0 0050U	0 021	0.005U	0 005U	0 022	0 0050U
Magnesium	40	39	51	62	23	53	32
Manganese	0.32	0 35	1 2	1.2	0.074	1 6	1 2
Mercury	0 00020UJ	0.00020UJ	0.0002U	0.0002U	0 0002U	0 00020UJ	0 00020UJ
Molybdenum	0.0035J	0 0062J	0.028	0 01U	0.01U	0 049	0 0028J
Nickel	0.040U	0 0057J	0.062	0.18	0 007J	0 056	0 040U
Potassium	4.3	4 5	12	170	2 5	12	6 0
Selenium	0.010U	0.010U	0.01U	0 01U	0 01U	0.010U	0 010U
Silver	0.010U	0.010U	0.01U	0 01U	0 01U	0 010U	0 010U
Sodium	26J	25J	27	100	8.5	30J	20J
Thallium	0.010U	0.010U	0 01U	0.01U	0 01U	0 010U	0 010U
Vanadium	0.010U	0.0027J	0 054	0.01U	0 01U	0.050	0 0026J
Zinc	0.042J	0.083J	0 077	0 02U	0 02U	1 0J	0 037J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-3.7
Sauget Area 1
Ground-Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UGGW-EEG-108	UGGW-EEG-108-100FT	UGGW-EEG-108-60FT	UGGW-EEG-108-60FTEB	UGGW-EEG-108FD
Description	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW	Upgradient GW
Sample Date	10/11/1999	1/31/2000	1/28/2000	1/28/2000	10/11/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	0 041UJ	5 4J	2 4J	0 20U	0 044UJ
Antimony	0 02U	0 02U	0 020U	0 020U	0 02U
Arsenic	0 0084J	0 0038J	0 010U	0 010U	0 0067J
Barium	0 55J	0 86	0 34J	0 010U	0 54J
Beryllium	0 004U	0 004U	0 0040U	0 0040U	0 004U
Cadmium	0 005U	0 005U	0 0050U	0 0050U	0 005U
Calcium	210	140J	140J	0 18J	210
Chromium	0 04J	0 028	0 0055J	0 010U	0 014J
Cobalt	0 01U	0 0047J	0 010U	0 010U	0 01U
Copper	0 02U	0 0095J	0 0023J	0 020U	0 02U
Cyanide, Total	0 01U	0 01U	0 010U	0 010U	0 01U
Iron	32J	20J	20J	0 021J	32J
Lead	0 005U	0 0061	0 0050U	0 0050U	0 005U
Magnesium	54	41	35	0 50U	53
Manganese	1 3J	0 58	0 62	0 010U	1 4J
Mercury	0 0002U	0 0002U	0 00020UJ	0 00020UJ	0 0002U
Molybdenum	0 01U	0 0067J	0 010U	0 010U	0 01U
Nickel	0 0051J	0 013J	0 010J	0 040U	0 04U
Potassium	12	6 4	6 6	1 0U	12
Selenium	0 01U	0 01U	0 010U	0 010U	0 01U
Silver	0 01U	0 01U	0 010U	0 010U	0 01U
Sodium	85	18J	25J	0 55	89
Thallium	0 01U	0 01U	0 010U	0 010U	0 01U
Vanadium	0 01U	0 016	0 0076J	0 010U	0 01U
Zinc	0 02U	0 065J	0 016J	0 020U	0 02U

Notes U not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	BS-EE-04-0-0 5FT	BS-EE-04-0-0 5FTFD	BS-EE-04-3-6FT	BS-EE-20-0-0 5FT	BS-EE-20-3-6FT	BS-EEG-108-0-0 5FT	BS-EEG-108-0-0 5FTEB
Description	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil
Sample Date	1/26/2000	1/26/2000	1/26/2000	1/24/2000	1/24/2000	3/9/2000	1/27/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
1 1 1-Trichloroethane	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
1 1,2,2-Tetrachloroethane	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
1 1,2-Trichloroethane	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
1 1-Dichloroethane	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
1 1-Dichloroethene	6 4U	6U	6U	5 4U	5 5U	4 9U	5 0U
1,2-Dichloroethane	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
1 2-Dichloropropane	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
2-Butanone (MEK)	35U	33U	32U	29U	30U	27U	25U
2-Hexanone	35U	33U	32U	29U	30U	18J	25U
4-Methyl-2-pentanone (MIBK)	35U	33U	32U	29U	30U	27U	25U
Acetone	70U	65U	65U	59U	60U	54U	50U
Benzene	7U	6 5U	6 5U	5 9U	6U	5 4U	1 2U
Bromodichloromethane	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Bromoform	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Bromomethane (Methyl bromide)	14U	13U	13U	12U	12U	11U	9 8U
Carbon disulfide	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Carbon tetrachloride	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Chlorobenzene	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Chloroethane	14U	13U	13U	12U	12U	11U	10U
Chloroform	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Chloromethane	14U	13U	13U	12U	12U	11U	10U
Cis/Trans-1,2-Dichloroethene	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Dibromochloromethane	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Ethylbenzene	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Methylene chloride (Dichloromethane)	7U	6 5U	6 5U	12	6U	1 7J	4 7U
Styrene	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Tetrachloroethene	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Toluene	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
Trichloroethene	7U	6 5U	6 5U	5 9U	6U	5 4U	2 7U
Vinyl chloride	14U	13U	13U	12U	12U	11U	10U
Xylenes, Total	7U	6 5U	6 5U	5 9U	6U	5 4U	5 0U
cis-1 3-Dichloropropene	5 6U	5 2U	5 2U	4 7U	4 8U	4 3U	1 0U
trans-1 3-Dichloropropene	5 6U	5 2U	5 2U	4 7U	4 8U	4 3U	5 0U
Total VOC's	**ND**	**ND**	**ND**	**12**	**ND**	**19 7**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	BS-EEG-108-3-6FT	DAS-T1-S1-0-0 5FT	DAS-T1-S1-0-0 5FTFD	DAS-T1-S1-3-6FT	DAS-T1-S2-0-0 5FT	DAS-T1-S2-3-6FT
Description	Background Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	3/9/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
1,1,2,2-Tetrachloroethane	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
1,1,2-Trichloroethane	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
1,1-Dichloroethane	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
1,1-Dichloroethene	4 5U	5 0U	4 9U	5 6U	5 2U	5 5U
1 2-Dichloroethane	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
1,2-Dichloropropane	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
2-Butanone (MEK)	24U	19J	27U	30U	32	30U
2-Hexanone	24U	27U	27U	30U	28U	30U
4-Methyl-2-pentanone (MIBK)	24U	27U	27U	30U	28U	30U
Acetone	5 5J	240	54U	60U	390	60U
Benzene	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Bromodichloromethane	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Bromoform	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Bromomethane (Methyl bromide)	9 8U	11U	11U	12U	11U	12U
Carbon disulfide	4 9U	5 5U	5 4U	6 0U	2 6J	6 0U
Carbon tetrachloride	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Chlorobenzene	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Chloroethane	9 8U	11U	11U	12U	11U	12U
Chloroform	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Chloromethane	9 8U	11U	11U	12U	11U	12U
Cis/Trans-1 2-Dichloroethene	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Dibromochloromethane	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Ethylbenzene	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Methylene chloride (Dichloromethane)	1 4J	2 1J	5.4U	6 0U	5 7U	6 0U
Styrene	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Tetrachloroethene	4 9U	5.5U	5 4U	6 0U	5 7U	6 0U
Toluene	4 9U	5 5U	5 4U	6 0U	2 3J	6 0U
Trichloroethene	4 9U	5 5U	5 4U	6 0U	5 7U	6 0U
Vinyl chloride	9 8U	11U	11U	12U	11U	12U
Xylenes Total	4 9U	5 5U	5 4U	6.0U	5 7U	6 0U
cis-1 3-Dichloropropene	3 9U	4 4U	4 3U	4 8U	4 5U	4 8U
trans-1,3-Dichloropropene	3 9U	4 4U	4 3U	4 8U	4 5U	4 8U
Total VOC's	6 9	261.1	ND	ND	ND	ND

Notes ...t detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-res... from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	DAS-T1-S3-0-0 5FT	DAS-T1-S3-3-6FT	DAS-T2-S1-0-0 5FT	DAS-T2-S1-3-6FT	DAS-T2-S2-0-0 5FT	DAS-T2-S2-3-6FT	DAS-T2-S3-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 1 1-Trichloroethane	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
1 1 2 2-Tetrachloroethane	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
1 1 2-Trichloroethane	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
1 1-Dichloroethane	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
1 1-Dichloroethene	5 6U	5 4U	5 4U	6 5U	5 2U	6 4U	6 0U
1 2-Dichloroethane	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
1 2-Dichloropropane	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
2-Butanone (MEK)	30U	25J	28J	35U	12J	35U	33U
2-Hexanone	30U	29U	29U	35U	28U	35U	33U
4-Methyl-2-pentanone (MIBK)	30U	29U	29U	35U	28U	35U	33U
Acetone	330	240J	270	26J	200	70U	66U
Benzene	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Bromodichloromethane	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Bromoform	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Bromomethane (Methyl bromide)	12U	12U	12U	14U	11U	14U	13U
Carbon disulfide	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Carbon tetrachloride	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Chlorobenzene	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Chloroethane	12U	12U	12U	14U	11U	14U	13U
Chloroform	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Chloromethane	12U	12U	12U	14U	11U	14U	13U
Cis/Trans-1 2-Dichloroethene	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Dibromochloromethane	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Ethylbenzene	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Methylene chloride (Dichloromethane)	1 8J	5 8U	5 8U	7 0U	5 6U	7 0U	2 0J
Styrene	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Tetrachloroethene	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Toluene	6 1U	5 8U	3 4J	7 0U	5 6U	7 0U	6 6U
Trichloroethene	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
Vinyl chloride	12U	12U	12U	14U	11U	14U	13U
Xylenes Total	6 1U	5 8U	5 8U	7 0U	5 6U	7 0U	6 6U
cis-1 3-Dichloropropene	4 8U	4 7U	4 7U	5 6U	4 5U	5 6U	5 3U
trans 1 3 Dichloropropene	4 8U	4 7U	4 7U	5 6U	4 5U	5 6U	5 3U
Total VOC s	**331 8**	**265**	**301 4**	**26**	**212**	**ND**	**2**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	DAS-T2-S3-3-6FT	DAS-T2-S3-3-6FTFD	DAS-T3-S1-0-0 5FT	DAS-T3-S1-3-6FT	DAS-T3-S2-0-0 5FT	DAS-T3-S2-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 1,1-Trichloroethane	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
1,1,2,2-Tetrachloroethane	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
1 1,2-Trichloroethane	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
1,1-Dichloroethane	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
1 1-Dichloroethene	5 7U	6 1U	5 2U	5 6U	5 4U	5 4U
1 2-Dichloroethane	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
1,2-Dichloropropane	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
2-Butanone (MEK)	30J	33U	28U	31U	29U	30U
2-Hexanone	31U	33U	28U	31U	29U	30U
4-Methyl-2-pentanone (MIBK)	31U	33U	28U	31U	29U	30U
Acetone	180	66U	57UJ	61U	58U	59U
Benzene	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Bromodichloromethane	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Bromoform	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Bromomethane (Methyl bromide)	12U	13U	11U	12U	12U	12U
Carbon disulfide	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Carbon tetrachloride	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Chlorobenzene	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Chloroethane	12U	13U	11U	12U	12U	12U
Chloroform	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Chloromethane	12U	13U	11U	12U	12U	12U
Cis/Trans-1,2-Dichloroethene	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Dibromochloromethane	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Ethylbenzene	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Methylene chloride (Dichloromethane)	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Styrene	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Tetrachloroethene	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Toluene	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Trichloroethene	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
Vinyl chloride	12U	13U	11U	12U	12U	12U
Xylenes, Total	6 2U	6 6U	5 7U	6 1U	5 8U	5 9U
cis-1,3-Dichloropropene	5 0U	5 3U	4 6U	4 9U	4 7U	4 7U
trans-1 3-Dichloropropene	5 0U	5 3U	4 6U	4 9U	4 7U	4 7U
Total VOC s	210	ND	ND	ND	ND	ND

Note: ot detected J-estimated value N-tentatively identified R-rejected M-EMPC D-res lt from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	DAS-T3-S3-0-0.5FT	DAS-T3-S3-0-0 5FTEB	DAS-T3-S3-3-6FT	DAS-T4-S1-0-0 5FT	DAS-T4-S1-0-0 5FTFD	DAS-T4-S1-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/20/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000
Units	ug/kg dw	ug/L	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5.7U	5.0U	6.0U	5.5U	5.6U	5 7U
1,1,2,2-Tetrachloroethane	5.7U	5.0U	6.0U	5.5UJ	5 6U	5 7U
1,1,2-Trichloroethane	5.7U	5.0U	6.0U	5.5U	5 6U	5 7U
1,1-Dichloroethane	5 7U	5.0U	6.0U	5.5U	5.6U	5 7U
1,1-Dichloroethene	5.3U	4.6U	5.6U	5.1U	5.1U	5 2U
1,2-Dichloroethane	5.7U	5.0U	6.0U	5.5U	5.6U	5 7U
1,2-Dichloropropane	5.7U	5.0U	6.0U	5.5U	5.6U	5 7U
2-Butanone (MEK)	29U	25U	30U	20J	29	28U
2-Hexanone	29U	25U	30U	28UJ	28U	28U
4-Methyl-2-pentanone (MIBK)	29U	25U	30U	28U	28U	28U
Acetone	57U	50U	60U	240	350	57U
Benzene	5.7U	5.0U	6.0U	5 5U	5.6U	5 7U
Bromodichloromethane	5 7U	5.0U	6.0U	5.5U	5.6U	5 7U
Bromoform	5.7U	5.0U	6.0U	5 5UJ	5.6U	5 7U
Bromomethane (Methyl bromide)	11U	10U	12U	11U	11U	11U
Carbon disulfide	5.7U	5.0U	6.0U	5.5U	5.6U	5 7U
Carbon tetrachloride	5.7U	5.0U	6.0U	5 5U	5.6U	5 7U
Chlorobenzene	5.7U	5.0U	6.0U	5 5UJ	5.6U	5 7U
Chloroethane	11U	10U	12U	11U	11U	11U
Chloroform	5.7U	5.0U	6.0U	5 5U	5.6U	5 7U
Chloromethane	11U	1.4J	12U	11U	11U	11U
Cis/Trans-1,2-Dichloroethene	5.7U	5.0U	6.0U	5.5U	5.6U	5 7U
Dibromochloromethane	5.7U	5.0U	6.0U	5.5UJ	5.6U	5 7U
Ethylbenzene	5.7U	5.0U	6.0U	5.5UJ	5.6U	5 7U
Methylene chloride (Dichloromethane)	5.7U	5.0U	6 0U	5.5U	5.6U	5 7U
Styrene	5.7U	5.0U	6.0U	5.5UJ	5.6U	5 7U
Tetrachloroethene	5.7U	5.0U	6.0U	5.5UJ	5 6U	5 7U
Toluene	5.7U	5.0U	6.0U	5.5U	5 6U	5 7U
Trichloroethene	5.7U	5.0U	6.0U	5.5U	5.6U	5 7U
Vinyl chloride	11U	10U	12U	11U	11U	11U
Xylenes, Total	5.7U	5.0U	6.0U	5.5UJ	5.6U	5 7U
cis-1,3-Dichloropropene	4 6U	4.0U	4 8U	4.4U	4.5U	4.5U
trans-1,3-Dichloropropene	4 6U	4.0U	4.8U	4.4U	4 5U	4 5U
Total VOC's	**ND**	**1.4**	**ND**	**260**	**379**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	DAS-T4-S1-3-6FTFD	DAS-T4-S2-0-0 5FT	DAS-T4-S2-3-6FT	DAS-T4-S3-0-0 5FT	DAS-T4-S3-3-6FT	DAS-T5-S1-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/19/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 1 1-Trichloroethane	6 1U	6 0U	6 5U	6 0U	6 0U	5 0U
1 1 2 2-Tetrachloroethane	6 1U	6 0U	6 5U	6 0UJ	6 0U	5 0UJ
1 1 2-Trichloroethane	6 1U	6 0U	6 5U	6 0UJ	6 0U	5 0U
1 1-Dichloroethane	6 1U	6 0U	6 5U	6 0U	6 0U	5 0U
1 1-Dichloroethene	5 6U	5 5U	6 0U	5 6U	5 5U	4 6U
1 2 Dichloroethane	6 1U	6 0U	6 5U	6 0U	6 0U	5 0U
1 2-Dichloropropane	6 1U	6 0U	6 5U	6 0UJ	6 0U	5 0U
2-Butanone (MEK)	31U	30U	32U	39U	30U	20J
2-Hexanone	31U	30U	32U	30UJ	30U	25UJ
4-Methyl-2-pentanone (MIBK)	31U	30U	32U	30U	30U	25U
Acetone	61U	60U	25J	460J	220	160
Benzene	6 1U	6 0U	6 5U	6 0U	6 0U	1 8J
Bromodichloromethane	6 1U	6 0U	6 5U	6 0U	6 0U	5 0U
Bromoform	6 1U	6 0U	6 5U	6 0UJ	6 0U	5 0UJ
Bromomethane (Methyl bromide)	12U	12U	13U	12U	12U	10U
Carbon disulfide	6 1U	6 0U	6 5U	6 0U	6 0U	5 0U
Carbon tetrachloride	6 1U	6 0U	6 5U	6 0U	6 0U	5 0U
Chlorobenzene	6 1U	6 0U	6 5U	6 0U	6 0U	5 0UJ
Chloroethane	12U	12U	13U	12U	12U	10U
Chloroform	6 1U	6 0U	6 5U	6 0U	6 0U	5 0U
Chloromethane	12U	12U	13U	12U	12U	10U
Cis/Trans-1 2-Dichloroethene	6 1U	6 0U	6 5U	6 0U	6 0U	5 0U
Dibromochloromethane	6 1U	6 0U	6 5U	6 0UJ	6 0U	5 0UJ
Ethylbenzene	6 1U	6 0U	6 5U	6 0U	6 0U	5 0UJ
Methylene chloride (Dichloromethane)	6 1U	6 0U	6 5U	6 0U	6 0U	5 0U
Styrene	6 1U	6 0U	6 5U	6 0U	6 0U	5 0UJ
Tetrachloroethene	6 1U	6 0U	6 5U	6 0U	6 0U	5 0UJ
Toluene	6 1U	6 0U	4 8J	4 5J	6 0U	2 8J
Trichloroethene	6 1U	6 0U	6 5U	6 0U	6 0U	5 0U
Vinyl chloride	12U	12U	13U	12U	12U	10U
Xylenes Total	6 1U	6 0U	6 5U	6 0U	6 0U	5 0UJ
cis-1 3-Dichloropropene	4 9U	4 8U	5 2U	4 8U	4 8U	4 0U
trans-1 3-Dichloropropene	4 9U	4 8U	5 2U	4 8U	4 8U	4 0U
Total VOC s	ND	ND	29 8	464 5	220	ND

Notes t detected J-estimated value N-tentatively identified R-rejected M-EMPC D-res from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	DAS-T5-S1-0-0 5FTEB	DAS-T5-S1-3-6FT	DAS-T5-S2-0-0 5FT	DAS-T5-S2-3-6FT	DAS-T5-S3-0-0 5FT	DAS-T5-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/20/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000
Units	ug/L	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 1 1-Trichloroethane	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
1 1 2 2-Tetrachloroethane	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
1 1 2-Trichloroethane	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
1 1-Dichloroethane	5 0U	5 5U	5 6U	6 4U	5 4U	5 8U
1,1-Dichloroethene	4 6U	5 1U	5 2U	5 9U	5 0U	5 3U
1 2-Dichloroethane	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
1,2-Dichloropropane	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
2-Butanone (MEK)	25U	28U	28U	32U	27U	29U
2-Hexanone	25U	28U	28U	32U	27UJ	29U
4-Methyl-2-pentanone (MIBK)	25U	28U	28U	32U	27UJ	29U
Acetone	50U	55U	56U	64U	54U	58U
Benzene	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Bromodichloromethane	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Bromoform	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Bromomethane (Methyl bromide)	10U	11U	11U	13U	11U	12U
Carbon disulfide	5 0U	5 5U	5 6U	6 4U	5 4U	5 8U
Carbon tetrachloride	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Chlorobenzene	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Chloroethane	10U	11U	11U	13U	11U	12U
Chloroform	5 0U	5 5U	5 6U	6 4U	5 4U	5 8U
Chloromethane	10U	11U	11U	13U	11U	12U
Cis/Trans-1 2-Dichloroethene	5 0U	5 5U	5 6U	6 4U	5 4U	5 8U
Dibromochloromethane	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Ethylbenzene	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Methylene chloride (Dichloromethane)	5 0U	5 5U	5 6U	6 4U	5 4U	5 8U
Styrene	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Tetrachloroethene	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Toluene	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Trichloroethene	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
Vinyl chloride	10U	11U	11U	13U	11U	12U
Xylenes Total	5 0U	5 5U	5 6U	6 4U	5 4UJ	5 8U
cis 1 3-Dichloropropene	4 0U	4 4U	4 5U	5 1U	4 3UJ	4 6U
trans-1 3-Dichloropropene	4 0U	4 4U	4 5U	5 1U	4 3UJ	4 6U
Total VOC s	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U not detected J estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	DAS-T6-S1-0-0 5FT	DAS-T6-S1-3-6FT	DAS-T6-S2-0-0 5FT	DAS-T6-S2-3-6FT	DAS-T6-S3-0-0 5FT	DAS-T6-S3-3-6FT	DAS-T7-S1-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 1 1-Trichloroethane	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
1 1,2,2-Tetrachloroethane	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
1 1,2-Trichloroethane	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
1,1-Dichloroethane	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
1 1-Dichloroethene	5 2U	5 9U	4 8U	5 1U	5 7U	4 8U	5 0U
1 2-Dichloroethane	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
1 2-Dichloropropane	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
2-Butanone (MEK)	32U	32U	26U	28U	31U	26U	39U
2-Hexanone	28U	32U	26U	28U	31U	26U	27U
4-Methyl-2-pentanone (MIBK)	28U	32U	26U	28U	31U	26U	27U
Acetone	420	64U	220	56U	48J	40J	340
Benzene	5 6U	6 4U	5 3U	5 6U	6 2U	3 0J	4 8J
Bromodichloromethane	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
Bromoform	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
Bromomethane (Methyl bromide)	11U	13U	10U	11U	12U	10U	11U
Carbon disulfide	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
Carbon tetrachloride	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
Chlorobenzene	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
Chloroethane	11U	13U	10U	11U	12U	10U	11U
Chloroform	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
Chloromethane	11U	13U	10U	11U	12U	10U	11U
Cis/Trans-1 2-Dichloroethene	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
Dibromochloromethane	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
Ethylbenzene	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	3 0J
Methylene chloride (Dichloromethane)	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
Styrene	5 6U	6 4U	5 3U	5.6U	6 2U	5 2U	5 4U
Tetrachloroethene	5 6U	6 4U	5 3U	5 6U	6 2U	5 2U	5 4U
Toluene	5 6U	6.4U	2 2J	5 6U	6 2U	6 6	8 8
Trichloroethene	5.6U	6 4U	5 3U	5 6U	6.2U	5 2U	5 4U
Vinyl chloride	11U	13U	10U	11U	12U	10U	11U
Xylenes, Total	5 6U	6 4U	5 3U	5 6U	6 2U	4 3J	4 2J
cis-1,3-Dichloropropene	4 5U	5 2U	4 2U	4 5U	4 9U	4 2U	4 3U
trans-1,3-Dichloropropene	4 5U	5 2U	4 2U	4 5U	4 9U	4 2U	4 3U
Total VOC's	420	ND	222.2	ND	48	53 9	360 8

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	DAS-T7-S1-3-6FT	DAS-T7-S2-0-0.5FT	DAS-T7-S2-3-6FT	UAS-T1-S1-0-0 5FT	UAS-T1-S1-3-6FT	UAS-T1-S2-0-0 5FT	UAS-T1-S2-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	4/20/2000	4/20/2000	4/20/2000	11/10/1999	11/10/1999	11/10/1999	11/10/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5.9U	5.8U	5.7U	6.4U	7.2U	6.1U	6.9U
1,1,2,2-Tetrachloroethane	5.9U	5.8U	5 7U	6.4U	7.2U	6.1U	6.9U
1,1,2-Trichloroethane	5.9U	5.8U	5.7U	6.4U	7.2U	6.1U	6 9U
1,1-Dichloroethane	5.9U	5.8U	5.7U	6.4U	7.2U	6 1U	6.9U
1,1-Dichloroethene	5.5U	5.3U	5.2U	5.9U	6.6U	5 6U	6.3U
1,2-Dichloroethane	5.9U	5.8U	5.7U	6.4U	7.2U	6 1U	6.9U
1,2-Dichloropropane	5.9U	5.8U	5.7U	6.4U	7.2U	6 1U	6.9U
2-Butanone (MEK)	34U	35U	28U	32U	36U	56U	34U
2-Hexanone	30U	29U	28U	6.6J	36U	31U	34U
4-Methyl-2-pentanone (MIBK)	30U	29U	28U	32U	36U	31U	34U
Acetone	310	480	140	350	72U	440	69U
Benzene	3.2J	5.8U	2.5J	3.0J	7.2U	6 1U	6 9U
Bromodichloromethane	5.9U	5.8U	5.7U	6.4U	7.2U	6.1U	6.9U
Bromoform	5.9U	5.8U	5.7U	6.4U	7.2U	6.1U	6.9U
Bromomethane (Methyl bromide)	12U	12U	11U	13U	14U	12U	14U
Carbon disulfide	4.9J	4.3J	7.8	6.4U	7.2U	6.1U	6 9U
Carbon tetrachloride	5.9U	5.8U	5.7U	6.4U	7.2U	6.1U	6.9U
Chlorobenzene	5.9U	5.8U	10	4.0J	7.2U	6 1U	6 9U
Chloroethane	12U	12U	11U	13U	14U	12U	14U
Chloroform	5.9U	5.8U	5.7U	6.4U	7.2U	6 1U	6 9U
Chloromethane	12U	12U	11U	13U	14U	12U	14U
Cis/Trans-1,2-Dichloroethene	5.9U	5.8U	5.7U	6.4U	7.2U	6 1U	6.9U
Dibromochloromethane	5.9U	5.8U	5.7U	6.4U	7.2U	6 1U	6.9U
Ethylbenzene	5.9U	5.8U	5.7U	6.4U	7.2U	6 1U	6.9U
Methylene chloride (Dichloromethane)	5.9U	5.8U	5.7U	6.4U	7.2U	6 1U	2 4J
Styrene	5.9U	5.8U	5.7U	6.4U	7.2U	6 1U	6 9U
Tetrachloroethene	5 9U	5.8U	5.7U	6 4U	7.2U	6 1U	6 9U
Toluene	5 4J	2.2J	5.7U	3.2J	7.2U	6.1U	6 9U
Trichloroethene	5.9U	5.8U	5.7U	6.4U	7.2U	6.1U	6.9U
Vinyl chloride	12U	12U	11U	13U	14U	12U	14U
Xylenes, Total	5.9U	5.8U	5.7U	6.4U	7.2U	6 1U	6.9U
cis-1,3-Dichloropropene	4.7U	4.6U	4.5U	5.1U	5.7U	4 9U	5 5U
trans-1,3-Dichloropropene	4 7U	4.6U	4.5U	5 1U	5.7U	4.9U	5.5U
Total VOC's	**323.5**	**486.5**	**160.3**	**366.8**	**ND**	**440**	**2.4**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T1-S3-0-0 5FT	UAS-T1-S3-3-6FT	UAS-T1-S4-0-0 5FT	UAS-T1-S4-3-6FT	UAS-T1-S5-0-0 5FT	UAS-T1-S5-3-6FT	UAS-T1-S6-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
1,1,2,2-Tetrachloroethane	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
1,1,2-Trichloroethane	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
1 1-Dichloroethane	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
1 1-Dichloroethene	5 6U	5 7U	5 3U	8 9U	4 4U	4 5U	5 6U
1 2-Dichloroethane	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
1 2-Dichloropropane	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
2-Butanone (MEK)	30U	31U	29U	48U	24U	24U	30U
2-Hexanone	30U	31U	29U	48U	24U	24U	30U
4-Methyl-2-pentanone (MIBK)	30U	31U	29U	48U	24U	24U	30U
Acetone	60U	62U	57U	97U	48U	48U	60U
Benzene	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Bromodichloromethane	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Bromoform	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Bromomethane (Methyl bromide)	12U	12U	11U	19U	9 7U	9 7U	12U
Carbon disulfide	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Carbon tetrachloride	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Chlorobenzene	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Chloroethane	12U	12U	11U	19U	9 7U	9 7U	12U
Chloroform	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Chloromethane	12U	12U	11U	19U	9 7U	9 7U	12U
Cis/Trans-1 2-Dichloroethene	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Dibromochloromethane	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Ethylbenzene	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Methylene chloride (Dichloromethane)	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Styrene	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Tetrachloroethene	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Toluene	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
Trichloroethene	6 2	4 9J	4 0J	7 4J	3 8J	2 8J	6 0U
Vinyl chloride	12U	12U	11U	19U	9 7U	9 7U	12U
Xylenes Total	6 0U	6 2U	5 7U	9 7U	4 8U	4 8U	6 0U
cis-1 3-Dichloropropene	4 8U	4 9U	4 6U	7 8U	3 9U	3 9U	4 8U
trans-1 3-Dichloropropene	4 8U	4 9U	4 6U	7 8U	3 9U	3 9U	4 8U
Total VOC s	ND	4 9	4	7 4	3 8	2 8	ND

Notes I ot detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T1-S6-3-6FT	UAS-T1-S7-0-0.5FT	UAS-T1-S7-0-0 5FTEB	UAS-T1-S7-0-0.5FTFD	UAS-T1-S7-3-6FT	UAS-T1-S7-3-6FTEB
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/l
1,1,1-Trichloroethane	5.9U	6.2U	5.0U	7 1U	5.6U	5.0U
1,1,2,2-Tetrachloroethane	5.9U	6.2U	5 0U	7 1U	5 6U	5 0U
1,1,2-Trichloroethane	5.9U	6.2U	5 0U	7 1U	5 6U	5 0U
1,1-Dichloroethane	5.9U	6.2U	5.0U	7.1U	5.6U	5 0U
1,1-Dichloroethene	5.4U	5.7U	5 0U	6.6U	5.2U	5 0U
1,2-Dichloroethane	5.9U	6.2U	5.0U	7.1U	5.6U	5 0U
1,2-Dichloropropane	5.9U	6.2U	5.0U	7.1U	5.6U	5 0U
2-Butanone (MEK)	29U	31U	25U	36U	28U	25U
2-Hexanone	29U	31U	25U	36U	28U	25U
4-Methyl-2-pentanone (MIBK)	29U	31U	25U	36U	28U	25U
Acetone	59U	62U	50U	71U	56U	50U
Benzene	5.9U	6.2U	1.2U	7.1U	5 6U	1 2U
Bromodichloromethane	5.9U	6 2U	5.0U	7.1U	5 6U	5 0U
Bromoform	5.9U	6.2U	5.0U	7 1U	5 6U	5.0U
Bromomethane (Methyl bromide)	12U	12U	9.8U	14U	11U	9.8U
Carbon disulfide	5.9U	6.2U	5.0U	7.1U	5.6U	5 0U
Carbon tetrachloride	5.9U	6.2U	5.0U	7.1U	5.6U	5.0U
Chlorobenzene	5.9U	6.2U	5.0U	7.1U	5 6U	5 0U
Chloroethane	12U	12U	10U	14U	11U	10U
Chloroform	5.9U	6.2U	5.0U	7.1U	5.6U	5 0U
Chloromethane	12U	12U	10U	14U	11U	10U
Cis/Trans-1,2-Dichloroethene	5.9U	6.2U	5.0U	7.1U	5.6U	5 0U
Dibromochloromethane	5.9U	6.2U	5.0U	7.1U	5.6U	5 0U
Ethylbenzene	5.9U	6.2U	5.0U	7.1U	5.6U	5 0U
Methylene chloride (Dichloromethane)	5.9U	6.2U	4.7U	7 1U	5.6U	4 7U
Styrene	5.9U	6.2U	5 0U	7.1U	5.6U	5 0U
Tetrachloroethene	5.9U	6.2U	5.0U	7.1U	5.6U	5 0U
Toluene	5.9U	6.2U	5 0U	7.1U	5.6U	5 0U
Trichloroethene	5.9U	6.2U	2.7U	7.1U	5.6U	2 7U
Vinyl chloride	12U	12U	10U	14U	11U	10U
Xylenes, Total	5 9U	6.2U	5 0U	7.1U	5.6U	5 0U
cis-1,3-Dichloropropene	4 7U	4.9U	1.0U	5.7U	4.5U	1 0U
trans-1,3-Dichloropropene	4.7U	4.9U	5.0U	5.7U	4.5U	5.0U
Total VOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T1-S7-3-6FTFD	UAS-T2-S1-0-0 5FT	UAS-T2-S1-3-6FT	UAS-T2-S2-0-0 5FT	UAS-T2-S2-3-6FT	UAS-T2-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg
1,1,1-Trichloroethane	6.5U	5.8U	5 5U	5 2U	6.4U	7 0U
1,1,2,2-Tetrachloroethane	6.5U	5.8U	5 5U	5 2U	6 4U	7 0U
1,1,2-Trichloroethane	6.5U	5.8U	5 5U	5.2U	6 4U	7 0U
1,1-Dichloroethane	6.5U	5.8U	5 5U	5 2U	6 4U	7 0U
1,1-Dichloroethene	6 0U	5.3U	5.0U	4 8U	5 9U	6 4U
1,2-Dichloroethane	6 5U	5.8U	5 5U	5 2U	6 4U	7 0U
1,2-Dichloropropane	6 5U	5.8U	5 5U	5 2U	6 4U	7 0U
2-Butanone (MEK)	33U	29U	27U	22J	32U	34J
2-Hexanone	33U	4 8J	27U	26U	32U	35U
4-Methyl-2-pentanone (MIBK)	33U	29U	27U	26U	32U	35U
Acetone	65U	58U	55U	220	64U	440
Benzene	6.5U	5 8U	5 5U	5 2U	6 4U	7 0U
Bromodichloromethane	6 5U	5 8U	5 5U	5 2U	6 4U	7 0U
Bromoform	6 5U	5 8U	5 5U	5 2U	6 4U	7 0U
Bromomethane (Methyl bromide)	13U	12U	11U	10U	13U	14U
Carbon disulfide	6 5U	5 8U	5 5U	5 2U	6 4U	7 0U
Carbon tetrachloride	6 5U	5 8U	5.5U	5 2U	6 4U	7 0U
Chlorobenzene	6 5U	5.8U	5 5U	5 2U	6 4U	7 0U
Chloroethane	13U	12U	11U	10U	13U	14U
Chloroform	6 5U	5.8U	5 5U	5 2U	6 4U	7 0U
Chloromethane	13U	12U	11U	10U	13U	14U
Cis/Trans-1,2-Dichloroethene	6 5U	5 8U	5 5U	5 2U	6 4U	7 0U
Dibromochloromethane	6.5U	5 8U	5.5U	5 2U	6 4U	7 0U
Ethylbenzene	6.5U	5.8U	5.5U	5 2U	6 4U	7 0U
Methylene chloride (Dichloromethane)	6.5U	5.8U	5.5U	5 2U	6 4U	7 0U
Styrene	6.5U	5.8U	5.5U	5.2U	6.4U	7 0U
Tetrachloroethene	6 5U	5 8U	5 5U	5 2U	6 4U	7 0U
Toluene	6 5U	5.8U	5 5U	5 2U	6 4U	7 0U
Trichloroethene	6.5U	5.8U	5.5U	5.2U	6 4U	7 0U
Vinyl chloride	13U	12U	11U	10U	13U	14U
Xylenes, Total	6.5U	5.8U	5 5U	5 2U	6 4U	7 0U
cis-1,3-Dichloropropene	5.2U	4 6U	4 4U	4 2U	5 1U	5 6U
trans-1,3-Dichloropropene	5 2U	4 6U	4 4U	4 2U	5 1U	5 6U
Total VOC's	**ND**	**4.8**	**ND**	**242**	**ND**	**474**

Notes: ...t detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T2-S3-3-6FT	UAS-T2-S4-0-0 5FT	UAS-T2-S4-3-6FT	UAS-T2-S5-0-0 5FT	UAS-T2-S5-3-6FT	UAS-T2-S6-0-0 5FT	UAS-T2-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
1 1 2 2-Tetrachloroethane	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
1 1 2-Trichloroethane	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
1 1-Dichloroethane	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
1 1-Dichloroethene	5 0U	5 2U	6 5U	6 0U	7 9U	5 6U	4 8U
1 2-Dichloroethane	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
1,2-Dichloropropane	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
2-Butanone (MEK)	27U	30	35U	25J	43U	31U	26U
2-Hexanone	27U	28U	35U	32U	43U	31U	26U
4-Methyl-2-pentanone (MIBK)	27U	28U	35U	32U	43U	31U	26U
Acetone	54U	280J	70UJ	450	86U	61U	52U
Benzene	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Bromodichloromethane	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Bromoform	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Bromomethane (Methyl bromide)	11U	11U	14U	13U	17U	12U	10U
Carbon disulfide	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Carbon tetrachloride	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Chlorobenzene	5 4U	5.7U	7 0U	6 5U	8 6U	6 1U	5 2U
Chloroethane	11U	11U	14U	13U	17U	12U	10U
Chloroform	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Chloromethane	11U	11U	14U	13U	17U	12U	10U
Cis/Trans-1,2-Dichloroethene	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Dibromochloromethane	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Ethylbenzene	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Methylene chloride (Dichloromethane)	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Styrene	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Tetrachloroethene	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Toluene	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Trichloroethene	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
Vinyl chloride	11U	11U	14U	13U	17U	12U	10U
Xylenes Total	5 4U	5 7U	7 0U	6 5U	8 6U	6 1U	5 2U
cis-1 3-Dichloropropene	4 3U	4 5U	5 6U	5 2U	6 8U	4 9U	4 2U
trans-1,3-Dichloropropene	4 3U	4 5U	5 6U	5 2U	6 8U	4 9U	4 2U
Total VOC's	**ND**	**310**	**ND**	**475**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T3-S1-0-0 5FT	UAS-T3-S1-3-6FT	UAS-T3-S2-0-0 5FT	UAS-T3-S2-3-6FT	UAS-T3-S3-0-0 5FT	UAS-T3-S3-0-0 5FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 1,1-Trichloroethane	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
1,1 2,2-Tetrachloroethane	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
1,1,2-Trichloroethane	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
1 1-Dichloroethane	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
1,1-Dichloroethene	5 4U	6 9U	4 6U	5 8U	5 8U	5 6U
1,2-Dichloroethane	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
1 2-Dichloropropane	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
2-Butanone (MEK)	29U	38U	25	32U	56	38
2-Hexanone	29U	38U	25U	32U	32U	30U
4-Methyl-2-pentanone (MIBK)	29U	38U	25U	32U	32U	30U
Acetone	59U	75U	280	63U	780	560
Benzene	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Bromodichloromethane	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Bromoform	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Bromomethane (Methyl bromide)	12U	15U	9 9U	13U	13U	12U
Carbon disulfide	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Carbon tetrachloride	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Chlorobenzene	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Chloroethane	12U	15U	9 9U	13U	13U	12U
Chloroform	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Chloromethane	12U	15U	9 9U	13U	13U	12U
Cis/Trans-1 2-Dichloroethene	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Dibromochloromethane	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Ethylbenzene	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Methylene chloride (Dichloromethane)	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Styrene	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Tetrachloroethene	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Toluene	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
Trichloroethene	5 9U	7.5U	5 0U	6 3U	6 3U	6 0U
Vinyl chloride	12U	15U	9 9U	13U	13U	12U
Xylenes, Total	5 9U	7 5U	5 0U	6 3U	6 3U	6 0U
cis-1 3-Dichloropropene	4 7U	6 0U	4 0U	5 1U	5 0U	4 8U
trans-1,3-Dichloropropene	4 7U	6 0U	4 0U	5 1U	5 0U	4 8U
Total VOC's	**ND**	**ND**	**305**	**ND**	**836**	**598**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T3-S3-3-6FT	UAS-T3-S3-3-6FTFD	UAS-T3-S4-0-0 5FT	UAS-T3-S4-3-6FT	UAS-T3-S5-0-0 5FT	UAS T3-S5-0-0 5FTEB
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/16/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
1 1 1-Trichloroethane	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
1,1 2 2-Tetrachloroethane	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
1 1 2-Trichloroethane	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
1 1-Dichloroethane	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
1 1-Dichloroethene	6 1U	5 0U	5 3U	5 5U	5 0U	5 0U
1 2-Dichloroethane	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
1,2-Dichloropropane	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
2-Butanone (MEK)	33U	27U	34	30U	45	25U
2-Hexanone	33U	27U	29U	30U	27U	25U
4-Methyl-2-pentanone (MIBK)	33U	27U	29U	30U	27U	25U
Acetone	66U	54U	450	60U	550	13J
Benzene	6 6U	5 4U	5 7U	6 0U	5 4U	1 2U
Bromodichloromethane	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Bromoform	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Bromomethane (Methyl bromide)	13U	11U	11U	12U	11U	9 8U
Carbon disulfide	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Carbon tetrachloride	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Chlorobenzene	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Chloroethane	13U	11U	11U	12U	11U	10U
Chloroform	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Chloromethane	13U	11U	11U	12U	11U	10U
Cis/Trans-1 2-Dichloroethene	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Dibromochloromethane	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Ethylbenzene	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Methylene chloride (Dichloromethane)	6 6U	5 4U	5 7U	6 0U	5 4U	0 55J
Styrene	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Tetrachloroethene	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
Toluene	6 6U	5 4U	5 3J	6 0U	2 5J	5 0U
Trichloroethene	6 6U	5 4U	5 7U	6 0U	5 4U	2 7U
Vinyl chloride	13U	11U	11U	12U	11U	10U
Xylenes Total	6 6U	5 4U	5 7U	6 0U	5 4U	5 0U
cis-1 3-Dichloropropene	5 3U	4 3U	4 6U	4 8U	4 3U	1 0U
trans-1 3-Dichloropropene	5 3U	4 3U	4 6U	4 8U	4 3U	5 0U
Total VOC's	**ND**	**ND**	**489 3**	**ND**	**597 5**	**13 55**

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T3-S5-3-6FT	UAS-T3-S6-0-0 5FT	UAS-T3-S6-3-6FT	UAS-T3-S7-0-0 5FT	UAS-T3-S7-3-6FT	UAS-T3-S7-3-6FTEB
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/16/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
1 1,1-Trichloroethane	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
1 1 2,2-Tetrachloroethane	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
1 1 2-Trichloroethane	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
1 1-Dichloroethane	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
1 1-Dichloroethene	4 5U	5 6U	5 6U	5 4U	6 5U	5 0U
1 2-Dichloroethane	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
1 2-Dichloropropane	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
2-Butanone (MEK)	24J	38	30U	30	35U	25U
2-Hexanone	24U	6 9J	30U	29U	35U	25U
4-Methyl-2-pentanone (MIBK)	24U	30U	30U	29U	35U	25U
Acetone	180	580	61U	430	70U	50U
Benzene	4 9U	2 1J	6 1U	5 8U	7 0U	1 2U
Bromodichloromethane	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Bromoform	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Bromomethane (Methyl bromide)	9 7U	12U	12U	12U	14U	9 8U
Carbon disulfide	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Carbon tetrachloride	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Chlorobenzene	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Chloroethane	9 7U	12U	12U	12U	14U	10U
Chloroform	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Chloromethane	9 7U	12U	12U	12U	14U	10U
Cis/Trans-1 2-Dichloroethene	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Dibromochloromethane	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Ethylbenzene	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Methylene chloride (Dichloromethane)	4 9U	6 1U	6 1U	5 8U	7 0U	0 54J
Styrene	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Tetrachloroethene	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
Toluene	4 9U	3 9J	6 1U	5 8U	7 0U	5 0U
Trichloroethene	4 9U	6 1U	6 1U	5 8U	7 0U	2 7U
Vinyl chloride	9 7U	12U	12U	12U	14U	10U
Xylenes Total	4 9U	6 1U	6 1U	5 8U	7 0U	5 0U
cis-1,3-Dichloropropene	3 9U	4 9U	4 9U	4 7U	5 6U	1 0U
trans-1 3-Dichloropropene	3 9U	4 9U	4 9U	4 7U	5 6U	5 0U
Total VOC's	**204**	**630.9**	**ND**	**460**	**ND**	**0 54**

Notes ' ›t detected J-estimated value, N-tentatively identified, R-rejected M-EMPC D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T4-S1-0-0 5FT	UAS-T4-S1-3-6FT	UAS-T4-S2-0-0 5FT	UAS-T4-S2-3-6FT	UAS-T4-S3-0-0 5FT	UAS-T4-S3-0-0 5FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/16/1999	11/17/1999	11/16/1999	11/17/1999	11/16/1999	11/16/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 1 1-Trichloroethane	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
1 1 2 2-Tetrachloroethane	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
1 1 2-Trichloroethane	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
1 1-Dichloroethane	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
1 1-Dichloroethene	6 7U	6 9U	4 2U	5 7U	5 6U	3 7U
1 2-Dichloroethane	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
1 2-Dichloropropane	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
2-Butanone (MEK)	36U	38U	23U	31U	30U	20U
2-Hexanone	36U	38U	23U	31U	30U	20U
4-Methyl-2-pentanone (MIBK)	36U	38U	23U	31U	30U	20U
Acetone	73U	7 2J	46U	36J	60U	40U
Benzene	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Bromodichloromethane	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Bromoform	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Bromomethane (Methyl bromide)	14U	15U	9 2U	12U	12U	8 0U
Carbon disulfide	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Carbon tetrachloride	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Chlorobenzene	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Chloroethane	14U	15U	9 2U	12U	12U	8 0U
Chloroform	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Chloromethane	14U	15U	9 2U	12U	12U	8 0U
Cis/Trans-1 2-Dichloroethene	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Dibromochloromethane	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Ethylbenzene	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Methylene chloride (Dichloromethane)	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Styrene	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Tetrachloroethene	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Toluene	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Trichloroethene	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
Vinyl chloride	14U	15U	9 2U	12U	12U	8 0U
Xylenes Total	7 3U	7 5U	4 6U	6 2U	6 0U	4 0U
cis-1 3-Dichloropropene	5 8U	6 0U	3 7U	4 9U	4 8U	3 2U
trans-1 3-Dichloropropene	5 8U	6 0U	3 7U	4 9U	4 8U	3 2U
Total VOC s	**ND**	**7 2**	**ND**	**36**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T4-S3-3-6FT	UAS-T4-S3-3-6FTFD	UAS-T4-S4-0-0.5FT	UAS-T4-S4-3-6FT	UAS-T4-S5-0-0.5FT	UAS-T4-S5-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/16/1999	11/17/1999	11/16/1999	11/16/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
1,1,2,2-Tetrachloroethane	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
1,1,2-Trichloroethane	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
1,1-Dichloroethane	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
1,1-Dichloroethene	5.2U	4.1U	4.5U	4.5U	3.8U	5.6U
1,2-Dichloroethane	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
1,2-Dichloropropane	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
2-Butanone (MEK)	28U	22U	24U	5.7J	20U	30U
2-Hexanone	28U	22U	24U	24U	20U	30U
4-Methyl-2-pentanone (MIBK)	28U	22U	24U	24U	20U	30U
Acetone	56U	45U	49U	86	41U	60U
Benzene	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Bromodichloromethane	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Bromoform	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Bromomethane (Methyl bromide)	11U	8.9U	9.7U	9.7U	8.2U	12U
Carbon disulfide	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Carbon tetrachloride	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Chlorobenzene	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Chloroethane	11U	8.9U	9.7U	9.7U	8.2U	12U
Chloroform	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Chloromethane	11U	8.9U	9.7U	9.7U	8.2U	12U
Cis/Trans-1,2-Dichloroethene	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Dibromochloromethane	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Ethylbenzene	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Methylene chloride (Dichloromethane)	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Styrene	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Tetrachloroethene	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Toluene	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Trichloroethene	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
Vinyl chloride	11U	8.9U	9.7U	9.7U	8.2U	12U
Xylenes, Total	5.6U	4.5U	4.9U	4.9U	4.1U	6.0U
cis-1,3-Dichloropropene	4.5U	3.6U	3.9U	3.9U	3.3U	4.8U
trans-1,3-Dichloropropene	4.5U	3.6U	3.9U	3.9U	3.3U	4.8U
Total VOC's	**ND**	**ND**	**ND**	**91.7**	**ND**	**ND**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T4-S6-0-0 5FT	UAS-T4-S6-3-6FT	UAS-T4-S7-0-0 5FT	UAS-T4-S7-3-6FT	UAS-T5-S1-0-0 5FT	UAS-T5-S1-3-6FT	UAS-T5-S2-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 1,1-Trichloroethane	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
1,1 2,2-Tetrachloroethane	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
1,1,2-Trichloroethane	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
1,1-Dichloroethane	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
1,1-Dichloroethene	4 8U	5 3U	5 1U	5 4U	5 4U	5 9U	5 0U
1,2-Dichloroethane	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
1,2-Dichloropropane	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
2-Butanone (MEK)	26U	29U	28U	29U	34	32U	19J
2-Hexanone	26U	29U	28U	29U	30U	32U	27U
4-Methyl-2-pentanone (MIBK)	26U	29U	28U	29U	30U	32U	27U
Acetone	52U	57U	55U	58U	460	64U	170
Benzene	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Bromodichloromethane	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Bromoform	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Bromomethane (Methyl bromide)	10U	11U	11U	12U	12U	13U	11U
Carbon disulfide	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Carbon tetrachloride	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Chlorobenzene	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Chloroethane	10U	11U	11U	12U	12U	13U	11U
Chloroform	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Chloromethane	10U	11U	11U	12U	12U	13U	11U
Cis/Trans-1,2-Dichloroethene	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Dibromochloromethane	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Ethylbenzene	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Methylene chloride (Dichloromethane)	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Styrene	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Tetrachloroethene	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Toluene	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Trichloroethene	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
Vinyl chloride	10U	11U	11U	12U	12U	13U	11U
Xylenes Total	5 2U	5 7U	5 5U	5 8U	5 9U	6 4U	5 4U
cis-1 3-Dichloropropene	4 2U	4 6U	4 4U	4 7U	4 7U	5 1U	4 4U
trans-1 3-Dichloropropene	4 2U	4 6U	4 4U	4 7U	4 7U	5 1U	4 4U
Total VOCs	**ND**	**ND**	**ND**	**ND**	**494**	**ND**	**189**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T5-S2-3-6FT	UAS-T5-S3-0-0 5FT	UAS-T5-S3-3-6FT	UAS-T5-S4-0-0 5FT	UAS-T5-S4-3-6FT	UAS-T5-S5-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 1 1-Trichloroethane	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
1 1,2 2-Tetrachloroethane	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
1,1,2-Trichloroethane	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
1 1-Dichloroethane	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
1 1-Dichloroethene	5 9U	5 0U	5 6U	6 0U	4 4U	4 8U
1 2-Dichloroethane	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
1 2-Dichloropropane	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
2-Butanone (MEK)	32U	14J	31U	24J	13J	26U
2-Hexanone	32U	27U	31U	33U	24U	26U
4-Methyl-2-pentanone (MIBK)	32U	27U	31U	33U	24U	26U
Acetone	64U	160	61U	180	140	52U
Benzene	6 4U	5 4U	6 1U	6 5U	0 98J	5 2U
Bromodichloromethane	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Bromoform	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Bromomethane (Methyl bromide)	13U	11U	12U	13U	9 6U	10U
Carbon disulfide	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Carbon tetrachloride	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Chlorobenzene	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Chloroethane	13U	11U	12U	13U	9 6U	10U
Chloroform	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Chloromethane	13U	11U	12U	13U	9 6U	10U
Cis/Trans-1 2-Dichloroethene	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Dibromochloromethane	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Ethylbenzene	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Methylene chloride (Dichloromethane)	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Styrene	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Tetrachloroethene	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Toluene	6 4U	5 4U	6 1U	6 5U	1 8J	5 2U
Trichloroethene	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
Vinyl chloride	13U	11U	12U	13U	9 6U	10U
Xylenes, Total	6 4U	5 4U	6 1U	6 5U	4 8U	5 2U
cis-1 3-Dichloropropene	5 2U	4 3U	4 9U	5 2U	3 8U	4 2U
trans-1 3-Dichloropropene	5 2U	4 3U	4 9U	5 2U	3 8U	4 2U
Total VOC's	**ND**	**174**	**ND**	**204**	**155 78**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T5-S5-0-0 5FTEB	UAS-T5-S5-3-6FT	UAS-T5-S5-3-6FTEB	UAS-T5-S6-0-0 5FT	UAS-T5-S6-0-0 5FTFD	UAS-T5-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
1 1 1-Trichloroethane	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
1 1 2 2-Tetrachloroethane	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
1 1 2-Trichloroethane	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
1 1-Dichloroethane	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
1,1-Dichloroethene	5 0U	5 6U	5 0U	4 8U	4 9U	5 0U
1,2-Dichloroethane	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
1,2-Dichloropropane	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
2-Butanone (MEK)	25U	30U	25U	26U	26U	27U
2-Hexanone	25U	30U	25U	26U	26U	27U
4-Methyl-2-pentanone (MIBK)	25U	30U	25U	26U	26U	27U
Acetone	50U	60U	50U	52U	53U	54U
Benzene	1 2U	6 0U	1 2U	5 2U	5 3U	5 4U
Bromodichloromethane	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Bromoform	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Bromomethane (Methyl bromide)	9 8U	12U	9 8U	10U	11U	11U
Carbon disulfide	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Carbon tetrachloride	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Chlorobenzene	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Chloroethane	10U	12U	10U	10U	11U	11U
Chloroform	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Chloromethane	10U	12U	10U	10U	11U	11U
Cis/Trans-1,2-Dichloroethene	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Dibromochloromethane	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Ethylbenzene	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Methylene chloride (Dichloromethane)	0 58J	6 0U	0 53J	5 2U	5 3U	5 4U
Styrene	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Tetrachloroethene	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Toluene	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
Trichloroethene	2 7U	6 0U	2 7U	5 2U	5 3U	5 4U
Vinyl chloride	10U	12U	10U	10U	11U	11U
Xylenes Total	5 0U	6 0U	5 0U	5 2U	5 3U	5 4U
cis-1 3-Dichloropropene	1 0U	4 8U	1 0U	4 2U	4 2U	4 3U
trans-1 3-Dichloropropene	5 0U	4 8U	5 0U	4 2U	4 2U	4 3U
Total VOC s	**0 58**	**ND**	**0.53**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T5-S6-3-6FTFD	UAS-T6-S1-0-0 5FT	UAS-T6-S1-3-6FT	UAS-T6-S2-0-0 5FT	UAS-T6-S2-3-6FT	UAS-T6-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
1,1 2,2-Tetrachloroethane	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
1,1,2-Trichloroethane	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
1,1-Dichloroethane	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
1,1-Dichloroethene	4 7U	6 6U	7 6U	5 2U	5 2U	4 9U
1,2-Dichloroethane	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
1,2-Dichloropropane	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
2-Butanone (MEK)	26U	36U	41U	28U	28U	26U
2-Hexanone	26U	36U	41U	28U	3 5J	26U
4-Methyl-2-pentanone (MIBK)	26U	36U	41U	28U	28U	26U
Acetone	51U	72U	83U	56U	56U	53U
Benzene	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Bromodichloromethane	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Bromoform	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Bromomethane (Methyl bromide)	10U	14U	16U	11U	11U	10U
Carbon disulfide	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Carbon tetrachloride	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Chlorobenzene	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Chloroethane	10U	14U	16U	11U	11U	10U
Chloroform	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Chloromethane	10U	14U	16U	11U	11U	10U
Cis/Trans-1 2-Dichloroethene	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Dibromochloromethane	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Ethylbenzene	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Methylene chloride (Dichloromethane)	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Styrene	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Tetrachloroethene	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Toluene	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Trichloroethene	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
Vinyl chloride	10U	14U	16U	11U	11U	10U
Xylenes, Total	5 1U	7 2U	8 3U	5 6U	5 6U	5 3U
cis-1 3-Dichloropropene	4 1U	5 7U	6 6U	4 5U	4 5U	4 2U
trans-1 3-Dichloropropene	4 1U	5 7U	6 6U	4 5U	4 5U	4 2U
Total VOC s	ND	ND	ND	ND	3 5	ND

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T6-S3-0-0 5FTEB	UAS-T6-S3-3-6FT	UAS-T6-S3-3-6FTEB	UAS-T6-S4-0-0 5FT	UAS-T6-S4-3-6FT	UAS-T6-S5-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Units	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
1 1 1-Trichloroethane	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
1 1,2 2-Tetrachloroethane	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
1,1 2-Trichloroethane	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
1,1-Dichloroethane	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
1,1-Dichloroethene	5 0U	6 0U	5 0U	5 0U	4 4U	5 7U
1,2-Dichloroethane	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
1,2-Dichloropropane	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
2-Butanone (MEK)	25U	33U	25U	27U	24U	31U
2-Hexanone	25U	33U	25U	27U	24U	31U
4-Methyl-2-pentanone (MIBK)	25U	33U	25U	27U	24U	31U
Acetone	50U	65U	50U	54U	48U	62U
Benzene	1 2U	6 5U	1 2U	5 4U	4 8U	6 2U
Bromodichloromethane	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Bromoform	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Bromomethane (Methyl bromide)	9 8U	13U	9 8U	11U	9 6U	12U
Carbon disulfide	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Carbon tetrachloride	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Chlorobenzene	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Chloroethane	10U	13U	10U	11U	9 6U	12U
Chloroform	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Chloromethane	10U	13U	10U	11U	9 6U	12U
Cis/Trans-1,2-Dichloroethene	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Dibromochloromethane	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Ethylbenzene	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Methylene chloride (Dichloromethane)	1 7J	6 5U	1 7J	5 4U	4 8U	6 2U
Styrene	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Tetrachloroethene	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
Toluene	5 0U	2 8J	5 0U	5 4U	4 8U	6 2U
Trichloroethene	2 7U	6.5U	2 7U	5 4U	4 8U	6 2U
Vinyl chloride	10U	13U	10U	11U	9 6U	12U
Xylenes Total	5 0U	6 5U	5 0U	5 4U	4 8U	6 2U
cis-1,3-Dichloropropene	1 0U	5 2U	1 0U	4 3U	3 8U	4 9U
trans-1 3-Dichloropropene	5 0U	5 2U	5 0U	4 3U	3 8U	4 9U
Total VOC's	**1 7**	**2.8**	**1.7**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T6-S5-3-6FT	UAS-T7-S1-0-0 5FT	UAS-T7-S1-3-6FT	UAS-T7-S2-0-0 5FT	UAS-T7-S2-3-6FT	UAS-T7-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
1,1,2,2-Tetrachloroethane	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
1,1,2-Trichloroethane	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
1,1-Dichloroethane	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
1,1-Dichloroethene	5 3U	7 7U	5 9U	5 7U	7 5U	4 8U
1,2-Dichloroethane	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
1,2-Dichloropropane	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
2-Butanone (MEK)	29U	42U	12J	37	41U	20J
2-Hexanone	29U	42U	32U	31U	41U	26U
4-Methyl-2-pentanone (MIBK)	29U	42U	32U	31U	41U	26U
Acetone	57U	83U	140	500	81U	270
Benzene	5 7U	8 3U	6 4U	2 1J	8 1U	5 2U
Bromodichloromethane	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Bromoform	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Bromomethane (Methyl bromide)	11U	17U	13U	12U	16U	10U
Carbon disulfide	5 7U	8 3U	5 0J	6 2U	8 1U	5 2U
Carbon tetrachloride	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Chlorobenzene	5 7U	8 3U	4 0J	6 2U	8 1U	5 2U
Chloroethane	11U	17U	13U	12U	16U	10U
Chloroform	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Chloromethane	11U	17U	13U	12U	16U	10U
Cis/Trans-1,2-Dichloroethene	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Dibromochloromethane	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Ethylbenzene	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Methylene chloride (Dichloromethane)	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Styrene	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Tetrachloroethene	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Toluene	5 7U	8 3U	6 4U	12	8 1U	5 2U
Trichloroethene	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
Vinyl chloride	11U	17U	13U	12U	16U	10U
Xylenes Total	5 7U	8 3U	6 4U	6 2U	8 1U	5 2U
cis-1 3-Dichloropropene	4 6U	6 7U	5 1U	4 9U	6 5U	4 2U
trans-1 3-Dichloropropene	4 6U	6 7U	5 1U	4 9U	6 5U	4 2U
Total VOC's	ND	ND	161	551 1	ND	290

Notes ' not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T7-S3-0-0.5FTFD	UAS-T7-S3-3-6FT	UAS-T7-S3-3-6FTFD	UAS-T7-S4-0 0 5FT	UAS-T7-S4-3-6FT	UAS-T7-S5-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5.1U	6.2U	7.1U	5.0U	5.4U	5 4U
1,1,2,2-Tetrachloroethane	5.1U	6 2U	7.1U	5 0U	5 4U	5 4U
1,1,2-Trichloroethane	5.1U	6.2U	7.1U	5.0U	5.4U	5 4U
1,1-Dichloroethane	5 1U	6.2U	7.1U	5.0U	5.4U	5 4U
1,1-Dichloroethene	4.7U	5.7U	6.6U	4.6U	5.0U	5 0U
1,2-Dichloroethane	5.1U	6 2U	7.1U	5.0U	5.4U	5 4U
1,2-Dichloropropane	5.1U	6.2U	7.1U	5.0U	5.4U	5 4U
2-Butanone (MEK)	26U	31U	36U	25U	27U	9 1J
2-Hexanone	26U	31U	36U	25U	27U	27U
4-Methyl-2-pentanone (MIBK)	26U	31U	36U	25U	27U	27U
Acetone	51U	62U	71U	50U	54U	68J
Benzene	5 1U	6 2U	7 1U	5 0U	5 4U	5 4U
Bromodichloromethane	5 1U	6 2U	7.1U	5.0U	5.4U	5 4U
Bromoform	5 1U	6 2U	7 1U	5 0U	5 4U	5 4U
Bromomethane (Methyl bromide)	10U	12U	14U	10U	11U	11U
Carbon disulfide	5.1U	6 2U	7 1U	5 0U	5 4U	2 7J
Carbon tetrachloride	5.1U	6.2U	7 1U	5 0U	5 4U	5 4U
Chlorobenzene	5.1U	6 2U	7 1U	5 0U	5.4U	5 4U
Chloroethane	10U	12U	14U	10U	11U	11U
Chloroform	5.1U	6.2U	7 1U	5.0U	5 4U	5 4U
Chloromethane	10U	12U	14U	10U	11U	11U
Cis/Trans-1,2-Dichloroethene	5.1U	6.2U	7.1U	5.0U	5 4U	5 4U
Dibromochloromethane	5.1U	6.2U	7 1U	5 0U	5 4U	5 4U
Ethylbenzene	5.1U	6 2U	7 1U	5 0U	5 4U	5 4U
Methylene chloride (Dichloromethane)	5 1U	6 2U	7 1U	5.0U	5 4U	5 4U
Styrene	5.1U	6.2U	7 1U	5.0U	5 4U	5 4U
Tetrachloroethene	5.1U	6.2U	7 1U	5 0U	5 4U	5 4U
Toluene	5 1U	6.2U	7 1U	5.0U	5 4U	3 4J
Trichloroethene	5.1U	6 2U	7 1U	5.0U	5 4U	5 4U
Vinyl chloride	10U	12U	14U	10U	11U	11U
Xylenes, Total	5 1U	6.2U	7 1U	5.0U	5 4U	5 4U
cis-1,3-Dichloropropene	4.1U	4 9U	5 7U	4.0U	4 4U	4 3U
trans-1,3-Dichloropropene	4 1U	4 9U	5 7U	4 0U	4.4U	4 3U
Total VOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**83.2**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T7-S5-3-6FT	UAS-T7-S6-0-0 5FT	UAS-T7-S6-0-0 5FTEB	UAS-T7-S6-3-6FT	UAS-T7-S6-3-6FTEB	UAS-T7-S7-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/l	ug/kg dw
1,1,1-Trichloroethane	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
1,1,2,2-Tetrachloroethane	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
1,1,2-Trichloroethane	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
1 1-Dichloroethane	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
1,1-Dichloroethene	6 2U	6 8U	5 0U	5 9U	5 0U	5 1UJ
1 2-Dichloroethane	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
1 2-Dichloropropane	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
2-Butanone (MEK)	34U	37U	25U	32U	25U	28UJ
2-Hexanone	34U	37U	25U	32U	25U	28UJ
4-Methyl-2-pentanone (MIBK)	34U	37U	25U	32U	25U	28UJ
Acetone	68U	74U	50U	64U	50U	56UJ
Benzene	6 8U	7 4U	1 2U	6 4U	1 2U	5 6UJ
Bromodichloromethane	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Bromoform	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Bromomethane (Methyl bromide)	14U	15U	9 8U	13U	9 8U	11UJ
Carbon disulfide	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Carbon tetrachloride	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Chlorobenzene	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Chloroethane	14U	15U	10U	13U	10U	11UJ
Chloroform	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Chloromethane	14U	15U	10U	13U	10U	11UJ
Cis/Trans-1,2-Dichloroethene	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Dibromochloromethane	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Ethylbenzene	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Methylene chloride (Dichloromethane)	6 8U	7 4U	4 7U	6 4U	4 7U	5 6UJ
Styrene	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Tetrachloroethene	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
Toluene	6 8U	7.4U	5 0U	6 4U	2 4J	5 6UJ
Trichloroethene	6.8U	7 4U	2 7U	6 4U	2 7U	2 6J
Vinyl chloride	14U	15U	10U	13U	10U	11UJ
Xylenes, Total	6 8U	7 4U	5 0U	6 4U	5 0U	5 6UJ
cis-1,3-Dichloropropene	5 4U	5.9U	1 0U	5 1U	1 0U	4 4UJ
trans-1,3-Dichloropropene	5 4U	5 9U	5 0U	5 1U	5 0U	4 4UJ
Total VOC's	**ND**	**ND**	**ND**	**ND**	**2.4**	**ND**

Notes: not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.1
Sauget Area 1
Soil Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	UAS-T7-S7-3-6FT
Description	Undeveloped Soil
Sample Date	11/19/1999
Units	ug/kg dw
1,1,1-Trichloroethane	6 6U
1,1,2,2-Tetrachloroethane	6 6U
1,1,2-Trichloroethane	6 6U
1,1-Dichloroethane	6 6U
1,1-Dichloroethene	6 1U
1 2-Dichloroethane	6 6U
1,2-Dichloropropane	6.6U
2-Butanone (MEK)	7 0J
2-Hexanone	33U
4-Methyl-2-pentanone (MIBK)	33U
Acetone	66U
Benzene	6 6U
Bromodichloromethane	6 6U
Bromoform	6 6U
Bromomethane (Methyl bromide)	13U
Carbon disulfide	6 6U
Carbon tetrachloride	6 6U
Chlorobenzene	6 6U
Chloroethane	13U
Chloroform	6 6U
Chloromethane	13U
Cis/Trans-1,2-Dichloroethene	6 6U
Dibromochloromethane	6 6U
Ethylbenzene	6 6U
Methylene chloride (Dichloromethane)	6 6U
Styrene	6 6U
Tetrachloroethene	6 6U
Toluene	6 6U
Trichloroethene	6 6U
Vinyl chloride	13U
Xylenes Total	6 6U
cis-1,3-Dichloropropene	5 3U
trans-1 3-Dichloropropene	5 3U
Total VOC's	7

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T1-S1-0-0 5FT	DAS-T1-S1-0-0 5FTFD	DAS-T1-S1-3-6FT	DAS-T1-S2-0-0 5FT	DAS-T1-S2-3-6FT	DAS-T1-S3-0-0 5FT	DAS-T1-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	190U	190U	200U	190U	200U	200U	220U
1,2-Dichlorobenzene	190U	190U	200U	190U	200U	200U	220U
1,3-Dichlorobenzene	190U	190U	200U	190U	200U	200U	220U
1,4-Dichlorobenzene	190U	190U	200U	190U	200U	200U	220U
2,2'-Oxybis(1-Chloropropane)	190U	190U	200U	190U	200U	200U	220U
2,4,5-Trichlorophenol	190U	190U	200U	190U	200U	200U	220U
2,4,6-Trichlorophenol	190U	190U	200U	190U	200U	200U	220U
2,4-Dichlorophenol	190U	190U	200U	190U	200U	200U	220U
2,4-Dinitrophenol	960U	960U	990U	960U	980U	1000U	1100U
2,4-Dinitrotoluene	190U	190U	200U	190U	200U	200U	220U
2,6-Dinitrotoluene	190U	190U	200U	190U	200U	200U	220U
2-Chloronaphthalene	190U	190U	200U	190U	200U	200U	220U
2-Chlorophenol	190U	190U	200U	190U	200U	200U	220U
2-Methylnaphthalene	190U	190U	200U	190U	200U	200U	220U
2-Methylphenol (o-cresol)	190U	190U	200U	190U	200U	200U	220U
2-Nitroaniline	960U	960U	990U	960U	980U	1000U	1100U
2-Nitrophenol	190U	190U	200U	190U	200U	200U	220U
3&4-Methylphenol (m&p-cresol)	190U	190U	200U	190U	200U	200U	220U
3,3'-Dichlorobenzidine	380U	380U	380U	380U	380U	390U	420U
3-Nitroaniline	960U	960U	990U	960U	980U	1000U	1100U
4,6-Dinitro-2-methylphenol	960U	960U	990U	960U	980U	1000U	1100U
4-Bromophenylphenyl ether	190U	190U	200U	190U	200U	200U	220U
4-Chloro-3-methylphenol	190U	190U	200U	190U	200U	200U	220U
4-Chloroaniline	380U	380U	380U	380U	380U	390U	420U
4-Chlorophenylphenyl ether	190U	190U	200U	190U	200U	200U	220U
4-Nitroaniline	960U	960U	990U	960U	980U	1000U	1100U
4-Nitrophenol	960U	960U	990U	960U	980U	1000U	1100U
Acenaphthene	190U	190U	200U	190U	200U	200U	220U
Acenaphthylene	190U	190U	200U	190U	200U	200U	220U
Anthracene	190U	190U	200U	190U	200U	200U	220U
Benzo(a)anthracene	190U	190U	200U	190U	200U	200U	220U
Benzo(a)pyrene	100U	100U	100U	100U	100U	110U	120U
Benzo(b)fluoranthene	190U	190U	200U	190U	200U	200U	220U
Benzo(g,h,i)perylene	190U	190U	200U	190U	200U	200U	220U
Benzo(k)fluoranthene	190U	190U	200U	190U	200U	200U	220U
Butylbenzylphthalate	190U	190U	200U	190U	200U	200U	220U
Carbazole	190U	190U	200U	190U	200U	200U	220U
Chrysene	190U	190U	200U	190U	200U	200U	220U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T1-S1-0-0 5FT	DAS-T1-S1-0-0 5FTFD	DAS-T1-S1-3-6FT	DAS-T1-S2-0-0 5FT	DAS-T1-S2-3-6FT	DAS-T1-S3-0-0 5FT	DAS-T1-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	100U	100U	100U	100U	100U	110U	120U
Dibenzofuran	190U	190U	200U	190U	200U	200U	220U
Diethylphthalate	190U	190U	200U	190U	200U	200U	220U
Dimethylphthalate	190U	190U	200U	190U	200U	200U	220U
Di-n-butylphthalate	190U	190U	200U	190U	200U	200U	220U
Di-n-octylphthalate	190U	190U	200U	190U	200U	200U	220U
Fluoranthene	190U	190U	200U	190U	200U	200U	220U
Fluorene	190U	190U	200U	190U	200U	200U	220U
Hexachlorobenzene	80U	80U	81U	80U	80U	83U	90U
Hexachlorobutadiene	190U	190U	200U	190U	200U	200U	220U
Hexachlorocyclopentadiene	190U	190U	200U	190U	200U	200U	220U
Hexachloroethane	190U	190U	200U	190U	200U	200U	220U
Indeno(1,2,3-cd)pyrene	190U	190U	200U	190U	200U	200U	220U
Isophorone	190U	190U	200U	190U	200U	200U	220U
Naphthalene	190U	190U	200U	190U	200U	200U	220U
Nitrobenzene	190U	190U	200U	190U	200U	200U	220U
n-Nitrosodi-n-propylamine	190U	190U	200U	190U	200U	200U	220U
N-Nitrosodiphenylamine	190U	190U	200U	190U	200U	200U	220U
Pentachlorophenol	960U	960U	990U	960U	980U	1000U	1100U
Phenanthrene	190U	190U	200U	190U	200U	200U	220U
Phenol	190U	190U	200U	190U	200U	200U	220U
Pyrene	190U	190U	200U	190U	200U	200U	220U
bis(2-Chloroethoxy)methane	190U	190U	200U	190U	200U	200U	220U
bis(2-Chloroethyl)ether	190U	190U	200U	190U	200U	200U	220U
bis(2-Ethylhexyl)phthalate	190U	190U	200U	190U	200U	160J	220U
Total SVOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**160**	**ND**

Note: not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T2-S1-0-0 5FT	DAS-T2-S1-3-6FT	DAS-T2-S2-0-0.5FT	DAS-T2-S2-3-6FT	DAS-T2-S3-0-0 5FT	DAS-T2-S3-3-6FT	DAS-T2-S3-3-6FTFD
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	200U	190U	200U	180U	220U	190U	190U
1,2-Dichlorobenzene	200U	190U	200U	180U	220U	190U	190U
1,3-Dichlorobenzene	200U	190U	200U	180U	220U	190U	190U
1,4-Dichlorobenzene	200U	190U	200U	180U	220U	190U	190U
2,2'-Oxybis(1-Chloropropane)	200U	190U	200U	180U	220U	190U	190U
2,4,5-Trichlorophenol	200U	190U	200U	180U	220U	190U	190U
2,4,6-Trichlorophenol	200U	190U	200U	180U	220U	190U	190U
2,4-Dichlorophenol	200U	190U	200U	180U	220U	190U	190U
2,4-Dinitrophenol	1000U	960U	980U	900U	1100U	930U	940U
2,4-Dinitrotoluene	200U	190U	200U	180U	220U	190U	190U
2,6-Dinitrotoluene	200U	190U	200U	180U	220U	190U	190U
2-Chloronaphthalene	200U	190U	200U	180U	220U	190U	190U
2-Chlorophenol	200U	190U	200U	180U	220U	190U	190U
2-Methylnaphthalene	200U	190U	200U	180U	220U	190U	190U
2-Methylphenol (o-cresol)	200U	190U	200U	180U	220U	190U	190U
2-Nitroaniline	1000U	960U	980U	900U	1100U	930U	940U
2-Nitrophenol	200U	190U	200U	180U	220U	190U	190U
3&4-Methylphenol (m&p-cresol)	200U	190U	200U	180U	220U	190U	190U
3,3'-Dichlorobenzidine	390U	370U	380U	350U	430U	360U	370U
3-Nitroaniline	1000U	960U	980U	900U	1100U	930U	940U
4,6-Dinitro-2-methylphenol	1000U	960U	980U	900U	1100U	930U	940U
4-Bromophenylphenyl ether	200U	190U	200U	180U	220U	190U	190U
4-Chloro-3-methylphenol	200U	190U	200U	180U	220U	190U	190U
4-Chloroaniline	390U	370U	380U	350U	430U	360U	370U
4-Chlorophenylphenyl ether	200U	190U	200U	180U	220U	190U	190U
4-Nitroaniline	1000U	960U	980U	900U	1100U	930U	940U
4-Nitrophenol	1000U	960U	980U	900U	1100U	930U	940U
Acenaphthene	200U	190U	200U	180U	220U	190U	190U
Acenaphthylene	200U	190U	200U	180U	220U	190U	190U
Anthracene	200U	190U	200U	180U	220U	190U	190U
Benzo(a)anthracene	46J	190U	200U	180U	220U	190U	190U
Benzo(a)pyrene	56J	100U	100U	96U	120U	99U	100U
Benzo(b)fluoranthene	42J	190U	200U	180U	32J	190U	190U
Benzo(g,h,i)perylene	200U	190U	200U	180U	220U	190U	190U
Benzo(k)fluoranthene	63J	190U	200U	180U	220U	190U	190U
Butylbenzylphthalate	200U	190U	200U	180U	220U	190U	190U
Carbazole	200U	190U	200U	180U	220U	190U	190U
Chrysene	69J	190U	200U	180U	29J	190U	190U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T2-S1-0-0 5FT	DAS-T2-S1-3-6FT	DAS-T2-S2-0-0 5FT	DAS-T2-S2-3-6FT	DAS-T2-S3-0-0 5FT	DAS-T2-S3-3-6FT	DAS-T2-S3-3-6FTFD
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	110U	100U	100U	96U	120U	99U	100U
Dibenzofuran	200U	190U	200U	180U	220U	190U	190U
Diethylphthalate	200U	190U	200U	180U	220U	190U	190U
Dimethylphthalate	200U	190U	200U	180U	220U	190U	190U
Di-n-butylphthalate	200U	190U	120J	180U	220U	190U	190U
Di-n-octylphthalate	200U	190U	200U	180U	220U	190U	190U
Fluoranthene	110J	190U	200U	180U	220U	190U	190U
Fluorene	200U	190U	200U	180U	220U	190U	190U
Hexachlorobenzene	83U	79U	80U	74U	92U	77U	78U
Hexachlorobutadiene	200U	190U	200U	180U	220U	190U	190U
Hexachlorocyclopentadiene	200U	190U	200U	180U	220U	190U	190U
Hexachloroethane	200U	190U	200U	180U	220U	190U	190U
Indeno(1,2,3-cd)pyrene	200U	190U	200U	180U	220U	190U	190U
Isophorone	200U	190U	200U	180U	220U	190U	190U
Naphthalene	200U	190U	200U	180U	220U	190U	190U
Nitrobenzene	200U	190U	200U	180U	220U	190U	190U
n-Nitrosodi-n-propylamine	200U	190U	200U	180U	220U	190U	190U
N-Nitrosodiphenylamine	200U	190U	200U	180U	220U	190U	190U
Pentachlorophenol	1000U	960U	980U	900U	1100U	930U	940U
Phenanthrene	52J	190U	200U	180U	220U	190U	190U
Phenol	200U	190U	200U	180U	220U	190U	190U
Pyrene	100J	190U	200U	180U	220U	190U	190U
bis(2-Chloroethoxy)methane	200U	190U	200U	180U	220U	190U	190U
bis(2-Chloroethyl)ether	200U	190U	200U	180U	220U	190U	190U
bis(2-Ethylhexyl)phthalate	61J	190U	57J	180U	220U	190U	190U
Total SVOC's	**599**	**ND**	**177**	**ND**	**61**	**ND**	**ND**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T3-S1-0-0 5FT	DAS-T3-S1-3-6FT	DAS-T3-S2-0-0 5FT	DAS-T3-S2-3-6FT	DAS-T3-S3-0-0 5FT	DAS-T3-S3-0-0 5FTEB	DAS-T3-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000	4/19/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw
1 2,4-Trichlorobenzene	210U	220U	200U	190U	190U	10U	210U
1,2-Dichlorobenzene	210U	220U	200U	190U	190U	10U	210U
1,3-Dichlorobenzene	210U	220U	200U	190U	190U	10U	210U
1,4-Dichlorobenzene	210U	220U	200U	190U	190U	10U	210U
2,2'-Oxybis(1-Chloropropane)	210U	220U	200U	190U	190U	10U	210U
2,4,5-Trichlorophenol	210U	220U	200U	190U	190U	10U	210U
2,4,6-Trichlorophenol	210U	220U	200U	190U	190U	2 1U	210U
2,4-Dichlorophenol	210U	220U	200U	190U	190U	10U	210U
2,4-Dinitrophenol	1000U	1100U	1000U	940U	970U	14U	1000U
2,4-Dinitrotoluene	210U	220U	200U	190U	190U	10U	210U
2,6-Dinitrotoluene	210U	220U	200U	190U	190U	10U	210U
2-Chloronaphthalene	210U	220U	200U	190U	190U	10U	210U
2-Chlorophenol	210U	220U	200U	190U	190U	10U	210U
2-Methylnaphthalene	210U	220U	200U	190U	190U	10U	210U
2-Methylphenol (o-cresol)	210U	220U	200U	190U	190U	10U	210U
2-Nitroaniline	1000U	1100U	1000U	940U	970U	50U	1000U
2-Nitrophenol	210U	220U	200U	190U	190U	10U	210U
3&4-Methylphenol (m&p-cresol)	210U	220U	200U	190U	190U	10U	210U
3,3'-Dichlorobenzidine	410U	430U	390U	360U	380U	20U	410U
3-Nitroaniline	1000U	1100U	1000U	940U	970U	50U	1000U
4,6-Dinitro-2-methylphenol	1000U	1100U	1000U	940U	970U	13U	1000U
4-Bromophenylphenyl ether	210U	220U	200U	190U	190U	1 0U	210U
4-Chloro-3-methylphenol	210U	220U	200U	190U	190U	10U	210U
4-Chloroaniline	410U	430U	390U	360U	380U	20U	410U
4-Chlorophenylphenyl ether	210U	220U	200U	190U	190U	10U	210U
4-Nitroaniline	1000U	1100U	1000U	940U	970U	50U	1000U
4-Nitrophenol	1000U	1100U	1000U	940U	970U	50U	1000U
Acenaphthene	210U	220U	200U	190U	190U	10U	210U
Acenaphthylene	210U	220U	200U	190U	190U	10U	210U
Anthracene	210U	220U	200U	190U	26J	10U	210U
Benzo(a)anthracene	82J	220U	35J	190U	79J	10U	210U
Benzo(a)pyrene	82J	120U	43J	100U	80J	10U	110U
Benzo(b)fluoranthene	82J	220U	45J	190U	84J	10U	210U
Benzo(g,h,i)perylene	75J	110J	38J	70J	60J	10U	77J
Benzo(k)fluoranthene	83J	220U	38J	190U	61J	10U	210U
Butylbenzylphthalate	210U	220U	200U	190U	190U	10U	210U
Carbazole	210U	220U	200U	190U	190U	3 4U	210U
Chrysene	100J	220U	46J	190U	100J	10U	210U

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T3-S1-0-0 5FT	DAS-T3-S1-3-6FT	DAS-T3-S2-0-0 5FT	DAS-T3-S2-3-6FT	DAS-T3-S3-0-0 5FT	DAS-T3-S3-0-0 5FTEB	DAS-T3-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000	4/19/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw
Dibenzo(a,h)anthracene	110U	87J	110U	100U	100U	10U	110U
Dibenzofuran	210U	220U	200U	190U	190U	10U	210U
Diethylphthalate	210U	220U	200U	190U	190U	10U	210U
Dimethylphthalate	210U	220U	200U	190U	190U	10U	210U
Di-n-butylphthalate	210U	220U	200U	190U	190U	10U	210U
Di-n-octylphthalate	210U	220U	200U	190U	190U	10U	210U
Fluoranthene	220	220U	86J	190U	190J	10U	210U
Fluorene	210U	220U	200U	190U	190U	1 0U	210U
Hexachlorobenzene	86U	91U	83U	78U	80U	10U	86U
Hexachlorobutadiene	210U	220U	200U	190U	190U	10U	210U
Hexachlorocyclopentadiene	210U	220U	200U	190U	190U	10U	210U
Hexachloroethane	210U	220U	200U	190U	190U	1 9U	210U
Indeno(1,2,3-cd)pyrene	210U	92J	200U	190U	190U	10U	210U
Isophorone	210U	220U	200U	190U	190U	10U	210U
Naphthalene	210U	220U	200U	190U	190U	10U	210U
Nitrobenzene	210U	220U	200U	190U	190U	3 5U	210U
n-Nitrosodi-n-propylamine	210U	220U	200U	190U	190U	10U	210U
N-Nitrosodiphenylamine	210U	220U	200U	190U	190U	5 0U	210U
Pentachlorophenol	1000U	1100U	1000U	940U	970U	5 0U	1000U
Phenanthrene	92J	220U	24J	190U	93J	10U	210U
Phenol	210U	220U	200U	190U	190U	10U	210U
Pyrene	160J	220U	200U	190U	130J	10U	210U
bis(2-Chloroethoxy)methane	210U	220U	200U	190U	190U	10U	210U
bis(2-Chloroethyl)ether	210U	220U	200U	190U	190U	10U	210U
bis(2-Ethylhexyl)phthalate	100J	88J	120J	57J	430	1 8U	72J
Total SVOC's	**1076**	**377**	**475**	**127**	**1333**	**ND**	**149**

Notes ' -ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T4-S1-0-0 5FT	DAS-T4-S1-0-0 5FTFD	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FTFD	DAS-T4-S2-0-0 5FT	DAS-T4-S2-3-6FT	DAS-T4-S3-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000	4/20/2000	4/20/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 2,4-Trichlorobenzene	210U	200U	220U	220U	210U	200U	210U
1,2-Dichlorobenzene	210U	200U	220U	220U	210U	200U	210U
1,3-Dichlorobenzene	210U	200U	220U	220U	210U	200U	210U
1,4-Dichlorobenzene	210U	200U	220U	220U	210U	200U	210U
2,2'-Oxybis(1-Chloropropane)	210U	200U	220U	220U	210U	200U	210U
2,4,5-Trichlorophenol	210U	200U	220U	220U	210U	200U	210U
2,4,6-Trichlorophenol	210U	200U	220U	220U	210U	200U	210U
2,4-Dichlorophenol	210U	200U	220U	220U	210U	200U	210U
2,4-Dinitrophenol	1000U	1000U	1100U	1100U	1000U	1000U	1000U
2,4-Dinitrotoluene	210U	200U	220U	220U	210U	200U	210U
2,6-Dinitrotoluene	210U	200U	220U	220U	210U	200U	210U
2-Chloronaphthalene	210U	200U	220U	220U	210U	200U	210U
2-Chlorophenol	210U	200U	220U	220U	210U	200U	210U
2-Methylnaphthalene	210U	200U	220U	220U	210U	200U	210U
2-Methylphenol (o-cresol)	210U	200U	220U	220U	210U	200U	210U
2-Nitroaniline	1000U	1000U	1100U	1100U	1000U	1000U	1000U
2-Nitrophenol	210U	200U	220U	220U	210U	200U	210U
3&4-Methylphenol (m&p-cresol)	210U	200U	220U	220U	210U	200U	210U
3,3'-Dichlorobenzidine	400U	400U	430U	420U	410U	390U	400U
3-Nitroaniline	1000U	1000U	1100U	1100U	1000U	1000U	1000U
4,6-Dinitro-2-methylphenol	1000U	1000U	1100U	1100U	1000U	1000U	1000U
4-Bromophenylphenyl ether	210U	200U	220U	220U	210U	200U	210U
4-Chloro-3-methylphenol	210U	200U	220U	220U	210U	200U	210U
4-Chloroaniline	400U	400U	430U	420U	410U	390U	400U
4-Chlorophenylphenyl ether	210U	200U	220U	220U	210U	200U	210U
4-Nitroaniline	1000U	1000U	1100U	1100U	1000U	1000U	1000U
4-Nitrophenol	1000U	1000U	1100U	1100U	1000U	1000U	1000U
Acenaphthene	43J	200U	220U	220U	210U	200U	210U
Acenaphthylene	210U	200U	220U	220U	210U	200U	210U
Anthracene	84J	200U	220U	220U	210U	200U	210U
Benzo(a)anthracene	200J	200U	220U	220U	210U	200U	210U
Benzo(a)pyrene	160	110U	120U	120U	110U	110U	110U
Benzo(b)fluoranthene	130J	30J	220U	220U	210U	200U	210U
Benzo(g,h,i)perylene	100J	200U	74J	51J	210U	200U	210U
Benzo(k)fluoranthene	140J	200U	220U	220U	210U	200U	210U
Butylbenzylphthalate	210U	200U	220U	220U	210U	200U	210UJ
Carbazole	45J	200U	220U	220U	210U	200U	210U
Chrysene	200J	29J	220U	220U	35J	200U	210UJ

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T4-S1-0-0 5FT	DAS-T4-S1-0-0 5FTFD	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FTFD	DAS-T4-S2-0-0 5FT	DAS-T4-S2-3-6FT	DAS-T4-S3-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000	4/20/2000	4/20/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	110U	110U	120U	120U	110U	110U	110U
Dibenzofuran	210U	200U	220U	220U	210U	200U	210U
Diethylphthalate	210U	200U	220U	220U	210U	200U	210U
Dimethylphthalate	210U	200U	220U	220U	210U	200U	210U
Di-n-butylphthalate	210U	200U	220U	220U	210U	200U	210U
Di-n-octylphthalate	210U	200U	220U	220U	210U	200U	210U
Fluoranthene	440	39J	220U	220U	42J	200U	210U
Fluorene	210U	200U	220U	220U	210U	200U	210U
Hexachlorobenzene	85U	84U	92U	90U	87U	83U	85U
Hexachlorobutadiene	210U	200U	220U	220U	210U	200U	210U
Hexachlorocyclopentadiene	210U	200U	220U	220U	210U	200U	210U
Hexachloroethane	210U	200U	220U	220U	210U	200U	210U
Indeno(1,2,3-cd)pyrene	89J	200U	220U	220U	210U	200U	210U
Isophorone	210U	200U	220U	220U	210U	200U	210U
Naphthalene	210U	200U	220U	220U	210U	200U	210U
Nitrobenzene	210U	200U	220U	220U	210U	200U	210U
n-Nitrosodi-n-propylamine	210U	200U	220U	220U	210U	200U	210U
N-Nitrosodiphenylamine	210U	200U	220U	220U	210U	200U	210U
Pentachlorophenol	1000U	1000U	1100U	1100U	1000U	1000U	1000U
Phenanthrene	390	200U	220U	220U	210U	200U	210U
Phenol	210U	200U	220U	220U	210U	200U	210U
Pyrene	370	200U	220U	220U	210U	200U	210U
bis(2-Chloroethoxy)methane	210U	200U	220U	220U	210U	200U	210U
bis(2-Chloroethyl)ether	210U	200U	220U	220U	210U	200U	210U
bis(2-Ethylhexyl)phthalate	70J	62J	63J	77J	210U	200U	210U
Total SVOC's	**2461**	**160**	**137**	**128**	**77**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T4-S3-3-6FT	DAS-T5-S1-0-0 5FT	DAS-T5-S1-0-0 5FTEB	DAS-T5-S1-3-6FT	DAS-T5-S2-0-0 5FT	DAS-T5-S2-3-6FT	DAS-T5-S3-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/20/2000	4/19/2000	4/20/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000
Units	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	220U	200U	10U	200U	200U	190U	180U
1 2-Dichlorobenzene	220U	200U	10U	200U	200U	190U	180U
1,3-Dichlorobenzene	220U	200U	10U	200U	200U	190U	180U
1 4-Dichlorobenzene	220U	200U	10U	200U	200U	190U	180U
2,2'-Oxybis(1-Chloropropane)	220U	200U	10U	200U	200U	190U	180U
2,4,5-Trichlorophenol	220U	200U	10U	200U	200U	190U	180U
2,4,6-Trichlorophenol	220U	200U	2.1U	200U	200U	190U	180U
2,4-Dichlorophenol	220U	200U	10U	200U	200U	190U	180U
2,4-Dinitrophenol	1100U	1000U	14U	1000U	990U	930U	930U
2,4-Dinitrotoluene	220U	200U	10U	200U	200U	190U	180U
2,6-Dinitrotoluene	220U	200U	10U	200U	200U	190U	180U
2-Chloronaphthalene	220U	200U	10U	200U	200U	190U	180U
2-Chlorophenol	220U	200U	10U	200U	200U	190U	180U
2-Methylnaphthalene	220U	200U	10U	200U	200U	190U	180U
2-Methylphenol (o-cresol)	220U	200U	10U	200U	200U	190U	180U
2-Nitroaniline	1100U	1000U	50U	1000U	990U	930U	930U
2-Nitrophenol	220U	200U	10U	200U	200U	190U	180U
3&4-Methylphenol (m&p-cresol)	220U	200U	10U	200U	200U	190U	180U
3,3'-Dichlorobenzidine	430U	390U	20U	390U	380U	360U	360U
3-Nitroaniline	1100U	1000U	50U	1000U	990U	930U	930U
4,6-Dinitro-2-methylphenol	1100U	1000U	13U	1000U	990U	930U	930U
4-Bromophenylphenyl ether	220U	200U	1 0U	200U	200U	190U	180U
4-Chloro-3-methylphenol	220U	200U	10U	200U	200U	190U	180U
4-Chloroaniline	430U	390U	20U	390U	380U	360U	360U
4-Chlorophenylphenyl ether	220U	200U	10U	200U	200U	190U	180U
4-Nitroaniline	1100U	1000U	50U	1000U	990U	930U	930U
4-Nitrophenol	1100U	1000U	50U	1000U	990U	930U	930U
Acenaphthene	220U	200U	10U	200U	200U	190U	180U
Acenaphthylene	220U	34J	10U	200U	200U	190U	180U
Anthracene	220U	89J	10U	200U	200U	190U	180U
Benzo(a)anthracene	220U	460	10U	200U	46J	190U	95J
Benzo(a)pyrene	120U	600	10U	110U	58J	99U	240
Benzo(b)fluoranthene	220U	780	10U	200U	70J	190U	180J
Benzo(g,h,i)perylene	220U	430	0.80J	200U	44J	30J	370
Benzo(k)fluoranthene	220U	600	10U	200U	58J	190U	190
Butylbenzylphthalate	220U	340	10U	200U	200U	190U	180U
Carbazole	220U	71J	3 4U	200U	200U	190U	180U
Chrysene	220U	710	10U	200U	69J	190U	140J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T4-S3-3-6FT	DAS-T5-S1-0-0 5FT	DAS-T5-S1-0-0 5FTEB	DAS-T5-S1-3-6FT	DAS-T5-S2-0-0 5FT	DAS-T5-S2-3-6FT	DAS-T5-S3-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/20/2000	4/19/2000	4/20/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000
Units	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	120U	110	10U	110U	100U	99U	320
Dibenzofuran	220U	200U	10U	200U	200U	190U	180U
Diethylphthalate	220U	200U	10U	200U	200U	190U	180U
Dimethylphthalate	220U	200U	10U	200U	200U	190U	180U
Di-n-butylphthalate	220U	35J	0.32J	200U	200U	190U	180U
Di-n-octylphthalate	220U	200U	10U	200U	200U	190U	180U
Fluoranthene	220U	1100	10U	200U	100J	190U	170J
Fluorene	220U	200U	1.0U	200U	200U	190U	180U
Hexachlorobenzene	91U	83U	10U	83U	82U	77U	76U
Hexachlorobutadiene	220U	200U	10U	200U	200U	190U	180U
Hexachlorocyclopentadiene	220U	200U	10U	200U	200U	190U	180U
Hexachloroethane	220U	200U	1.9U	200U	200U	190U	180U
Indeno(1,2,3-cd)pyrene	220U	450	10U	200U	200U	190U	350
Isophorone	220U	200U	10U	200U	200U	190U	180U
Naphthalene	220U	200U	10U	200U	200U	190U	180U
Nitrobenzene	220U	200U	3.5U	200U	200U	190U	180U
n-Nitrosodi-n-propylamine	220U	200U	10U	200U	200U	190U	180U
N-Nitrosodiphenylamine	220U	200U	5.0U	200U	200U	190U	180U
Pentachlorophenol	1100U	1000U	5.0U	1000U	990U	930U	930U
Phenanthrene	220U	360	10U	200U	22J	190U	58J
Phenol	220U	200U	10U	200U	200U	190U	180U
Pyrene	220U	810	10U	200U	77J	190U	180J
bis(2-Chloroethoxy)methane	220U	200U	10U	200U	200U	190U	180U
bis(2-Chloroethyl)ether	220U	200U	10U	200U	200U	190U	180U
bis(2-Ethylhexyl)phthalate	220U	180J	1.8U	96J	94J	190U	160J
Total SVOC's	**ND**	**7159**	**1.12**	**96**	**638**	**30**	**2453**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T5-S3-3-6FT	DAS-T6-S1-0-0 5FT	DAS-T6-S1-3-6FT	DAS-T6-S2-0-0 5FT	DAS-T6-S2-3-6FT	DAS-T6-S3-0-0 5FT	DAS-T6-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	190U	200U	190U	190U	200U	180U	190U
1,2-Dichlorobenzene	190U	200U	190U	190U	200U	180U	190U
1,3-Dichlorobenzene	190U	200U	190U	190U	200U	180U	190U
1,4-Dichlorobenzene	190U	200U	190U	190U	200U	180U	190U
2,2'-Oxybis(1-Chloropropane)	190U	200U	190U	190U	200U	180U	190U
2,4,5-Trichlorophenol	190U	200U	190U	190U	200U	180U	190U
2,4,6-Trichlorophenol	190U	200U	190U	190U	200U	180U	190U
2,4-Dichlorophenol	190U	200U	190U	190U	200U	180U	190U
2,4-Dinitrophenol	940U	990U	960U	950U	980U	920U	950U
2,4-Dinitrotoluene	190U	200U	190U	190U	200U	180U	190U
2,6-Dinitrotoluene	190U	200U	190U	190U	200U	180U	190U
2-Chloronaphthalene	190U	200U	190U	190U	200U	180U	190U
2-Chlorophenol	190U	200U	190U	190U	200U	180U	190U
2-Methylnaphthalene	190U	200U	190U	190U	200U	180U	190U
2-Methylphenol (o-cresol)	190U	200U	190U	190U	200U	180U	190U
2-Nitroaniline	940U	990U	960U	950U	980U	920U	950U
2-Nitrophenol	190U	200U	190U	190U	200U	180U	190U
3&4-Methylphenol (m&p-cresol)	190U	200U	190U	190U	200U	180U	190U
3,3'-Dichlorobenzidine	360U	380U	370U	370U	380U	360U	370U
3-Nitroaniline	940U	990U	960U	950U	980U	920U	950U
4,6-Dinitro-2-methylphenol	940U	990U	960U	950U	980U	920U	950U
4-Bromophenylphenyl ether	190U	200U	190U	190U	200U	180U	190U
4-Chloro-3-methylphenol	190U	200U	190U	190U	200U	180U	190U
4-Chloroaniline	360U	380U	370U	370U	380U	360U	370U
4-Chlorophenylphenyl ether	190U	200U	190U	190U	200U	180U	190U
4-Nitroaniline	940U	990U	960U	950U	980U	920U	950U
4-Nitrophenol	940U	990U	960U	950U	980U	920U	950U
Acenaphthene	190U	200U	190U	190U	200U	420	190U
Acenaphthylene	190U	200U	190U	190U	200U	180U	190U
Anthracene	190U	200U	190U	190U	200U	1400	190U
Benzo(a)anthracene	190UJ	200U	190U	70J	200U	4200	190U
Benzo(a)pyrene	100U	100U	100U	78J	100U	3600	100U
Benzo(b)fluoranthene	190U	200U	190U	72J	200U	4400	190U
Benzo(g,h,i)perylene	190U	200U	190U	190U	200U	1300	190U
Benzo(k)fluoranthene	190U	200U	190U	53J	200U	3400	190U
Butylbenzylphthalate	190UJ	200U	190U	190U	200U	57J	190U
Carbazole	190U	200U	190U	190U	200U	860	190U
Chrysene	190UJ	200U	190U	100J	200U	4900	190U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T5-S3-3-6FT	DAS-T6-S1-0-0 5FT	DAS-T6-S1-3-6FT	DAS-T6-S2-0-0 5FT	DAS-T6-S2-3-6FT	DAS-T6-S3-0-0 5FT	DAS-T6-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	100U	100U	100U	100U	100U	600	100U
Dibenzofuran	190U	200U	190U	190U	200U	230	190U
Diethylphthalate	190U	200U	190U	190U	200U	180U	190U
Dimethylphthalate	190UJ	200U	190U	190U	200U	180U	190U
Di-n-butylphthalate	190U	200U	190U	190U	200U	180U	190U
Di-n-octylphthalate	190U	200U	190U	190U	200U	180U	190U
Fluoranthene	190U	200U	190U	110J	200U	9800	190U
Fluorene	190U	200U	190U	190U	200U	580	190U
Hexachlorobenzene	78U	82U	79U	78U	80U	76U	78U
Hexachlorobutadiene	190U	200U	190U	190U	200U	180U	190U
Hexachlorocyclopentadiene	190U	200U	190U	190U	200U	180U	190U
Hexachloroethane	190U	200U	190U	190U	200U	180U	190U
Indeno(1,2,3-cd)pyrene	190U	200U	190U	190U	200U	1100	190U
Isophorone	190U	200U	190U	190U	200U	180U	190U
Naphthalene	190U	200U	190U	190U	200U	180U	190U
Nitrobenzene	190U	200U	190U	190U	200U	180U	190U
n-Nitrosodi-n-propylamine	190U	200U	190U	190U	200U	180U	190U
N-Nitrosodiphenylamine	190UJ	200U	190U	190U	200U	180U	190U
Pentachlorophenol	940U	990U	960U	950U	980U	920U	950U
Phenanthrene	190U	200U	190U	28J	200U	7100	190U
Phenol	190U	200U	190U	190U	200U	180U	190U
Pyrene	190U	200U	190U	110J	200U	7700	190U
bis(2-Chloroethoxy)methane	190U	200U	190U	190U	200U	180U	190U
bis(2-Chloroethyl)ether	190U	200U	190U	190U	200U	180U	190U
bis(2-Ethylhexyl)phthalate	65J	200U	190U	190U	200U	360	190U
Total SVOC's	**65**	**ND**	**ND**	**621**	**ND**	**52007**	**ND**

Notes ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T7-S1-0-0 5FT	DAS-T7-S1-3-6FT	DAS-T7-S2-0-0 5FT	DAS-T7-S2-3-6FT	UAS-T1-S1-0-0 5FT	UAS-T1-S1-3-6FT	UAS-T1-S2-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	4/20/2000	4/20/2000	4/20/2000	4/20/2000	11/10/1999	11/10/1999	11/10/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	190U	220U	200U	220U	210U	200U	210U
1,2-Dichlorobenzene	190U	220U	200U	220U	210U	200U	210U
1,3-Dichlorobenzene	190U	220U	200U	220U	210U	200U	210U
1,4-Dichlorobenzene	190U	220U	200U	220U	210U	200U	210U
2,2'-Oxybis(1-Chloropropane)	190U	220U	200U	220U	210U	200U	210U
2,4,5-Trichlorophenol	190U	220U	200U	220U	210U	200U	210U
2,4,6-Trichlorophenol	190U	220U	200U	220U	210U	200U	210U
2,4-Dichlorophenol	190U	220U	200U	220U	210U	200U	210U
2,4-Dinitrophenol	970U	1100U	1000U	1100U	1000U	1000U	1000U
2,4-Dinitrotoluene	190U	220U	200U	220U	210U	200U	210U
2,6-Dinitrotoluene	190U	220U	200U	220U	210U	200U	210U
2-Chloronaphthalene	190U	220U	200U	220U	210U	200U	210U
2-Chlorophenol	190U	220U	200U	220U	210U	200U	210U
2-Methylnaphthalene	190U	220U	200U	220U	210U	200U	210U
2-Methylphenol (o-cresol)	190U	220U	200U	220U	210U	200U	210U
2-Nitroaniline	970U	1100U	1000U	1100U	1000U	1000U	1000U
2-Nitrophenol	190U	220U	200U	220U	210U	200U	210U
3&4-Methylphenol (m&p-cresol)	190U	220U	200U	220U	210U	200U	210U
3,3'-Dichlorobenzidine	380U	420U	390U	430U	410U	390U	410U
3-Nitroaniline	970U	1100U	1000U	1100U	1000U	1000U	1000U
4,6-Dinitro-2-methylphenol	970U	1100U	1000U	1100U	1000U	1000U	1000U
4-Bromophenylphenyl ether	190U	220U	200U	220U	210U	200U	210U
4-Chloro-3-methylphenol	190U	220U	200U	220U	210U	200U	210U
4-Chloroaniline	380U	420U	390U	430U	410U	390U	410U
4-Chlorophenylphenyl ether	190U	220U	200U	220U	210U	200U	210U
4-Nitroaniline	970U	1100U	1000U	1100U	1000U	1000U	1000U
4-Nitrophenol	970U	1100U	1000U	1100U	1000U	1000U	1000U
Acenaphthene	59J	220U	160J	220U	210U	200U	210U
Acenaphthylene	190U	220U	200U	220U	210U	200U	210U
Anthracene	100J	220U	360	220U	210U	200U	210U
Benzo(a)anthracene	500	220U	1900	220U	210U	200U	210U
Benzo(a)pyrene	520	120U	2100	120U	110U	110U	110U
Benzo(b)fluoranthene	580	220U	2200	220U	210U	200U	210U
Benzo(g,h,i)perylene	310	220U	1100	220U	210U	200U	210U
Benzo(k)fluoranthene	470	220U	2100	220U	210U	200U	210U
Butylbenzylphthalate	190U	220U	200U	220U	210U	200U	210U
Carbazole	110J	220U	310	220U	210U	200U	210U
Chrysene	770	220U	2600	220U	210U	200U	210U

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	DAS-T7-S1-0-0 5FT	DAS-T7-S1-3-6FT	DAS-T7-S2-0-0 5FT	DAS-T7-S2-3-6FT	UAS-T1-S1-0-0 5FT	UAS-T1-S1-3-6FT	UAS-T1-S2-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	4/20/2000	4/20/2000	4/20/2000	4/20/2000	11/10/1999	11/10/1999	11/10/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	120	120U	410	120U	110U	110U	110U
Dibenzofuran	190U	220U	52J	220U	210U	200U	210U
Diethylphthalate	190U	220U	200U	220U	210U	200U	210U
Dimethylphthalate	190U	220U	200U	220U	210U	200U	210U
Di-n-butylphthalate	190U	220U	200U	220U	210U	200U	210U
Di-n-octylphthalate	190U	220U	200U	220U	210U	200U	210U
Fluoranthene	1400	220U	5600	220U	210U	200U	210U
Fluorene	56J	220U	140J	220U	210U	200U	210U
Hexachlorobenzene	80U	90U	83U	92U	86U	84U	87U
Hexachlorobutadiene	190U	220U	200U	220U	210U	200U	210U
Hexachlorocyclopentadiene	190U	220U	200U	220U	210U	200U	210U
Hexachloroethane	190U	220U	200U	220U	210U	200U	210U
Indeno(1,2,3-cd)pyrene	280	220U	1100	220U	210U	200U	210U
Isophorone	190U	220U	200U	220U	210U	200U	210U
Naphthalene	190U	220U	200U	220U	210U	200U	210U
Nitrobenzene	190U	220U	200U	220U	210U	200U	210U
n-Nitrosodi-n-propylamine	190U	220U	200U	220U	210U	200U	210U
N-Nitrosodiphenylamine	190U	220U	200U	220U	210U	200U	210U
Pentachlorophenol	970U	1100U	1000U	1100U	1000U	1000U	1000U
Phenanthrene	970	220U	2900	220U	210U	200U	210U
Phenol	190U	220U	200U	220U	210U	200U	210U
Pyrene	1000	220U	3900	220U	210U	200U	210U
bis(2-Chloroethoxy)methane	190U	220U	200U	220U	210U	200U	210U
bis(2-Chloroethyl)ether	190U	220U	200U	220U	210U	200U	210U
bis(2-Ethylhexyl)phthalate	190U	140J	91J	220U	210U	200U	210U
Total SVOC's	**7245**	**140**	**27023**	**ND**	**ND**	**ND**	**ND**

Notes : ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T1-S2-3-6FT	UAS-T1-S3-0-0 5FT	UAS-T1-S3-3-6FT	UAS-T1-S4-0-0 5FT	UAS-T1-S4-3-6FT	UAS-T1-S5-0-0 5FT	UAS-T1-S5-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/10/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 2,4-Trichlorobenzene	210U	210U	220U	200U	180U	200U	180U
1,2-Dichlorobenzene	210U	210U	220U	200U	180U	200U	180U
1,3-Dichlorobenzene	210U	210U	220U	200U	180U	200U	180U
1,4-Dichlorobenzene	210U	210U	220U	200U	180U	200U	180U
2,2'-Oxybis(1-Chloropropane)	210U	210U	220U	200U	180U	200U	180U
2,4,5-Trichlorophenol	210U	210U	220U	200U	180U	200U	180U
2,4,6-Trichlorophenol	210U	210U	220U	200U	180U	200U	180U
2,4-Dichlorophenol	210U	210U	220U	200U	180U	200U	180U
2,4-Dinitrophenol	1100U	1100U	1100U	1000U	910U	990U	920U
2,4-Dinitrotoluene	210U	210U	220U	200U	180U	200U	180U
2,6-Dinitrotoluene	210U	210U	220U	200U	180U	200U	180U
2-Chloronaphthalene	210U	210U	220U	200U	180U	200U	180U
2-Chlorophenol	210U	210U	220U	200U	180U	200U	180U
2-Methylnaphthalene	210U	210U	220U	200U	180U	200U	180U
2-Methylphenol (o-cresol)	210U	210U	220U	200U	180U	200U	180U
2-Nitroaniline	1100U	1100U	1100U	1000U	910U	990U	920U
2-Nitrophenol	210U	210U	220U	200U	180U	200U	180U
3&4-Methylphenol (m&p-cresol)	210U	210U	220U	200U	180U	200U	180U
3,3'-Dichlorobenzidine	410U	420U	440U	390U	360U	380U	360U
3-Nitroaniline	1100U	1100U	1100U	1000U	910U	990U	920U
4,6-Dinitro-2-methylphenol	1100U	1100U	1100U	1000U	910U	990U	920U
4-Bromophenylphenyl ether	210U	210U	220U	200U	180U	200U	180U
4-Chloro-3-methylphenol	210U	210U	220U	200U	180U	200U	180U
4-Chloroaniline	410U	420U	440U	390U	360U	380U	360U
4-Chlorophenylphenyl ether	210U	210U	220U	200U	180U	200U	180U
4-Nitroaniline	1100U	1100U	1100U	1000U	910U	990U	920U
4-Nitrophenol	1100U	1100U	1100U	1000U	910U	990U	920U
Acenaphthene	210U	210U	220U	200U	180U	200U	180U
Acenaphthylene	210U	210U	220U	200U	180U	200U	180U
Anthracene	210U	210U	220U	200U	180U	200U	180U
Benzo(a)anthracene	210U	210U	220U	200U	180U	200U	180U
Benzo(a)pyrene	110U	110U	120U	110U	97U	100U	97U
Benzo(b)fluoranthene	210U	210U	220U	200U	180U	200U	180U
Benzo(g,h,i)perylene	210U	210U	220U	200U	180U	200U	180U
Benzo(k)fluoranthene	210U	210U	220U	200U	180U	200U	180U
Butylbenzylphthalate	210U	210U	220U	200U	180U	200U	180U
Carbazole	210U	210U	220U	200U	180U	200U	180U
Chrysene	210U	210U	220U	200U	180U	200U	180U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T1-S2-3-6FT	UAS-T1-S3-0-0 5FT	UAS-T1-S3-3-6FT	UAS-T1-S4-0-0 5FT	UAS-T1-S4-3-6FT	UAS-T1-S5-0-0 5FT	UAS-T1-S5-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/10/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	110U	110U	120U	110U	97U	100U	97U
Dibenzofuran	210U	210U	220U	200U	180U	200U	180U
Diethylphthalate	210U	210U	220U	200U	180U	200U	180U
Dimethylphthalate	210U	210U	220U	200U	180U	200U	180U
Di-n-butylphthalate	210U	210U	220U	200U	180U	200U	180U
Di-n-octylphthalate	210U	210U	220U	200U	180U	200U	180U
Fluoranthene	210U	210U	220U	200U	180U	200U	180U
Fluorene	210U	210U	220U	200U	180U	200U	180U
Hexachlorobenzene	87U	88U	93U	83U	75U	81U	76U
Hexachlorobutadiene	210U	210U	220U	200U	180U	200U	180U
Hexachlorocyclopentadiene	210U	210U	220U	200U	180U	200U	180U
Hexachloroethane	210U	210U	220U	200U	180U	200U	180U
Indeno(1,2,3-cd)pyrene	210U	210U	220U	200U	180U	200U	180U
Isophorone	210U	210U	220U	200U	180U	200U	180U
Naphthalene	210U	210U	220U	200U	180U	200U	180U
Nitrobenzene	210U	210U	220U	200U	180U	200U	180U
n-Nitrosodi-n-propylamine	210U	210U	220U	200U	180U	200U	180U
N-Nitrosodiphenylamine	210U	210U	220U	200U	180U	200U	180U
Pentachlorophenol	1100U	1100U	1100U	1000U	910U	990U	920U
Phenanthrene	210U	210U	220U	200U	180U	200U	180U
Phenol	210U	210U	220U	200U	180U	200U	180U
Pyrene	210U	210U	220U	200U	180U	200U	180U
bis(2-Chloroethoxy)methane	210U	210U	220U	200U	180U	200U	180U
bis(2-Chloroethyl)ether	210U	210U	220U	200U	180U	200U	180U
bis(2-Ethylhexyl)phthalate	210U	210U	220U	200U	180U	200U	180U
Total SVOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T1-S6-0-0 5FT	UAS-T1-S6-3-6FT	UAS-T1-S7-0-0 5FT	UAS-T1-S7-0-0 5FTEB	UAS-T1-S7-0-0 5FTFD	UAS-T1-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	180U	200U	190U	10U	190U	200U
1,2-Dichlorobenzene	180U	200U	190U	10U	190U	200U
1,3-Dichlorobenzene	180U	200U	190U	10U	190U	200U
1,4-Dichlorobenzene	180U	200U	190U	10U	190U	200U
2,2'-Oxybis(1-Chloropropane)	180U	200U	190U	10U	190U	200U
2,4,5-Trichlorophenol	180U	200U	190U	10U	190U	200U
2,4,6-Trichlorophenol	180U	200U	190U	2 1U	190U	200U
2,4-Dichlorophenol	180U	200U	190U	10U	190U	200U
2,4-Dinitrophenol	910U	1000U	940U	14U	940U	990U
2,4-Dinitrotoluene	180U	200U	190U	10U	190U	200U
2,6-Dinitrotoluene	180U	200U	190U	10U	190U	200U
2-Chloronaphthalene	180U	200U	190U	10U	190U	200U
2-Chlorophenol	180U	200U	190U	10U	190U	200U
2-Methylnaphthalene	180U	200U	190U	10U	190U	200U
2-Methylphenol (o-cresol)	180U	200U	190U	10U	190U	200U
2-Nitroaniline	910U	1000U	940U	50U	940U	990U
2-Nitrophenol	180U	200U	190U	10U	190U	200U
3&4-Methylphenol (m&p-cresol)	180U	200U	190U	10U	190U	200U
3,3'-Dichlorobenzidine	360U	400U	360U	20U	360U	380U
3-Nitroaniline	910U	1000U	940U	50U	940U	990U
4,6-Dinitro-2-methylphenol	910U	1000U	940U	13U	940U	990U
4-Bromophenylphenyl ether	180U	200U	190U	1 0U	190U	200U
4-Chloro-3-methylphenol	180U	200U	190U	10U	190U	200U
4-Chloroaniline	360U	400U	360U	20U	360U	380U
4-Chlorophenylphenyl ether	180U	200U	190U	10U	190U	200U
4-Nitroaniline	910U	1000U	940U	50U	940U	990U
4-Nitrophenol	910U	1000U	940U	50U	940U	990U
Acenaphthene	180U	200U	190U	10U	190U	200U
Acenaphthylene	180U	200U	190U	10U	190U	200U
Anthracene	180U	200U	190U	10U	190U	200U
Benzo(a)anthracene	180U	200U	190U	10U	190U	200U
Benzo(a)pyrene	97U	110U	99U	10U	99U	100U
Benzo(b)fluoranthene	180U	200U	190U	10U	190U	200U
Benzo(g,h,i)perylene	180U	200U	190U	10U	190U	200U
Benzo(k)fluoranthene	180U	200U	190U	10U	190U	200U
Butylbenzylphthalate	180U	200U	190U	10U	190U	200U
Carbazole	180U	200U	190U	10U	190U	200U
Chrysene	180U	200U	190U	10U	190U	200U

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T1-S6-0-0 5FT	UAS-T1-S6-3-6FT	UAS-T1-S7-0-0 5FT	UAS-T1-S7-0-0 5FTEB	UAS-T1-S7-0-0 5FTFD	UAS-T1-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	97U	110U	99U	10U	99U	100U
Dibenzofuran	180U	200U	190U	10U	190U	200U
Diethylphthalate	180U	200U	190U	10U	190U	200U
Dimethylphthalate	180U	200U	190U	10U	190U	200U
Di-n-butylphthalate	180U	200U	190U	10U	190U	200U
Di-n-octylphthalate	180U	200U	190U	10U	190U	200U
Fluoranthene	180U	200U	37J	10U	190U	200U
Fluorene	180U	200U	190U	1 0U	190U	200U
Hexachlorobenzene	75U	84U	77U	10U	77U	82U
Hexachlorobutadiene	180U	200U	190U	10U	190U	200U
Hexachlorocyclopentadiene	180U	200U	190U	10U	190U	200U
Hexachloroethane	180U	200U	190U	1 9U	190U	200U
Indeno(1,2,3-cd)pyrene	180U	200U	190U	10U	190U	200U
Isophorone	180U	200U	190U	10U	190U	200U
Naphthalene	180U	200U	190U	10U	190U	200U
Nitrobenzene	180U	200U	190U	3 5U	190U	200U
n-Nitrosodi-n-propylamine	180U	200U	190U	10U	190U	200U
N-Nitrosodiphenylamine	180U	200U	190U	5 0U	190U	200U
Pentachlorophenol	910U	1000U	940U	5 0U	940U	990U
Phenanthrene	180U	200U	190U	10U	190U	200U
Phenol	180U	200U	190U	10U	190U	200U
Pyrene	180U	200U	190U	10U	190U	200U
bis(2-Chloroethoxy)methane	180U	200U	190U	10U	190U	200U
bis(2-Chloroethyl)ether	180U	200U	190U	10U	190U	200U
bis(2-Ethylhexyl)phthalate	180U	69J	190U	1 8U	190U	200
Total SVOC's	**ND**	**69**	**37**	**ND**	**ND**	**200**

Notes: t detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T1-S7-3-6FTEB	UAS-T1-S7-3-6FTFD	UAS-T2-S1-0-0 5FT	UAS-T2-S1-3-6FT	UAS-T2-S2-0-0 5FT	UAS-T2-S2-3-6FT	UAS-T2-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 2,4-Trichlorobenzene	10U	200U	190U	180U	200U	190U	210U
1,2-Dichlorobenzene	10U	200U	190U	180U	200U	190U	210U
1,3-Dichlorobenzene	10U	200U	190U	180U	200U	190U	210U
1,4-Dichlorobenzene	10U	200U	190U	180U	200U	190U	210U
2,2'-Oxybis(1-Chloropropane)	10U	200U	190U	180U	200U	190U	210U
2,4,5-Trichlorophenol	10U	200U	190U	180U	200U	190U	210U
2,4,6-Trichlorophenol	2 1U	200U	190U	180U	200U	190U	210U
2,4-Dichlorophenol	10U	200U	190U	180U	200U	190U	210U
2,4-Dinitrophenol	14U	990U	930U	900U	1000U	950U	1000U
2 4-Dinitrotoluene	10U	200U	190U	180U	200U	190U	210U
2,6-Dinitrotoluene	10U	200U	190U	180U	200U	190U	210U
2-Chloronaphthalene	10U	200U	190U	180U	200U	190U	210U
2-Chlorophenol	10U	200U	190U	180U	200U	190U	210U
2-Methylnaphthalene	10U	200U	190U	180U	200U	190U	210U
2-Methylphenol (o-cresol)	10U	200U	190U	180U	200U	190U	210U
2-Nitroaniline	50U	990U	930U	900U	1000U	950U	1000U
2-Nitrophenol	10U	200U	190U	180U	200U	190U	210U
3&4-Methylphenol (m&p-cresol)	10U	200U	190U	180U	200U	370U	410U
3,3'-Dichlorobenzidine	20U	380U	360U	350U	390U	370U	410U
3-Nitroaniline	50U	990U	930U	900U	1000U	950U	1000U
4,6-Dinitro-2-methylphenol	13U	990U	930U	900U	1000U	950U	1000U
4-Bromophenylphenyl ether	1 0U	200U	190U	180U	200U	190U	210U
4-Chloro-3-methylphenol	10U	200U	190U	180U	200U	190U	210U
4-Chloroaniline	20U	380U	360U	350U	390U	370U	410U
4-Chlorophenylphenyl ether	10U	200U	190U	180U	200U	190U	210U
4-Nitroaniline	50U	990U	930U	900U	1000U	950U	1000U
4-Nitrophenol	50U	990U	930U	900U	1000U	950U	1000U
Acenaphthene	10U	200U	190U	180U	200U	190U	210U
Acenaphthylene	10U	200U	190U	180U	200U	190U	210U
Anthracene	10U	200U	190U	180U	200U	190U	210U
Benzo(a)anthracene	10U	200U	190U	180U	200U	190U	210U
Benzo(a)pyrene	1,0U	100U	99U	96U	110U	100U	110U
Benzo(b)fluoranthene	10U	200U	190U	180U	200U	190U	210U
Benzo(g,h,i)perylene	10U	200U	190U	180U	200U	190U	210U
Benzo(k)fluoranthene	10U	200U	190U	180U	200U	190U	210U
Butylbenzylphthalate	10U	200U	190U	180U	200U	190U	210U
Carbazole	10U	200U	190U	180U	200U	190U	210U
Chrysene	10U	200U	190U	180U	200U	190U	210U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T1-S7-3-6FTEB	UAS-T1-S7-3-6FTFD	UAS-T2-S1-0-0 5FT	UAS-T2-S1-3-6FT	UAS-T2-S2-0-0 5FT	UAS-T2-S2-3-6FT	UAS-T2-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a h)anthracene	10U	100U	99U	96U	110U	100U	110U
Dibenzofuran	10U	200U	190U	180U	200U	190U	210U
Diethylphthalate	10U	200U	190U	180U	200U	190U	210U
Dimethylphthalate	10U	200U	190U	180U	200U	190U	210U
Di-n-butylphthalate	10U	200U	190U	180U	200U	190U	210U
Di-n-octylphthalate	10U	200U	190U	180U	200U	190U	210U
Fluoranthene	10U	200U	190U	180U	200U	190U	210U
Fluorene	1 0U	200U	190U	180U	200U	190U	210U
Hexachlorobenzene	10U	82U	77U	74U	84U	78U	86U
Hexachlorobutadiene	10U	200U	190U	180U	200U	190U	210U
Hexachlorocyclopentadiene	10U	200U	190U	180U	200U	190U	210U
Hexachloroethane	1 9U	200U	190U	180U	200U	190U	210U
Indeno(1,2 3-cd)pyrene	10U	200U	190U	180U	200U	190U	210U
Isophorone	10U	200U	190U	180U	200U	190U	210U
Naphthalene	10U	200U	190U	180U	200U	190U	210U
Nitrobenzene	3 5U	200U	190U	180U	200U	190U	210U
n-Nitrosodi-n-propylamine	10U	200U	190U	180U	200U	190U	210U
N-Nitrosodiphenylamine	5 0U	200U	190U	180U	200U	190U	210U
Pentachlorophenol	5 0U	990U	930U	900U	1000U	950U	1000U
Phenanthrene	10U	200U	190U	180U	200U	190U	210U
Phenol	10U	200U	190U	180U	200U	190U	210U
Pyrene	10U	200U	190U	180U	200U	190U	210U
bis(2-Chloroethoxy)methane	10U	200U	190U	180U	200U	190U	210U
bis(2-Chloroethyl)ether	10U	200U	190U	180U	200U	190U	210U
bis(2-Ethylhexyl)phthalate	1 8U	200U	190U	160J	200U	64J	210U
Total SVOC's	**ND**	**ND**	**ND**	**160**	**ND**	**64**	**ND**

Notes ot detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T2-S3-3-6FT	UAS-T2-S4-0-0.5FT	UAS-T2-S4-3-6FT	UAS-T2-S5-0-0 5FT	UAS-T2-S5-3-6FT	UAS-T2-S6-0-0 5FT	UAS-T2-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	200U	200U	230UJ	200U	220U	200U	200U
1,2-Dichlorobenzene	200U	200U	230UJ	200U	220U	200U	200U
1,3-Dichlorobenzene	200U	200U	230U	200U	220U	200U	200U
1,4-Dichlorobenzene	200U	200U	230U	200U	220U	200U	200U
2,2'-Oxybis(1-Chloropropane)	200U	200U	230U	200U	220U	200U	200U
2,4,5-Trichlorophenol	200U	200U	230U	200U	220U	200U	200U
2,4,6-Trichlorophenol	200U	200U	230U	200U	220U	200U	200U
2,4-Dichlorophenol	200U	200U	230U	200U	220U	200U	200U
2,4-Dinitrophenol	980U	1000U	1100U	1000U	1100U	1000U	1000U
2,4-Dinitrotoluene	200U	200U	230U	200U	220U	200U	200U
2,6-Dinitrotoluene	200U	200U	230U	200U	220U	200U	200U
2-Chloronaphthalene	200U	200U	230U	200U	220U	200U	200U
2-Chlorophenol	200U	200U	230U	200U	220U	200U	200U
2-Methylnaphthalene	200U	200U	230U	200U	220U	200U	200U
2-Methylphenol (o-cresol)	200U	200U	230U	200U	220U	200U	200U
2-Nitroaniline	980U	1000U	1100U	1000U	1100U	1000U	1000U
2-Nitrophenol	200U	200U	230U	200U	220U	200U	200U
3&4-Methylphenol (m&p-cresol)	380U	200U	440U	390U	420U	390U	390U
3,3'-Dichlorobenzidine	380U	390U	440U	390U	420U	390U	390U
3-Nitroaniline	980U	1000U	1100U	1000U	1100U	1000U	1000U
4,6-Dinitro-2-methylphenol	980U	1000U	1100U	1000U	1100U	1000U	1000U
4-Bromophenylphenyl ether	200U	200U	230UJ	200U	220U	200U	200U
4-Chloro-3-methylphenol	200U	200U	230U	200U	220U	200U	200U
4-Chloroaniline	380U	390U	440U	390U	420U	390U	390U
4-Chlorophenylphenyl ether	200U	200U	230U	200U	220U	200U	200U
4-Nitroaniline	980U	1000U	1100U	1000U	1100U	1000U	1000U
4-Nitrophenol	980U	1000U	1100U	1000U	1100U	1000U	1000U
Acenaphthene	200U	200U	230U	200U	220U	200U	200U
Acenaphthylene	200U	200U	230U	200U	220U	200U	200U
Anthracene	200U	200U	230U	200U	220U	200U	200U
Benzo(a)anthracene	200U	200U	230U	200U	220U	72J	200U
Benzo(a)pyrene	100U	110U	120U	110U	110U	72J	110U
Benzo(b)fluoranthene	200U	200U	230U	200U	220U	72J	200U
Benzo(g,h,i)perylene	200U	200U	230U	200U	220U	40J	200U
Benzo(k)fluoranthene	200U	200U	230U	200U	220U	53J	200U
Butylbenzylphthalate	200U	200U	230U	200U	220U	200U	200U
Carbazole	200U	200U	230U	200U	220U	200U	200U
Chrysene	200U	200U	230U	200U	220U	89J	200U

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T2-S3-3-6FT	UAS-T2-S4-0-0 5FT	UAS-T2-S4-3-6FT	UAS-T2-S5-0-0 5FT	UAS-T2-S5-3-6FT	UAS-T2-S6-0-0 5FT	UAS-T2-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	100U	110U	120U	110U	110U	110U	110U
Dibenzofuran	200U	200U	230U	200U	220U	200U	200U
Diethylphthalate	200U	200U	230U	200U	220U	200U	200U
Dimethylphthalate	200U	200U	230U	200U	220U	200U	200U
Di-n-butylphthalate	200U	200U	230U	200U	220U	200U	200U
Di-n-octylphthalate	200U	200U	230U	200U	220U	200U	200U
Fluoranthene	200U	200U	230U	200U	220U	150J	200U
Fluorene	200U	200U	230U	200U	220U	200U	200U
Hexachlorobenzene	80U	84U	94U	83U	89U	84U	82U
Hexachlorobutadiene	200U	200U	230U	200U	220U	200U	200U
Hexachlorocyclopentadiene	200U	200U	230U	200U	220U	200U	200U
Hexachloroethane	200U	200U	230UJ	200U	220U	200U	200U
Indeno(1,2,3-cd)pyrene	200U	200U	230U	200U	220U	200U	200U
Isophorone	200U	200U	230U	200U	220U	200U	200U
Naphthalene	200U	200U	230U	200U	220U	200U	200U
Nitrobenzene	200U	200U	230U	200U	220U	200U	200U
n-Nitrosodi-n-propylamine	200U	200U	230U	200U	220U	200U	200U
N-Nitrosodiphenylamine	200U	200U	230U	200U	220U	200U	200U
Pentachlorophenol	980U	1000U	1100U	1000U	1100U	1000U	1000U
Phenanthrene	200U	200U	230U	200U	220U	61J	200U
Phenol	200U	200U	230U	200U	220U	200U	200U
Pyrene	200U	200U	230U	200U	220U	120J	200U
bis(2-Chloroethoxy)methane	200U	200U	230U	200U	220U	200U	200U
bis(2-Chloroethyl)ether	200U	200U	230U	200U	220U	200U	200U
bis(2-Ethylhexyl)phthalate	62J	200U	45J	200U	120J	94J	200U
Total SVOC's	**62**	**ND**	**45**	**ND**	**120**	**823**	**ND**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T3-S1-0-0 5FT	UAS-T3-S1-3-6FT	UAS-T3-S2-0-0 5FT	UAS-T3-S2-3-6FT	UAS-T3-S3-0-0 5FT	UAS-T3-S3-0-0 5FTFD	UAS-T3-S3-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	210U	210U	200U	220U	200U	200U	190U
1,2-Dichlorobenzene	210U	210U	200U	220U	200U	200U	190U
1,3-Dichlorobenzene	210U	210U	200U	220U	200U	200U	190U
1,4-Dichlorobenzene	210U	210U	200U	220U	200U	200U	190U
2,2'-Oxybis(1-Chloropropane)	210U	210U	200U	220U	200U	200U	190U
2,4,5-Trichlorophenol	210U	210U	200U	220U	200U	200U	190U
2,4,6-Trichlorophenol	210U	210U	200U	220U	200U	200U	190U
2,4-Dichlorophenol	210U	210U	200U	220U	200U	200U	190U
2,4-Dinitrophenol	1000U	1000U	1000U	1100U	980U	980U	970U
2,4-Dinitrotoluene	210U	210U	200U	220U	200U	200U	190U
2,6-Dinitrotoluene	210U	210U	200U	220U	200U	200U	190U
2-Chloronaphthalene	210U	210U	200U	220U	200U	200U	190U
2-Chlorophenol	210U	210U	200U	220U	200U	200U	190U
2-Methylnaphthalene	210U	210U	200U	220U	200U	200U	190U
2-Methylphenol (o-cresol)	210U	210U	200U	220U	200U	200U	190U
2-Nitroaniline	1000U	1000U	1000U	1100U	980U	980U	970U
2-Nitrophenol	210U	210U	200U	220U	200U	200U	190U
3&4-Methylphenol (m&p-cresol)	400U	410U	390U	420U	380U	380U	380U
3,3'-Dichlorobenzidine	400U	410U	390U	420U	380U	380U	380U
3-Nitroaniline	1000U	1000U	1000U	1100U	980U	980U	970U
4,6-Dinitro-2-methylphenol	1000U	1000U	1000U	1100U	980U	980U	970U
4-Bromophenylphenyl ether	210U	210U	200U	220U	200U	200U	190U
4-Chloro-3-methylphenol	210U	210U	200U	220U	200U	200U	190U
4-Chloroaniline	400U	410U	390U	420U	380U	380U	380U
4-Chlorophenylphenyl ether	210U	210U	200U	220U	200U	200U	190U
4-Nitroaniline	1000U	1000U	1000U	1100U	980U	980U	970U
4-Nitrophenol	1000U	1000U	1000U	1100U	980U	980U	970U
Acenaphthene	210U	210U	200U	220U	200U	200U	190U
Acenaphthylene	210U	210U	200U	220U	200U	200U	190U
Anthracene	210U	210U	200U	220U	200U	200U	190U
Benzo(a)anthracene	210U	210U	200U	220U	200U	200U	190U
Benzo(a)pyrene	110U	110U	100U	110U	100U	100U	100U
Benzo(b)fluoranthene	210U	210U	200U	220U	200U	200U	190U
Benzo(g,h,i)perylene	49J	210U	200U	53J	200U	200U	190U
Benzo(k)fluoranthene	210U	210U	200U	220U	200U	200U	190U
Butylbenzylphthalate	210U	210U	200U	220U	200U	200U	190U
Carbazole	210U	210U	200U	220U	200U	200U	190U
Chrysene	210U	210U	200U	220U	200U	200U	190U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T3-S1-0-0 5FT	UAS-T3-S1-3-6FT	UAS-T3-S2-0-0.5FT	UAS-T3-S2-3-6FT	UAS-T3-S3-0-0 5FT	UAS-T3-S3-0-0 5FTFD	UAS-T3-S3-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	110U	110U	100U	110U	100U	100U	100U
Dibenzofuran	210U	210U	200U	220U	200U	200U	190U
Diethylphthalate	210U	210U	200U	220U	200U	200U	190U
Dimethylphthalate	210U	210U	200U	220U	200U	200U	190U
Di-n-butylphthalate	210U	210U	200U	220U	200U	200U	190U
Di-n-octylphthalate	210U	210U	200U	220U	200U	200U	190U
Fluoranthene	210U	210U	200U	220U	200U	200U	190U
Fluorene	210U	210U	200U	220U	200U	200U	190U
Hexachlorobenzene	85U	87U	82U	89U	81U	81U	80U
Hexachlorobutadiene	210U	210U	200U	220U	200U	200U	190U
Hexachlorocyclopentadiene	210U	210U	200U	220U	200U	200U	190U
Hexachloroethane	210U	210U	200U	220U	200U	200U	190U
Indeno(1,2,3-cd)pyrene	210U	210U	200U	220U	200U	200U	190U
Isophorone	210U	210U	200U	220U	200U	200U	190U
Naphthalene	210U	210U	200U	220U	200U	200U	190U
Nitrobenzene	210U	210U	200U	220U	200U	200U	190U
n-Nitrosodi-n-propylamine	210U	210U	200U	220U	200U	200U	190U
N-Nitrosodiphenylamine	210U	210U	200U	220U	200U	200U	190U
Pentachlorophenol	1000U	1000U	1000U	1100U	980U	980U	970U
Phenanthrene	210U	210U	200U	220U	200U	200U	190U
Phenol	210U	210U	200U	220U	200U	200U	190U
Pyrene	210U	210U	200U	220U	200U	200U	190U
bis(2-Chloroethoxy)methane	210U	210U	200U	220U	200U	200U	190U
bis(2-Chloroethyl)ether	210U	210U	200U	220U	200U	200U	190U
bis(2-Ethylhexyl)phthalate	210U	210U	200U	220U	200U	200U	190U
Total SVOC's	**49**	**ND**	**ND**	**53**	**ND**	**ND**	**ND**

Notes ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T3-S3-3-6FTFD	UAS-T3-S4-0-0.5FT	UAS-T3-S4-3-6FT	UAS-T3-S5-0-0 5FT	UAS-T3-S5-0-0 5FTEB	UAS-T3-S5-3-6FT	UAS-T3-S6-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/16/1999	11/15/1999	11/15/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	200U	190U	200U	190U	10U	180U	200U
1,2-Dichlorobenzene	200U	190U	200U	190U	10U	180U	200U
1,3-Dichlorobenzene	200U	190U	200U	190U	10U	180U	200U
1,4-Dichlorobenzene	200U	190U	200U	190U	10U	180U	200U
2,2'-Oxybis(1-Chloropropane)	200U	190U	200U	190U	10U	180U	200U
2,4,5-Trichlorophenol	200U	190U	200U	190U	10U	180U	200U
2,4,6-Trichlorophenol	200U	190U	200U	190U	2.1U	180U	200U
2,4-Dichlorophenol	200U	190U	200U	190U	10U	180U	200U
2,4-Dinitrophenol	990U	970U	1000U	960U	14U	880U	980U
2,4-Dinitrotoluene	200U	190U	200U	190U	10U	180U	200U
2,6-Dinitrotoluene	200U	190U	200U	190U	10U	180U	200U
2-Chloronaphthalene	200U	190U	200U	190U	10U	180U	200U
2-Chlorophenol	200U	190U	200U	190U	10U	180U	200U
2-Methylnaphthalene	200U	190U	200U	190U	10U	180U	200U
2-Methylphenol (o-cresol)	200U	190U	200U	190U	10U	180U	200U
2-Nitroaniline	990U	970U	1000U	960U	50U	880U	980U
2-Nitrophenol	200U	190U	200U	190U	10U	180U	200U
3&4-Methylphenol (m&p-cresol)	380U	380U	390U	370U	10U	340U	380U
3,3'-Dichlorobenzidine	380U	380U	390U	370U	20U	340U	380U
3-Nitroaniline	990U	970U	1000U	960U	50U	880U	980U
4,6-Dinitro-2-methylphenol	990U	970U	1000U	960U	13U	880U	980U
4-Bromophenylphenyl ether	200U	190U	200U	190U	1 0U	180U	200U
4-Chloro-3-methylphenol	200U	190U	200U	190U	10U	180U	200U
4-Chloroaniline	380U	380U	390U	370U	20U	340U	380U
4-Chlorophenylphenyl ether	200U	190U	200U	190U	10U	180U	200U
4-Nitroaniline	990U	970U	1000U	960U	50U	880U	980U
4-Nitrophenol	990U	970U	1000U	960U	50U	880U	980U
Acenaphthene	200U	190U	200U	190U	10U	180U	200U
Acenaphthylene	200U	190U	200U	190U	10U	180U	200U
Anthracene	200U	190U	200U	190U	10U	180U	200U
Benzo(a)anthracene	200U	190U	200U	23J	10U	180U	200U
Benzo(a)pyrene	100U	100U	110U	100U	10U	93U	100U
Benzo(b)fluoranthene	200U	27J	200U	30J	10U	180U	200U
Benzo(g,h,i)perylene	200U	190U	200U	190U	10U	180U	200U
Benzo(k)fluoranthene	200U	190U	200U	190U	10U	180U	200U
Butylbenzylphthalate	200U	190U	200U	190U	10U	180U	200U
Carbazole	200U	190U	200U	190U	10U	180U	200U
Chrysene	200U	28J	200U	37J	10U	180U	29J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T3-S3-3-6FTFD	UAS-T3-S4-0-0 5FT	UAS-T3-S4-3-6FT	UAS-T3-S5-0-0 5FT	UAS-T3-S5-0-0 5FTEB	UAS-T3-S5-3-6FT	UAS-T3-S6-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/16/1999	11/15/1999	11/15/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	100U	100U	110U	100U	10U	93U	100U
Dibenzofuran	200U	190U	200U	190U	10U	180U	200U
Diethylphthalate	200U	190U	200U	190U	10U	180U	200U
Dimethylphthalate	200U	190U	200U	190U	10U	180U	200U
Di-n-butylphthalate	200U	190U	200U	190U	10U	180U	200U
Di-n-octylphthalate	200U	190U	200U	190U	10U	180U	200U
Fluoranthene	200U	37J	200U	50J	10U	180U	200U
Fluorene	200U	190U	200U	190U	1 0U	180U	200U
Hexachlorobenzene	81U	80U	84U	79U	10U	72U	80U
Hexachlorobutadiene	200U	190U	200U	190U	10U	180U	200U
Hexachlorocyclopentadiene	200U	190U	200U	190U	10U	180U	200U
Hexachloroethane	200U	190U	200U	190U	1 9U	180U	200U
Indeno(1,2,3-cd)pyrene	200U	190U	200U	190U	10U	180U	200U
Isophorone	200U	190U	200U	190U	10U	180U	200U
Naphthalene	200U	190U	200U	190U	10U	180U	200U
Nitrobenzene	200U	190U	200U	190U	3 5U	180U	200U
n-Nitrosodi-n-propylamine	200U	190U	200U	190U	10U	180U	200U
N-Nitrosodiphenylamine	200U	190U	200U	190U	5 0U	180U	200U
Pentachlorophenol	990U	970U	1000U	960U	5 0U	880U	980U
Phenanthrene	200U	190U	200U	190U	10U	180U	200U
Phenol	200U	190U	200U	190U	10U	180U	200U
Pyrene	200U	190U	200U	190U	10U	180U	200U
bis(2-Chloroethoxy)methane	200U	190U	200U	190U	10U	180U	200U
bis(2-Chloroethyl)ether	200U	190U	200U	190U	10U	180U	200U
bis(2-Ethylhexyl)phthalate	200U	190U	200U	190U	0 56J	120J	200U
Total SVOC's	**ND**	**92**	**ND**	**140**	**0.56**	**120**	**29**

Notes ot detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T3-S6-3-6FT	UAS-T3-S7-0-0 5FT	UAS-T3-S7-3-6FT	UAS-T3-S7-3-6FTEB	UAS-T4-S1-0-0 5FT	UAS-T4-S1-3-6FT	UAS-T4-S2-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/16/1999	11/16/1999	11/17/1999	11/16/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	220U	180U	220U	10U	190U	200U	180U
1,2-Dichlorobenzene	220U	180U	220U	10U	190U	200U	180U
1,3-Dichlorobenzene	220U	180U	220U	10U	190U	200U	180U
1,4-Dichlorobenzene	220U	180U	220U	10U	190U	200U	180U
2,2'-Oxybis(1-Chloropropane)	220U	180U	220U	10U	190U	200U	180U
2,4,5-Trichlorophenol	220U	180U	220U	10U	190U	200U	180U
2,4,6-Trichlorophenol	220U	180U	220U	2 1U	190U	200U	180U
2,4-Dichlorophenol	220U	180U	220U	10U	190U	200U	180U
2,4-Dinitrophenol	1100U	890U	1100U	14U	960U	1000U	900U
2,4-Dinitrotoluene	220U	180U	220U	10U	190U	200U	180U
2,6-Dinitrotoluene	220U	180U	220U	10U	190U	200U	180U
2-Chloronaphthalene	220U	180U	220U	10U	190U	200U	180U
2-Chlorophenol	220U	180U	220U	10U	190U	200U	180U
2-Methylnaphthalene	220U	180U	220U	10U	190U	200U	72J
2-Methylphenol (o-cresol)	220U	180U	220U	10U	190U	200U	180U
2-Nitroaniline	1100U	890U	1100U	50U	960U	1000U	900U
2-Nitrophenol	220U	180U	220U	10U	190U	200U	180U
3&4-Methylphenol (m&p-cresol)	430U	340U	420U	10U	190U	200U	180U
3,3'-Dichlorobenzidine	430U	340U	420U	20U	380U	390U	350U
3-Nitroaniline	1100U	890U	1100U	50U	960U	1000U	900U
4,6-Dinitro-2-methylphenol	1100U	890U	1100U	13U	960U	1000U	900U
4-Bromophenylphenyl ether	220U	180U	220U	1 0U	190U	200U	180U
4-Chloro-3-methylphenol	220U	180U	220U	10U	190U	200U	180U
4-Chloroaniline	430U	340U	420U	20U	380U	390U	350U
4-Chlorophenylphenyl ether	220U	180U	220U	10U	190U	200U	180U
4-Nitroaniline	1100U	890U	1100U	50U	960U	1000U	900U
4-Nitrophenol	1100U	890U	1100U	50U	960U	1000U	900U
Acenaphthene	220U	180U	220U	10U	190U	200U	1200
Acenaphthylene	220U	180U	220U	10U	190U	200U	49J
Anthracene	220U	51J	220U	10U	190U	200U	2300
Benzo(a)anthracene	220U	480	220U	10U	34J	200U	4300
Benzo(a)pyrene	120U	860	120U	10U	100U	110U	3500
Benzo(b)fluoranthene	220U	970	220U	10U	190U	200U	3500
Benzo(g,h,i)perylene	220U	830	220U	10U	190U	200U	2200
Benzo(k)fluoranthene	220U	1000	220U	10U	190U	200U	3300
Butylbenzylphthalate	220U	180U	220U	10U	190U	200U	180U
Carbazole	220U	88J	220U	10U	190U	200U	1000
Chrysene	220U	980	220U	10U	35J	200U	4400

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T3-S6-3-6FT	UAS-T3-S7-0-0.5FT	UAS-T3-S7-3-6FT	UAS-T3-S7-3-6FTEB	UAS-T4-S1-0-0.5FT	UAS-T4-S1-3-6FT	UAS-T4-S2-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/16/1999	11/16/1999	11/17/1999	11/16/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	120U	250	120U	10U	90U	110U	810
Dibenzofuran	220U	180U	220U	10U	190U	200U	770
Diethylphthalate	220U	180U	220U	10U	190U	200U	180U
Dimethylphthalate	220U	180U	220U	10U	190U	200U	180U
Di-n-butylphthalate	220U	180U	220U	10U	190U	200U	180U
Di-n-octylphthalate	220U	180U	220U	10U	190U	200U	180U
Fluoranthene	220U	1500	220U	10U	41J	200U	10000
Fluorene	220U	180U	220U	1.0U	190U	200U	1400
Hexachlorobenzene	91U	73U	90U	10U	80U	84U	74U
Hexachlorobutadiene	220U	180U	220U	10U	190U	200U	180U
Hexachlorocyclopentadiene	220U	180U	220U	10U	190U	200U	180U
Hexachloroethane	220U	180U	220U	1.9U	190U	200U	180U
Indeno(1,2,3-cd)pyrene	220U	690	220U	10U	190U	200U	2000
Isophorone	220U	180U	220U	10U	190U	200U	180U
Naphthalene	220U	180U	220U	10U	190U	200U	41J
Nitrobenzene	220U	180U	220U	3 5U	190U	200U	180U
n-Nitrosodi-n-propylamine	220U	180U	220U	10U	190U	200U	180U
N-Nitrosodiphenylamine	220U	180U	220U	5.0U	190U	200U	180U
Pentachlorophenol	1100U	890U	1100U	5 0U	960U	1000U	900U
Phenanthrene	220U	530	220U	10U	190U	200U	9200
Phenol	220U	180U	220U	10U	190U	200U	180U
Pyrene	220U	1400	220U	10U	190U	200U	8500
bis(2-Chloroethoxy)methane	220U	180U	220U	10U	190U	200U	180U
bis(2-Chloroethyl)ether	220U	180U	220U	10U	190U	200U	180U
bis(2-Ethylhexyl)phthalate	220U	61J	220U	1.8U	190U	8700	180U
Total SVOC's	**ND**	**9690**	**ND**	**ND**	**110**	**8700**	**58542**

Notes: ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T4-S2-3-6FT	UAS-T4-S3-0-0 5FT	UAS-T4-S3-0-0 5FTFD	UAS-T4-S3-3-6FT	UAS-T4-S3-3-6FTFD	UAS-T4-S4-0-0 5FT	UAS-T4-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/16/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	180U	180U	180U	180U	180U	180U	180U
1,2-Dichlorobenzene	180U	180U	180U	180U	180U	180U	180U
1,3-Dichlorobenzene	180U	180U	180U	180U	180U	180U	180U
1,4-Dichlorobenzene	180U	180U	180U	180U	180U	180U	180U
2,2'-Oxybis(1-Chloropropane)	180U	180U	180U	180U	180U	180U	180U
2,4,5-Trichlorophenol	180U	180U	180U	180U	180U	180U	180U
2,4,6-Trichlorophenol	180U	180U	180U	180U	180U	180U	180U
2,4-Dichlorophenol	180U	180U	180U	180U	180U	180U	180U
2,4-Dinitrophenol	920U	900U	900U	890U	890U	880U	890U
2,4-Dinitrotoluene	180U	180U	180U	180U	180U	180U	180U
2,6-Dinitrotoluene	180U	180U	180U	180U	180U	180U	180U
2-Chloronaphthalene	180U	180U	180U	180U	180U	180U	180U
2-Chlorophenol	180U	180U	180U	180U	180U	180U	180U
2-Methylnaphthalene	180U	33J	180U	180U	180U	180U	180U
2-Methylphenol (o-cresol)	180U	180U	180U	180U	180U	180U	180U
2-Nitroaniline	920U	900U	900U	890U	890U	880U	890U
2-Nitrophenol	180U	180U	180U	180U	180U	180U	180U
3&4-Methylphenol (m&p-cresol)	180U	180U	180U	180U	180U	180U	180U
3,3'-Dichlorobenzidine	360U	350U	350U	350U	340U	340U	340U
3-Nitroaniline	920U	900U	900U	890U	890U	880U	890U
4,6-Dinitro-2-methylphenol	920U	900U	900U	890U	890U	880U	890U
4-Bromophenylphenyl ether	180U	180U	180U	180U	180U	180U	180U
4-Chloro-3-methylphenol	180U	180U	180U	180U	180U	180U	180U
4-Chloroaniline	360U	350U	350U	350U	340U	340U	340U
4-Chlorophenylphenyl ether	180U	180U	180U	180U	180U	180U	180U
4-Nitroaniline	920U	900U	900U	890U	890U	880U	890U
4-Nitrophenol	920U	900U	900U	890U	890U	880U	890U
Acenaphthene	180U	310	130J	180U	180U	180U	180U
Acenaphthylene	180U	56J	94J	180U	180U	180U	180U
Anthracene	180U	600	430	26J	180U	180U	180U
Benzo(a)anthracene	33J	1200	1200	70J	55J	81J	53J
Benzo(a)pyrene	98U	1100	1000	95U	94U	120U	100U
Benzo(b)fluoranthene	180U	1000	880	180U	180U	180U	180U
Benzo(g,h,i)perylene	180U	670	580	180U	180U	180U	180U
Benzo(k)fluoranthene	180U	840	900	180U	180U	180U	180U
Butylbenzylphthalate	180U	180U	180U	180U	180U	180U	180U
Carbazole	180U	200	96J	180U	180U	180U	180U
Chrysene	39J	1100	1200	76J	56J	110J	62J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T4-S2-3-6FT	UAS-T4-S3-0-0 5FT	UAS-T4-S3-0-0 5FTFD	UAS-T4-S3-3-6FT	UAS-T4-S3-3-6FTFD	UAS-T4-S4-0-0 5FT	UAS-T4-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/16/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	98U	95U	140U	95U	94U	93U	95U
Dibenzofuran	180U	160J	84J	180U	180U	180U	180U
Diethylphthalate	180U	180U	180U	180U	180U	180U	180U
Dimethylphthalate	180U	180U	180U	180U	180U	180U	180U
Di-n-butylphthalate	180U	180U	180U	180U	180U	180U	180U
Di-n-octylphthalate	180U	180U	180U	180U	180U	180U	180U
Fluoranthene	54J	2900	2600	190	120J	170J	180U
Fluorene	180U	310	140J	180U	180U	180U	180U
Hexachlorobenzene	76U	74U	74U	73U	73U	72U	73U
Hexachlorobutadiene	180U	180U	180U	180U	180U	180U	180U
Hexachlorocyclopentadiene	180U	180U	180U	180U	180U	180U	180U
Hexachloroethane	180U	180U	180U	180U	180U	180U	180U
Indeno(1,2,3-cd)pyrene	180U	610	510	180U	180U	180U	180U
Isophorone	180U	180U	180U	180U	180U	180U	180U
Naphthalene	180U	68J	180U	180U	180U	180U	180U
Nitrobenzene	180U	180U	180U	180U	180U	180U	180U
n-Nitrosodi-n-propylamine	180U	180U	180U	180U	180U	180U	180U
N-Nitrosodiphenylamine	180U	180U	180U	180U	180U	180U	180U
Pentachlorophenol	920U	900U	900U	890U	890U	880U	890U
Phenanthrene	36J	2400	1800	100J	66J	75J	180U
Phenol	180U	180U	180U	180U	180U	180U	180U
Pyrene	56J	2300	2300	150J	96J	160J	180U
bis(2-Chloroethoxy)methane	180U	180U	180U	180U	180U	180U	180U
bis(2-Chloroethyl)ether	180U	180U	180U	180U	180U	180U	180U
bis(2-Ethylhexyl)phthalate	180U	180U	180U	260U	450U	180U	180U
Total SVOC's	**218**	**15857**	**13944**	**612**	**393**	**596**	**115**

Notes '' not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T4-S5-0-0 5FT	UAS-T4-S5-3-6FT	UAS-T4-S6-0-0 5FT	UAS-T4-S6-3-6FT	UAS-T4-S7-0-0 5FT	UAS-T4-S7-3-6FT	UAS-T5-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/16/1999	11/16/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 2,4-Trichlorobenzene	180U	210U	200U	220U	190U	190U	190U
1,2-Dichlorobenzene	180U	210U	200U	220U	190U	190U	190U
1,3-Dichlorobenzene	180U	210U	200U	220U	190U	190U	190U
1,4-Dichlorobenzene	180U	210U	200U	220U	190U	190U	190U
2,2'-Oxybis(1-Chloropropane)	180U	210U	200U	220U	190U	190U	190U
2,4,5-Trichlorophenol	180U	210U	200U	220U	190U	190U	190U
2,4,6-Trichlorophenol	180U	210U	200U	220U	190U	190U	190U
2,4-Dichlorophenol	180U	210U	200U	220U	190U	190U	190U
2,4-Dinitrophenol	920U	1100U	1000U	1100U	950U	950U	960U
2,4-Dinitrotoluene	180U	210U	200U	220U	190U	190U	190U
2,6-Dinitrotoluene	180U	210U	200U	220U	190U	190U	190U
2-Chloronaphthalene	180U	210U	200U	220U	190U	190U	190U
2-Chlorophenol	180U	210U	200U	220U	190U	190U	190U
2-Methylnaphthalene	180U	210U	200U	220U	190U	160J	190U
2-Methylphenol (o-cresol)	180U	210U	200U	220U	190U	190U	190U
2-Nitroaniline	920U	1100U	1000U	1100U	950U	950U	960U
2-Nitrophenol	180U	210U	200U	220U	190U	190U	190U
3&4-Methylphenol (m&p-cresol)	180U	210U	200U	220U	190U	190U	190U
3,3'-Dichlorobenzidine	360U	410U	390U	420U	370U	370U	370U
3-Nitroaniline	920U	1100U	1000U	1100U	950U	950U	960U
4,6-Dinitro-2-methylphenol	920U	1100U	1000U	1100U	950U	950U	960U
4-Bromophenylphenyl ether	180U	210U	200U	220U	190U	190U	190U
4-Chloro-3-methylphenol	180U	210U	200U	220U	190U	190U	190U
4-Chloroaniline	360U	410U	390U	420U	370U	370U	370U
4-Chlorophenylphenyl ether	180U	210U	200U	220U	190U	190U	190U
4-Nitroaniline	920U	1100U	1000U	1100U	950U	950U	960U
4-Nitrophenol	920U	1100U	1000U	1100U	950U	950U	960U
Acenaphthene	62J	210U	200U	220U	57J	1000	190U
Acenaphthylene	24J	210U	200U	220U	190U	720	190U
Anthracene	200	210U	30J	220U	120J	5400	190U
Benzo(a)anthracene	610	210U	140J	220U	300	12000	190U
Benzo(a)pyrene	660	110U	180J	120U	280	5600	100U
Benzo(b)fluoranthene	720	210U	200U	220U	240	9800	190U
Benzo(g,h,i)perylene	410	21U	200U	220U	190U	330	190U
Benzo(k)fluoranthene	400	210U	200U	220U	230	6300	190U
Butylbenzylphthalate	180U	210U	200U	220U	190U	190U	190U
Carbazole	100J	210U	200U	220U	62J	820	190U
Chrysene	650	210U	180J	220U	320	11000	190U

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T4-S5-0-0 5FT	UAS-T4-S5-3-6FT	UAS-T4-S6-0-0 5FT	UAS-T4-S6-3-6FT	UAS-T4-S7-0-0 5FT	UAS-T4-S7-3-6FT	UAS-T5-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/16/1999	11/16/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	150U	110U	110U	120U	100U	1900	100U
Dibenzofuran	45J	210U	200U	220U	190U	1100	190U
Diethylphthalate	180U	210U	200U	220U	190U	190U	190U
Dimethylphthalate	180U	210U	200U	220U	190U	190U	190U
Di-n-butylphthalate	180U	210U	200U	220U	190U	190U	190U
Di-n-octylphthalate	180U	210U	200U	220U	190U	190U	190U
Fluoranthene	1400	210U	290	220U	730	23000D	190U
Fluorene	59J	210U	200U	220U	44J	2000	190U
Hexachlorobenzene	76U	88U	83U	89U	78U	78U	79U
Hexachlorobutadiene	180U	210U	200U	220U	190U	190U	190U
Hexachlorocyclopentadiene	180U	210U	200U	220U	190U	190U	190U
Hexachloroethane	180U	210U	200U	220U	190U	190U	190U
Indeno(1,2,3-cd)pyrene	310	210U	200U	220U	190U	3500	190U
Isophorone	180U	210U	200U	220U	190U	190U	190U
Naphthalene	180U	210U	200U	220U	190U	64J	190U
Nitrobenzene	180U	210U	200U	220U	190U	190U	190U
n-Nitrosodi-n-propylamine	180U	210U	200U	220U	190U	190U	190U
N-Nitrosodiphenylamine	180U	210U	200U	220U	190U	190U	190U
Pentachlorophenol	920U	1100U	1000U	1100U	950U	950U	960U
Phenanthrene	920	210U	120J	220U	570	14000	190U
Phenol	180U	210U	200U	220U	190U	190U	190U
Pyrene	1200	210U	260	220U	580	18000D	190U
bis(2-Chloroethoxy)methane	180U	210U	200U	220U	190U	190U	190U
bis(2-Chloroethyl)ether	180U	210U	200U	220U	190U	190U	190U
bis(2-Ethylhexyl)phthalate	180U	210U	200U	220U	190U	190U	190U
Total SVOC's	**7770**	**ND**	**1020**	**ND**	**3533**	**116694**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T5-S1-3-6FT	UAS-T5-S2-0-0 5FT	UAS-T5-S2-3-6FT	UAS-T5-S3-0-0 5FT	UAS-T5-S3-3-6FT	UAS-T5-S4-0-0 5FT	UAS-T5-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	*ug/kg dw*	*ug/kg dw*	*ug/kg dw*	*ug/kg dw*	*ug/kg dw*	*ug/kg dw*	*ug/kg dw*
1,2,4-Trichlorobenzene	190U	190U	200U	180U	210U	190U	180U
1 2-Dichlorobenzene	190U	190U	200U	180U	210U	190U	180U
1,3-Dichlorobenzene	190U	190U	200U	180U	210U	190U	180U
1,4-Dichlorobenzene	190U	190U	200U	180U	210U	190U	180U
2,2'-Oxybis(1-Chloropropane)	190U	190U	200U	180U	210U	190U	180U
2,4,5-Trichlorophenol	190U	190U	200U	180U	210U	190U	180U
2,4,6-Trichlorophenol	190U	190U	200U	180U	210U	190U	180U
2,4-Dichlorophenol	190U	190U	200U	180U	210U	190U	180U
2,4-Dinitrophenol	950U	940U	980U	920U	1000U	960U	880U
2,4-Dinitrotoluene	190U	190U	200U	180U	210U	190U	180U
2,6-Dinitrotoluene	190U	190U	200U	180U	210U	190U	180U
2-Chloronaphthalene	190U	190U	200U	180U	210U	190U	180U
2-Chlorophenol	190U	190U	200U	180U	210U	190U	180U
2-Methylnaphthalene	190U	190U	200U	180U	210U	190U	180U
2-Methylphenol (o-cresol)	190U	190U	200U	180U	210U	190U	180U
2-Nitroaniline	950U	940U	980U	920U	1000U	960U	880U
2-Nitrophenol	190U	190U	200U	180U	210U	190U	180U
3&4-Methylphenol (m&p-cresol)	190U	190U	200U	180U	210U	190U	180U
3,3'-Dichlorobenzidine	370U	360U	380U	360U	410U	370U	340U
3-Nitroaniline	950U	940U	980U	920U	1000U	960U	880U
4,6-Dinitro-2-methylphenol	950U	940U	980U	920U	1000U	960U	880U
4-Bromophenylphenyl ether	190U	190U	200U	180U	210U	190U	180U
4-Chloro-3-methylphenol	190U	190U	200U	180U	210U	190U	180U
4-Chloroaniline	370U	360U	380U	360U	410U	370U	340U
4-Chlorophenylphenyl ether	190U	190U	200U	180U	210U	190U	180U
4-Nitroaniline	950U	940U	980U	920U	1000U	960U	880U
4-Nitrophenol	950U	940U	980U	920U	1000U	960U	880U
Acenaphthene	190U	190U	200U	180U	210U	190U	180U
Acenaphthylene	190U	190U	200U	180U	210U	190U	180U
Anthracene	190U	190U	200U	180U	210U	190U	180U
Benzo(a)anthracene	190U	190U	200U	180U	210U	36J	180U
Benzo(a)pyrene	100U	100U	100U	98U	110U	120U	93U
Benzo(b)fluoranthene	190U	190U	200U	180U	210U	86J	180U
Benzo(g,h,i)perylene	190U	190U	200U	180U	210U	190U	180U
Benzo(k)fluoranthene	190U	190U	200U	180U	210U	190U	180U
Butylbenzylphthalate	190U	190U	200U	180U	210U	190U	180U
Carbazole	190U	190U	200U	180U	210U	190U	180U
Chrysene	190U	190U	200U	180U	210U	49J	180UJ

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T5-S1-3-6FT	UAS-T5-S2-0-0.5FT	UAS-T5-S2-3-6FT	UAS-T5-S3-0-0 5FT	UAS-T5-S3-3-6FT	UAS-T5-S4-0-0 5FT	UAS-T5-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	100U	100U	100U	98U	110U	160	93U
Dibenzofuran	190U	190U	200U	180U	210U	190U	180U
Diethylphthalate	190U	190U	200U	180U	210U	39J	180U
Dimethylphthalate	190U	190U	200U	180U	210U	190U	180U
Di-n-butylphthalate	190U	190U	200U	180U	210U	32J	180U
Di-n-octylphthalate	190U	190U	200U	180U	210U	190U	180U
Fluoranthene	190U	190U	200U	180U	210U	190U	180U
Fluorene	190U	190U	200U	180U	210U	190U	180U
Hexachlorobenzene	78U	78U	81U	76U	87U	79U	72U
Hexachlorobutadiene	190U	190U	200U	180U	210U	190U	180U
Hexachlorocyclopentadiene	190U	190U	200U	180U	210U	190U	180U
Hexachloroethane	190U	190U	200U	180U	210U	190U	180U
Indeno(1,2,3-cd)pyrene	190U	190U	200U	180U	210U	190J	180U
Isophorone	190U	190U	200U	180U	210U	190U	180U
Naphthalene	190U	190U	200U	180U	210U	190U	180U
Nitrobenzene	190U	190U	200U	180U	210U	190U	180U
n-Nitrosodi-n-propylamine	190U	190U	200U	180U	210U	190U	180U
N-Nitrosodiphenylamine	190U	190U	200U	180U	210U	190U	180U
Pentachlorophenol	950U	940U	980U	920U	1000U	960U	880U
Phenanthrene	190U	190U	200U	180U	210U	23J	180U
Phenol	190U	190U	200U	180U	210U	190U	180U
Pyrene	190U	190U	200U	180U	210U	190U	180U
bis(2-Chloroethoxy)methane	190U	190U	200U	180U	210U	190U	180U
bis(2-Chloroethyl)ether	190U	190U	200U	180U	210U	190U	180U
bis(2-Ethylhexyl)phthalate	190U	190U	200U	180U	120J	53J	180U
Total SVOC's	**ND**	**ND**	**ND**	**ND**	**120**	**668**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T5-S5-0-0 5FT	UAS-T5-S5-0-0 5FTEB	UAS-T5-S5-3-6FT	UAS-T5-S5-3-6FTEB	UAS-T5-S6-0-0 5FT	UAS-T5-S6-0-0 5FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	180U	10U	180U	10U	200U	200UJ
1,2-Dichlorobenzene	180U	10U	180U	10U	200U	200UJ
1,3-Dichlorobenzene	180U	10U	180U	10U	200U	200UJ
1,4-Dichlorobenzene	180U	10U	180U	10U	200U	200UJ
2,2'-Oxybis(1-Chloropropane)	180U	10U	180U	10U	200U	200UJ
2,4,5-Trichlorophenol	180U	10U	180U	10U	200U	200UJ
2,4,6-Trichlorophenol	180U	2.1U	180U	2 1U	200U	200UJ
2,4-Dichlorophenol	180U	10U	180U	10U	200U	200UJ
2,4-Dinitrophenol	880U	14U	880U	14U	1000U	1000UJ
2,4-Dinitrotoluene	180U	10U	180U	10U	200U	200UJ
2,6-Dinitrotoluene	180U	10U	180U	10U	200U	200UJ
2-Chloronaphthalene	180U	10U	180U	10U	200U	200UJ
2-Chlorophenol	180U	10U	180U	10U	200U	200UJ
2-Methylnaphthalene	180U	10U	180U	10U	200U	200UJ
2-Methylphenol (o-cresol)	180U	10U	180U	10U	200U	200UJ
2-Nitroaniline	880U	50U	880U	50U	1000U	1000UJ
2-Nitrophenol	180U	10U	180U	10U	200U	200UJ
3&4-Methylphenol (m&p-cresol)	180U	10U	180U	10U	200U	200UJ
3,3'-Dichlorobenzidine	340U	20U	340U	20U	390U	390UJ
3-Nitroaniline	880U	50U	880U	50U	1000U	1000UJ
4,6-Dinitro-2-methylphenol	880U	13U	880U	13U	1000U	1000UJ
4-Bromophenylphenyl ether	180U	1 0U	180U	1.0U	200U	200UJ
4-Chloro-3-methylphenol	180U	10U	180U	10U	200U	200UJ
4-Chloroaniline	340U	20U	340U	20U	390U	390UJ
4-Chlorophenylphenyl ether	180U	10U	180U	10U	200U	200UJ
4-Nitroaniline	880U	50U	880U	50U	1000U	1000UJ
4-Nitrophenol	880U	50U	880U	50U	1000U	1000UJ
Acenaphthene	180U	10U	180U	10U	200U	200UJ
Acenaphthylene	180U	10U	180U	10U	200U	200UJ
Anthracene	180U	10U	180U	10U	200U	200UJ
Benzo(a)anthracene	73J	10U	180U	10U	82J	110J
Benzo(a)pyrene	94U	10U	93U	10U	100U	130J
Benzo(b)fluoranthene	93J	10U	180U	10U	120J	110J
Benzo(g,h,i)perylene	180U	10U	180U	10U	200U	130J
Benzo(k)fluoranthene	180U	10U	180U	10U	200U	140J
Butylbenzylphthalate	180U	10U	180U	10U	200U	200UJ
Carbazole	180U	10U	180U	10U	200U	200UJ
Chrysene	120J	10U	180U	10U	120J	200J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T5-S5-0-0 5FT	UAS-T5-S5-0-0 5FTEB	UAS-T5-S5-3-6FT	UAS-T5-S5-3-6FTEB	UAS-T5-S6-0-0 5FT	UAS-T5-S6-0-0 5FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
Dibenzo(a h)anthracene	93U	10U	93U	10U	48J	110UJ
Dibenzofuran	180U	10U	180U	10U	200U	200UJ
Diethylphthalate	180U	10U	180U	10U	200U	200UJ
Dimethylphthalate	180U	10U	180U	10U	200U	200UJ
Di-n-butylphthalate	180U	10U	180U	10U	200U	200UJ
Di-n-octylphthalate	180U	10U	180U	10U	200U	200UJ
Fluoranthene	200	10U	180U	10U	200	290J
Fluorene	180U	1 0U	180U	1 0U	200U	200UJ
Hexachlorobenzene	73U	10U	72U	10U	82U	82UJ
Hexachlorobutadiene	180U	10U	180U	10U	200U	200UJ
Hexachlorocyclopentadiene	180U	10U	180U	10U	200U	200UJ
Hexachloroethane	180U	1 9U	180U	1 9U	200U	200UJ
Indeno(1 2 3-cd)pyrene	79J	10U	180U	10U	84J	100J
Isophorone	180U	10U	180U	10U	200U	200UJ
Naphthalene	180U	10U	180U	10U	200U	200UJ
Nitrobenzene	180U	3 5U	180U	3 5U	200U	200UJ
n-Nitrosodi-n-propylamine	180U	10U	180U	10U	200U	200UJ
N-Nitrosodiphenylamine	180U	5 0U	180U	5 0U	200U	200UJ
Pentachlorophenol	880U	5 0U	880U	5 0U	1000U	1000UJ
Phenanthrene	74J	10U	180U	10U	80J	110J
Phenol	180U	10U	180U	10U	200U	200UJ
Pyrene	160J	10U	180U	10U	170J	210J
bis(2-Chloroethoxy)methane	180U	10U	180U	10U	200U	200UJ
bis(2-Chloroethyl)ether	180U	10U	180U	10U	200U	200UJ
bis(2-Ethylhexyl)phthalate	180U	1 8U	120J	1 8U	200U	200UJ
Total SVOC's	**799**	**ND**	**120**	**ND**	**904**	**1530**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T5-S6-3-6FT	UAS-T5-S6-3-6FTFD	UAS-T6-S1-0-0.5FT	UAS-T6-S1-3-6FT	UAS-T6-S2-0-0 5FT	UAS-T6-S2-3-6FT	UAS-T6-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	190U	190U	200U	200U	190U	200U	180U
1,2-Dichlorobenzene	190U	190U	200U	200U	190U	200U	180U
1,3-Dichlorobenzene	190U	190U	200U	200U	190U	200U	180U
1,4-Dichlorobenzene	190U	190U	200U	200U	190U	200U	180U
2,2'-Oxybis(1-Chloropropane)	190U	190U	200U	200U	190U	200U	180U
2,4,5-Trichlorophenol	190U	190U	200U	200U	190U	200U	180U
2,4,6-Trichlorophenol	190U	190U	200U	200U	190U	200U	180U
2,4-Dichlorophenol	190U	190U	200U	200U	190U	200U	180U
2,4-Dinitrophenol	930U	940U	990U	1000U	970U	1000U	930U
2,4-Dinitrotoluene	190U	190U	200U	200U	190U	200U	180U
2,6-Dinitrotoluene	190U	190U	200U	200U	190U	200U	180U
2-Chloronaphthalene	190U	190U	200U	200U	190U	200U	180U
2-Chlorophenol	190U	190U	200U	200U	190U	200U	180U
2-Methylnaphthalene	190U	190U	200U	200U	190U	200U	180U
2-Methylphenol (o-cresol)	190U	190U	200U	200U	190U	200U	180U
2-Nitroaniline	930U	940U	990U	1000U	970U	1000U	930U
2-Nitrophenol	190U	190U	200U	200U	190U	200U	180U
3&4-Methylphenol (m&p-cresol)	190U	190U	200U	200U	190U	200U	180U
3,3'-Dichlorobenzidine	360U	370U	380U	390U	380U	390U	360U
3-Nitroaniline	930U	940U	990U	1000U	970U	1000U	930U
4,6-Dinitro-2-methylphenol	930U	940U	990U	1000U	970U	1000U	930U
4-Bromophenylphenyl ether	190U	190U	200U	200U	190U	200U	180U
4-Chloro-3-methylphenol	190U	190U	200U	200U	190U	200U	180U
4-Chloroaniline	360U	370U	380U	390U	380U	390U	360U
4-Chlorophenylphenyl ether	190U	190U	200U	200U	190U	200U	180U
4-Nitroaniline	930U	940U	990U	1000U	970U	1000U	930U
4-Nitrophenol	930U	940U	990U	1000U	970U	1000U	930U
Acenaphthene	190U	190U	200U	200U	190U	200U	180U
Acenaphthylene	190U	190U	200U	200U	190U	200U	180U
Anthracene	190U	190U	200U	200U	35J	200U	180U
Benzo(a)anthracene	190U	190U	25J	200U	160J	33J	54J
Benzo(a)pyrene	98U	100U	100U	110U	160U	100U	98U
Benzo(b)fluoranthene	190U	55J	34J	200U	150J	200U	67J
Benzo(g,h,i)perylene	190U	190U	200U	200U	190U	200U	180U
Benzo(k)fluoranthene	190U	190U	200U	200U	190U	200U	180U
Butylbenzylphthalate	190U	190U	200U	200U	190U	200U	180U
Carbazole	190U	190U	200U	200U	190U	200U	180U
Chrysene	190U	190U	30J	200U	200	42J	68J

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T5-S6-3-6FT	UAS-T5-S6-3-6FTFD	UAS-T6-S1-0-0 5FT	UAS-T6-S1-3-6FT	UAS-T6-S2-0-0 5FT	UAS-T6-S2-3-6FT	UAS-T6-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	98U	140	100U	110U	100U	100U	26J
Dibenzofuran	190U	190U	200U	200U	190U	200U	180U
Diethylphthalate	190U	190U	200U	200U	190U	200U	180U
Dimethylphthalate	190U	190U	200U	200U	190U	200U	180U
Di-n-butylphthalate	190U	190U	200U	200U	190U	200U	180U
Di-n-octylphthalate	190U	140J	200U	200U	190U	200U	180U
Fluoranthene	190U	190U	42J	200U	360	79J	120J
Fluorene	190U	190U	200U	200U	190U	200U	180U
Hexachlorobenzene	77U	78U	82U	83U	80U	82U	76U
Hexachlorobutadiene	190U	190U	200U	200U	190U	200U	180U
Hexachlorocyclopentadiene	190U	190U	200U	200U	190U	200U	180U
Hexachloroethane	190U	190U	200U	200U	190U	200U	180U
Indeno(1,2,3-cd)pyrene	190U	130J	200U	200U	110J	200U	51J
Isophorone	190U	190U	200U	200U	190U	200U	180U
Naphthalene	190U	190U	200U	200U	190U	200U	180U
Nitrobenzene	190U	190U	200U	200U	190U	200U	180U
n-Nitrosodi-n-propylamine	190U	190U	200U	200U	190U	200U	180U
N-Nitrosodiphenylamine	190U	190U	200U	200U	190U	200U	180U
Pentachlorophenol	930U	940U	990U	1000U	970U	1000U	930U
Phenanthrene	190U	190U	200U	200U	160J	57J	55J
Phenol	190U	190U	200U	200U	190U	200U	180U
Pyrene	190U	190U	200U	200U	310	200U	97J
bis(2-Chloroethoxy)methane	190U	190U	200U	200U	190U	200U	180U
bis(2-Chloroethyl)ether	190U	190U	200U	200U	190U	200U	180U
bis(2-Ethylhexyl)phthalate	190U	120J	29J	200U	190U	200U	180U
Total SVOC's	**ND**	**585**	**160**	**ND**	**1485**	**211**	**538**

Notes ' ›t detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T6-S3-0-0 5FTEB	UAS-T6-S3-3-6FT	UAS-T6-S3-3-6FTEB	UAS-T6-S4-0-0 5FT	UAS-T6-S4-3-6FT	UAS-T6-S5-0-0 5FT	UAS-T6-S5-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Units	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	10U	200U	10U	180U	190U	190U	220U
1,2-Dichlorobenzene	10U	200U	10U	180U	190U	190U	220U
1,3-Dichlorobenzene	10U	200U	10U	180U	190U	190U	220U
1,4-Dichlorobenzene	10U	200U	10U	180U	190U	190U	220U
2,2'-Oxybis(1-Chloropropane)	10U	200U	10U	180U	190U	190U	220U
2,4,5-Trichlorophenol	10U	200U	10U	180U	190U	190U	220U
2,4,6-Trichlorophenol	2.1U	200U	2.1U	180U	190U	190U	220U
2,4-Dichlorophenol	10U	200U	10U	180U	190U	190U	220U
2,4-Dinitrophenol	14U	1000U	14U	920U	970U	960U	1100U
2,4-Dinitrotoluene	10U	200U	10U	180U	190U	190U	220U
2,6-Dinitrotoluene	10U	200U	10U	180U	190U	190U	220U
2-Chloronaphthalene	10U	200U	10U	180U	190U	190U	220U
2-Chlorophenol	10U	200U	10U	180U	190U	190U	220U
2-Methylnaphthalene	10U	200U	10U	180U	190U	190U	220U
2-Methylphenol (o-cresol)	10U	200U	10U	180U	190U	190U	220U
2-Nitroaniline	50U	1000U	50U	920U	970U	960U	1100U
2-Nitrophenol	10U	200U	10U	180U	190U	190U	220U
3&4-Methylphenol (m&p-cresol)	10U	200U	10U	180U	190U	190U	220U
3,3'-Dichlorobenzidine	20U	390U	20U	360U	380U	370U	420U
3-Nitroaniline	50U	1000U	50U	920U	970U	960U	1100U
4,6-Dinitro-2-methylphenol	13U	1000U	13U	920U	970U	960U	1100U
4-Bromophenylphenyl ether	1.0U	200U	1.0U	180U	190U	190U	220U
4-Chloro-3-methylphenol	10U	200U	10U	180U	190U	190U	220U
4-Chloroaniline	20U	390U	20U	360U	380U	370U	420U
4-Chlorophenylphenyl ether	10U	200U	10U	180U	190U	190U	220U
4-Nitroaniline	50U	1000U	50U	920U	970U	960U	1100U
4-Nitrophenol	50U	1000U	50U	920U	970U	960U	1100U
Acenaphthene	10U	160J	10U	180U	41J	16J	220U
Acenaphthylene	10U	49J	10U	180U	190U	190U	220U
Anthracene	10U	360	10U	180U	92J	32J	66J
Benzo(a)anthracene	10U	940	10U	88J	280	150J	160J
Benzo(a)pyrene	10U	880	10U	97U	270	160U	150U
Benzo(b)fluoranthene	10U	640	10U	88J	260	160J	150J
Benzo(g,h,i)perylene	10U	630	10U	180U	190U	220U	220U
Benzo(k)fluoranthene	10U	1100	10U	180U	220	190U	220U
Butylbenzylphthalate	10U	200U	10U	180U	190U	190U	220U
Carbazole	10U	170J	10U	180U	36J	190U	220U
Chrysene	10U	1100	10U	110J	300	190J	180J

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T6-S3-0-0.5FTEB	UAS-T6-S3-3-6FT	UAS-T6-S3-3-6FTEB	UAS-T6-S4-0-0 5FT	UAS-T6-S4-3-6FT	UAS-T6-S5-0-0 5FT	UAS-T6-S5-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Units	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	10U	270	10U	97U	92J	69J	120U
Dibenzofuran	10U	120J	10U	180U	190U	190U	220U
Diethylphthalate	10U	200U	10U	180U	190U	190U	220U
Dimethylphthalate	10U	200U	10U	180U	190U	190U	220U
Di-n-butylphthalate	10U	200U	10U	180U	190U	190U	220U
Di-n-octylphthalate	10U	200U	10U	180U	190U	190U	220U
Fluoranthene	10U	2500	10U	210	650	290	360
Fluorene	1.0U	130J	1.0U	180U	190U	190U	36J
Hexachlorobenzene	10U	82U	10U	76U	80U	79U	89U
Hexachlorobutadiene	10U	200U	10U	180U	190U	190U	220U
Hexachlorocyclopentadiene	10U	200U	10U	180U	190U	190U	220U
Hexachloroethane	1.9U	200U	1.9U	180U	190U	190U	220U
Indeno(1,2,3-cd)pyrene	10U	570	10U	180U	150J	110J	100J
Isophorone	10U	200U	10U	180U	190U	190U	220U
Naphthalene	10U	49J	10U	180U	190U	190U	41J
Nitrobenzene	3.5U	200U	3.5U	180U	190U	190U	220U
n-Nitrosodi-n-propylamine	10U	200U	10U	180U	190U	190U	220U
N-Nitrosodiphenylamine	5.0U	200U	5.0U	180U	190U	190U	220U
Pentachlorophenol	5.0U	1000U	5.0U	920U	970U	960U	1100U
Phenanthrene	10U	1900	10U	120J	450	140J	260
Phenol	10U	200U	10U	180U	190U	190U	220U
Pyrene	10U	2300	10U	180J	570	260	310
bis(2-Chloroethoxy)methane	10U	200U	10U	180U	190U	190U	220U
bis(2-Chloroethyl)ether	10U	200U	10U	180U	190U	190U	220U
bis(2-Ethylhexyl)phthalate	1.8U	270	1.8U	180U	120J	190U	120J
Total SVOC's	**ND**	**14138**	**ND**	**796**	**3531**	**1417**	**1783**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T7-S1-0-0 5FT	UAS-T7-S1-3-6FT	UAS-T7-S2-0-0 5FT	UAS-T7-S2-3-6FT	UAS-T7-S3-0-0 5FT	UAS-T7-S3-0-0 5FTFD	UAS-T7-S3-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 2,4-Trichlorobenzene	210U	240U	180U	200U	200U	200U	190U
1,2-Dichlorobenzene	210U	240U	180U	200U	200U	200U	190U
1,3-Dichlorobenzene	210U	240U	180U	200U	200U	200U	190U
1,4-Dichlorobenzene	210U	240U	180U	200U	200U	200U	190U
2,2'-Oxybis(1-Chloropropane)	210U	240U	180U	200U	200U	200U	190U
2,4,5-Trichlorophenol	210U	240U	180U	200U	200U	200U	190U
2,4,6-Trichlorophenol	210U	240U	180U	200U	200U	200U	190U
2,4-Dichlorophenol	210U	240U	180U	200U	200U	200U	190U
2,4-Dinitrophenol	1000U	1200U	920U	1000U	980U	980U	960U
2,4-Dinitrotoluene	210U	240U	180U	200U	200U	200U	190U
2,6-Dinitrotoluene	210U	240U	180U	200U	200U	200U	190U
2-Chloronaphthalene	210U	240U	180U	200U	200U	200U	190U
2-Chlorophenol	210U	240U	180U	200U	200U	200U	190U
2-Methylnaphthalene	210U	240U	180U	200U	200U	200U	190U
2-Methylphenol (o-cresol)	210U	240U	180U	200U	200U	200U	190U
2-Nitroaniline	1000U	1200U	920U	1000U	980U	980U	960U
2-Nitrophenol	210U	240U	180U	200U	200U	200U	190U
3&4-Methylphenol (m&p-cresol)	410U	460U	360U	400U	380U	380U	380U
3,3'-Dichlorobenzidine	410U	460U	360U	400U	380U	380U	380U
3-Nitroaniline	1000U	1200U	920U	1000U	980U	980U	960U
4,6-Dinitro-2-methylphenol	1000U	1200U	920U	1000U	980U	980U	960U
4-Bromophenylphenyl ether	210U	240U	180U	200U	200U	200U	190U
4-Chloro-3-methylphenol	210U	240U	180U	200U	200U	200U	190U
4-Chloroaniline	410U	460U	360U	400U	380U	380U	380U
4-Chlorophenylphenyl ether	210U	240U	180U	200U	200U	200U	190U
4-Nitroaniline	1000U	1200U	920U	1000U	980U	980U	960U
4-Nitrophenol	1000U	1200U	920U	1000U	980U	980U	960U
Acenaphthene	210U	240U	180U	200U	200U	200U	190U
Acenaphthylene	210U	240U	180U	200U	200U	200U	190U
Anthracene	210U	240U	180U	200U	200U	200U	190U
Benzo(a)anthracene	63J	240U	46J	200U	45J	42J	190U
Benzo(a)pyrene	84J	120U	61J	110U	100U	51J	100U
Benzo(b)fluoranthene	85J	240U	57J	200U	79J	51J	190U
Benzo(g,h,i)perylene	100J	240U	63J	200U	59J	50J	190U
Benzo(k)fluoranthene	69J	240U	51J	200U	36J	45J	190U
Butylbenzylphthalate	210U	240U	180U	200U	200U	200U	190U
Carbazole	210U	240U	180U	200U	200U	200U	190U
Chrysene	91J	240U	64J	200U	70J	59J	190U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T7-S1-0-0 5FT	UAS-T7-S1-3-6FT	UAS-T7-S2-0-0 5FT	UAS-T7-S2-3-6FT	UAS-T7-S3-0-0 5FT	UAS-T7-S3-0-0 5FTFD	UAS-T7-S3-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	110U	120U	98U	110U	100U	100U	100U
Dibenzofuran	210U	240U	180U	200U	200U	200U	190U
Diethylphthalate	210U	240U	180U	200U	200U	200U	190U
Dimethylphthalate	210U	240U	180U	200U	200U	200U	190U
Di-n-butylphthalate	95J	110J	170J	120J	76J	74J	65J
Di-n-octylphthalate	210U	240U	180U	200U	200U	200U	190U
Fluoranthene	120J	240U	99J	200U	110J	92J	190U
Fluorene	210U	240U	180U	200U	200U	200U	190U
Hexachlorobenzene	86U	97U	76U	84U	80U	80U	80U
Hexachlorobutadiene	210U	240U	180U	200U	200U	200U	190U
Hexachlorocyclopentadiene	210U	240U	180U	200U	200U	200U	190U
Hexachloroethane	210U	240U	180U	200U	200U	200U	190U
Indeno(1,2,3-cd)pyrene	210U	240U	52J	200U	200U	200U	190U
Isophorone	210U	240U	180U	200U	200U	200U	190U
Naphthalene	210U	240U	180U	200U	200U	200U	190U
Nitrobenzene	210U	240U	180U	200U	200U	200U	190U
n-Nitrosodi-n-propylamine	210U	240U	180U	200U	200U	200U	190U
N-Nitrosodiphenylamine	210U	240U	180U	200U	200U	200U	190U
Pentachlorophenol	1000U	1200U	920U	1000U	980U	980U	960U
Phenanthrene	43J	240U	38J	200U	44J	39J	190U
Phenol	210U	240U	180U	200U	200U	200U	190U
Pyrene	99J	240U	90J	200U	100J	80J	190U
bis(2-Chloroethoxy)methane	210U	240U	180U	200U	200U	200U	190U
bis(2-Chloroethyl)ether	210U	240U	180U	200U	200U	200U	190U
bis(2-Ethylhexyl)phthalate	210U	180J	42J	200U	200U	200U	100J
Total SVOC's	**849**	**290**	**833**	**120**	**619**	**583**	**165**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T7-S3-3-6FTFD	UAS-T7-S4-0-0 5FT	UAS-T7-S4-3-6FT	UAS-T7-S5-0-0 5FT	UAS-T7-S5-3-6FT	UAS-T7-S6-0-0 5FT	UAS-T7-S6-0-0 5FTEB
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
1,2,4-Trichlorobenzene	190U	180U	190U	180U	190U	180U	10U
1,2-Dichlorobenzene	190U	180U	190U	180U	190U	180U	10U
1,3-Dichlorobenzene	190U	180U	190U	180U	190U	180U	10U
1,4-Dichlorobenzene	190U	180U	190U	180U	190U	180U	10U
2,2'-Oxybis(1-Chloropropane)	190U	180U	190U	180U	190U	180U	10U
2,4,5-Trichlorophenol	190U	180U	190U	180U	190U	180U	10U
2,4,6-Trichlorophenol	190U	180U	190U	180U	190U	180U	2 1U
2,4-Dichlorophenol	190U	180U	190U	180U	190U	180U	10U
2,4-Dinitrophenol	940U	910U	940U	920U	960U	900U	14U
2,4-Dinitrotoluene	190U	180U	190U	180U	190U	180U	10U
2,6-Dinitrotoluene	190U	180U	190U	180U	190U	180U	10U
2-Chloronaphthalene	190U	180U	190U	180U	190U	180U	10U
2-Chlorophenol	190U	180U	190U	180U	190U	180U	10U
2-Methylnaphthalene	190U	180U	190U	180U	190U	180U	10U
2-Methylphenol (o-cresol)	190U	180U	190U	180U	190U	180U	10U
2-Nitroaniline	940U	910U	940U	920U	960U	900U	50U
2-Nitrophenol	190U	180U	190U	180U	190U	180U	10U
3&4-Methylphenol (m&p-cresol)	360U	350U	370U	360U	370U	350U	10U
3,3'-Dichlorobenzidine	360U	350U	370U	360U	370U	350U	20U
3-Nitroaniline	940U	910U	940U	920U	960U	900U	50U
4,6-Dinitro-2-methylphenol	940U	910U	940U	920U	960U	900U	13U
4-Bromophenylphenyl ether	190U	180U	190U	180U	190U	180U	1 0U
4-Chloro-3-methylphenol	190U	180U	190U	180U	190U	180U	10U
4-Chloroaniline	360U	350U	370U	360U	370U	350U	20U
4-Chlorophenylphenyl ether	190U	180U	190U	180U	190U	180U	10U
4-Nitroaniline	940U	910U	940U	920U	960U	900U	50U
4-Nitrophenol	940U	910U	940U	920U	960U	900U	50U
Acenaphthene	190U	180U	190U	180U	190U	180U	10U
Acenaphthylene	190U	180U	190U	180U	190U	180U	10U
Anthracene	190U	180U	190U	180U	190U	180U	10U
Benzo(a)anthracene	190U	36J	190U	46J	190U	86J	10U
Benzo(a)pyrene	100U	44J	100U	55J	100U	95J	10U
Benzo(b)fluoranthene	190U	40J	190U	65J	190U	130J	10U
Benzo(g,h,i)perylene	190U	40J	36J	53J	190U	71J	10U
Benzo(k)fluoranthene	190U	37J	190U	46J	190U	65J	10U
Butylbenzylphthalate	190U	180U	190U	180U	190U	180U	10U
Carbazole	190U	180U	190U	180U	190U	180U	10U
Chrysene	190U	48J	190U	78J	190U	130J	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T7-S3-3-6FTFD	UAS-T7-S4-0-0 5FT	UAS-T7-S4-3-6FT	UAS-T7-S5-0-0 5FT	UAS-T7-S5-3-6FT	UAS-T7-S6-0-0 5FT	UAS-T7-S6-0-0 5FTEB
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
Dibenzo(a,h)anthracene	100U	97U	100U	98U	100U	95U	10U
Dibenzofuran	190U	180U	190U	180U	190U	180U	10U
Diethylphthalate	190U	180U	190U	180U	190U	180U	10U
Dimethylphthalate	190U	180U	190U	180U	190U	180U	10U
Di-n-butylphthalate	26J	75J	65J	100J	94J	47J	10U
Di-n-octylphthalate	190U	180U	190U	180U	190U	180U	10U
Fluoranthene	190U	84J	190U	110J	190U	210	10U
Fluorene	190U	180U	190U	180U	190U	180U	1 0U
Hexachlorobenzene	78U	75U	78U	76U	79U	74U	10U
Hexachlorobutadiene	190U	180U	190U	180U	190U	180U	10U
Hexachlorocyclopentadiene	190U	180U	190U	180U	190U	180U	10U
Hexachloroethane	190U	180U	190U	180U	190U	180U	1 9U
Indeno(1,2,3-cd)pyrene	190U	180U	190U	180U	190U	180U	10U
Isophorone	190U	180U	190U	180U	190U	180U	10U
Naphthalene	190U	180U	190U	180U	190U	180U	10U
Nitrobenzene	190U	180U	190U	180U	190U	180U	3 5U
n-Nitrosodi-n-propylamine	190U	180U	190U	180U	190U	180U	10U
N-Nitrosodiphenylamine	190U	180U	190U	180U	190U	180U	5 0U
Pentachlorophenol	940U	910U	940U	920U	960U	900U	5 0U
Phenanthrene	190U	37J	190U	41J	190U	77J	10U
Phenol	190U	180U	190U	180U	190U	180U	10U
Pyrene	190U	72J	190U	76J	190U	150J	10U
bis(2-Chloroethoxy)methane	190U	180U	190U	180U	190U	180U	10U
bis(2-Chloroethyl)ether	190U	180U	190U	180U	190U	180U	10U
bis(2-Ethylhexyl)phthalate	50J	180U	1100	180U	270	54J	1 8U
Total SVOC's	**76**	**513**	**1201**	**670**	**364**	**1115**	**ND**

Notes ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T7-S6-3-6FT	UAS-T7-S6-3-6FTEB	UAS-T7-S7-0-0 5FT	UAS-T7-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
1 2 4-Trichlorobenzene	190U	10U	190U	190U
1,2-Dichlorobenzene	190U	10U	190U	190U
1,3-Dichlorobenzene	190U	10U	190U	190U
1,4-Dichlorobenzene	190U	10U	190U	190U
2,2'-Oxybis(1-Chloropropane)	190U	10U	190U	190U
2,4,5-Trichlorophenol	190U	10U	190U	190U
2,4,6-Trichlorophenol	190U	2 1U	190U	190U
2 4-Dichlorophenol	190U	10U	190U	190U
2,4-Dinitrophenol	950U	14U	940U	940U
2,4-Dinitrotoluene	190U	10U	190U	190U
2,6-Dinitrotoluene	190U	10U	190U	190U
2-Chloronaphthalene	190U	10U	190U	190U
2-Chlorophenol	190U	10U	190U	190U
2-Methylnaphthalene	190U	10U	65J	190U
2-Methylphenol (o-cresol)	190U	10U	190U	190U
2-Nitroaniline	950U	50U	940U	940U
2-Nitrophenol	190U	10U	190U	190U
3&4-Methylphenol (m&p-cresol)	370U	10U	370U	370U
3,3'-Dichlorobenzidine	370U	20U	370U	370U
3-Nitroaniline	950U	50U	940U	940U
4,6-Dinitro-2-methylphenol	950U	13U	940U	940U
4-Bromophenylphenyl ether	190U	1 0U	190U	190U
4-Chloro-3-methylphenol	190U	10U	190U	190U
4-Chloroaniline	370U	20U	370U	370U
4-Chlorophenylphenyl ether	190U	10U	190U	190U
4-Nitroaniline	950U	50U	940U	940U
4-Nitrophenol	950U	50U	940U	940U
Acenaphthene	190U	10U	190U	190U
Acenaphthylene	190U	10U	190U	190U
Anthracene	190U	10U	41J	190U
Benzo(a)anthracene	36J	10U	360	37J
Benzo(a)pyrene	38J	10U	360	34J
Benzo(b)fluoranthene	37J	10U	430	28J
Benzo(g,h,i)perylene	35J	10U	270	190U
Benzo(k)fluoranthene	36J	10U	310	190U
Butylbenzylphthalate	190U	10U	58J	190U
Carbazole	190U	10U	58J	190U
Chrysene	48J	10U	530	43J

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.2
Sauget Area 1
Soil Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	UAS-T7-S6-3-6FT	UAS-T7-S6-3-6FTEB	UAS-T7-S7-0-0.5FT	UAS-T7-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	100U	10U	100	100U
Dibenzofuran	190U	10U	190U	190U
Diethylphthalate	190U	10U	190U	190U
Dimethylphthalate	190U	10U	190U	190U
Di-n-butylphthalate	52J	10U	40J	190U
Di-n-octylphthalate	190U	10U	190U	190U
Fluoranthene	81J	10U	970	78J
Fluorene	190U	1.0U	190U	190U
Hexachlorobenzene	78U	10U	78U	78U
Hexachlorobutadiene	190U	10U	190U	190U
Hexachlorocyclopentadiene	190U	10U	190U	190U
Hexachloroethane	190U	1.9U	190U	190U
Indeno(1,2,3-cd)pyrene	190U	10U	250	190U
Isophorone	190U	10U	190U	190U
Naphthalene	190U	10U	190U	190U
Nitrobenzene	190U	3.5U	190U	190U
n-Nitrosodi-n-propylamine	190U	10U	190U	190U
N-Nitrosodiphenylamine	190U	5.0U	190U	190U
Pentachlorophenol	950U	5.0U	940U	940U
Phenanthrene	31J	10U	430	42J
Phenol	190U	10U	190U	190U
Pyrene	60J	10U	700	190U
bis(2-Chloroethoxy)methane	190U	10U	190U	190U
bis(2-Chloroethyl)ether	190U	10U	190U	190U
bis(2-Ethylhexyl)phthalate	180J	1.8U	64J	7600
Total SVOC's	**634**	**ND**	**5036**	**7862**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	BS-EE-04-0-0 5FT	BS-EE-04-0-0.5FTFD	BS-EE-04-3-6FT	BS-EE-20-0-0 5FT	BS-EE-20-3-6FT	BS-EEG-108-0-0 5FT	BS-EEG-108-0-0 5FTEB
Description	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil
Sample Date	1/26/2000	1/26/2000	1/26/2000	1/24/2000	1/24/2000	1/27/2000	1/27/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
Decachlorobiphenyl	53	43	22UJ	740	20U	20UJ	0 50U
Dichlorobiphenyl	4 3U	4 4U	4 3UJ	4 1U	3 9U	4UJ	0 10U
Heptachlorobiphenyl	13U	13U	13UJ	94	12U	12UJ	0 30U
Hexachlorobiphenyl	8 8U	8 9U	8 7UJ	170	8U	8 1UJ	0 20U
Monochlorobiphenyl	4 3U	4.4U	4.3UJ	4 1U	3 9U	4UJ	0 10U
Nonachlorobiphenyl	42	29	22UJ	450	20U	20UJ	0 50U
Octachlorobiphenyl	13U	13U	13UJ	71	12U	12UJ	0 30U
Pentachlorobiphenyl	8.8U	8 9U	8 7UJ	130	8U	8.1UJ	0 20U
Tetrachlorobiphenyl	8 8U	8 9U	8 7UJ	47	8U	8.1UJ	0 20U
Trichlorobiphenyl	4 3U	4 4U	4 3UJ	3 8J	3 9U	4UJ	0 10U
Total PCB's	**95**	**72**	**ND**	**1705.8**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	BS-EEG-108-3-6FT	DAS-T1-S1-0-0 5FT	DAS-T1-S1-0-0 5FTFD	DAS-T1-S1-3-6FT	DAS-T1-S2-0-0 5FT	DAS-T1-S2-3-6FT	DAS-T1-S3-0-0 5FT
Description	Background Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	1/27/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	21R	69	75	19U	35	19U	28
Dichlorobiphenyl	4 1R	3 8U	3 8U	3 8U	3 8U	3 8U	3 9U
Heptachlorobiphenyl	12R	11U	11U	12U	11U	11U	12U
Hexachlorobiphenyl	8 4R	7 6U	7 6U	7 8U	7 6U	7 7U	8 0U
Monochlorobiphenyl	4 1R	3 8U	3 8U	3 8U	3 8U	3 8U	3 9U
Nonachlorobiphenyl	21R	19U	19U	19U	19U	19U	20U
Octachlorobiphenyl	12R	11U	11U	12U	11U	11U	12U
Pentachlorobiphenyl	8 4R	7 6U	7 6U	7 8U	7 6U	7 7U	8 0U
Tetrachlorobiphenyl	8 4R	7 6U	7 6U	7 8U	7 6U	7 7U	8 0U
Trichlorobiphenyl	4 1R	3 8U	3 8U	3 8U	3 8U	3 8U	3 9U
Total PCB's	**ND**	**69**	**75**	**ND**	**35**	**ND**	**28**

Notes t detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	DAS-T1-S3-3-6FT	DAS-T2-S1-0-0 5FT	DAS-T2-S1-3-6FT	DAS-T2-S2-0-0 5FT	DAS-T2-S2-3-6FT	DAS-T2-S3-0-0 5FT	DAS-T2-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	21U	41	19U	19U	18U	12J	18U
Dichlorobiphenyl	4 2U	3 9U	3 7U	3 8U	3 5U	4 3U	3 6U
Heptachlorobiphenyl	13U	12U	11U	11U	11U	13U	11U
Hexachlorobiphenyl	8 6U	8 0U	7 5U	7 7U	7 1U	8 8U	7 4U
Monochlorobiphenyl	4 2U	3 9U	3 7U	3 8U	3 5U	4 3U	3 6U
Nonachlorobiphenyl	21U	20U	19U	19U	18U	22U	18U
Octachlorobiphenyl	13U	12U	11U	11U	11U	13U	11U
Pentachlorobiphenyl	8 6U	8 0U	7 5U	7 7U	7 1U	8 8U	7 4U
Tetrachlorobiphenyl	8 6UJ	8 0U	7 5U	7 7U	7 1U	8 8U	7 4U
Trichlorobiphenyl	4 2U	3 9U	3 7U	3 8U	3 5U	4 3U	3 6U
Total PCB's	**ND**	**41**	**ND**	**ND**	**ND**	**12**	**ND**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	DAS-T2-S3-3-6FTFD	DAS-T3-S1-0-0 5FT	DAS-T3-S1-3-6FT	DAS-T3-S2-0-0 5FT	DAS-T3-S2-3-6FT	DAS-T3-S3-0-0 5FT	DAS-T3-S3-0-0 5FTEB
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
Decachlorobiphenyl	18U	13J	22U	13J	18U	30	0 50U
Dichlorobiphenyl	3 7U	4 1U	4 3U	3 9U	3 7U	3 8U	0 10U
Heptachlorobiphenyl	11U	12U	13U	12U	11U	11U	0 30U
Hexachlorobiphenyl	7 4U	8 3U	8 7U	8 0U	7 4U	7 7U	0 20U
Monochlorobiphenyl	3 7U	4 1U	4 3U	3 9U	3 7U	3 8U	0 10U
Nonachlorobiphenyl	18U	21U	22U	20U	18U	19U	0 50U
Octachlorobiphenyl	11U	12U	13U	12U	11U	11U	0 30U
Pentachlorobiphenyl	7 4U	8 3U	8 7U	8 0U	7 4U	7 7U	0 20U
Tetrachlorobiphenyl	7 4U	8 3U	8 7U	8 0U	7 4U	7 7U	0 20U
Trichlorobiphenyl	3 7U	4 1U	4 3U	3 9U	3 7U	3 8U	0 10U
Total PCB's	**ND**	**13**	**ND**	**13**	**ND**	**30**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	DAS-T3-S3-3-6FT	DAS-T4-S1-0-0.5FT	DAS-T4-S1-0-0 5FTFD	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FTFD	DAS-T4-S2-0-0 5FT	DAS-T4-S2-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000	4/20/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	21U	48	47	22U	22U	33	20U
Dichlorobiphenyl	4 1U	4 0U	4 0U	4 3U	4 3U	4 1U	3 9U
Heptachlorobiphenyl	12U	12U	12U	13U	13U	12U	12U
Hexachlorobiphenyl	8.3U	8 2U	8.1U	8.8U	8 7U	8 4U	8 0U
Monochlorobiphenyl	4 1U	4 0U	4.0U	4.3U	4.3U	4 1U	3 9U
Nonachlorobiphenyl	21U	20U	20U	22U	10J	9.2J	20U
Octachlorobiphenyl	12U	12U	12U	13U	13U	12U	12U
Pentachlorobiphenyl	8.3U	8 2U	8.1U	8 8U	8.7U	8.4U	8 0U
Tetrachlorobiphenyl	8 3U	8.2U	8.1U	8 8U	8.7U	8.4U	8 0U
Trichlorobiphenyl	4 1U	4 0U	4 0U	4.3U	4 3U	4.1U	3 9U
Total PCB's	**ND**	**48**	**47**	**ND**	**10**	**42.2**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	DAS-T4-S3-0-0 5FT	DAS-T4-S3-3-6FT	DAS-T5-S1-0-0.5FT	DAS-T5-S1-0-0.5FTEB	DAS-T5-S1-3-6FT	DAS-T5-S2-0-0 5FT	DAS-T5-S2-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/20/2000	4/20/2000	4/19/2000	4/20/2000	4/19/2000	4/19/2000	4/19/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	21U	22U	20U	0.50U	20U	20U	18U
Dichlorobiphenyl	4 1U	4.3U	3.9U	0.10U	3 9U	3 9U	3 6U
Heptachlorobiphenyl	12UJ	13U	12U	0.30U	12U	12U	11U
Hexachlorobiphenyl	8.3UJ	8 8U	8.0U	0.20U	8 0U	7 9U	7 4U
Monochlorobiphenyl	4.1UJ	4.3U	3.9U	0.10U	3.9U	3 9U	3 6U
Nonachlorobiphenyl	21U	22U	20U	0.50U	20U	20U	18U
Octachlorobiphenyl	12U	13U	12U	0.30U	12U	12U	11U
Pentachlorobiphenyl	8.3UJ	8.8U	8 0U	0.20U	8.0U	7.9U	7 4U
Tetrachlorobiphenyl	8 3UJ	8.8U	8.0U	0.20U	8 0U	7 9U	7 4U
Trichlorobiphenyl	4.1U	4.3U	3.9U	0 10U	3 9U	3.9U	3 6U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	DAS-T5-S3-0-0 5FT	DAS-T5-S3-3-6FT	DAS-T6-S1-0-0 5FT	DAS-T6-S1-3-6FT	DAS-T6-S2-0-0 5FT	DAS-T6-S2-3-6FT	DAS-T6-S3-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	25J	18U	130	19U	11J	19U	18U
Dichlorobiphenyl	3 6UJ	3 7U	3 9U	3 8U	3 8UJ	3 8U	3 6U
Heptachlorobiphenyl	11UJ	11UJ	12U	11U	11UJ	12U	11U
Hexachlorobiphenyl	7 4UJ	7 4UJ	7 9U	7 6U	7 6UJ	7 8U	7 3U
Monochlorobiphenyl	3 6UJ	3 7U	3 9U	3 8U	3 8UJ	3 8U	3 6U
Nonachlorobiphenyl	10J	18U	49	19U	19UJ	19U	18U
Octachlorobiphenyl	11UJ	11UJ	12U	11U	11UJ	12U	11U
Pentachlorobiphenyl	7 4UJ	7 4UJ	7 9U	7 6U	7 6UJ	7 8U	7 3U
Tetrachlorobiphenyl	7 4UJ	7 4UJ	7 9U	7 6U	7 6UJ	7 8U	7 3U
Trichlorobiphenyl	3 6UJ	3 7U	3 9U	3 8U	3 8UJ	3 8U	3 6U
Total PCB s	**35**	**ND**	**179**	**ND**	**11**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	DAS-T6-S3-3-6FT	DAS-T7-S1-0-0 5FT	DAS-T7-S1-3-6FT	DAS-T7-S2-0-0 5FT	DAS-T7-S2-3-6FT	UAS-T1-S1-0-0 5FT	UAS-T1-S1-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	11/10/1999	11/10/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	19U	19U	21U	10J	22U	55	20U
Dichlorobiphenyl	3 7U	3 8U	4 2U	4 0U	4 3U	4 1U	3 9U
Heptachlorobiphenyl	11U	12U	13U	12U	13U	12U	12U
Hexachlorobiphenyl	7 5U	7 8U	8 6U	8 1U	8 8U	8 3U	8 0U
Monochlorobiphenyl	3 7U	3 8U	4 2U	4 0U	4 3U	4 1U	3 9U
Nonachlorobiphenyl	19U	19U	21U	20U	22U	29	20U
Octachlorobiphenyl	11U	12U	13U	12U	13U	12U	12U
Pentachlorobiphenyl	7 5U	7 8U	8 6U	8 1U	8 8U	8 3U	8 0U
Tetrachlorobiphenyl	7 5U	7 8U	8 6U	8 1U	8 8U	8 3U	8 0U
Trichlorobiphenyl	3 7U	3 8U	4 2U	4 0U	4 3U	4 1U	3 9U
Total PCB's	**ND**	**ND**	**ND**	**10**	**ND**	**84**	**ND**

Notes ot detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T1-S2-0-0 5FT	UAS-T1-S2-3-6FT	UAS-T1-S3-0-0 5FT	UAS-T1-S3-3-6FT	UAS-T1-S4-0-0 5FT	UAS-T1-S4-3-6FT	UAS-T1-S5-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	81	21U	140J	22U	85	18U	73
Dichlorobiphenyl	4 0U	4 1U	4 2UJ	4 4U	3 9U	3 5U	3 8U
Heptachlorobiphenyl	12U	13U	13UJ	13U	12U	11U	12U
Hexachlorobiphenyl	8 2U	8 4U	8 6UJ	8 8U	7 9U	7 2U	7 7U
Monochlorobiphenyl	4 0U	4 1U	4 2UJ	4 4U	3 9U	3 5U	3 8U
Nonachlorobiphenyl	28	14J	91J	22U	41	18U	35
Octachlorobiphenyl	12U	13U	13UJ	13U	12U	11U	3 8J
Pentachlorobiphenyl	8 2U	5 0J	8 6UJ	8 8U	7 9U	7 2U	7 7U
Tetrachlorobiphenyl	8 2U	8 4U	8 6UJ	8 8U	7 9U	7 2U	7 7U
Trichlorobiphenyl	4 0U	4 1U	4 2UJ	4 4U	3 9U	3 5U	3 8U
Total PCB's	**109**	**19**	**231**	**ND**	**126**	**ND**	**111 8**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T1-S5-3-6FT	UAS-T1-S6-0-0 5FT	UAS-T1-S6-3-6FT	UAS-T1-S7-0-0 5FT	UAS-T1-S7-0-0 5FTEB	UAS-T1-S7-0-0 5FTFD	UAS-T1-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
Decachlorobiphenyl	18U	83J	20U	68	0 50U	56	19U
Dichlorobiphenyl	3 6U	3 6UJ	4 0U	3 6U	0 10U	3 6U	3 8U
Heptachlorobiphenyl	11U	11UJ	12U	11U	0 30U	11U	12U
Hexachlorobiphenyl	7 2U	7 2UJ	8 1U	7 4U	0 20U	7 4U	7 8U
Monochlorobiphenyl	3 6U	3 6UJ	4 0U	3 6U	0 10U	3 6U	3 8U
Nonachlorobiphenyl	18U	40J	12J	32	0 50U	29	19U
Octachlorobiphenyl	11U	11UJ	12U	11U	0 30U	11U	12U
Pentachlorobiphenyl	7 2U	7 2UJ	8 1U	7 4U	0 20U	7 4U	7 8U
Tetrachlorobiphenyl	7 2U	7 2UJ	8 1U	7 4U	0 20U	7 4U	7 8U
Trichlorobiphenyl	3 6U	3 6UJ	4 0U	3 6U	0 10U	3 6U	3 8U
Total PCB's	**ND**	**123**	**12**	**100**	**ND**	**85**	**ND**

Notes ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T1-S7-3-6FTEB	UAS-T1-S7-3-6FTFD	UAS-T2-S1-0-0 5FT	UAS-T2-S1-3-6FT	UAS-T2-S2-0-0 5FT	UAS-T2-S2-3-6FT	UAS-T2-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	0 50U	19UJ	96	18UJ	80	19UJ	34J
Dichlorobiphenyl	0 10U	3 8UJ	3 6U	3 5UJ	4 0U	3 7UJ	4 1UJ
Heptachlorobiphenyl	0 30U	12UJ	11U	11UJ	12U	11UJ	12UJ
Hexachlorobiphenyl	0 20U	7 8UJ	7 4U	7 2UJ	8 0U	7 5UJ	8 3UJ
Monochlorobiphenyl	0 10U	3 8UJ	3 6U	3 5UJ	4 0U	3 7UJ	4 1UJ
Nonachlorobiphenyl	0 50U	12J	34	18UJ	32	19UJ	18J
Octachlorobiphenyl	0 30U	12UJ	11U	11UJ	12U	11UJ	12UJ
Pentachlorobiphenyl	0 20U	7 8UJ	7 4U	7 2UJ	8 0U	7 5UJ	8 3UJ
Tetrachlorobiphenyl	0 20U	7 8UJ	7 4U	7 2UJ	8 0U	7 5UJ	8 3UJ
Trichlorobiphenyl	0 10U	3 8UJ	3 6U	3 5UJ	4 0U	3 7UJ	4 1UJ
Total PCB s	**ND**	**12**	**130**	**ND**	**112**	**ND**	**52**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T2-S3-3-6FT	UAS-T2-S4-0-0 5FT	UAS-T2-S4-3-6FT	UAS-T2-S5-0-0 5FT	UAS-T2-S5-3-6FT	UAS-T2-S6-0-0 5FT	UAS-T2-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	19UJ	20UJ	22U	110J	21UJ	48	20U
Dichlorobiphenyl	3 8UJ	3 9UJ	4 4U	3 9UJ	4 2UJ	4 0U	3 9U
Heptachlorobiphenyl	12UJ	12UJ	13UJ	12UJ	13UJ	12U	12U
Hexachlorobiphenyl	7 8UJ	8 0UJ	9 0UJ	8 0UJ	8 5UJ	8 1U	8 0U
Monochlorobiphenyl	3 8UJ	3 9UJ	4 4U	3 9UJ	4 2UJ	4 0U	3 9U
Nonachlorobiphenyl	19UJ	17J	22U	54J	21UJ	16J	20U
Octachlorobiphenyl	12UJ	12UJ	13UJ	12UJ	13UJ	12U	12U
Pentachlorobiphenyl	7 8UJ	8 0UJ	9 0UJ	8 0UJ	8 5UJ	8 1U	8 0U
Tetrachlorobiphenyl	7 8UJ	8 0UJ	9 0UJ	8 0UJ	8 5UJ	8 1U	8 0U
Trichlorobiphenyl	3 8UJ	3 9UJ	4 4U	3 9UJ	4 2UJ	4 0U	3 9U
Total PCB's	**ND**	**17**	**ND**	**164**	**ND**	**64**	**ND**

Notes ' ›t detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T3-S1-0-0 5FT	UAS-T3-S1-3-6FT	UAS-T3-S2-0-0 5FT	UAS-T3-S2-3-6FT	UAS-T3-S3-0-0 5FT	UAS-T3-S3-0-0 5FTFD	UAS-T3-S3-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	62	21UJ	72	21U	47	39	19UJ
Dichlorobiphenyl	4.0U	4.2UJ	3.9U	4.2U	3 8U	3 8U	3 8UJ
Heptachlorobiphenyl	12U	13UJ	12U	13U	12U	12U	12UJ
Hexachlorobiphenyl	8 2U	8.5UJ	8.0U	8.5U	7 8U	7.8U	7 8UJ
Monochlorobiphenyl	4.0U	4.2UJ	3.9U	4.2U	3.8U	3.8U	3 8UJ
Nonachlorobiphenyl	35	21UJ	44	21U	21	17J	19UJ
Octachlorobiphenyl	12U	13UJ	12U	13U	12U	12U	12UJ
Pentachlorobiphenyl	8.2U	8.5UJ	8.0U	8.5U	7.8U	7.8U	7 8UJ
Tetrachlorobiphenyl	8.2U	8.5UJ	8.0U	8.5U	7.8U	7.8U	7 8UJ
Trichlorobiphenyl	4.0U	4.2UJ	3.9U	4.2U	3 8U	3.8U	3 8UJ
Total PCB's	**97**	**ND**	**116**	**ND**	**68**	**56**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T3-S3-3-6FTFD	UAS-T3-S4-0-0.5FT	UAS-T3-S4-3-6FT	UAS-T3-S5-0-0.5FT	UAS-T3-S5-0-0.5FTEB	UAS-T3-S5-3-6FT	UAS-T3-S6-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/16/1999	11/15/1999	11/15/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
Decachlorobiphenyl	19U	52	20U	58	0.50U	18U	20
Dichlorobiphenyl	3.8U	3.8U	4.0U	3.7U	0.10U	3 5U	3 8U
Heptachlorobiphenyl	12U	11U	12U	11U	0.30U	10U	11U
Hexachlorobiphenyl	7.8U	7.7U	8.1U	7.5U	0.20U	7.0U	7 7U
Monochlorobiphenyl	3.8U	3.8U	4.0U	3.7U	0.10U	3 5U	3 8U
Nonachlorobiphenyl	9 5J	38	20U	30	0.50U	18U	10J
Octachlorobiphenyl	12U	11U	12U	11U	0.30U	10U	11U
Pentachlorobiphenyl	7 8U	7.7U	8.1U	7.5U	0.20U	7 0U	7 7U
Tetrachlorobiphenyl	7 8U	7 7U	8.1U	7.5U	0.20U	7 0U	7 7U
Trichlorobiphenyl	3 8U	3.8U	4.0U	3.7U	0.10U	3 5U	3 8U
Total PCB's	**9.5**	**90**	**ND**	**88**	**ND**	**ND**	**30**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T3-S6-3-6FT	UAS-T3-S7-0-0 5FT	UAS-T3-S7-3-6FT	UAS-T3-S7-3-6FTEB	UAS-T4-S1-0-0 5FT	UAS-T4-S1-3-6FT	UAS-T4-S2-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/16/1999	11/16/1999	11/17/1999	11/16/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	22U	180U	22U	0 50U	33J	20U	89U
Dichlorobiphenyl	4 3U	35U	4 3U	0 10U	3 8UJ	4 0U	18U
Heptachlorobiphenyl	13U	100U	13U	0 30U	11UJ	12U	53U
Hexachlorobiphenyl	8 8U	70U	8 7U	0 20U	7 6UJ	8 1U	36U
Monochlorobiphenyl	4 3U	35U	4 3U	0 10U	3 8UJ	4 0U	18U
Nonachlorobiphenyl	22U	180U	22U	0 50U	13J	20U	89U
Octachlorobiphenyl	13U	100U	13U	0 30U	11UJ	12U	53U
Pentachlorobiphenyl	8 8U	70U	8 7U	0 20U	7 6UJ	8 1U	36U
Tetrachlorobiphenyl	8 8U	70U	8 7U	0 20U	7 6UJ	8 1U	36U
Trichlorobiphenyl	4 3U	35U	4 3U	0 10U	3 8UJ	4 0U	18U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**46**	**ND**	**ND**

Notes U-not detected *J-estimated value* N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, *EB-equipment blank, FD-field duplicate* ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T4-S2-3-6FT	UAS-T4-S3-0-0 5FT	UAS-T4-S3-0-0 5FTFD	UAS-T4-S3-3-6FT	UAS-T4-S3-3-6FTFD	UAS-T4-S4-0-0 5FT	UAS-T4-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/16/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	18U	18U	18U	18U	10J	7 6J	11J
Dichlorobiphenyl	3 6U	3 5U	3 5U	3 5U	3 5U	3 4U	3 5U
Heptachlorobiphenyl	11U	11U	11U	10U	10U	10U	10U
Hexachlorobiphenyl	7 3U	7 1U	7 2U	7 0U	7 0U	6 9U	7 0U
Monochlorobiphenyl	3 6U	3 5U	3 5U	3 5U	3 5U	3 4U	3 5U
Nonachlorobiphenyl	18U	18U	18U	7 1J	18U	17U	18U
Octachlorobiphenyl	11U	11U	11U	10U	10U	10U	10U
Pentachlorobiphenyl	7 3U	7 1U	7 2U	7 0U	7 0U	6 9U	7 0U
Tetrachlorobiphenyl	7 3U	7 1U	7 2U	7 0U	7 0U	6 9U	7 0U
Trichlorobiphenyl	3 6U	3 5U	3 5U	3 5U	3 5U	3 4U	3 5U
Total PCB's	**ND**	**ND**	**ND**	**7.1**	**10**	**7.6**	**11**

Notes U not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T4-S5-0-0 5FT	UAS-T4-S5-3-6FT	UAS-T4-S6-0-0.5FT	UAS-T4-S6-3-6FT	UAS-T4-S7-0-0.5FT	UAS-T4-S7-3-6FT	UAS-T5-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/16/1999	11/16/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	91U	21U	20U	36	42	45J	120
Dichlorobiphenyl	18U	4 2U	3.9U	4.2U	3.7U	18U	3 8U
Heptachlorobiphenyl	54U	13U	12U	13U	11U	56U	11U
Hexachlorobiphenyl	36U	8 6U	8.0U	8 6U	7 5U	38U	7 6U
Monochlorobiphenyl	18U	4.2U	3.9U	4 2U	3 7U	18U	3 8U
Nonachlorobiphenyl	91U	21U	20U	13J	16J	8.9J	45
Octachlorobiphenyl	54U	13U	12U	13U	11U	56U	11U
Pentachlorobiphenyl	36U	8.6U	8.0U	8.6U	7.5U	38U	7 6U
Tetrachlorobiphenyl	36U	8.6U	8.0U	8.6U	7 5U	38U	7.6U
Trichlorobiphenyl	18U	4 2U	3.9U	4 2U	3.7U	18U	3 8U
Total PCB's	**ND**	**ND**	**ND**	**49**	**58**	**53.9**	**165**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T5-S1-3-6FT	UAS-T5-S2-0-0 5FT	UAS-T5-S2-3-6FT	UAS-T5-S3-0-0 5FT	UAS-T5-S3-3-6FT	UAS-T5-S4-0-0 5FT	UAS-T5-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	19U	75	19U	110J	21UJ	43	17U
Dichlorobiphenyl	3 7U	3 7U	3 8U	3 6UJ	4 1UJ	3 7U	3 4U
Heptachlorobiphenyl	11U	11U	12U	11UJ	12UJ	11U	10U
Hexachlorobiphenyl	7 5U	7 4U	7 8U	7 3UJ	8 4UJ	7 5U	7 0U
Monochlorobiphenyl	3 7U	3 7U	3 8U	3 6UJ	4 1UJ	3 7U	3 4U
Nonachlorobiphenyl	19U	20	19U	27J	21UJ	16J	17U
Octachlorobiphenyl	11U	11U	12U	11UJ	12UJ	11U	10U
Pentachlorobiphenyl	7 5U	7 4U	7 8U	7 3UJ	8 4UJ	7 5U	7 0U
Tetrachlorobiphenyl	7 5U	7 4U	7 8U	7 3UJ	8 4UJ	7 5U	7 0U
Trichlorobiphenyl	3 7U	3 7U	3 8U	3 6UJ	4 1UJ	3 7U	3 4U
Total PCB's	**ND**	**95**	**ND**	**137**	**ND**	**59**	**ND**

Notes ...ot detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T5-S5-0-0 5FT	UAS-T5-S5-0-0 5FTEB	UAS-T5-S5-3-6FT	UAS-T5-S5-3-6FTEB	UAS-T5-S6-0-0 5FT	UAS-T5-S6-0-0 5FTFD	UAS-T5-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	12J	0 50U	17U	0 50U	36J	54J	18U
Dichlorobiphenyl	3 4UJ	0 10U	3 4U	0 10U	3 9UJ	3 9UJ	3 6U
Heptachlorobiphenyl	10UJ	0 30U	10U	0 30U	12UJ	12UJ	11U
Hexachlorobiphenyl	7 0UJ	0 20U	7 0U	0 20U	7 9UJ	8 0UJ	7 4U
Monochlorobiphenyl	3 4UJ	0 10U	3 4U	0 10U	3 9UJ	3 9UJ	3 6U
Nonachlorobiphenyl	7 9J	0 50U	17U	0 50U	15J	30J	18U
Octachlorobiphenyl	10UJ	0 30U	10U	0 30U	12UJ	12UJ	11U
Pentachlorobiphenyl	7 0UJ	0 20U	7 0U	0 20U	7 9UJ	3 4J	7 4U
Tetrachlorobiphenyl	7 0UJ	0 20U	7 0U	0 20U	7 9UJ	8 0UJ	7 4U
Trichlorobiphenyl	3 4UJ	0 10U	3 4U	0 10U	3 9UJ	3 9UJ	3 6U
Total PCB's	**19 9**	**ND**	**ND**	**ND**	**51**	**87 4**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T5-S6-3-6FTFD	UAS-T6-S1-0-0.5FT	UAS-T6-S1-3-6FT	UAS-T6-S2-0-0.5FT	UAS-T6-S2-3-6FT	UAS-T6-S3-0-0 5FT	UAS-T6-S3-0-0 5FTEB
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
Decachlorobiphenyl	18UJ	15J	20UJ	53	20UJ	12J	0 50U
Dichlorobiphenyl	3.7UJ	3.9UJ	3.9UJ	3.8U	3.9UJ	3 6U	0 10U
Heptachlorobiphenyl	11UJ	12UJ	12UJ	92	12UJ	11U	0 30U
Hexachlorobiphenyl	7 4UJ	7 9UJ	8.0UJ	7.7U	7.9UJ	7 4U	0 20U
Monochlorobiphenyl	3 7UJ	3.9UJ	3.9UJ	3.8U	3 9UJ	3.6U	0 10U
Nonachlorobiphenyl	18UJ	20UJ	20UJ	32	20UJ	18U	0 50U
Octachlorobiphenyl	11UJ	12UJ	12UJ	48	12UJ	11U	0 30U
Pentachlorobiphenyl	7 4UJ	7.9UJ	8.0UJ	160	7.9UJ	7.1J	0 20U
Tetrachlorobiphenyl	7.4UJ	7.9UJ	8.0UJ	7.7U	7.9UJ	7.4U	0 20U
Trichlorobiphenyl	3.7UJ	3.9UJ	3.9UJ	3.8U	3 9UJ	3 6U	0 10U
Total PCB's	**ND**	**15**	**ND**	**385**	**ND**	**19.1**	**ND**

Notes U not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T6-S3-3-6FT	UAS-T6-S3-3-6FTEB	UAS-T6-S4-0-0 5FT	UAS-T6-S4-3-6FT	UAS-T6-S5-0-0 5FT	UAS-T6-S5-3-6FT	UAS-T7-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/19/1999
Units	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	98U	0 50U	17J	19UJ	19UJ	21U	40
Dichlorobiphenyl	19U	0 10U	3 6UJ	3 8UJ	3 8UJ	4 2U	4 1U
Heptachlorobiphenyl	59U	0 30U	11UJ	11UJ	11UJ	13U	12U
Hexachlorobiphenyl	39U	0 20U	7 3UJ	7 7UJ	7 6UJ	8 6U	11
Monochlorobiphenyl	19U	0 10U	3 6UJ	3 8UJ	3 8UJ	4 2U	4 1U
Nonachlorobiphenyl	98U	0 50U	8 2J	19UJ	19UJ	21U	17J
Octachlorobiphenyl	59U	0 30U	11UJ	11UJ	11UJ	13U	12U
Pentachlorobiphenyl	39U	0 20U	12J	7 7UJ	7 6UJ	4 3J	22
Tetrachlorobiphenyl	39U	0 20U	7 3UJ	7 7UJ	7 6UJ	8 6U	8 3U
Trichlorobiphenyl	19U	0 10U	3 6UJ	3 8UJ	3 8UJ	4 2U	4 1U
Total PCB's	**ND**	**ND**	**37.2**	**ND**	**ND**	**4 3**	**90**

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T7-S1-3-6FT	UAS-T7-S2-0-0 5FT	UAS-T7-S2-3-6FT	UAS-T7-S3-0-0 5FT	UAS-T7-S3-0-0 5FTFD	UAS-T7-S3-3-6FT	UAS-T7-S3-3-6FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	23U	15J	20U	35	51	19U	18U
Dichlorobiphenyl	4 6U	3 6U	4 0U	3 8U	3 8U	3 8U	3 7U
Heptachlorobiphenyl	14U	11U	12U	11U	11U	11U	11U
Hexachlorobiphenyl	9 3U	7 3U	8 1U	7 7U	7 7U	7 6U	7 4U
Monochlorobiphenyl	4 6U	3 6U	4 0U	3 8U	3 8U	3 8U	3 7U
Nonachlorobiphenyl	23U	18U	20U	13J	25	19U	18U
Octachlorobiphenyl	14U	11U	12U	11U	11U	11U	11U
Pentachlorobiphenyl	9 3U	7 3U	8 1U	7 7U	7 7U	7 6U	7 4U
Tetrachlorobiphenyl	9 3U	7 3U	8 1U	7 7U	7 7U	7 6U	7 4U
Trichlorobiphenyl	4 6U	3 6U	4 0U	3 8U	3 8U	3 8U	3 7U
Total PCB's	**ND**	**15**	**ND**	**48**	**76**	**ND**	**ND**

Notes)t detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-resu'' from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T7-S4-0-0 5FT	UAS-T7-S4-3-6FT	UAS-T7-S5-0-0 5FT	UAS-T7-S5-3-6FT	UAS-T7-S6-0-0 5FT	UAS-T7-S6-0-0 5FTEB	UAS-T7-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw
Decachlorobiphenyl	23	18U	7 5J	19UJ	28	0 50U	8 4J
Dichlorobiphenyl	3 5U	3 7U	3 6U	3 8UJ	3 5U	0 10U	3 7U
Heptachlorobiphenyl	11U	11U	11U	11UJ	11U	0 30U	11U
Hexachlorobiphenyl	7 2U	7 4U	7 3U	7 6UJ	7 1U	0 20U	7 5U
Monochlorobiphenyl	3 5U	3 7U	3 6U	3 8UJ	3 5U	0 10U	3 7U
Nonachlorobiphenyl	11J	18U	18U	19UJ	10J	0 50U	19U
Octachlorobiphenyl	11U	11U	11U	11UJ	11U	0 30U	11U
Pentachlorobiphenyl	7 2U	7 4U	7 3U	7 6UJ	7 1U	0 12J	7 5U
Tetrachlorobiphenyl	7 2U	7 4U	7 3U	7 6UJ	7 1U	0 20U	7 5U
Trichlorobiphenyl	3 5U	3 7U	3 6U	3 8UJ	3 5U	0 10U	3 7U
Total PCB s	**34**	**ND**	**7 5**	**ND**	**38**	**0 12**	**8 4**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.3
Sauget Area 1
Soil Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	UAS-T7-S6-3-6FTEB	UAS-T7-S7-0-0.5FT	UAS-T7-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999
Units	ug/l	ug/kg dw	ug/kg dw
Decachlorobiphenyl	0.50U	39	18U
Dichlorobiphenyl	0.10U	3.7U	3.7U
Heptachlorobiphenyl	0.30U	11U	11U
Hexachlorobiphenyl	0.20U	7.4U	7.4U
Monochlorobiphenyl	0.10U	3.7U	3.7U
Nonachlorobiphenyl	0 50U	12J	18U
Octachlorobiphenyl	0 30U	11U	11U
Pentachlorobiphenyl	0.20U	7.4U	7.4U
Tetrachlorobiphenyl	0 20U	7.4U	7.4U
Trichlorobiphenyl	0 10U	3.7U	3 7U
Total PCB's	**ND**	**51**	**ND**

Notes: ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	BS-EEG-108-0-0 5FT	BS-EEG-108-0-0 5FTEB	BS-EEG-108-3-6FT
Description	Background Soil	Background Soil	Background Soil
Sample Date	1/27/2000	1/27/2000	1/27/2000
Units	ug/kg dw	ug/l	ug/kg dw
4 4'-DDD	4U	0 10U	4 1U
4 4 -DDE	4U	0 10U	4 1UJ
4 4'-DDT	4U	0 10U	4 1UJ
Aldrin	2U	0 050U	2 1U
Alpha Chlordane	2U	0 050U	2 1U
Dieldrin	4U	0 10U	4 1UJ
Endosulfan I	2U	0 050U	2 1UJ
Endosulfan II	4U	0 10U	4 1U
Endosulfan sulfate	4U	0 10U	4 1U
Endrin	4U	0 10U	4 1UJ
Endrin aldehyde	4U	0 10U	4 1U
Endrin ketone	4U	0 10U	4 1UJ
Gamma Chlordane	2U	0 050U	2 1UJ
Heptachlor	2U	0 050U	2 1U
Heptachlor epoxide	2U	0 050U	2 1U
Methoxychlor	20U	0 50U	21U
Toxaphene	200U	5 0U	210U
alpha-BHC	0 6U	0 039U	0 62UJ
beta-BHC	0 6U	0 014U	0 62U
delta-BHC	0 6U	0 012U	0 62U
gamma-BHC (Lindane)	2U	0 019U	2 1UJ
Total Pesticides	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	DAS-T7-S2-0-0 5FT	DAS-T7-S2-3-6FT	BS-EE-04-0-0 5FT	BS-EE-04-0-0 5FTFD	BS-EE-04-3-6FT	BS-EE-20-0-0 5FT	BS-EE-20-3-6FT
Description	Developed Soil	Developed Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil
Sample Date	4/20/2000	4/20/2000	1/26/2000	1/26/2000	1/26/2000	1/24/2000	1/24/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	1 3J	4 3U	4 3U	4 4U	4 3U	4 1U	3 9U
4 4'-DDE	1 6J	4 3U	4 3U	4 4U	4 3U	20	3 9U
4 4'-DDT	15	4 3U	4 3U	4 4U	4 3U	17J	3 9U
Aldrin	2 0U	2 2U	2 2U	2 3U	2 2U	2 1U	2U
Alpha Chlordane	11	2 2U	2 2U	2 3U	2 2U	2 1U	2U
Dieldrin	3 9U	4 3U	4 3U	4 4U	4 3U	4 1U	3 9U
Endosulfan I	2 0U	2 2U	2 2U	2 3U	2 2U	2 1U	2U
Endosulfan II	3 9U	4 3U	4 3U	4 4U	4 3U	4 1U	3 9U
Endosulfan sulfate	3 9U	0 32J	4 3U	4 4U	4 3U	4 1U	3 9U
Endrin	0 10J	4 3U	4 3U	4 4U	4 3U	4 1U	3 9U
Endrin aldehyde	3 9U	4 3U	4 3U	4 4U	4 3U	4 1U	3 9U
Endrin ketone	3 9U	4 3U	4 3U	4 4U	4 3U	4 1U	3 9U
Gamma Chlordane	10J	2 2U	2 2U	2 3U	2 2U	2 1U	2U
Heptachlor	2U	2 2U	2 2U	2 3U	2 2U	2 1U	2U
Heptachlor epoxide	0 62J	2 2U	2 2U	2 3U	2 2U	2 1U	2U
Methoxychlor	10J	22U	22U	23U	22U	21U	20U
Toxaphene	200U	220U	220U	230U	220U	210U	200U
alpha-BHC	0 59U	0 66U	0 66U	0 67U	0 65U	0 62U	0 6U
beta-BHC	0 59U	0 66U	0 66U	0 67U	0 65U	0 62U	0 6U
delta-BHC	0 18J	2 2U	0 66U	0 67U	0 65U	0 62U	0 6U
gamma-BHC (Lindane)	0 087J	2 2U	2 2U	2 3U	2 2U	2 1U	2U
Total Pesticides	**49 887**	**0 32**	**ND**	**ND**	**ND**	**37**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	DAS-T6-S1-3-6FT	DAS-T6-S2-0-0.5FT	DAS-T6-S2-3-6FT	DAS-T6-S3-0-0.5FT	DAS-T6-S3-3-6FT	DAS-T7-S1-0-0 5FT	DAS-T7-S1-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	3 8U	3 7U	3.8U	1.8J	3 7U	3.8U	4 2U
4,4'-DDE	3.8U	2 0J	3.8U	0.80J	3.7U	3.8U	4 2U
4,4'-DDT	3.8U	3.7U	3.8U	7.4U	3.7U	3.8U	4 2U
Aldrin	1 9U	1.9U	2 0U	3.7U	1.9U	2.0U	2 2U
Alpha Chlordane	1 9U	1.9U	2.0U	17	1 9U	0.30J	2 2U
Dieldrin	3.8U	3.7U	3.8U	7.4U	3.7U	3 8U	4 2U
Endosulfan I	1.9U	1 9U	2.0U	3.7U	1.9U	2 0U	2 2U
Endosulfan II	3.8U	3.7U	3 8U	7.4U	3.7U	3.8U	4.2U
Endosulfan sulfate	0.58J	0.57J	0 42J	1.9J	3.7U	3.8U	0 57J
Endrin	3.8U	3 7U	3.8U	2.2J	3 7U	0.40J	4 2U
Endrin aldehyde	3.8U	3 7U	3.8U	0 75J	3.7U	3 8U	4 2U
Endrin ketone	3.8U	0 23J	3.8U	7.4U	3 7U	3 8U	4 2U
Gamma Chlordane	1.9U	1.9U	2.0U	18J	1 9U	2.0U	2 2U
Heptachlor	1 9U	1.9U	2.0U	4 1	1 9U	2 0U	2 2U
Heptachlor epoxide	1 9U	1.9U	2.0U	3.7U	1 9U	2.0U	2 2U
Methoxychlor	19U	1 5J	20U	5.5J	19U	20U	22U
Toxaphene	190U	190U	200U	370U	190U	200U	220U
alpha-BHC	0.57U	0 56U	0.58U	0.22J	0.56U	0 58U	0 64U
beta-BHC	0 57U	0.56U	0.58U	3 8	0 56U	0 58U	0 64U
delta-BHC	1 9U	1.9U	2.0U	0.12J	0.14J	2.0U	2 2U
gamma-BHC (Lindane)	1 9U	1 9U	2.0U	0.13J	1 9U	2.0U	2 2U
Total Pesticides	**0.58**	**4.3**	**0.42**	**56.32**	**0.14**	**0.7**	**0.57**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	DAS-T5-S1-0-0 5FTEB	DAS-T5-S1-3-6FT	DAS-T5-S2-0-0 5FT	DAS-T5-S2-3-6FT	DAS-T5-S3-0-0 5FT	DAS-T5-S3-3-6FT	DAS-T6-S1-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/20/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4'-DDD	0 10U	3 9U	3 9U	3 6U	36J	3 7U	3 9U
4 4'-DDE	0 10U	3 9U	3 9U	3 6U	8 3J	3 7U	0 66J
4,4 -DDT	0 10U	3 9U	3 9U	3 6U	110	3 7U	3 8U
Aldrin	0 010J	2 0U	2 0U	1 9U	23	1 9U	2 0U
Alpha Chlordane	0 050U	2 0U	2 0U	1 9U	9 2J	1 9U	2 0U
Dieldrin	0 10U	3 9U	3 9U	3 6U	120	3 7U	3 9U
Endosulfan I	0 050U	2 0U	2 0U	1 9U	9 3U	1 9U	2 0U
Endosulfan II	0 10U	3 9U	3 9U	3 6U	18U	3 7U	3 9U
Endosulfan sulfate	0 10U	3 9U	3 9U	3 6U	18U	3 7U	0 96J
Endrin	0 10U	3 9U	3 9U	3 6U	6 1J	3 7U	3 9U
Endrin aldehyde	0 10U	3 9U	3 9U	3 6U	18U	3 7U	3 9U
Endrin ketone	0 10U	3 9U	3 9U	3 6U	18U	3 7U	0 67J
Gamma Chlordane	0 050U	2 0U	2 0U	1 9U	78D	1 9U	2 0U
Heptachlor	0 050U	2 0U	2 0U	1 9U	91D	1 9U	2 0U
Heptachlor epoxide	0 050U	2 0U	2 0U	1 9U	9 3U	1 9U	0 18J
Methoxychlor	0 50U	20U	20U	19U	38J	19U	3 8J
Toxaphene	5 0U	200U	200U	190U	930U	190U	200U
alpha-BHC	0 039U	0 59U	0 59U	0 55U	2 7U	0 56U	0 59U
beta-BHC	0 014U	0 59U	0 59U	0 55U	2 7U	0 56U	0 59U
delta-BHC	0 015	0 59U	0 59U	0 55U	2 7U	0 56UJ	2 0U
gamma-BHC (Lindane)	0 019U	2 0U	2 0U	1 9U	9 3U	1 9U	2 0U
Total Pesticides	**0 025**	**ND**	**ND**	**ND**	**519 6**	**ND**	**6 27**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FTFD	DAS-T4-S2-0-0 5FT	DAS-T4-S2-3-6FT	DAS-T4-S3-0-0 5FT	DAS-T4-S3-3 6FT	DAS T5-S1-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/19/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4'-DDD	4 3U	4 3U	4 0U	3 9U	4 0U	4 3U	7 8U
4 4'-DDE	4 3U	4 3U	4 0U	3 9U	0 73J	4 3U	4 2J
4,4'-DDT	4 3U	4 3U	4U	3 9U	4U	4 3U	24
Aldrin	2 2U	2 2U	2 1U	2 0U	2 1U	2 2U	4 0U
Alpha Chlordane	2 2U	2 2U	2 1U	2 0U	2 1U	2 2U	54D
Dieldrin	4 3U	4 3U	4 0U	3 9U	4U	4 3U	1 4J
Endosulfan I	2 2U	2 2U	2 1U	2 0U	2 1U	2 2U	4 0U
Endosulfan II	4 3U	4 3U	4 0U	3 9U	4 0U	4 3U	7 8U
Endosulfan sulfate	4 3U	4 3U	0 14J	1 0J	0 10J	4 3U	7 8U
Endrin	4 3U	4 3U	4 0U	3 9U	4 0U	4 3U	7 8U
Endrin aldehyde	4 3U	4 3U	4 0U	3 9U	4 0U	4 3U	7 8U
Endrin ketone	4 3U	4 3U	0 17J	0 29J	4 0U	4 3U	7 8U
Gamma Chlordane	2 2U	2 2U	2 1U	2 0U	2 1U	2 2U	71JD
Heptachlor	2 2U	2 2U	2 1U	2 0U	2 1U	2 2U	4 0U
Heptachlor epoxide	2 2U	2 2U	2 1U	2 0U	2 1U	2 2U	30J
Methoxychlor	22U	22U	1 5J	20U	21U	22U	40U
Toxaphene	220U	220U	210U	200U	210U	220U	400U
alpha-BHC	0 65U	0 65U	0 61U	0 59U	0 61U	0 65U	1 2U
beta-BHC	0 65U	0 65U	0 61U	0 59U	0 61U	0 65U	1 2U
delta-BHC	0 65U	0 65U	0 082J	0 23J	0 17J	0 12J	1 2U
gamma-BHC (Lindane)	2 2U	2 2U	2 1U	2 0U	2 1U	2 2U	4 0U
Total Pesticides	**ND**	**ND**	**1.892**	**1 52**	**1**	**0 12**	**184 6**

Notes ' ot detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	DAS-T3-S2-0-0 5FT	DAS-T3-S2-3-6FT	DAS-T3-S3-0-0 5FT	DAS-T3-S3-0-0 5FTEB	DAS-T3-S3-3-6FT	DAS-T4-S1-0-0 5FT	DAS-T4-S1-0-0 5FTFD
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/20/2000	4/19/2000	4/19/2000	4/19/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
4 4'-DDD	3 9U	3 7U	3 8U	0 10U	4 0U	4 0U	4 0UJ
4 4'-DDE	1 7J	3 7U	0 92J	0 10U	4 0U	4 0U	4 0UJ
4,4'-DDT	1 8J	3 7U	1 3J	0 10U	4 0U	1 3J	0 65J
Aldrin	2 0U	1 9U	2 0U	0 015J	2 1U	2 1U	2 0UJ
Alpha Chlordane	1 2J	1 9U	2 0U	0 050U	2 1U	2 1U	2 0UJ
Dieldrin	0 99J	3 7U	0 97J	0 10U	4 0U	1 3J	1 0J
Endosulfan I	2 0U	1 9U	2 0U	0 050U	2 1U	2 1U	2 0UJ
Endosulfan II	3 9U	3 7U	3 8U	0 10U	4 0U	4 0U	4 0UJ
Endosulfan sulfate	3 9U	3 7U	3 8U	0 10U	4 0U	4 0U	4 0UJ
Endrin	3 9U	3 7U	3 8U	0 10U	4 0U	4 0U	4 0UJ
Endrin aldehyde	3 9U	3 7U	3 8U	0 10U	4 0U	4 0U	4 0UJ
Endrin ketone	3 9U	3 7U	3 8U	0 10U	4 0U	4 0U	4 0UJ
Gamma Chlordane	2 0U	1 9U	1 5J	0 050U	2 1U	2 1U	2 0UJ
Heptachlor	2 0U	1 9U	2 0U	0 050U	2 1U	2 1U	2 0UJ
Heptachlor epoxide	2 0U	1 9U	2 0U	0 050U	2 1U	2 1U	2 0UJ
Methoxychlor	20U	19U	20U	0 50U	21U	21U	20UJ
Toxaphene	200U	190U	200U	5 0U	210U	210U	200UJ
alpha-BHC	0 60U	0 56U	0 57U	0 039U	0 61U	0 61U	0 60UJ
beta-BHC	0 60U	0 56U	0 57U	0 014U	0 61U	0 61U	0 60UJ
delta-BHC	0 60U	0 56U	0 57U	0 017	0 61U	0 61U	0 60UJ
gamma-BHC (Lindane)	2 0U	1 9U	2 0U	0 019U	2 1U	2 1U	2 0UJ
Total Pesticides	**5 69**	**ND**	**4.69**	**0.032**	**ND**	**2 6**	**1 65**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	DAS-T2-S2-0-0 5FT	DAS-T2-S2-3-6FT	DAS-T2-S3-0-0 5FT	DAS-T2-S3-3-6FT	DAS-T2-S3-3-6FTFD	DAS-T3-S1-0-0 5FT	DAS-T3-S1-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/19/2000	4/19/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	3 8U	3.5U	0 56J	3 6UJ	3 7U	4 1U	4 3U
4,4'-DDE	3.8U	3 5U	4.3U	3 6UJ	3 7U	4 1U	4 3U
4,4'-DDT	3.8U	3.5U	14	3.6UJ	3 7U	4 1U	4 3U
Aldrin	2 0U	1 8U	2 2U	1 9UJ	1 9U	2.1U	2 2U
Alpha Chlordane	2 0U	1 8U	2 2U	1 9UJ	1 9U	5 8	2 2U
Dieldrin	3 8U	3.5U	4 3U	3 6UJ	3 7U	0 67J	4 3U
Endosulfan I	2.0U	1.8U	2.2U	1 9UJ	1 9U	2 1U	2 2U
Endosulfan II	3.8U	3 5U	4.3U	3 6UJ	3 7U	4.1U	4 3U
Endosulfan sulfate	3.8U	3.5U	4.3U	3.6UJ	3.7U	4 1U	4 3U
Endrin	3.8U	3.5U	4.3U	3.6UJ	3.7U	4 1U	4 3U
Endrin aldehyde	3.8U	3.5U	4.3U	3 6UJ	3.7U	4 1U	4 3U
Endrin ketone	3.8U	3.5U	4.3U	3.6UJ	3.7U	4 1U	4 3U
Gamma Chlordane	2.0U	1.8U	2.2U	1 9UJ	1 9U	5 1J	2 2U
Heptachlor	2.0U	1.8U	2.2U	1 9UJ	1 9U	2.1U	2 2U
Heptachlor epoxide	2.0U	1.8U	2.2U	1.9UJ	1 9U	2 1U	2 2U
Methoxychlor	20U	18U	22U	19UJ	19U	21U	22U
Toxaphene	200U	180U	220U	190UJ	190U	210U	220U
alpha-BHC	0.57U	0 53U	0.66U	0.55UJ	0.56U	0 62U	0 65U
beta-BHC	0.57U	0.53U	0 66U	0 55UJ	0.56U	0 62U	0 65U
delta-BHC	0.57U	0 53U	0.66U	0 55UJ	0.56U	0 62U	0 65U
gamma-BHC (Lindane)	2.0U	1.8U	2.2U	1.9UJ	1.9U	2 1U	2 2U
Total Pesticides	**ND**	**ND**	**14.56**	**ND**	**ND**	**11.57**	**ND**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	DAS-T1-S1-3-6FT	DAS-T1-S2-0-0 5FT	DAS-T1-S2-3-6FT	DAS-T1-S3-0-0 5FT	DAS-T1-S3-3-6FT	DAS-T2-S1-0-0 5FT	DAS-T2-S1-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4'-DDD	3 8U	3 8U	0 53J	3 9U	4 2U	3 9U	3 7U
4 4'-DDE	3 8U	0 40J	3 8U	3 9U	4 2U	3 9U	3 7U
4 4'-DDT	3 8U	3 8U	3 8U	3 9U	4 2U	3 9U	3 7U
Aldrin	2 0U	1 9U	2 0U	2 0U	2 2U	2 0U	1 9U
Alpha Chlordane	2 0U	1 9U	2 0U	2 0U	2 2U	2 0U	1 9U
Dieldrin	3 8U	3 8U	1 2J	1 5J	4 2UJ	1 3J	0 41
Endosulfan I	2 0U	1 9U	2 0U	2 0U	2 2U	2 0U	1 9U
Endosulfan II	3 8U	3 8U	3 8U	3 9U	4 2U	3 9U	3 7U
Endosulfan sulfate	3 8U	3 8U	3 8U	3 9U	4 2U	3 9U	3 7U
Endrin	3 8U	3 8U	3 8U	3 9U	4 2U	3 9U	3 7U
Endrin aldehyde	3 8U	3 8U	3 8U	3 9U	4 2U	3 9U	3 7U
Endrin ketone	3 8U	3 8U	3 8U	3 9U	4 2U	3 9U	3 7U
Gamma Chlordane	2 0U	1 9U	2 0U	2 0U	2 2U	2 0U	1 9U
Heptachlor	2 0U	1 9U	0 26J	2 0U	2 2U	2 0U	1 9U
Heptachlor epoxide	2 0U	1 9U	2 0U	2 0U	2 2U	2 0U	1 9U
Methoxychlor	20U	19U	20U	20U	22U	20U	19U
Toxaphene	200U	190U	200U	200U	220U	200U	190U
alpha-BHC	0 58U	0 57U	0 57U	0 60U	0 64U	0 60U	0 56U
beta-BHC	0 58U	0 57U	0 57U	0 60U	0 64U	0 60U	0 56U
delta-BHC	0 58U	0 57U	0 57U	0 60U	0 64U	0 60U	0 56U
gamma-BHC (Lindane)	2 0U	1 9U	2 0U	2 0U	2 2U	2 0U	1 9U
Total Pesticides	**ND**	**0 4**	**1 99**	**1 5**	**ND**	**1 3**	**0 41**

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T7-S6-0-0 5FTEB	UAS-T7-S6-3-6FT	UAS-T7-S6-3-6FTEB	UAS-T7-S7-0-0.5FT	UAS-T7-S7-3-6FT	DAS-T1-S1-0-0 5FT	DAS-T1-S1-0-0 5FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Developed Soil	Developed Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	4/18/2000	4/18/2000
Units	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	0.10U	3.7U	0.10U	18U	3.6U	3.8U	3 8U
4,4'-DDE	0.10U	0.34J	0.10U	54	1 7J	0 80J	0 33J
4,4'-DDT	0.10U	3 7U	0.10U	29	3 6U	3 8U	3 8U
Aldrin	0.050U	1.9U	0.050U	9 4U	1 9U	1 9U	1 9U
Alpha Chlordane	0.050U	1.9U	0.050U	9.4U	1.9U	1 9U	1 9U
Dieldrin	0.10U	3.7U	0.10U	3.0J	3.6U	3 8U	3 8U
Endosulfan I	0.050U	1.9U	0.050U	9.4U	1.9U	1.9U	1.9U
Endosulfan II	0.10U	3.7U	0.10U	18U	3.6U	3.8U	3.8U
Endosulfan sulfate	0.10U	3.7U	0.10U	18U	3.6U	3.8U	3.8U
Endrin	0.10U	3.7U	0.10U	18U	3.6U	3 8U	3.8U
Endrin aldehyde	0.10U	3.7U	0.10U	18U	3.6U	3.8U	3.8U
Endrin ketone	0.10U	3.7U	0.10U	1.7J	3.6U	3.8U	3.8U
Gamma Chlordane	0.050U	1.9U	0.050U	2.2J	1.9U	1.9U	1.9U
Heptachlor	0.050U	1.9U	0.050U	9.4U	1.9U	1.9U	1 9U
Heptachlor epoxide	0 050U	1.9U	0.050U	9.4U	1.9U	1.9U	1.9U
Methoxychlor	0.50U	19U	0.50U	3.4J	19U	19U	19U
Toxaphene	5.0U	190U	5.0U	940U	190U	190U	190U
alpha-BHC	0.039U	0.56U	0.039U	2.8U	0 55U	0.57U	0 57U
beta-BHC	0.014U	0.56U	0.014U	2.8U	0 55U	0.57U	0 57U
delta-BHC	0.012U	0.56U	0.012U	2.8U	0.55U	0.57U	0 57U
gamma-BHC (Lindane)	0.0029J	1.9U	0.0017J	9.4U	1.9U	1.9U	1 9U
Total Pesticides	**0.0029**	**0.34**	**0.0017**	**93.3**	**1.7**	**0.8**	**0.33**

Notes ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T7-S3-3-6FT	UAS-T7-S3-3-6FTFD	UAS-T7-S4-0-0 5FT	UAS-T7-S4-3-6FT	UAS-T7-S5-0-0 5FT	UAS-T7-S5-3-6FT	UAS-T7-S6-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	3 7U	3 6U	3 5U	3 6U	3 5U	3 8U	3 5U
4 4'-DDE	3 7U	3 6U	0 30J	3 6U	3 5U	3 8UJ	24
4,4'-DDT	3 7U	3 6U	3 5U	3 6U	3 5U	3 8UJ	16
Aldrin	1 9U	1 9U	1 8U	1 9U	1 8U	1 9U	1 8U
Alpha Chlordane	1 9U	1 9U	1 8U	1 9U	1 8U	1 9U	1 8U
Dieldrin	3 7U	3 6U	3 5U	3 6U	3 5U	3 8U	3 5U
Endosulfan I	1 9U	1 9U	1 8U	1 9U	1 8U	1 9U	1 8U
Endosulfan II	3 7U	3 6U	3 5U	3 6U	3 5U	3 8U	3 5U
Endosulfan sulfate	3 7U	3 6U	3 5U	3 6U	3 5U	3 8UJ	3 5U
Endrin	3 7U	3 6U	3 5U	3 6U	3 5UJ	3 8UJ	3 5U
Endrin aldehyde	3 7U	3 6U	3 5U	3 6U	3 5U	3 8U	3 5U
Endrin ketone	3 7U	3 6U	3 5U	3 6U	3 5U	3 8U	3 5U
Gamma Chlordane	1 9U	1 9U	0 10J	1 9U	1 8U	1 9U	1 8U
Heptachlor	1 9U	1 9U	1 8U	1 9U	1 8U	1 9U	1 8U
Heptachlor epoxide	1 9U	1 9U	1 8U	1 9U	1 8U	1 9U	1 8U
Methoxychlor	19U	19U	18U	19U	18U	19U	18U
Toxaphene	190U	190U	180U	190U	180U	190U	180U
alpha-BHC	0 56U	0 55U	0 53U	0 55U	0 54U	0 57U	0 53U
beta-BHC	0 56U	0 55U	0 53U	0 55U	0 54U	0 57U	0 53U
delta-BHC	0 56U	0 55U	0 53U	0 55U	0 54U	0 57U	0 53U
gamma-BHC (Lindane)	1 9U	1 9U	1 8U	1 9U	1 8U	1 9U	1 8U
Total Pesticides	**ND**	**ND**	**0.4**	**ND**	**ND**	**ND**	**40**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T6-S5-3-6FT	UAS-T7-S1-0-0 5FT	UAS-T7-S1-3-6FT	UAS-T7-S2-0-0 5FT	UAS-T7-S2-3-6FT	UAS-T7-S3-0-0 5FT	UAS-T7-S3-0-0 5FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4'-DDD	84U	4 1U	4 6U	3 6U	4 0U	3 7U	3 8U
4,4'-DDE	84U	1 2J	4 6U	1 8J	4 0U	1 4J	1 9J
4,4'-DDT	84U	1 7J	4 6U	1 2J	4 0U	1 0J	1 2J
Aldrin	43U	2 1U	2 3U	1 8U	2 0U	1 9U	1 9U
Alpha Chlordane	43U	2 1U	2 3U	1 8U	2 0U	1 9U	1 9U
Dieldrin	84U	4 1U	4 6U	0 27J	4 0U	3 7U	3 8U
Endosulfan I	43U	2 1U	2 3U	1 8U	2 0U	1 9U	1 9U
Endosulfan II	84U	1 0J	4 6U	3 6U	4 0U	3 7U	3 8U
Endosulfan sulfate	84U	4 1U	4 6U	3 6U	4 0U	3 7U	3 8U
Endrin	84U	4 1U	4 6U	3 6U	4 0U	3 7U	3 8U
Endrin aldehyde	84U	4 1U	4 6U	3 6U	4 0U	3 7U	3 8U
Endrin ketone	84U	1 9J	4 6U	0 25J	4 0U	0 14J	0 20J
Gamma Chlordane	43U	0 80J	2 3U	1 8U	2 0U	1 9U	1 9U
Heptachlor	43U	2 1U	2 3U	1 8U	2 0U	1 9U	1 9U
Heptachlor epoxide	43U	0 26J	2 3U	1 8U	2 0U	1 9U	1 9U
Methoxychlor	430U	4 2J	23U	0 99J	20U	2 1J	19U
Toxaphene	4300U	210U	230U	180U	200U	190U	190U
alpha-BHC	13U	0 62U	0 69U	0 54U	0 60U	0 57U	0 57U
beta-BHC	13U	0 62U	0 69U	0 54U	0 60U	0 57U	0 57U
delta-BHC	13U	0 62U	0 69U	0 54U	0 60U	0 57U	0 57U
gamma-BHC (Lindane)	43U	2 1U	2 3U	1 8U	2 0U	1 9U	1 9U
Total Pesticides	**ND**	**11.06**	**ND**	**4.51**	**ND**	**4.64**	**3 3**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T6-S3-0-0 5FT	UAS-T6-S3-0-0 5FTEB	UAS-T6-S3-3-6FT	UAS-T6-S3-3-6FTEB	UAS-T6-S4-0-0 5FT	UAS-T6-S4-3-6FT	UAS-T6-S5-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Units	ug/kg dw	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
4 4 -DDD	7 2U	0 10U	38U	0 10U	6 4J	19U	19U
4 4'-DDE	7 2U	0 10U	38U	0 10U	18J	19U	0 78J
4,4'-DDT	7 2U	0 10U	38U	0 10U	140	19U	1 6J
Aldrin	3 7U	0 050U	20U	0 050U	18U	9 7U	9 6U
Alpha Chlordane	3 7U	0 050U	20U	0 050U	18U	9 7U	0 50J
Dieldrin	7 2U	0 10U	38U	0 10U	36U	19U	1 8J
Endosulfan I	3 7U	0 050U	20U	0 050U	18U	9 7U	9 6U
Endosulfan II	7 2U	0 10U	38U	0 10U	36U	19U	19U
Endosulfan sulfate	7 2U	0.10U	38U	0 10U	36U	19U	19U
Endrin	7 2U	0 10U	38U	0 10U	36U	19U	19U
Endrin aldehyde	7 2U	0 10U	38U	0 10U	36U	19U	19U
Endrin ketone	7 2U	0 10U	38U	0 10U	36U	19U	19U
Gamma Chlordane	3 7U	0 050U	20U	0 050U	18U	9 7U	0 94J
Heptachlor	3 7U	0 050U	20U	0 050U	18U	9 7U	9 6U
Heptachlor epoxide	3 7U	0 050U	20U	0 050U	18U	9 7U	9 6U
Methoxychlor	37U	0 50U	200U	0 50U	180U	97U	96U
Toxaphene	370U	5 0U	2000U	5 0U	1800U	970U	960U
alpha-BHC	1 1U	0 039U	5 8U	0 039U	5 4U	2 9U	2 8U
beta-BHC	1 1U	0 014U	5 8U	0 014U	5 4U	2 9U	2 8U
delta-BHC	1 1U	0 0051J	5 8U	0 0039J	5 4U	2 9U	2 8U
gamma-BHC (Lindane)	3 7U	0 019U	20U	0 019U	18U	9 7U	9 6U
Total Pesticides	**ND**	**0.0051**	**ND**	**0 0039**	**164 4**	**ND**	**5 62**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T5-S6-0-0 5FTFD	UAS-T5-S6-3-6FT	UAS-T5-S6-3-6FTFD	UAS-T6-S1-0-0 5FT	UAS-T6-S1-3-6FT	UAS-T6-S2-0-0 5FT	UAS-T6-S2-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4 -DDD	20U	3 6U	3 6U	3 9U	3 9U	19U	7 7U
4 4 -DDE	0 36J	3 6U	3 6U	3 9U	3 9U	15J	7 7U
4 4 -DDT	0 35J	3 6U	3 6U	3 9U	3 9U	130J	7 7U
Aldrin	10U	1 8U	1 9U	2 0U	2 0U	9 7U	4 0U
Alpha Chlordane	10U	1 8U	1 9U	2 0U	2 0U	9 7U	4 0U
Dieldrin	20U	3 6U	3 6U	3 9U	3 9U	19U	7 7U
Endosulfan I	10U	1 8U	1 9U	2 0U	2 0U	9 7U	4 0U
Endosulfan II	20U	3 6U	3 6U	3 9U	3 9U	19U	7 7U
Endosulfan sulfate	20U	3 6U	3 6U	3 9U	3 9U	19U	7 7U
Endrin	20U	3 6U	3 6U	3 9U	3 9U	19U	7 7U
Endrin aldehyde	0 61J	3 6U	3 6U	3 9U	3 9U	19U	7 7U
Endrin ketone	0 39J	3 6U	3 6U	3 9U	3 9U	19U	7 7U
Gamma Chlordane	10U	1 8U	1 9U	2 0U	2 0U	9 7U	4 0U
Heptachlor	10U	1 8U	1 9U	2 0U	2 0U	9 7U	4 0U
Heptachlor epoxide	10U	1 8U	1 9U	2 0U	2 0U	9 7U	4 0U
Methoxychlor	2 0J	18U	19U	20U	20U	97U	40U
Toxaphene	1000U	180U	190U	200U	200U	970U	400U
alpha-BHC	3 0U	0 54U	0 55U	0 59U	0 59U	2 8U	1 2U
beta-BHC	3 0U	0 54U	0 55U	0 59U	0 59U	2 8U	1 2U
delta-BHC	3 0U	0 54U	0 55U	0 59U	0 59U	2 8U	1 2U
gamma-BHC (Lindane)	10U	1 8U	1 9U	2 0U	2 0U	9 7U	4 0U
Total Pesticides	**3 71**	**ND**	**ND**	**ND**	**ND**	**145**	**ND**

Notes t detected J-estimated value N-tentatively identified, R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T5-S4-0-0 5FT	UAS-T5-S4-3-6FT	UAS-T5-S5-0-0 5FT	UAS-T5-S5-0-0 5FTEB	UAS-T5-S5-3-6FT	UAS-T5-S5-3-6FTEB	UAS-T5-S6-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/l	ug/kg dw
4 4'-DDD	3 7U	3 4U	3 4U	0 10U	3 4U	0 10U	19U
4 4'-DDE	3 7UJ	3 4U	3 4U	0 10U	3 4U	0 10U	19U
4 4'-DDT	3 7U	3 4U	3 4U	0 10U	3 4U	0 10U	19U
Aldrin	1 9U	1 8U	1 8U	0 050U	1 8U	0 050U	9 9U
Alpha Chlordane	1 9U	1 8U	1 8U	0 050U	1 8U	0 050U	9 9U
Dieldrin	3 7U	3 4U	3 4U	0 10U	3 4U	0 10U	19U
Endosulfan I	1 9U	1 8U	1 8U	0 050U	1 8U	0 050U	9 9U
Endosulfan II	3 7U	3 4U	3 4U	0 10U	3 4U	0 10U	19U
Endosulfan sulfate	3 7U	3 4U	3 4U	0 10U	3 4U	0 10U	19U
Endrin	3 7U	3 4U	3 4U	0 10U	3 4U	0 10U	19U
Endrin aldehyde	3 7U	3 4U	3 4U	0 10U	3 4U	0 10U	19U
Endrin ketone	3 7U	3 4U	3 4U	0 10U	3 4U	0 10U	19U
Gamma Chlordane	1 9U	1 8U	1 8U	0 050U	1 8U	0 050U	9 9U
Heptachlor	1 9U	1 8U	1 8U	0 050U	1 8U	0 050U	9 9U
Heptachlor epoxide	1 9U	1 8U	1 8U	0 050U	1 8U	0 050U	9 9U
Methoxychlor	1 3J	18U	18U	0 50U	18U	0 50U	99U
Toxaphene	190U	180U	180U	5 0U	180U	5 0U	990U
alpha-BHC	0 56U	0 52U	0 52U	0 039U	0 52U	0 039U	2 9U
beta-BHC	0 56U	0 52U	0 52U	0 014U	0 52U	0 014U	2 9U
delta-BHC	0 56U	0 52U	0 52U	0 012U	0 52U	0 012U	2 9U
gamma-BHC (Lindane)	1 9U	1 8U	1 8U	0 019U	1 8U	0 019U	9 9U
Total Pesticides	1 3	ND	ND	ND	ND	ND	ND

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T4-S7 3-6FT	UAS-T5-S1-0-0 5FT	UAS-T5-S1-3-6FT	UAS-T5-S2-0-0 5FT	UAS-T5-S2-3-6FT	UAS-T5-S3-0 0 5FT	UAS-T5-S3-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4 DDD	3 6U	3 7U	3 7U	3 6U	3 8U	3 6U	4 1U
4 4 -DDE	3 6U	3 7U	3 7U	3 6U	3 8U	3 6U	4 1U
4 4 -DDT	3 6U	3 7U	3 7U	3 6U	3 8U	3 6U	4 1U
Aldrin	1 9U	1 9U	1 9U	1 9U	2 0U	1 8U	2 1U
Alpha Chlordane	1 9U	0 16J	1 9U	1 9U	2 0U	1 8U	2 1U
Dieldrin	3 6U	3 7U	3 7U	3 6U	3 8U	3 6U	4 1U
Endosulfan I	1 9U	1 9U	1 9U	1 9U	2 0U	1 8U	2 1U
Endosulfan II	3 6U	3 7U	3 7U	3 6U	3 8U	3 6U	4 1U
Endosulfan sulfate	3 6U	3 7U	3 7U	3 6U	3 8U	3 6U	4 1U
Endrin	3 6U	3 7U	3 7U	3 6U	3 8U	3 6U	4 1U
Endrin aldehyde	3 6U	0 24J	3 7U	3 6U	3 8U	3 6U	4 1U
Endrin ketone	3 6U	3 7U	3 7U	3 6U	3 8U	3 6U	4 1U
Gamma Chlordane	1 9U	1 9U	1 9U	1 9U	2 0U	1 8U	2 1U
Heptachlor	1 9U	1 9U	1 9U	1 9U	2 0U	1 8U	2 1U
Heptachlor epoxide	1 9U	1 9U	1 9U	1 9U	2 0U	0 091J	2 1U
Methoxychlor	7 6J	19U	19U	19U	20U	18U	21U
Toxaphene	190U	190U	190U	190U	200U	180U	210U
alpha-BHC	0 55U	0 56U	0 56U	0 55U	0 58U	0 54U	0 62U
beta-BHC	0 55U	0 56U	0 56U	0 55U	0 58U	0 10J	0 62U
delta-BHC	0 55U	0 56U	0 56U	0 55U	0 58U	0 54U	0 62U
gamma-BHC (Lindane)	1 9U	1 9U	1 9U	1 9U	2 0U	1 8U	2 1U
Total Pesticides	**7 6**	**0 4**	**ND**	**ND**	**ND**	**0 191**	**ND**

Notes ' detected J-estimated value N tentatively identified R-rejected M EMPC D-result from diluted analysis EB equipment blank FD field duplicate ND none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T4-S4-0-0 5FT	UAS-T4-S4-3-6FT	UAS-T4-S5-0-0 5FT	UAS-T4-S5-3-6FT	UAS-T4-S6-0-0 5FT	UAS-T4-S6-3-6FT	UAS-T4-S7-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/16/1999	11/17/1999	11/16/1999	11/16/1999	11/16/1999	11/16/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4 -DDD	3 4U	3 5U	3 6U	4 2UJ	3 9U	4 2U	3 7U
4 4'-DDE	3 4U	3 5U	3 6U	4 2UJ	1 2J	4 2U	0 90J
4 4 -DDT	3 4U	3 5U	0 92J	4 2UJ	1 4J	4 2U	1 8J
Aldrin	1 8U	1 8U	1 8U	2 2UJ	2 0U	2 2U	1 9U
Alpha Chlordane	1 0J	1 8U	2 0	2 2UJ	1 2J	2 2U	1 9U
Dieldrin	1 6J	3 5U	3 6J	4 2UJ	2 1J	4 2U	2 3J
Endosulfan I	1 8U	1 8U	1 8U	2 2UJ	2 0U	2 2U	1 9U
Endosulfan II	3 4U	3 5U	3 6U	4 2UJ	3 9U	4 2U	3 7U
Endosulfan sulfate	3 4U	3 5U	3 6U	4 2UJ	3 9U	4 2U	3 7U
Endrin	3 4U	3 5U	3 6U	4 2UJ	3 9U	4 2U	3 7U
Endrin aldehyde	3 4U	3 5U	3 6U	4 2UJ	3 9U	4 2U	3 7U
Endrin ketone	3 4U	3 5U	2 3J	4 2UJ	3 9U	4 2U	1 3J
Gamma Chlordane	0 96J	1 8U	3 6J	2 2UJ	1 2J	2 2U	1 9U
Heptachlor	1 8U	1 8U	0 64J	2 2UJ	2 0U	2 2U	1 9U
Heptachlor epoxide	1 8U	1 8U	0 74J	2 2UJ	0 19J	2 2U	1 9U
Methoxychlor	0 93J	18U	5 4J	22UJ	20U	22U	19U
Toxaphene	180U	180U	180U	220UJ	200U	220U	190U
alpha-BHC	0 52U	0 53U	0 54U	0 64UJ	0 60U	0 64U	0 56U
beta-BHC	0 10J	0 53U	0 95J	0 64UJ	0 60U	0 64U	0 56U
delta-BHC	0 52U	0 53U	0 24J	0 64UJ	0 60U	0 64U	0 56U
gamma-BHC (Lindane)	1 8U	1 8U	1 8U	2 2UJ	2 0U	2 2U	1 9U
Total Pesticides	**4 59**	**ND**	**20.39**	**ND**	**7 29**	**ND**	**6 3**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T4-S1-3-6FT	UAS-T4-S2-0-0 5FT	UAS-T4-S2-3-6FT	UAS-T4-S3-0-0 5FT	UAS-T4-S3-0-0 5FTFD	UAS-T4-S3-3-6FT	UAS-T4-S3-3-6FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/16/1999	11/17/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4 -DDD	3 9UJ	3 5U	3 6U	3 5U	3 5U	3 5U	3 4U
4 4 -DDE	3 9UJ	1 5J	3 6U	3 5U	3 5U	3 5U	3 4U
4 4 -DDT	3 9UJ	3 0J	3 6U	3 5U	3 5U	3 5U	3 4U
Aldrin	2 0UJ	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U
Alpha Chlordane	2 0UJ	3 1	1 8U	1 8U	1 8U	1 8U	1 8U
Dieldrin	3 9UJ	10	1 3J	3 5U	3 5U	3 5U	3 4U
Endosulfan I	2 0UJ	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U
Endosulfan II	3 9UJ	3 5U	3 6U	3 5U	3 5U	3 5U	3 4U
Endosulfan sulfate	3 9UJ	3 5U	3 6U	3 5U	3 5U	3 5U	3 4U
Endrin	3 9UJ	3 5U	3 6U	3 5U	3 5U	3 5U	3 4U
Endrin aldehyde	3 9UJ	3 5U	3 6U	3 5U	3 5U	3 5U	3 4U
Endrin ketone	3 9UJ	4 0J	3 6U	3 5U	3 5U	3 5U	3 4U
Gamma Chlordane	2 0UJ	6 6	1 8U	1 8U	1 8U	1 8U	1 8U
Heptachlor	2 0UJ	0 34J	1 8U	1 8U	1 8U	1 8U	1 8U
Heptachlor epoxide	2 0UJ	2 3J	1 8U	1 8U	1 8U	1 8U	1 8U
Methoxychlor	20UJ	6 9J	18U	7 4J	12J	18U	18U
Toxaphene	200UJ	180U	180U	180U	180U	180U	180U
alpha-BHC	0 60UJ	0 52U	0 54U	0 53U	0 53U	0 53U	0 52U
beta-BHC	0 60UJ	1 3J	0 54U	0 30J	0 53U	0 14J	0 52U
delta-BHC	0 60UJ	0 52U	0 54U	0 53U	0 53U	0 53U	0 52U
gamma-BHC (Lindane)	2 0UJ	1 8U	1 8U	1 8U	1 8U	1 8U	1 8U
Total Pesticides	**ND**	**39 04**	**1.3**	**7 7**	**12**	**0.14**	**ND**

Notes * detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T3-S5-3-6FT	UAS-T3-S6-0-0 5FT	UAS-T3-S6-3-6FT	UAS-T3-S7-0-0 5FT	UAS-T3-S7-3-6FT	UAS-T3-S7-3-6FTEB	UAS-T4-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/16/1999	11/16/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw
4 4 -DDD	3 4U	3 8UJ	4 3U	3 4U	4 2U	0 10U	3 7U
4 4 -DDE	3 4U	3 8UJ	4 3U	0 14J	4 2U	0 10U	3 7U
4 4 -DDT	3 4U	3 8UJ	4 3U	0 40J	4 2U	0 10U	3 7U
Aldrin	1 8U	1 9UJ	2 2U	1 8U	2 2U	0 050U	1 9U
Alpha Chlordane	1 8U	1 9UJ	2 2U	1 8U	2 2U	0 050U	1 9U
Dieldrin	3 4U	3 8UJ	4 3U	3 4U	4 2U	0 10U	3 7U
Endosulfan I	1 8U	1 9UJ	2 2U	1 8U	2 2U	0 050U	1 9U
Endosulfan II	3 4U	3 8UJ	4 3U	3 4U	4 2U	0 10U	3 7U
Endosulfan sulfate	3 4U	3 8UJ	4 3U	3 4U	4 2U	0 10U	3 7U
Endrin	3 4U	3 8UJ	4 3U	3 4U	4 2U	0 10U	3 7U
Endrin aldehyde	3 4U	3 8UJ	4 3U	3 4U	4 2U	0 10U	3 7U
Endrin ketone	3 4U	3 8UJ	4 3U	0 75J	4 2U	0 10U	3 7U
Gamma Chlordane	1 8U	1 9UJ	2 2U	1 8U	2 2U	0 050U	1 9U
Heptachlor	1 8U	1 9UJ	2 2U	1 8U	2 2U	0 050U	1 9U
Heptachlor epoxide	1 8U	1 9UJ	2 2U	1 8U	2 2U	0 050U	1 9U
Methoxychlor	18U	19UJ	22U	2 6J	22U	0 50U	19U
Toxaphene	180U	190UJ	220U	180U	220U	5 0U	190U
alpha-BHC	0 52UJ	0 57UJ	0 65UJ	0 52U	0 64U	0 039U	0 56U
beta-BHC	0 52U	0 57UJ	0 65U	0 75J	0 64U	0 014U	0 56U
delta-BHC	0 52U	0 57UJ	0 65U	0 52U	0 64UJ	0 012U	0 56U
gamma-BHC (Lindane)	1 8U	1 9UJ	2 2U	1 8U	2 2U	0 019U	1 9U
Total Pesticides	**ND**	**ND**	**ND**	**4 64**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T3-S3-0-0 5FTFD	UAS-T3-S3-3-6FT	UAS-T3-S3-3-6FTFD	UAS-T3-S4-0-0 5FT	UAS-T3-S4-3-6FT	UAS-T3-S5-0-0 5FT	UAS-T3-S5-0-0 5FTEB
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/16/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
4 4 -DDD	3 8U	3 8U	3 8UJ	3 8U	3 9U	3 6U	0 10U
4 4'-DDE	0 17J	3 8U	3 8UJ	3 8U	3 9U	3 6U	0 10U
4 4 -DDT	0 39J	3 8U	3 8UJ	3 8U	3 9U	3 6U	0 10U
Aldrin	2 0U	2 0U	2 0UJ	1 9U	2 0U	1 9U	0 050U
Alpha Chlordane	2 0U	2 0U	2 0UJ	1 9U	2 0U	1 9U	0 050U
Dieldrin	3 8U	3 8U	3 8UJ	3 8U	3 9U	3 6U	0 10U
Endosulfan I	2 0U	2 0U	2 0UJ	1 9U	2 0U	1 9U	0 050U
Endosulfan II	3 8U	3 8U	3 8UJ	3 8U	3 9U	3 6U	0 10U
Endosulfan sulfate	3 8U	3 8U	3 8UJ	3 8U	3 9U	3 6U	0 10U
Endrin	3 8U	3 8U	3 8UJ	3 8U	3 9U	3 6U	0 10U
Endrin aldehyde	3 8U	3 8U	3 8UJ	3 8U	3 9U	3 6U	0 10U
Endrin ketone	3 8U	3 8U	3 8UJ	3 8U	3 9U	3 6U	0 10U
Gamma Chlordane	2 0U	2 0U	2 0UJ	1 9U	2 0U	1 9U	0 050U
Heptachlor	2 0U	2 0U	2 0UJ	1 9U	2 0U	1 9U	0 050U
Heptachlor epoxide	2 0U	2 0U	2 0UJ	1 9U	2 0U	1 9U	0 050U
Methoxychlor	20U	20U	20UJ	19U	20U	19U	0 50U
Toxaphene	200U	200U	200UJ	190U	200U	190U	5 0U
alpha-BHC	0 58U	0 58UJ	0 58UJ	0 57UJ	0 59UJ	0 55UJ	0 039U
beta-BHC	0 58U	0 58U	0 58UJ	0 57U	0 59U	0 55U	0 014U
delta-BHC	0 58U	0 58U	0 58UJ	0 57U	0 59U	0 55U	0 0091J
gamma-BHC (Lindane)	2 0U	2 0U	2 0UJ	1 9U	2 0U	1 9U	0 019U
Total Pesticides	**0.56**	**ND**	**ND**	**ND**	**ND**	**ND**	**0 0091**

Notes t detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T2-S6-0-0 5FT	UAS-T2-S6-3-6FT	UAS-T3-S1-0-0 5FT	UAS-T3-S1-3-6FT	UAS-T3-S2-0-0 5FT	UAS-T3-S2-3-6FT	UAS-T3-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/12/1999	11/12/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4'-DDD	3 9U	3 9U	4 0U	4 2U	3 9U	4 1U	3 8U
4,4 -DDE	0 42J	3 9U	0 11J	4 2U	3 9U	4 1U	0 31J
4,4'-DDT	3 9U	3 9U	4 0U	4 2U	3 9U	4 1U	1 1J
Aldrin	2 0U	2 0U	2 1U	2 1U	2 0U	2 1U	2 0U
Alpha Chlordane	2 0U	2 0U	2 1U	2 1U	2 0U	2 1U	2 0U
Dieldrin	3 9U	3 9U	4 0U	4 2U	3 9U	4 1U	0 26J
Endosulfan I	2 0U	2 0U	2 1U	2 1U	2 0U	2 1U	2 0U
Endosulfan II	3 9U	3 9U	4 0U	4 2U	3 9U	4 1U	3 8U
Endosulfan sulfate	3 9U	3 9U	4 0U	4 2U	3 9U	4 1U	3 8U
Endrin	3 9U	3 9U	4 0U	4 2U	3 9U	4 1U	3 8U
Endrin aldehyde	3 9U	3 9U	4 0U	4 2U	3 9U	4 1U	3 8U
Endrin ketone	1 3J	3 9U	0 17J	4 2U	3 9U	4 1U	3 8U
Gamma Chlordane	2 0U	2 0U	2 1U	2 1U	2 0U	2 1U	0 18J
Heptachlor	2 0U	2 0U	2 1U	2 1U	2 0U	2 1U	2 0U
Heptachlor epoxide	2 0U	2 0U	2 1U	2 1U	2 0U	2 1U	2 0U
Methoxychlor	20U	20U	21U	21U	20U	21U	20U
Toxaphene	200U	200U	210U	210U	200U	210U	200U
alpha-BHC	0 60UJ	0 59UJ	0 61U	0 63UJ	0 59UJ	0 63U	0 58UJ
beta-BHC	0 60U	0 59U	0 61U	0 63U	0 59U	0 63U	0 58U
delta-BHC	0 60U	0 59U	0 61U	0 63U	0 59U	0 63U	0 58U
gamma-BHC (Lindane)	2 0U	2 0U	2 1U	2 1U	2 0U	2 1U	2 0U
Total Pesticides	1 72	ND	0.28	ND	ND	ND	1 85

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T2-S2-3-6FT	UAS-T2-S3-0-0.5FT	UAS-T2-S3-3-6FT	UAS-T2-S4-0-0.5FT	UAS-T2-S4-3-6FT	UAS-T2-S5-0-0 5FT	UAS-T2-S5-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	3.7U	4.0U	3.8U	3.9U	4.4U	3.9U	4 1U
4,4'-DDE	3 7U	4.0U	3.8U	0.24J	4 4U	3.9U	4 1U
4,4'-DDT	3.7U	0 52J	3.8U	0.61J	4 4U	3.9U	4 1U
Aldrin	1.9U	2 1U	2.0U	2.0U	2 3U	2.0U	2 1U
Alpha Chlordane	1 9U	2.1U	2.0U	2.0U	2.3U	2.0U	2 1U
Dieldrin	3.7U	4.0U	3.8U	3.9U	4.4U	3.9U	4 1U
Endosulfan I	1.9U	2.1U	2.0U	2.0U	2.3U	2.0U	2 1U
Endosulfan II	3.7U	4.0U	3.8U	3.9U	4 4U	3.9U	4 1U
Endosulfan sulfate	3 7U	4.0U	3.8U	0.47J	4 4U	3.9U	4 1U
Endrin	3.7U	4.0U	3.8U	3.9U	4.4U	3.9U	4 1U
Endrin aldehyde	3.7U	4.0U	3.8U	3.9U	4.4U	3.9U	4 1U
Endrin ketone	3.7U	4.0U	3.8U	0.13J	4 4U	3.9U	4.1U
Gamma Chlordane	1.9U	2.1U	2.0U	2.0U	2.3U	2.0U	2 1U
Heptachlor	1.9U	2.1U	2.0U	2.0U	2 3U	2.0U	2 1U
Heptachlor epoxide	1.9U	2 1U	2.0U	0.15J	2 3U	2.0U	2 1U
Methoxychlor	19U	21U	20U	20U	23U	20U	21U
Toxaphene	190U	210U	200U	200U	230U	200U	210U
alpha-BHC	0.56UJ	0 61UJ	0.57UJ	0.60U	0 67UJ	0.58UJ	0 63UJ
beta-BHC	0 56U	0 61U	0 57U	0.60U	0.67U	0.58U	0 63U
delta-BHC	0.56U	0.61U	0.57U	0.60U	0 67U	0.58U	0 63U
gamma-BHC (Lindane)	1.9U	2.1U	2.0U	2.0U	2.3U	2.0U	2 1U
Total Pesticides	**ND**	**0.52**	**ND**	**1.6**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T1-S7-0-0.5FTFD	UAS-T1-S7-3-6FT	UAS-T1-S7-3-6FTEB	UAS-T1-S7-3-6FTFD	UAS-T2-S1-0-0.5FT	UAS-T2-S1-3-6FT	UAS-T2-S2-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/12/1999	11/12/1999	11/12/1999
Units	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	3.6U	3.9U	0.10U	3.8U	3.6U	3.5U	4.0U
4,4'-DDE	3.6U	3.9U	0.10U	3.8U	0.48J	3.5U	4 0U
4,4'-DDT	0.065J	3.9U	0.10U	3.8U	0 54J	3 5U	0 14J
Aldrin	1.9U	2.0U	0.050U	2.0U	1 9U	1 8U	2.0U
Alpha Chlordane	1.9U	2.0U	0 050U	0.16J	1.9U	1 8U	2 0U
Dieldrin	3.6U	3 9U	0 10U	3 8U	3 6U	3 5U	4 0U
Endosulfan I	1.9U	2.0U	0.050U	2.0U	1 9U	1 8U	2 0U
Endosulfan II	3.6U	3.9U	0.10U	3.8U	3.6U	3.5U	4 0U
Endosulfan sulfate	3.6U	3.9U	0.10U	3.8U	0.41J	3 5U	0 11J
Endrin	3.6U	3.9U	0.10U	3 8U	3.6U	3 5U	4 0U
Endrin aldehyde	3.6U	3.9U	0.10U	3.8U	3 6U	3.5U	4 0U
Endrin ketone	0 26J	3.9U	0.10U	3 8U	0 81J	3 5U	0 14J
Gamma Chlordane	1.9U	2 0U	0.050U	2 0U	0 20J	1 8U	2 0U
Heptachlor	1.9U	2 0U	0.050U	2 0U	1 9U	1 8U	2 0U
Heptachlor epoxide	0.064J	2 0U	0.050U	0 14J	0 19J	1 8U	2 0U
Methoxychlor	2.2J	20U	0.50U	20U	7.3J	18U	1 3J
Toxaphene	190U	200U	5.0U	200U	190U	180U	200U
alpha-BHC	0.55U	0.59U	0.039U	0.58U	0.55U	0.53U	0 60U
beta-BHC	0.55U	0 59U	0.014U	0.58U	0.55U	0 53U	0.60U
delta-BHC	0.55U	0.59U	0.0043J	0 58U	0 55U	0 53U	0 60U
gamma-BHC (Lindane)	1.9U	2.0U	0 019U	2.0U	1 9U	1 8U	2 0U
Total Pesticides	**2.589**	**ND**	**0.0043**	**0.3**	**9.93**	**ND**	**1.69**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T1-S4-3-6FT	UAS-T1-S5-0-0 5FT	UAS-T1-S5-3-6FT	UAS-T1-S6-0-0 5FT	UAS-T1-S6-3-6FT	UAS-T1-S7-0-0 5FT	UAS-T1-S7-0-0 5FTEB
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
4 4'-DDD	3 6U	3 8U	3 6U	3 6U	4 0U	3 6U	0 10U
4 4'-DDE	3 6U	0 27J	0 14J	0 086J	4 0U	3 6U	0 10U
4 4'-DDT	3 6U	0 70J	0 27J	3 6U	4 0U	3 6U	0 10U
Aldrin	1 8U	2 0U	1 8U	1 8U	2 0U	1 9U	0 050U
Alpha Chlordane	1 8U	2 0U	1 8U	1 8U	2 0U	1 9U	0 050U
Dieldrin	3 6U	0 14J	3 6U	0 089J	4 0U	3 6U	0 10U
Endosulfan I	1 8U	2 0U	1 8U	1 8U	2 0U	1 9U	0 050U
Endosulfan II	3 6U	3 8U	3 6U	3 6U	4 0U	3 6U	0 10U
Endosulfan sulfate	3 6U	0 45J	3 6U	3 6U	4 0U	3 6U	0 10U
Endrin	3 6U	3 8U	3 6U	3 6U	4 0U	3 6U	0 10U
Endrin aldehyde	3 6U	3 8U	3 6U	3 6U	4 0U	3 6U	0 10U
Endrin ketone	3.6U	0 30J	0 18J	0 24J	4 0U	0 20J	0 10U
Gamma Chlordane	1 8U	2 0U	1 8U	1 8U	2 0U	1 9U	0 050U
Heptachlor	1 8U	2 0U	1 8U	1 8U	2 0U	1 9U	0 050U
Heptachlor epoxide	0 057J	0 13J	1 8U	0 090J	2 0U	1 9U	0 050U
Methoxychlor	18U	20U	1 6J	18U	20U	1 6J	0 50U
Toxaphene	180U	200U	180U	180U	200U	190U	5 0U
alpha-BHC	0 54U	0 58U	0 54U	0 54U	0 60U	0 55U	0 039U
beta-BHC	0 54U	0 58U	0 54U	0 54U	0 60U	0 55U	0 014U
delta-BHC	0 54U	0 58U	0 54U	0 54U	0 60U	0 55U	0 0053J
gamma-BHC (Lindane)	1 8U	2 0U	1 8U	1 8U	2 0U	1 9U	0 019U
Total Pesticides	**0.057**	**1.99**	**2.19**	**0.505**	**ND**	**1.8**	**0.0053**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.4
Sauget Area 1
Soil Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	UAS-T1-S1-0-0 5FT	UAS-T1-S1-3-6FT	UAS-T1-S2-0-0 5FT	UAS-T1-S2-3-6FT	UAS-T1-S3-0-0 5FT	UAS-T1-S3-3-6FT	UAS-T1-S4-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/10/1999	11/10/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/11/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4 -DDD	4 1U	4 0U	4 1U	4 1U	4 2U	4 4U	3 9U
4,4'-DDE	0 40J	4 0U	0 13J	4 1U	0 28J	0 22J	3 9U
4 4'-DDT	0 51J	4 0U	0 12J	4 1U	0 14J	4 4U	3 9U
Aldrin	2 1U	2 0U	2 1U	2 1U	2 2U	2 2U	2 0U
Alpha Chlordane	2 1U	2 0U	2 1U	2 1U	2 2U	2 2U	2 0U
Dieldrin	4 1U	4 0U	4 1U	4 1U	4 2U	0 12J	3 9U
Endosulfan I	2 1U	2 0U	2 1U	2 1U	2 2U	2 2U	2 0U
Endosulfan II	4 1U	4 0U	4 1U	4 1U	4 2U	4 4U	3 9U
Endosulfan sulfate	0 39J	4 0U	0 093J	4 1U	0 11J	4 4U	3 9U
Endrin	4 1U	4 0U	4 1U	4 1U	4 2U	4 4U	3 9U
Endrin aldehyde	4 1U	4 0U	4 1U	4 1U	4 2U	4 4U	3 9U
Endrin ketone	0 49J	4 0U	0 18J	4 1U	0 30J	0 27J	0 12J
Gamma Chlordane	2 1U	2 0U	2 1U	2 1U	2 2U	2 2U	2 0U
Heptachlor	2 1UJ	2 0U	2 1U	2 1U	2 2U	2 2U	2 0U
Heptachlor epoxide	0 14J	2 0U	2 1U	2 1U	0 34J	0 35J	0 35J
Methoxychlor	2 9J	20U	1 7J	21U	2 6J	2 6J	1 2J
Toxaphene	210U	200U	210U	210U	220U	220U	200U
alpha-BHC	0 62U	0 60U	0 62U	0 63U	0 64U	0 66U	0 59U
beta-BHC	0 62U	0 60U	0 62U	0 63U	0 64U	0 66U	0 59U
delta-BHC	0 62U	0 60U	0 62U	0 63U	0 64U	0 66U	0 59U
gamma-BHC (Lindane)	2 1U	2 0U	2 1U	2 1U	2 2U	2 2U	2 0U
Total Pesticides	**4 83**	**ND**	**2.223**	**ND**	**3 77**	**3 56**	**1 67**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T7-S6-3-6FTEB	UAS-T7-S7-0-0 5FT	UAS-T7-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/99	11/19/99	11/19/99
Units	*ug/l*	*ug/kg dw*	*ug/kg dw*
2,4,5-T	0 50U	9 2U	9 2U
2,4,5-TP (Silvex)	0 50U	9 2U	9 2U
2 4-D	0 50U	9 2U	9 2U
2 4-DB	0 50U	9 2U	9 2U
Dalapon	120U	72U	72U
Dicamba	1 2U	22U	22U
Dichloroprop	6 0U	110U	110U
Dinoseb	6 0U	110U	110U
MCPA	120U	2200U	2200U
MCPP	120U	2200U	2200U
Pentachlorophenol	1 0U	19U	19U
Total Herbicides	**ND**	**ND**	**ND**

Notes ot detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T7-S4-0-0 5FT	UAS-T7-S4-3-6FT	UAS-T7-S5-0-0 5FT	UAS-T7-S5-3-6FT	UAS-T7-S6-0-0 5FT	UAS-T7-S6-0-0 5FTEB	UAS-T7-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/99	11/19/99	11/19/99	11/19/99	11/19/99	11/19/99	11/19/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw
2 4,5-T	8 8U	9 2U	8 9U	9 4U	8 8UJ	0 50U	9 3U
2 4 5-TP (Silvex)	8 8U	9 2U	8 9U	9 4U	8 8UJ	0 50U	9 3U
2 4-D	8 8U	9 2U	8 9U	9 4U	8 8UJ	0 50U	9 3U
2,4-DB	8 8U	9 2U	8 9U	9 4U	8 8UJ	0 50U	9 3U
Dalapon	69U	72U	2200U	74U	69UJ	120U	73U
Dicamba	21U	22U	22U	23U	21UJ	1 2U	22U
Dichloroprop	110U	110U	110U	110U	110UJ	6 0U	110U
Dinoseb	110UJ	110UJ	110UJ	110U	110UJ	6 0U	110U
MCPA	2100U	2200U	2200U	2300U	2100UJ	120U	2200U
MCPP	2100U	2200U	2200U	2300U	2100UJ	120U	2200U
Pentachlorophenol	18U	1 9J	18U	19U	18UJ	0 13J	19U
Total Herbicides	**ND**	**1 9**	**ND**	**ND**	**ND**	**0 13**	**ND**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T7-S1-3-6FT	UAS-T7-S2-0-0 5FT	UAS-T7-S2-3-6FT	UAS-T7-S3-0-0 5FT	UAS-T7-S3-0-0 5FTFD	UAS-T7-S3-3-6FT	UAS-T7-S3-3-6FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/99	11/19/99	11/19/99	11/19/99	11/19/99	11/19/99	11/19/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	11U	9 0U	9.9U	9 4U	9 5U	9 3U	9 1U
2 4 5-TP (Silvex)	11U	9 0U	9 9U	9 4U	9 5U	9 3U	9 1U
2 4-D	11U	9 0U	9 9U	9 4U	9 5U	9 3U	9 1U
2 4-DB	11U	9 0U	9 9U	9 4U	9 5U	9 3U	9 1U
Dalapon	90U	70U	77U	74U	74U	73U	71U
Dicamba	28U	22U	24U	3 2J	2 1J	22U	22U
Dichloroprop	140U	110U	120U	110U	110U	110U	110U
Dinoseb	140UJ	110UJ	120UJ	110UJ	110UJ	110UJ	110UJ
MCPA	2800U	2200U	2400U	2300U	2300U	2200U	2200U
MCPP	2800U	2200U	2400U	2300U	2300U	2200U	2200U
Pentachlorophenol	1 8J	2 0J	20U	19U	19U	19U	19U
Total Herbicides	**1.8**	**2**	**ND**	**3.2**	**2.1**	**ND**	**ND**

Notes ›t detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T6-S3-3-6FT	UAS-T6-S3-3-6FTEB	UAS-T6-S4-0-0 5FT	UAS-T6-S4-3-6FT	UAS-T6-S5-0-0 5FT	UAS-T6-S5-3-6FT	UAS-T7-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/99	11/18/99	11/18/99	11/18/99	11/18/99	11/18/99	11/19/99
Units	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2 4 5-T	9 7U	0 50U	8 9U	9 5U	9 4U	10U	10U
2 4 5-TP (Silvex)	9 7U	0 50U	8 9U	9 5U	9 4U	10U	10U
2 4-D	9 7U	0 50U	8 9U	9 5U	9 4U	10U	10U
2 4-DB	9 7U	0 50U	8 9U	9 5U	9 4U	10U	10U
Dalapon	76U	120U	70U	75U	74U	82U	80U
Dicamba	23U	1 2U	21U	23U	23U	25U	24U
Dichloroprop	120U	6 0U	110U	110U	110U	130U	120U
Dinoseb	120UJ	6 0U	110UJ	110UJ	110UJ	130UJ	120UJ
MCPA	2300U	120U	2100U	2300U	2300U	2500U	2400U
MCPP	2300U	120U	2100U	2300U	2300U	2500U	2400U
Pentachlorophenol	1 4J	1 0U	2 9J	4 5J	19U	21U	2 8J
Total Herbicides	**1 4**	**ND**	**2 9**	**4 5**	**ND**	**ND**	**2 8**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T5-S6-3-6FTFD	UAS-T6-S1-0-0 5FT	UAS-T6-S1-3-6FT	UAS-T6-S2-0-0.5FT	UAS-T6-S2-3-6FT	UAS-T6-S3-0-0 5FT	UAS-T6-S3-0-0 5FTEB
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/99	11/18/99	11/18/99	11/18/99	11/18/99	11/18/99	11/18/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
2,4,5-T	9.2U	9.8U	9.9U	9.4U	9.7U	9.1U	0 50U
2,4,5-TP (Silvex)	9.2U	9.8U	9.9U	9 4U	9.7U	9.1U	0 50U
2,4-D	9.2U	9.8U	9.9U	9 4U	9.7U	9 1U	0 50U
2,4-DB	9.2U	9.8U	9.9U	9.4U	9.7U	9 1U	0 50U
Dalapon	72U	76U	77U	73U	76U	71U	120U
Dicamba	22U	24U	24U	23U	23U	22U	1 2U
Dichloroprop	110U	120U	120U	110U	120U	110U	6 0U
Dinoseb	110UJ	120UJ	120UJ	110UJ	120UJ	110UJ	6 0U
MCPA	2200U	2400U	2400U	2300U	2300U	2200U	120U
MCPP	2200U	4500J	3000	2300U	2300U	2200U	120U
Pentachlorophenol	19U	20U	20U	9 9J	20U	4.6J	1 0U
Total Herbicides	**ND**	**4500**	**ND**	**9.9**	**ND**	**4.6**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T5-S5-0-0 5FT	UAS-T5-S5-0-0 5FTEB	UAS-T5-S5-3-6FT	UAS-T5-S5-3-6FTEB	UAS-T5-S6-0-0 5FT	UAS-T5-S6-0-0 5FTFD	UAS-T5-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/99	11/17/99	11/17/99	11/17/99	11/17/99	11/17/99	11/17/99
Units	ug/kg dw	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
2 4 5-T	8 6U	0 50U	8 5U	0 50U	9 7U	9 8U	9 1U
2 4 5-TP (Silvex)	8 6U	0 50U	8 5U	0 50U	9 7U	9 8U	9 1U
2 4-D	8 6U	0 50U	8 5U	0 50U	9 7U	9 8U	9 1U
2,4-DB	8 6U	0 50U	8 5U	0 50U	9 7U	9 8U	9 1U
Dalapon	67U	120U	67U	120U	76U	77U	71U
Dicamba	21U	1 2U	20U	1 2U	23U	24U	22U
Dichloroprop	100U	6 0U	100U	6 0U	120U	120U	110U
Dinoseb	100UJ	6 0U	100UJ	6 0U	120UJ	120UJ	110UJ
MCPA	2100U	120U	2000U	120U	2300U	2900	2200U
MCPP	5100	120U	2000U	120U	2300U	3600	2200U
Pentachlorophenol	18U	1 0U	17U	1 0U	20U	20U	19U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T5-S1-3-6FT	UAS-T5-S2-0-0 5FT	UAS-T5-S2-3-6FT	UAS-T5-S3-0-0 5FT	UAS-T5-S3-3-6FT	UAS-T5-S4-0-0 5FT	UAS-T5-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/99	11/17/99	11/17/99	11/17/99	11/17/99	11/17/99	11/17/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	9 3U	9 2U	9 5U	8 9U	10U	9 2U	8 5U
2,4,5-TP (Silvex)	9 3U	9 2U	9 5U	8 9U	10U	9 2U	8 5U
2,4-D	9 3U	9 2U	9 5U	8 9U	10U	9 2U	8 5U
2,4-DB	9 3U	9 2U	9 5U	8 9U	10U	9 2UJ	8 5U
Dalapon	73U	72U	74U	70U	80U	72UJ	67U
Dicamba	22U	22U	23U	2 9J	25U	22U	20U
Dichloroprop	110U	110U	110U	110U	120U	110U	100U
Dinoseb	110UJ	110U	110UJ	110U	120UJ	110UJ	100U
MCPA	2300	2200U	2300U	2100U	2500U	4400J	2000U
MCPP	2900	2500	2300U	2200	2900	6800J	2000U
Pentachlorophenol	19U	1 6J	20U	18U	21U	19U	17U
Total Herbicides	**ND**	**1.6**	**ND**	**2.9**	**ND**	**11200**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T4-S5-0-0 5FT	UAS-T4-S5-3-6FT	UAS-T4-S6-0-0 5FT	UAS-T4-S6-3-6FT	UAS-T4-S7-0-0 5FT	UAS-T4-S7-3-6FT	UAS-T5-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/16/99	11/16/99	11/16/99	11/16/99	11/17/99	11/17/99	11/17/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2 4,5-T	8 9U	11U	9 8U	10U	9 3U	9 2U	9 4U
2,4,5-TP (Silvex)	8 9U	11U	9 8U	10U	9 3U	9 2U	9 4U
2 4-D	8 9U	11U	9 8U	10U	9 3U	9 2U	9 4U
2,4-DB	8 9U	11U	9 8U	10U	9 3U	9 2U	9 4U
Dalapon	69U	83U	77U	83U	73U	72U	74U
Dicamba	21U	26U	24U	25U	22U	22U	23U
Dichloroprop	110U	130U	120U	130U	110U	110U	110U
Dinoseb	110U	130U	120U	130U	110U	110U	110U
MCPA	2100U	2600U	2400U	2500U	2200U	2200U	2300U
MCPP	2100U	2600U	2400U	2500U	2200U	2200U	4100
Pentachlorophenol	6 8J	3 1J	6 7J	22U	3 5J	3 6J	2 4J
Total Herbicides	**6 8**	**3.1**	**6.7**	**ND**	**3 5**	**3 6**	**2 4**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T4-S2-3-6FT	UAS-T4-S3-0-0.5FT	UAS-T4-S3-0-0.5FTFD	UAS-T4-S3-3-6FT	UAS-T4-S3-3-6FTFD	UAS-T4-S4-0-0 5FT	UAS-T4-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/99	11/16/99	11/16/99	11/17/99	11/17/99	11/16/99	11/17/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	9.0U	8 8U	8.9U	8.6U	8.7U	8.5U	8 6U
2,4,5-TP (Silvex)	9.0U	8 8U	8.9U	8.6U	8.7U	8.5U	8 6U
2,4-D	9.0U	8 8U	8.9U	8.6U	8.7U	8.5U	8 6U
2,4-DB	9.0U	8 8U	8.9U	8.6U	8.7U	8 5U	8 6U
Dalapon	71U	69U	69U	68U	68U	66U	68U
Dicamba	22U	21U	21U	21U	21U	20U	21U
Dichloroprop	110U	110U	110U	100U	100U	100U	100U
Dinoseb	110U	110U	110U	100U	100U	100U	100U
MCPA	2200U	2100U	2100U	2100U	2100U	2000U	2100U
MCPP	2200U	2100U	2100U	2100U	2100U	2000U	2100U
Pentachlorophenol	18U	1 4J	2.7J	18U	5.9J	2 2J	1 8J
Total Herbicides	**ND**	**1.4**	**2.7**	**ND**	**5.9**	**2.2**	**1.8**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T3-S6-3-6FT	UAS-T3-S7-0-0.5FT	UAS-T3-S7-3-6FT	UAS-T3-S7-3-6FTEB	UAS-T4-S1-0-0 5FT	UAS-T4-S1-3-6FT	UAS-T4-S2-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/99	11/15/99	11/15/99	11/16/99	11/16/99	11/17/99	11/16/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	11U	8 7U	11U	0.50U	9.4U	9.9U	8 8U
2,4,5-TP (Silvex)	11U	8 7U	11U	0.50U	9.4U	1.5J	8.8U
2,4-D	11U	8 7U	11U	0.50U	9 4U	9.9U	8 8U
2,4-DB	11U	8.7U	11U	0.50U	9.4U	9 9U	8 8U
Dalapon	85U	68U	83U	120U	74U	77U	69U
Dicamba	26U	21U	26U	1 2U	23U	24U	21U
Dichloroprop	130U	100U	130U	6.0U	110U	120U	100U
Dinoseb	130UJ	100UJ	130UJ	6.0U	110U	120U	100U
MCPA	2600U	2100U	2600U	120U	2300U	2400U	2100U
MCPP	2600U	2100U	2600U	120U	2300U	2400U	2100U
Pentachlorophenol	22UJ	1 3J	22UJ	1 0U	2.8J	20U	40
Total Herbicides	**ND**	**1.3**	**ND**	**ND**	**2.8**	**1.5**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T3-S3-3-6FTFD	UAS-T3-S4-0-0.5FT	UAS-T3-S4-3-6FT	UAS-T3-S5-0-0.5FT	UAS-T3-S5-0-0 5FTEB	UAS-T3-S5-3-6FT	UAS-T3-S6-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/99	11/15/99	11/15/99	11/15/99	11/16/99	11/15/99	11/15/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
2,4,5-T	9 6U	9 5U	9.9U	9.2U	0.50U	8 6U	9 5U
2,4,5-TP (Silvex)	9 6U	9 5U	9.9U	9.2U	0 50U	8 6U	9 5U
2,4-D	9 6U	9 5U	9.9U	9 2U	0.50U	8 6U	9 5U
2,4-DB	9 6U	41J	9 9U	9 2U	0 50U	8 6U	9 5U
Dalapon	75U	74U	78U	72U	120U	68U	75U
Dicamba	23U	23U	24U	22U	1 2U	21U	23U
Dichloroprop	120U	110U	120U	110U	6 0U	100U	110U
Dinoseb	120UJ	110UJ	120UJ	110UJ	6 0U	100UJ	110UJ
MCPA	2300U	4000J	2400U	2200U	120U	2100U	2300U
MCPP	2300U	4400	2400U	2200U	120U	2100U	2300U
Pentachlorophenol	20UJ	19UJ	20UJ	19UJ	1 0U	18UJ	20UJ
Total Herbicides	**ND**	**4041**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes t detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-res' '' from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T3-S1-0-0 5FT	UAS-T3-S1-3-6FT	UAS-T3-S2-0-0.5FT	UAS-T3-S2-3-6FT	UAS-T3-S3-0-0 5FT	UAS-T3-S3-0-0 5FTFD	UAS-T3-S3-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/99	11/15/99	11/15/99	11/15/99	11/15/99	11/15/99	11/15/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	10U	10U	9.9U	10U	9.5R	9.6UJ	9 6U
2,4,5-TP (Silvex)	10U	10U	9.9U	10U	9 5R	9.6UJ	9 6U
2,4-D	10U	10U	9.9U	10U	9.5R	9.6UJ	9 6U
2,4-DB	10U	10U	9.9U	10U	9 5R	9.6UJ	9 6U
Dalapon	78U	82U	77U	81U	74R	75UJ	75U
Dicamba	24U	25U	24U	25U	23R	23UJ	23U
Dichloroprop	120U	130U	120U	120U	110R	120UJ	120U
Dinoseb	120UJ	130UJ	120UJ	120UJ	110R	120UJ	120UJ
MCPA	1800J	2500U	2400U	2500U	2300R	2300UJ	2300U
MCPP	2400U	2500U	7700JD	2500U	2300R	2300UJ	2300U
Pentachlorophenol	20U	22UJ	20UJ	21U	20R	20UJ	20UJ
Total Herbicides	**1800**	**ND**	**7700**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T2-S3-3-6FT	UAS-T2-S4-0-0 5FT	UAS-T2-S4-3-6FT	UAS-T2-S5-0-0 5FT	UAS-T2-S5-3-6FT	UAS-T2-S6-0-0 5FT	UAS-T2-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/12/99	11/12/99	11/12/99	11/12/99	11/12/99	11/12/99	11/12/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2 4 5-T	9 6U	10U	11U	9 8U	10U	9 9U	9 8U
2 4,5-TP (Silvex)	9 6U	10U	11U	9 8U	10U	9 9U	9 8U
2,4-D	9 6U	10U	11UJ	9 8U	10U	9 9U	9 8U
2,4-DB	9 6U	10UJ	11U	9 8U	10U	9 9U	9 8U
Dalapon	76U	78UJ	87UJ	77U	81U	78U	77U
Dicamba	23U	3 1J	27U	24U	25U	24U	24U
Dichloroprop	120U	120U	130UJ	120U	120U	120U	120U
Dinoseb	120UJ	120UJ	130UJ	120UJ	120UJ	120UJ	120UJ
MCPA	2300U	2400U	2700UJ	2400U	2500U	2400U	2400U
MCPP	2300U	2400U	2700UJ	2400U	2500U	2400U	2400U
Pentachlorophenol	20UJ	1 4J	23UJ	20UJ	21UJ	20UJ	20UJ
Total Herbicides	**ND**	**4.5**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes ' t detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T1-S7-3-6FTEB	UAS-T1-S7-3-6FTFD	UAS-T2-S1-0-0 5FT	UAS-T2-S1-3-6FT	UAS-T2-S2-0-0.5FT	UAS-T2-S2-3-6FT	UAS-T2-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/99	11/11/99	11/12/99	11/12/99	11/12/99	11/12/99	11/12/99
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	0.50U	9.8U	9.1U	8.9U	9.9U	9 3U	10U
2,4,5-TP (Silvex)	0.50U	9.8U	9.1U	8.9U	9.9U	9.3U	10U
2,4-D	0.50U	9.8U	9.1U	8.9U	9.9U	9.3U	10U
2,4-DB	0.50U	9.8U	9.1U	8.9U	9.9U	9.3U	10U
Dalapon	120U	76U	72U	70U	77U	72U	80U
Dicamba	1 2U	24U	22U	22U	24U	22U	25U
Dichloroprop	6 0U	120U	110U	110U	120U	110U	120U
Dinoseb	6.0U	120UJ	110UJ	110UJ	120UJ	110UJ	120UJ
MCPA	120U	2400U	2200U	2200U	2400U	2200U	5500J
MCPP	120U	2400U	2200U	2200U	2400U	2200U	7600
Pentachlorophenol	1 0U	20U	1.6J	18U	20U	19UJ	20UJ
Total Herbicides	**ND**	**ND**	**1.6**	**ND**	**ND**	**ND**	**5500**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T1-S5-3-6FT	UAS-T1-S6-0-0.5FT	UAS-T1-S6-3-6FT	UAS-T1-S7-0-0 5FT	UAS-T1-S7-0-0 5FTEB	UAS-T1-S7-0-0 5FTFD	UAS-T1-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/99	11/11/99	11/11/99	11/11/99	11/11/99	11/11/99	11/11/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
2,4,5-T	9 0U	9 0U	10U	9 2U	0 50U	9 2U	9 6U
2,4 5-TP (Silvex)	9 0U	9 0U	10U	9 2U	0 50U	9 2U	9 6U
2,4-D	9 0U	9 0U	10U	9 2U	0 50U	9 2U	9 6U
2,4-DB	9 0U	9 0U	10U	9 2U	0 50U	9 2U	9 6U
Dalapon	71U	70U	79U	72U	120U	72U	75U
Dicamba	22U	22U	24U	22U	1 2U	22U	23U
Dichloroprop	110U	110U	120U	110U	6 0U	110U	120U
Dinoseb	110UJ	110UJ	120UJ	110UJ	6 0U	110UJ	120UJ
MCPA	2200U	2200U	2400U	2200U	120U	2200U	2300U
MCPP	2200U	2200U	2400U	2200U	120U	2200U	2300U
Pentachlorophenol	18U	2 9J	21U	1 2J	1 0U	1 4J	20U
Total Herbicides	**ND**	**2.9**	**ND**	**1 2**	**ND**	**1 4**	**ND**

Notes ' ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	UAS-T1-S2-0-0 5FT	UAS-T1-S2-3-6FT	UAS-T1-S3-0-0.5FT	UAS-T1-S3-3-6FT	UAS-T1-S4-0-0 5FT	UAS-T1-S4-3-6FT	UAS-T1-S5-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/10/99	11/10/99	11/11/99	11/11/99	11/11/99	11/11/99	11/11/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	10U	10U	10U	11U	20U	9.0U	9.5U
2,4,5-TP (Silvex)	10U	10U	10U	11U	20U	9.0U	9 5U
2,4-D	10U	10U	10U	11U	20U	9.0U	9.5U
2,4-DB	10U	10U	10U	11U	20U	9.0U	9.5U
Dalapon	81U	82U	83U	87U	150U	71U	74U
Dicamba	1.8J	25U	25U	27U	47U	22U	2 4J
Dichloroprop	120U	120U	130U	130U	230U	110U	110U
Dinoseb	120UJ	120UJ	130UJ	130UJ	230UJ	110UJ	110UJ
MCPA	2700	2500U	3300	2700U	6800	2200U	7400J
MCPP	2500U	2500U	2500U	2700U	4700U	2200U	2300U
Pentachlorophenol	1.9J	21U	3.9J	23U	6.6J	18U	4 1J
Total Herbicides	**3.7**	**ND**	**3.9**	**ND**	**6.6**	**ND**	**7406.5**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	DAS-T6-S3-3-6FT	DAS-T7-S1-0-0 5FT	DAS-T7-S1-3-6FT	DAS-T7-S2-0-0 5FT	DAS-T7-S2-3-6FT	UAS-T1-S1-0-0 5FT	UAS-T1-S1-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	4/20/00	4/20/00	4/20/00	4/20/00	4/20/00	11/10/99	11/10/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	9 3UJ	9 6UJ	11UJ	10UJ	11UJ	10U	9 9U
2,4,5-TP (Silvex)	9 3UJ	9 6UJ	11UJ	10UJ	11UJ	10U	9 9U
2,4-D	9 3UJ	9 6UJ	11UJ	10UJ	11UJ	10U	9 9U
2,4-DB	9 3UJ	9 6UJ	11UJ	10UJ	11UJ	10U	9 9U
Dalapon	73UJ	75UJ	83UJ	78UJ	86UJ	81U	78U
Dicamba	22UJ	23UJ	26UJ	24UJ	26UJ	25U	24U
Dichloroprop	110UJ	120UJ	130UJ	120UJ	130UJ	120U	120U
Dinoseb	110UJ	120UJ	130UJ	120UJ	130UJ	120UJ	120UJ
MCPA	2200UJ	2300UJ	2600UJ	2400UJ	2600UJ	2500U	2400U
MCPP	2200UJ	2300UJ	2600UJ	2400UJ	2600UJ	2500U	2400U
Pentachlorophenol	19UJ	20UJ	22UJ	2 5J	2 6J	2 3J	20U
Total Herbicides	**ND**	**ND**	**ND**	**2.5**	**2.6**	**2.3**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	DAS-T5-S3-0-0 5FT	DAS-T5-S3-3-6FT	DAS-T6-S1-0-0.5FT	DAS-T6-S1-3-6FT	DAS-T6-S2-0-0 5FT	DAS-T6-S2-3-6FT	DAS-T6-S3-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/00	4/19/00	4/20/00	4/20/00	4/20/00	4/20/00	4/20/00
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	9.1U	9 2U	9.8UJ	9 4UJ	9.4UJ	9 6UJ	9 0UJ
2,4,5-TP (Silvex)	9 1U	9.2U	9.8UJ	9.4UJ	9 4UJ	9.6UJ	9 0UJ
2,4-D	9 1U	9.2U	9.8UJ	9 4UJ	9 4UJ	9 6UJ	9 0UJ
2,4-DB	18J	7 7J	9.8UJ	9.4UJ	9 4UJ	9 6UJ	9 0UJ
Dalapon	72U	73U	76UJ	74UJ	74UJ	76UJ	71UJ
Dicamba	1 3J	22U	3.0J	23UJ	1 7J	23UJ	22UJ
Dichloroprop	110U	110U	120UJ	110UJ	110UJ	120UJ	110UJ
Dinoseb	110UJ	110UJ	120UJ	110UJ	110UJ	120UJ	110UJ
MCPA	2200U	2200U	2400UJ	2300UJ	2300UJ	1400J	2200UJ
MCPP	2200U	2200U	2400UJ	2300UJ	2300UJ	2300UJ	2200UJ
Pentachlorophenol	4 3J	19U	2 0J	19UJ	1 6J	20UJ	18UJ
Total Herbicides	**23.6**	**7.7**	**5**	**ND**	**3.3**	**1400**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	DAS-T4-S3-0-0 5FT	DAS-T4-S3-3-6FT	DAS-T5-S1-0-0 5FT	DAS-T5-S1-0-0 5FTEB	DAS-T5-S1-3-6FT	DAS-T5-S2-0-0 5FT	DAS-T5-S2-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/20/00	4/20/00	4/19/00	4/20/00	4/19/00	4/19/00	4/19/00
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
2 4 5-T	10UJ	11UJ	9 8U	0 50U	9 8U	9 7U	9 1U
2 4 5-TP (Silvex)	10UJ	11UJ	9 8U	0 50U	9 8U	9 7U	9 1U
2 4-D	10UJ	11UJ	9 8U	0 50U	9 8U	9 7U	9 1U
2 4-DB	10UJ	11UJ	23J	0 50U	9 8U	9 7U	9 1U
Dalapon	80UJ	86UJ	78U	120U	78U	77U	71U
Dicamba	25UJ	26UJ	24U	1 2U	24U	23U	22U
Dichloroprop	120UJ	130UJ	120U	6 0U	120U	120U	110U
Dinoseb	120UJ	130UJ	120UJ	6 0U	120UJ	120UJ	110UJ
MCPA	3700J	2600UJ	2400U	120U	2400U	2300U	2200U
MCPP	2500UJ	2600UJ	2400U	120U	2400U	2300U	2200U
Pentachlorophenol	2 5J	22UJ	20U	1 0U	20U	20U	19U
Total Herbicides	**3702 5**	**ND**	**23**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-FMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	DAS-T3-S3-3-6FT	DAS-T4-S1-0-0 5FT	DAS-T4-S1-0-0.5FTFD	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FTFD	DAS-T4-S2-0-0 5FT	DAS-T4-S2-3-6FT
Description	*Developed Soil*	*Developed Soil*	*Developed Soil*	*Developed Soil*	*Developed Soil*	*Developed Soil*	*Developed Soil*
Sample Date	4/19/00	4/19/00	4/19/00	4/19/00	4/19/00	4/20/00	4/20/00
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	10U	10U	10U	11U	11U	10UJ	9 9UJ
2,4,5-TP (Silvex)	10U	10U	10U	11U	11U	10UJ	9 9UJ
2,4-D	10U	10U	10U	11U	11U	10UJ	9 9UJ
2,4-DB	10U	65J	10U	11U	11U	10UJ	9 9UJ
Dalapon	81U	80U	79U	85U	84U	81UJ	77UJ
Dicamba	24U	1 9J	1 6J	26U	26U	1 5J	24UJ
Dichloroprop	120U	120U	120U	130U	130U	120UJ	120UJ
Dinoseb	120UJ	120UJ	120UJ	130UJ	130UJ	120UJ	120UJ
MCPA	2400U	2100J	2200J	2600U	2600U	2200J	2400UJ
MCPP	2400U	2400U	2400U	2600U	2600U	2500UJ	2400UJ
Pentachlorophenol	21U	20U	2.2J	22U	1 7J	2 0J	20UJ
Total Herbicides	**ND**	**2166.9**	**2203.8**	**ND**	**1.7**	**2203.5**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	DAS-T2-S3-3-6FTFD	DAS-T3-S1-0-0 5FT	DAS-T3-S1-3-6FT	DAS-T3-S2-0-0 5FT	DAS-T3-S2-3-6FT	DAS-T3-S3-0-0 5FT	DAS-T3-S3-0-0 5FTEB
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/00	4/19/00	4/19/00	4/19/00	4/19/00	4/19/00	4/20/00
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
2 4 5-T	9 2U	10U	11U	9 8U	9 2U	9 5U	0 50U
2 4 5-TP (Silvex)	9 2U	10U	11U	9 8U	9 2U	9 5U	0 50U
2 4-D	9 2U	10U	11U	9 8U	9 2U	9 5U	0 50U
2 4-DB	9 2U	10U	11U	9 8U	9 2U	9 5U	0 50U
Dalapon	72U	81U	83U	78U	72U	2300U	120U
Dicamba	22U	1 6J	26U	24U	22U	1 8J	1 2U
Dichloroprop	110U	120U	130U	120U	110U	115U	6 0U
Dinoseb	110U	120UJ	130UJ	120UJ	110UJ	115UJ	6 0U
MCPA	2200U	2400U	2600U	2400U	2200U	2300U	120U
MCPP	2200U	2400U	2600U	2400U	2200U	2300U	120U
Pentachlorophenol	19U	1 5J	2 3J	20U	1 7J	19U	1 0U
Total Herbicides	**ND**	**3.1**	**2.3**	**ND**	**1.7**	**1.8**	**ND**

Notes ...t detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	DAS-T1-S3-3-6FT	DAS-T2-S1-0-0 5FT	DAS-T2-S1-3-6FT	DAS-T2-S2-0-0 5FT	DAS-T2-S2-3-6FT	DAS-T2-S3-0-0 5FT	DAS-T2-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/00	4/18/00	4/18/00	4/18/00	4/18/00	4/18/00	4/18/00
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2 4,5-T	10U	9 8U	9 3U	9 4U	8 8U	11U	9 1U
2 4 5-TP (Silvex)	10U	9 8U	9 3U	9 4U	8 8U	11U	9 1U
2,4-D	10U	9 8U	9 3U	9 4U	8 8U	11U	9 1U
2 4-DB	10U	9 8U	9 3U	9 4U	8 8U	11U	9 1U
Dalapon	83U	77U	73U	74U	69U	85U	71U
Dicamba	1 3J	24U	22U	1 3J	21U	26U	22U
Dichloroprop	130U	120U	110U	110U	110U	130U	110U
Dinoseb	130U	120U	110U	110U	110U	130U	110U
MCPA	1700J	2400U	2200U	2300U	2100U	2000J	2200U
MCPP	2500U	2400U	2200U	2300U	2100U	2600U	2200U
Pentachlorophenol	22U	1 4J	19U	2 6J	18U	22U	18U
Total Herbicides	**1701.3**	**1.4**	**ND**	**3.9**	**ND**	**2000**	**ND**

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	BS-EEG-108-3-6FT	DAS-T1-S1-0-0 5FT	DAS-T1-S1-0-0 5FTFD	DAS-T1-S1-3-6FT	DAS-T1-S2-0-0 5FT	DAS-T1-S2-3-6FT	DAS-T1-S3-0-0 5FT
Description	Background Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	1/27/00	4/18/00	4/18/00	4/18/00	4/18/00	4/18/00	4/18/00
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	10U	9 4U	9.4U	9 6U	9 4U	9 5U	9 8U
2,4 5-TP (Silvex)	5 8J	9 4U	9 4U	9 6U	9 4U	9 5U	9 8U
2,4-D	10U	4 1J	3 1J	9 6U	9 4U	9 5U	9 8U
2,4-DB	10U	9 4U	9 4U	9 6U	9 4U	9 5U	9 8U
Dalapon	80U	74U	74U	75U	73U	74U	77U
Dicamba	25U	23U	1 2J	23U	22U	23U	1 7J
Dichloroprop	120U	110U	110U	120U	110U	110U	120U
Dinoseb	120U	110U	110U	120U	110U	110U	120U
MCPA	2500U	2300U	2300U	2300U	2200U	2300U	2400U
MCPP	2900	2300U	2300U	2300U	2200U	2300U	2400U
Pentachlorophenol	21U	3 8J	3 1J	20U	2 1J	19U	20U
Total Herbicides	**5.8**	**7.9**	**7.4**	**ND**	**2.1**	**ND**	**1.7**

Notes ' ·ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.5
Sauget Area 1
Soil Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	BS-EE-04-0-0 5FT	BS-EE-04-0-0.5FTFD	BS-EE-04-3-6FT	BS-EE-20-0-0 5FT	BS-EE-20-3-6FT	BS-EEG-108-0-0.5FT	BS-EEG-108-0-0.5FTEB
Description	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil
Sample Date	1/26/00	1/26/00	1/26/00	1/24/00	1/24/00	1/27/00	1/27/00
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
2,4,5-T	11U	11U	11U	10U	9.8U	9.9U	0 50U
2,4,5-TP (Silvex)	11U	13J	11U	11J	9.8U	5.8J	0 50U
2,4-D	11U	11U	11U	10U	9.8U	9.9U	0 50U
2,4-DB	11U	11U	11U	10U	9.8U	9.9U	0 50U
Dalapon	86U	86U	84U	81U	77U	77U	120U
Dicamba	26U	26U	26U	25U	24U	24U	1 2U
Dichloroprop	130U	130U	130U	120U	120U	120U	6 0U
Dinoseb	130U	130U	130U	120U	120U	120U	6 0U
MCPA	3100J	5800	2600U	13000J	2400U	4300	120U
MCPP	5600	7500	3000	5900	2400U	2500J	120U
Pentachlorophenol	18J	24J	22U	45J	20U	20U	1 0U
Total Herbicides	**3118**	**37**	**ND**	**13056**	**ND**	**2505.8**	**ND**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-4.6
Sauget Area 1
Soil Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	UAS-T6-S3-3-6FTEB	UAS-T7-S3-0-0 5FT	UAS-T7-S3-0-0 5FTFD	UAS-T7-S3-3-6FT	UAS-T7-S3-3-6FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	ug/l	ug/kg	ug/kg	ug/kg	ug/kg
1 2 3 4 6 7 8 9-OCDD	0 0012U	2 2	2 8	0 28	0 1UJ
1 2 3 4 6 7 8 9-OCDF	0 001U	0,1M	0 22	0 09U	0 09UJ
1 2 3 4 6 7 8-HpCDD	0 0007U	0 11	0 18	0 03U	0 07UJ
1 2,3 4 6 7 8-HpCDF	0 0005U	0 07M	0 07	0 01U	0 06UJ
1 2,3 4,7,8,9-HpCDF	0 0006U	0 02U	0 02U	0 01U	0 07UJ
1,2,3,4,7,8-HxCDD	0 0005U	0 02U	0 02U	0 02U	0 04UJ
1,2,3,4,7,8-HxCDF	0 0004U	0 02U	0 02U	0 01U	0 05UJ
1,2,3,6 7,8-HxCDD	0 0008U	0 03U	0 03U	0 03U	0 06UJ
1,2,3,6 7,8-HxCDF	0 0005U	0 02U	0 02U	0 01U	0 05UJ
1 2 3 7,8,9-HxCDD	0 001U	0 04U	0 04U	0 04U	0 09UJ
1,2,3,7 8,9-HxCDF	0 0005U	0 02U	0 02U	0 01U	0 06UJ
1,2,3,7,8-PeCDD	0 0008U	0 03U	0 03U	0 03U	0 09UJ
1,2,3,7,8-PeCDF	0 0005U	0 01U	0 02U	0 01U	0 05UJ
2,3,4,6,7,8-HxCDF	0 0005U	0 02U	0 02U	0 01U	0 05UJ
2 3,4,7,8-PeCDF	0 0006U	0 02U	0 02U	0 01U	0 06UJ
2 3,7 8-TCDD	0 0004U	0 01U	0 02U	0 02U	0 05UJ
2 3,7,8-TCDF	0 0005U	0 01U	0 01U	0 009U	0 05UJ
Total HpCDD	0 0007U	0 24	0 38	0 03U	0 07U
Total HpCDF	0 0005U	0 07M	0 18	0 01U	0 06U
Total HxCDD	0 0005U	0 02U	0 02U	0 02U	0 04U
Total HxCDF	0 0004U	0 02U	0 02U	0 01U	0 05U
Total PeCDD	0 0008U	0 03U	0 03U	0 03U	0 09U
Total PeCDF	0 0005U	0 01U	0 02U	0 01U	0 05U
Total TCDD	0 0164M	3 1M	2 9M	4 5M	3 3M
Total TCDF	0 0015M	0 07M	0 05M	0 04M	0 09M
1998 Total TEQ w/ EMPC as ND	**0.00060611**	**0 008175**	**0.009302**	**0 0252325**	**0 0706595**

Notes ⁻ot detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.6
Sauget Area 1
Soil Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	UAS-T4-S6-0-0 5FT	UAS-T4-S6-3-6FT	UAS-T5-S4-0-0 5FT	UAS-T5-S4-3-6FT	UAS-T6-S3-0-0 5FT	UAS-T6-S3-0-0 5FTEB	UAS-T6-S3-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/18/1999	11/18/1999	11/18/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/l	ug/kg
1,2,3,4 6,7,8,9-OCDD	7	0 06M	3 3	0 3	10 1	0 0002U	2
1,2,3,4,6,7,8,9-OCDF	0 23	0 3U	0 4	0 05	3 2	0 0002U	0 06
1,2,3,4,6,7,8-HpCDD	0 42	0 03U	0 23	0 01U	0 78	0 0001U	0 13
1,2,3,4 6,7,8-HpCDF	0 5U	0 02U	0 1	0 01U	0 41	0 0001U	0 01U
1,2,3,4,7,8,9-HpCDF	0 6U	0 02U	0 008U	0 01U	0 01U	0 0001U	0 02U
1 2,3 4 7 8-HxCDD	0 6U	0 02U	0 006U	0 008U	0 01U	0 00009U	0 02U
1 2 3 4 7 8-HxCDF	0 4U	0 02U	0 006U	0 008U	0 008U	0 00009U	0 01U
1,2,3,6 7 8-HxCDD	0 9U	0 03U	0 01U	0 01U	0 02U	0 0001U	0 02U
1,2 3,6,7 8-HxCDF	0 5U	0 02U	0 007U	0 01U	0 01U	0 0001U	0 01U
1 2,3 7 8,9-HxCDD	1 2U	0 04U	0 01U	0 02U	0 02U	0 0002U	0 03U
1,2,3,7,8,9-HxCDF	0 5U	0.02U	0 007U	0 01U	0 01U	0 0001U	0 01U
1,2,3,7,8-PeCDD	1 1UJ	0 05U	0 01U	0 01U	0 03U	0 0002U	0 03U
1 2,3 7 8-PeCDF	0 5UJ	0 02U	0 006U	0 01U	0 01U	0 00008U	0 02U
2,3,4 6,7,8-HxCDF	0 5U	0 02U	0 007U	0 009U	0 009U	0 0001U	0 01U
2 3,4,7,8-PeCDF	0 5UJ	0 03U	0 007U	0 01U	0 01U	0 00009U	0 02U
2,3 7 8-TCDD	0 6UJ	0 02U	0 006U	0 008U	0 02U	0 00009U	0 02U
2,3,7,8-TCDF	0 4UJ	0 02U	J 006U	0 009U	0 01U	0 00007U	0 01U
Total HpCDD	0 89	0 03U	0 48	0 01U	1 5	0 0001U	0 28
Total HpCDF	0 5U	0 02U	0 25	0 01U	2M	0 0001U	0 06
Total HxCDD	0 6U	0 02U	0 1	0 008U	0 09	0 00009U	0 02U
Total HxCDF	0 4U	0 02U	0 06	0 008U	0 19M	0 00009U	0 01U
Total PeCDD	1 1U	0 05U	0 01U	0 01U	0 03U	0 0002U	0 03U
Total PeCDF	0 5U	0 02U	0 006U	0 01U	0 01U	0 00008U	0 02U
Total TCDD	0 6U	4 6M	2 5M	2M	4 8M	0 026M	4 9M
Total TCDF	0 4U	0 06M	0 06M	0 07M	0 06M	0 00044M	0 1M
1998 Total TEQ w/ EMPC as ND	**0.187423**	**0.035268**	**0.00562**	**0.009135**	**0.01658**	**0 00003002**	**0.026556**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.6
Sauget Area 1
Soil Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	UAS-T3-S3-3-6FT	UAS-T3-S3-3-6FTFD	UAS-T3-S5-0-0 5FTEB	UAS-T3-S7-3-6FTEB	UAS-T4-S1-0-0 5FT	UAS-T4-S1-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/16/1999	11/16/1999	11/16/1999	11/17/1999
Units	ug/kg	ug/kg	ug/l	ug/l	ug/kg	ug/kg
1 2,3 4,6,7 8,9-OCDD	0 06M	0 08M	0 000011	0 0000118M	6 1	0 2U
1,2,3,4,6,7,8 9-OCDF	0 01U	0 008U	0 0000036U	0 0000035U	0 35	0 1U
1,2,3,4,6,7,8-HpCDD	0 01U	0 01U	0 0000026U	0 0000024U	0 26	0 09U
1,2,3,4 6,7,8-HpCDF	0 01U	0 006U	0 0000015U	0 0000015U	0 14	0 08U
1,2,3,4,7,8,9-HpCDF	0 01U	0 007U	0 0000022U	0 0000021U	0 01U	0 09U
1,2,3,4,7,8-HxCDD	0 01U	0 007U	0 0000017U	0 0000016U	0 01U	0 07U
1,2,3,4,7,8-HxCDF	0 008U	0 005U	0 000001U	0 000001U	0 01U	0 07U
1,2,3,6,7,8-HxCDD	0 01U	0 01U	0 0000016U	0 0000015U	0 02U	0 1U
1,2,3,6,7,8-HxCDF	0 01U	0 006U	0 000001U	0 0000009U	0 01U	0 07U
1,2,3,7,8,9-HxCDD	0 02U	0 01U	0 0000017U	0 0000016U	0 03U	0 1U
1,2,3 7,8,9-HxCDF	0 009U	0 006U	0 0000012U	0 0000012U	0 01U	0 08U
1,2,3,7,8-PeCDD	0 02U	0 02U	0 0000017U	0 0000016U	0 03U	0 1U
1,2,3,7,8-PeCDF	0 01U	0 008U	0 0000013U	0 0000012U	0 01U	0 04U
2,3,4,6,7,8-HxCDF	0 009U	0 006U	0 0000011U	0 000001U	0 01U	0 07U
2,3,4,7,8-PeCDF	0 01U	0 01U	0 0000014U	0 0000012M	0 02U	0 06U
2,3,7,8-TCDD	0 01U	0 008U	0 0000019U	0 0000017U	0 01U	0 06U
2,3,7,8-TCDF	0 01U	0 007U	0 0000014U	0 0000012U	0 01U	0 04U
Total HpCDD	0 01U	0 01U	0 0000037M	0 0000058M	0 59	0 09U
Total HpCDF	0 01U	0 006U	0 0000018M	0 0000017U	0.32	0 08U
Total HxCDD	0 01U	0.007U	0 0000017U	0 0000021M	0 01U	0 07U
Total HxCDF	0 008U	0 005U	0 0000011U	0 000001U	0.01U	0 07U
Total PeCDD	0 02U	0 02U	0 0000017U	0 0000016U	0.03U	0 01U
Total PeCDF	0 01U	0 008U	0 0000014U	0 0000012M	0 01U	0 04U
Total TCDD	4 1M	3 9M	0 0000019U	0 0000017U	4 2M	3 3M
Total TCDF	0 05M	0 06M	0 0000014U	0 0000012U	0 05M	0 04U
1998 Total TEQ w/ EMPC as ND	**0.0151035**	**0.0140844**	**0.0000003768**	**0.0000016703**	**0.008645**	**0.080865**

Notes ·ot detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.6
Sauget Area 1
Soil Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	UAS-T1-S7-0-0 5FTEB	UAS-T1-S7-3-6FTEB	UAS-T2-S4-0-0 5FT	UAS-T2-S4-3-6FT	UAS-T3-S3-0-0 5FT	UAS-T3-S3-0-0 5FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/12/1999	11/12/1999	11/15/1999	11/15/1999
Units	ug/l	ug/l	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3 4,6,7,8,9-OCDD	0 0037	0.0006U	6 4	0 29J	2	1 8J
1,2,3,4,6,7,8,9-OCDF	0 00087M	0 0005U	1	0 09UJ	0 14	0 18J
1 2,3,4,6,7,8-HpCDD	0 0004U	0.0004U	0 49	0 06UJ	0 17	0 2J
1,2,3,4,6,7,8-HpCDF	0 0003U	0.0005U	0 31	0 05UJ	0 08	0 08J
1,2,3,4 7,8,9-HpCDF	0 0003U	0.0005U	0.06U	0 05UJ	0 01U	0 006UJ
1 2 3 4 7 8-HxCDD	0 0003U	0 0003U	0 04U	0 05UJ	0 01U	0 006UJ
1 2 3 4 7 8-HxCDF	0 0002U	0 0004U	0 04U	0 04UJ	0 007U	0 004UJ
1 2 3,6 7,8-HxCDD	0 0003U	0 0003U	0 05U	0 05UJ	0 01U	0 008UJ
1 2,3,6,7 8-HxCDF	0 0002U	0 0004U	0 04U	0 04UJ	0 008U	0 005UJ
1,2,3,7,8,9-HxCDD	0 0003U	0 0003U	0 04U	0 05UJ	0 02U	0 01UJ
1,2,3,7,8,9-HxCDF	0 0002U	0 0004U	0 05U	0 04UJ	0 008U	0 005UJ
1,2,3,7,8-PeCDD	0 0002U	0 0002U	0 04U	0 03	0 02U	0 02U
1 2 3 7 8-PeCDF	0 0001U	0 0002U	0 03U	0 02U	0 01U	0 007U
2 3 4 6 7,8-HxCDF	0 0003U	0 0004U	0 05U	0 04UJ	0 008U	0 005UJ
2 3,4 7 8-PeCDF	0 0001U	0 0002U	0 03U	0 02U	0 01U	0 008U
2,3 7 8-TCDD	0 0001U	0 0001U	0 02U	0 02	0 01U	0 008U
2,3 7,8-TCDF	0 0001U	0 0001U	0 02U	0 02U	0 01U	0 006U
Total HpCDD	0 0004U	0 0004U	0 96	0 06U	0 36	0 39
Total HpCDF	0 0003U	0 0005U	0 82	0 05U	0 17	0 17
Total HxCDD	0 0003U	0 0003U	0 04U	0 05U	0 01U	0 006U
Total HxCDF	0 0002U	0 0004U	0 04U	0 04U	0 007U	0 004U
Total PeCDD	0 0002U	0 0002U	0 04U	0 03U	0 02U	0 02U
Total PeCDF	0 0001U	0 0002U	0 03U	0 02U	0 01U	0 007U
Total TCDD	0 0185M	0 0173M	2 2M	2 2M	4 2M	4 9M
Total TCDF	0 00032M	0 0004M	0 05M	0 05M	0 05M	0 06M
1998 Total TEQ w/ EMPC as ND	**0.0000739135**	**0.000154555**	**0.01974**	**0.0505835**	**0.005464**	**0 004648**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.6
Sauget Area 1
Soil Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	DAS-T6-S3-0-0.5FT	DAS-T7-S1-0-0.5FT	DAS-T7-S2-0-0.5FT	UAS-T1-S1-0-0.5FT	UAS-T1-S1-3-6FT	UAS-T1-S6-0-0.5FT	UAS-T1-S6-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	4/20/2000	4/20/2000	4/20/2000	11/10/1999	11/10/1999	11/11/1999	11/11/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	4.9	0.82	5	3.8	0.4U	2.7UJ	0.2UJ
1,2,3,4,6,7,8,9-OCDF	0.22	0.03U	0.25	1.8	0.4U	0.21J	0.2UJ
1,2,3,4,6,7,8-HpCDD	0.3	0.08	0.36	0.28	0.1U	0.18J	0.1UJ
1,2,3,4,6,7,8-HpCDF	0.09	0.01U	0.11	0.17	0.08U	0.05UJ	0.09UJ
1,2,3,4,7,8,9-HpCDF	0.01U	0.01U	0.01U	0.06U	0.08U	0.06UJ	0.1UJ
1,2,3,4,7,8-HxCDD	0.01U	0.01U	0.01U	0.06U	0.08U	0.04UJ	0.07UJ
1,2,3,4,7,8-HxCDF	0.008U	0.01U	0.01U	0.04U	0.06U	0.04UJ	0.08UJ
1,2,3,6,7,8-HxCDD	0.01U	0.01U	0.02U	0.06U	0.08U	0.05UJ	0.1UJ
1,2,3,6,7,8-HxCDF	0.01U	0.01U	0.01U	0.04U	0.06U	0.05UJ	0.09UJ
1,2,3,7,8,9-HxCDD	0.01U	0.01U	0.01U	0.06U	0.07U	0.08UJ	0.1UJ
1,2,3,7,8,9-HxCDF	0.008U	0.01U	0.01U	0.04U	0.06U	0.05UJ	0.1UJ
1,2,3,7,8-PeCDD	0.02U	0.03U	0.03U	0.05U	0.07U	0.07UJ	0.2UJ
1,2,3,7,8-PeCDF	0.01U	0.01U	0.01U	0.03U	0.06U	0.04UJ	0.09UJ
2,3,4,6,7,8-HxCDF	0.009U	0.01U	0.01U	0.05U	0.06U	0.05UJ	0.09UJ
2,3,4,7,8-PeCDF	0.01U	0.01U	0.01U	0.03U	0.06U	0.05UJ	0.1UJ
2,3,7,8-TCDD	0.01U	0.01U	0.01U	0.03U	0.04U	0.04UJ	0.08UJ
2,3,7,8-TCDF	0.008U	0.01U	0.01U	0.02U	0.04U	0.04UJ	0.07UJ
Total HpCDD	0.6	0.14M	0.63	0.48	0.1U	0.4M	0.1U
Total HpCDF	0.21	0.01U	0.23	0.48	0.08U	0.05U	0.09U
Total HxCDD	0.1	0.01U	0.01U	0.06U	0.07U	0.04U	0.07U
Total HxCDF	0.08	0.01U	0.04	0.04U	0.06U	0.04U	0.08U
Total PeCDD	0.02U	0.15M	0.03U	0.05U	0.07U	0.07U	0.2U
Total PeCDF	0.05M	0.01U	0.01U	0.03U	0.06U	0.04U	0.09U
Total TCDD	2.9M	2.9M	3.6M	2.3M	2M	3.4M	3.6M
Total TCDF	0.22M	0.07M	0.12M	0.05M	0.07M	0.07M	0.13M
1998 Total TEQ w/ EMPC as ND	**0.006762**	**0.0034335**	**0.008225**	**0.01856**	**0.05594**	**0.015206**	**0.14097**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-4.6
Sauget Area 1
Soil Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	DAS-T5-S1-0-0 5FT	DAS-T5-S2-0-0 5FT	DAS-T5-S2-3-6FT	DAS-T5-S3-0-0 5FT	DAS-T6-S1-0-0 5FT	DAS-T6-S1-3-6FT	DAS-T6-S2-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000	4/20/2000	4/20/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	2 9	1 7	0 1M	10 9	5 5	0 19M	3
1,2,3,4,6,7,8,9-OCDF	0 16	0 13	0 04U	1 3	0 56	0 02U	0 13
1,2,3,4,6,7,8-HpCDD	0 17	0 09	0 03U	1 1	0 36	0 01U	0 1
1,2,3,4,6,7,8-HpCDF	0 05	0 04	0 02U	0 46	0 19	0 01U	0 04
1,2,3,4,7,8,9-HpCDF	0 01U	0 02U	0 03U	0 02U	0 02U	0 01U	0 01U
1 2 3 4 7 8-HxCDD	0 01U	0 02U	0 02U	0 01U	0 01U	0 01U	0 01U
1 2,3,4,7,8-HxCDF	0 01U	0 01U	0 02U	0 01U	0 01U	0 007U	0 008U
1,2,3,6,7,8-HxCDD	0 01U	0 02U	0 02U	0 05	0 02U	0 01U	0 01U
1,2,3,6,7,8-HxCDF	0 01U	0 01U	0 02U	0 01U	0 01U	0 008U	0 01U
1,2,3,7,8,9-HxCDD	0 01U	0 02U	0 02U	0 02U	0 01U	0 01U	0 01U
1,2,3,7,8,9-HxCDF	0 01U	0 01U	0 02U	0 01U	0 01U	0 008U	0 008U
1,2,3,7,8-PeCDD	0 03U	0 03U	0 06U	0 04U	0 03U	0 02U	0 02U
1 2,3 7 8-PeCDF	0 01U	0 02U	0 03U	0 02U	0 01U	0 01U	0 01U
2,3,4,6,7,8-HxCDF	0 01U	0 01U	0 02U	0 01U	0 01U	0 008U	0 009U
2,3,4 7,8-PeCDF	0 01U	0 02U	0 03U	0 02U	0 01U	0 01U	0 01U
2,3,7,8-TCDD	0 02U	0 02U	0 03U	0 02U	0 01U	0 01U	0 01U
2,3,7,8-TCDF	0 01U	0.01U	0 02U	0 01U	0 009U	0 01U	0 01U
Total HpCDD	0 36	0.17	0 03U	1 9	0 72	0 01U	0 2
Total HpCDF	0 13	0 09	0 02U	1 4	0 48	0 01U	0 1
Total HxCDD	0 01U	0 02U	0 02U	0 21	0 12	0 01U	0 01U
Total HxCDF	0 01U	0 01U	0 02U	0 36	0 16	0 007U	0 008U
Total PeCDD	0 03U	0 03U	0 06U	0 42M	0 03U	0 02U	0 02U
Total PeCDF	0 01U	0 02U	0 03U	0 02U	0 24M	0 01U	0 01U
Total TCDD	3 5M	2 6M	2 5M	3M	3 2M	2 4M	2 4M
Total TCDF	0 14M	0.09M	0 07M	0 09M	0 2M	0 07M	0 07M
1998 Total TEQ w/ EMPC as ND	**0.005006**	**0.005483**	**0.045257**	**0.02432**	**0.009106**	**0.0151105**	**0.004063**

Table A-4.6
Sauget Area 1
Soil Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	DAS-T3-S2-0-0 5FT	DAS-T3-S3-0-0 5FT	DAS-T4-S1-0-0 5FT	DAS-T4-S1-0-0 5FTFD	DAS-T4-S2-0-0 5FT	DAS-T4-S3-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000	4/20/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1 2,3 4,6,7 8,9-OCDD	3 7	3 4	2 7J	4 1J	2 4	8 3
1 2 3 4 6 7 8 9-OCDF	0 16	0 2	0 29J	0 31J	0 18	0 16
1 2,3,4,6,7,8-HpCDD	0 19	0 25	0 24J	0 38J	0 17	0 28
1 2 3 4,6 7 8-HpCDF	0 08	0 08	0 05UJ	0 16J	0 08	0 07
1 2,3,4 7,8,9-HpCDF	0 03U	0 02U	0 06UJ	0 07UJ	0 01U	0 01U
1,2,3,4 7,8-HxCDD	0 02U	0 02U	0 04UJ	0 06UJ	0 01U	0 01U
1 2,3,4,7,8-HxCDF	0 02U	0 01U	0 03UJ	0 04UJ	0 01U	0 008U
1 2,3,6,7,8-HxCDD	0 02U	0 02U	0 05UJ	0 07UJ	0 02U	0 01U
1 2,3,6,7,8-HxCDF	0 03U	0 02U	0 04UJ	0 05UJ	0 01U	0 009U
1 2,3 7 8,9-HxCDD	0 02U	0 02U	0 05UJ	0 07UJ	0 02U	0 01U
1 2,3,7,8 9-HxCDF	0 02U	0 01U	0 04UJ	0 05UJ	0 01U	0 008U
1 2,3,7,8-PeCDD	0 03U	0 04U	0 1UJ	0 1UJ	0 03U	0 02U
1 2,3,7,8-PeCDF	0 02U	0 02U	0 05UJ	0 05UJ	0 01U	0 01U
2 3,4,6,7,8-HxCDF	0 03U	0 01U	0 04UJ	0 04UJ	0 01U	0 009U
2 3,4,7,8-PeCDF	0 02U	0 02U	0 06UJ	0 06UJ	0 01U	0 01U
2 3 7 8-TCDD	0 02U	0 02U	0 05UJ	0 05UJ	0 01U	0 01U
2 3,7,8-TCDF	0 02U	0 01U	0 04UJ	0 04UJ	0 01U	0 008U
Total HpCDD	0 36	0 53	0 46	0 72	0 34	0 51
Total HpCDF	0 2	0 17	0 18	0 33	0 15	0 14
Total HxCDD	0 02U	0 02U	0 04U	0 06U	0 01U	0 01U
Total HxCDF	0 02U	0 01U	0 03U	0 04U	0 01U	0 008U
Total PeCDD	0 03U	0 04U	5 1M	3 2M	0 03U	0 02U
Total PeCDF	0 02U	0 02U	0 54M	0 35M	0 01U	0 01U
Total TCDD	2 5M	2 8M	2 6M	2 6M	3M	2 9M
Total TCDF	0 08M	0 07M	0 04U	0 04U	0 07M	0 07M
1998 Total TEQ w/ EMPC as ND	**0.008586**	**0.00766**	**0.013449**	**0 019841**	**0.006258**	**0 006696**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.6
Sauget Area 1
Soil Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	DAS-T2-S1-0-0.5FT	DAS-T2-S2-0-0.5FT	DAS-T2-S3-0-0 5FT	DAS-T2-S3-3-6FT	DAS-T2-S3-3-6FTFD	DAS-T3-S1-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/19/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	9J	2.7JM	1.7JM	0.25JM	0.44JM	2 4
1,2,3,4,6,7,8,9-OCDF	1 4J	0.1J	0.16J	0.05UJ	0.08J	0.18
1,2,3,4,6,7,8-HpCDD	0.63	0.24	0.18J	0.04U	0.05U	0 16
1,2,3,4,6,7,8-HpCDF	0.26	0.03U	0.04UJ	0.03U	0.03U	0 08
1,2,3,4,7,8,9-HpCDF	0.04U	0.03U	0.04UJ	0.03U	0.03U	0 02U
1,2,3,4,7,8-HxCDD	0.04U	0.03U	0.05UJ	0 03U	0 03U	0 02U
1,2,3,4,7,8-HxCDF	0.02UJ	0.02UJ	0.03UJ	0.02UJ	0.02UJ	0.02U
1,2,3,6,7,8-HxCDD	0.06U	0.05U	0.08UJ	0.04U	0.05U	0 02U
1,2,3,6,7,8-HxCDF	0.03U	0.03U	0.04UJ	0.02U	0.03U	0 02U
1,2,3,7,8,9-HxCDD	0.08U	0.06U	0.1UJ	0.06U	0.06U	0 02U
1,2,3,7,8,9-HxCDF	0.03U	0.03U	0.04UJ	0.02U	0.03U	0 02U
1,2,3,7,8-PeCDD	0.1U	0.1U	0.1U	0.09U	0.08U	0 04U
1,2,3,7,8-PeCDF	0 05U	0.04U	0.06U	0 04U	0.04U	0 02U
2,3,4,6,7,8-HxCDF	0 03U	0.03U	0.04UJ	0 02U	0.03U	0 02U
2,3,4,7,8-PeCDF	0 06U	0.05U	0.07U	0 05U	0 05U	0 02U
2,3,7,8-TCDD	0.07U	0.06U	0.07U	0.05U	0.04U	0.02U
2,3,7,8-TCDF	0.04U	0.04U	0.05U	0.03U	0.03U	0 02U
Total HpCDD	1.2	0.42	0.18	0.04U	0.05U	0 32
Total HpCDF	0.86	0.12	0.1M	0.03U	0.03U	0 18
Total HxCDD	0.12	0.03U	0.05U	0.03U	0.03U	0 02U
Total HxCDF	0.08	0.02U	0.03U	0.02U	0.02U	0 02U
Total PeCDD	0.1U	0.1U	0.1U	0.09U	0.08U	0 04U
Total PeCDF	0.05U	0.04U	0.06U	0.04U	0.04U	0 02U
Total TCDD	3.9M	4M	4.2M	3 2M	3.3M	3M
Total TCDF	0.08M	0.04U	0.05U	0.09M	0.09M	0 08M
1998 Total TEQ w/ EMPC as ND	**0.02144**	**0.012195**	**0.017101**	**0.070365**	**0.06043**	**0.007658**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.6
Sauget Area 1
Soil Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	BS-EEG-108-3-6FT	DAS-T1-S1-0-0 5FT	DAS-T1-S1-0-0 5FTFD	DAS-T1-S2-0-0 5FT	DAS-T1-S3-0-0 5FT	DAS-T1-S3-3-6FT
Description	Background Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	1/27/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1 2,3 4 6,7,8,9-OCDD	1 3	14 7J	7 8J	5 6J	5 2J	0 44JM
1 2 3,4 6 7 8,9-OCDF	0 21	1 4J	0 81J	0 39J	0 31J	0 1J
1 2,3,4 6,7,8-HpCDD	0 1	1 2	0 61	0 36	0 35	0 05UJ
1,2 3 4,6,7,8-HpCDF	0 04	0 35	0 21	0 12	0 1	0 04UJ
1 2,3,4,7 8,9-HpCDF	0 02U	0 04U	0 03U	0 03U	0 03U	0 04UJ
1,2,3,4,7,8-HxCDD	0 02U	0 04U	0 03U	0 04U	0 03U	0 03UJ
1,2,3,4,7,8-HxCDF	0 02U	0 03UJ	0 02UJ	0 02UJ	0 02UJ	0 03UJ
1 2,3 6,7,8-HxCDD	0 02U	0 06U	0 05U	0 06U	0 05U	0 06UJ
1 2,3,6 7,8-HxCDF	0 02U	0 03U	0 02U	0 03U	0 02U	0 03UJ
1 2,3 7 8 9-HxCDD	0 03U	0 08U	0 06U	0 07U	0 06U	0 07UJ
1 2 3,7,8 9-HxCDF	0 02U	0 03U	0 02U	0 03U	0 02U	0 03UJ
1 2,3 7,8-PeCDD	0 04U	0 1U	0 1U	0 1U	0 1U	0 1U
1 2,3 7 8-PeCDF	0 02U	0 05U	0 04U	0 04U	0 04U	0 05U
2 3,4 6 7,8-HxCDF	0 02U	0 03U	0 02U	0 03U	0 02U	0 03UJ
2 3,4 7,8-PeCDF	0 02U	0 06U	0 05U	0 05U	0 04U	0 06U
2 3 7,8-TCDD	0 02U	0 07U	0 05U	0 06U	0 05U	0 05U
2,3,7,8-TCDF	0 02U	0 04U	0 04U	0 04U	0 03U	0 04U
Total HpCDD	0 21M	2 1	1 2	0 71	0 62	0 05U
Total HpCDF	0 14	0 92	0 52	0 33	0 23	0 04U
Total HxCDD	0 02U	0 37	0 13	0 04U	0 03U	0 03U
Total HxCDF	0 02U	0 19	0 02U	0 02U	0 02U	0 03U
Total PeCDD	0 04U	0 1U	0 1U	0 1U	0 1U	0 1U
Total PeCDF	0 02U	0 05U	0 04U	0 04U	0 04U	0 05U
Total TCDD	4 1M	3 5M	3 4M	3 5M	3 6M	3 4M
Total TCDF	0 08M	0 11M	0 08M	0 09M	0 09M	0 1M
1998 Total TEQ w/ EMPC as ND	**0.031551**	**0.02911**	**0.018061**	**0 016399**	**0.014051**	**0 075482**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.6
Sauget Area 1
Soil Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	BS-EE-04-0-0 5FT	BS-EE-04-0-0 5FTFD	BS-EE-04-3-6FT	BS-EE-20-0-0 5FT	BS-EE-20-3-6FT	BS-EEG-108-0-0 5FT	BS-EEG-108-0-0 5FTEB
Description	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil
Sample Date	1/26/2000	1/26/2000	1/26/2000	1/24/2000	1/24/2000	1/27/2000	1/27/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/l
1,2,3,4,6,7,8,9-OCDD	3 6J	1.7J	0 06UJ	102	0 08J	1 1	0 0003U
1,2,3,4,6,7,8,9-OCDF	0 58J	0 33J	0 05UJ	22 4	0 03UJ	0 11	0 0003U
1,2,3,4,6,7,8-HpCDD	0 19J	0.12J	0.04UJ	6 4	0 02UJ	0 07	0 0002U
1,2,3,4,6,7,8-HpCDF	0 11J	0.1J	0 03UJ	3 2	0 01UJ	0 04	0 0002U
1,2,3,4,7,8,9-HpCDF	0 02UJ	0.02UJ	0.03UJ	0 02U	0 01UJ	0 01U	0 0002U
1,2,3,4,7,8-HxCDD	0 02UJ	0 02UJ	0 03UJ	0 04	0 01UJ	0 01U	0 0001U
1,2,3,4,7,8-HxCDF	0 01UJ	0.01UJ	0 02UJ	0 14	0 01UJ	0 01U	0 0001U
1,2,3,6,7,8-HxCDD	0 03UJ	0.03UJ	0.04UJ	0 23	0 02UJ	0 02U	0 0002U
1,2,3,6,7,8-HxCDF	0 02UJ	0.02UJ	0.02UJ	0 06M	0 01UJ	0 01U	0 0001U
1,2,3,7,8,9-HxCDD	0.04UJ	0.03UJ	0.05UJ	0 15	0 02UJ	0 02U	0 0003U
1,2,3,7,8,9-HxCDF	0 02UJ	0.02UJ	0 02UJ	0 02U	0 01UJ	0 01U	0 0002U
1,2,3,7,8-PeCDD	0.04UJ	0.04UJ	0 05UJ	0 03U	0 03UJ	0 03U	0 0003U
1,2,3,7,8-PeCDF	0 02UJ	0.02UJ	0.03UJ	0 02U	0 01UJ	0 01U	0 0002U
2,3,4,6,7,8-HxCDF	0 02UJ	0 02UJ	0.02UJ	0 08	0 01UJ	0 01U	0 0001U
2,3,4,7,8-PeCDF	0.03UJ	0 02UJ	0 03UJ	0 02U	0 02UJ	0 02U	0 0002U
2,3,7,8-TCDD	0.02UJ	0.02UJ	0 03UJ	0 02U	0 01UJ	0 01U	0 0002U
2,3,7,8-TCDF	0 02UJ	0 02UJ	0.02UJ	0 01U	0 01UJ	0 01U	0 0001U
Total HpCDD	0.37	0.22	0.04U	12 1	0.02U	0 12M	0 0002U
Total HpCDF	0 33	0.24	0.03U	11 4M	0 01U	0 08	0 0002U
Total HxCDD	0 02U	0.02U	0.03U	1 5	0 01U	0 01U	0 0001U
Total HxCDF	0 01U	0 01U	0 02U	2M	0 01U	0 01U	0 0001U
Total PeCDD	0 04U	0 04U	0.05U	0 03U	0 03U	0 03U	0 0003U
Total PeCDF	0 02U	0.02U	0.03U	0 16	0 01U	0 01U	0 0002U
Total TCDD	4 5M	4.2M	4.1M	5M	3 2M	4 2M	0 0283M
Total TCDF	0 09M	0.1M	0 13M	0 11M	0 06M	0 07M	0 00066M
1998 Total TEQ w/ EMPC as ND	**0.009418**	**0.007903**	**0.0403555**	**0.17244**	**0.0201595**	**0.004721**	**0.00004203**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T7-S6-3-6FTEB	UAS-T7-S7-0-0 5FT	UAS-T7-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999
Units	mg/l	mg/kg dw	mg/kg dw
Aluminum	0 20U	6900	6000
Antimony	0 020U	0 73J	2 2UJ
Arsenic	0 010U	7 7	4 7
Barium	0 010U	150	180
Beryllium	0 00090J	0 75U	0 53U
Cadmium	0 0050U	6 1	0 40J
Calcium	0 18J	8900J	12000J
Chromium	0 010U	15	11
Cobalt	0 010U	6 2	5 3
Copper	0 020U	57	9 8
Hardness as CaCO3			
Iron	0 050U	17000J	11000J
Lead	0 0050U	150J	15J
Magnesium	0 50U	2800	5500
Manganese	0 010U	280	230
Molybdenum	0 010U	1 8J	0 78UJ
Nickel	0 040U	17	13
Potassium	1 0U	2000	1400
Selenium	0 010U	0 53J	1 1U
Silver	0 010U	0 44J	1 1U
Sodium	0 38J	110U	170U
Thallium	0 010U	1 1U	1 1U
Vanadium	0 010U	21	19
Zinc	0 020U	640	60

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T7-S4-0-0 5FT	UAS-T7-S4-3-6FT	UAS-T7-S5-0-0 5FT	UAS-T7-S5-3-6FT	UAS-T7-S6-0-0 5FT	UAS-T7-S6-0-0 5FTEB	UAS-T7-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/l	mg/kg dw
Aluminum	7200	6100	7500	7200	7000	0 20U	9400
Antimony	2 0UJ	2 0UJ	2 2UJ	2 3UJ	1 9UJ	0 020U	0 56J
Arsenic	6 2	4 5	6 6	5 1	6 5	0 010U	6 1
Barium	150	180	130	190	160	0 013	170
Beryllium	0 57U	0 48U	0 57U	0 56U	0 59U	0 00086J	0 71U
Cadmium	1 5	0 38J	1 5	0 28J	3 3	0 0050U	0 72
Calcium	6700J	14000J	19000J	14000	7300J	24	6000J
Chromium	12	11	14	13	13	0 010U	15
Cobalt	6 0	5 1	6 6	5 8	6 2	0 010U	7 0
Copper	21	8 1	24	9 8	32	0 0027J	16
Hardness as CaCO3							
Iron	13000J	11000	14000	12000J	13000J	0 050U	15000J
Lead	36J	10J	42J	9 0J	72J	0 0050U	25J
Magnesium	4200	6400	11000	6500	4000	8 1	4300
Manganese	270	220	420	270	280	0 010U	300
Molybdenum	0 65J	0 45J	0 65J	0 66UJ	0 68UJ	0 010U	0 84UJ
Nickel	15	13	16	15	16	0 040U	18
Potassium	1800J	1300J	1600J	1600	1700	2 5	1800
Selenium	0 55J	1 0U	1 1U	1 1U	1 1	0 010U	1 1U
Silver	0 98U	1 0U	1 1U	1 1U	0 27J	0 010U	1 1U
Sodium	110U	160U	120U	150	110U	13	120U
Thallium	0 98U	1 0U	1 1U	1 1U	0 97U	0 010U	1 1U
Vanadium	22	19	26	22	22	0 010U	27
Zinc	150	49	160	43	310	0 0059J	93

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T7-S1-3-6FT	UAS-T7-S2-0-0 5FT	UAS-T7-S2-3-6FT	UAS-T7-S3-0-0 5FT	UAS-T7-S3-0-0 5FTFD	UAS-T7-S3-3-6FT	UAS-T7 S3-3-6FTFD
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	22000	8200	8500	11000	13000	7500J	5500J
Antimony	5 6UJ	0 63UJ	2 0UJ	2 1UJ	2 3UJ	2 1UJ	2 0UJ
Arsenic	11	6 7	5 7	7 6	8 1	5 4J	4 1J
Barium	290	180	200	190	200	200J	160J
Beryllium	1 2J	0 66U	0 63U	0 81J	0 84J	0 56U	0 45U
Cadmium	5 4	1 8	0 33J	2 6	2 8	0 33J	0 20J
Calcium	9600J	11000J	17000J	5900J	6000J	15000J	13000J
Chromium	50	13	14	17	18	80J	9 8J
Cobalt	11	6 5	6 1	7 7	7 9	6 4J	5 0J
Copper	33	26	14	33	36	12J	7 1J
Hardness as CaCO3							
Iron	26000J	14000J	13000J	17000J	18000J	13000J	10000J
Lead	37J	41J	9 2J	60J	67J	11J	7 2J
Magnesium	7100	6100	6800	4200	4400	6600	5400
Manganese	260	320	260	430	440	290J	200J
Molybdenum	0 74J	0 84J	0 47J	0 94J	1 0J	0 79J	0 78J
Nickel	42	17	16	20	21	55J	12J
Potassium	4000J	2400J	1700J	2600J	3100J	1600J	1100J
Selenium	2 8U	0 49J	1 0U	0 89J	1 1U	1 0U	1 0U
Silver	1 4U	1 1U	1 0U	0 21J	1 1U	1 0U	1 0U
Sodium	200U	120U	170U	100U	110U	170U	150U
Thallium	1 4U	1 1U	1 0U	1 0U	1 1U	1 0U	1 0U
Vanadium	50	25	24	31	34	23J	17J
Zinc	1800	190	46	250	280	51J	36J

Notes ~ot detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T6-S3-3-6FT	UAS-T6-S3-3-6FTEB	UAS-T6-S4-0-0 5FT	UAS-T6-S4-3-6FT	UAS-T6-S5-0-0 5FT	UAS-T6-S5-3-6FT	UAS-T7-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/19/1999
Units	mg/kg dw	mg/l	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	8200	0 20U	9100	9600	9000	12000	10000
Antimony	2 4U	0 020U	2 0U	1 1J	0 65J	2 6	2 2UJ
Arsenic	7 8	0 010U	5 3	5 9	9 2	6 5	34
Barium	200	0 010U	130	190	190	180	200
Beryllium	0 52J	0 00069J	0 49J	0 63J	0 86J	0 58J	0 70U
Cadmium	0 96	0 0050U	0 94	0 65	0 92	0 66	5 4
Calcium	34000J	0 17J	79000J	26000J	55000J	64000J	26000J
Chromium	17	0 010U	15	21	18	19	17
Cobalt	7 9	0 010U	5 9	8 6	9 2	6 6	6 8
Copper	35	0 020U	21	22	29	34	130
Hardness as CaCO3							
Iron	15000	0 050U	14000	18000	19000	16000	15000J
Lead	240J	0 0050U	36J	160J	78J	130J	71J
Magnesium	5700	0 50U	9900	4800	4900	5600	5400
Manganese	400	0 010U	380	360	660	390	330
Molybdenum	1 0J	0 010U	0 62J	1 1	3 2	0 73J	0 69J
Nickel	19	0 040U	17	24	23	19	55
Potassium	1400J	1 0U	1700J	1300J	1300J	1600J	2300J
Selenium	1 1U	0 010U	1 1U	1 0U	0 68J	1 2U	1 1
Silver	1 1U	0 010U	1 1U	1 0U	1 1U	1 2U	0 37J
Sodium	230U	0 43J	160U	190U	150U	230U	130U
Thallium	1 1U	0 010U	1 1U	1 0U	1 1U	1 2U	1 1U
Vanadium	25	0 010U	33	29	30	33	27
Zinc	160J	0 020U	99J	130J	120J	98J	610

Notes U not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T5-S6-3-6FTFD	UAS-T6-S1-0-0 5FT	UAS-T6-S1-3-6FT	UAS-T6-S2-0-0 5FT	UAS-T6-S2-3-6FT	UAS-T6-S3-0-0 5FT	UAS-T6-S3-0-0 5FTEB
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/l
Aluminum	6100J	8700	9000J	7500	6600	9700	0 20U
Antimony	2 2U	0 74J	2 4U	2 1U	2 1U	0 77J	0 020U
Arsenic	5 0	6 1	6 1	4 0	5 5	5 4	0 010U
Barium	180	190	220	89	180	130	0 010U
Beryllium	0 37J	0 55J	0 50J	0 34UJ	0 43J	0 49J	0 00070J
Cadmium	0.20J	1 6	0 23J	0 81	0 73	0 85	0 0050U
Calcium	13000J	10000J	18000J	140000J	17000J	48000J	0 29J
Chromium	11	14	15	13	12	15	0 010U
Cobalt	5 1	6 3	5 8	4 0	5 1	5 8	0 010U
Copper	7 3	31	12	19	14	18	0 020U
Hardness as CaCO3							
Iron	11000	14000	14000	10000	12000	14000	0 050U
Lead	7 4	39J	8 3J	35J	25J	29J	0 0021J
Magnesium	5500	5100	6900	18000	6000	10000	0 50U
Manganese	230	360	350	310	270	400	0 010U
Molybdenum	0 16J	0 43J	0 48J	0 40J	0 27J	0 28J	0 010U
Nickel	13	17	16	13	14	16	0 040U
Potassium	1300J	2400J	2000J	1600J	1200J	2000J	1 0U
Selenium	1 1U	1 1U	1 1U	1 1U	1 2U	1 0U	0 010U
Silver	1 1U	1 1U	1 1U	1 1U	1 2U	1 0U	0 010U
Sodium	120U	100U	130U	210U	130U	120U	0 44J
Thallium	1 1U	1 1U	1 1U	1 1U	1 2U	1 0U	0 010U
Vanadium	20	25	26	24	21	30	0 010U
Zinc	38	160J	45J	82J	89J	90J	0 0067J

Notes ' ~ot detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T5-S5-0-0 5FT	UAS-T5-S5-0-0 5FTEB	UAS-T5-S5-3-6FT	UAS-T5-S5-3-6FTEB	UAS-T5-S6-0-0 5FT	UAS-T5-S6-0-0 5FTFD	UAS-T5-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	mg/kg dw	mg/l	mg/kg dw	mg/l	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	9800J	0 053J	4800J	0 029J	7500J	7800J	5500J
Antimony	0 62J	0 020U	1 9U	0 020U	0 61J	1 2J	2 2U
Arsenic	6 4	0 010U	4.1	0.010U	6 9	7 2	4 9
Barium	180	0 010U	130	0 010U	170	180	160
Beryllium	0 54	0 0040U	0 28J	0.0040U	0 53	0 56	0 34J
Cadmium	2 3	0 0050U	0 13J	0.0050U	8 3	8 5	0 18J
Calcium	10000J	0 28J	10000J	0 12J	20000J	21000J	12000J
Chromium	16	0 010U	20	0 010U	18	19	10
Cobalt	6 2	0 010U	4 4	0 010U	5 5	5 8	5 0
Copper	41	0 020U	5 7	0 020U	82	87	6 9
Hardness as CaCO3							
Iron	15000	0 050U	9000	0 050U	13000	14000	10000
Lead	45	0 0050U	6 2	0 0050U	170	170	7 1
Magnesium	5000	0 50U	4100	0 50U	4300	4600	5300
Manganese	370	0 010U	180	0 010U	330	330	220
Molybdenum	0 37J	0 010U	0 17J	0 010U	0 56J	0 80J	1 1U
Nickel	18	0 040U	17	0 040U	16	17	13
Potassium	1700J	1 0U	950J	1 0U	1500J	1500J	1100J
Selenium	1 0U	0 010U	1 0U	0 010U	1 2U	1 2U	1 1U
Silver	1 0U	0 010U	1 0U	0 010U	0 54J	0 55J	1 1U
Sodium	120U	0 62	89U	0 40J	160U	170U	130U
Thallium	1 0U	0 010U	1 0U	0 010U	1 2U	1 2U	1 1U
Vanadium	28	0 010U	16	0 010U	26	27	18
Zinc	240	0 020U	32	0 020U	980	980	37

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T5-S1-3-6FT	UAS-T5-S2-0-0 5FT	UAS-T5-S2-3-6FT	UAS-T5-S3-0-0 5FT	UAS-T5-S3-3-6FT	UAS-T5-S4-0-0 5FT	UAS-T5-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	8700J	11000J	6500J	8700J	9600J	9600J	5300J
Antimony	2 0U	2 0UJ	2 3U	2 2UJ	2 5U	0 63J	1 9UJ
Arsenic	6 1	6 8	4 9	6 0	6 4	6 5	3 5
Barium	190	190	200	170	210	170	93
Beryllium	0 52	0 61	0 38J	0 52	0 56	0 58	0 29J
Cadmium	0 33J	2 4	0 16J	2 5	0 26J	2 4	0 084J
Calcium	15000J	4200J	19000J	3800J	17000J	4100J	3500J
Chromium	15	16	11	14	15	15	12
Cobalt	6 0	6 3	4 8	5 4	6 1	6 2	3 9
Copper	15	42	6 7	44	16	38	5 8
Hardness as CaCO3							
Iron	14000	15000	11000	13000	15000	15000	8500
Lead	11	50	6 6	54	11	50	6 3
Magnesium	6500	3600	6200	3000	7400	3400	2600
Manganese	320	370J	260	280J	310	350	140J
Molybdenum	0 25J	0 27J	1 1U	0 46J	0 23J	0 22J	0 22J
Nickel	16	17	12	15	16	17	12
Potassium	1600J	2400J	1400J	1700J	1800J	1800J	950J
Selenium	1 1U	1 0U	1 1U	1 1U	1 1U	0 48J	0 95U
Silver	1 1U	1 0U	1 1U	1 1U	1 1U	1 0U	0 95U
Sodium	130U	100U	130U	120U	140U	78U	88U
Thallium	1 1U	1 0U	1 1U	1 1U	1 1U	1 0U	0 95U
Vanadium	26	29	20	25	26	26	16
Zinc	56	230	35	240	55	230	31

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T4-S5-0-0 5FT	UAS-T4-S5-3-6FT	UAS-T4-S6-0-0 5FT	UAS-T4-S6-3-6FT	UAS-T4-S7-0-0 5FT	UAS-T4-S7-3-6FT	UAS-T5-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/16/1999	11/16/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	8800J	6200J	10000J	8300J	9900J	8200J	11000J
Antimony	2 0UJ	2 6UJ	2 4UJ	2 3UJ	2 2UJ	2 2UJ	2 3UJ
Arsenic	5 7	4 3	8 0	5 9	4 6	6 0	7 6
Barium	200	160	180	190	110	150	190
Beryllium	0 49	0 36J	0 65	0 46J	0 63	0 49	0 66
Cadmium	0 94	0 64U	0 98	0 58U	1 7	1 0	2 6
Calcium	150000J	10000J	25000J	16000J	80000J	25000J	4800J
Chromium	22	11	16	13	18	15	16
Cobalt	4 8	4 9	6 8	5 3	5 3	5 8	6 9
Copper	48	6 3	39	9 5	60	30	53
Hardness as CaCO3							
Iron	12000	11000	19000	13000	17000	16000	16000
Lead	83	6 8	130	7 9	260	130	59
Magnesium	21000	5600	6800	6400	5400	9000	3800
Manganese	400J	240J	400J	240J	440J	350J	390J
Molybdenum	2 3	0 37J	1 0J	0 17J	1 1J	0 76J	0 42J
Nickel	17	13	19	14	17	18	19
Potassium	1800J	1300J	2100J	1600J	1800J	1600J	2000J
Selenium	0 99U	1 3U	1 2U	1 2U	1 1U	1 1U	1 1U
Silver	0 99U	1 3U	1 2U	1 2U	1 1U	1 1U	1 1U
Sodium	220U	150U	160U	170U	200U	190U	130U
Thallium	0 99U	1 3U	1 2U	1 2U	1 1U	1 1U	1 1U
Vanadium	26	20	29	25	26	25	29
Zinc	120	35	140	39	550	190	230

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T4-S2-3-6FT	UAS-T4-S3-0-0 5FT	UAS-T4-S3-0-0 5FTFD	UAS-T4-S3-3-6FT	UAS-T4-S3-3-6FTFD	UAS-T4-S4-0-0 5FT	UAS-T4-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/16/1999	11/17/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	6700J	10000J	9800J	2900J	3700J	5100J	3800J
Antimony	2 0UJ	1 9UJ	2 0UJ	2 1UJ	2 1UJ	2 1UJ	2 1UJ
Arsenic	4 5	6 0	5 9	3 2	3 4	3 4	3 7
Barium	200	130	140	85	90	77	90
Beryllium	0 36J	0 50	0 50	0 18J	0 21J	0 27J	0 25J
Cadmium	0 45J	0 47J	0 45J	0 53U	0 53U	0 83	0 22J
Calcium	130000J	50000J	49000J	6100J	6800J	96000J	7800J
Chromium	17	14	14	8 1J	18J	11	10
Cobalt	4 2	6 1	6 4	4 2	4 3	3 4	4 3
Copper	19	24	27	3 0J	4 4J	32	7 6
Hardness as CaCO3							
Iron	9200	14000	14000	7600	8100	7700	8300
Lead	42	29	27	5 8	7 1	29	10
Magnesium	11000	5800	6600	2800	3000	13000	3200
Manganese	330J	400J	470J	130J	140J	180J	150J
Molybdenum	0 64J	1 4	1 3	1 1U	0 26J	0 51J	0 22J
Nickel	14	16	16	11J	16J	12	12
Potassium	1500J	1500J	1500J	570J	700J	1200J	770J
Selenium	0 99U	0 97U	0 98U	1 1U	1 1U	1 0U	1 1U
Silver	0 99U	0 97U	0 98U	1 1U	1 1U	1 0U	1 1U
Sodium	380J	120U	120U	100U	100U	160U	110U
Thallium	0 99U	0 97U	0 98U	1 1U	1 1U	1 0U	1 1U
Vanadium	20	27	27	11	13	15	13
Zinc	95	75	77	24	29	82	40

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T3-S6-3-6FT	UAS-T3-S7-0-0 5FT	UAS-T3-S7-3-6FT	UAS-T3-S7-3-6FTEB	UAS-T4-S1-0-0 5FT	UAS-T4-S1-3-6FT	UAS-T4-S2-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/16/1999	11/16/1999	11/17/1999	11/16/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/l	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	13000J	3300J	6600J	0 064J	8100J	9000J	7900J
Antimony	0 67J	2 1UJ	0 79J	0 020U	2 3UJ	2 4UJ	2 1UJ
Arsenic	5 8	2 6	5 8	0 010U	6 6	5 8	5 7
Barium	190J	40	210J	0 010U	190	210	1200
Beryllium	0 89J	0 18J	0 56U	0 0040U	0 54	0 50	0 54
Cadmium	0 57	3 8	0 17J	0 0050U	2 3	0 13J	1 5
Calcium	6900J	250000J	18000J	0 44J	6000J	15000J	82000J
Chromium	21	11	11	0 010U	13	14	29
Cobalt	7 4	2 3	5 8	0 010U	6 2	5 9	5 9
Copper	19	75	10	0 020U	69	12	180
Hardness as CaCO3							
Iron	19000	4100	12000	0 050U	14000	14000	14000
Lead	17	51J	8 8	0 0050U	62	8 5	190
Magnesium	4900	18000	6600	0 50U	3900	6800	8100
Manganese	300	120	270	0 010U	340J	320J	430J
Molybdenum	0 54J	1 4	0 95J	0 010U	0 32J	0 24J	1 2
Nickel	20	14	14	0 040U	17	16	18
Potassium	2700J	1200J	1500J	1 0U	1900J	1700J	1400J
Selenium	1 1U	3 2	1 3U	0 010U	1 1U	1 2U	1 1U
Silver	1 1U	0 38J	1 3U	0 010U	0 24J	1 2U	1 1U
Sodium	110U	260U	170U	0 68	170U	180U	190U
Thallium	1 1U	1 1U	1 3U	0 010U	1 1U	1 2U	1 1U
Vanadium	33J	13	20J	0 010U	23	26	22
Zinc	82	460	45	0 020U	240	44	290

Notes U-not detected J-estimated value, N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T3-S3-3-6FTFD	UAS-T3-S4-0-0.5FT	UAS-T3-S4-3-6FT	UAS-T3-S5-0-0.5FT	UAS-T3-S5-0-0.5FTEB	UAS-T3-S5-3-6FT	UAS-T3-S6-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/16/1999	11/15/1999	11/15/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/l	mg/kg dw	mg/kg dw
Aluminum	7100J	17000J	6700J	9900J	0.047J	2100J	7700J
Antimony	2.1U	1.1J	2.4U	1 2J	0.020U	1 9U	2 3U
Arsenic	4.9	8.0	5.3	5.2	0.010U	1 9	5 8
Barium	220J	210J	160J	150J	0 010U	45J	190J
Beryllium	0.54U	1.1J	0.58U	0.76J	0.0040U	0.24U	0 61U
Cadmium	0.17J	2.7	0.30J	2.2	0.0050U	0 48U	2 2
Calcium	16000J	4600J	10000J	3500J	0.30J	2400J	9500J
Chromium	12	23	11	15	0.010U	5.6	12
Cobalt	5.6	9.5	6.0	6.4	0.010U	2 8	6.1
Copper	9.1	77	14	79	0.020U	2.8	48
Hardness as CaCO3							
Iron	12000	22000	13000	15000	0.050U	5000	13000
Lead	8.2	64	11	56	0.0050U	4 5	39
Magnesium	6900	4700	5600	3100	0 50U	1700	5400
Manganese	260	510	250	250	0.010U	92	360
Molybdenum	0.89J	1.2J	0.38J	0.56J	0.010U	0 25J	0 77J
Nickel	14	24	15	17	0.040U	7.4	15
Potassium	1500J	3700J	1500J	2100J	1.0U	490J	1900J
Selenium	1.2U	1.1U	1.2U	0.60J	0.010U	0.96U	1 1U
Silver	1.2U	1.1U	1.2U	1.0U	0.010U	0.96U	1 1U
Sodium	140U	94U	110U	70U	0.62	48U	120U
Thallium	1.2U	1.1U	1.2U	1.0U	0.010U	0.96U	1.1U
Vanadium	22J	42J	21J	27J	0.010U	7.7J	23J
Zinc	40	300	53	410	0.020U	24	250

Notes ɔt detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T3-S1-0-0 5FT	UAS-T3-S1-3-6FT	UAS-T3-S2-0-0 5FT	UAS-T3-S2-3-6FT	UAS-T3-S3-0-0 5FT	UAS-T3-S3-0-0 5FTFD	UAS-T3-S3-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	11000J	9400J	16000J	14000J	5500J	14000J	6000J
Antimony	2 2UJ	0 79J	1 9J	2 5UJ	0 90J	2 3UJ	0 78J
Arsenic	7 5	7 0	9 4	8 5	3 2J	7 9J	4 7
Barium	200	200J	220J	250	87J	210J	200J
Beryllium	0 63	0 66U	0 99J	0 73	0 43U	0 77	0 49U
Cadmium	1 5	0 57J	2 7	0 23J	0 96J	2 2J	0 18J
Calcium	7600J	11000J	4400J	13000J	2100J	5100J	15000J
Chromium	16	14	22	20	7 7J	19J	9 8
Cobalt	6 7	7 2	10	8 1	3 6J	8 2J	5 3
Copper	55	15	65	19	28J	75J	8 8
Hardness as CaCO3							
Iron	16000	15000	21000	19000	7900J	19000J	11000
Lead	40J	12	63	13J	21J	50J	7 7
Magnesium	5600	6900	4500	7700	1800J	4200J	6400
Manganese	380	380	610	550	220J	530J	240
Molybdenum	0 38J	0 91J	0 94J	0 30J	0 30J	0 57J	0 54J
Nickel	20	18	26	22	9 1J	21J	13
Potassium	2300J	1900J	3000J	2700J	1500J	3400J	1400J
Selenium	1 1U	1 2U	1 1U	1 3U	1 2U	1 2U	1 1U
Silver	1 1U	1 2U	1 1U	1 3U	1 2U	1 2U	1 1U
Sodium	120U	150U	100U	150U	58U	110U	120U
Thallium	1 1U	1 2U	1 1U	1 3U	1 2U	1 2U	1 1U
Vanadium	30	26J	39J	38	15J	36J	18J
Zinc	160	260	240	65	98J	220J	37

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T2-S3-3-6FT	UAS-T2-S4-0-0 5FT	UAS-T2-S4-3-6FT	UAS-T2-S5-0-0 5FT	UAS-T2-S5-3-6FT	UAS-T2-S6-0-0 5FT	UAS-T2-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	4500J	18000J	11000J	11000J	5400J	9900J	7700J
Antimony	2 1U	1 7J	2 7U	1 1J	0 67J	0 67J	2 4U
Arsenic	4 0	9 4	7 0	6 9	4 3	6 6	5 4
Barium	140J	230	220J	180J	160J	190J	220J
Beryllium	0 37U	1 0	0 71U	0 73U	0 44U	0 72U	0 57U
Cadmium	0 11J	2 7	0 29J	2 1	0 15J	2 8	0 32J
Calcium	9200J	4800J	15000J	4300J	14000J	8800J	15000J
Chromium	8 6	25	15	16	8 8	15	12
Cobalt	4 7	9 9	8 3	6 9	4 6	6 8	6 1
Copper	5 9	95	16	69	9 3	87	13
Hardness as CaCO3							
Iron	9100	24000	16000	16000	9800	15000	12000
Lead	6 4	72	12	48	7 8	79	11
Magnesium	4300	5000	6800	3900	5900	5100	6200
Manganese	170	630	480	340	210	350	310
Molybdenum	0 52J	0 87J	0 70J	0 79J	0 45J	0 70J	0 68J
Nickel	11	26	20	18	11	18	15
Potassium	870J	3800	2000J	2500J	1200J	2500J	1800J
Selenium	1 1U	0 61J	1 2U	0 99U	1 1U	1 0J	1 2U
Silver	1 1U	0 28J	1 2U	0 23J	1 1U	0 38J	1 2U
Sodium	93U	96U	160U	100U	120U	130U	130U
Thallium	1 1U	1 0J	1 2U	0 99U	1 1U	1 2U	1 2U
Vanadium	15J	46	28J	30J	17J	28J	23J
Zinc	30J	270J	57J	210J	39J	290J	51

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T1-S7-3-6FTEB	UAS-T1-S7-3-6FTFD	UAS-T2-S1-0-0 5FT	UAS-T2-S1-3-6FT	UAS-T2-S2-0-0 5FT	UAS-T2-S2-3-6FT	UAS-T2-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Units	mg/l	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	0 064J	8000J	11000J	6100J	9800J	5200J	18000J
Antimony	0 020U	2 4U	1 4J	2 2U	1 5J	2 2U	1 3J
Arsenic	0 010U	6 0	9 0	5 2	7 0	4 3	10
Barium	0 010U	170	200	190	160	160J	230J
Beryllium	0 0040U	0 49	0 66	0 37J	0 62	0 40U	1 1J
Cadmium	0 0050U	0 36J	2 8	0 16J	1 9	0 19J	2 1
Calcium	0 31J	9800J	4600J	14000J	3500J	11000J	4600J
Chromium	0 010U	13	17	11	15	9 6	24
Cobalt	0 010U	5 9	7 1	4 9	6 5	4 9	11
Copper	0 020U	17	140	8 0	77	7 6	87
Hardness as CaCO3							
Iron	0 050U	13000	17000	11000	15000	9700	24000
Lead	0 0050U	12	79	7 3	50	7 0	66
Magnesium	0 50U	5400	3700	6000	3400	5000	5200
Manganese	0 010U	320	410	220	390	190	690
Molybdenum	0 010U	0 38J	0 47J	0 19J	0 46J	0 77J	1 3J
Nickel	0 040U	15	23	13	18	11	27
Potassium	1 0U	1500	2200	1200	1700	1100J	3300J
Selenium	0 010U	1 2U	1 1U	1 1U	1 1U	0 51J	1 2U
Silver	0 010U	1 2U	0 41J	1 1U	0 24J	1 0U	0 30J
Sodium	0 84	140U	120U	150U	120U	110U	89U
Thallium	0 010U	1 2U	1 1U	1 1U	1 1U	1 0U	0 73J
Vanadium	0 010U	24	30	20	28	17J	40J
Zinc	0 020U	63J	310J	37J	190J	34J	250J

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T1-S5-3-6FT	UAS-T1-S6-0-0 5FT	UAS-T1-S6-3-6FT	UAS-T1-S7-0-0 5FT	UAS-T1-S7-0-0 5FTEB	UAS-T1-S7-0-0 5FTFD	UAS-T1-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/l	mg/kg dw	mg/kg dw
Aluminum	3800J	7000J	6700J	6600J	0 065J	5900J	7000J
Antimony	0 59J	1 5J	2 2U	1 2J	0 020U	0 60J	2 1U
Arsenic	4 0	6 2	5 5	5 9	0 010U	5 6	5 5
Barium	140	180	200	170	0 010U	160	170
Beryllium	0 25J	0 46	0 43J	0 43J	0 0040U	0 40J	0 44
Cadmium	0 54U	1 7	0 23J	2 1	0 0050U	2 2	0 30J
Calcium	11000J	8700J	18000J	6900J	0 27J	6700J	11000J
Chromium	7 8	12	11	12	0 010U	11	11
Cobalt	4 3	5 4	5 4	5 1	0 010U	4 8	5 5
Copper	4 0	86	14	72	0 020U	81	16
Hardness as CaCO3							
Iron	8700	13000	12000	12000	0 050U	11000	12000
Lead	5 4	40	9 1	46	0 0050U	46	11
Magnesium	4400	5300	6800	4600	0 50U	4300	5600
Manganese	170	250	280	230	0 010U	220	310
Molybdenum	0 20J	0 35J	0 39J	0 46J	0 010U	0 45J	0 37J
Nickel	11	15	14	14	0 040U	14	14
Potassium	760	1500	1400	1400	1 0U	1400	1300
Selenium	1 1U	1 1U	1 1U	1 1U	0 010U	1 1U	1 1U
Silver	1 1U	1 1U	1 1U	1 1U	0 010U	0 21J	1 1U
Sodium	130U	140U	180U	140U	0 60	130U	160U
Thallium	1 1U	1 1U	1 1U	1 1U	0 010U	1 1U	1 1U
Vanadium	14	22	21	21	0 010U	20	21
Zinc	28J	180J	45J	240J	0 020U	250J	56J

Notes ›t detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	UAS-T1-S2-0-0 5FT	UAS-T1-S2-3-6FT	UAS-T1-S3-0-0 5FT	UAS-T1-S3-3-6FT	UAS-T1-S4-0-0.5FT	UAS-T1-S4-3-6FT	UAS-T1-S5-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	13000J	7400J	15000J	17000J	13000J	4300J	13000J
Antimony	2.6	0.68J	2.6	0.84J	1 8J	0.60J	2 1
Arsenic	8.3	6 5	9.0	8.7	8.8	4.2	8 9
Barium	210	210	210	260	210	160	200
Beryllium	0.75	0.48J	0.94	0.93	0.76	0 27J	0 83
Cadmium	3 5	0 13J	3.7	0 45J	2 4	0 10J	2 5
Calcium	5100J	17000J	5200J	16000J	4200J	11000J	4400J
Chromium	19	13	22	25	19	11	19
Cobalt	7 8	5.5	9.2	11	7.5	4.4	8 6
Copper	230	13	230	24	160	6.8	130
Hardness as CaCO3							
Iron	18000	13000	22000	22000	19000	9300	20000
Lead	92	8.9	120	15	73	7.3	69
Magnesium	4500	6900	4600	7800	4300	4700	4100
Manganese	450	240	460	980	430	170	550
Molybdenum	0 43J	0.32J	0.86J	0.76J	0.36J	0.21J	0 74J
Nickel	23	15	25	33	21	12	23
Potassium	2800	1500	2800	2700	2500	880	2300
Selenium	1.3U	1 3U	1.3U	1.2U	1.2U	0.99U	0 72J
Silver	0.48J	1 3U	0.59J	1.2U	0.27J	0 99U	0 28J
Sodium	120U	180U	130U	140U	130U	120U	110U
Thallium	1.3U	1.3U	1.3U	1 2U	0 80J	0.99U	1 2U
Vanadium	35	23	41	45	36	16	35
Zinc	340J	43J	390J	80J	280J	34J	270J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	DAS-T6-S3-3-6FT	DAS-T7-S1-0-0 5FT	DAS-T7-S1-3-6FT	DAS-T7-S2-0-0 5FT	DAS-T7-S2-3-6FT	UAS-T1-S1-0-0 5FT	UAS-T1-S1-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	11/10/1999	11/10/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	5600	9000	7900	7200	9700	12000J	12000J
Antimony	2 2UJ	2 3UJ	2.3UJ	2.4UJ	0 60J	2 3J	0 72J
Arsenic	5.7	7 6	6.6	6.8	5 5	10	8 7
Barium	190	180	220	160	280	240	260
Beryllium	0.38J	0 59	0.50	0 47J	0 49	0 71	0 73
Cadmium	0.29J	3 6	0.37J	2.2	7 9	4 8	0 53J
Calcium	14000	8100J	17000	38000J	4700	5000J	15000J
Chromium	9.8	20	13	16	130	49	19
Cobalt	5.4	7 5	6.8	6 1	5 7	7.1	8 4
Copper	9.4	29	14	33	62	150	21
Hardness as CaCO3							
Iron	12000	15000J	15000	14000J	11000	16000	19000
Lead	8.0	39J	10	67J	77	93	14
Magnesium	6400	5200	7000	7900	3200	4100	8300
Manganese	270	390	400	380	150	190	550
Molybdenum	0 46J	0 51J	0.52J	0 69J	0 33J	0 42J	0 57J
Nickel	14	21	17	18	19	21	23
Potassium	1200J	2000J	1700J	1500J	2100J	2400	2400
Selenium	1 1U	1 2U	1.2U	1 2U	1 1U	0 81J	1 2U
Silver	1.1U	1 2U	1 2U	1.2U	1.1U	0 27J	1 2U
Sodium	130	130U	160	150U	260	180U	230U
Thallium	1 1U	1 2U	1.2U	0.85J	0.72J	1.1U	1 2U
Vanadium	18	25	23J	22	23J	32	35
Zinc	37	870	74	260	1200	1400J	250J

Notes: not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	DAS-T5-S3-0-0 5FT	DAS-T5-S3-3-6FT	DAS-T6-S1-0-0.5FT	DAS-T6-S1-3-6FT	DAS-T6-S2-0-0 5FT	DAS-T6-S2-3-6FT	DAS-T6-S3-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	5300	3600	7100	5500	7500	6700	5200
Antimony	2.2UJ	2.0UJ	0.59J	2.3UJ	2.3UJ	2.3UJ	2 2UJ
Arsenic	5.7	4.5	8.0	6.0	5.8	6.1	4 3
Barium	170	160	200	200	160	200	110
Beryllium	0.40J	0.28J	0.55	0.38J	0.49	0.45J	0.32J
Cadmium	5 7	0 34J	4.0	0 59	1 1	0.32J	1 8
Calcium	18000J	13000J	9500J	18000	9600J	17000	150000J
Chromium	12	7.3	14	10	13	11	13
Cobalt	5 2	4.6	6.5	5.3	6.1	5.8	3 9
Copper	70	8 2	56	12	24	12	36
Hardness as CaCO3							
Iron	12000J	9200	15000J	12000	14000J	13000	9000J
Lead	130J	9.0	110J	16	29J	8.8	87J
Magnesium	4600	4900	4900	6800	5900	6600	11000
Manganese	280	200	350	240	340	290	280
Molybdenum	0.58J	0.35J	0.83J	0.39J	0.37J	0.42J	0 59J
Nickel	14	12	20	15	17	16	15
Potassium	1500	1100	1700J	1200J	1900J	1500J	1600J
Selenium	1.1U	1 0U	1.2U	1.1U	1 1U	1.2U	1 1U
Silver	0.60J	1.0U	0.29J	1 1U	1 1U	1 2U	1 1U
Sodium	160U	110	140U	140	120U	120	180U
Thallium	1 1U	1.0U	0.73J	1.1U	0.97J	1 2U	1 1U
Vanadium	17	13	22J	18	22J	20	17J
Zinc	750J	41J	350	60	110	42	240

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	DAS-T4-S3-0-0 5FT	DAS-T4-S3-3-6FT	DAS-T5-S1-0-0 5FT	DAS-T5-S1-0-0 5FTEB	DAS-T5-S1-3-6FT	DAS-T5-S2-0-0 5FT	DAS-T5-S2-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/20/2000	4/20/2000	4/19/2000	4/20/2000	4/19/2000	4/19/2000	4/19/2000
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/l	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	14000	5500	6200	0 20U	5300	6100	4000
Antimony	2 5UJ	2 4UJ	2.2UJ	0 020U	2 4UJ	2 1UJ	2 2UJ
Arsenic	9 1	4 4	5 4	0 010U	5 4	5 5	4 3
Barium	180	130	170	0 010U	200	150	180
Beryllium	0.79	0.36J	0.46	0 0040U	0 40J	0 45	0 29J
Cadmium	1.7	0.20J	3 1	0 0050U	0 33J	1 4	0 19J
Calcium	11000J	6800	13000J	0 13J	19000J	11000J	15000J
Chromium	20	10	13	0 010U	9 7	11	7 7
Cobalt	10	5 1	6 1	0.010U	5 8	6 0	4 6
Copper	64	8.7	75	0 020U	12	40	6 3
Hardness as CaCO3							
Iron	21000J	11000	13000J	0 028J	12000	13000J	9800
Lead	50J	7.7	130J	0 0050U	8.9	35J	6.7
Magnesium	4000	4700	4800	0 50U	6400	4500	5700
Manganese	610	280	360	0.010U	290	400	230
Molybdenum	0.85J	0.46J	0.78J	0.010U	0 45J	0 40J	0 35J
Nickel	23	14	19	0 040U	15	16	12
Potassium	2100J	1100J	1600	1 0U	1100	1600	930
Selenium	1.2U	1.2U	1.1U	0.010U	1.2U	1 1U	1 1U
Silver	1.2U	1.2U	0 21J	0.010U	1 2U	1.1U	1 1U
Sodium	87U	99	130U	0.33J	160	110U	120
Thallium	1.1J	1.2U	1.1U	0.010U	1.2U	1 1U	1 1U
Vanadium	34J	17	19	0.010U	17	19	14
Zinc	180	36	330J	0 020U	40J	140J	31J

Notes: ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	DAS-T3-S3-3-6FT	DAS-T4-S1-0-0 5FT	DAS-T4-S1-0-0 5FTFD	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FTFD	DAS-T4-S2-0-0 5FT	DAS-T4-S2-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000	4/20/2000
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	6100	7300	7200	6500	6600	13000	4100
Antimony	2 5UJ	2 2UJ	2 4UJ	2 6UJ	2 6UJ	0 65J	2 2UJ
Arsenic	5 1	8 9	8 1	5 6	5 9	10	4 5
Barium	200	180	170	190	190	200	140
Beryllium	0 42J	0 57	0 55	0 46J	0 45J	0 86	0 29J
Cadmium	0 28J	2 7	2 5	0 29J	0 25J	3 2	0 18J
Calcium	17000J	7100J	6100J	15000J	15000J	7100J	11000
Chromium	10	13	13	11	11	20	8 1
Cobalt	5 6	6 6	6 4	6 3	5 9	8 8	4 7
Copper	11	55	53	13	12	79	6 2
Hardness as CaCO3							
Iron	12000	15000J	14000J	13000	13000	21000J	9900
Lead	8 3	76J	74J	9 9	9 6	96J	6 4
Magnesium	5900	3900	3500	6900	6700	4200	5100
Manganese	350	400	390	360	350	510	190
Molybdenum	0 52J	0 63J	0 53J	0 42J	0 41J	1 0J	0 39J
Nickel	14	19	18	16	16	24	12
Potassium	1400	2000	2000	1300	1300	2600J	880J
Selenium	1 2U	1 1U	1 2U	1 3U	1 3U	0 88J	1 1U
Silver	1 2U	0 29J	1 2U	1 3U	1 3U	0 29J	1 1U
Sodium	160	94U	110U	140	140	74U	100
Thallium	1 2U	1 1U	0 86J	1 3U	1 3U	1 1J	1 1U
Vanadium	19	21	21	20	20	35	15
Zinc	38J	240J	230J	47J	44J	310	30

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	DAS-T2-S3-3-6FTFD	DAS-T3-S1-0-0.5FT	DAS-T3-S1-3-6FT	DAS-T3-S2-0-0.5FT	DAS-T3-S2-3-6FT	DAS-T3-S3-0-0 5FT	DAS-T3-S3-0-0 5FTEB
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/l
Aluminum	2600	5500	5700	8500	3300	5900	0 20U
Antimony	2.0UJ	2.5UJ	2.6UJ	2.4UJ	2.2UJ	2 1UJ	0 020U
Arsenic	3.1	6.4	5.7	9.7	3.6	6 2	0 010U
Barium	89J	140	200	200	170	150	0 010U
Beryllium	0.18J	0.41J	0.42J	0.59	0 23J	0.41J	0 0040U
Cadmium	0.51U	2.0	0.24J	2.2	0.15J	2.5	0 0050U
Calcium	4500	15000J	19000J	12000J	13000J	17000J	0.099J
Chromium	5.5	20	10	15	6.8	12	0.010U
Cobalt	3.8	5.4	5.7	7.1	4.1	5.6	0.010U
Copper	3.7	70	12	72	4.4	63	0.020U
Hardness as CaCO3							
Iron	7100	12000J	12000	16000J	8500	12000J	0.050U
Lead	4.9	53J	8.9	90J	5.5	53J	0.0016J
Magnesium	2900J	5300	7200	5600	5000	7300	0 50U
Manganese	160	400	270	420	180	360	0 010U
Molybdenum	0.24J	0.37J	0.42J	0.61J	0.30J	0.71J	0.010U
Nickel	9.3	16	16	23	10	16	0.040U
Potassium	560	1300	1300	2100	720	1700	1.0U
Selenium	1.0U	1.2U	1.3U	1.2U	1.1U	1.0U	0.010U
Silver	1.0U	0.35J	1.3U	0.26J	1.1U	0.20J	0.010U
Sodium	100U	120U	160	150U	120	120U	0 50U
Thallium	1.0U	0.90J	1.3U	1.4	1 1U	0.78J	0.010U
Vanadium	10J	23	18	25	13	20	0.010U
Zinc	22	220J	41J	240J	26J	260J	0.020U

Notes ' ~ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	DAS-T1-S3-3-6FT	DAS-T2-S1-0-0 5FT	DAS-T2-S1-3-6FT	DAS-T2-S2-0-0 5FT	DAS-T2-S2-3-6FT	DAS-T2-S3-0-0 5FT	DAS-T2-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	5800	7200	4900	13000	2800	11000	3100
Antimony	2 3UJ	2 2UJ	2 0UJ	2 1UJ	2 1UJ	2 2UJ	2 2UJ
Arsenic	5 9	7 6	5 0	6 0	3 4	9 0	3 8
Barium	140J	160	170J	190	110J	190	110J
Beryllium	0 40J	0 55	0 36J	0 72	0 19J	0 76	0 22J
Cadmium	0 31J	2 6J	0 27J	1 1J	0 14J	2 4J	0 11J
Calcium	6200	16000J	15000	11000J	5900	16000J	5300
Chromium	9 9	13	8 9	48	6 5	19	6 6
Cobalt	5 7	6 4	5 3	6 9	4 0	8 3	4 3
Copper	13	110J	10	53J	3 7	94J	4 8
Hardness as CaCO3							
Iron	12000	16000J	11000	25000J	7900	19000J	8400
Lead	11	88J	8 1	24J	5 5	76J	5 6
Magnesium	4400J	9500	5800J	4800	3500J	5800	3600J
Manganese	350	430	250	1200	140	560	160
Molybdenum	0 41J	0 82J	0 42J	0 55J	0 16J	0 94J	0 25J
Nickel	15	24	14	18	10	24	11
Potassium	1100	1900	1100	2400	580	2500	670
Selenium	1 2U	1 1U	1 0U	1 0U	1 1U	0 55J	1 1U
Silver	1 2U	0 48J	1 0U	1 0U	1 1U	0 43J	1 1U
Sodium	140U	130U	140U	97U	140U	130U	110U
Thallium	1 2U	1 1U	1 0U	1 3	1 1U	0 71J	0 63J
Vanadium	18J	24	16J	120	12J	34	13J
Zinc	50	290J	36	140J	25	260J	25

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	BS-EEG-108-3-6FT	DAS-T1-S1-0-0 5FT	DAS-T1-S1-0-0 5FTFD	DAS-T1-S1-3-6FT	DAS-T1-S2-0-0 5FT	DAS-T1-S2-3-6FT	DAS-T1-S3-0-0 5FT
Description	Background Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	1/27/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	12000	5800	5800	3500	7800	5600	6000
Antimony	2 3R	0 70R	2 3UJ	2 1UJ	2 3UJ	1 9UJ	2 2UJ
Arsenic	6 8	7 6	8 0	3 8	7 5	5 1	8 7
Barium	200J	160	160	120J	120	190J	130
Beryllium	0 72	0 47	0 45J	0 24J	0 50	0 39	0 47
Cadmium	1 3	3 5J	2 5J	0 16J	1 9J	0 27J	1 7J
Calcium	12000J	7800J	7800J	8700	6800J	16000	5100J
Chromium	18	11	11	6 5	14	9 7	12
Cobalt	7 7	5 9	5 7	4 1	7 8	5 3	5 9
Copper	41	110J	85J	5 4	85J	11	73J
Hardness as CaCO3							
Iron	18000J	13000J	13000J	8300	15000J	11000	12000J
Lead	45	110J	81J	5 5	50J	7 6	50J
Magnesium	5200	5000	5100	4100J	4400	6100J	3200
Manganese	410J	320	290	240	470	270	320
Molybdenum	0 62J	0 45J	0 38J	0 27J	0 50J	0 47J	0 50J
Nickel	20	18	17	11	19	14	16
Potassium	2300	1600	1600	750	1400	1300	1300
Selenium	1 1U	1 1U	1 1U	1 1U	1 1U	0 96U	1 1U
Silver	1 1U	0 62J	0 37J	1 1U	0 34J	0 96U	0 28J
Sodium	410J	130U	140U	110U	100U	130U	130U
Thallium	1 1U	0 79J	1 1U	1 1U	0 98J	0 96U	0 84J
Vanadium	31	19	19	12J	25	17J	18
Zinc	150J	350J	240J	25	230J	37	250J

Notes ›t detected J-estimated value N-tentatively identified, R-rejected M-EMPC D-resu‹t from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-4.7
Sauget Area 1
Soil Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	BS-EE-04-0-0 5FT	BS-EE-04-0-0 5FTFD	BS-EE-04-3-6FT	BS-EE-20-0-0 5FT	BS-EE-20-3-6FT	BS-EEG-108-0-0 5FT	BS-EEG-108-0-0 5FTEB
Description	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil
Sample Date	1/26/2000	1/26/2000	1/26/2000	1/24/2000	1/24/2000	1/27/2000	1/27/2000
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/l
Aluminum	19000	19000	8400	11000	10000	8100	0 20U
Antimony	1 9J	2 7R	2 2R	2 3R	1 2J	2 4R	0 020U
Arsenic	8 8	9 4	7 3	13	12	6 6	0 010U
Barium	210J	260J	170J	200J	190J	110J	0 010U
Beryllium	1 1	1 1	0 5	0 71	0 68	0 45J	0 0040U
Cadmium	2 9	3 2	0 11J	9 4	8 9	0 52J	0 0050U
Calcium	6200J	6400J	8400J	4000J	3800J	40000J	0 21J
Chromium	25	25	13	17	18	17	0 010U
Cobalt	9 8	11	6 4	7 4	6 8	5 5	0 010U
Copper	96	81	11	190	180	35	0 020U
Hardness as CaCO3							
Iron	24000J	26000J	14000J	17000J	18000J	15000J	0 043J
Lead	78	69	8 5	180	160	24	0 0050U
Magnesium	5500	5800	5700	3200	3100	17000	0 50U
Manganese	470J	600J	420J	400J	370J	390J	0 010U
Molybdenum	0 85J	0 98J	0 5J	1 4	1 5	0 72J	0 010U
Nickel	26	30	16	21	20	15	0 040U
Potassium	3400	3600	1800	2300	2200	1300	1 0U
Selenium	1 2U	1 3U	1 1U	1 1U	1 1U	1 2U	0 010U
Silver	0 38J	0 27J	1 1U	1 1J	0 98J	1 2U	0 010U
Sodium	100U	100U	120U	130U	120U	750J	0 58
Thallium	1 2U	1 3U	1 1U	0 76UJ	0 84UJ	1 2U	0 010U
Vanadium	44	45	25	31	31	28	0 010U
Zinc	320J	300J	42J	820J	770J	82J	0 014J

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	BS-EE-04-0-0 5FT	BS-EE-04-0-0 5FTFD	BS-EE-04-3-6FT	BS-EE-20-0-0 5FT	BS-EE-20-3-6FT	BS-EEG-108-0-0 5FT	BS-EEG-108-3-6FT
Description	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil	Background Soil
Sample Date	1/26/2000	1/26/2000	1/26/2000	1/24/2000	1/24/2000	1/27/2000	'1/27/2000
Mercury (mg/kg)	0 083J	0 081J	0 02J	0 14J	0 0041J	0 044J	0 06J
pH (su)	7 15	6 98	7 69	7 08	8 04	8 85	7 82

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	DAS-T1-S1-0-0 5FT	DAS-T1-S1-0-0 5FTFD	DAS-T1-S1-3-6FT	DAS-T1-S2-0-0 5FT	DAS-T1-S2-3-6FT	DAS-T1-S3-0-0 5FT	DAS-T1-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Mercury (mg/kg)	0 093J	0 071J	0 0088UJ	0 060J	0 02UJ	0 054J	0 024UJ
pH (su)	7 48	6.58		7.59		7 23	

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	DAS-T2-S1-0-0 5FT	DAS-T2-S1-3-6FT	DAS-T2-S2-0-0 5FT	DAS-T2-S2-3-6FT	DAS-T2-S3-0-0 5FT	DAS-T2-S3-3-6FT	DAS-T2-S3-3-6FTFD
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000
Mercury (mg/kg)	0 076J	0 017UJ	0 094J	0 021U	0 086J	0 02U	0 02U
pH (su)	7 43		6 72		7 27		

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	DAS-T3-S1-0-0 5FT	DAS-T3-S1-3-6FT	DAS-T3-S2-0-0.5FT	DAS-T3-S2-3-6FT	DAS-T3-S3-0-0.5FT	DAS-T3-S3-3-6FT	DAS-T4-S1-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000
Mercury (mg/kg)	0 050J	0 023	0 055J	0 0080J	0 068J	0 019J	0 065J
pH (su)	4 87		7 48		7 14		7 10

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	DAS-T4-S1-0-0 5FTFD	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FTFD	DAS-T4-S2-0-0 5FT	DAS-T4-S2-3-6FT	DAS-T4-S3-0-0 5FT	DAS-T4-S3-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000
Mercury (mg/kg)	0 055J	0 018J	0 020J	0.11J	0 015UJ	0 073J	0 021UJ
pH (su)	6 87						

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	DAS-T5-S1-0-0 5FT	DAS-T5-S1-3-6FT	DAS-T5-S2-0-0 5FT	DAS-T5-S2-3-6FT	DAS-T5-S3-0-0 5FT	DAS-T5-S3-3-6FT	DAS-T6-S1-0-0 5FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000	4/20/2000
Mercury (mg/kg)	0 097J	0 020J	0 044J	0 011J	0 089J	0 014J	0 071J
pH (su)	7 50		6 71		7 80		

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	DAS-T6-S1-3-6FT	DAS-T6-S2-0-0 5FT	DAS-T6-S2-3-6FT	DAS-T6-S3-0-0 5FT	DAS-T6-S3-3-6FT	DAS-T7-S1-0-0 5FT	DAS-T7-S1-3-6FT
Description	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil	Developed Soil
Sample Date	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000	4/20/2000
Mercury (mg/kg)	0 022UJ	0 049J	0 026UJ	0 049J	0 078J	0 066J	0 027UJ
pH (su)							

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	DAS-T7-S2-0-0 5FT	DAS-T7-S2-3-6FT	UAS-T1-S1-0-0 5FT	UAS-T1-S1-3-6FT	UAS-T1-S2-0-0 5FT	UAS-T1-S2-3-6FT	UAS-T1-S3-0-0 5FT
Description	Developed Soil	Developed Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	4/20/2000	4/20/2000	11/10/1999	11/10/1999	11/10/1999	11/10/1999	11/11/1999
Mercury (mg/kg)	0 089J	0 12J	0 099	0 031	0 069	0 021J	0 088
pH (su)			7 14	7 57	7 37	8 05	6 62

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T1-S3-3-6FT	UAS-T1-S4-0-0 5FT	UAS-T1-S4-3-6FT	UAS-T1-S5-0-0 5FT	UAS-T1-S5-3-6FT	UAS-T1-S6-0-0 5FT	UAS-T1-S6-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999
Mercury (mg/kg)	0 035	0 050	0 0078J	0 053	0 0059J	0 031	0 070
pH (su)	7 91	7 46	8 05	6 65	8 20	8 23	8 27

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T1-S7-0-0.5FT	UAS-T1-S7-0-0 5FTFD	UAS-T1-S7-3-6FT	UAS-T1-S7-3-6FTFD	UAS-T2-S1-0-0.5FT	UAS-T2-S1-3-6FT	UAS-T2-S2-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/12/1999	11/12/1999 [1]	11/12/1999
Mercury (mg/kg)	0 037	0.040	0.020J	0.022	0.065	0.014J	0.047
pH (su)	7 76	7 61	8.15	8.12	7.08	8 30	6.89

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T2-S2-3-6FT	UAS-T2-S3-0-0 5FT	UAS-T2-S3-3-6FT	UAS-T2-S4-0-0 5FT	UAS-T2-S4-3-6FT	UAS-T2-S5-0-0 5FT	UAS-T2-S5-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999
Mercury (mg/kg)	0 0058J	0 069	0 0088J	0 077	0 029	0 045	0 010J
pH (su)	8 27	6 33	8 21	6 47	8 01	7 62	8 20

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T2-S6-0-0 5FT	UAS-T2-S6-3-6FT	UAS-T3-S1-0-0.5FT	UAS-T3-S1-3-6FT	UAS-T3-S2-0-0 5FT	UAS-T3-S2-3-6FT	UAS-T3-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/12/1999	11/12/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999
Mercury (mg/kg)	0 063	0 015J	0 042	0 024J	0.055	0.033	0 073J
pH (su)	7 73	7 78	7 51	7 73	6 72	7.75	6 85

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T3-S3-0-0 5FTFD	UAS-T3-S3-3-6FT	UAS-T3-S3-3-6FTFD	UAS-T3-S4-0-0 5FT	UAS-T3-S4-3-6FT	UAS-T3-S5-0-0 5FT	UAS-T3-S5-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/15/1999
Mercury (mg/kg)	0 055J	0 014J	0 014J	0 072	0 019J	0 079	0 0029J
pH (su)	6 81	7 78	7 85	6 24	7 86	6 42	7 77

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T3-S6-0-0 5FT	UAS-T3-S6-3-6FT	UAS-T3-S7-0-0 5FT	UAS-T3-S7-3-6FT	UAS-T4-S1-0-0 5FT	UAS-T4-S1-3-6FT	UAS-T4-S2-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/15/1999	11/15/1999	11/15/1999	11/15/1999	11/16/1999	11/17/1999	11/16/1999
Mercury (mg/kg)	0 049	0 078	0 093	0 020J	0 066	0 017J	0 084
pH (su)	7 31	7 62	7 82	7 95	7 59	7 90	8 47

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T4-S2-3-6FT	UAS-T4-S3-0-0 5FT	UAS-T4-S3-0-0 5FTFD	UAS-T4-S3-3-6FT	UAS-T4-S3-3-6FTFD	UAS-T4-S4-0-0 5FT	UAS-T4-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/16/1999	11/17/1999
Mercury (mg/kg)	0 028	0 046	0 045	0 0042J	0 0064J	0 027	0 0062J
pH (su)	8 36	8 22	7 92	8 36	8 59	8 03	8 30

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T4-S5-0-0 5FT	UAS-T4-S5-3-6FT	UAS-T4-S6-0-0 5FT	UAS-T4-S6-3-6FT	UAS-T4-S7-0-0 5FT	UAS-T4-S7-3-6FT	UAS-T5-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/16/1999	11/16/1999	11/16/1999	11/16/1999	11/17/1999	11/17/1999	11/17/1999
Mercury (mg/kg)	0 096	0 0080J	0 57	0 013J	0 087	0 039	0 060
pH (su)	8 29	8 21	7 87	7 74	7 86	8 29	8 07

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T5-S1-3-6FT	UAS-T5-S2-0-0 5FT	UAS-T5-S2-3-6FT	UAS-T5-S3-0-0 5FT	UAS-T5-S3-3-6FT	UAS-T5-S4-0-0 5FT	UAS-T5-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999
Mercury (mg/kg)	0 024	0 054	0 011J	0 049	0 030	0 056	0 086
pH (su)	8 11	7 38	8 19	7 57	8 16	6 82	7 99

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T5-S5-0-0 5FT	UAS-T5-S5-3-6FT	UAS-T5-S6-0-0 5FT	UAS-T5-S6-0-0 5FTFD	UAS-T5-S6-3-6FT	UAS-T5-S6-3-6FTFD	UAS-T6-S1-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/17/1999	11/18/1999
Mercury (mg/kg)	0 063	0 010J	0 11	0 12	0 014J	0 012J	0 086
pH (su)	7 45	8 27	7 53	7 50	8 31	8 11	7 76

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T6-S1-3-6FT	UAS-T6-S2-0-0 5FT	UAS-T6-S2-3-6FT	UAS-T6-S3-0-0 5FT	UAS-T6-S3-3-6FT	UAS-T6-S4-0-0 5FT	UAS-T6-S4-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999	11/18/1999
Mercury (mg/kg)	0 025	0 043	0 045	0.039	0 19	0 044	0 056
pH (su)	8 32	7 75	8 40	8 02	9 09	7 84	8 05

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T6-S5-0-0 5FT	UAS-T6-S5-3-6FT	UAS-T7-S1-0-0 5FT	UAS-T7-S1-3-6FT	UAS-T7-S2-0-0 5FT	UAS-T7-S2-3-6FT	UAS-T7-S3-0-0 5FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/18/1999	11/18/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Mercury (mg/kg)	0 077	0 051	0 14	0 29	0 052	0 022	0 077
pH (su)	7 87	8 93	7 41	7 69	7 80	8 05	7 74

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T7-S3-0-0 5FTFD	UAS-T7-S3-3-6FT	UAS-T7-S3-3-6FTFD	UAS-T7-S4-0-0 5FT	UAS-T7-S4-3-6FT	UAS-T7-S5-0-0 5FT	UAS-T7-S5-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Mercury (mg/kg)	0 084	0 021J	0 016J	0 045	0 015J	0 044	0 017J
pH (su)	7 83	8 14	8 29	7 87	8.28	8 10	8 41

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-4.8
Sauget Area 1
Soil Sample Analytical Results
Other Data

Sample Id	UAS-T7-S6-0-0 5FT	UAS-T7-S6-3-6FT	UAS-T7-S7-0-0 5FT	UAS-T7-S7-3-6FT
Description	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil	Undeveloped Soil
Sample Date	11/19/1999	11/19/1999	11/19/1999	11/19/1999
Mercury (mg/kg)	0 089	0 039	0 16	0.023
pH (su)	7 44	7 96	7 38	8 25

Table A-5.1
Sauget Area 1
Sediment Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	SED-CSB-0.2FTEB	SED-CSB-S1-0.2FT	SED-CSB-S1-0 2FTFD	SED-CSB-S2-0 2FT	SED-CSB-S3-0 2FT	SED-CSC-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/4/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	5.0U	26UJ	20UJ	20UJ	38UJ	27UJ
1,1,2,2-Tetrachloroethane	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
1,1,2-Trichloroethane	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
1,1-Dichloroethane	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
1,1-Dichloroethene	5 0U	24UJ	18UJ	18UJ	35UJ	25UJ
1,2-Dichloroethane	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
1,2-Dichloropropane	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
2-Butanone (MEK)	25U	130UJ	99UJ	98UJ	190UJ	31J
2-Hexanone	25U	130UJ	99UJ	21J	190UJ	130UJ
4-Methyl-2-pentanone (MIBK)	25U	130UJ	99UJ	98UJ	190UJ	130UJ
Acetone	50U	260UJ	200UJ	250UJ	380UJ	96J
Benzene	1 2U	26UJ	20UJ	20UJ	38UJ	27UJ
Bromodichloromethane	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
Bromoform	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
Bromomethane (Methyl bromide)	9 8U	52UJ	40UJ	39UJ	76UJ	54UJ
Carbon disulfide	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
Carbon tetrachloride	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
Chlorobenzene	5 0U	86J	17J	26J	20J	27UJ
Chloroethane	10U	52UJ	40UJ	39UJ	76UJ	54UJ
Chloroform	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
Chloromethane	10U	52UJ	40UJ	39UJ	76UJ	54UJ
Cis/Trans-1,2-Dichloroethene	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
Dibromochloromethane	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
Ethylbenzene	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
Methylene chloride (Dichloromethane)	0 90J	26UJ	20UJ	20UJ	38UJ	27UJ
Styrene	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
Tetrachloroethene	5.0U	26UJ	20UJ	20UJ	38UJ	27UJ
Toluene	5 0U	26UJ	20UJ	20J	38UJ	27UJ
Trichloroethene	2.7U	26UJ	20UJ	20UJ	38UJ	27UJ
Vinyl chloride	10U	52UJ	40UJ	39UJ	76UJ	54UJ
Xylenes, Total	5 0U	26UJ	20UJ	20UJ	38UJ	27UJ
cis-1,3-Dichloropropene	1 0U	21UJ	16UJ	16UJ	30UJ	22UJ
trans-1,3-Dichloropropene	5 0U	21UJ	16UJ	16UJ	30UJ	22UJ
Total VOC's	**0.9**	**86**	**17**	**67**	**20**	**127**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.1
Sauget Area 1
Sediment Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	SED-CSC-S2-0 2FT	SED-CSC-S3-0 2FT	SED-CSD-S1-0 2FT	SED-CSD-S2-0 2FT	SED-CSD-S3-0 2FT	SED-CSE-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/6/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
1,1,2,2-Tetrachloroethane	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
1,1,2-Trichloroethane	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
1,1-Dichloroethane	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
1,1-Dichloroethene	20UJ	27UJ	37UJ	38UJ	19UJ	27UJ
1,2-Dichloroethane	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
1,2-Dichloropropane	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
2-Butanone (MEK)	37J	28J	65J	56J	30J	150UJ
2-Hexanone	110UJ	140UJ	200UJ	200UJ	100UJ	150UJ
4-Methyl-2-pentanone (MIBK)	110UJ	140UJ	200UJ	200UJ	100UJ	150UJ
Acetone	130J	100J	190J	170J	84J	430UJ
Benzene	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Bromodichloromethane	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Bromoform	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Bromomethane (Methyl bromide)	45UJ	58UJ	80UJ	82UJ	41UJ	60UJ
Carbon disulfide	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Carbon tetrachloride	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Chlorobenzene	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Chloroethane	45UJ	58UJ	80UJ	82UJ	41UJ	60UJ
Chloroform	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Chloromethane	45UJ	58UJ	80UJ	82UJ	41UJ	60UJ
Cis/Trans-1,2-Dichloroethene	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Dibromochloromethane	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Ethylbenzene	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Methylene chloride (Dichloromethane)	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Styrene	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Tetrachloroethene	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Toluene	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Trichloroethene	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
Vinyl chloride	45UJ	58UJ	80UJ	82UJ	41UJ	60UJ
Xylenes, Total	22UJ	29UJ	40UJ	41UJ	20UJ	30UJ
cis-1,3-Dichloropropene	18UJ	23UJ	32UJ	33UJ	16UJ	24UJ
trans-1,3-Dichloropropene	18UJ	23UJ	32UJ	33UJ	16UJ	24UJ
Total VOC's	**167**	**128**	**255**	**ND**	**114**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.1
Sauget Area 1
Sediment Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	SED-CSE-S2-0 2FT	SED-CSE-S3-0 2FT	SED-CSF-S1-0 2FT	SED-CSF-S2-0 2FT	SED-CSF-S3-0 2FT	SED-M-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/5/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
1,1,2,2-Tetrachloroethane	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
1,1,2-Trichloroethane	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
1,1-Dichloroethane	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
1,1-Dichloroethene	17UJ	23UJ	16UJ	38UJ	24UJ	38UJ
1,2-Dichloroethane	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
1,2-Dichloropropane	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
2-Butanone (MEK)	94UJ	520J	85UJ	200UJ	130UJ	270UJ
2-Hexanone	94UJ	130UJ	85UJ	200UJ	130UJ	210UJ
4-Methyl-2-pentanone (MIBK)	94UJ	130UJ	85UJ	200UJ	130UJ	210UJ
Acetone	190UJ	1200J	200UJ	410UJ	260UJ	920UJ
Benzene	19UJ	25UJ	17UJ	41UJ	26UJ	17J
Bromodichloromethane	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Bromoform	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Bromomethane (Methyl bromide)	38UJ	50UJ	34UJ	82UJ	51UJ	83UJ
Carbon disulfide	19UJ	25UJ	17UJ	41UJ	26UJ	49J
Carbon tetrachloride	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Chlorobenzene	19UJ	25UJ	17UJ	41UJ	26UJ	100J
Chloroethane	38UJ	50UJ	34UJ	82UJ	51UJ	83UJ
Chloroform	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Chloromethane	38UJ	50UJ	34UJ	82UJ	51UJ	83UJ
Cis/Trans-1,2-Dichloroethene	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Dibromochloromethane	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Ethylbenzene	19UJ	25UJ	17UJ	41UJ	11J	42UJ
Methylene chloride (Dichloromethane)	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Styrene	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Tetrachloroethene	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Toluene	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Trichloroethene	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
Vinyl chloride	38UJ	50UJ	34UJ	82UJ	51UJ	83UJ
Xylenes, Total	19UJ	25UJ	17UJ	41UJ	26UJ	42UJ
cis-1 3-Dichloropropene	15UJ	20UJ	14UJ	33UJ	20UJ	33UJ
trans-1 3-Dichloropropene	15UJ	20UJ	14UJ	33UJ	20UJ	33UJ
Total VOC's	**ND**	**1720**	**ND**	**ND**	**11**	**166**

Notes U-not detected, J-estimated value, N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.1
Sauget Area 1
Sediment Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	SED-RA1-S1-0.2FT	SED-RA1-S2-0.2FT	SED-RA2-S1-0.2FT	SED-RA2-S1-0.2FTEB	SED-RA2-S1-0 2FTFD	SED-RA2-S2-0.2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	9.5U	19UJ	13UJ	5U	13UJ	11UJ
1,1,2,2-Tetrachloroethane	9.5U	19UJ	13UJ	5U	13UJ	11UJ
1,1,2-Trichloroethane	9.5U	19UJ	13UJ	5U	13UJ	11UJ
1,1-Dichloroethane	9.5U	19UJ	13UJ	5U	13UJ	11UJ
1,1-Dichloroethene	8.7U	17UJ	12UJ	5U	12UJ	10UJ
1,2-Dichloroethane	9.5U	19UJ	13UJ	5U	13UJ	11UJ
1,2-Dichloropropane	9.5U	19UJ	13UJ	5U	13UJ	11UJ
2-Butanone (MEK)	47U	40J	11J	25U	67UJ	14J
2-Hexanone	47U	94UJ	65UJ	25U	67UJ	56UJ
4-Methyl-2-pentanone (MIBK)	47U	94UJ	65UJ	25U	67UJ	56UJ
Acetone	95U	160J	38J	50U	130UJ	52J
Benzene	9.5U	19UJ	13UJ	1.2U	13UJ	11UJ
Bromodichloromethane	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Bromoform	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Bromomethane (Methyl bromide)	19U	38UJ	26UJ	9.8U	27UJ	22UJ
Carbon disulfide	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Carbon tetrachloride	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Chlorobenzene	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Chloroethane	19U	38UJ	26UJ	10U	27UJ	22UJ
Chloroform	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Chloromethane	19U	38UJ	26UJ	10U	27UJ	22UJ
Cis/Trans-1,2-Dichloroethene	9 5U	19UJ	13UJ	5U	13UJ	11UJ
Dibromochloromethane	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Ethylbenzene	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Methylene chloride (Dichloromethane)	9.5U	19UJ	13UJ	4.7U	13UJ	11UJ
Styrene	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Tetrachloroethene	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Toluene	9.5U	19UJ	13UJ	5U	13UJ	11UJ
Trichloroethene	9.5U	19UJ	13UJ	2.7U	13UJ	11UJ
Vinyl chloride	19U	38UJ	26UJ	10U	27UJ	22UJ
Xylenes, Total	9.5U	19UJ	13UJ	5U	13UJ	11UJ
cis-1,3-Dichloropropene	7.6U	15UJ	10UJ	1U	11UJ	9 1UJ
trans-1,3-Dichloropropene	7.6U	15UJ	10UJ	5U	11UJ	9 1UJ
Total VOC's	**ND**	**200**	**49**	**ND**	**ND**	**66**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.1
Sauget Area 1
Sediment Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	BSSED-PDC-DS-S-0-30IN	BSSED-PDC-US-N-0-20IN	BSSED-PDC-US-N-0-20INEB	BSSED-PDC-US-N-0-20INFD
Description	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment
Sample Date	2/7/2000	2/7/2000	2/4/2000	2/7/2000
Units	ug/kg dw	ug/kg dw	ug/l	ug/kg dw
1,1,1-Trichloroethane	11U	8 6U	5U	9 6U
1,1,2,2-Tetrachloroethane	11U	8 6U	5U	9 6U
1,1,2-Trichloroethane	11U	8 6U	5U	9 6U
1,1-Dichloroethane	11U	8 6U	5U	9 6U
1,1-Dichloroethene	10U	7 9U	5U	8 9U
1,2-Dichloroethane	11U	8 6U	5U	9 6U
1,2-Dichloropropane	11U	8 6U	5U	9 6U
2-Butanone (MEK)	57U	43U	25U	48U
2-Hexanone	57U	43U	25U	48U
4-Methyl-2-pentanone (MIBK)	57U	43U	25U	48U
Acetone	41J	86U	50U	47J
Benzene	11U	8.6U	1 2U	9 6U
Bromodichloromethane	11U	8 6U	5U	9 6U
Bromoform	11U	8 6U	5U	9 6U
Bromomethane (Methyl bromide)	23U	17U	9.8U	19U
Carbon disulfide	11U	8 6U	5U	9 6U
Carbon tetrachloride	11U	8.6U	5U	9 6U
Chlorobenzene	11U	8 6U	5U	9 6U
Chloroethane	23U	17U	10U	19U
Chloroform	11U	8 6U	5U	9 6U
Chloromethane	23U	17U	10U	19U
Cis/Trans-1,2-Dichloroethene	11U	8 6U	5U	9 6U
Dibromochloromethane	11U	8 6U	5U	9 6U
Ethylbenzene	11U	8 6U	5U	9 6U
Methylene chloride (Dichloromethane)	11U	8 6U	1 6J	9 6U
Styrene	11U	8 6U	5U	9 6U
Tetrachloroethene	11U	8 6U	5U	9 6U
Toluene	11U	8 6U	5U	6 4J
Trichloroethene	11U	8 6U	2 7U	9 6U
Vinyl chloride	23U	17U	10U	19U
Xylenes, Total	11U	8 6U	5U	9 6U
cis-1,3-Dichloropropene	9 2U	6 8U	1U	7 7U
trans-1,3-Dichloropropene	9 2U	6 8U	5U	7 7U
Total VOC's	**41**	**ND**	**1.6**	**53.4**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.1
Sauget Area 1
Sediment Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	BPL-ESED-S1-0 2FT	BPL-ESED-S1-0 2FTFD	BPL-ESED-S2-0 2FT	BPL-ESED-S3-0 2FT
Description	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/6/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,1,1-Trichloroethane	26UJ	21UJ	25UJ	29UJ
1,1,2,2-Tetrachloroethane	26UJ	21UJ	25UJ	29UJ
1,1,2-Trichloroethane	26UJ	21UJ	25UJ	29UJ
1,1-Dichloroethane	26UJ	21UJ	25UJ	29UJ
1,1-Dichloroethene	24UJ	19UJ	23UJ	27UJ
1,2-Dichloroethane	26UJ	21UJ	25UJ	29UJ
1,2-Dichloropropane	26UJ	21UJ	25UJ	29UJ
2-Butanone (MEK)	130UJ	100UJ	130UJ	140UJ
2-Hexanone	130UJ	100UJ	130UJ	140UJ
4-Methyl-2-pentanone (MIBK)	130UJ	100UJ	130UJ	140UJ
Acetone	260UJ	210UJ	250UJ	290UJ
Benzene	26UJ	21UJ	25UJ	29UJ
Bromodichloromethane	26UJ	21UJ	25UJ	29UJ
Bromoform	26UJ	21UJ	25UJ	29UJ
Bromomethane (Methyl bromide)	51UJ	42UJ	51UJ	58UJ
Carbon disulfide	26UJ	21UJ	25UJ	29UJ
Carbon tetrachloride	26UJ	21UJ	25UJ	29UJ
Chlorobenzene	26UJ	21UJ	25UJ	29UJ
Chloroethane	51UJ	42UJ	51UJ	58UJ
Chloroform	26UJ	21UJ	25UJ	29UJ
Chloromethane	51UJ	42UJ	51UJ	58UJ
Cis/Trans-1,2-Dichloroethene	26UJ	21UJ	25UJ	29UJ
Dibromochloromethane	26UJ	21UJ	25UJ	29UJ
Ethylbenzene	26UJ	21UJ	25UJ	29UJ
Methylene chloride (Dichloromethane)	26UJ	21UJ	25UJ	29UJ
Styrene	26UJ	21UJ	25UJ	29UJ
Tetrachloroethene	26UJ	21UJ	25UJ	29UJ
Toluene	26UJ	21UJ	25UJ	29UJ
Trichloroethene	26UJ	21UJ	25UJ	29UJ
Vinyl chloride	51UJ	42UJ	51UJ	58UJ
Xylenes, Total	26UJ	21UJ	25UJ	29UJ
cis-1,3-Dichloropropene	20UJ	17UJ	20UJ	23UJ
trans-1,3-Dichloropropene	20UJ	17UJ	20UJ	23UJ
Total VOC's	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SED-CSB-0 2FTEB	SED-CSB-S1-0 2FT	SED-CSB-S1-0 2FTFD	SED-CSB-S2-0 2FT	SED-CSB-S3-0 2FT	SED-CSC-S1-0 2FT
Description	*Ecological Sediment*	*Ecological Sediment*	*Ecological Sediment*	*Ecological Sediment*	*Ecological Sediment*	*Ecological Sediment*
Sample Date	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/4/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	10U	2600UJ	2200UJ	770J	3300UJ	3400UJ
1,2-Dichlorobenzene	10U	370J	2200UJ	2600UJ	3300UJ	3400UJ
1,3-Dichlorobenzene	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
1,4-Dichlorobenzene	10U	1000J	2200UJ	520J	3300UJ	3400UJ
2,2'-Oxybis(1-Chloropropane)	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
2,4,5-Trichlorophenol	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
2,4,6-Trichlorophenol	2 1U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
2,4-Dichlorophenol	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
2,4-Dinitrophenol	14U	13000UJ	11000UJ	13000UJ	16000UJ	17000UJ
2,4-Dinitrotoluene	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
2,6-Dinitrotoluene	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
2-Chloronaphthalene	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
2-Chlorophenol	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
2-Methylnaphthalene	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
2-Methylphenol (o-cresol)	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
2-Nitroaniline	50U	13000UJ	11000UJ	13000UJ	16000UJ	17000UJ
2-Nitrophenol	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
3&4-Methylphenol (m&p-cresol)	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
3,3'-Dichlorobenzidine	20U	5000UJ	4200UJ	5000UJ	6300UJ	6600UJ
3-Nitroaniline	50U	13000UJ	11000UJ	13000UJ	16000UJ	17000UJ
4,6-Dinitro-2-methylphenol	13U	13000UJ	11000UJ	13000UJ	16000UJ	17000UJ
4-Bromophenylphenyl ether	1 0U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
4-Chloro-3-methylphenol	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
4-Chloroaniline	20U	5000UJ	4200UJ	830J	6300UJ	6600UJ
4-Chlorophenylphenyl ether	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
4-Nitroaniline	50U	13000UJ	11000UJ	13000UJ	16000UJ	17000UJ
4-Nitrophenol	50U	13000UJ	11000UJ	13000UJ	16000UJ	17000UJ
Acenaphthene	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Acenaphthylene	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Anthracene	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Benzo(a)anthracene	10U	960J	600J	870J	680J	530J
Benzo(a)pyrene	10U	1500J	770J	1200J	730J	1800UJ
Benzo(b)fluoranthene	10U	1700J	1100J	2000J	1100J	680J
Benzo(g,h,i)perylene	10U	1600J	710J	1600J	790J	3400UJ
Benzo(k)fluoranthene	10U	1500J	920J	1600J	920J	3400UJ
Butylbenzylphthalate	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Carbazole	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Chrysene	10U	1600J	990J	1800J	1100J	640J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SED-CSB-0 2FTEB	SED-CSB-S1-0.2FT	SED-CSB-S1-0 2FTFD	SED-CSB-S2-0 2FT	SED-CSB-S3-0 2FT	SED-CSC-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/4/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	10U	1400UJ	1200UJ	1400UJ	1700UJ	1800UJ
Dibenzofuran	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Diethylphthalate	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Dimethylphthalate	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Di-n-butylphthalate	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Di-n-octylphthalate	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Fluoranthene	10U	2300J	1700J	1800J	1900J	780J
Fluorene	1 0U	2600UJ	2200UJ	2600UJ	3300UJ	3400U
Hexachlorobenzene	10U	1000UJ	900UJ	1000UJ	1300UJ	1400UJ
Hexachlorobutadiene	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Hexachlorocyclopentadiene	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Hexachloroethane	1 9U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Indeno(1,2,3-cd)pyrene	10U	1300J	2200UJ	1000J	3300UJ	3400UJ
Isophorone	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Naphthalene	10U	2600UJ	2200UJ	380J	3300UJ	3400UJ
Nitrobenzene	3 5U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
n-Nitrosodi-n-propylamine	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
N-Nitrosodiphenylamine	5 0U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Pentachlorophenol	5.0U	13000UJ	11000UJ	13000UJ	16000UJ	17000UJ
Phenanthrene	10U	2600UJ	810J	930J	910J	530J
Phenol	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
Pyrene	10U	3000J	1800J	2200J	2000J	940J
bis(2-Chloroethoxy)methane	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
bis(2-Chloroethyl)ether	10U	2600UJ	2200UJ	2600UJ	3300UJ	3400UJ
bis(2-Ethylhexyl)phthalate	1 8U	3000J	2200UJ	2600UJ	3300UJ	3400UJ
Total SVOC's	**ND**	**19830**	**9400**	**17500**	**10130**	**4100**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SED-CSC-S2-0 2FT	SED-CSC-S3-0 2FT	SED-CSD-S1-0 2FT	SED-CSD-S2-0 2FT	SED-CSD-S3-0 2FT	SED-CSE-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/6/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1 2,4-Trichlorobenzene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
1 2-Dichlorobenzene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
1 3-Dichlorobenzene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
1,4-Dichlorobenzene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2,2'-Oxybis(1-Chloropropane)	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2,4,5-Trichlorophenol	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2,4,6-Trichlorophenol	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2,4-Dichlorophenol	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2,4-Dinitrophenol	14000UJ	20000UJ	22000UJ	23000UJ	15000UJ	3000UJ
2,4-Dinitrotoluene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2,6-Dinitrotoluene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2-Chloronaphthalene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2-Chlorophenol	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2-Methylnaphthalene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2-Methylphenol (o-cresol)	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
2-Nitroaniline	14000UJ	20000UJ	22000UJ	23000UJ	15000UJ	3000UJ
2-Nitrophenol	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
3&4-Methylphenol (m&p-cresol)	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
3,3'-Dichlorobenzidine	5500UJ	7600UJ	8400UJ	9100UJ	5700UJ	1200UJ
3-Nitroaniline	14000UJ	20000UJ	22000UJ	23000UJ	15000UJ	3000UJ
4,6-Dinitro-2-methylphenol	14000UJ	20000UJ	22000UJ	23000UJ	15000UJ	3000UJ
4-Bromophenylphenyl ether	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
4-Chloro-3-methylphenol	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
4-Chloroaniline	5500UJ	7600UJ	8400UJ	9100UJ	5700UJ	1200UJ
4-Chlorophenylphenyl ether	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
4-Nitroaniline	14000UJ	20000UJ	22000UJ	23000UJ	15000UJ	3000UJ
4-Nitrophenol	14000UJ	20000UJ	22000UJ	23000UJ	15000UJ	3000UJ
Acenaphthene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Acenaphthylene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Anthracene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Benzo(a)anthracene	2800UJ	890J	4300UJ	4700UJ	420J	100J
Benzo(a)pyrene	1500UJ	1400J	2300UJ	2500UJ	560J	150J
Benzo(b)fluoranthene	600J	2000J	970J	780J	910J	170J
Benzo(g,h,i)perylene	2800UJ	1400J	4300UJ	4700UJ	660J	140J
Benzo(k)fluoranthene	390J	1200J	660J	520J	610J	600UJ
Butylbenzylphthalate	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Carbazole	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Chrysene	500J	1500J	790J	670J	740J	190J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SED-CSC-S2-0 2FT	SED-CSC-S3-0 2FT	SED-CSD-S1-0 2FT	SED-CSD-S2-0 2FT	SED-CSD-S3-0 2FT	SED-CSE-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/6/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	1500UJ	2100UJ	2300UJ	2500UJ	1600UJ	320UJ
Dibenzofuran	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Diethylphthalate	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Dimethylphthalate	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Di-n-butylphthalate	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Di-n-octylphthalate	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Fluoranthene	800J	2200J	1200J	1000J	1200J	320J
Fluorene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Hexachlorobenzene	1200UJ	1600UJ	1800UJ	1900UJ	1200UJ	250UJ
Hexachlorobutadiene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Hexachlorocyclopentadiene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Hexachloroethane	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Indeno(1,2,3-cd)pyrene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	130J
Isophorone	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Naphthalene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Nitrobenzene	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
n-Nitrosodi-n-propylamine	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
N-Nitrosodiphenylamine	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Pentachlorophenol	14000UJ	20000UJ	22000UJ	23000UJ	15000UJ	3000UJ
Phenanthrene	320J	840J	4300UJ	4700UJ	410J	130J
Phenol	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
Pyrene	660J	2000J	950J	970J	1100J	250J
bis(2-Chloroethoxy)methane	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
bis(2-Chloroethyl)ether	2800UJ	3900UJ	4300UJ	4700UJ	2900UJ	600UJ
bis(2-Ethylhexyl)phthalate	2800UJ	3900UJ	4300UJ	4700UJ	1200J	600UJ
Total SVOC's	**3270**	**13430**	**4570**	**3940**	**7810**	**1580**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SED-CSE-S2-0.2FT	SED-CSE-S3-0.2FT	SED-CSF-S1-0.2FT	SED-CSF-S2-0 2FT	SED-CSF-S3-0 2FT	SED-M-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/5/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
1,2-Dichlorobenzene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
1,3-Dichlorobenzene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
1,4-Dichlorobenzene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2,2'-Oxybis(1-Chloropropane)	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2,4,5-Trichlorophenol	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2,4,6-Trichlorophenol	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2,4-Dichlorophenol	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2,4-Dinitrophenol	2200UJ	2800UJ	2000UJ	4500UJ	3100UJ	25000UJ
2,4-Dinitrotoluene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2,6-Dinitrotoluene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2-Chloronaphthalene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2-Chlorophenol	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2-Methylnaphthalene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2-Methylphenol (o-cresol)	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
2-Nitroaniline	2200UJ	2800UJ	2000UJ	4500UJ	3100UJ	25000UJ
2-Nitrophenol	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
3&4-Methylphenol (m&p-cresol)	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
3,3'-Dichlorobenzidine	860UJ	1100UJ	770UJ	1700UJ	1200UJ	9700UJ
3-Nitroaniline	2200UJ	2800UJ	2000UJ	4500UJ	3100UJ	25000UJ
4,6-Dinitro-2-methylphenol	2200UJ	2800UJ	2000UJ	4500UJ	3100UJ	25000UJ
4-Bromophenylphenyl ether	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
4-Chloro-3-methylphenol	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
4-Chloroaniline	860UJ	1100UJ	770UJ	1700UJ	1200UJ	2400J
4-Chlorophenylphenyl ether	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
4-Nitroaniline	2200UJ	2800UJ	2000UJ	4500UJ	3100UJ	25000UJ
4-Nitrophenol	2200UJ	2800UJ	2000UJ	4500UJ	3100UJ	25000UJ
Acenaphthene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Acenaphthylene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Anthracene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Benzo(a)anthracene	120J	340J	400UJ	890UJ	620UJ	1300J
Benzo(a)pyrene	170J	420J	210UJ	470UJ	330UJ	1500J
Benzo(b)fluoranthene	260J	520J	400UJ	890UJ	620UJ	1500J
Benzo(g,h,i)perylene	170J	350J	400UJ	890UJ	620UJ	1300J
Benzo(k)fluoranthene	170J	600J	400UJ	890UJ	620UJ	1800J
Butylbenzylphthalate	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Carbazole	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Chrysene	220J	660J	74J	890UJ	620UJ	1600J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SED-CSE-S2-0 2FT	SED-CSE-S3-0 2FT	SED-CSF-S1-0 2FT	SED-CSF-S2-0 2FT	SED-CSF-S3-0 2FT	SED-M-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/5/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	240UJ	300UJ	210UJ	470UJ	330UJ	2600UJ
Dibenzofuran	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Diethylphthalate	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Dimethylphthalate	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Di-n-butylphthalate	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Di-n-octylphthalate	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Fluoranthene	390J	1200J	120J	890UJ	130J	3000J
Fluorene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Hexachlorobenzene	180UJ	230UJ	160UJ	370UJ	260UJ	2000UJ
Hexachlorobutadiene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Hexachlorocyclopentadiene	440UJ	560R	400UJ	890UJ	620UJ	5000UJ
Hexachloroethane	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Indeno(1 2 3-cd)pyrene	150J	430J	400UJ	890UJ	620UJ	5000UJ
Isophorone	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Naphthalene	440UJ	560UJ	400UJ	890UJ	620UJ	1100J
Nitrobenzene	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
n-Nitrosodi-n-propylamine	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
N-Nitrosodiphenylamine	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Pentachlorophenol	2200UJ	2800UJ	2000UJ	4500UJ	3100UJ	25000UJ
Phenanthrene	120J	510J	400UJ	890UJ	620UJ	1300J
Phenol	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
Pyrene	310J	1000J	400UJ	890UJ	620UJ	2200J
bis(2-Chloroethoxy)methane	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
bis(2-Chloroethyl)ether	440UJ	560UJ	400UJ	890UJ	620UJ	5000UJ
bis(2-Ethylhexyl)phthalate	260J	250J	400UJ	890UJ	620UJ	1400J
Total SVOC's	**2340**	**6280**	**194**	**ND**	**130**	**20400**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SED-RA1-S1-0.2FT	SED-RA1-S2-0.2FT	SED-RA2-S1-0.2FT	SED-RA2-S1-0 2FTEB	SED-RA2-S1-0 2FTFD	SED-RA2-S2-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/9/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	300U	450UJ	350UJ	10U	350UJ	370UJ
1,2-Dichlorobenzene	300U	450UJ	350UJ	10U	350UJ	370UJ
1,3-Dichlorobenzene	300U	450UJ	350UJ	10U	350UJ	370UJ
1,4-Dichlorobenzene	300U	450UJ	350UJ	10U	350UJ	370UJ
2,2'-Oxybis(1-Chloropropane)	300U	450UJ	350UJ	10U	350UJ	370UJ
2,4,5-Trichlorophenol	300U	450UJ	350UJ	10U	350UJ	370UJ
2,4,6-Trichlorophenol	300U	450UJ	350UJ	2.1U	350UJ	370UJ
2,4-Dichlorophenol	300U	450UJ	350UJ	10U	350UJ	370UJ
2,4-Dinitrophenol	1500U	2300UJ	1800UJ	14U	1800UJ	1800UJ
2,4-Dinitrotoluene	300U	450UJ	350UJ	10U	350UJ	370UJ
2,6-Dinitrotoluene	300U	450UJ	350UJ	10U	350UJ	370UJ
2-Chloronaphthalene	300U	450UJ	350UJ	10U	350UJ	370UJ
2-Chlorophenol	300U	450UJ	350UJ	10U	350UJ	370UJ
2-Methylnaphthalene	300U	450UJ	350UJ	10U	350UJ	370UJ
2-Methylphenol (o-cresol)	300U	450UJ	350UJ	10U	350UJ	370UJ
2-Nitroaniline	1500U	2300UJ	1800UJ	50U	1800UJ	1800UJ
2-Nitrophenol	300U	450UJ	350UJ	10U	350UJ	370UJ
3&4-Methylphenol (m&p-cresol)	300U	450UJ	350UJ	10U	350UJ	370UJ
3,3'-Dichlorobenzidine	590U	880UJ	680UJ	20U	690UJ	710UJ
3-Nitroaniline	1500U	2300UJ	1800UJ	50U	1800UJ	1800UJ
4,6-Dinitro-2-methylphenol	1500U	2300UJ	1800UJ	13U	1800UJ	1800UJ
4-Bromophenylphenyl ether	300U	450UJ	350UJ	1U	350UJ	370UJ
4-Chloro-3-methylphenol	300U	450UJ	350UJ	10U	350UJ	370UJ
4-Chloroaniline	590U	880UJ	680UJ	1 2J	690UJ	710UJ
4-Chlorophenylphenyl ether	300U	450UJ	350UJ	10U	350UJ	370UJ
4-Nitroaniline	1500U	2300UJ	1800UJ	50U	1800UJ	1800UJ
4-Nitrophenol	1500U	2300UJ	1800UJ	50U	1800UJ	1800UJ
Acenaphthene	300U	450UJ	350UJ	10U	350UJ	370UJ
Acenaphthylene	300U	450UJ	350UJ	10U	350UJ	370UJ
Anthracene	300U	450UJ	350UJ	10U	350UJ	370UJ
Benzo(a)anthracene	300U	450UJ	350UJ	10U	350UJ	370UJ
Benzo(a)pyrene	160U	240UJ	190UJ	10U	190UJ	190UJ
Benzo(b)fluoranthene	300U	450UJ	350UJ	10U	350UJ	370UJ
Benzo(g,h,i)perylene	300U	450UJ	350UJ	10U	350UJ	370UJ
Benzo(k)fluoranthene	300U	450UJ	350UJ	10U	350UJ	370UJ
Butylbenzylphthalate	300U	450UJ	350UJ	10U	350UJ	370UJ
Carbazole	300U	450UJ	350UJ	10U	350UJ	370UJ
Chrysene	300U	450UJ	350UJ	10U	350UJ	370UJ

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SED-RA1-S1-0 2FT	SED-RA1-S2-0 2FT	SED-RA2-S1-0 2FT	SED-RA2-S1-0 2FTEB	SED-RA2-S1-0 2FTFD	SED-RA2-S2-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/9/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	160U	240UJ	190UJ	10U	190UJ	190UJ
Dibenzofuran	300U	450UJ	350UJ	10U	350UJ	370UJ
Diethylphthalate	300U	450UJ	350UJ	10U	350UJ	370UJ
Dimethylphthalate	300U	450UJ	350UJ	10U	350UJ	370UJ
Di-n-butylphthalate	300U	450UJ	350UJ	10U	350UJ	370UJ
Di-n-octylphthalate	300U	450UJ	350UJ	10U	350UJ	370UJ
Fluoranthene	300U	450UJ	350UJ	10U	350UJ	370UJ
Fluorene	300U	450UJ	350UJ	1U	350UJ	370UJ
Hexachlorobenzene	120U	190UJ	140UJ	10U	140UJ	150UJ
Hexachlorobutadiene	300U	450UJ	350UJ	10U	350UJ	370UJ
Hexachlorocyclopentadiene	300U	450UJ	350UJ	10U	350UJ	370UJ
Hexachloroethane	300U	450UJ	350UJ	1 9U	350UJ	370UJ
Indeno(1,2,3-cd)pyrene	300U	450UJ	350UJ	10U	350UJ	370UJ
Isophorone	300U	450UJ	350UJ	10U	350UJ	370UJ
Naphthalene	300U	450UJ	350UJ	10U	350UJ	370UJ
Nitrobenzene	300U	450UJ	350UJ	3.5U	350UJ	370UJ
n-Nitrosodi-n-propylamine	300U	450UJ	350UJ	10U	350UJ	370UJ
N-Nitrosodiphenylamine	300U	450UJ	350UJ	5U	350UJ	370UJ
Pentachlorophenol	1500U	2300UJ	1800UJ	5U	1800UJ	1800UJ
Phenanthrene	300U	450UJ	350UJ	10U	350UJ	370UJ
Phenol	300U	450UJ	350UJ	10U	350UJ	370UJ
Pyrene	300U	450UJ	350UJ	10U	350UJ	370UJ
bis(2-Chloroethoxy)methane	300U	450UJ	350UJ	10U	350UJ	370UJ
bis(2-Chloroethyl)ether	300U	450UJ	350UJ	10U	350UJ	370UJ
bis(2-Ethylhexyl)phthalate	300U	450UJ	350UJ	1.8U	350UJ	370UJ
Total SVOC's	**ND**	**ND**	**ND**	**1.2**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	BSSED-PDC-DS-S-0-30IN	BSSED-PDC-US-N-0-20IN	BSSED-PDC-US-N-0-20INEB	BSSED-PDC-US-N-0-20INFD	BPL-ESED-S1-0 2FT
Description	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment	Borrow Pit Lake Sediment
Sample Date	2/7/2000	2/7/2000	2/4/2000	2/7/2000	10/6/1999
Units	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	250UJ	230U	10U	230U	470UJ
1,2-Dichlorobenzene	250U	230U	10U	230U	470UJ
1,3-Dichlorobenzene	250UJ	230U	10U	230U	470UJ
1,4-Dichlorobenzene	250UJ	230U	10U	230U	470UJ
2,2'-Oxybis(1-Chloropropane)	250UJ	230U	10U	230U	470UJ
2,4,5-Trichlorophenol	250UJ	230U	10U	230U	470UJ
2,4,6-Trichlorophenol	250UJ	230U	2 1U	230U	470UJ
2,4-Dichlorophenol	250U	230U	10U	230U	470UJ
2,4-Dinitrophenol	1200U	1100U	14U	1200U	2300UJ
2,4-Dinitrotoluene	250UJ	230U	10U	230U	470UJ
2,6-Dinitrotoluene	250U	230U	10U	230U	470UJ
2-Chloronaphthalene	250U	230U	10U	230U	470UJ
2-Chlorophenol	250U	230U	10U	230U	470UJ
2-Methylnaphthalene	250U	230U	10U	230U	470UJ
2-Methylphenol (o-cresol)	250U	230U	10U	230U	470UJ
2-Nitroaniline	1200U	1100U	50U	1200U	2300UJ
2-Nitrophenol	250U	230U	10U	230U	470UJ
3&4-Methylphenol (m&p-cresol)	250U	230U	10U	230U	470UJ
3,3'-Dichlorobenzidine	480U	450U	20U	450U	910UJ
3-Nitroaniline	1200UJ	1100U	50U	1200U	2300UJ
4,6-Dinitro-2-methylphenol	1200U	1100U	13U	1200U	2300UJ
4-Bromophenylphenyl ether	250UJ	230U	1U	230U	470UJ
4-Chloro-3-methylphenol	250UJ	230U	10U	230U	470UJ
4-Chloroaniline	480U	450U	20U	450U	910UJ
4-Chlorophenylphenyl ether	250U	230U	10U	230U	470UJ
4-Nitroaniline	1200U	1100U	50U	1200U	2300UJ
4-Nitrophenol	1200U	1100U	50U	1200U	2300UJ
Acenaphthene	250U	230U	10U	230U	470UJ
Acenaphthylene	250U	230U	10U	230U	470UJ
Anthracene	250UJ	230U	10U	230U	470UJ
Benzo(a)anthracene	250U	230U	10U	230U	470UJ
Benzo(a)pyrene	130U	120U	10U	120U	250UJ
Benzo(b)fluoranthene	250U	230U	10U	230U	470UJ
Benzo(g,h,i)perylene	250U	230U	0 76J	230U	470UJ
Benzo(k)fluoranthene	250U	230U	10U	230U	470UJ
Butylbenzylphthalate	250UJ	230U	10U	230U	470UJ
Carbazole	250U	230U	3 4U	230U	470UJ
Chrysene	250UJ	230U	10U	230U	470UJ

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	BSSED-PDC-DS-S-0-30IN	BSSED-PDC-US-N-0-20IN	BSSED-PDC-US-N-0-20INEB	BSSED-PDC-US-N-0-20INFD	BPL-ESED-S1-0 2FT
Description	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment	Borrow Pit Lake Sediment
Sample Date	2/7/2000	2/7/2000	2/4/2000	2/7/2000	10/6/1999
Units	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	130UJ	120U	10U	120U	250UJ
Dibenzofuran	250U	230U	10U	230U	470UJ
Diethylphthalate	250U	230U	10U	230U	470UJ
Dimethylphthalate	250U	230U	10U	230U	470UJ
Di-n-butylphthalate	250U	230U	10U	230U	470UJ
Di-n-octylphthalate	250U	230U	10U	230U	470UJ
Fluoranthene	250U	230U	10U	230U	470UJ
Fluorene	250U	230U	1U	230U	470UJ
Hexachlorobenzene	100U	95U	10U	96U	190UJ
Hexachlorobutadiene	250U	230U	10U	230U	470UJ
Hexachlorocyclopentadiene	250U	230U	10U	230U	470UJ
Hexachloroethane	250UJ	230U	1.9U	230U	470UJ
Indeno(1,2,3-cd)pyrene	250UJ	230U	0 61J	230U	470UJ
Isophorone	250U	230U	10U	230U	470UJ
Naphthalene	250UJ	230U	10U	230U	470UJ
Nitrobenzene	250UJ	230U	3 5U	230U	470UJ
n-Nitrosodi-n-propylamine	250UJ	230U	10U	230U	470UJ
N-Nitrosodiphenylamine	250U	230U	5U	230U	470UJ
Pentachlorophenol	1200U	1100U	5U	1200U	2300UJ
Phenanthrene	250UJ	230U	10U	230U	470UJ
Phenol	250UJ	230U	10U	230U	470UJ
Pyrene	250U	230U	10U	230U	470UJ
bis(2-Chloroethoxy)methane	250U	230U	10U	230U	470UJ
bis(2-Chloroethyl)ether	250U	230U	10U	230U	470UJ
bis(2-Ethylhexyl)phthalate	250UJ	230U	1 8U	230U	470UJ
Total SVOC's	**ND**	**ND**	**1.37**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	BPL-ESED-S1-0 2FTFD	BPL-ESED-S2-0 2FT	BPL-ESED-S3-0 2FT
Description	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment
Sample Date	10/6/1999	10/7/1999	10/6/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw
1,2,4-Trichlorobenzene	470UJ	500UJ	470UJ
1,2-Dichlorobenzene	470UJ	500UJ	470UJ
1,3-Dichlorobenzene	470UJ	500UJ	470UJ
1,4-Dichlorobenzene	470UJ	500UJ	470UJ
2,2'-Oxybis(1-Chloropropane)	470UJ	500UJ	470UJ
2,4,5-Trichlorophenol	470UJ	500UJ	470UJ
2,4,6-Trichlorophenol	470UJ	500UJ	470UJ
2,4-Dichlorophenol	470UJ	500UJ	470UJ
2,4-Dinitrophenol	2400UJ	2500UJ	2300UJ
2,4-Dinitrotoluene	470UJ	500UJ	470UJ
2,6-Dinitrotoluene	470UJ	500UJ	470UJ
2-Chloronaphthalene	470UJ	500UJ	470UJ
2-Chlorophenol	470UJ	500UJ	470UJ
2-Methylnaphthalene	470UJ	500UJ	470UJ
2-Methylphenol (o-cresol)	470UJ	500UJ	470UJ
2-Nitroaniline	2400UJ	2500UJ	2300UJ
2-Nitrophenol	470UJ	500UJ	470UJ
3&4-Methylphenol (m&p-cresol)	470UJ	500UJ	470UJ
3,3'-Dichlorobenzidine	910UJ	960UJ	910UJ
3-Nitroaniline	2400UJ	2500UJ	2300UJ
4,6-Dinitro-2-methylphenol	2400UJ	2500UJ	2300UJ
4-Bromophenylphenyl ether	470UJ	500UJ	470UJ
4-Chloro-3-methylphenol	470UJ	500UJ	470UJ
4-Chloroaniline	910UJ	960UJ	910UJ
4-Chlorophenylphenyl ether	470UJ	500UJ	470UJ
4-Nitroaniline	2400UJ	2500UJ	2300UJ
4-Nitrophenol	2400UJ	2500UJ	2300UJ
Acenaphthene	470UJ	500UJ	470UJ
Acenaphthylene	470UJ	500UJ	470UJ
Anthracene	470UJ	500UJ	470UJ
Benzo(a)anthracene	470UJ	500UJ	470UJ
Benzo(a)pyrene	250UJ	260UJ	250UJ
Benzo(b)fluoranthene	470UJ	500UJ	470UJ
Benzo(g,h,i)perylene	470UJ	500UJ	470UJ
Benzo(k)fluoranthene	470UJ	500UJ	470UJ
Butylbenzylphthalate	470UJ	500UJ	470UJ
Carbazole	470UJ	500UJ	470UJ
Chrysene	470UJ	500UJ	470UJ

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.2
Sauget Area 1
Sediment Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	BPL-ESED-S1-0 2FTFD	BPL-ESED-S2-0 2FT	BPL-ESED-S3-0 2FT
Description	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment
Sample Date	10/6/1999	10/7/1999	10/6/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw
Dibenzo(a,h)anthracene	250UJ	260UJ	250UJ
Dibenzofuran	470UJ	500UJ	470UJ
Diethylphthalate	470UJ	500UJ	470UJ
Dimethylphthalate	470UJ	500UJ	470UJ
Di-n-butylphthalate	470UJ	500UJ	470UJ
Di-n-octylphthalate	470UJ	500UJ	470UJ
Fluoranthene	470UJ	500UJ	470UJ
Fluorene	470UJ	500UJ	470UJ
Hexachlorobenzene	190UJ	200UJ	190UJ
Hexachlorobutadiene	470UJ	500UJ	470UJ
Hexachlorocyclopentadiene	470UJ	500UJ	470UJ
Hexachloroethane	470UJ	500UJ	470UJ
Indeno(1,2,3-cd)pyrene	470UJ	500UJ	470UJ
Isophorone	470UJ	500UJ	470UJ
Naphthalene	470UJ	500UJ	470UJ
Nitrobenzene	470UJ	500UJ	470UJ
n-Nitrosodi-n-propylamine	470UJ	500UJ	470UJ
N-Nitrosodiphenylamine	470UJ	500UJ	470UJ
Pentachlorophenol	2400UJ	2500UJ	2300UJ
Phenanthrene	470UJ	500UJ	470UJ
Phenol	470UJ	500UJ	470UJ
Pyrene	470UJ	500UJ	470UJ
bis(2-Chloroethoxy)methane	470UJ	500UJ	470UJ
bis(2-Chloroethyl)ether	470UJ	500UJ	470UJ
bis(2-Ethylhexyl)phthalate	470UJ	500UJ	470UJ
Total SVOC's	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	BPL-ESED-S1-0 2FT	BPL-ESED-S1-0 2FTFD	BPL-ESED-S2-0 2FT	BPL-ESED-S3-0 2FT	BSSED-PDC-DS-S-0-30IN	BSSED-PDC-US-N-0-20IN
Description	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Dead Creek Sediment	Dead Creek Sediment
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/6/1999	2/7/2000	2/7/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	230UJ	46UJ	49UJ	46UJ	24U	23U
Dichlorobiphenyl	46UJ	9 2UJ	9 7UJ	9 2UJ	4 8UJ	4 5U
Heptachlorobiphenyl	140UJ	28UJ	29UJ	28UJ	15UJ	14U
Hexachlorobiphenyl	95UJ	19UJ	20UJ	19UJ	9 8UJ	9 2U
Monochlorobiphenyl	46UJ	9 2UJ	9 7UJ	9 2UJ	4 8UJ	4 5U
Nonachlorobiphenyl	230UJ	46UJ	49UJ	46UJ	24UJ	23U
Octachlorobiphenyl	140UJ	28UJ	29UJ	28UJ	15UJ	14U
Pentachlorobiphenyl	95UJ	19UJ	20UJ	19UJ	9 8UJ	9 2U
Tetrachlorobiphenyl	95UJ	19UJ	20UJ	19UJ	9 8UJ	9 2U
Trichlorobiphenyl	46UJ	9 2UJ	9 7UJ	9 2UJ	4 8UJ	4 5U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	BSSED-PDC-US-N-0-20INEB	BSSED-PDC-US-N-0-20INFD	SED-CSB-0.2FTEB	SED-CSB-S1-0 2FT	SED-CSB-S1-0 2FTFD	SED-CSB-S2-0 2FT
Description	Dead Creek Sediment	Dead Creek Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	2/4/2000	2/7/2000	10/5/1999	10/5/1999	10/5/1999	10/5/1999
Units	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	0.5U	23U	0.50U	2500UJ	2300UJ	3400J
Dichlorobiphenyl	0.1U	4.6U	0 10U	500UJ	450UJ	640J
Heptachlorobiphenyl	0.3U	14U	0 30U	980J	1400UJ	5300J
Hexachlorobiphenyl	0.2U	9 3U	0 20U	5200J	2600J	21000J
Monochlorobiphenyl	0 1U	4 6U	0 10U	500UJ	450UJ	500UJ
Nonachlorobiphenyl	0 5U	23U	0 50U	2500UJ	2300UJ	2500UJ
Octachlorobiphenyl	0 3U	14U	0.30U	1500UJ	1400UJ	1800J
Pentachlorobiphenyl	0 2U	9 3U	0 20U	34000J	7500J	66000J
Tetrachlorobiphenyl	0.2U	9 3U	0 20U	88000J	15000J	98000J
Trichlorobiphenyl	0 1U	4.6U	0 10U	34000J	4800J	30000J
Total PCB's	**ND**	**ND**	**ND**	**162180**	**29900**	**226140**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	SED-CSB-S3-0 2FT	SED-CSC-S1-0 2FT	SED-CSC-S2-0.2FT	SED-CSC-S3-0 2FT	SED-CSD-S1-0 2FT	SED-CSD-S2-0 2FT	SED-CSD-S3-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	2300J	290UJ	2900UJ	3900UJ	170J	230J	300UJ
Dichlorobiphenyl	500J	57UJ	570UJ	770UJ	87UJ	96UJ	59UJ
Heptachlorobiphenyl	1300J	170UJ	1700UJ	2300UJ	260UJ	290UJ	180UJ
Hexachlorobiphenyl	7600J	160J	720J	2000J	97J	400J	250J
Monochlorobiphenyl	670UJ	57UJ	570UJ	770UJ	87UJ	96UJ	59UJ
Nonachlorobiphenyl	3400UJ	290UJ	2900UJ	3900UJ	440UJ	480UJ	300UJ
Octachlorobiphenyl	2000UJ	170UJ	1700UJ	2300UJ	260UJ	290UJ	180UJ
Pentachlorobiphenyl	19000J	110UJ	2200J	2600J	430J	520J	480J
Tetrachlorobiphenyl	26000J	110UJ	1200UJ	1600UJ	180UJ	190UJ	120UJ
Trichlorobiphenyl	11000J	57UJ	570UJ	770UJ	87UJ	96UJ	59UJ
Total PCB's	**67700**	**160**	**2920**	**4600**	**697**	**1150**	**730**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	SED-CSE-S1-0 2FT	SED-CSE-S2-0 2FT	SED-CSE-S3-0 2FT	SED-CSF-S1-0 2FT	SED-CSF-S2-0 2FT	SED-CSF-S3-0 2FT	SED-M-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/6/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/5/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	140J	440UJ	56UJ	39UJ	88UJ	310UJ	5100UJ
Dichlorobiphenyl	12UJ	87UJ	11UJ	7.7UJ	17UJ	60UJ	1000UJ
Heptachlorobiphenyl	49J	260UJ	33UJ	23UJ	53UJ	180UJ	3000UJ
Hexachlorobiphenyl	130J	170UJ	22UJ	22J	17J	120UJ	3000J
Monochlorobiphenyl	12UJ	87UJ	11UJ	7 7UJ	17UJ	60UJ	1000UJ
Nonachlorobiphenyl	60UJ	440UJ	56UJ	39UJ	88UJ	310UJ	5100UJ
Octachlorobiphenyl	36UJ	260UJ	33UJ	23UJ	53UJ	180UJ	3000UJ
Pentachlorobiphenyl	650J	170UJ	22UJ	61J	66J	120UJ	4800J
Tetrachlorobiphenyl	60J	170UJ	22UJ	16UJ	35UJ	120UJ	3100J
Trichlorobiphenyl	9 2J	87UJ	11UJ	7 7UJ	17UJ	60UJ	1300J
Total PCB's	**1038.2**	**ND**	**ND**	**83**	**83**	**ND**	**12200**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	SED-RA1-S1-0 2FT	SED-RA1-S2-0 2FT	SED-RA2-S1-0 2FT	SED-RA2-S1-0 2FTEB	SED-RA2-S1-0 2FTFD	SED-RA2-S2-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/9/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
Decachlorobiphenyl	30U	45UJ	35UJ	0 5U	35UJ	36UJ
Dichlorobiphenyl	5 9U	8 9UJ	6 9UJ	0 1U	6 9UJ	7 1UJ
Heptachlorobiphenyl	18U	27UJ	21UJ	0 3U	21UJ	22UJ
Hexachlorobiphenyl	12U	18UJ	14UJ	0 2U	14UJ	14UJ
Monochlorobiphenyl	5 9U	8 9UJ	6 9UJ	0 1U	6 9UJ	7 1UJ
Nonachlorobiphenyl	30U	45UJ	35UJ	0 5U	35UJ	36UJ
Octachlorobiphenyl	18U	27UJ	21UJ	0 3U	21UJ	22UJ
Pentachlorobiphenyl	12U	18UJ	14UJ	0 2U	14UJ	14UJ
Tetrachlorobiphenyl	12U	18UJ	14UJ	0 2U	14UJ	14UJ
Trichlorobiphenyl	5 9U	8 9UJ	6 9UJ	0 1U	6 9UJ	7 1UJ
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value, N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-BPL-S1-0-10IN	FASED-BPL-S1-0-10INEB	FASED-BPL-S2-0-10IN	FASED-BPL-S3-0-8IN	FASED-BPL-S4-0-10IN
Description	Industry Specific - Borrow Pit Lake Sediment	Industry Specific - Borrow Pit Lake Sediment	Industry Specific - Borrow Pit Lake Sediment	Industry Specific - Borrow Pit Lake Sediment	Industry Specific - Borrow Pit Lake Sediment
Sample Date	2/3/2000	2/3/2000	2/3/2000	2/3/2000	2/3/2000
Units	ug/kg dw	ug/l	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	20U	0.5U	22U	24U	22U
Dichlorobiphenyl	3 9U	0.1U	4.3U	4 8U	4 4U
Heptachlorobiphenyl	12U	0.3U	13U	15U	13U
Hexachlorobiphenyl	7 9U	0.2U	8 8U	9.8U	8 9U
Monochlorobiphenyl	3 9U	0 1U	4 3U	4 8U	4 4U
Nonachlorobiphenyl	20U	0 5U	22U	24U	22U
Octachlorobiphenyl	12U	0 3U	13U	15U	13U
Pentachlorobiphenyl	7 9U	0 2U	8.8U	9 8U	8 9U
Tetrachlorobiphenyl	7 9U	0 2U	8 8U	9.8U	8 9U
Trichlorobiphenyl	3.9U	0.1U	4 3U	4 8U	4 4U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-BPL-S5-0-9IN	FASED-BPL-S6-0-11IN	FASED-BPL-S6-0-11INFD	FASED-BPL-S7-0-9IN	FASED-BPL-S8-0-9IN
	Industry Specific - Borrow	Industry Specific - Borrow	Industry Specific - Borrow	Industry Specific - Borrow	Industry Specific - Borrow
Description	Pit Lake Sediment	Pit Lake Sediment	Pit Lake Sediment	Pit Lake Sediment	Pit Lake Sediment
Sample Date	2/3/2000	2/3/2000	2/3/2000	2/3/2000	2/3/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	22U	22U	24U	22U	24U
Dichlorobiphenyl	4 3U	4.3U	4 8U	4 4U	4 8U
Heptachlorobiphenyl	13U	13U	14U	13U	14U
Hexachlorobiphenyl	8 7U	8 8U	9 7U	8 9U	9 7U
Monochlorobiphenyl	4.3U	4 3U	4 8U	4 4U	4 8U
Nonachlorobiphenyl	22U	22U	24U	22U	24U
Octachlorobiphenyl	13U	13U	14U	13U	14U
Pentachlorobiphenyl	8 7U	8.8U	9.7U	8.9U	9 7U
Tetrachlorobiphenyl	8.7U	8 8U	9.7U	8 9U	9 7U
Trichlorobiphenyl	4 3U	4.3U	4.8U	4.4U	4 8U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSB-S10W-0-9IN	FASED-CSB-S10W-0-9INFD	FASED-CSB-S1W-0-25IN	FASED-CSB-S2-0-23IN	FASED-CSB-S3-0-26IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	2/2/2000	2/2/2000	2/1/2000	2/1/2000	2/1/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	100U	70J	730	2300U	140J
Dichlorobiphenyl	20U	19U	100U	460U	72
Heptachlorobiphenyl	700	860	2100	1400U	96U
Hexachlorobiphenyl	1200	1500	6600	3400	400
Monochlorobiphenyl	20U	19U	100U	460U	32U
Nonachlorobiphenyl	100U	72J	510U	2300U	160U
Octachlorobiphenyl	190	360	380	1400U	96U
Pentachlorobiphenyl	740	800	7300	3800	290
Tetrachlorobiphenyl	320	680	5400	5700	650
Trichlorobiphenyl	20	35	840	1400	330
Total PCB's	**3170**	**4377**	**23350**	**14300**	**1882**

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 8270 Polychlorinated Biphenyl Data

Sample Id	FASED-CSB-S4W-0-23IN	FASED-CSB-S5-0-22IN	FASED-CSB-S6-0-20IN	FASED-CSB-S7-0-18IN	FASED-CSB-S8E-0-22IN	FASED-CSB-S9W-0-9IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	2/1/2000	2/1/2000	2/2/2000	2/2/2000	2/2/2000	2/2/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	280J	620	250J	18J	150	490U
Dichlorobiphenyl	66U	210	180	9 1	27U	97U
Heptachlorobiphenyl	170J	500	160J	15U	57J	490
Hexachlorobiphenyl	1300	2800	1100	22	360	1800
Monochlorobiphenyl	66U	63U	62U	5	27U	97U
Nonachlorobiphenyl	330U	320U	310U	25U	140U	490U
Octachlorobiphenyl	200U	190U	190U	15U	82U	100J
Pentachlorobiphenyl	3300	4800	3500	60	700	1900
Tetrachlorobiphenyl	7500	3400	14000	240	750	16000
Trichlorobiphenyl	2300	1200	5100	68	55	2200
Total PCB's	**14850**	**13530**	**24290**	**422.1**	**2072**	**22490**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSC-S10-0-28IN	FASED-CSC-S1-0-13IN	FASED-CSC-S11-0-25IN	FASED-CSC-S11-0-25INFD	FASED-CSC-S12E-0-18IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	2/1/2000	1/31/2000	2/1/2000	2/1/2000	2/1/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	320J	500J	1800	4300U	3600
Dichlorobiphenyl	130U	230U	260	850U	66U
Heptachlorobiphenyl	250J	690U	1000	2600U	4300
Hexachlorobiphenyl	2400	780	6300	1600J	14000
Monochlorobiphenyl	130U	230U	260	850U	66U
Nonachlorobiphenyl	680J	1200U	1000U	4300U	900
Octachlorobiphenyl	410U	690U	600U	2600U	1000
Pentachlorobiphenyl	3600	1100	9300	2700	13000
Tetrachlorobiphenyl	2800	460U	7300	1700U	11000
Trichlorobiphenyl	960	230U	1000	850U	450
Total PCB's	**11010**	**2380**	**27220**	**4300**	**48250**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSC-S2-0-28IN	FASED-CSC-S2-0-28INFD	FASED-CSC-S3-0-20IN	FASED-CSC-S4-0-22IN	FASED-CSC-S5W-0-26IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	540J	1900	1400J	260	1200
Dichlorobiphenyl	140U	140J	330U	38U	130U
Heptachlorobiphenyl	420U	1600	1000U	120	630
Hexachlorobiphenyl	970	6500	2800	1000	4100
Monochlorobiphenyl	140U	150U	330U	38U	130U
Nonachlorobiphenyl	700U	350J	1700U	190	680U
Octachlorobiphenyl	420U	320J	1000U	110U	410U
Pentachlorobiphenyl	1700	9000	3800	2100	3900
Tetrachlorobiphenyl	730	6400	1900	950	3500
Trichlorobiphenyl	190	1800	570	110	300
Total PCB's	**4130**	**28010**	**10470**	**4730**	**13630**

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSC-S6W-0-26IN	FASED-CSC-S7-0-29IN	FASED-CSC-S8-0-16IN	FASED-CSC-S9-0-27IN	FASED-CSC-S9-0-27INFD
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/31/2000	1/31/2000	2/1/2000	2/1/2000	2/1/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	1100	410J	490J	2000J	470
Dichlorobiphenyl	50U	140	180U	850J	67
Heptachlorobiphenyl	700	360U	540U	2900U	340
Hexachlorobiphenyl	3500	480	2000	7800	2600
Monochlorobiphenyl	50U	120U	180U	940U	60U
Nonachlorobiphenyl	140J	600U	900U	4800U	120J
Octachlorobiphenyl	190	360U	540U	2900U	61J
Pentachlorobiphenyl	4600	240U	2800	9100	4000
Tetrachlorobiphenyl	2500	240U	1500	4700	2800
Trichlorobiphenyl	80	240	420	2300	380
Total PCB's	**12810**	**1270**	**7210**	**26750**	**10838**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSD-S1W-0-24IN	FASED-CSD-S2-0-15IN	FASED-CSD-S3-0-21IN	FASED-CSD-S4-0-23IN	FASED-CSD-S5-0-10IN	FASED-CSD-S6E-0-13IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	2/2/2000	1/27/2000	1/27/2000	1/27/2000	1/31/2000	1/28/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	140U	720	370	780	8 7J	12J
Dichlorobiphenyl	27U	66	53U	57J	4 5U	5 5U
Heptachlorobiphenyl	82U	210	270	480	14U	17U
Hexachlorobiphenyl	96	720	2200	1800	18	39
Monochlorobiphenyl	27U	49U	53U	61U	4 5U	5 5U
Nonachlorobiphenyl	140U	670	260J	520	23U	28U
Octachlorobiphenyl	82U	57J	160U	69J	14U	17U
Pentachlorobiphenyl	110	440	3000	4300	9 6	66
Tetrachlorobiphenyl	55U	610	1800	2200	9 2U	11U
Trichlorobiphenyl	27U	470	190	410	4 5U	5 5U
Total PCB's	**206**	**3963**	**8090**	**10616**	**36.3**	**117**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSD-S7-0-33IN	FASED-CSD-S8-0-29IN	FASED-CSD-S9W-0-23IN	FASED-CSE-S1-0-12IN	FASED-CSE-S10W-0-27IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/31/2000	1/31/2000	1/31/2000	1/19/2000	1/24/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	1800	540J	320	270U	360U
Dichlorobiphenyl	280U	120U	52U	54U	72U
Heptachlorobiphenyl	860U	370U	160U	160U	220U
Hexachlorobiphenyl	1400	140J	470	110U	150U
Monochlorobiphenyl	280U	120U	52U	54U	72U
Nonachlorobiphenyl	720J	620U	110J	270U	360U
Octachlorobiphenyl	860U	370U	160U	160U	220U
Pentachlorobiphenyl	490J	250U	450	110U	150U
Tetrachlorobiphenyl	580U	250U	70J	110U	150U
Trichlorobiphenyl	1400	250	61	54U	72U
Total PCB's	**5810**	**930**	**1481**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate, ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSE-S11W-0-22IN	FASED-CSE-S12-0-21IN	FASED-CSE-S13E-0-21IN	FASED-CSE-S14W-0-31IN	FASED-CSE S15-0-19IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/24/2000	1/24/2000	1/24/2000	1/24/2000	1/25/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	150U	1400U	120U	2000U	1700U
Dichlorobiphenyl	30U	280U	24U	400U	330U
Heptachlorobiphenyl	92U	860U	100	1200U	1000U
Hexachlorobiphenyl	62U	580U	300	820U	670U
Monochlorobiphenyl	30U	280U	24U	400U	330U
Nonachlorobiphenyl	150U	1400U	120U	2000U	1700U
Octachlorobiphenyl	92U	860U	71U	1200U	1000U
Pentachlorobiphenyl	62U	580U	50U	820U	670U
Tetrachlorobiphenyl	62U	580U	50U	820U	670U
Trichlorobiphenyl	30U	280U	24U	400U	330U
Total PCB's	**ND**	**ND**	**400**	**ND**	**ND**

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSE-S16E-0-21IN	FASED-CSE-S17-0-28IN	FASED-CSE-S18-0-25IN	FASED-CSE-S19E-0-28IN	FASED-CSE-S19E-0-28INFD
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	660	270U	1600U	26U	14J
Dichlorobiphenyl	66U	53U	320U	5 2U	5 1U
Heptachlorobiphenyl	160J	160U	980U	16U	15U
Hexachlorobiphenyl	2000	110U	660U	10U	17
Monochlorobiphenyl	66U	53U	320U	5 2U	5 1U
Nonachlorobiphenyl	28J	140J	1600U	26U	14J
Octachlorobiphenyl	200U	160U	980U	16U	15U
Pentachlorobiphenyl	4300	48J	660U	10U	26
Tetrachlorobiphenyl	1500	110U	660U	10U	10U
Trichlorobiphenyl	110	53U	320U	5 2U	5 1U
Total PCB's	**8758**	**188**	**ND**	**ND**	**71**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSE-S20E-0-33IN	FASED-CSE-S21-0-28IN	FASED-CSE-S22E-0-26IN	FASED-CSE-S23-0-23IN	FASED-CSE-S24W-0-27IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/25/2000	1/26/2000	1/26/2000	1/26/2000	1/26/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	24U	57	20J	3600U	58
Dichlorobiphenyl	4 8U	5 9U	4 9U	720U	5 1J
Heptachlorobiphenyl	15U	28	15U	2200U	73
Hexachlorobiphenyl	9 8U	220	58	1400U	340
Monochlorobiphenyl	4 8U	5 9U	4 9U	720U	5 4U
Nonachlorobiphenyl	24U	33	25U	3600U	26J
Octachlorobiphenyl	15U	18U	15U	2200U	20
Pentachlorobiphenyl	9 8U	360	92	1400U	730
Tetrachlorobiphenyl	9 8U	96	15	1400U	400
Trichlorobiphenyl	4 8U	6 3	4 9U	720U	50
Total PCB's	**ND**	**800.3**	**185**	**ND**	**1702.1**

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSE-S25W-0-29IN	FASED-CSE-S26E-0-12IN	FASED-CSE-S2W-0-19IN	FASED-CSE-S3-0-13IN	FASED-CSE-S4E-0-17IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/26/2000	1/27/2000	1/19/2000	1/20/2000	1/20/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	24U	22U	500U	120U	110U
Dichlorobiphenyl	4 6U	4.4U	98U	24U	22U
Heptachlorobiphenyl	14U	13U	300U	74U	68U
Hexachlorobiphenyl	19	4.2J	200U	49U	45U
Monochlorobiphenyl	4.6U	4.4U	98U	24U	22U
Nonachlorobiphenyl	13J	22U	500U	56J	110U
Octachlorobiphenyl	14U	13U	300U	74U	68U
Pentachlorobiphenyl	20	3 8J	200U	49U	45U
Tetrachlorobiphenyl	9 4U	8 9U	200U	49U	45U
Trichlorobiphenyl	4 6U	4 4U	98U	24U	22U
Total PCB's	**52**	**8**	**ND**	**56**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSE-S5E-0-24IN	FASED-CSE-S6W-0-35IN	FASED-CSE-S6W-0-35INFD	FASED-CSE-S7W-0-13IN	FASED-CSE-S8-0-32IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/20/2000	1/20/2000	1/20/2000	1/20/2000	1/21/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	1600U	89J	210	790U	240U
Dichlorobiphenyl	320U	20J	43	160U	48U
Heptachlorobiphenyl	960U	71U	43J	480U	90J
Hexachlorobiphenyl	640U	400	570	640	520
Monochlorobiphenyl	320U	24	32	160U	48U
Nonachlorobiphenyl	1600U	120U	120J	490J	240U
Octachlorobiphenyl	960U	71U	75U	480U	140U
Pentachlorobiphenyl	640U	680	930	1200	710
Tetrachlorobiphenyl	640U	250	380	320U	140
Trichlorobiphenyl	320U	24U	76	160U	48U
Total PCB's	**ND**	**1463**	**2404**	**2330**	**1460**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSE-S9-0-31IN	FASED-CSF-S10-0-9IN	FASED-CSF-S11W-0-10IN	FASED-CSF-S12-0-15IN	FASED-CSF-S12-0-15INFD
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/21/2000	1/12/2000	1/12/2000	1/12/2000	1/12/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	310U	25U	29U	28U	28U
Dichlorobiphenyl	62U	4 9U	5 7U	5 6U	5 5U
Heptachlorobiphenyl	190U	15U	17U	17U	17U
Hexachlorobiphenyl	230	10U	12U	11U	11U
Monochlorobiphenyl	62U	4 9U	5 7U	5 6U	5 5U
Nonachlorobiphenyl	310U	25U	29U	28U	28U
Octachlorobiphenyl	190U	15U	17U	17U	17U
Pentachlorobiphenyl	500	10U	12U	11U	11U
Tetrachlorobiphenyl	130U	10U	12U	11U	11U
Trichlorobiphenyl	62U	4 9U	5 7U	5 6U	5 5U
Total PCB's	**730**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSF-S13W-0-15IN	FASED-CSF-S14W-0-15IN	FASED-CSF-S15W-0-28IN	FASED-CSF-S16-0-23IN	FASED-CSF-S17W-0-16IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/12/2000	1/12/2000	1/13/2000	1/13/2000	1/13/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	33J	57J	310U	30U	160
Dichlorobiphenyl	7UJ	6 7UJ	61U	5 9U	6 1U
Heptachlorobiphenyl	21UJ	13J	180U	18U	15J
Hexachlorobiphenyl	14UJ	14UJ	120U	12U	12U
Monochlorobiphenyl	7UJ	6 7UJ	61U	5 9U	6 1U
Nonachlorobiphenyl	35UJ	24J	310U	30U	24J
Octachlorobiphenyl	21UJ	20UJ	180U	18U	12J
Pentachlorobiphenyl	160J	250J	64J	13	220
Tetrachlorobiphenyl	48J	93J	120U	12U	44
Trichlorobiphenyl	7UJ	6 7UJ	61U	5 9U	6 1U
Total PCB s	**241**	**437**	**64**	**13**	**475**

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSF-S18E-0-14IN	FASED-CSF-S19-0-13IN	FASED-CSF-S1E-0-8IN	FASED-CSF-S20-0-12IN	FASED-CSF-S2-0-7IN	FASED-CSF-S21-0-13IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/13/2000	1/17/2000	1/11/2000	1/17/2000	1/11/2000	1/17/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	52	85J	25U	50	450U	96
Dichlorobiphenyl	6.2U	6 6UJ	4 9U	5 6U	89U	5 9U
Heptachlorobiphenyl	19U	51J	15U	13J	270U	15J
Hexachlorobiphenyl	13U	13UJ	10U	11U	180U	12U
Monochlorobiphenyl	6 2U	6 6UJ	4 9U	5 6U	89U	5 9U
Nonachlorobiphenyl	21J	32J	25U	28U	250J	37
Octachlorobiphenyl	19U	6 6J	15U	17U	270U	18U
Pentachlorobiphenyl	170	720J	10U	300	140J	310
Tetrachlorobiphenyl	18	340J	10U	93	180U	65
Trichlorobiphenyl	6 2U	8.3J	4 9U	5 6U	89U	5 9U
Total PCB's	**261**	**1242.9**	**ND**	**456**	**390**	**523**

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSF-S21-0-13INFD	FASED-CSF-S22E-0-20IN	FASED-CSF-S23-0-15IN	FASED-CSF-S24W-0-13IN	FASED-CSF-S25E-0-10IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/17/2000	1/17/2000	1/17/2000	1/17/2000	1/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	150J	76	93J	32J	190J
Dichlorobiphenyl	6 7UJ	5 7U	6 3UJ	6 5U	7 2UJ
Heptachlorobiphenyl	31J	49	62J	20U	50J
Hexachlorobiphenyl	14UJ	12U	13UJ	13U	19J
Monochlorobiphenyl	6 7UJ	5 7U	6 3UJ	6 5U	7 2UJ
Nonachlorobiphenyl	50J	28J	35J	33U	67J
Octachlorobiphenyl	14J	5 8J	21J	20U	20J
Pentachlorobiphenyl	420J	680	770J	160	550J
Tetrachlorobiphenyl	110J	250	400J	13U	150J
Trichlorobiphenyl	6 7UJ	6.4	16J	6 5U	7 2UJ
Total PCB's	**775**	**1095.2**	**1397**	**192**	**1046**

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSF-S26W-0-13IN	FASED-CSF-S27E-0-16IN	FASED-CSF-S28-0-10IN	FASED-CSF-S29W-0-10IN	FASED-CSF-S30N-0-8IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/18/2000	1/18/2000	1/18/2000	1/18/2000	1/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	75	98	460J	24UJ	15J
Dichlorobiphenyl	5.4U	6U	61UJ	4 8UJ	5.2UJ
Heptachlorobiphenyl	40	110	260J	15UJ	16UJ
Hexachlorobiphenyl	11U	12U	120UJ	9.8UJ	10UJ
Monochlorobiphenyl	5.4U	6U	61UJ	4 8UJ	5 2UJ
Nonachlorobiphenyl	26J	33	270J	24UJ	20J
Octachlorobiphenyl	11J	27	180UJ	15UJ	16UJ
Pentachlorobiphenyl	330	1100	3700J	9.8UJ	10UJ
Tetrachlorobiphenyl	91	420	1600J	9.8UJ	10UJ
Trichlorobiphenyl	5.4U	17	61UJ	4.8UJ	5.2UJ
Total PCB's	**573**	**1805**	**6290**	**ND**	**35**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSF-S31N-0-13IN	FASED-CSF-S32S-0-11IN	FASED-CSF-S32S-0-11INFD	FASED-CSF-S33-0-13IN	FASED-CSF-S34S-0-14IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/18/2000	1/18/2000	1/18/2000	1/18/2000	1/18/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	560UJ	130U	250U	24J	120U
Dichlorobiphenyl	110UJ	26U	50U	6.1U	24U
Heptachlorobiphenyl	330UJ	78U	150U	14J	74U
Hexachlorobiphenyl	220UJ	52U	100U	6.4J	49U
Monochlorobiphenyl	110UJ	26U	50U	6.1U	24U
Nonachlorobiphenyl	560UJ	130U	250U	31U	120U
Octachlorobiphenyl	330UJ	78U	150U	18U	74U
Pentachlorobiphenyl	220UJ	87	100U	78	49U
Tetrachlorobiphenyl	220UJ	52U	100U	9.3J	49U
Trichlorobiphenyl	110UJ	26U	50U	6.1U	24U
Total PCB's	**ND**	**87**	**ND**	**131.7**	**ND**

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSF-S35S-0-21IN	FASED-CSF-S36N-0-12IN	FASED-CSF-S36N-0-12INFD	FASED-CSF-S37N-0-13IN	FASED-CSF-S38S-0-14IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	2/2/2000	1/18/2000	1/18/2000	1/18/2000	1/19/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	120U	25	250U	50U	15J
Dichlorobiphenyl	23U	4.9U	48U	9 8U	4 6U
Heptachlorobiphenyl	69U	40	150U	30U	8 1J
Hexachlorobiphenyl	46U	10U	98U	13J	9 3U
Monochlorobiphenyl	23U	4.9U	48U	9 8U	4 6U
Nonachlorobiphenyl	120U	25U	250U	50U	23U
Octachlorobiphenyl	69U	23	150U	30U	14U
Pentachlorobiphenyl	46U	170	98U	20	140
Tetrachlorobiphenyl	46U	39	98U	20U	100
Trichlorobiphenyl	23U	4 9U	48U	9 8U	7 4
Total PCB's	**ND**	**297**	**ND**	**33**	**270.5**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSF-S39S-0-26IN	FASED-CSF-S3E-0-6IN	FASED-CSF-S40-0-20IN	FASED-CSF-S4-0-7IN	FASED-CSF-S5W-0-10IN	FASED-CSF-S6E-0-10IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/19/2000	1/11/2000	1/19/2000	1/11/2000	1/11/2000	1/11/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	60	22U	46UJ	22U	24U	24U
Dichlorobiphenyl	6 1U	4 4U	9 2UJ	4 4U	4 8U	4 7U
Heptachlorobiphenyl	20	14U	28UJ	13U	14U	14U
Hexachlorobiphenyl	12U	9U	19UJ	8 9U	9 7U	9 6U
Monochlorobiphenyl	6 1UJ	4 4U	9.2UJ	4 4U	4 8U	4 7U
Nonachlorobiphenyl	22J	22U	46UJ	22U	10J	24U
Octachlorobiphenyl	18UJ	14U	28UJ	13U	14U	14U
Pentachlorobiphenyl	340J	9U	23J	8 9U	9 7U	9 6U
Tetrachlorobiphenyl	120J	9U	19UJ	8 9U	9 7U	9 6U
Trichlorobiphenyl	6 1U	4 4U	9 2UJ	4 4U	4 8U	4 7U
Total PCB's	**562**	**ND**	**23**	**ND**	**10**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.3
Sauget Area 1
Sediment Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	FASED-CSF-S7E-0-11IN	FASED-CSF-S8-0-15IN	FASED-CSF-S9-0-11IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	1/11/2000	1/12/2000	1/12/2000
Units	ug/kg dw	ug/kg dw	ug/kg dw
Decachlorobiphenyl	23U	24U	29U
Dichlorobiphenyl	4.5U	4.8U	5.7U
Heptachlorobiphenyl	14U	15U	17U
Hexachlorobiphenyl	9.2U	9.8U	12U
Monochlorobiphenyl	4.5U	4.8U	5.7U
Nonachlorobiphenyl	23U	24U	29U
Octachlorobiphenyl	14U	15U	17U
Pentachlorobiphenyl	9.2U	9.8U	12U
Tetrachlorobiphenyl	9.2U	9.8U	12U
Trichlorobiphenyl	4.5U	4.8U	5.7U
Total PCB's	**ND**	**ND**	**ND**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-5.4
Sauget Area 1
Sediment Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	SED-CSB-0 2FTEB	SED-CSB-S1-0 2FT	SED-CSB-S1-0 2FTFD	SED-CSB-S2-0 2FT	SED-CSB-S3-0 2FT	SED-CSC-S1-0 2FT	SED-CSC-S2-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/4/1999	10/4/1999
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	0 10U	170J	130J	970UJ	650UJ	28J	270UJ
4,4'-DDE	0 10U	970UJ	860UJ	970UJ	650UJ	51J	270UJ
4 4'-DDT	0 10U	970UJ	860UJ	970UJ	650UJ	140UJ	270UJ
Aldrin	0.050U	1200J	1000J	980J	410J	25J	42J
Alpha Chlordane	0 050U	500UJ	440UJ	500UJ	330UJ	37J	54J
Dieldrin	0 10U	970UJ	860UJ	970UJ	650UJ	140UJ	270UJ
Endosulfan I	0 050U	500UJ	440UJ	500UJ	330UJ	70UJ	140UJ
Endosulfan II	0 10U	970UJ	860UJ	970UJ	650UJ	140UJ	270UJ
Endosulfan sulfate	0.0014J	970UJ	84J	130J	98J	9J	16J
Endrin	0 10U	970UJ	860UJ	970UJ	650UJ	140UJ	270UJ
Endrin aldehyde	0.10U	520J	860UJ	970UJ	650UJ	140UJ	270UJ
Endrin ketone	0 10U	970UJ	860UJ	970UJ	650UJ	140UJ	270UJ
Gamma Chlordane	0 050U	760J	680J	500UJ	330UJ	110J	140J
Heptachlor	0 050U	500UJ	440UJ	500J	330UJ	70UJ	9 1J
Heptachlor epoxide	0 050U	500UJ	440UJ	500UJ	330UJ	70UJ	140UJ
Methoxychlor	0 50U	5000UJ	4400UJ	5000UJ	3300UJ	700UJ	1400UJ
Toxaphene	5 0U	50000UJ	44000UJ	50000UJ	33000UJ	7000UJ	14000UJ
alpha-BHC	0 039U	150UJ	130UJ	150UJ	98UJ	21UJ	41UJ
beta-BHC	0.014U	150UJ	130UJ	150UJ	98UJ	21UJ	41UJ
delta-BHC	0.0096J	150UJ	130UJ	150UJ	98UJ	21UJ	41UJ
gamma-BHC (Lindane)	0 019U	500UJ	440UJ	500UJ	330UJ	70UJ	140UJ
Total Pesticides	**0.011**	**2650**	**1894**	**1610**	**508**	**260**	**261 1**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.4
Sauget Area 1
Sediment Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	SED-CSC-S3-0 2FT	SED-CSD-S1-0 2FT	SED-CSD-S2-0 2FT	SED-CSD-S3-0 2FT	SED-CSE-S1-0 2FT	SED-CSE-S2-0 2FT	SED-CSE-S3-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/6/1999	10/6/1999	10/6/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4,4'-DDD	380UJ	86UJ	94UJ	58UJ	120UJ	86UJ	22UJ
4,4'-DDE	380UJ	20J	14J	4 4J	15J	3 4J	4 3J
4,4'-DDT	380UJ	86UJ	94UJ	58UJ	9 3J	86UJ	22UJ
Aldrin	64J	9 6J	11J	2 7J	60UJ	44UJ	11UJ
Alpha Chlordane	120J	26J	14J	30UJ	6 9J	2 5J	3 9J
Dieldrin	380UJ	86UJ	94UJ	58UJ	9 4J	1 7J	5 4J
Endosulfan I	200UJ	44UJ	48UJ	30UJ	60UJ	44UJ	11UJ
Endosulfan II	380UJ	86UJ	94UJ	58UJ	12J	2 3J	22UJ
Endosulfan sulfate	380UJ	86UJ	94UJ	58UJ	10J	86UJ	22UJ
Endrin	380UJ	86UJ	94UJ	58UJ	4 6J	86UJ	22UJ
Endrin aldehyde	380UJ	86UJ	94UJ	16J	22J	3 6J	22UJ
Endrin ketone	380UJ	86UJ	94UJ	5 5J	17J	6 8J	22UJ
Gamma Chlordane	250J	49J	29J	6 7J	14J	5 9J	5 1J
Heptachlor	9 7J	44UJ	48UJ	30UJ	60UJ	44UJ	0 53J
Heptachlor epoxide	200UJ	44UJ	48UJ	30UJ	5 2J	44UJ	11UJ
Methoxychlor	2000UJ	440UJ	480UJ	300UJ	39J	440UJ	110UJ
Toxaphene	20000UJ	4400UJ	4800UJ	3000UJ	6000UJ	4400UJ	1100UJ
alpha-BHC	58UJ	13UJ	14UJ	8 8UJ	18UJ	13UJ	3 3UJ
beta-BHC	58UJ	13UJ	14UJ	8 8UJ	18UJ	13UJ	3 3UJ
delta-BHC	18J	16J	14UJ	1 5J	1 3J	13UJ	3 3UJ
gamma-BHC (Lindane)	200UJ	44UJ	48UJ	30UJ	60UJ	44UJ	11UJ
Total Pesticides	**461.7**	**120.6**	**68**	**36 8**	**165.7**	**26 2**	**19 23**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.4
Sauget Area 1
Sediment Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	SED-CSF-S1-0 2FT	SED-CSF-S2-0 2FT	SED-CSF-S3-0 2FT	SED-M-S1-0 2FT	SED-RA1-S1-0 2FT	SED-RA1-S2-0 2FT	SED-RA2-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/7/1999	10/7/1999	10/7/1999	10/5/1999	10/8/1999	10/8/1999	10/8/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4'-DDD	3 8J	35UJ	24UJ	770UJ	5 8U	8 8UJ	6 8UJ
4 4 -DDE	11J	8 1J	2 5J	110J	5 8U	8 8UJ	6 8UJ
4 4 -DDT	4 5J	35UJ	24UJ	44J	5 8U	8 8UJ	6 8UJ
Aldrin	4 1J	18UJ	12UJ	120J	3U	4 6UJ	3 5UJ
Alpha Chlordane	4 6J	5 3J	0 84J	400UJ	3U	4 6UJ	3 5UJ
Dieldrin	9 3J	35UJ	0 99J	770UJ	5 8U	8 8UJ	6 8UJ
Endosulfan I	5 7J	2J	1 2J	400UJ	3U	4 6UJ	3 5UJ
Endosulfan II	8 1J	5 5J	1 8J	770UJ	5 8U	8 8UJ	6 8UJ
Endosulfan sulfate	2 8J	35UJ	24UJ	50J	5 8U	8 8UJ	6 8UJ
Endrin	1 7J	35UJ	1 7J	770UJ	5 8U	8 8UJ	6 8UJ
Endrin aldehyde	14J	9J	3 6J	770UJ	5 8U	8 8UJ	6 8UJ
Endrin ketone	10J	7 2J	3 8J	200J	5 8U	8 8UJ	6 8UJ
Gamma Chlordane	17J	7 5J	2 4J	140J	3U	4 6UJ	3 5UJ
Heptachlor	7 8UJ	18UJ	0 93J	59J	3U	4 6UJ	3 5UJ
Heptachlor epoxide	5 4J	18UJ	0 51J	400UJ	3U	4 6UJ	3 5UJ
Methoxychlor	24J	14J	7 3J	4000UJ	30U	46UJ	35UJ
Toxaphene	780UJ	1800UJ	1200UJ	40000UJ	300U	460UJ	350UJ
alpha-BHC	2 3UJ	5 3UJ	3 7UJ	120UJ	0 89U	1 3UJ	1UJ
beta-BHC	2 3UJ	5 3UJ	3 7UJ	120UJ	0 89U	1 3UJ	1UJ
delta-BHC	0 34J	5 3UJ	3 7UJ	120UJ	0 89U	1 3UJ	1UJ
gamma-BHC (Lindane)	7 8UJ	18UJ	12UJ	400UJ	3U	4 6UJ	3 5UJ
Total Pesticides	**126.34**	**58.6**	**27.57**	**723**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-5.4
Sauget Area 1
Sediment Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	SED-RA2-S1-0.2FTEB	SED-RA2-S1-0.2FTFD	SED-RA2-S2-0 2FT	BSSED-PDC-DS-S-0-30IN	BSSED-PDC-US-N-0-20IN	BSSED-PDC-US-N-0-20INEB
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment
Sample Date	10/8/1999	10/8/1999	10/9/1999	2/7/2000	2/7/2000	2/4/2000
Units	ug/l	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l
4,4'-DDD	0.1U	6.8UJ	7.2UJ	4 8U	4.5U	0 1U
4,4'-DDE	0 1U	6.8UJ	7 2UJ	4 8U	4.5U	0 1U
4,4'-DDT	0.1U	6.8UJ	7.2UJ	4.8U	4.5U	0 1U
Aldrin	0.05U	3.5UJ	3.7UJ	2 4U	2.3U	0 05U
Alpha Chlordane	0.05U	3.5UJ	3.7UJ	2 4U	2 3U	0 05U
Dieldrin	0.1U	6.8UJ	7.2UJ	4 8UJ	4 5U	0 1U
Endosulfan I	0 05U	3.5UJ	3 7UJ	2 4U	2 3U	0 05U
Endosulfan II	0 1U	6.8UJ	7.2UJ	4 8U	4.5U	0 1U
Endosulfan sulfate	0.1U	6.8UJ	7.2UJ	4.8U	4.5U	0 1U
Endrin	0.1U	6.8UJ	7.2UJ	4.8UJ	4.5U	0 1U
Endrin aldehyde	0.1U	6.8UJ	7.2UJ	4 8U	4.5U	0 1U
Endrin ketone	0.1U	6.8UJ	7.2UJ	4 8U	4.5U	0 1U
Gamma Chlordane	0.05U	3.5UJ	3.7UJ	2 4U	2.3U	0 05U
Heptachlor	0.05U	3.5UJ	3.7UJ	2 4U	2 3U	0 05U
Heptachlor epoxide	0 05U	3.5UJ	3.7UJ	2 4U	2 3U	0 05U
Methoxychlor	0 5U	35UJ	37UJ	24U	23U	0 5U
Toxaphene	5U	350UJ	370UJ	240U	230U	5U
alpha-BHC	0 039U	1UJ	1 1UJ	0 72U	0 68U	0 039U
beta-BHC	0.014U	1UJ	1 1UJ	0 72UJ	0 68U	0 014U
delta-BHC	0.0089J	1UJ	1.1UJ	2 4U	2 3U	0 012U
gamma-BHC (Lindane)	0.019U	3 5UJ	3.7UJ	2 4U	2 3U	0 019U
Total Pesticides	**0.0089**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.4
Sauget Area 1
Sediment Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	BSSED-PDC-US-N-0-20INFD	BPL-ESED-S1-0 2FT	BPL-ESED-S1-0 2FTFD	BPL-ESED-S2-0 2FT	BPL-ESED-S3-0 2FT
Descnption	Dead Creek Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment
Sample Date	2/7/2000	10/6/1999	10/6/1999	10/7/1999	10/6/1999
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
4 4'-DDD	4 5U	18UJ	9 1UJ	19UJ	18UJ
4 4 -DDE	4 5U	1 4J	0 81J	3 2J	1 6J
4 4 -DDT	4 5U	1 9J	0 38J	19UJ	1 4J
Aldrin	2 3U	9 4UJ	4 7UJ	9 9UJ	9 4UJ
Alpha Chlordane	2 3U	0 52J	0 43J	3 2J	1 2J
Dieldrin	4 5U	0 3J	0 21J	0 5J	18UJ
Endosulfan I	2 3U	9 4UJ	0 38J	2 8J	1J
Endosulfan II	4 5U	18UJ	9 1UJ	19UJ	18UJ
Endosulfan sulfate	4 5U	18UJ	0 94J	1 4J	18UJ
Endrin	4 5U	18UJ	9 1UJ	19UJ	18UJ
Endrin aldehyde	4 5U	1 6J	1 1J	2 2J	1 2J
Endrin ketone	4 5U	1J	0 43J	19UJ	18UJ
Gamma Chlordane	2 3U	0 89J	0 58J	3J	9 4UJ
Heptachlor	2 3U	9 4UJ	4 7UJ	9 9UJ	9 4UJ
Heptachlor epoxide	2 3U	9 4UJ	0 2J	9 9UJ	9 4UJ
Methoxychlor	23U	94UJ	47UJ	99UJ	94UJ
Toxaphene	230U	940UJ	470UJ	990UJ	940UJ
alpha-BHC	0 69U	2 8UJ	1 4UJ	2 9UJ	2 8UJ
beta-BHC	0 69U	2 8UJ	1 4UJ	2 9UJ	2 8UJ
delta-BHC	2 3U	2 8UJ	1 4UJ	2 9UJ	2 8UJ
gamma-BHC (Lindane)	2 3U	9 4UJ	0 16J	9 9UJ	9 4UJ
Total Pesticides	**ND**	**7 61**	**5 62**	**16 3**	**6 4**

Notes U not detected J-estimated value N-tentatively identified R rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-5.5
Sauget Area 1
Sediment Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	BPL-ESED-S1-0 2FT	BPL-ESED-S1-0.2FTFD	BPL-ESED-S2-0.2FT	BPL-ESED-S3-0.2FT	BSSED-PDC-DS-S-0-30IN
Description	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Dead Creek Sediment
Sample Date	10/6/99	10/6/99	10/7/99	10/6/99	2/7/00
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	23UJ	23UJ	24UJ	23UJ	12U
2,4,5-TP (Silvex)	23UJ	23UJ	24UJ	23UJ	12U
2,4-D	23UJ	6.1J	24UJ	11J	12U
2,4-DB	23UJ	23UJ	24UJ	23UJ	12U
Dalapon	180UJ	180UJ	190UJ	180UJ	97U
Dicamba	55UJ	55UJ	58UJ	56UJ	30U
Dichloroprop	280UJ	270UJ	290UJ	280UJ	140U
Dinoseb	280UJ	270UJ	290UJ	280UJ	140U
MCPA	5500UJ	5500UJ	5800UJ	5600UJ	2900U
MCPP	5500UJ	5500UJ	5800UJ	5600UJ	2900U
Pentachlorophenol	47UJ	47UJ	50UJ	47UJ	29U
Total Herbicides	**ND**	**6.1**	**ND**	**11**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.5
Sauget Area 1
Sediment Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	BSSED-PDC-US-N-0-20IN	BSSED-PDC-US-N-0-20INEB	BSSED-PDC-US-N-0-20INFD	SED-CSB-0.2FTEB	SED-CSB-S1-0 2FT	SED-CSB-S1-0 2FTFD
Description	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	2/7/00	2/4/00	2/7/00	10/5/99	10/5/99	10/5/99
Units	ug/kg dw	ug/l	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
2,4,5-T	11U	0.5U	11U	0 50U	110UJ	110UJ
2,4,5-TP (Silvex)	11U	0.5U	11U	0 50U	110UJ	110UJ
2,4-D	11U	0.5U	11U	0 50U	110UJ	110UJ
2,4-DB	11U	0.5U	11U	0 50U	110UJ	110UJ
Dalapon	90U	120U	91U	120U	840UJ	850UJ
Dicamba	27U	1 2U	28U	1 2U	260UJ	260UJ
Dichloroprop	140U	6U	140U	6 0U	1300UJ	1300UJ
Dinoseb	140U	6U	140U	6 0U	1300UJ	1300UJ
MCPA	2700U	120U	2800U	120U	26000UJ	26000UJ
MCPP	2700U	120U	2800U	120U	26000UJ	26000UJ
Pentachlorophenol	27U	1U	23U	1 0U	57J	36J
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**57**	**36**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.5
Sauget Area 1
Sediment Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	SED-CSB-S2-0 2FT	SED-CSB-S3-0.2FT	SED-CSC-S1-0.2FT	SED-CSC-S2-0 2FT	SED-CSC-S3-0 2FT	SED-CSD-S1-0 2FT	SED-CSD-S2-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/99	10/5/99	10/4/99	10/4/99	10/4/99	10/4/99	10/4/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	21UJ	140UJ	28UJ	24UJ	180UJ	190UJ	220UJ
2,4,5-TP (Silvex)	21UJ	140UJ	28UJ	24UJ	180UJ	190UJ	220UJ
2,4-D	21UJ	140UJ	28UJ	24UJ	180UJ	190UJ	220UJ
2,4-DB	21UJ	140UJ	28UJ	24UJ	180UJ	190UJ	220UJ
Dalapon	160UJ	1100UJ	220UJ	180UJ	1400UJ	1500UJ	1700UJ
Dicamba	50UJ	350UJ	68UJ	57UJ	440UJ	460UJ	13J
Dichloroprop	250UJ	1800UJ	340UJ	280UJ	2200UJ	2300UJ	2600UJ
Dinoseb	250UJ	1800UJ	340UJ	280UJ	2200UJ	2300UJ	2600UJ
MCPA	5000UJ	35000UJ	6800UJ	5700UJ	44000UJ	46000UJ	53000UJ
MCPP	5000UJ	35000UJ	6800UJ	5700UJ	44000UJ	46000UJ	53000UJ
Pentachlorophenol	220J	56J	7.4J	23J	23J	400UJ	450UJ
Total Herbicides	**220**	**56**	**7.4**	**23**	**23**	**ND**	**13**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.5
Sauget Area 1
Sediment Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	SED-CSD-S3-0 2FT	SED-CSE-S1-0 2FT	SED-CSE-S2-0 2FT	SED-CSE-S3-0 2FT	SED-CSF-S1-0 2FT	SED-CSF-S2-0 2FT	SED-CSF-S3-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/4/99	10/6/99	10/6/99	10/6/99	10/7/99	10/7/99	10/7/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
2,4,5-T	24UJ	170U	130UJ	140UJ	110UJ	240UJ	30UJ
2,4,5-TP (Silvex)	24UJ	170UJ	130UJ	140UJ	110UJ	240UJ	30UJ
2,4-D	24UJ	73J	130UJ	140UJ	110UJ	240UJ	23J
2,4-DB	24UJ	150J	130UJ	140UJ	110UJ	240UJ	30UJ
Dalapon	190UJ	1300UJ	990UJ	1100UJ	860UJ	2000UJ	240UJ
Dicamba	59UJ	410UJ	300UJ	340UJ	260UJ	570UJ	74UJ
Dichloroprop	290UJ	2100UJ	1500UJ	1700UJ	1300UJ	2900UJ	370UJ
Dinoseb	290UJ	2100UJ	1500UJ	1700R	1300UJ	2900UJ	370UJ
MCPA	5900UJ	41000UJ	30000UJ	34000UJ	26000UJ	57000UJ	7400UJ
MCPP	5900UJ	41000UJ	30000UJ	34000UJ	26000UJ	57000UJ	7400UJ
Pentachlorophenol	3 9J	350UJ	12J	3 8J	72UJ	490UJ	62UJ
Total Herbicides	**3.9**	**223**	**12**	**3.8**	**ND**	**ND**	**23**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.5
Sauget Area 1
Sediment Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	SED-M-S1-0.2FT	SED-RA1-S1-0.2FT	SED-RA1-S2-0.2FT	SED-RA2-S1-0.2FT	SED-RA2-S1-0.2FTEB	SED-RA2-S1-0 2FTFD	SED-RA2-S2-0.2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/99	10/8/99	10/8/99	10/8/99	10/8/99	10/8/99	10/9/99
Units	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/l	ug/kg dw	ug/kg dw
2,4,5-T	220UJ	15U	22UJ	17UJ	0 5U	17UJ	18UJ
2,4,5-TP (Silvex)	220UJ	15U	22UJ	17UJ	0 5U	17UJ	18UJ
2,4-D	220UJ	12J	22UJ	17UJ	0 5U	17UJ	18UJ
2,4-DB	220UJ	15U	22UJ	17UJ	0 5U	17UJ	18UJ
Dalapon	1700UJ	120U	180UJ	130UJ	120U	130UJ	120UJ
Dicamba	540UJ	35U	54UJ	42UJ	1 2U	42UJ	43UJ
Dichloroprop	2700UJ	180U	270UJ	210UJ	6U	210UJ	220UJ
Dinoseb	2700UJ	180U	270UJ	210UJ	6U	210UJ	220UJ
MCPA	54000UJ	3500UJ	5400UJ	4200UJ	120U	4200UJ	4300UJ
MCPP	54000UJ	3500U	5400UJ	4200UJ	120U	4200UJ	4300UJ
Pentachlorophenol	52J	1.9J	46UJ	35UJ	1 0U	35UJ	36UJ
Total Herbicides	**52**	**13.9**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.7
Sauget Area 1
Sediment Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	BPL-ESED-S1-0 2FT	BPL-ESED-S1-0.2FTFD	BPL-ESED-S2-0 2FT	BPL-ESED-S3-0 2FT	BSSED-PDC-DS-S-0-30IN
Description	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Dead Creek Sediment
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/6/1999	2/7/2000
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	13000J	15000J	16000J	11000J	9800
Antimony	1 9J	5.1UJ	5 9UJ	1 5J	2 7UJ
Arsenic	16J	17J	17J	13J	7
Barium	360J	410J	420J	240J	140J
Beryllium	0 72J	0.76J	0 82J	0 58J	0 48J
Cadmium	1.9J	2J	2 7J	1 6J	0 67U
Calcium	16000J	17000J	16000J	11000J	5300
Chromium	20J	22J	26J	18J	15J
Cobalt	9.3J	10J	10J	7 1J	6 7
Copper	43J	48J	64J	36J	14
Hardness as CaCO3					
Iron	34000J	37000J	38000J	28000J	16000
Lead	49J	54J	58J	34J	16
Magnesium	5500J	5700J	4800J	3600J	2900
Manganese	1200J	1300J	1400J	940J	430J
Molybdenum	0.52J	0.47J	0 92J	0 37J	0 45J
Nickel	51J	54J	54J	35J	15
Potassium	2000J	2300J	2200J	1500J	1200J
Selenium	2 8UJ	2.8UJ	2 9UJ	2 5UJ	1 3U
Silver	2.8UJ	2.8UJ	0 79J	2 5UJ	1 3U
Sodium	200UJ	180UJ	230UJ	140UJ	92
Thallium	2.8UJ	2.8UJ	2 9UJ	2 5UJ	1 3U
Vanadium	35J	38J	40J	28J	25
Zinc	290J	320J	370J	250J	58

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.7
Sauget Area 1
Sediment Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	BSSED-PDC-US-N-0-20IN	BSSED-PDC-US-N-0-20INEB	BSSED-PDC-US-N-0-20INFD	SED-CSB-0.2FTEB	SED-CSB-S1-0 2FT	SED-CSB-S1-0 2FTFD
Description	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	2/7/2000	2/4/2000	2/7/2000	10/5/1999	10/5/1999	10/5/1999
Units	mg/kg dw	mg/l	mg/kg dw	mg/l	mg/kg dw	mg/kg dw
Aluminum	11000	0.2U	13000	0 20U	6900J	6200J
Antimony	2.5UJ	0.02U	2.5UJ	0.020U	9.2J	8.6J
Arsenic	6.6	0.01U	7 8	0.010U	35J	31J
Barium	130J	0.01U	140J	0.0030J	950J	550J
Beryllium	0.54	0.004U	0.58	0.0040U	1UJ	0 96UJ
Cadmium	0.62U	0 005U	0 63U	0 0050U	17J	13J
Calcium	3300	0.15J	4000	0 41J	180000J	180000J
Chromium	16J	0.01U	18J	0.010U	49J	34J
Cobalt	7.4	0.01U	7.7	0 010U	7.2J	6 7J
Copper	14	0.02U	15	0 0062J	5100J	4600J
Hardness as CaCO3				1 0		
Iron	16000	0.05U	18000	0 042J	14000J	12000J
Lead	15	0.005U	16	0.0019J	630J	490J
Magnesium	2600	0.5U	2800	0 50U	20000J	20000J
Manganese	540J	0.01U	670J	0.010U	250J	240J
Molybdenum	0.58J	0.01U	0.68J	0.010U	7 2J	6 8J
Nickel	16	0.04U	17	0.040U	88J	67J
Potassium	1200J	1U	1500J	1.0U	1700J	1600J
Selenium	1.2U	0.01U	1.3U	0 010U	4 1J	1 7J
Silver	1.2U	0.01U	1 3U	0 010U	6 7J	6 7J
Sodium	80	0 58	71	0 39J	340UJ	310UJ
Thallium	1 2UJ	0.01U	1 3U	0.010U	2 5UJ	2 2UJ
Vanadium	29	0.01U	33	0.010U	29J	26J
Zinc	59	0.02U	63	0 023	2000J	1600J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.7
Sauget Area 1
Sediment Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SED-CSB-S2-0.2FT	SED-CSB-S3-0.2FT	SED-CSC-S1-0.2FT	SED-CSC-S2-0.2FT	SED-CSC-S3-0 2FT	SED-CSD-S1-0 2FT	SED-CSD-S2-0 2FT
Description	*Ecological Sediment*	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/1999	10/5/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	8300J	12000J	15000J	12000J	9700J	13000J	16000J
Antimony	6.3J	6.8J	1.8J	1 3J	2 2J	8 7UJ	8.7UJ
Arsenic	38J	25J	28J	17J	16J	16J	17J
Barium	3300J	1700J	470J	680J	800J	380J	400J
Beryllium	1UJ	1.2UJ	1 2UJ	0.93UJ	1UJ	1 2UJ	1 3UJ
Cadmium	25J	25J	20J	19J	16J	15J	13J
Calcium	87000J	100000J	28000J	23000J	47000J	28000J	30000J
Chromium	76J	78J	50J	93J	47J	56J	60J
Cobalt	9.9J	12J	17J	12J	9.7J	12J	12J
Copper	11000J	6700J	1400J	2200J	2100J	740J	730J
Hardness as CaCO3							
Iron	29000J	25000J	27000J	21000J	24000J	22000J	25000J
Lead	1000J	750J	270J	330J	480J	260J	230J
Magnesium	10000J	11000J	5500J	3600J	6400J	6700J	7500J
Manganese	210J	230J	290J	240J	330J	250J	320J
Molybdenum	4 3J	4.8J	3.4J	2 2J	1.7UJ	3UJ	2.6UJ
Nickel	500J	380J	370J	580J	550J	260J	260J
Potassium	1700J	2400J	3000J	2400J	2100J	2900J	3200J
Selenium	5.1J	3.5J	2.8UJ	13UJ	2.4UJ	2UJ	2.5UJ
Silver	15J	8.9J	1.2J	1.8J	1.6J	4.3UJ	4 3UJ
Sodium	270UJ	290UJ	300UJ	320UJ	340UJ	240UJ	250UJ
Thallium	2.3UJ	2.1J	3.1UJ	2.6UJ	3.5UJ	4.3UJ	4.3UJ
Vanadium	37J	41J	48J	36J	34J	44J	51J
Zinc	7900J	4800J	2900J	4500J	3300J	2500J	2700J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.7
Sauget Area 1
Sediment Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SED-CSD-S3-0 2FT	SED-CSE-S1-0 2FT	SED-CSE-S2-0 2FT	SED-CSE-S3-0 2FT	SED-CSF-S1-0 2FT	SED-CSF-S2-0 2FT	SED-CSF-S3-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/4/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	13000J	15000J	13000J	11000J	7800J	14000J	17000J
Antimony	5 9UJ	2 7J	2J	6 1UJ	4 7R	2 6J	2 5J
Arsenic	10J	16J	12J	9 3J	8J	19J	15J
Barium	310J	340J	290J	190J	150J	250J	270J
Beryllium	1UJ	0 84J	0 75J	0 9UJ	0 53J	0 85J	0 89J
Cadmium	10J	14J	11J	7 7J	7 4J	47J	14J
Calcium	26000J	43000J	80000J	26000J	11000J	13000J	11000J
Chromium	67J	71J	49J	31J	19J	38J	30J
Cobalt	8 8J	10J	9 2J	7 4J	5 5J	13J	11J
Copper	320J	570J	350J	150J	160J	410J	240J
Hardness as CaCO3							
Iron	19000J	24000J	20000J	17000J	14000J	22000J	26000J
Lead	170J	310J	190J	140J	110J	320J	110J
Magnesium	6600J	9200J	13000J	7400J	4100J	6800J	5300J
Manganese	270J	310J	320J	170J	170J	230J	510J
Molybdenum	1 7UJ	2 6J	1 6J	3 2J	0 7J	3 7J	0 76J
Nickel	150J	190J	130J	51J	90J	390J	180J
Potassium	2700J	3100J	2600J	2400J	1600J	2900J	2700J
Selenium	2 9UJ	2 6UJ	1 5UJ	3UJ	2 3UJ	4 8UJ	3 7UJ
Silver	2 9UJ	1 1J	0 67J	3UJ	2 3UJ	4 8UJ	3 7UJ
Sodium	190UJ	250UJ	300UJ	180UJ	210UJ	350UJ	230UJ
Thallium	2 9UJ	1 9J	2 6UJ	3UJ	2 3UJ	4 8UJ	3 7UJ
Vanadium	37J	51J	40J	37J	25J	51J	41J
Zinc	1800J	2300J	1800J	980J	950J	3700J	1600J

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-5.7
Sauget Area 1
Sediment Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SED-M-S1-0 2FT	SED-RA1-S1-0.2FT	SED-RA1-S2-0.2FT	SED-RA2-S1-0.2FT	SED-RA2-S1-0.2FTEB	SED-RA2-S1-0 2FTFD	SED-RA2-S2-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/9/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/l	mg/kg dw	mg/kg dw
Aluminum	8900J	15000J	12000J	11000J	0.2U	13000J	19000J
Antimony	6 6J	3.2UJ	1.3J	1J	0 02U	3.8UJ	4R
Arsenic	35J	8	7J	6.5J	0.01U	6 9J	7J
Barium	700J	230J	210J	160J	0.013	170J	220J
Beryllium	1 3UJ	0 8	0.7J	0.6J	0.004U	0.64J	1J
Cadmium	17J	0.38J	0 34J	0.26J	0.005U	0.32J	0 65J
Calcium	100000J	18000J	12000J	11000J	24	13000J	12000J
Chromium	48J	21J	17J	16J	0.01U	18J	25J
Cobalt	15J	9 8	7.1J	7 3J	0 01U	7 7J	10J
Copper	4200J	20J	17J	16J	0.0038J	16J	23J
Hardness as CaCO3							
Iron	34000J	22000J	19000J	17000J	0 05U	18000J	24000J
Lead	530J	23J	22J	16J	0 005U	17J	26J
Magnesium	7400J	6500	5000J	3100J	8	3400J	5800J
Manganese	370J	720J	770J	560J	0.0026J	580J	770J
Molybdenum	17J	0.37J	0.49J	0.35J	0.01U	0 43J	0 53J
Nickel	190J	23	19J	17J	0.04U	18J	26J
Potassium	2000J	2300	1900J	1500J	2.3	1700J	2600J
Selenium	3.8J	1.8U	2 5UJ	1 9UJ	0 01U	1 9UJ	2UJ
Silver	7.3J	1.8U	2.5UJ	1 9UJ	0.01U	1 9UJ	2UJ
Sodium	290UJ	150U	180UJ	140UJ	13	130UJ	210UJ
Thallium	5UJ	1.8U	2 5UJ	1.9UJ	0 01U	1 9UJ	2UJ
Vanadium	45J	36	30J	28J	0.01U	31J	44J
Zinc	2400J	95J	82J	57J	0 0072J	61J	96J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.6
Sauget Area 1
Sediment Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SED-CSB-0 2FTEB	SED-CSB-S1-0 2FT	SED-CSB-S1-0 2FTFD	SED-CSB-S2-0 2FT	SED-CSB-S3-0 2FT	SED-CSC-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/4/1999
Units	ug/l	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	0 0000276	1298.83J	1169 13J	3415 6J	2362 98J	283 53J
1,2,3 4,6,7,8,9-OCDF	0 000014U	161.98J	151 21J	1126 74J	806 88J	93 75J
1 2,3,4,6,7,8-HpCDD	0 0000119U	131.19J	99 99J	396 91J	265 54J	31 72J
1,2,3,4,6,7,8-HpCDF	0 0000082U	39 76J	27 7J	187 96J	130 97J	17 73J
1,2,3,4,7,8,9-HpCDF	0 0000107U	3.27J	2 65J	13 14J	8 73J	0 663J
1,2,3,4,7,8-HxCDD	0 0000071U	1.26J	0.825J	2 31J	1.57J	0 0916J
1,2,3,4,7,8-HxCDF	0 0000068U	2.31J	1.93J	6 41J	4 22J	0 353J
1,2,3,6,7,8-HxCDD	0 0000067U	4.62J	3 21J	13 18J	8.49J	0 657J
1,2,3,6,7,8-HxCDF	0 0000063U	1.13J	0 837J	2 54J	1.7J	0 195J
1,2,3,7,8,9-HxCDD	0 0000069U	3.42J	2.73J	7 54J	5.6J	0 322J
1,2,3,7,8,9-HxCDF	0 0000076U	0.0296J	0.0206J	0 119J	0 0583J	0 0083J
1,2,3,7,8-PeCDD	0 0000082U	0.975J	0 583J	1 48J	1 97J	0 0781J
1,2,3,7,8-PeCDF	0.0000057U	0.272J	0 224J	0 842J	0.603J	0 0643J
2,3,4,6,7,8-HxCDF	0 0000067U	1.6J	1 26J	3 91J	2.36J	0 25J
2,3,4,7,8-PeCDF	0.000006U	0.691J	0 546J	1 28J	0.835J	0 097J
2,3,7,8-TCDD	0.000008U	0.306J	0 221J	0 441JM	0.63JM	0 0176JM
2,3,7,8-TCDF	0 0000077U	0.335J	0 257J	0.788J	0 811J	0 109J
Total HpCDD	0 0000119U	225.79	183 03	721.8	487 93	57 09
Total HpCDF	0 0000093U	137 05	96.41M	755.23M	519 22	65 64
Total HxCDD	0 0000069U	26.93M	20.62M	77 27M	57 3M	4 28M
Total HxCDF	0.0000068U	49.15M	29.9M	340 44M	76 31M	8 92M
Total PeCDD	0 0000082U	8.07M	7 14M	21.77M	20 71M	1 34M
Total PeCDF	0 0000059U	7.6M	4.95M	80.9M	10 58M	1 1M
Total TCDD	0.000008U	9.02M	4 07M	45.65M	23.13M	2 43M
Total TCDF	0 0000077U	6.23M	3 76M	34.8M	11 16M	1 22M
1998 Total TEQ w/ EMPC as ND	0.00001269	4.998841	3 630594	12 496634	9 582966	0 876063

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.6
Sauget Area 1
Sediment Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SED-CSC-S2-0.2FT	SED-CSC-S3-0 2FT	SED-CSD-S1-0 2FT	SED-CSD-S2-0 2FT	SED-CSD-S3-0 2FT	SED-CSE-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/6/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	483 88J	880.64J	209 03J	182 84J	91 25J	60 65J
1,2,3,4,6,7,8,9-OCDF	178 41J	398.07J	63.97J	51.28J	26 62J	24 02J
1,2,3,4,6,7,8-HpCDD	55.25J	101.1J	21.45J	20.14J	10 81J	6 77J
1,2,3,4,6,7,8-HpCDF	33 37J	62.04J	12 1J	10 92J	6 14J	5 13J
1,2,3,4,7,8,9-HpCDF	1.81J	4 27J	0 538J	0 414J	0 305J	0 673J
1,2,3,4,7,8-HxCDD	0 143J	0.314J	0 0968J	0 107J	0.0962J	0 13J
1 2,3,4,7,8-HxCDF	0.915J	1 36J	0.297J	0 245J	0 166J	0 364J
1,2,3,6,7,8-HxCDD	1 64J	2.79J	0.587J	0 529J	0 396J	0 704J
1,2,3,6,7,8-HxCDF	0.328J	0.698J	0 178J	0 146J	0 118J	0 222J
1,2,3,7,8,9-HxCDD	0 587J	1.03J	0.318J	0 34J	0 363J	0 415J
1,2,3,7,8,9-HxCDF	0 0153J	0.0466J	0.0076J	0 009J	0 0074J	0 0175J
1,2,3,7,8-PeCDD	0.135J	0.219J	0 0741J	0.0785J	0 0811J	0 0696J
1,2,3,7,8-PeCDF	0 134JM	0.151J	0 0575J	0 0569J	0 0377J	0 051J
2,3,4,6,7,8-HxCDF	0.479J	1.09J	0 233J	0 182J	0 153J	0 274J
2,3,4,7,8-PeCDF	0 188J	0.25J	0 0792J	0 0624J	0 0461J	0 0658J
2,3,7,8-TCDD	0.0297JM	0.0489JM	0 0129JM	0 0138JM	0 0134J	0 0172JM
2,3,7,8-TCDF	0.174J	0.28J	0.0983J	0 0911J	0 064J	0 0921J
Total HpCDD	99.57	187 22	39 27	36.4	19 32	12 82
Total HpCDF	120.3	260.35	40.89M	32 57	17 17M	19 35
Total HxCDD	8 56M	17.12M	4 57M	4 31M	3 37M	5 61M
Total HxCDF	15.81M	32 12	5.73M	4 89	3 49M	8 04M
Total PeCDD	3 95M	4.98M	1 48M	1 49M	1 15M	1 41M
Total PeCDF	2.26M	3.08M	1.04M	0 879M	0 607M	0 967M
Total TCDD	4.59M	8.54M	1.01M	0 943M	0.678M	1 43M
Total TCDF	2 15M	3.59M	1 23M	1 06M	0.598M	1 21M
1998 Total TEQ w/ EMPC as ND	1 645859	2.938831	0.672775	0.622507	0 440132	0 469707

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.6
Sauget Area 1
Sediment Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SED-CSE-S2-0.2FT	SED-CSE-S3-0 2FT	SED-CSF-S1-0 2FT	SED-CSF-S2-0 2FT	SED-CSF-S3-0 2FT	SED-M-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/5/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	91 45J	30.57J	38 7J	88 43J	47.36J	1210 54J
1,2,3,4,6,7,8,9-OCDF	28.71J	9.75J	15 01J	32 61J	19 26J	297 31J
1,2,3,4,6,7,8-HpCDD	9.45J	3.26J	4.03J	9 44J	4 44J	121 89J
1,2,3,4,6,7,8-HpCDF	5.94J	1.64J	2 38J	5 08J	2 9J	49 36J
1,2,3,4,7,8,9-HpCDF	0.276J	0.0956J	0.198J	0.32J	0.157J	4 09J
1,2,3,4,7,8-HxCDD	0.0574J	0.0232JM	0.0228J	0.0688J	0 0291J	0 754J
1,2,3,4,7,8-HxCDF	0 127J	0.053J	0.0842J	0.162J	0 0874J	2 23J
1,2,3,6,7,8-HxCDD	0.282J	0.113J	0 141J	0 32J	0 159J	3 41J
1,2,3,6,7,8-HxCDF	0.116J	0.0344J	0 0325J	0 0719J	0 0367J	0 996J
1,2,3,7,8,9-HxCDD	0.176J	0.0825J	0 0667J	0 221J	0 0911J	2 07J
1,2,3,7,8,9-HxCDF	0.0082J	0.0045J	0 0085J	0 0109J	0 0223J	0 0184J
1,2,3,7,8-PeCDD	0.0244J	0.0147J	0.0145J	0 0389J	0.0232J	0 564J
1,2,3,7,8-PeCDF	0 0268J	0.0141J	0 0118J	0 0333JM	0.0124J	0 257J
2,3,4,6,7,8-HxCDF	0 13J	0.0447J	0.0503J	0 0899J	0.0473J	1 45J
2,3,4,7,8-PeCDF	0.0283J	0.0105J	0.0147J	0 0333J	0 0179J	0 581J
2,3,7,8-TCDD	0 0075J	0.004J	0.0083J	0.016J	0 0055J	0 193JM
2,3,7,8-TCDF	0.0457J	0.0106J	0.016J	0.0448J	0 0304J	0 4J
Total HpCDD	17 72	6.26	7.86	17.9	8 53J	228 85
Total HpCDF	24.19	6.89M	10 65	21 65	11.62J	198 56
Total HxCDD	2.37M	0.974M	1.08M	2 86M	1 37J	22 52M
Total HxCDF	3.16M	1.21M	1.72M	2.88M	1 44M	29 42M
Total PeCDD	0 524M	0.223M	0 352M	0 773M	0 434M	5 71M
Total PeCDF	0 447M	0.223M	0 328M	0 703M	0 293M	5 77M
Total TCDD	0 61M	0.207M	0 25M	0 691M	0.304M	5 86M
Total TCDF	0 602M	0.232M	0.444M	1 01M	0 449M	5 48M
1998 Total TEQ w/ EMPC as ND	0 310296	0 114073	0 144391	0 3318165	0 170232	4 000875

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.6
Sauget Area 1
Sediment Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SED-RA1-S1-0 2FT	SED-RA1-S2-0 2FT	SED-RA2-S1-0 2FT	SED-RA2-S1-0 2FTEB	SED-RA2-S1-0 2FTFD	SED-RA2-S2-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/9/1999
Units	ug/kg	ug/kg	ug/kg	ug/l	ug/kg	ug/kg
1,2 3 4,6,7 8,9-OCDD	3 47	4 95J	9 19J	0 000131	7 94J	3 98J
1 2 3,4 6,7,8 9-OCDF	0 128	0 136J	0 0164	0 0000468	0 0122	0 107J
1 2,3,4,6,7,8-HpCDD	0 155	0 162J	0 144	0 0000138M	0 136	0 128J
1,2,3,4,6,7,8-HpCDF	0 0254	0 0307J	0 0063	0 0000095	0 0054	0 0283J
1,2,3,4,7,8,9-HpCDF	0 0017M	0 003J	0 00057M	0 0000024U	0 0007U	0 0021JM
1 2,3,4 7 8-HxCDD	0 0011	0 0018J	0 0023M	0 0000019U	0 0021	0 0014JM
1 2 3 4 7 8-HxCDF	0 0019M	0 0029J	0 0012M	0 0000012U	0 00093M	0 003J
1,2,3,6,7,8-HxCDD	0 0046	0 0044J	0 0035	0 0000019U	0 0031	0 004J
1,2,3,6,7 8-HxCDF	0 00075M	0 0011JM	0 00062M	0 0000011U	0 0004U	0 0013J
1,2 3 7,8,9-HxCDD	0 0034	0 0048J	0 0051	0 000002U	0 005	0 0043J
1 2 3 7 8,9-HxCDF	0 0002U	0 00002U	0 0004U	0 0000015U	0 0005U	0 0002UJ
1,2,3 7,8-PeCDD	0 00092M	0 0017JM	0 0014	0 0000021U	0 0015	0 0013J
1 2 3 7 8-PeCDF	0 0002U	0 00082JM	0 0005M	0 0000012U	0 0004U	0 0011J
2,3 4 6 7 8-HxCDF	0 0011M	0 0018J	0 00072M	0 0000012U	0 0004U	0 0016J
2 3 4 7 8-PeCDF	0 00094M	0 0011JM	0 00067M	0 0000012U	0 00062M	0 0013J
2 3 7 8-TCDD	0 0035	0 00064J	0 0004U	0 0000014U	0 0006U	0 0005JM
2 3 7 8-TCDF	0 0013J	0 0014J	0 00077J	0 0000013U	0 00075J	0 0014J
Total HpCDD	0 324	0 347	0 354	0 000029M	0 329	0 278
Total HpCDF	0 112M	0 113	0 0189M	0 0000327	0 0139	0 094M
Total HxCDD	0 0462M	0 0504M	0 0472M	0 0000019U	0 0444	0 0422M
Total HxCDF	0 0231	0 0252	0 0075	0 0000012U	0 0048	0 0232M
Total PeCDD	0 0381M	0 0345M	0 0217	0 0000021U	0 0202M	0 025M
Total PeCDF	0 0052M	0 0117M	0 0046M	0 0000012U	0 0028M	0 0111M
Total TCDD	0 0296M	0 0294M	0 0096M	0 0000014U	0 0083M	0 0259M
Total TCDF	0 0147M	0 0145	0 0078	0 0000013U	0 0057M	0 0158M
1998 Total TEQ w/ EMPC as ND	0 0076098	0 0060171	0 00540549	0 0000028788	0 00538422	0 0058772

Notes U-not detected J-estimated value, N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-5.6
Sauget Area 1
Sediment Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	BSSED-PDC-DS-S-0-30IN	BSSED-PDC-US-N-0-20IN	BSSED-PDC-US-N-0-20INEB	BSSED-PDC-US-N-0-20INFD	BPL-ESED-S1-0 2FT
Description	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment	Borrow Pit Lake Sediment
Sample Date	2/7/2000	2/7/2000	2/4/2000	2/7/2000	10/6/1999
Units	ug/kg	ug/kg	ug/l	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	9 35	12 24	0 0000276	12 39	8 39J
1 2,3,4,6,7,8,9-OCDF	0 0082	0 0074	0 0000077U	0 0098J	0 236J
1,2,3,4,6,7,8-HpCDD	0 106	0 0778	0 0000057U	0 111	0 225J
1,2,3 4,6,7,8-HpCDF	0 0044	0 0031	0 0000046U	0 0042	0 052J
1,2,3,4,7,8,9-HpCDF	0 0002U	0.0002U	0 0000066U	0 0002U	0 0134JM
1,2,3,4,7,8-HxCDD	0 0015	0.0011	0 0000044U	0 0013	0 0027JM
1,2,3,4,7,8-HxCDF	0 00049	0 00048	0 0000025U	0 00071	0 0049J
1,2,3,6,7,8-HxCDD	0 0019	0.0013	0 0000041U	0 0019	0 0078J
1,2,3,6,7,8-HxCDF	0 00006U	0 00026M	0 0000023U	0 00036	0 0028J
1 2,3,7,8,9-HxCDD	0 0041	0 0026	0 0000044U	0 0039	0 0099J
1 2 3,7,8 9-HxCDF	0 00008U	0 00008U	0 000003U	0 0001U	0 006J
1 2 3 7 8-PeCDD	0 00058	0 00047	0 0000018U	0 00069M	0 0022J
1,2,3,7,8-PeCDF	0 00006U	0 00039JM	0 0000016U	0 00085	0 0019JM
2,3,4,6,7,8-HxCDF	0 00006U	0 00038	0 0000048	0 00049	0 0038JM
2,3,4,7,8-PeCDF	0 00031	0 00031	0 0000017U	0 0005	0 0036J
2,3,7,8-TCDD	0 00021	0 00008U	0 0000027U	0 00021	0 0013J
2,3,7,8-TCDF	0 00057	0 00051	0 0000028U	0 00063	0 0099J
Total HpCDD	0 257	0 193	0 0000057U	0.272	0 526
Total HpCDF	0 0107	0 0084	0.0000054U	0 0118	0 159
Total HxCDD	0 0323M	0 0218M	0 0000043U	0 0288M	0 11M
Total HxCDF	0 0038M	0 0044M	0 0000048	0 0059M	0 0592M
Total PeCDD	0 0095M	0.0056M	0 0000018U	0 0066M	0 0498M
Total PeCDF	0 0018M	0 0037M	0 0000017U	0 0053M	0 0357M
Total TCDD	0 0064M	0 0017M	0 0000027U	0 0025M	0 0384M
Total TCDF	0 0047M	0 0051M	0 0000028U	0 0075M	0 0803M
1998 Total TEQ w/ EMPC as ND	0 00385332	0 00336349	0 0000044577	0 00417448	0 0135021

Notes U-not detected J-estimated value, N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.6
Sauget Area 1
Sediment Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	BPL-ESED-S1-0.2FTFD	BPL-ESED-S2-0 2FT	BPL-ESED-S3-0 2FT
Description	*Borrow Pit Lake Sediment*	*Borrow Pit Lake Sediment*	*Borrow Pit Lake Sediment*
Sample Date	10/6/1999	10/7/1999	10/6/1999
Units	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	8.86J	17.25J	15.5J
1,2,3,4,6,7,8,9-OCDF	0.234J	0.658J	0.756J
1,2,3,4,6,7,8-HpCDD	0.251J	0.425J	0.443J
1,2,3,4,6,7,8-HpCDF	0.0576J	0.126J	0.159J
1,2,3,4,7,8,9-HpCDF	0.0053J	0.0117J	0.0109J
1,2,3,4,7,8-HxCDD	0.0034J	0.0049J	0.0041JM
1,2,3,4,7,8-HxCDF	0.0052J	0.0092J	0.0072J
1,2,3,6,7,8-HxCDD	0.0081J	0.0162J	0.013J
1,2,3,6,7,8-HxCDF	0.0031J	0.0059J	0.0041J
1,2,3,7,8,9-HxCDD	0.0096J	0.0173J	0.013J
1,2,3,7,8,9-HxCDF	0.00039JM	0.0036J	0.00074J
1,2,3,7,8-PeCDD	0.002J	0.0035J	0.0023J
1,2,3,7,8-PeCDF	0.002J	0.0027J	0.0018JM
2,3,4,6,7,8-HxCDF	0.0051J	0.0073J	0.0064J
2,3,4,7,8-PeCDF	0.0043J	0.0042J	0.0029J
2,3,7,8-TCDD	0.001JM	0.0122J	0.0026J
2,3,7,8-TCDF	0.0104J	0.0094J	0.0062J
Total HpCDD	0.556	0.932	0.917
Total HpCDF	0.207M	0.553M	0.599
Total HxCDD	0.109M	0.185M	0 135M
Total HxCDF	0.0539M	0.136M	0.106M
Total PeCDD	0.0459M	0.0611M	0.0356M
Total PeCDF	0.0367M	0.0512M	0.0318M
Total TCDD	0.0355M	0.0698M	0.0352M
Total TCDF	0.0814M	0.0996M	0.0606M
1998 Total TEQ w/ EMPC as ND	0.0133079	0.0327328	0.0194186

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.7
Sauget Area 1
Sediment Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	BPL-ESED-S1-0 2FT	BPL-ESED-S1-0.2FTFD	BPL-ESED-S2-0.2FT	BPL-ESED-S3-0 2FT	BSSED-PDC-DS-S-0-30IN
Description	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Dead Creek Sediment
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/6/1999	2/7/2000
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	13000J	15000J	16000J	11000J	9800
Antimony	1.9J	5.1UJ	5 9UJ	1 5J	2 7UJ
Arsenic	16J	17J	17J	13J	7
Barium	360J	410J	420J	240J	140J
Beryllium	0.72J	0 76J	0.82J	0 58J	0 48J
Cadmium	1 9J	2J	2.7J	1 6J	0 67U
Calcium	16000J	17000J	16000J	11000J	5300
Chromium	20J	22J	26J	18J	15J
Cobalt	9.3J	10J	10J	7 1J	6 7
Copper	43J	48J	64J	36J	14
Hardness as CaCO3					
Iron	34000J	37000J	38000J	28000J	16000
Lead	49J	54J	58J	34J	16
Magnesium	5500J	5700J	4800J	3600J	2900
Manganese	1200J	1300J	1400J	940J	430J
Molybdenum	0.52J	0.47J	0.92J	0.37J	0 45J
Nickel	51J	54J	54J	35J	15
Potassium	2000J	2300J	2200J	1500J	1200J
Selenium	2.8UJ	2.8UJ	2.9UJ	2 5UJ	1.3U
Silver	2.8UJ	2.8UJ	0.79J	2.5UJ	1.3U
Sodium	200UJ	180UJ	230UJ	140UJ	92
Thallium	2.8UJ	2.8UJ	2.9UJ	2 5UJ	1 3U
Vanadium	35J	38J	40J	28J	25
Zinc	290J	320J	370J	250J	58

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.7
Sauget Area 1
Sediment Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	BSSED-PDC-US-N-0-20IN	BSSED-PDC-US-N-0-20INEB	BSSED-PDC-US-N-0-20INFD	SED-CSB-0 2FTEB	SED-CSB-S1-0 2FT	SED-CSB-S1-0 2FTFD
Description	Dead Creek Sediment	Dead Creek Sediment	Dead Creek Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	2/7/2000	2/4/2000	2/7/2000	10/5/1999	10/5/1999	10/5/1999
Units	mg/kg dw	mg/l	mg/kg dw	mg/l	mg/kg dw	mg/kg dw
Aluminum	11000	0 2U	13000	0 20U	6900J	6200J
Antimony	2 5UJ	0 02U	2 5UJ	0 020U	9 2J	8 6J
Arsenic	6 6	0 01U	7 8	0 010U	35J	31J
Barium	130J	0 01U	140J	0 0030J	950J	550J
Beryllium	0 54	0 004U	0 58	0 0040U	1UJ	0 96UJ
Cadmium	0 62U	0 005U	0 63U	0 0050U	17J	13J
Calcium	3300	0 15J	4000	0 41J	180000J	180000J
Chromium	16J	0 01U	18J	0 010U	49J	34J
Cobalt	7 4	0 01U	7 7	0 010U	7 2J	6 7J
Copper	14	0 02U	15	0 0062J	5100J	4600J
Hardness as CaCO3				1 0		
Iron	16000	0 05U	18000	0 042J	14000J	12000J
Lead	15	0 005U	16	0 0019J	630J	490J
Magnesium	2600	0 5U	2800	0 50U	20000J	20000J
Manganese	540J	0 01U	670J	0 010U	250J	240J
Molybdenum	0 58J	0 01U	0 68J	0 010U	7 2J	6 8J
Nickel	16	0 04U	17	0 040U	88J	67J
Potassium	1200J	1U	1500J	1 0U	1700J	1600J
Selenium	1 2U	0 01U	1 3U	0 010U	4 1J	1 7J
Silver	1 2U	0 01U	1 3U	0 010U	6 7J	6 7J
Sodium	80	0 58	71	0 39J	340UJ	310UJ
Thallium	1 2UJ	0 01U	1 3U	0 010U	2 5UJ	2 2UJ
Vanadium	29	0 01U	33	0 010U	29J	26J
Zinc	59	0 02U	63	0 023	2000J	1600J

Notes ot detected J-estimated value N-tentatively identified, R-rejected M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.7
Sauget Area 1
Sediment Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SED-CSB-S2-0 2FT	SED-CSB-S3-0 2FT	SED-CSC-S1-0 2FT	SED-CSC-S2-0 2FT	SED-CSC-S3-0 2FT	SED-CSD-S1-0 2FT	SED-CSD-S2-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/1999	10/5/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	8300J	12000J	15000J	12000J	9700J	13000J	16000J
Antimony	6 3J	6 8J	1 8J	1 3J	2 2J	8 7UJ	8 7UJ
Arsenic	38J	25J	28J	17J	16J	16J	17J
Barium	3300J	1700J	470J	680J	800J	380J	400J
Beryllium	1UJ	1 2UJ	1 2UJ	0 93UJ	1UJ	1 2UJ	1 3UJ
Cadmium	25J	25J	20J	19J	16J	15J	13J
Calcium	87000J	100000J	28000J	23000J	47000J	28000J	30000J
Chromium	76J	78J	50J	93J	47J	56J	60J
Cobalt	9 9J	12J	17J	12J	9 7J	12J	12J
Copper	11000J	6700J	1400J	2200J	2100J	740J	730J
Hardness as CaCO3							
Iron	29000J	25000J	27000J	21000J	24000J	22000J	25000J
Lead	1000J	750J	270J	330J	480J	260J	230J
Magnesium	10000J	11000J	5500J	3600J	6400J	6700J	7500J
Manganese	210J	230J	290J	240J	330J	250J	320J
Molybdenum	4 3J	4 8J	3 4J	2 2J	1 7UJ	3UJ	2 6UJ
Nickel	500J	380J	370J	580J	550J	260J	260J
Potassium	1700J	2400J	3000J	2400J	2100J	2900J	3200J
Selenium	5 1J	3 5J	2 8UJ	13UJ	2 4UJ	2UJ	2 5UJ
Silver	15J	8 9J	1 2J	1 8J	1 6J	4 3UJ	4 3UJ
Sodium	270UJ	290UJ	300UJ	320UJ	340UJ	240UJ	250UJ
Thallium	2 3UJ	2 1J	3 1UJ	2 6UJ	3 5UJ	4 3UJ	4 3UJ
Vanadium	37J	41J	48J	36J	34J	44J	51J
Zinc	7900J	4800J	2900J	4500J	3300J	2500J	2700J

Notes U not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-5.7
Sauget Area 1
Sediment Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SED-CSD-S3-0 2FT	SED-CSE-S1-0 2FT	SED-CSE-S2-0 2FT	SED-CSE-S3-0 2FT	SED-CSF-S1-0 2FT	SED-CSF-S2-0 2FT	SED-CSF-S3-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/4/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aluminum	13000J	15000J	13000J	11000J	7800J	14000J	17000J
Antimony	5 9UJ	2 7J	2J	6 1UJ	4 7R	2 6J	2 5J
Arsenic	10J	16J	12J	9 3J	8J	19J	15J
Barium	310J	340J	290J	190J	150J	250J	270J
Beryllium	1UJ	0 84J	0 75J	0 9UJ	0 53J	0 85J	0 89J
Cadmium	10J	14J	11J	7 7J	7 4J	47J	14J
Calcium	26000J	43000J	80000J	26000J	11000J	13000J	11000J
Chromium	67J	71J	49J	31J	19J	38J	30J
Cobalt	8 8J	10J	9 2J	7 4J	5 5J	13J	11J
Copper	320J	570J	350J	150J	160J	410J	240J
Hardness as CaCO3							
Iron	19000J	24000J	20000J	17000J	14000J	22000J	26000J
Lead	170J	310J	190J	140J	110J	320J	110J
Magnesium	6600J	9200J	13000J	7400J	4100J	6800J	5300J
Manganese	270J	310J	320J	170J	170J	230J	510J
Molybdenum	1 7UJ	2 6J	1 6J	3 2J	0 7J	3 7J	0 76J
Nickel	150J	190J	130J	51J	90J	390J	180J
Potassium	2700J	3100J	2600J	2400J	1600J	2900J	2700J
Selenium	2 9UJ	2 6UJ	1 5UJ	3UJ	2 3UJ	4 8UJ	3 7UJ
Silver	2 9UJ	1 1J	0 67J	3UJ	2 3UJ	4 8UJ	3 7UJ
Sodium	190UJ	250UJ	300UJ	180UJ	210UJ	350UJ	230UJ
Thallium	2 9UJ	1 9J	2 6UJ	3UJ	2 3UJ	4 8UJ	3 7UJ
Vanadium	37J	51J	40J	37J	25J	51J	41J
Zinc	1800J	2300J	1800J	980J	950J	3700J	1600J

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.7
Sauget Area 1
Sediment Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SED-M-S1-0 2FT	SED-RA1-S1-0 2FT	SED-RA1-S2-0 2FT	SED-RA2-S1-0 2FT	SED-RA2-S1-0 2FTEB	SED-RA2-S1-0 2FTFD	SED-RA2-S2-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/5/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/9/1999
Units	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/l	mg/kg dw	mg/kg dw
Aluminum	8900J	15000J	12000J	11000J	0 2U	13000J	19000J
Antimony	6 6J	3 2UJ	1 3J	1J	0 02U	3 8UJ	4R
Arsenic	35J	8	7J	6 5J	0 01U	6 9J	7J
Barium	700J	230J	210J	160J	0 013	170J	220J
Beryllium	1 3UJ	0 8	0 7J	0 6J	0 004U	0 64J	1J
Cadmium	17J	0 38J	0 34J	0 26J	0 005U	0 32J	0 65J
Calcium	100000J	18000J	12000J	11000J	24	13000J	12000J
Chromium	48J	21J	17J	16J	0 01U	18J	25J
Cobalt	15J	9 8	7 1J	7 3J	0 01U	7 7J	10J
Copper	4200J	20J	17J	16J	0 0038J	16J	23J
Hardness as CaCO3							
Iron	34000J	22000J	19000J	17000J	0 05U	18000J	24000J
Lead	530J	23J	22J	16J	0 005U	17J	26J
Magnesium	7400J	6500	5000J	3100J	8	3400J	5800J
Manganese	370J	720J	770J	560J	0 0026J	580J	770J
Molybdenum	17J	0 37J	0 49J	0 35J	0 01U	0 43J	0 53J
Nickel	190J	23	19J	17J	0 04U	18J	26J
Potassium	2000J	2300	1900J	1500J	2 3	1700J	2600J
Selenium	3 8J	1 8U	2 5UJ	1 9UJ	0 01U	1 9UJ	2UJ
Silver	7 3J	1 8U	2 5UJ	1 9UJ	0 01U	1 9UJ	2UJ
Sodium	290UJ	150U	180UJ	140UJ	13	130UJ	210UJ
Thallium	5UJ	1 8U	2 5UJ	1 9UJ	0 01U	1 9UJ	2UJ
Vanadium	45J	36	30J	28J	0 01U	31J	44J
Zinc	2400J	95J	82J	57J	0 0072J	61J	96J

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	BPL-ESED-S1-0 2FT	BPL-ESED-S1-0 2FTFD	BPL-ESED-S2-0 2FT	BPL-ESED-S3-0.2FT	BSSED-PDC-DS-S-0-30IN	BSSED-PDC-US-N-0-20IN
Description	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Borrow Pit Lake Sediment	Dead Creek Sediment	Dead Creek Sediment
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/6/1999	2/7/2000	2/7/2000
Copper (mg/kg)						
Hydrocarbons as DRO (mg/kg)						
Hydrocarbons as GRO (mg/kg)						
Mercury (mg/kg)	0 091J	0 11J	0 16J	0 11J	0 025	0 023
pH (su)	7 12	6 93	7 06	6 74		
Total Organic Carbon (mg/kg)	84000J	50000J	45000J	33000J	3600	4100
Zinc (mg/kg)						

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	BSSED-PDC-US-N-0-20INEB	BSSED-PDC-US-N-0-20INFD	SED-CSB-S1-0 2FT	SED-CSB-S1-0 2FTFD	SED-CSB-S2-0 2FT	SED-CSB-S3-0 2FT
Description	Dead Creek Sediment	Dead Creek Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	2/4/2000	2/7/2000	10/5/1999	10/5/1999	10/5/1999	10/5/1999
Copper (mg/kg)						
Hydrocarbons as DRO (mg/kg)						
Hydrocarbons as GRO (mg/kg)						
Mercury (mg/kg)		0 023	0 96J	0 56J	1 5J	1 4J
pH (su)			6 77	6 66	6 64	6 6
Total Organic Carbon (mg/kg)	1U	5200	100000J	60000J	95000J	67000J
Zinc (mg/kg)						

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	SED-CSC-S1-0 2FT	SED-CSC-S2-0 2FT	SED-CSC-S3-0 2FT	SED-CSD-S1-0 2FT	SED-CSD-S2-0 2FT	SED-CSD-S3-0 2FT	SED-CSE-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	*10/4/1999*	*10/4/1999*	*10/4/1999*	*10/4/1999*	*10/4/1999*	*10/4/1999*	*10/6/1999*
Copper (mg/kg)							
Hydrocarbons as DRO (mg/kg)							
Hydrocarbons as GRO (mg/kg)							
Mercury (mg/kg)	0 66J	0 64J	0 58J	0 5J	0 42J	0 35J	0 51J
pH (su)	6 87	6 92	6 78	6 84	6 82	6 75	6 7
Total Organic Carbon (mg/kg)	95000J	84000J	89000J	73000J	72000J	32000J	92000J
Zinc (mg/kg)							

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	SED-CSE-S2-0 2FT	SED-CSE-S3-0 2FT	SED-CSF-S1-0 2FT	SED-CSF-S2-0 2FT	SED-CSF-S3-0 2FT	SED-M-S1-0 2FT	SED-RA1-S1-0 2FT
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/5/1999	10/8/1999
Copper (mg/kg)							
Hydrocarbons as DRO (mg/kg)							
Hydrocarbons as GRO (mg/kg)							
Mercury (mg/kg)	0 3J	0 3J	0 3J	1 1J	0 45J	1J	0 042
pH (su)	6 83	6 78	6 85	6 71	6 87	6 81	7 31
Total Organic Carbon (mg/kg)	82000J	70000J	40000J	140000J	61000J	75000J	12000
Zinc (mg/kg)							

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	SED-RA1-S2-0 2FT	SED-RA2-S1-0 2FT	SED-RA2-S1-0 2FTFD	SED-RA2-S2-0 2FT	FASED-BPL-S1-0-10IN	FASED-BPL-S1-0-10INEB
Description	Ecological Sediment	Ecological Sediment	Ecological Sediment	Ecological Sediment	Industry Specific - Borrow Pit Lake	Industry Specific - Borrow Pit Lake
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/9/1999	2/3/2000	2/3/2000
Copper (mg/kg)					9 9	0 02U
Hydrocarbons as DRO (mg/kg)					23	0 1U
Hydrocarbons as GRO (mg/kg)					0 28U	0 05U
Mercury (mg/kg)	0 063J	0 046J	0 048J	0 04J		
pH (su)	6 92	6 68	6 92	7 24		
Total Organic Carbon (mg/kg)	23000J	13000J	13000J	20000J	12000	1U
Zinc (mg/kg)					380	0 02U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-BPL-S2-0-10IN	FASED-BPL-S3-0-8IN	FASED-BPL-S4-0-10IN	FASED-BPL-S5-0-9IN	FASED-BPL-S6-0-11IN	FASED-BPL-S6-0-11INFD
Description	Industry Specific - Borrow Pit Lake	Industry Specific - Borrow Pit Lake	Industry Specific - Borrow Pit Lake	Industry Specific - Borrow Pit Lake	Industry Specific - Borrow Pit Lake	Industry Specific - Borrow Pit Lake
Sample Date	36559	36559	36559	36559	36559	36559
Copper (mg/kg)	15	14	13	13	15	19
Hydrocarbons as DRO (mg/kg)	10	4 6	4	6 6	8 1	6
Hydrocarbons as GRO (mg/kg)	0 33U	0 37U	0 33U	0 31U	0 33U	0 36U
Mercury (mg/kg)						
pH (su)						
Total Organic Carbon (mg/kg)	3900	16000	7600	7600	11000	16000
Zinc (mg/kg)	230	300	360	280	220	450

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-BPL-S7-0-9IN	FASED-BPL-S8-0-9IN	FASED-CSB-S10W-0-9IN	FASED-CSB-S10W-0-9INFD	FASED-CSB-S1W-0-25IN
Description	Industry Specific - Borrow Pit Lake	Industry Specific - Borrow Pit Lake	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36559	36559	36558	36558	36557
Copper (mg/kg)	18	21	1800	670	2200
Hydrocarbons as DRO (mg/kg)	4 3	5 5	370	150	2400
Hydrocarbons as GRO (mg/kg)	0 33U	0 36U	0 3U	0 29U	0 69
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	9200	11000	30000	28000	71000
Zinc (mg/kg)	410	490	800	260	3600

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSB-S2-0-23IN	FASED-CSB-S3-0-26IN	FASED-CSB-S4W-0-23IN	FASED-CSB-S5-0-22IN	FASED-CSB-S6-0-20IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36557	36557	36557	36557	36558
Copper (mg/kg)	19000	750	19000	4500	4900
Hydrocarbons as DRO (mg/kg)	2000	700	800	2100	2500
Hydrocarbons as GRO (mg/kg)	9.9	8.8	0.37	0.44	3.9
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	60000	110000	25000	89000	130000
Zinc (mg/kg)	25000	11000	21000	12000	20000

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSB-S7-0-18IN	FASED-CSB-S8E-0-22IN	FASED-CSB-S9W-0-9IN	FASED-CSC-S10-0-28IN	FASED-CSC-S1-0-13IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36558	36558	36558	36557	36556
Copper (mg/kg)	480	6700	2000	640	2200
Hydrocarbons as DRO (mg/kg)	67	460	5200	2400	540
Hydrocarbons as GRO (mg/kg)	3 7	0 34	1 9	0 52	0 34U
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	30000	53000	370000	75000	34000
Zinc (mg/kg)	3100	12000	26000	17000	2300

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSC-S11-0-25IN	FASED-CSC-S11-0-25INFD	FASED-CSC-S12E-0-18IN	FASED-CSC-S2-0-28IN	FASED-CSC-S2-0-28INFD
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36557	36557	36557	36556	36556
Copper (mg/kg)	13000	6900	16000	4500	6400
Hydrocarbons as DRO (mg/kg)	2600	5200	930	800	1000
Hydrocarbons as GRO (mg/kg)	8 3	9.8	2.1	4 1	0 51
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	230000	150000	130000	74000	81000
Zinc (mg/kg)	37000	20000	4700	11000	13000

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSC-S3-0-20IN	FASED-CSC-S4-0-22IN	FASED-CSC-S5W-0-26IN	FASED-CSC-S6W-0-26IN	FASED-CSC-S7-0-29IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36556	36556	36556	36556	36556
Copper (mg/kg)	4200	5600	9500	2600	1400
Hydrocarbons as DRO (mg/kg)	1200	1100	880	160	430
Hydrocarbons as GRO (mg/kg)	1 4	2.3	3	0 15	6 3
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	120000	100000	72000	44000	47000
Zinc (mg/kg)	10000	11000	13000	3400	3100

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSC-S8-0-16IN	FASED-CSC-S9-0-27IN	FASED-CSC-S9-0-27INFD	FASED-CSD-S1W-0-24IN	FASED-CSD-S2-0-15IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36557	36557	36557	36558	36552
Copper (mg/kg)	14000	31000	3500	840	1500
Hydrocarbons as DRO (mg/kg)	2500	5000	930	74	220
Hydrocarbons as GRO (mg/kg)	2	9 6	6 3	0 41U	0 36U
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	88000	26000	120000	31000	60000
Zinc (mg/kg)	33000	76000	6700	4500	1600

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSD-S3-0-21IN	FASED-CSD-S4-0-23IN	FASED-CSD-S5-0-10IN	FASED-CSD-S6E-0-13IN	FASED-CSD-S7-0-33IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36552	36552	36556	36553	36556
Copper (mg/kg)	1100	18000	220	1100	1400
Hydrocarbons as DRO (mg/kg)	280	920	53	30	1200
Hydrocarbons as GRO (mg/kg)	0.4	0.66U	0.34U	0.42U	0.52
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	69000	110000	170000	47000	62000
Zinc (mg/kg)	2000	19000	360	3300	13000

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSD-S8-0-29IN	FASED-CSD-S9W-0-23IN	FASED-CSE-S1-0-12IN	FASED-CSE-S10W-0-27IN	FASED-CSE-S11W-0-22IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36556	36556	36544	36549	36549
Copper (mg/kg)	770	3800	44	970	150
Hydrocarbons as DRO (mg/kg)	750	61	98	870	320
Hydrocarbons as GRO (mg/kg)	0 84	0 64	0 5U	2 5	0 16
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	58000	54000	39000	44000	51000
Zinc (mg/kg)	16000	6100	660	4200	1000

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSE-S12-0-21IN	FASED-CSE-S13E-0-21IN	FASED-CSE-S14W-0-31IN	FASED-CSE-S15-0-19IN	FASED-CSE-S16E-0-21IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36549	36549	36549	36550	36550
Copper (mg/kg)	480	120	13000	11000	3600
Hydrocarbons as DRO (mg/kg)	410	56	830	860	290
Hydrocarbons as GRO (mg/kg)	0 43U	0 36U	0 36	0 32	0 27
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	67000	33000	47000	66000	52000
Zinc (mg/kg)	1400	1100	32000	150000	6600

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSE-S17-0-28IN	FASED-CSE-S18-0-25IN	FASED-CSE-S19E-0-28IN	FASED-CSE-S19E-0-28INFD	FASED-CSE-S20E-0-33IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36550	36550	36550	36550	36550
Copper (mg/kg)	460	2200	1600	440	24
Hydrocarbons as DRO (mg/kg)	110	290	5 2U	41	4 8U
Hydrocarbons as GRO (mg/kg)	0 27	0 3	0 39U	0 31	0 27
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	18000	52000	16000	32000	19000
Zinc (mg/kg)	3200	6800	3000	3100	2900

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSE-S21-0-28IN	FASED-CSE-S22E-0-26IN	FASED-CSE-S23-0-23IN	FASED-CSE-S24W-0-27IN	FASED-CSE-S25W-0-29IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36551	36551	36551	36551	36551
Copper (mg/kg)	330	42	2900	810	690
Hydrocarbons as DRO (mg/kg)	310	15	3600	82	11
Hydrocarbons as GRO (mg/kg)	0 45U	0 37U	0 26	0 18	0 35U
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	35000	23000	49000	55000	15000
Zinc (mg/kg)	8600	2800	5200	2900	3100

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSE-S26E-0-12IN	FASED-CSE-S2W-0-19IN	FASED-CSE-S3-0-13IN	FASED-CSE-S4E-0-17IN	FASED-CSE-S5E-0-24IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36552	36544	36545	36545	36545
Copper (mg/kg)	57	34	65	45	3900
Hydrocarbons as DRO (mg/kg)	420	50	460	1100	2100
Hydrocarbons as GRO (mg/kg)	0 22	0 43U	0 42U	0 38U	5 6
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	51000	42000	53000	14000	63000
Zinc (mg/kg)	810	490	590	500	8500

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSE-S6W-0-35IN	FASED-CSE-S6W-0-35INFD	FASED-CSE-S7W-0-13IN	FASED-CSE-S8-0-32IN	FASED-CSE-S9-0-31IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36545	36545	36545	36546	36546
Copper (mg/kg)	440	6500	35000	270	1200
Hydrocarbons as DRO (mg/kg)	1700	1100	3200	550	930
Hydrocarbons as GRO (mg/kg)	8 4	4 9	3 9	6	1 4
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	89000	51000	89000	26000	74000
Zinc (mg/kg)	1900	11000	55000	4200	3900

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSF-S10-0-9IN	FASED-CSF-S11W-0-10IN	FASED-CSF-S12-0-15IN	FASED-CSF-S12-0-15INFD	FASED-CSF-S13W-0-15IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36537	36537	36537	36537	36537
Copper (mg/kg)	33	88	80	72	370
Hydrocarbons as DRO (mg/kg)	17	11	16	17	77
Hydrocarbons as GRO (mg/kg)	0 46U	0 63U	0 53U	0 6U	0 8U
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	19000	23000	22000	17000	42000
Zinc (mg/kg)	250	690	680	690	2100

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSF-S14W-0-15IN	FASED-CSF-S15W-0-28IN	FASED-CSF-S16-0-23IN	FASED-CSF-S17W-0-16IN	FASED-CSF-S18E-0-14IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36537	36538	36538	36538	36538
Copper (mg/kg)	460	430	33	1400	1700
Hydrocarbons as DRO (mg/kg)	91	31	18	100	110
Hydrocarbons as GRO (mg/kg)	0 69U	0 68U	0 74U	0 77U	0 79U
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	43000	41000	34000	43000	56000
Zinc (mg/kg)	3200	7700	3900	11000	9100

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSF-S19-0-13IN	FASED-CSF-S1E-0-8IN	FASED-CSF-S20-0-12IN	FASED-CSF-S2-0-7IN	FASED-CSF-S21-0-13IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36542	36536	36542	36536	36542
Copper (mg/kg)	5400	17	710	12	920
Hydrocarbons as DRO (mg/kg)	74	7 4	50	920	87
Hydrocarbons as GRO (mg/kg)	0 15	0 26	0 5U	31	0 57U
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	66000	21000	52000	12000	71000
Zinc (mg/kg)	10000	88	2300	53	4500

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSF-S21-0-13INFD	FASED-CSF-S22E-0-20IN	FASED-CSF-S23-0-15IN	FASED-CSF-S24W-0-13IN	FASED-CSF-S25E-0-10IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36542	36542	36542	36542	36543
Copper (mg/kg)	1200	420	1400	530	2500
Hydrocarbons as DRO (mg/kg)	25	50	49	47	71
Hydrocarbons as GRO (mg/kg)	0 77U	0 18	0 14	0 14	0 13
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	32000	51000	73000	30000	70000
Zinc (mg/kg)	4400	4800	5400	3200	6200

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSF-S26W-0-13IN	FASED-CSF-S27E-0-16IN	FASED-CSF-S28-0-10IN	FASED-CSF-S29W-0-10IN	FASED-CSF-S30N-0-8IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36543	36543	36543	36543	36543
Copper (mg/kg)	930	1900	1200	26	54
Hydrocarbons as DRO (mg/kg)	75	44	220	21	20
Hydrocarbons as GRO (mg/kg)	0.52U	0.53U	0.17	0.38U	0.1
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	68000	59000	56000	15000	30000
Zinc (mg/kg)	4700	6200	3200	510	850

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSF-S31N-0-13IN	FASED-CSF-S32S-0-11IN	FASED-CSF-S32S-0-11INFD	FASED-CSF-S33-0-13IN	FASED-CSF-S34S-0-14IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36543	36543	36543	36543	36543
Copper (mg/kg)	130	81	59	200	92
Hydrocarbons as DRO (mg/kg)	49	75	190	440	40
Hydrocarbons as GRO (mg/kg)	0 38	0 43	0 11	0 26	0 17
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	36000	38000	41000	44000	48000
Zinc (mg/kg)	2400	1600	1200	1700	3900

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSF-S35S-0-21IN	FASED-CSF-S36N-0-12IN	FASED-CSF-S36N-0-12INFD	FASED-CSF-S37N-0-13IN	FASED-CSF-S38S-0-14IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36558	36543	36543	36543	36544
Copper (mg/kg)	44	78	68	43	89
Hydrocarbons as DRO (mg/kg)	170	120	150	160	44
Hydrocarbons as GRO (mg/kg)	0 35U	0.15	0 1	0.44U	0 33U
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	25000	28000	38000	23000	21000
Zinc (mg/kg)	540	1000	720	920	860

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSF-S39S-0-26IN	FASED-CSF-S3E-0-6IN	FASED-CSF-S40-0-20IN	FASED-CSF-S4-0-7IN	FASED-CSF-S5W-0-10IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36544	36536	36544	36536	36536
Copper (mg/kg)	1100	17	39	10	13
Hydrocarbons as DRO (mg/kg)	300	3 8	170	2.7	3
Hydrocarbons as GRO (mg/kg)	0 55U	0 3U	0 35U	0.56U	0 38U
Mercury (mg/kg)					
pH (su)					
Total Organic Carbon (mg/kg)	53000	11000	25000	11000	24000
Zinc (mg/kg)	5300	63	690	50	62

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-5.8
Sauget Area 1
Sediment Sample Analytical Results
Other Data

Sample Id	FASED-CSF-S6E-0-10IN	FASED-CSF-S7E-0-11IN	FASED-CSF-S8-0-15IN	FASED-CSF-S9-0-11IN
Description	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment	Industry Specific - Un/Developed Sediment
Sample Date	36536	36536	36537	36537
Copper (mg/kg)	17	21	34	78
Hydrocarbons as DRO (mg/kg)	3 4	5 7	8 6	24
Hydrocarbons as GRO (mg/kg)	0 36U	0 34U	0 36U	0 63U
Mercury (mg/kg)				
pH (su)				
Total Organic Carbon (mg/kg)	14000	16000	20000	36000
Zinc (mg/kg)	85	84	160	400

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.1
Sauget Area 1
Surface Water Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	SW-BPL-S1	SW-BPL-S2	SW-BPL-S3	SW-CSB-S1	SW-CSB-S2	SW-CSB-S3	SW-CSDEB	SW-CSD-S1
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/5/1999	10/5/1999	10/6/1999	10/5/1999	10/5/1999	10/4/1999	10/6/1999	10/6/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 1 1-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1 1 2 2-Tetrachloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1 1 2-Trichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,1-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1 1-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1,2-Dichloroethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
1 2-Dichloropropane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U	25U	25U
Acetone	18J	13J	14J	50U	14J	18J	50U	13J
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromoform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Carbon tetrachloride	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chlorobenzene	5 0U	5 0U	5 0U	2 8J	5 0U	5 0U	5 0U	5 0U
Chloroethane	10U	10U	10U	10U	10U	10U	10U	10U
Chloroform	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U	10U	10U
Cis/Trans-1 2-Dichloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Dibromochloromethane	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Ethylbenzene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Tetrachloroethene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Toluene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Trichloroethene	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U	10U	10U
Xylenes Total	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
cis-1 3-Dichloropropene	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
trans 1 3-Dichloropropene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Total VOC s	**18**	**13**	**14**	**2 8**	**14**	**18**	**ND**	**13**

Notes U not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD field duplicate ND-none detected

Table A-6.1
Sauget Area 1
Surface Water Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	SW-CSD-S1FD	SW-CSD-S2	SW-CSD-S3	SW-CSE-S3	SW-CSF-S1	SW-CSF-S2	SW-CSF-S3	SW-M-S1
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/6/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/7/1999	10/5/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 1,1-Trichloroethane	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
1,1,2,2-Tetrachloroethane	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
1 1,2-Trichloroethane	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
1 1-Dichloroethane	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
1 1-Dichloroethene	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
1 2-Dichloroethane	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
1,2-Dichloropropane	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U	25U	25U
Acetone	10J	11J	17J	50U	50U	50U	50U	50U
Benzene	1 2U	1 2U	1 2U	1 2U	1 2U	1 7	1 2U	1 2U
Bromodichloromethane	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Bromoform	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Carbon tetrachloride	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Chlorobenzene	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Chloroethane	10U	10U	10U	10U	10U	10U	10U	10U
Chloroform	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Chloromethane	10U	10U	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Dibromochloromethane	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Ethylbenzene	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Tetrachloroethene	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Toluene	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Trichloroethene	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U	10U	10U
Xylenes, Total	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
cis-1,3-Dichloropropene	1 0U	1 0U	1 0U	1U	1U	1U	1U	1 0U
trans-1 3-Dichloropropene	5 0U	5 0U	5 0U	5U	5U	5U	5U	5 0U
Total VOC's	**10**	**11**	**17**	**ND**	**ND**	**1.7**	**ND**	**ND**

Notes not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.1
Sauget Area 1
Surface Water Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	SW-PDC-DS	SW-PDC-US	SW-PDC-USFD	SW-RA1-S1	SW-RA1-S2	SW-RA1-S2FD	SW-RA2EB	SW-RA2-S1
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	2/4/2000	2/4/2000	2/4/2000	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 1 1-Trichloroethane	5U	5U	5U	5 0U	5U	5U	5U	5U
1 1 2 2-Tetrachloroethane	5U	5U	5U	5 0U	5U	5U	5U	5U
1 1 2-Trichloroethane	5U	5U	5U	5 0U	5U	5U	5U	5U
1 1-Dichloroethane	5U	5U	5U	5 0U	5U	5U	5U	5U
1 1-Dichloroethene	5U	5U	5U	5 0U	5U	5U	5U	5U
1 2-Dichloroethane	5U	5U	5U	5 0U	5U	5U	5U	5U
1 2-Dichloropropane	5U	5U	5U	5 0U	5U	5U	5U	5U
2-Butanone (MEK)	25U	25U	25U	25U	25U	25U	25U	25U
2-Hexanone	25U	25U	25U	25U	25U	25U	25U	25U
4-Methyl-2-pentanone (MIBK)	25U	25U	25U	25U	25U	25U	25U	25U
Acetone	50U	50U	50U	50U	26J	50U	50U	50U
Benzene	1 2U	1 2U	0 3J	1 2U	1 2U	1 2U	1 2U	1 2U
Bromodichloromethane	5U	5U	5U	5 0U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5 0U	5U	5U	5U	5U
Bromomethane (Methyl bromide)	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U	9 8U
Carbon disulfide	5U	5U	5U	5 0U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5 0U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5 0U	5U	5U	5U	5U
Chloroethane	10U	10U	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5 0U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U	10U	10U
Cis/Trans-1,2-Dichloroethene	5U	5U	5U	5 0U	5U	5U	5U	5U
Dibromochloromethane	5U	5U	5U	5 0U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5 0U	5U	5U	5U	5U
Methylene chloride (Dichloromethane)	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U	4 7U
Styrene	5U	5U	5U	5 0U	5U	5U	5U	5U
Tetrachloroethene	5U	5U	5U	5 0U	5U	5U	5U	5U
Toluene	5U	5U	5U	5 0U	5U	5U	5U	5U
Trichloroethene	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U	2 7U
Vinyl chloride	10U	10U	10U	10U	10U	10U	10U	10U
Xylenes Total	5U	5U	5U	5 0U	5U	5U	5U	5U
cis-1 3-Dichloropropene	1U	1U	1U	1 0U	1U	1U	1U	1U
trans-1 3-Dichloropropene	5U	5U	5U	5 0U	5U	5U	5U	5U
Total VOC s	**ND**	**ND**	**0 3**	**ND**	**26**	**ND**	**ND**	**ND**

Notes U not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-6.1
Sauget Area 1
Surface Water Sample Analytical Results
Method 8260B Volatile Organic Compound Data

Sample Id	SW-RA2-S2
Description	Surface Water
Sample Date	10/8/1999
Units	ug/l
1,1,1-Trichloroethane	5U
1,1,2,2-Tetrachloroethane	5U
1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U
1,1-Dichloroethene	5U
1,2-Dichloroethane	5U
1,2-Dichloropropane	5U
2-Butanone (MEK)	25U
2-Hexanone	25U
4-Methyl-2-pentanone (MIBK)	25U
Acetone	50U
Benzene	1 2U
Bromodichloromethane	5U
Bromoform	5U
Bromomethane (Methyl bromide)	9 8U
Carbon disulfide	5U
Carbon tetrachloride	5U
Chlorobenzene	5U
Chloroethane	10U
Chloroform	5U
Chloromethane	10U
Cis/Trans-1,2-Dichloroethene	5U
Dibromochloromethane	5U
Ethylbenzene	5U
Methylene chloride (Dichloromethane)	4 7U
Styrene	5U
Tetrachloroethene	5U
Toluene	5U
Trichloroethene	2 7U
Vinyl chloride	10U
Xylenes, Total	5U
cis-1,3-Dichloropropene	1U
trans-1,3-Dichloropropene	5U
Total VOC's	**ND**

Notes: ...t detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-res... from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.2
Sauget Area 1
Surface Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SW-RA2-S2	SW-RA2-S1	SW-RA2EB	SW-RA1-S2FD	SW-RA1-S2	SW-RA1-S1	SW-PDC-USFD	SW-PDC-US	SW-PDC-DS
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	2/4/2000	2/4/2000	2/4/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
2 4,6-Trichlorophenol	2 1U	2 1U	2 1U	2 1U	2 1U	2 1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2 6-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
3&4-Methylphenol (m&p-cresol)	10U	10U	10U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20R	20U	20U	20U	20U
3-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U	50U
4 6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1U	1U	1U	1U	1UJ	1 0UJ	1U	1U	1UJ
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10UJ	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10UJ	10UJ	10U	10U	10UJ
Benzo(a)anthracene	10U	10U	10U	10U	10UJ	10UJ	10U	10U	0 62J
Benzo(a)pyrene	10U	10U	10U	10U	10UJ	10UJ	10U	0 77J	1 1J
Benzo(b)fluoranthene	10U	10U	10U	10U	10UJ	10UJ	10U	0 66J	0 95J
Benzo(g,h i)perylene	10U	10U	10U	10U	10UJ	10UJ	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10UJ	10UJ	10U	0 76J	1 7J
Butylbenzylphthalate	10U	10U	10U	10U	10UJ	10UJ	10U	10U	10U
Carbazole	10U	10U	10U	10U	10UJ	10U	3 4U	3 4U	3 4U
Chrysene	10U	10U	10U	10U	10UJ	10UJ	10U	10U	0 74J

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-6.2
Sauget Area 1
Surface Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SW-RA2-S2	SW-RA2-S1	SW-RA2EB	SW-RA1-S2FD	SW-RA1-S2	SW-RA1-S1	SW-PDC-USFD	SW-PDC-US	SW-PDC-DS
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	2/4/2000	2/4/2000	2/4/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10UJ	10UJ	10U	0 81J	1 2J
Dibenzofuran	10U	10U	10U	10U	10UJ	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10UJ	10UJ	0 3J	10U	0 3J
Di-n-octylphthalate	10U	10U	10U	10U	10U	10UJ	10U	10U	1 1J
Fluoranthene	10U	10U	10U	10U	10UJ	10UJ	10U	10U	10UJ
Fluorene	1U	1U	1U	1U	1UJ	1 0U	1U	1U	1U
Hexachlorobenzene	10U	10U	10U	10U	10UJ	10UJ	10U	10U	10UJ
Hexachlorobutadiene	10U	10U	10U	10U	10UJ	10UJ	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10UJ	10UJ	10U	10U	10UJ
Isophorone	10U	10U	10U	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Nitrobenzene	3.5U	3.5U	3 5U	3.5U	3 5U	3 5U	3 5U	3 5U	3 5U
n-Nitrosodi-n-propylamine	10U	10U	10U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5U	5U	5U	5U	5UJ	5 0UJ	5U	5U	5U
Pentachlorophenol	5U	5U	5U	5U	5U	5 0U	5U	5U	5U
Phenanthrene	10U	10U	10U	10U	10UJ	10UJ	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10UJ	10UJ	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1.8U	1.8U	1.8U	1.8UJ	1.8UJ	0.48J	1 2J	0 51J
Total SVOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.78**	**4.2**	**8.22**

Notes 't detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-resi " from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.2
Sauget Area 1
Surface Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SW-M-S1	SW-CSF-S3	SW-CSF-S2	SW-CSF-S1	SW-CSE-S3	SW-CSD-S3	SW-CSD-S2	SW-CSD-S1FD	SW-CSD-S1
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/5/1999	10/7/1999	10/7/1999	10/7/1999	10/7/1999	10/6/1999	10/6/1999	10/6/1999	10/6/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,2,4-Trichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,4-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2.1U	2.1U	2.1U	2 1U	2 1U	2 1U	2 1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
3&4-Methylphenol (m&p-cresol)	10U	10U	10U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U	20U	20U	20U
3-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1.0U	1U	1U	1U	1U	1 0U	1 0U	1 0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U	10U	10U	10U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.2
Sauget Area 1
Surface Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SW-M-S1	SW-CSF-S3	SW-CSF-S2	SW-CSF-S1	SW-CSE-S3	SW-CSD-S3	SW-CSD-S2	SW-CSD-S1FD	SW-CSD-S1
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/5/1999	10/7/1999	10/7/1999	10/7/1999	10/7/1999	10/6/1999	10/6/1999	10/6/1999	10/6/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	0.7J	1 2J	10U	10U	10U	10U
Fluorene	1.0U	1U	1U	1U	1U	1 0U	1.0U	1 0U	1 0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1 9U	1.9U	1.9U	1.9U	1.9U	1 9U	1 9U	1 9U	1 9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Nitrobenzene	3.5U	3.5U	3.5U	3.5U	3 5U	3.5U	3 5U	3 5U	3 5U
n-Nitrosodi-n-propylamine	10U	10U	10U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5 0U	5U	5U	5U	5U	5 0U	5 0U	5 0U	5 0U
Pentachlorophenol	5.0U	5U	5U	5U	5U	5.0U	5.0U	5 0U	5 0U
Phenanthrene	10U	10U	10U	0 7J	0 67J	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	0 87J	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1 8U	1 8U
Total SVOC's	**ND**	**ND**	**ND**	**1.4**	**2.74**	**ND**	**ND**	**ND**	**ND**

Notes ...t detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.2
Sauget Area 1
Surface Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SW-CSDEB	SW-CSB-S3	SW-CSB-S2	SW-CSB-S1	SW-BPL-S3	SW-BPL-S2	SW-BPL-S1
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/6/1999	10/4/1999	10/5/1999	10/5/1999	10/6/1999	10/6/1999	10/5/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2 4-Trichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1,2-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1,3-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U
1 4-Dichlorobenzene	10U	10U	10U	10U	10U	10U	10U
2,2'-Oxybis(1-Chloropropane)	10U	10U	10U	10U	10U	10U	10U
2,4,5-Trichlorophenol	10U	10U	10U	10U	10U	10U	10U
2,4,6-Trichlorophenol	2 1U	2 1U	2 1U	2 1U	2 1U	2.1U	2 1U
2,4-Dichlorophenol	10U	10U	10U	10U	10U	10U	10U
2,4-Dinitrophenol	14U	14U	14U	14U	14U	14U	14U
2,4-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U
2,6-Dinitrotoluene	10U	10U	10U	10U	10U	10U	10U
2-Chloronaphthalene	10U	10U	10U	10U	10U	10U	10U
2-Chlorophenol	10U	10U	10U	10U	10U	10U	10U
2-Methylnaphthalene	10U	10U	10U	10U	10U	10U	10U
2-Methylphenol (o-cresol)	10U	10U	10U	10U	10U	10U	10U
2-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
2-Nitrophenol	10U	10U	10U	10U	10U	10U	10U
3&4-Methylphenol (m&p-cresol)	10U	10U	10U	10U	10U	10U	10U
3,3'-Dichlorobenzidine	20U	20U	20U	20U	20U	20U	20U
3-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
4,6-Dinitro-2-methylphenol	13U	13U	13U	13U	13U	13U	13U
4-Bromophenylphenyl ether	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
4-Chloro-3-methylphenol	10U	10U	10U	10U	10U	10U	10U
4-Chloroaniline	20U	20U	20U	20U	20U	20U	20U
4-Chlorophenylphenyl ether	10U	10U	10U	10U	10U	10U	10U
4-Nitroaniline	50U	50U	50U	50U	50U	50U	50U
4-Nitrophenol	50U	50U	50U	50U	50U	50U	50U
Acenaphthene	10U	10U	10U	10U	10U	10U	10U
Acenaphthylene	10U	10U	10U	10U	10U	10U	10U
Anthracene	10U	10U	10U	10U	10U	10U	10U
Benzo(a)anthracene	10U	10U	10U	10U	10U	10U	10U
Benzo(a)pyrene	10U	10U	10U	10U	10U	10U	10U
Benzo(b)fluoranthene	10U	10U	10U	10U	10U	10U	10U
Benzo(g,h,i)perylene	10U	10U	10U	10U	10U	10U	10U
Benzo(k)fluoranthene	10U	10U	10U	10U	10U	10U	10U
Butylbenzylphthalate	10U	10U	10U	10U	10U	10U	10U
Carbazole	10U	10U	10U	10U	10U	10U	10U
Chrysene	10U	10U	10U	10U	10U	10U	10U

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-6.2
Sauget Area 1
Surface Water Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

Sample Id	SW-CSDEB	SW-CSB-S3	SW-CSB-S2	SW-CSB-S1	SW-BPL-S3	SW-BPL-S2	SW-BPL-S1
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/6/1999	10/4/1999	10/5/1999	10/5/1999	10/6/1999	10/6/1999	10/5/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Dibenzo(a,h)anthracene	10U	10U	10U	10U	10U	10U	10U
Dibenzofuran	10U	10U	10U	10U	10U	10U	10U
Diethylphthalate	10U	10U	10U	10U	10U	10U	10U
Dimethylphthalate	10U	10U	10U	10U	10U	10U	10U
Di-n-butylphthalate	10U	10U	10U	10U	10U	10U	10U
Di-n-octylphthalate	10U	10U	10U	10U	10U	10U	10U
Fluoranthene	10U	10U	10U	10U	10U	10U	10U
Fluorene	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U	10U
Hexachlorobutadiene	10U	10U	10U	10U	10U	10U	10U
Hexachlorocyclopentadiene	10U	10U	10U	10U	10U	10U	10U
Hexachloroethane	1.9U	1.9U	1.9U	1.9U	1 9U	1.9U	1.9U
Indeno(1,2,3-cd)pyrene	10U	10U	10U	10U	10U	10U	10U
Isophorone	10U	10U	10U	10U	10U	10U	10U
Naphthalene	10U	10U	10U	10U	10U	10U	10U
Nitrobenzene	3.5U	3.5U	3.5U	3 5U	3.5U	3.5U	3.5U
n-Nitrosodi-n-propylamine	10U	10U	10U	10U	10U	10U	10U
N-Nitrosodiphenylamine	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U	5 0U
Pentachlorophenol	5.0U	5.0U	5.0U	5 0U	5.0U	5.0U	5 0U
Phenanthrene	10U	10U	10U	10U	10U	10U	10U
Phenol	10U	10U	10U	10U	10U	10U	10U
Pyrene	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethoxy)methane	10U	10U	10U	10U	10U	10U	10U
bis(2-Chloroethyl)ether	10U	10U	10U	10U	10U	10U	10U
bis(2-Ethylhexyl)phthalate	1 8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U
Total SVOC's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.3
Sauget Area 1
Surface Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	SW-BPL-S1	SW-BPL-S2	SW-BPL-S3	SW-CSB-S1	SW-CSB-S2	SW-CSB-S3	SW-CSDEB	SW-CSD-S1	SW-CSD-S1FD	SW-CSD-S2
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/5/1999	10/6/1999	10/6/1999	10/5/1999	10/5/1999	10/4/1999	10/6/1999	10/6/1999	10/6/1999	10/6/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	2 5U	2 5U	2 5U
Dichlorobiphenyl	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 50U	0 50U	0 50U
Heptachlorobiphenyl	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U	1 5U	1 5U	1 5U
Hexachlorobiphenyl	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	1 0U	1 0U	1 0U
Monochlorobiphenyl	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 50U	0 50U	0 50U
Nonachlorobiphenyl	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	2 5U	2 5U	2 5U
Octachlorobiphenyl	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U	0 30U	1 5U	1 5U	1 5U
Pentachlorobiphenyl	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	1 0U	1 0U	1 0U
Tetrachlorobiphenyl	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	1 0U	1 0U	1 0U
Trichlorobiphenyl	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 50U	0 50U	0 50U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-6.3
Sauget Area 1
Surface Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	SW-CSD-S3	SW-CSE-S3	SW-CSF-S1	SW-CSF-S2	SW-CSF-S3	SW-M-S1	SW-PDC-DS	SW-PDC-US	SW-PDC-USFD	SW-RA1-S1
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/7/1999	10/5/1999	2/4/2000	2/4/2000	2/4/2000	10/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 50U	0 5U	0 5UJ	0.5U	0 5U	0 50U	0 5U	0 5U	0 5U	0 50U
Dichlorobiphenyl	0 10U	0 1U	0 1UJ	0 1U	0 1U	0 10U	0 1U	0 1U	0 1U	0 10U
Heptachlorobiphenyl	0 30U	0 3U	0.3UJ	0 3U	0 3U	0 30U	0 3U	0 3U	0 3U	0 30U
Hexachlorobiphenyl	0.20U	0 2U	0.2UJ	0 2U	0.2U	0 20U	0 2U	0 2U	0 2U	0 20U
Monochlorobiphenyl	0 10U	0 1U	0 1UJ	0 1U	0 1U	0 10U	0 1U	0 1U	0 1U	0 10U
Nonachlorobiphenyl	0 50U	0 5U	0 5UJ	0 5U	0 5U	0 50U	0 5U	0 5U	0 5U	0 50U
Octachlorobiphenyl	0 30U	0 3U	0 3UJ	0 3U	0 3U	0 30U	0 3U	0 3U	0 3U	0 30U
Pentachlorobiphenyl	0 055J	0 2U	0 2UJ	0 2U	0 2U	0 20U	0 2U	0 2U	0 2U	0 20U
Tetrachlorobiphenyl	0 20U	0 2U	0 2UJ	0 2U	0 2U	0 20U	0 2U	0 2U	0 2U	0 20U
Trichlorobiphenyl	0 10U	0 1U	0 1UJ	0 1U	0 1U	0 10U	0 1U	0 1U	0 1U	0 10U
Total PCB's	**0.055**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-6.3
Sauget Area 1
Surface Water Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	SW-RA1-S2	SW-RA1-S2FD	SW-RA2EB	SW-RA2-S1	SW-RA2-S2
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l
Decachlorobiphenyl	0 5U	0 5U	0 5U	0 5U	0 5U
Dichlorobiphenyl	0 1U	0 1U	0 1U	0 1U	0 1U
Heptachlorobiphenyl	0 3U	0 3U	0 3U	0 3U	0 3U
Hexachlorobiphenyl	0 2U	0 2U	0 2U	0 2U	0 2U
Monochlorobiphenyl	0 1U	0 1U	0 1U	0 1U	0 1U
Nonachlorobiphenyl	0 5U	0 5U	0 5U	0 5U	0 5U
Octachlorobiphenyl	0 3U	0 3U	0 3U	0 3U	0 3U
Pentachlorobiphenyl	0 2U	0 2U	0 2U	0 2U	0 2U
Tetrachlorobiphenyl	0 2U	0 2U	0 2U	0 2U	0 2U
Trichlorobiphenyl	0 1U	0 1U	0 1U	0 1U	0 1U
Total PCB s	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-6.4
Sauget Area 1
Surface Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	SW-BPL-S1	SW-BPL-S2	SW-BPL-S3	SW-CSB-S1	SW-CSB-S2	SW-CSB-S3	SW-CSDEB	SW-CSD-S1	SW-CSD-S1FD
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/5/1999	10/6/1999	10/6/1999	10/5/1999	10/5/1999	10/4/1999	10/6/1999	10/6/1999	10/6/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4'-DDD	0 10U	0 10U	0 10U	0 0052J	0 10U	0 10UJ	0 10U	0 10U	0 10U
4 4'-DDE	0 10U	0 10U	0 10U	0 10U	0 10U	0 10UJ	0 10U	0 10U	0 10U
4 4'-DDT	0 10U	0 10U	0 10U	0 0040J	0 10U	0 10UJ	0 10U	0 0023J	0 10U
Aldrin	0 050U	0 050U	0 050U	0 050U	0 0037J	0 050UJ	0 0019J	0 050U	0 0023J
Alpha Chlordane	0 050U	0 050U	0 050U	0 050U	0 050U	0 050UJ	0 050U	0 050U	0 050U
Dieldrin	0 10U	0 10U	0 0010J	0 0035J	0 10U	0 10UJ	0 10U	0 10U	0 10U
Endosulfan I	0 0024J	0 050U	0 0015J	0 050U	0 050U	0 050UJ	0 050U	0 050U	0 050U
Endosulfan II	0 10U	0 10U	0 10U	0 0053J	0 10U	0 10UJ	0 10U	0 0063J	0 10U
Endosulfan sulfate	0 10U	0 10U	0 0032J	0 10U	0 10U	0 10UJ	0 10U	0 10U	0 0056J
Endrin	0 10U	0 10U	0 00095J	0 10U	0 10U	0 10UJ	0 10U	0 10U	0 0021J
Endrin aldehyde	0 0032J	0 10U	0 0016J	0 0025J	0 10U	0 10UJ	0 10U	0 10U	0 10U
Endrin ketone	0 10U	0 10U	0 0027J	0 10U	0 10U	0 10UJ	0 10U	0 10U	0 10U
Gamma Chlordane	0 050U	0 050U	0 050U	0 0027J	0 0054J	0 050UJ	0 050U	0 0050J	0 050U
Heptachlor	0 0026J	0 0022J	0 0029J	0 050U	0 0016J	0 0048J	0 050U	0 013J	0 0029J
Heptachlor epoxide	0 00096J	0 00090J	0 050U	0 0016J	0 0077J	0 050UJ	0 050U	0 0080J	0 014J
Methoxychlor	0 50U	0 50U	0 50U	0 50U	0 50U	0 50UJ	0 50U	0 50U	0 50U
Toxaphene	5 0U	5 0U	5 0U	5 0U	5 0U	5 0UJ	5 0U	5 0U	5 0U
alpha-BHC	0 039U	0 0010J	0 00047J	0 022J	0 011J	0 039UJ	0 039U	0 030J	0 0028J
beta-BHC	0 0096J	0 012J	0 020J	0 020J	0 019J	0 014UJ	0 014U	0 040J	0 015J
delta-BHC	0 00013J	0 0022J	0 012U	0 015J	0 0066J	0 005J	0 014J	0 022J	0 0031J
gamma-BHC (Lindane)	0 019U	0 0038J	0 0024J	0 040J	0 0038J	0 019UJ	0 019U	0 086J	0 0049J
Total Pesticides	**0.01889**	**0 0221**	**0.03672**	**0.1218**	**0.0588**	**0.0098**	**0.0159**	**0.2126**	**0 0527**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-6.4
Sauget Area 1
Surface Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	SW-CSD-S2	SW-CSD-S3	SW-CSE-S3	SW-CSF-S1	SW-CSF-S2	SW-CSF-S3	SW-M-S1	SW-PDC-DS	SW-PDC-US
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/7/1999	10/5/1999	2/4/2000	2/4/2000
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4 -DDD	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ	0 10U	0 1UJ	0 1U
4 4 -DDE	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ	0 0034J	0 1UJ	0 1U
4 4'-DDT	0 0040J	0 0071J	0 1U	0 1U	0 1U	0 1UJ	0 10U	0 1UJ	0 1U
Aldrin	0 050U	0 0020J	0 05U	0 05U	0 05U	0 05UJ	0 0014J	0 05UJ	0 05U
Alpha Chlordane	0 050U	0 050U	0 05U	0 05U	0 05U	0 05UJ	0 050U	0 05UJ	0 05U
Dieldrin	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ	0 10U	0 1UJ	0 1U
Endosulfan I	0 050U	0 00051J	0 05U	0 05U	0 05U	0 05UJ	0 050U	0 05UJ	0 05U
Endosulfan II	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ	0 10U	0 1UJ	0 1U
Endosulfan sulfate	0 0035J	0 017J	0 1U	0 1U	0 1U	0 1UJ	0 10U	0 1UJ	0 1U
Endrin	0 0054J	0 10U	0 1U	0 1U	0 1U	0 1UJ	0 10U	0 1UJ	0 1U
Endrin aldehyde	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ	0 0025J	0 1UJ	0 1U
Endrin ketone	0 10U	0 10U	0 1U	0 1U	0 1U	0 1UJ	0 10U	0 1UJ	0 1U
Gamma Chlordane	0 050U	0 050U	0 05U	0 05U	0 05U	0 05UJ	0 050U	0 05UJ	0 05U
Heptachlor	0 012J	0 0064J	0 05U	0 05U	0 05U	0 05UJ	0 0035J	0 05UJ	0 05U
Heptachlor epoxide	0 014J	0 017J	0 05U	0 05U	0 05U	0 05UJ	0 0080J	0 05UJ	0 05U
Methoxychlor	0 50U	0 50U	0 5U	0 5U	0 5U	0 5UJ	0 50U	0 5UJ	0 5U
Toxaphene	5 0U	5 0U	5U	5U	5U	5UJ	5 0U	5UJ	5U
alpha-BHC	0 0043J	0 0061J	0 0035J	0 039U	0 039U	0 039UJ	0 00091J	0 039UJ	0 039U
beta-BHC	0 010J	0 045J	0 012J	0 014U	0 014U	0 014UJ	0 0027J	0 014UJ	0 014U
delta-BHC	0 0037J	0 0038J	0 028	0 012U	0 012U	0 012UJ	0 0035J	0 012UJ	0 012UJ
gamma-BHC (Lindane)	0 010J	0 015J	0 0028J	0 019U	0 019U	0 019UJ	0 0036J	0 019UJ	0 019U
Total Pesticides	**0 0669**	**0 11991**	**0 0463**	**ND**	**ND**	**ND**	**0 02951**	**ND**	**ND**

Notes ' detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-6.4
Sauget Area 1
Surface Water Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	SW-PDC-USFD	SW-RA1-S1	SW-RA1-S2	SW-RA1-S2FD	SW-RA2EB	SW-RA2-S1	SW-RA2-S2
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	2/4/2000	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4 4'-DDD	0 1U	0 10U	0 1U	0 1U	0 1U	0 1U	0 1U
4 4 -DDE	0 1U	0 0015J	0 1UJ	0 1U	0 1U	0 1U	0 1U
4 4'-DDT	0 1U	0 10U	0 1U	0 1U	0 1U	0 1U	0 0057J
Aldrin	0 05U	0 050U	0 05U	0 05U	0 05U	0 004J	0 0024J
Alpha Chlordane	0 05U	0 050U	0 05U	0 05U	0 05U	0 013J	0 0019J
Dieldrin	0 1U	0 0021J	0 1U	0 1U	0 1U	0 0036J	0 1U
Endosulfan I	0 05U	0 0017J	0 002J	0 05U	0 05U	0 011J	0 0017J
Endosulfan II	0 1U	0 000096J	0 1U	0 1U	0 1U	0 1U	0 1U
Endosulfan sulfate	0 1U	0 0070J	0 004J	0 0042J	0 1U	0 0028J	0 1U
Endrin	0 1U	0 00048J	0 0038J	0 007J	0 1U	0 1U	0 1U
Endrin aldehyde	0 1U	0 10U	0 0023J	0 1U	0 1U	0 1U	0 1U
Endrin ketone	0 1U	0 10U	0 1UJ	0 1UJ	0 1U	0 011J	0 0047J
Gamma Chlordane	0 05U	0 00082J	0 05U	0 05U	0 05U	0 0031J	0 05U
Heptachlor	0 05U	0 0035J	0 05UJ	0 05U	0 05U	0 05U	0 05U
Heptachlor epoxide	0 05U	0 0058J	0 0048J	0 0046J	0 05U	0 0082J	0 005J
Methoxychlor	0 5U	0 50U	0 5UJ	0 5U	0 5U	0 5U	0 5U
Toxaphene	5U	5 0U	5U	5U	5U	5U	5U
alpha-BHC	0 039U	0 039U	0 0012J	0 0019J	0 039U	0 039U	0 039U
beta-BHC	0 014U	0 0048J	0 0094J	0 014U	0 014U	0 015J	0 015J
delta-BHC	0 012UJ	0 012U	0 012U	0 012U	0 0069J	0 012U	0 007J
gamma-BHC (Lindane)	0 019U	0 0010J	0 019UJ	0 0041J	0 019U	0 0066J	0 0066J
Total Pesticides	**ND**	**0.028796**	**0.0275**	**0 0218**	**0 0069**	**0 0783**	**0 05**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-6.5
Sauget Area 1
Surface Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	SW-BPL-S1	SW-BPL-S2	SW-BPL-S3	SW-CSB-S1	SW-CSB-S2	SW-CSB-S3	SW-CSDEB	SW-CSD-S1	SW-CSD-S1FD	SW-CSD-S2
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/5/99	10/6/99	10/6/99	10/5/99	10/5/99	10/4/99	10/6/99	10/6/99	10/6/99	10/6/99
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2 4 5-T	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
2 4 5-TP (Silvex)	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
2 4-D	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
2 4-DB	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U	0 50U
Dalapon	120U	120U	120U	120U	120U	120U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U
Dinoseb	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	6 0U	120U
MCPA	120U	120U	120U	120U	120U	120UJ	120U	120U	120U	120U
MCPP	120UJ	120U	120U	120UJ	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1 0U	1 0U	1 0U	1 0	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-6.5
Sauget Area 1
Surface Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	SW-CSD-S3	SW-CSE-S3	SW-CSF-S1	SW-CSF-S2	SW-CSF-S3	SW-M-S1	SW-PDC-DS	SW-PDC-US	SW-PDC-USFD	SW-RA1-S1
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/6/99	10/7/99	10/7/99	10/7/99	10/7/99	10/5/99	2/4/00	2/4/00	2/4/00	10/8/99
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4,5-T	0 50U	0.5U	0.5U	0.5U	0 5U	0 50U	0 5U	0 5U	0 5U	0 50U
2,4,5-TP (Silvex)	0 50U	0.5U	0.5U	0.5U	0.5U	0.50U	0 5U	0 5U	0 5U	0.50U
2,4-D	0.50U	0.5U	0.5U	0.5U	0.5U	0.50U	0 5U	0.5U	0 5U	0.50U
2,4-DB	0 50U	0.5U	0.5U	0.5U	0.5U	0 50U	0.5U	0 5U	0 5U	0 50U
Dalapon	120U	120U	120U	120U	120U	120U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1.2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6 0U	6U	6U	6U	6U	6 0U	6U	6U	6U	6 0U
Dinoseb	6 0U	6U	6U	6U	6U	6.0U	6U	6U	6U	6.0U
MCPA	120U	120U	120U	120UJ	120U	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U	120U	120U	120U	120U	120U
Pentachlorophenol	1 0U	1 0U	1.0U	1.0U	1 0U	1.0U	1U	1U	1U	1 0U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.5
Sauget Area 1
Surface Water Sample Analytical Results
Method 8151A Herbicide Data

Sample Id	SW-RA1-S2	SW-RA1-S2FD	SW-RA2EB	SW-RA2-S1	SW-RA2-S2
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/8/99	10/8/99	10/8/99	10/8/99	10/8/99
Units	ug/l	ug/l	ug/l	ug/l	ug/l
2 4,5-T	0 5U	0 5U	0.5U	0 5U	0 5U
2,4,5-TP (Silvex)	0 5U	0 5U	0 5U	0 5U	0 5U
2,4-D	0 5U	0 5U	0.5U	0 5U	0 5U
2,4-DB	0 5U	0 5U	0 5U	0 5U	0 5U
Dalapon	120U	120U	120U	120U	120U
Dicamba	1 2U	1 2U	1 2U	1 2U	1 2U
Dichloroprop	6U	6U	6U	6U	6U
Dinoseb	6U	6U	6U	6U	6U
MCPA	120U	120U	120U	120U	120U
MCPP	120U	120U	120U	120U	120U
Pentachlorophenol	1 0U	1 0U	1 0U	1 0U	1 0U
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-6.6
Sauget Area 1
Surface Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SW-BPL-S1	SW-BPL-S2	SW-BPL-S3	SW-CSB-S1	SW-CSB-S2	SW-CSB-S3	SW-CSDEB
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/5/1999	10/5/1999	10/6/1999	10/5/1999	10/5/1999	10/4/1999	10/6/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2 3 4 6 7 8 9-OCDD	0 00143	0 000792	0 000751	0 00193	0 00422	0 00558	0 0000062U
1 2 3 4 6 7 8 9-OCDF	0 0000604M	0 000071	0 0000503	0 000209	0 00107	0 00174	0 0000041U
1 2 3 4 6 7 8-HpCDD	0 0000569	0 0000442	0 000045M	0 000213	0 000473	0 000637	0 0000021U
1 2 3 4 6 7 8-HpCDF	0 0000144	0 0000217	0 0000179	0 0000748	0 000245	0 0004	0 0000012U
1 2 3 4 7 8 9-HpCDF	0 0000128U	0 0000087U	0 0000075U	0 0000124U	0 0000117U	0 0000248	0 0000017U
1 2 3 4 7 8-HxCDD	0 0000088U	0 0000058U	0 0000055U	0 0000091U	0 0000095U	0 0000032U	0 0000014U
1 2 3 4 7 8-HxCDF	0 0000083U	0 0000055U	0 0000049U	0 0000071U	0 0000078U	0 0000146	0 0000009U
1 2 3 6 7,8-HxCDD	0 0000082U	0 0000055U	0 0000051U	0 0000085U	0 0000178	0 0000241	0 0000014U
1 2 3 6 7 8-HxCDF	0 0000077U	0 0000051U	0 0000046U	0 0000066U	0 0000072U	0 0000064M	0 0000009U
1 2 3 7 8 9-HxCDD	0 0000085U	0 0000057U	0 0000053U	0 0000088U	0 0000092U	0 0000185	0 0000015U
1 2 3 7 8 9-HxCDF	0 0000092U	0 0000061U	0 0000054U	0 0000079U	0 0000086U	0 0000032U	0 0000012U
1 2 3 7 8-PeCDD	0 0000087U	0 0000055U	0 0000053U	0 0000085U	0 0000095U	0 0000033U	0 0000016U
1 2 3 7 8-PeCDF	0 000006U	0 0000041U	0 0000036U	0 0000062U	0 0000072U	0 0000025U	0 000001U
2 3 4 6 7 8-HxCDF	0 0000082U	0 0000054U	0 0000048U	0 000007U	0 0000077U	0 0000133M	0 000001U
2 3 4 7,8-PeCDF	0 0000063U	0 0000043U	0 0000038U	0 0000065U	0 0000076U	0 0000026U	0 000001U
2 3 7 8-TCDD	0 000009U	0 0000056U	0 0000053U	0 0000077U	0 0000091U	0 0000034U	0 0000012U
2 3 7 8-TCDF	0 0000088U	0 0000049U	0 0000047U	0 0000076U	0 0000087U	0 0000115J	0 000001U
Total HpCDD	0 000122	0 0000935	0 00011M	0 000451	0 000943	0 00124	0 0000021U
Total HpCDF	0 0000461	0 0000551	0 0000416	0 00018	0 000734	0 00119	0 0000014U
Total HxCDD	0 0000085U	0 0000057U	0 0000062	0 0000251	0 000106	0 00018	0 0000015U
Total HxCDF	0 0000083U	0 0000055U	0 0000049U	0 0000272	0 000095	0 000195M	0 000001U
Total PeCDD	0 0000087U	0 0000055U	0 0000053U	0 0000085U	0 0000095U	0 0000673M	0 0000016U
Total PeCDF	0 0000062U	0 0000042U	0 0000037U	0 0000063U	0 0000499M	0 0000458	0 000001U
Total TCDD	0 000009U	0 0000056U	0 0000053U	0 0000077U	0 0000243	0 0000262	0 0000012U
Total TCDF	0 0000088U	0 0000049U	0 0000047U	0 0000076U	0 0000087U	0 0000661	0 000001U
1998 Total TEQ w/ EMPC as ND	**0.000010383**	**0 0000069163**	**0.0000062266**	**0 0000123139**	**0 0000193125**	**0 0000218875**	**0 0000015655**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-6.6
Sauget Area 1
Surface Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SW-CSD-S1	SW-CSD-S1FD	SW-CSD-S2	SW-CSD-S3	SW-CSE-S3	SW-CSF-S1	SW-CSF-S2	SW-CSF-S3
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/6/1999	10/6/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/7/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2 3 4 6 7 8 9-OCDD	0 00411	0 00392	0 00308	0 00383	0 0000604M	0 000166M	0 000617	0 000573
1 2 3 4 6 7 8 9-OCDF	0 00132	0 00118	0 00104	0 0012	0 0000164	0 0000817	0 00026	0 00023
1 2,3 4 6,7 8-HpCDD	0 000429	0 000406	0 00034	0 000444	0 0000119	0 0000183M	0 0000692	0 0000629
1 2,3 4 6,7,8-HpCDF	0 00033	0 000318	0 0000233	0 000337	0 0000042U	0 0000134	0 0000451	0 0000505
1 2 3 4 7,8 9-HpCDF	0 0000109	0 000017	0 0000254	0 0000109U	0 0000055U	0 000548	0 0000041U	0 0000048U
1 2 3 4 7 8-HxCDD	0 0000073U	0 0000067U	0 0000118	0 0000079U	0 0000044U	0 0000047U	0 0000036U	0 0000044U
1 2 3 4 7 8-HxCDF	0 0000053U	0 0000077	0 0000127M	0 0000067U	0 0000039U	0 000024	0 0000026U	0 0000033U
1,2 3 6 7 8-HxCDD	0 0000117	0 0000152	0 0000184	0 0000167	0 0000041U	0 0000044U	0 0000034U	0 0000041U
1 2 3,6,7 8-HxCDF	0 0000049U	0 0000064	0 0000153	0 0000062U	0 0000037U	0 0000089	0 0000024U	0 0000031U
1,2,3 7 8,9-HxCDD	0 0000071U	0 0000065U	0 0000136	0 0000076U	0 0000281M	0 0000046U	0 0000035U	0 0000043U
1 2,3 7,8,9-HxCDF	0 0000059U	0 0000064U	0 0000067U	0 0000074U	0 0000044U	0 0000047U	0 0000029U	0 0000037U
1 2,3 7,8-PeCDD	0 000007U	0 0000064U	0 0000061U	0 0000075U	0 0000081U	0 0000067U	0 0000046U	0 0000075U
1 2 3 7 8-PeCDF	0 0000049U	0 0000043U	0 0000138	0 0000051U	0 0000046U	0 0000043U	0 0000026U	0 0000039U
2 3 4 6 7 8-HxCDF	0 0000052U	0 0000098M	0 0000138	0 0000066U	0 0000039U	0 0000042U	0 0000026U	0 0000033U
2 3 4 7 8-PeCDF	0 0000051U	0 0000045U	0 0000101	0 0000054U	0 0000049U	0 0000045U	0 0000028U	0 0000041U
2 3 7 8-TCDD	0 0000066U	0 0000059U	0 0000059U	0 0000069U	0 0000066U	0 0000058U	0 0000036U	0 0000062U
2 3 7,8-TCDF	0 000006U	0 0000053	0 0000056U	0 0000058U	0 0000061U	0 0000046U	0 0000027U	0 0000045U
Total HpCDD	0 000853	0 000815	0 000678	0 000858	0 0000119	0 0000378M	0 000127	0 000128
Total HpCDF	0 000848M	0 000862	0 000541	0 000903	0 0000048U	0 0006	0 000182	0 000131M
Total HxCDD	0 000092	0 0000936	0 000115	0 0000982	0 000058M	0 0000902	0 0000035U	0 0000181M
Total HxCDF	0 000128	0 000158M	0 000148M	0 000133	0 0000039U	0 000581	0 0000249	0 0000125M
Total PeCDD	0 0000179	0 0000064U	0 0000061U	0 0000186M	0 0000081U	0 0000067U	0 0000046U	0 0000075U
Total PeCDF	0 0000143M	0 000016	0 000038	0 0000053U	0 0000047U	0 0000044U	0 0000027U	0 000004U
Total TCDD	0 0000124	0 0000115M	0 0000059U	0 0000069U	0 0000066U	0 0000058U	0 0000036U	0 0000062U
Total TCDF	0 0000218	0 0000194M	0 0000056U	0 0000058U	0 0000061U	0 0000046U	0 0000027U	0 0000045U
1998 Total TEQ w/ EMPC as ND	**0.0000163945**	**0.0000172825**	**0.000021629**	**0.000017675**	**0.0000084921**	**0.0000149545**	**0 0000055012**	**0.0000076458**

Notes ...t detected J-estimated value N-tentatively identified R-rejected M-EMPC, D-res... from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-6.6
Sauget Area 1
Surface Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SW-M-S1	SW-PDC-DS	SW-PDC-US	SW-PDC-USFD	SW-RA1-S1	SW-RA1-S2	SW-RA1-S2FD	SW-RA2EB
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/5/1999	2/4/2000	2/4/2000	2/4/2000	10/8/1999	10/8/1999	10/8/1999	10/8/1999
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1 2 3 4 6 7 8 9-OCDD	0 00413	0 00136	0 00117	0 000934J	0 00288J	0 00613J	0 00538J	0 0000688
1 2,3 4 6 7,8 9-OCDF	0 00101	0 0000129	0 0000098	0 0000133JM	0 000123J	0 000191J	0 0002J	0 0000085
1,2,3,4,6,7,8-HpCDD	0 000429	0 0000278	0 0000218	0 0000128J	0 0000959J	0 000194J	0 000172J	0 0000042M
1 2,3,4,6 7,8-HpCDF	0 000208	0 0000027U	0 0000043	0 0000028UJ	0 0000237J	0 0000441J	0 0000449J	0 0000012U
1,2,3 4,7,8,9-HpCDF	0 0000105U	0 0000035U	0 0000017U	0 000004UJ	0 0000035UJ	0 0000054JM	0 0000184J	0 0000017U
1,2,3,4 7,8-HxCDD	0 000007U	0 000003U	0 0000038	0 0000028UJ	0 0000028UJ	0 0000027UJ	0 0000088J	0 0000014U
1,2,3,4,7,8-HxCDF	0 0000072U	0 0000022U	0 0000028	0 0000023UJ	0 0000031JM	0 0000053JM	0 0000129JM	0 0000009U
1,2,3,6,7,8-HxCDD	0 0000066U	0 0000028U	0 0000036	0 0000026UJ	0 0000036JM	0 0000077J	0 0000112JM	0 0000014U
1,2,3 6,7 8-HxCDF	0 0000067U	0 000002U	0 0000025	0 0000021UJ	0 000002UJ	0 0000018UJ	0 0000089JM	0 0000009U
1 2,3,7,8 9-HxCDD	0 0000068U	0 0000029U	0 0000037	0 0000028UJ	0 000003UJ	0 0000076J	0 0000142J	0 0000015U
1,2,3,7,8,9-HxCDF	0 0000079U	0 0000024U	0 000003	0 0000027UJ	0 0000026UJ	0 0000024UJ	0 0000126J	0 0000012U
1,2,3,7 8-PeCDD	0 0000078U	0 000002U	0 0000028M	0 0000021UJ	0 0000036UJ	0 0000033UJ	0 0000066UJ	0 0000016U
1,2 3 7,8-PeCDF	0 0000057U	0 0000014U	0 0000031	0 0000016UJ	0 0000019UJ	0 0000019UJ	0 0000154JM	0 000001U
2,3,4 6,7,8-HxCDF	0 000007U	0 0000021U	0 0000022M	0 0000023UJ	0 0000034JM	0 0000051JM	0 0000128JM	0 000001U
2 3,4 7 8-PeCDF	0 000006U	0 0000015U	0 0000025	0 0000017UJ	0 000002UJ	0 0000019UJ	0 0000111JM	0 000001U
2,3 7,8-TCDD	0 0000075U	0 000002U	0 0000013U	0 0000023UJ	0 0000022UJ	0 0000024UJ	0 0000064JM	0 0000012U
2 3 7,8-TCDF	0 0000071U	0 0000017U	0 0000013U	0 000002UJ	0 0000043JM	0 0000076J	0 0000091J	0 000001U
Total HpCDD	0 000837	0 0000496	0 0000416	0 0000335	0 000202	0 000437	0 00037	0 0000096M
Total HpCDF	0 00072	0 000003U	0 0000043	0 0000033U	0 000081	0 000146M	0 000157	0 0000014U
Total HxCDD	0 0000606	0 0000029U	0 0000135	0 0000027U	0 0000223M	0 00006	0 0000685M	0 0000015U
Total HxCDF	0 0000757	0 0000022U	0 0000105M	0 0000023U	0 0000216	0 0000453M	0 0000728M	0 000001U
Total PeCDD	0 0000078U	0 000002U	0 0000028M	0 0000021U	0 0000036U	0 0000033U	0 0000066U	0 0000016U
Total PeCDF	0 0000058U	0 0000015U	0 0000056	0 0000016U	0 000002U	0 0000063	0 0000264M	0 000001U
Total TCDD	0 0000075U	0 000002U	0 0000013U	0 0000023U	0 0000056M	0 0000154	0 0000186	0 0000012U
Total TCDF	0 0000071U	0 0000017U	0 0000013U	0 000002U	0 0000043M	0 0000076	0 0000104M	0 000001U
1998 Total TEQ w/ EMPC as ND	**0.000015294**	**0.0000028113**	**0.0000053075**	**0.0000027511**	**0.0000051013**	**0.0000083676**	**0 000016131**	**0 0000015833**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.6
Sauget Area 1
Surface Water Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SW-RA2-S1	SW-RA2-S2
Description	Surface Water	Surface Water
Sample Date	10/8/1999	10/8/1999
Units	ug/l	ug/l
1,2,3,4,6,7,8,9-OCDD	0.0074J	0.00299J
1,2,3,4,6,7,8,9-OCDF	0.0000382JM	0.000138J
1,2,3,4,6,7,8-HpCDD	0.000156J	0.000138J
1,2,3,4,6,7,8-HpCDF	0.0000147J	0.000038J
1,2,3,4,7,8,9-HpCDF	0.00001JM	0.0000101JM
1,2,3,4,7,8-HxCDD	0.0000067JM	0.000008J
1,2,3,4,7,8-HxCDF	0.0000057JM	0.0000077JM
1,2,3,6,7,8-HxCDD	0.000009J	0.0000098J
1,2,3,6,7,8-HxCDF	0.0000053J	0.0000072J
1,2,3,7,8,9-HxCDD	0.0000139J	0.0000138J
1,2,3,7,8,9-HxCDF	0.0000103J	0.0000127J
1,2,3,7,8-PeCDD	0.0000083J	0.0000087J
1,2,3,7,8-PeCDF	0.0000071J	0.0000068J
2,3,4,6,7,8-HxCDF	0.0000072JM	0.0000075JM
2,3,4,7,8-PeCDF	0.0000059J	0.000006JM
2,3,7,8-TCDD	0.0000039JM	0.0000024UJ
2,3,7,8-TCDF	0.0000054J	0.0000069J
Total HpCDD	0.000402	0.0003
Total HpCDF	0.0000413M	0.000118M
Total HxCDD	0.0000706M	0.0000633
Total HxCDF	0.0000368	0.0000533M
Total PeCDD	0 0000083	0.0000176M
Total PeCDF	0.000013	0.0000129M
Total TCDD	0.0000039	0.0000057
Total TCDF	0.0000054	0.0000069
1998 Total TEQ w/ EMPC as ND	**0.0000194739**	**0.0000192633**

Notes ot detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.7
Sauget Area 1
Surface Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SW-BPL-S1	SW-BPL-S2	SW-BPL-S3	SW-CSB-S1	SW-CSB-S2	SW-CSB-S3	SW-CSDEB	SW-CSD-S1	SW-CSD-S1FD	SW-CSD-S2
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/5/1999	10/6/1999	10/6/1999	10/5/1999	10/5/1999	10/4/1999	10/6/1999	10/6/1999	10/6/1999	10/6/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	3 4	0 71	0 65	0 041J	0 035J	0 066J	0 20U	0 36	0 32	0 33
Antimony	0 020U	0 020U	0 020U	0 0070J	0 020U	0 020U	0 020U	0 020U	0 020U	0 020U
Arsenic	0 015	0 0079J	0 012	0 010U	0 0064J	0 0052J	0 010U	0 010U	0 0050J	0 010U
Barium	0 32	0 12	0 045	0 17	0 30	0 23	0 010U	0 18	0 17	0 16
Beryllium	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U
Cadmium	0 0050U	0 0050U	0 0050U	0 00091J	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U	0 0050U
Calcium	89J	55J	47J	180J	140J	51J	0 29J	51J	48J	48J
Chromium	0 0041J	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Cobalt	0 0015J	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Copper	0 0074J	0 0036J	0 0048J	0 13	0 059	0 046	0 020U	0 016J	0 015J	0 015J
Hardness as CaCO3	350	270	220	550	420	150	0 72	150	150	140
Iron	8 7J	1 6J	1 3J	0 076U	0 13U	0 43J	0 039J	1 1J	1 1J	0 96J
Lead	0 020	0 0020J	0 0029J	0 0030J	0 0042J	0 0066J	0 0050U	0 0083	0 0098	0 0066
Magnesium	30	31	26	23	17	6 0	0 50U	6 7	6 4	6 0
Manganese	1 7	0 13	0 17	0 026	0 0068J	0 034	0 010U	0 056	0 053	0 046
Molybdenum	0 0035J	0 010U	0 0040J	0 032	0 024	0 012	0 010U	0 0042J	0 0053J	0 0033J
Nickel	0 015J	0 012J	0 0077J	0 0096J	0 013J	0 015J	0 040U	0 018J	0 018J	0 017J
Potassium	7 6	7 0	5 1	7 3	7 7	4 8	1 0U	6 4	6 2	5 8
Selenium	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 0046J
Silver	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U	0 010U
Sodium	24J	21J	22J	54J	37J	28J	0 58	8 8J	8 4J	8 1J
Thallium	0 010U	0 010U	0 010U	0 010UJ	0 010U	0 010UJ	0 010U	0 010U	0 010U	0 010U
Vanadium	0 014	0 0051J	0 011	0 010U	0 010U	0 010U	0 010U	0 0040J	0 0043J	0 0043J
Zinc	0 048	0 027	0 017J	0 13	0 080	0 045	0 020U	0 053	0 050	0 050

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-6.7
Sauget Area 1
Surface Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SW-CSD-S3	SW-CSE-S3	SW-CSF-S1	SW-CSF-S2	SW-CSF-S3	SW-M-S1	SW-PDC-DS	SW-PDC-US	SW-PDC-USFD	SW-RA1-S1
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/6/1999	10/7/1999	10/7/1999	10/7/1999	10/7/1999	10/5/1999	2/4/2000	2/4/2000	2/4/2000	10/8/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	1 4	0 2U	0 039J	0 15J	0 55	0 078J	2 6J	1 7J	1 6J	9 4
Antimony	0 020U	0 02U	0 02U	0 02U	0 02U	0 020U	0 02U	0 02U	0 02U	0 020U
Arsenic	0 010U	0 01U	0 01U	0 0032J	0 0049J	0 010U	0 0051J	0 01U	0 01U	0 0093J
Barium	0 17	0 066	0 13	0 13	0 12	0 21	0 18J	0 17J	0 17J	0 33
Beryllium	0 0040U	0 004U	0 004U	0 004U	0 004U	0 0040U	0 004U	0 004U	0 004U	0 00083J
Cadmium	0 0050U	0 005U	0 005U	0 005U	0 005U	0 0050U	0 005U	0 005U	0 005U	0 0050U
Calcium	50J	44J	53J	52J	53J	48J	100J	98J	100J	72J
Chromium	0 0057J	0 01U	0 01U	0 01U	0 01U	0 010U	0 0032UJ	0 0018UJ	0 0021UJ	0 012
Cobalt	0 010U	0 01U	0 01U	0 01U	0 01U	0 010U	0 0019J	0 01U	0 0016J	0 0047J
Copper	0 026	0 0092J	0 0016J	0 002J	0 012J	0 046	0 004UJ	0 0032UJ	0 004UJ	0 0097J
Hardness as CaCO3	150	170	270	260	260	140	420	410	420	330
Iron	1 8J	1 2	0 5	0 55	1	1 9J	4J	2 6J	2 7J	11
Lead	0 016	0 005U	0 005U	0 0022J	0 0037J	0 0070	0 0019J	0 005U	0 005U	0 021
Magnesium	6 6	15	33	33	30	4 8	40	40	40	35
Manganese	0 082	0 14J	0 082J	0 1J	0 14J	0 17	0 63J	0 57J	0 58J	1 5
Molybdenum	0 0052J	0 01U	0 01U	0 01U	0 0028J	0 010	0 0037J	0 0033J	0 0032J	0 0052J
Nickel	0 022J	0 04U	0 0069J	0 013J	0 021J	0 012J	0 005J	0 04U	0 04U	0 013J
Potassium	5 0	4 8	6 5	6 4	6 9	4 2	7 5	7 4	7 6	7 5
Selenium	0 010U	0 01U	0 01U	0 01U	0 01U	0 010U	0 01U	0 01U	0 01U	0 010U
Silver	0 010U	0 01U	0 01U	0 01U	0 01U	0 010U	0 01U	0 01U	0 01U	0 010U
Sodium	11J	23J	21J	21J	22J	27J	79J	170J	170J	16J
Thallium	0 010U	0 01U	0 01U	0 01U	0 01U	0 010U	0 01U	0 0055UJ	0 01U	0 010U
Vanadium	0 0070J	0 01U	0 01U	0 01U	0 003J	0 010U	0 0075UJ	0 0055UJ	0 0053UJ	0 031
Zinc	0 15	0 073	0 0073J	0 035	0 075	0 030	0 022	0 018J	0 025	0 042

Notes not detected J estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-6.7
Sauget Area 1
Surface Water Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SW-RA1-S2	SW-RA1-S2FD	SW-RA2EB	SW-RA2-S1	SW-RA2-S2
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999
Units	mg/l	mg/l	mg/l	mg/l	mg/l
Aluminum	20	19	0 2U	10	14
Antimony	0 02U	0 02U	0 02U	0 02U	0 02U
Arsenic	0 017	0 017	0 01U	0 017	0 015
Barium	0 38	0 37	0 01U	0 32	0 41
Beryllium	0 00069J	0 00064J	0 004U	0 004U	0 004U
Cadmium	0 005U	0 005U	0 005U	0 005U	0 005U
Calcium	56J	57J	0 19J	50J	56J
Chromium	0 023	0 022	0 01U	0 011	0 016
Cobalt	0 0078J	0 0074J	0 01U	0 005J	0 0055J
Copper	0 019J	0 018J	0 02U	0 0099J	0 011J
Hardness as CaCO3	230	240	0 47	220	240
Iron	26	25	0 05U	14	15
Lead	0 03	0 03	0 005U	0 02	0 032
Magnesium	23	23	0 5U	24	25
Manganese	1 9J	1 9J	0 01U	1 6J	2 9J
Molybdenum	0 0068J	0 0063J	0 01U	0 0032J	0 0065J
Nickel	0 025J	0 024J	0 04U	0 014J	0 018J
Potassium	11	11	1U	8 5	7
Selenium	0 01U	0 01U	0 01U	0 01U	0 01U
Silver	0 01U	0 01U	0 01U	0 01U	0 01U
Sodium	16J	16J	0 42J	21J	23J
Thallium	0 01U	0 01U	0 01U	0 01U	0 01U
Vanadium	0 053	0 052	0 01U	0 039	0 047
Zinc	0 093	0 086	0 02U	0 13	0 042

Notes U not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-6.8
Sauget Area 1
Surface Water Sample Analytical Results
Other Data

Sample Id	SW-BPL-S1	SW-BPL-S2	SW-BPL-S3	SW-CSB-S1	SW-CSB-S2	SW-CSB-S3	SW-CSDEB	SW-CSD-S1	SW-CSD-S1FD
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/5/99	10/6/99	10/6/99	10/5/99	10/5/99	10/4/99	10/6/99	10/6/99	10/6/99
Fluoride (mg/L)	0 29	0 25	0 25	0 32	0 55	0 22	0 10U	0 20	0 20
Ortho-Phosphate-P (su)	0 83	0 20	0 22	0 076	0 021	0 087	0 050U	0 057	0 057
pH (su)	8 5	9 0	9 7	7 6	8 0	8 5	6 6	7 9	7 9
Suspended Solids (mg/L)	160	37	55	5 0U	5 0U	5 0U	5 0U	28	27
Total Dissolved Solids (mg/L)	480	350	280	1200	940	340	5 0U	200	200
Total Phosphorus (su)	1 2	0 26	0 32	0 10U	0 10U	0 11	0 10U	0 24	0 23

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.8
Sauget Area 1
Surface Water Sample Analytical Results
Other Data

Sample Id	SW-CSD-S2	SW-CSD-S3	SW-CSE-S3	SW-CSF-S1	SW-CSF-S2	SW-CSF-S3	SW-M-S1	SW-PDC-DS	SW-PDC-US
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	10/6/99	10/6/99	10/7/99	10/7/99	10/7/99	10/7/99	10/5/99	2/4/00	2/4/00
Fluoride (mg/L)	0 24	0 30	0 75	0 24	0 25	0 27	0 22	0 38	1U*F6
Ortho-Phosphate-P (su)	0 063	0 075	0 37J	0 063J	0 094J	0 12J	0 18	0 46	0 57
pH (su)	8 0	7 6					7 3		
Suspended Solids (mg/L)	26	44	7	5U	8	12	9.0	920	56
Total Dissolved Solids (mg/L)	210	210	250	330	350	360	270	670	690
Total Phosphorus (su)	0 25	0 21	0 37	0 18	0 13	0 14	0 32	0 93	0 62

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-6.8
Sauget Area 1
Surface Water Sample Analytical Results
Other Data

Sample Id	SW-PDC-USFD	SW-RA1-S1	SW-RA1-S2	SW-RA1-S2FD	SW-RA2EB	SW-RA2-S1	SW-RA2-S2
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sample Date	2/4/00	10/8/99	10/8/99	10/8/99	10/8/99	10/8/99	10/8/99
Fluoride (mg/L)	0 38	0 32	0 23	0 23	0 1U	0 32	0 38
Ortho-Phosphate-P (su)	0 63	0 089	0 27J	0 16J	0 05U	0 05UJ	0 14J
pH (su)		7 9					
Suspended Solids (mg/L)	56	270	710	690	5U	340	370
Total Dissolved Solids (mg/L)	680	460	400	360	5U	310	320
Total Phosphorus (su)	0 63	0 87	3 1	2 9	0 1U	1 4	1 3

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-7.1
Sauget Area 1
Air Sample Analytical Results
Method TO-1 Volatile Organic Compound Data

SAMP_ID	AIR-V-1 TUBE 1	AIR-V-1 TUBE 2	AIR-V-10 TUBE 1	AIR-V-10 TUBE 2	AIR-V-11 TUBE 1	AIR-V-11 TUBE 2	AIR-V-12 TUBE 1
SOL_DESC	Air	Air	Air	Air	Air	Air	Air
SAMP_DATE	9/10/1999	9/10/1999	9/11/1999	9/11/1999	9/11/1999	9/11/1999	9/11/1999
UNITS	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube
1 1,1 2 Tetrachloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 1,1-Trichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,1,2,2-Tetrachloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 1,2-Trichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 1-Dichloroethane	0 10U	0 10UJ	0 10U	0 10UJ	0 10U	0 10UJ	0 10U
1,1-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,1-Dichloropropylene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2,3-Trichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,3-Trichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,4-Trichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,4-Trimethylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2-Dibromo-3-chloropropane	0 10UJ	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2-Dibromoethane (EDB)	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 3,5-Trimethylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,3-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,3-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,4-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
2,2-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
2-Butanone (MEK)	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	0 25
2-Chlorotoluene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
2-Hexanone	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
4-Chlorotoluene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
4-Methyl-2-pentanone (MIBK)	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
Acetone	1 0U	1 0UJ	1 0U	1 0UJ	1 0U	1 0UJ	1 0U
Benzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromochloromethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromodichloromethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromoform	0 10UJ	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromomethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Carbon disulfide	0 10UJ	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Carbon tetrachloride	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Chlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Chloroethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Chloroform	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.1
Sauget Area 1
Air Sample Analytical Results
Method TO-1 Volatile Organic Compound Data

SAMP_ID	AIR-V-1 TUBE 1	AIR-V-1 TUBE 2	AIR-V-10 TUBE 1	AIR-V-10 TUBE 2	AIR-V-11 TUBE 1	AIR-V-11 TUBE 2	AIR-V-12 TUBE 1
SOL_DESC	Air	Air	Air	Air	Air	Air	Air
SAMP_DATE	9/10/1999	9/10/1999	9/11/1999	9/11/1999	9/11/1999	9/11/1999	9/11/1999
UNITS	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube
Chloromethane	1 5UJ	1 3U	0 26U	0 27U	0 20U	0 36U	0 20U
cis-1,2-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
cis-1,3-Dichloropropene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Dibromochloromethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Dibromomethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Dichlorodifluoromethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Ethylbenzene	0 10U	0 011	0 10U	0 015	0 10U	0 10U	0 10U
Hexachlorobutadiene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Isopropylbenzene	0 10U	0 10U	0 10U	0 014	0 10U	0 10U	0 10U
m&p-Xylene	0 10U	0 10U	0 10U	0 021	0 10U	0 0084	0 10U
Methylene chloride (Dichloromethane)	0 10U	0 073	0 10U	0 10U	13J	0 10U	0 10U
Naphthalene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
n-Butylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
n-Propylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
o-Xylene	0 10U	0 10U	0 10U	0 018	0 10U	0 10U	0 015
p-Isopropyltoluene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
s-Butylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Styrene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
t-Butylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Tetrachloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Toluene	0 10U	0 20U	0 19U	0 21U	0 10U	0 18U	0 14U
trans-1 2-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
trans-1 3-Dichloropropene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Trichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Trichlorofluoromethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Vinyl acetate	0 10UJ	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Vinyl chloride	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Total VOC's	**ND**	**0.084**	**ND**	**0.068**	**13**	**0.0084**	**0.265**

Notes: ' not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.1
Sauget Area 1
Air Sample Analytical Results
Method TO-1 Volatile Organic Compound Data

SAMP_ID	AIR-V-12 TUBE 2	AIR-V-13 TUBE 1	AIR-V-13 TUBE 2	AIR-V-2 TUBE 1	AIR-V-2 TUBE 2	AIR-V-3 TUBE 1	AIR-V-3 TUBE 2
SOL_DESC	Air	Air	Air	Air	Air	Air	Air
SAMP_DATE	9/11/1999	9/11/1999	9/11/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999
UNITS	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube
1,1 1,2 Tetrachloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 1 1-Trichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,1,2,2-Tetrachloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 1,2-Trichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 1-Dichloroethane	0 10UJ	0 10UJ	0 10UJ	0 10U	0 10UJ	0 10U	0 10UJ
1,1-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,1-Dichloropropylene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,3-Trichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,3-Trichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,4-Trichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,4-Trimethylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dibromo-3-chloropropane	0 10U	0 10U	0 10U	0 10UJ	0 10U	0 10U	0 10U
1,2-Dibromoethane (EDB)	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,3,5-Trimethylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,3-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,3-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,4-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
2,2-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
2-Butanone (MEK)	1 0U	1 0U	1 0U	1 0U	1 0U	0 22J	1 0U
2-Chlorotoluene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
2-Hexanone	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
4-Chlorotoluene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
4-Methyl-2-pentanone (MIBK)	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
Acetone	1 0UJ	1 0UJ	1 0UJ	1 0U	1 0UJ	2 1J	1 0UJ
Benzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromochloromethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromodichloromethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromoform	0 10U	0 10U	0 10U	0 10UJ	0 10U	0 10U	0 10U
Bromomethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Carbon disulfide	0 10U	0 10U	0 10U	0 10UJ	0 10U	0 10U	0 10U
Carbon tetrachloride	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Chlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Chloroethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Chloroform	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.1
Sauget Area 1
Air Sample Analytical Results
Method TO-1 Volatile Organic Compound Data

SAMP_ID	AIR-V-12 TUBE 2	AIR-V-13 TUBE 1	AIR-V-13 TUBE 2	AIR-V-2 TUBE 1	AIR-V-2 TUBE 2	AIR-V-3 TUBE 1	AIR-V-3 TUBE 2
SOL_DESC	Air	Air	Air	Air	Air	Air	Air
SAMP_DATE	9/11/1999	9/11/1999	9/11/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999
UNITS	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube
Chloromethane	0 42U	0 20U	0 91U	0 20UJ	1 8U	1 2UJ	0 65U
cis-1,2-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
cis-1,3-Dichloropropene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Dibromochloromethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Dibromomethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Dichlorodifluoromethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Ethylbenzene	0 10U	0 012	0 10U	0 10U	0 10U	0 10U	0 10U
Hexachlorobutadiene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Isopropylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 013J	0 10U
m&p-Xylene	0 10U	0 012	0 10U	0 10U	0 10U	0 013J	0 10U
Methylene chloride (Dichloromethane)	0 10U	0 10U	0 10U	0 10U	14J	2 7J	0 10U
Naphthalene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
n-Butylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
n-Propylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
o-Xylene	0 10U	0 012	0 10U	0 10U	0 10U	0 10U	0 10U
p-Isopropyltoluene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
s-Butylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Styrene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
t-Butylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Tetrachloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Toluene	0 14U	0 18U	0 17U	0 10U	0 10U	0 10U	0 21U
trans-1,2-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
trans-1,3-Dichloropropene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Trichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 044J	0 10U
Trichlorofluoromethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Vinyl acetate	0 10U	0 10U	0 10U	0 10UJ	0 10U	0 10U	0 10U
Vinyl chloride	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Total VOC's	**ND**	**0.036**	**ND**	**ND**	**14**	**5.09**	**ND**

Notes: not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.1
Sauget Area 1
Air Sample Analytical Results
Method TO-1 Volatile Organic Compound Data

SAMP_ID	AIR-V-4 TUBE 1	AIR-V-4 TUBE 2	AIR-V-5 TUBE 1	AIR-V-5 TUBE 2	AIR-V-6 TUBE 1	AIR-V-6 TUBE 2	AIR-V-7 TUBE 1	AIR-V-7 TUBE 2
SOL_DESC	Air	Air	Air	Air	Air	Air	Air	Air
SAMP_DATE	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999
UNITS	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube
1 1 1 2 Tetrachloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 1 1-Trichloroethane	0 10U	0 10U	0 10U	0 058	0 10U	0 10U	0 10U	0 10U
1 1 2 2-Tetrachloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 1 2-Trichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 1-Dichloroethane	0 10U	0 10UJ	0 10U	0 10UJ	0 10U	0 10UJ	0 10U	0 10UJ
1 1-Dichloroethene	0 10U	0 10U	0 10U	0 20	0 10U	0 25	0 10U	0 10U
1 1-Dichloropropylene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2 3-Trichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2 3-Trichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2 4-Trichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2 4-Trimethylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2-Dibromo-3-chloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2-Dibromoethane (EDB)	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2-Dichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 2-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1,3 5-Trimethylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 3-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 3-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
1 4-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
2,2-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
2-Butanone (MEK)	0 38	1 0U	1 0U	1 0U	1 0U	1 0U	0 19	1 1U
2-Chlorotoluene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
2-Hexanone	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
4-Chlorotoluene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
4-Methyl-2-pentanone (MIBK)	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	0 70
Acetone	0 37	1 0UJ	1 0U	1 0UJ	1 0U	1 0UJ	1 0U	8 1J
Benzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromochloromethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromodichloromethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromoform	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Bromomethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Carbon disulfide	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Carbon tetrachloride	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Chlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Chloroethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Chloroform	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.1
Sauget Area 1
Air Sample Analytical Results
Method TO-1 Volatile Organic Compound Data

SAMP_ID	AIR-V-4 TUBE 1	AIR-V-4 TUBE 2	AIR-V-5 TUBE 1	AIR-V-5 TUBE 2	AIR-V-6 TUBE 1	AIR-V-6 TUBE 2	AIR-V-7 TUBE 1	AIR-V-7 TUBE 2
SOL_DESC	Air	Air	Air	Air	Air	Air	Air	Air
SAMP_DATE	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999
UNITS	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube
Chloromethane	0 26U	0 56U	0 31U	0 62U	0 71U	0 51U	0 40U	0 20U
cis-1,2-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
cis-1,3-Dichloropropene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Dibromochloromethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Dibromomethane	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Dichlorodifluoromethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Ethylbenzene	0 028	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 15
Hexachlorobutadiene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Isopropylbenzene	0 036	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 20
m&p-Xylene	0 034	0 10U	0 10U	0 10U	0 10U	0 10U	0 010	0 21
Methylene chloride (Dichloromethane)	0 17	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 77
Naphthalene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
n-Butylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
n-Propylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
o-Xylene	0 042	0 10U	0 10U	0 10U	0 10U	0 10U	0 010	0 19
p-Isopropyltoluene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 050
s-Butylbenzene	0 034	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Styrene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 18
t-Butylbenzene	0 011	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 056
Tetrachloroethene	0 014	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 033
Toluene	0 22U	0 11U	0 16U	0 20U	0 10U	0 20U	0 17U	1 8
trans-1 2-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
trans-1 3-Dichloropropene	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Trichloroethene	0 053	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Trichlorofluoromethane	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Vinyl acetate	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U	0 10U
Vinyl chloride	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U	0 20U
Total VOC's	**1 172**	**ND**	**ND**	**0.258**	**ND**	**0.25**	**0 21**	**12 439**

Notes U not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.1
Sauget Area 1
Air Sample Analytical Results
Method TO-1 Volatile Organic Compound Data

SAMP_ID	AIR-V-8 TUBE 1	AIR-V-8 TUBE 2	AIR-V-9 TUBE 1	AIR-V-9 TUBE 2	AIR-V-FB TUBE 1
SOL_DESC	Air	Air	Air	Air	Air
SAMP_DATE	9/10/1999	9/10/1999	9/11/1999	9/11/1999	9/11/1999
UNITS	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube
1,1,1,2 Tetrachloroethane	0 10U	0 10U	0 10U	0 10U	0 10U
1,1,1-Trichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U
1,1,2,2-Tetrachloroethane	0 10U	0 10U	0 10U	0 10U	0 10U
1,1,2-Trichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U
1,1-Dichloroethane	0 10U	0 10UJ	0 10U	0 10UJ	0 10U
1,1-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U
1,1-Dichloropropylene	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,3-Trichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,3-Trichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,4-Trichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U
1,2,4-Trimethylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dibromo-3-chloropropane	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dibromoethane (EDB)	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dichloroethane	0 10U	0 10U	0 10U	0 10U	0 10U
1,2-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U
1,3,5-Trimethylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U
1,3-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U
1,3-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U
1,4-Dichlorobenzene	0 10U	0 10U	0 10U	0 10U	0 022
2,2-Dichloropropane	0 10U	0 10U	0 10U	0 10U	0 10U
2-Butanone (MEK)	1 0U	1 0U	1 0U	1 0U	1 0U
2-Chlorotoluene	0 10U	0 10U	0 10U	0 10U	0 10U
2-Hexanone	1 0U	1 0U	1 0U	1 0U	1 0U
4-Chlorotoluene	0 10U	0 10U	0 10U	0 10U	0 10U
4-Methyl-2-pentanone (MIBK)	1 0U	1 0U	1 0U	1 0U	1 0U
Acetone	1 0U	1 0UJ	1 0U	1 0UJ	1 0U
Benzene	0 10U	0 10U	0 10U	0 10U	0 029
Bromobenzene	0 10U	0 10U	0 10U	0 10U	0 10U
Bromochloromethane	0 10U	0 10U	0 10U	0 10U	0 10U
Bromodichloromethane	0 10U	0 10U	0 10U	0 10U	0 10U
Bromoform	0 10U	0 10U	0 10U	0 10U	0 10U
Bromomethane	0 20U	0 20U	0 20U	0 20U	0 20U
Carbon disulfide	0 10U	0 10U	0 10U	0 10U	0 10U
Carbon tetrachloride	0 10U	0 10U	0 10U	0 10U	0 10U
Chlorobenzene	0 10U	0 10U	0 10U	0 10U	0 10U
Chloroethane	0 20U	0 20U	0 20U	0 20U	0 20U
Chloroform	0 10U	0 10U	0 10U	0 10U	0 10U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-7.1
Sauget Area 1
Air Sample Analytical Results
Method TO-1 Volatile Organic Compound Data

SAMP_ID	AIR-V-8 TUBE 1	AIR-V-8 TUBE 2	AIR-V-9 TUBE 1	AIR-V-9 TUBE 2	AIR-V-FB TUBE 1
SOL_DESC	Air	Air	Air	Air	Air
SAMP_DATE	9/10/1999	9/10/1999	9/11/1999	9/11/1999	9/11/1999
UNITS	ug/tube	ug/tube	ug/tube	ug/tube	ug/tube
Chloromethane	0 37U	0 70U	0 35U	2 4U	0 92
cis-1,2-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U
cis-1,3-Dichloropropene	0 10U	0 10U	0 10U	0 10U	0 10U
Dibromochloromethane	0 10U	0 10U	0 10U	0 10U	0 10U
Dibromomethane	0 10U	0 10U	0 10U	0 10U	0 10U
Dichlorodifluoromethane	0 20U	0 20U	0 20U	0 20U	0 20U
Ethylbenzene	0 012	0 10U	0 021	0 10U	0 10U
Hexachlorobutadiene	0 10U	0 10U	0 10U	0 10U	0 10U
Isopropylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U
m&p-Xylene	0 012	0 013	0 012	0 020	0 10U
Methylene chloride (Dichloromethane)	0 10U	20J	0 10U	1 1	0 10U
Naphthalene	0 10U	0 10U	0 10U	0 10U	0 016
n-Butylbenzene	0 012	0 10U	0 10U	0 10U	0 10U
n-Propylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U
o-Xylene	0 011	0 013	0 011	0 015	0 10U
p-Isopropyltoluene	0 10U	0 10U	0 10U	0 10U	0 10U
s-Butylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U
Styrene	0 10U	0 10U	0 10U	0 10U	0 012
t-Butylbenzene	0 10U	0 10U	0 10U	0 10U	0 10U
Tetrachloroethene	0 10U	0 10U	0 10U	0 10U	0 10U
Toluene	0 10U	0 10U	0 91U	0 17U	0 16
trans-1,2-Dichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U
trans-1,3-Dichloropropene	0 10U	0 10U	0 10U	0 10U	0 10U
Trichloroethene	0 10U	0 10U	0 10U	0 10U	0 10U
Trichlorofluoromethane	0 20U	0 20U	0 20U	0 20U	0 20U
Vinyl acetate	0 10U	0 10U	0 10U	0 10U	0 10U
Vinyl chloride	0 20U	0 20U	0 20U	0 20U	0 20U
Total VOC's	**0.047**	**20.026**	**0.044**	**1.135**	**1.159**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.2
Sauget Area 1
Air Sample Analytical Results
Method TO-13 Semivolatile Organic Compound Data

SAMP_ID	AIR-S-1	AIR-S-10	AIR-S-11	AIR-S-12	AIR-S-13	AIR-S-2	AIR-S-3	AIR-S-4	AIR-S-5	AIR-S-6	AIR-S-7
SOL_DESC	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air
SAMP_DATE	9/10/1999	9/11/1999	9/11/1999	9/11/1999	9/11/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/11/1999
UNITS	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff
1,2,4-Trichlorobenzene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
1 2-Dichlorobenzene	27J	10UJ	10UJ	10UJ	10UJ	74J	20UJ	10UJ	10UJ	10UJ	10UJ
1,3-Dichlorobenzene	8 4UJ	8 4UJ	8 4UJ	8 4UJ	8 4UJ	8 4UJ	17UJ	8 4UJ	8 4UJ	8 4UJ	8 4UJ
1,4-Dichlorobenzene	93J	10UJ	5 2J	7 1J	10UJ	120J	28J	21J	14J	16J	10UJ
2,2'-Oxybis(1-chloropropane)_bis(2-Chlor	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
2,4,5-Trichlorophenol	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
2,4,6-Trichlorophenol	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
2,4-Dichlorophenol	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
2,4-Dimethylphenol	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
2,4-Dinitrotoluene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
2,6-Dinitrotoluene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
2-Chloronaphthalene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
2-Chlorophenol	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
2-Methylnaphthalene	33J	36J	37J	44J	46J	35J	45J	37J	29J	29J	34J
2-Methylphenol (o-cresol)	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
2-Nitroaniline	50UJ	50UJ	50UJ	50UJ	50UJ	8 4J	100UJ	50UJ	50UJ	50UJ	50UJ
2-Nitrophenol	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
3,3'-Dichlorobenzidine	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
3-Methylphenol/4-Methylphenol (m&p-Creso	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
3-Nitroaniline	50UJ	50UJ	50UJ	50UJ	50UJ	50UJ	100UJ	50UJ	50UJ	50UJ	50UJ
4-Bromophenylphenyl ether	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
4-Chloro-3-methylphenol	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
4-Chloroaniline	15UJ	15UJ	15UJ	15UJ	15UJ	15UJ	30UJ	15UJ	15UJ	15UJ	15UJ
4-Chlorophenylphenyl ether	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
4-Nitroaniline	50UJ	50UJ	50UJ	50UJ	50UJ	50UJ	100UJ	50U	50UJ	50UJ	50UJ
Acenaphthene	10J	6 1J	7 0J	9 8J	10J	11J	20UJ	7 4J	6 0J	6 8J	5 5J
Acenaphthylene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Anthracene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Benzo(a)anthracene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Benzo(a)pyrene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Benzo(b)fluoranthene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Benzo(g h,i)perylene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Benzo(k)fluoranthene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Benzyl alcohol	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
bis(2-Chloroethoxy)methane	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
bis(2-Chloroethyl)ether	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
bis(2-Ethylhexyl)phthalate	24J	21J	10UJ	23J	22J	20J	20UJ	10UJ	10UJ	17J	19J
Butylbenzylphthalate	520UJ	420UJ	400UJ	480UJ	520UJ	400UJ	520UJ	520UJ	430UJ	430UJ	460UJ

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.2
Sauget Area 1
Air Sample Analytical Results
Method TO-13 Semivolatile Organic Compound Data

SAMP_ID	AIR-S-1	AIR-S-10	AIR-S-11	AIR-S-12	AIR-S-13	AIR-S-2	AIR-S-3	AIR-S-4	AIR-S-5	AIR-S-6	AIR-S-7
SOL_DESC	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air
SAMP_DATE	9/10/1999	9/11/1999	9/11/1999	9/11/1999	9/11/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/11/1999
UNITS	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff
Chrysene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Dibenzo(a,h)anthracene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Dibenzofuran	11J	6 7J	8 4J	11J	11J	11J	20UJ	7 0J	5 9J	6 7J	5 6J
Diethylphthalate	10UJ	10UJ	10UJ	9 6J	7 1J	10UJ	20UJ	10UJ	10UJ	7 4J	10UJ
Dimethylphthalate	19J	16J	8 4J	12J	9 2J	9 4J	13J	24J	11J	14J	14J
Di-n-butylphthalate	84UJ	150UJ	85UJ	170UJ	120UJ	290UJ	150UJ	240UJ	98UJ	310UJ	120UJ
Di-n-octylphthalate	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Fluoranthene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Fluorene	8 5J	10UJ	6 9J	8 8J	8 6J	9 3J	20UJ	6 6J	5 1J	6 2J	5 2J
Hexachlorobenzene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Hexachlorobutadiene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Hexachloroethane	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Indeno(1,2,3-cd)pyrene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Isophorone	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Naphthalene	86UJ	110UJ	100UJ	130UJ	110UJ	89UJ	100UJ	80UJ	64UJ	81UJ	77UJ
Nitrobenzene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
N-Nitroso-di-n-propylamine	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
N-Nitrosodiphenylamine/1 2-Diphenylhydra	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Phenanthrene	14J	8 1J	11J	10UJ	10UJ	17J	11J	10J	9 2J	13J	8 3J
Phenol	16UJ	10UJ	23UJ	28UJ	18	18UJ	22UJ	16UJ	12UJ	16UJ	20UJ
Pyrene	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	20UJ	10UJ	10UJ	10UJ	10UJ
Total SVOC's	**239.5**	**93.9**	**83.9**	**125.3**	**131.9**	**315.1**	**97**	**113**	**80.2**	**116 1**	**91.6**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.2
Sauget Area 1
Air Sample Analytical Results
Method TO-13 Semivolatile Organic Compound Data

SAMP_ID	AIR-S-8	AIR-S-9	AIR-S-FB
SOL_DESC	Air	Air	Air
SAMP_DATE	9/11/1999	9/11/1999	9/11/1999
UNITS	ug/puff	ug/puff	ug/puff
1,2,4-Trichlorobenzene	10UJ	10UJ	10U
1,2-Dichlorobenzene	10UJ	10UJ	10U
1,3-Dichlorobenzene	8 4UJ	8 4UJ	8 4U
1,4-Dichlorobenzene	10UJ	5 0J	10U
2,2'-Oxybis(1-chloropropane)_bis(2-Chlor	10UJ	10UJ	10U
2,4,5-Trichlorophenol	10UJ	10UJ	10U
2,4,6-Trichlorophenol	10UJ	10UJ	10U
2,4-Dichlorophenol	10UJ	10UJ	10U
2,4-Dimethylphenol	10UJ	10UJ	10U
2,4-Dinitrotoluene	10UJ	10UJ	10U
2,6-Dinitrotoluene	10UJ	10UJ	10U
2-Chloronaphthalene	10UJ	10UJ	10U
2-Chlorophenol	10UJ	10UJ	10U
2-Methylnaphthalene	42J	32J	10U
2-Methylphenol (o-cresol)	10UJ	10UJ	10U
2-Nitroaniline	50UJ	50UJ	50U
2-Nitrophenol	10UJ	10UJ	10U
3,3'-Dichlorobenzidine	10UJ	10UJ	10U
3-Methylphenol/4-Methylphenol (m&p-Creso	10UJ	10UJ	10U
3-Nitroaniline	50UJ	50UJ	50U
4-Bromophenylphenyl ether	10UJ	10UJ	10U
4-Chloro-3-methylphenol	10UJ	10UJ	10U
4-Chloroaniline	15UJ	15UJ	15U
4-Chlorophenylphenyl ether	10UJ	10UJ	10U
4-Nitroaniline	50UJ	50UJ	50U
Acenaphthene	6 9J	10UJ	10U
Acenaphthylene	10UJ	10UJ	10U
Anthracene	10UJ	10UJ	10U
Benzo(a)anthracene	10UJ	10UJ	10U
Benzo(a)pyrene	10UJ	10UJ	10U
Benzo(b)fluoranthene	10UJ	10UJ	10U
Benzo(g,h,i)perylene	10UJ	10UJ	10U
Benzo(k)fluoranthene	10UJ	10UJ	10U
Benzyl alcohol	10UJ	10J	10U
bis(2-Chloroethoxy)methane	10UJ	10UJ	10U
bis(2-Chloroethyl)ether	10UJ	10UJ	10U
bis(2-Ethylhexyl)phthalate	24J	10UJ	10U
Butylbenzylphthalate	480UJ	460UJ	450

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, *EB-equipment blank FD-field duplicate* ND-none detected

Table A-7.2
Sauget Area 1
Air Sample Analytical Results
Method TO-13 Semivolatile Organic Compound Data

SAMP_ID	AIR-S-8	AIR-S-9	AIR-S-FB
SOL_DESC	Air	Air	Air
SAMP_DATE	9/11/1999	9/11/1999	9/11/1999
UNITS	ug/puff	ug/puff	ug/puff
Chrysene	10UJ	10UJ	10U
Dibenzo(a,h)anthracene	10UJ	10UJ	10U
Dibenzofuran	7 4J	6 2J	10U
Diethylphthalate	7 4J	15J	10U
Dimethylphthalate	9 2J	15J	10U
Di-n-butylphthalate	190UJ	40UJ	61
Di-n-octylphthalate	10UJ	10UJ	10U
Fluoranthene	10UJ	10UJ	10U
Fluorene	6 9J	5 3J	10U
Hexachlorobenzene	10UJ	10UJ	10U
Hexachlorobutadiene	10UJ	10UJ	10U
Hexachloroethane	10UJ	10UJ	10U
Indeno(1 2,3-cd)pyrene	10UJ	10UJ	10U
Isophorone	10UJ	10UJ	6 2
Naphthalene	99UJ	86UJ	52
Nitrobenzene	10UJ	10UJ	10U
N-Nitroso-di-n-propylamine	10UJ	10UJ	10U
N-Nitrosodiphenylamine/1,2-Diphenylhydra	10UJ	10UJ	10U
Phenanthrene	9 4J	5 5J	10U
Phenol	27UJ	14UJ	59
Pyrene	10UJ	10UJ	10U
Total SVOC's	**113.2**	**94**	**628.2**

Notes U not detected J-estimated value N-tentatively identified, R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-7.3
Sauget Area 1
Air Sample Analytical Results
Method TO-13-PCB Polychlorinated Biphenyl Data

SAMP_ID	AIR-P-1	AIR-P-10	AIR-P-11	AIR-P-12	AIR-P-13	AIR-P-2	AIR-P-3	AIR-P-4	AIR-P-5	AIR-P-6	AIR-P-7	AIR-P-8
SOL_DESC	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air
METHOD_ID	TO-13-PCB	TO-13-PCB	TO-13-PCB	TO-13-PCB	TO-13-PCB	TO-13-PCB	TO-13-PCB	TO-13-PCB	TO-13-PCB	TO-13-PCB	TO-13-PCB	TO-13-PCB
SAMP_DATE	9/10/1999	9/11/1999	9/11/1999	9/11/1999	9/11/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/11/1999	9/11/1999
UNITS	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff	ug/puff
Dichlorobiphenyl	1 0UJ	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
Monochlorobiphenyl	1 0UJ	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
Trichlorobiphenyl	1 0UJ	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U	1 0U
Hexachlorobiphenyl	2 0UJ	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U
Pentachlorobiphenyl	2 0UJ	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U
Tetrachlorobiphenyl	2 0UJ	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U	2 0U
Heptachlorobiphenyl	3 0UJ	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U
Octachlorobiphenyl	3 0UJ	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U	3 0U
Decachlorobiphenyl	5 0UJ	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Nonachlorobiphenyl	5 0UJ	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U	5 0U
Total PCB's	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.3
Sauget Area 1
Air Sample Analytical Results
Method TO-13-PCB Polychlorinated Biphenyl Data

SAMP_ID	AIR-P-9	AIR-P-FB
SOL_DESC	Air	Air
METHOD_ID	TO-13-PCB	TO-13-PCB
SAMP_DATE	9/11/1999	9/11/1999
UNITS	ug/puff	ug/puff
Dichlorobiphenyl	1 0U	1 0U
Monochlorobiphenyl	1 0U	1 0U
Trichlorobiphenyl	1 0U	1 0U
Hexachlorobiphenyl	2 0U	2 0U
Pentachlorobiphenyl	2 0U	2 0U
Tetrachlorobiphenyl	2 0U	2 0U
Heptachlorobiphenyl	3 0U	3 0U
Octachlorobiphenyl	3 0U	3 0U
Decachlorobiphenyl	5 0U	5 0U
Nonachlorobiphenyl	5 0U	5 0U
Total PCB's	ND	ND

Notes: not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-7.4
Sauget Area 1
Air Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	AIR-D-1	AIR-D-10	AIR-D-11	AIR-D-12	AIR-D-13	AIR-D-2	AIR-D-3	AIR-D-4	AIR-D-5	AIR-D-6	AIR-D-7
Description	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air
Sample Date	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999
Units	pg	pg	pg	pg	pg	pg	pg	pg	pg	pg	pg
1 2,3,4,6,7,8,9-OCDD	2110J	810J	1220J	913J	652J	1370J	8670J	3600J	1050J	2640J	1550J
1 2 3,4,6 7,8 9-OCDF	259J	90 2JM	66 3J	83J	57 3J	250J	747J	632J	58 5J	84UJ	186UJ
1,2,3,4,6,7,8-HpCDD	259J	159J	162J	182J	153J	160J	600J	376J	148J	52 4UJ	204JM
1,2,3,4,6,7,8-HpCDF	17 3UJ	14 9UJ	8 6UJ	66 7JM	13 7R	15 8UJ	15 4UJ	14 6UJ	12 8UJ	36 1UJ	39 4UJ
1,2,3,4,7,8,9-HpCDF	23 1UJ	19 9UJ	14UJ	3UJ	22 2R	21UJ	20 6UJ	19 5UJ	17 1UJ	48 2UJ	56 3UJ
1,2,3,4,7,8-HxCDD	23 7UJ	18 8UJ	11 1UJ	7 1J	14 1R	18 7UJ	20 2UJ	20 2UJ	14 4UJ	48 8UJ	
1,2,3,4,7,8-HxCDF	22 7J	11 1UJ	26J	29 5J	26 5J	12 6UJ	36 4J	12 2UJ	9 4UJ	29 2UJ	
1,2,3,6,7,8-HxCDD	22 3UJ	17 7UJ	10 6UJ	10 2JM	13 5R	17 6UJ	18 9UJ	18 9UJ	13 5UJ	45 9UJ	
1,2,3,6,7,8-HxCDF	15 4UJ	10 6UJ	5 6UJ	12 2JM	17 8JM	12UJ	11 1UJ	11 6UJ	9UJ	27 9UJ	
1,2,3 7,8,9-HxCDD	55 2JM	17 6UJ	63 6J	22J	14 3R	43JM	79 2JM	18 9UJ	13 5UJ	45 8UJ	
1,2,3,7 8,9-HxCDF	18 7UJ	12 9UJ	7 3UJ	1 9UJ	10 2R	14 6UJ	13 5UJ	14 1UJ	10 9UJ	33 9UJ	
1,2,3,7,8-PeCDD	24 5UJ	20 9UJ	13UJ	4UJ	20 1UJ	24 2UJ	23UJ	24 7UJ	18 4UJ	61 8UJ	23 9UJ
1,2,3,7,8-PeCDF	18 9UJ	12UJ	8 8UJ	6 1J	11 2UJ	17UJ	17UJ	14 2UJ	11 7UJ	37 9UJ	
2,3,4 6,7,8-HxCDF	16 5UJ	11 4UJ	6 1UJ	14 9J	17 9JM	12 9UJ	11 9UJ	12 4UJ	9 6UJ	29 9UJ	
2,3,4 7,8-PeCDF	19UJ	12UJ	9 2UJ	6.9JM	11 6UJ	17 1UJ	17 1UJ	14 3UJ	11 7UJ	38UJ	
2,3,7,8-TCDD	19 5UJ	11 9UJ	7 8UJ	4 7JM	11 4UJ	19 7UJ	15 4UJ	16 6UJ	12 2UJ	39 1UJ	18 3UJ
2 3,7,8-TCDF	15 3UJ	10 3UJ	20 8JM	20 4J	20 4JM	16UJ	13 3UJ	13 4UJ	10 4UJ	30 4UJ	16 4UJ
Total HpCDD	564	316M	391	394	366	323	1280	767	297	317M	456M
Total HpCDF	19 8U	17U	10 7U	66 7M	16 9U	18U	17 7U	16 7U	14 7U	41 3U	342M
Total HxCDD	163M	68.5M	199	190M	138	101M	287M	125	42 9	46 8U	
Total HxCDF	295M	11 4U	192M	135M	127M	128M	403M	85 1M	31 3M	30 1U	
Total PeCDD	148M	20 9U	626M	34 8M	179M	120M	124M	24 7U	28 9M	61 8U	23 9U
Total PeCDF	99 5M	12U	74 3M	79 9M	11 4U	81 1M	17 1U	14 3U	11 7U	38U	
Total TCDD	19 5U	11 9U	33 8M	33 9M	22 4	19 7U	15 4U	16 6U	12 2U	39 1U	18 3U
Total TCDF	15 3U	10 3U	76 5M	144M	89 1M	16U	13 3U	13 4U	10 4U	30 4U	35
1998 Total TEQ w/ EMPC as ND	**11.1044**	**5.43551**	**12.82863**	**11.6146**	**6.44593**	**7 347**	**17 2367**	**8 3932**	**4.74835**	**10.6827**	**2 0043**

Notes U-not detected J-estimated value, N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.4
Sauget Area 1
Air Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	AIR-D-8	AIR-D-9	AIR-DFB
Description	Air	Air	Air
Sample Date	9/10/1999	9/10/1999	9/10/1999
Units	pg	pg	pg
1,2,3,4,6,7,8,9-OCDD	1560J	696J	18 7M
1,2,3,4,6,7,8,9-OCDF	146JM	71 4J	22 6U
1,2,3,4,6,7,8-HpCDD	213J	161J	8 3U
1,2,3,4,6,7,8-HpCDF	13 9UJ	10 1UJ	4 2U
1,2,3,4,7,8,9-HpCDF	18 6UJ	13 5UJ	6 8U
1,2,3,4 7,8-HxCDD	19 7UJ	13UJ	4 3U
1,2,3,4,7,8-HxCDF	30 4J	26 3J	2 5U
1,2,3,6,7,8-HxCDD	18 5UJ	12 2UJ	4 2U
1,2,3,6,7,8-HxCDF	12 1UJ	7 7UJ	2 4U
1,2,3,7,8,9-HxCDD	71 5JM	12 1UJ	4 4U
1,2,3,7,8,9-HxCDF	14 7UJ	9 4UJ	3 1U
1,2,3,7,8-PeCDD	23 1UJ	17 3UJ	5 9U
1,2,3,7,8-PeCDF	14 7UJ	11 1UJ	3 2U
2,3,4,6 7,8-HxCDF	12 9UJ	8 3UJ	2 6U
2,3,4,7,8-PeCDF	14 8UJ	11 1UJ	3 3U
2,3,7,8-TCDD	14 7UJ	10UJ	3 2U
2,3,7,8-TCDF	12 4UJ	8 6UJ	2 6U
Total HpCDD	465	324	8 3U
Total HpCDF	15 9U	11 6U	5 2U
Total HxCDD	230M	53 5M	4 3U
Total HxCDF	165M	81 9M	7 1M
Total PeCDD	152M	17 3U	98M
Total PeCDF	38M	11 1U	3 2U
Total TCDD	14 7U	10U	3 2U
Total TCDF	12 4U	8 6U	2 6U
1998 Total TEQ w/ EMPC as ND	**11.5258**	**6.69424**	**0.943565**

Note not detected J-estimated value, N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-7.5
Sauget Area 1
Air Sample Analytical Results
6010B/7470A/9010B Inorganic Data

Sample Id	AIR-M 1	AIR-M-10	AIR-M-11	AIR-M-12	AIR-M-13	AIR-M-2	AIR-M-3	AIR-M-4	AIR-M-5	AIR-M-6	AIR-M-7	AIR-M-8	AIR-M-9	AIR-M-FB
Description	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air
Sample Date	9/10/1999	9/11/1999	9/11/1999	9/11/1999	9/11/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/10/1999	9/11/1999	9/11/1999	9/11/1999	9/11/1999
Units	mg/filter	mg/filter	mg/filter	mg/filter	mg/filter	mg/filter	mg/filter	mg/filter	mg/filter	mg/filter	mg/filter	mg/filter	mg/filter	mg/filter
Aluminum	0 0043UJ	0 023J	0 0084UJ	0 0031UJ	0 010UJ	0 0076UJ	0 0032UJ	0 0068UJ	0 0039UJ	0 0027UJ	0 0029UJ	0 0033UJ	0 0042UJ	0 0030J
Antimony	0 0020U	0 0020U	0 0020U	0 0020U	0 0020U	0 0020U	0 0020U	0 0020U	0 0020U	0 0020U	0 0020U	0 0020U	0 0020U	0 0020U
Arsenic	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U
Barium	0 00055UJ	0 00026UJ	0 00015UJ	0 00016UJ	0 00029UJ	0 00049UJ	0 00085UJ	0 00091UJ	0 00051UJ	0 00063UJ	0 00022UJ	0 00020UJ	0 00020UJ	0 0010U
Beryllium	0 00040U	0 00040U	0 00040U	0 00040U	0 00040U	0 00040U	0 00040U	0 00040U	0 00040U	0 00040U	0 00040U	0 00040U	0 00040U	0 00040U
Cadmium	0 00050	0 00075	0 00063	0 00066	0 00070	0 00050U	0 00050U	0 00050U	0 00050U	0 00069	0 00064	0 00051	0 00050U	
Calcium	0 012J	0 012J	0 0072UJ	0 0071UJ	0 031J	0 0082UJ	0 015J	0 022J	0 013J	0 0082UJ	0 011J	0 0082UJ	0 013J	0 0018J
Chromium	0 00022UJ	0 00018UJ	0 00022UJ	0 00017UJ	0 00029UJ	0 00020UJ	0 00019UJ	0 00017UJ	0 00019UJ	0 00014UJ	0 00020UJ	0 00017UJ	0 00018UJ	0 00016J
Cobalt	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U
Copper	0 0036J	0 0018UJ	0 0011UJ	0 00075UJ	0 0014UJ	0 0050J	0 0075J	0 0081J	0 014J	0 018J	0 0024J	0 0013UJ	0 0025J	0 00045J
Iron	0 0055U	0 0043UJ	0 0071U	0 0037UJ	0 012J	0 0062U	0 0033UJ	0 0058U	0 0035UJ	0 0021UJ	0 0037UJ	0 0041UJ	0 0030UJ	0 0018
Lead	0 00063	0 0072	0 0063	0 0066	0 0072	0 00049J	0 00053	0 00057	0 00064	0 00055	0 0067	0 0064	0 0054	0 00050U
Magnesium	0 0016J	0 0016J	0 0016J	0 0011J	0 0072J	0 0014J	0 0014J	0 0019J	0 0024J	0 050U	0 0011J	0 0011J	0 0013J	0 050U
Manganese	0 00015J	0 00011UJ	0 00011UJ	0 000089UJ	0 00023UJ	0 00015J	0 000095UJ	0 00013J	0 00012UJ	0 000044UJ	0 00012UJ	0 00011UJ	0 000099UJ	0 0010U
Molybdenum	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U
Nickel	0 0040U	0 0040U	0 0040U	0 0040U	0 00014J	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U	0 0040U
Potassium	0 0021UJ	0 0024UJ	0 0040UJ	0 0021UJ	0 0023UJ	0 0034UJ	0 0018UJ	0 0021UJ	0 0025UJ	0 0013UJ	0 0021UJ	0 0021UJ	0 0021UJ	0 0011J
Selenium	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U
Silver	0 0010U	0 0010U	0 00084J	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 000055J
Sodium	0 050U	0 050U	0 012J	0 013J	0 050U	0 013J	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U	0 050U
Thallium	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U
Vanadium	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U	0 0010U
Zinc	0 0030U	0 0022U	0 0020UJ	0 0019UJ	0 0031U	0 0028U	0 0021U	0 0025U	0 0029U	0 0016UJ	0 0021U	0 0020UJ	0 0019UJ	0 0010J

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	LMB BP COMP 1	LMB BP COMP 2	LMB BP COMP 3	LMB REF 1 COMP 1	LMB REF 1 COMP 2	LMB REF 2 COMP 1	LMB REF 2 COMP 2
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/4/1999	11/3/1999	11/2/1999	11/1/1999	11/1/1999	10/8/1999	11/2/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,4-Trichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,2-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,3-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,4-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
2,2'-Oxybis(1-Chloropropane)	170U	170U	170U	170U	170U	170U	170U
2,4,5-Trichlorophenol	420U	420U	420U	420U	420U	420U	420U
2,4,6-Trichlorophenol	170U	170U	170U	170U	170U	170U	170U
2,4-Dichlorophenol	170U	170U	170U	170U	170U	170U	170U
2,4-Dimethylphenol	170U	170U	170U	170U	170U	170U	170U
2,4-Dinitrophenol	420U	420U	420U	420U	420U	420U	420U
2,4-Dinitrotoluene	170U	170U	170U	170U	170U	170U	170U
2,6-Dinitrotoluene	170U	170U	170U	170U	170U	170U	170U
2-Chloronaphthalene	170U	170U	170U	170U	170U	170U	170U
2-Chlorophenol	170U	170U	170U	170U	170U	170U	170U
2-Methyl-4,6-dinitrophenol	420U	420U	420U	420U	420U	420U	420U
2-Methylnaphthalene	170U	170U	170U	170U	170U	170U	170U
2-Methylphenol (o-cresol)	170U	170U	170U	170U	170U	170U	170U
2-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
2-Nitrophenol	170U	170U	170U	170U	170U	170U	170U
3&4-Methylphenol (m&p-cresol)	170U	170U	170U	170U	170U	170U	170U
3,3'-Dichlorobenzidine	170U	170U	170U	170U	170U	170U	170U
3-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
4-Bromophenylphenyl ether	170U	170U	170U	170U	170U	170U	170U
4-Chloro-3-methylphenol	170U	170U	170U	170U	170U	170U	170U
4-Chloroaniline	170U	170U	170U	170U	170U	170U	170U
4-Chlorophenylphenyl ether	170U	170U	170U	170U	170U	170U	170U
4-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
4-Nitrophenol	420U	420U	420U	420U	420U	420U	420U
Acenaphthene	170U	170U	170U	170U	170U	170U	170U
Acenaphthylene	170U	170U	170U	170U	170U	170U	170U
Anthracene	170U	170U	170U	170U	170U	170U	170U
Benzo(a)anthracene	170U	170U	170U	170U	170U	170U	170U
Benzo(a)pyrene	170U	170U	170U	170U	170U	170U	170U
Benzo(b)fluoranthene	170U	170U	170U	170U	170U	170U	170U
Benzo(g,h,i)perylene	170U	170U	170U	170U	170U	170U	170U
Benzo(k)fluoranthene	170U	170U	170U	170U	170U	170U	170U
bis(2-Chloroethoxy)methane	170U	170U	170U	170U	170U	170U	170U
bis(2-Chloroethyl)ether	170U	170U	170U	170U	170U	170U	170U

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	LMB BP COMP 1	LMB BP COMP 2	LMB BP COMP 3	LMB REF 1 COMP 1	LMB REF 1 COMP 2	LMB REF 2 COMP 1	LMB REF 2 COMP 2
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/4/1999	11/3/1999	11/2/1999	11/1/1999	11/1/1999	10/8/1999	11/2/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
bis(2-Ethylhexyl)phthalate	170U	170U	210U	170U	170U	170U	170U
Butylbenzylphthalate	170U	170U	170U	170U	170U	170U	170U
Carbazole	170U	170U	170U	170U	170U	170U	170U
Chrysene	170U	170U	170U	170U	170U	170U	170U
Dibenzo(a,h)anthracene	170U	170U	170U	170U	170U	170U	170U
Dibenzofuran	170U	170U	170U	170U	170U	170U	170U
Diethylphthalate	170U	170U	170U	170U	170U	170U	170U
Dimethylphthalate	170U	170U	170U	170U	170U	170U	170U
Di-n-butylphthalate	170U	170U	32J	19J	20J	170U	170U
Di-n-octylphthalate	170U	170U	170U	170U	170U	170U	170U
Fluoranthene	170U	170U	170U	170U	170U	170U	170U
Fluorene	170U	170U	170U	170U	170U	170U	170U
Hexachlorobenzene	170U	170U	170U	170U	170U	170U	170U
Hexachlorobutadiene	170U	170U	170U	170U	170U	170U	170U
Hexachlorocyclopentadiene	170U	170U	170U	170U	170U	170U	170U
Hexachloroethane	170U	170U	170U	170U	170U	170U	170U
Indeno(1,2,3-cd)pyrene	170U	170U	170U	170U	170U	170U	170U
Isophorone	170U	170U	170U	170U	170U	170U	170U
Naphthalene	170U	170U	170U	170U	170U	170U	170U
Nitrobenzene	170U	170U	170U	170U	170U	170U	170U
n-Nitrosodi-n-propylamine	170U	170U	170U	170U	170U	170U	170U
N-Nitrosodiphenylamine	170U	170U	170U	170U	170U	170U	170U
Pentachlorophenol	420U	420U	420U	420U	420U	420U	420U
Phenanthrene	170U	170U	170U	170U	170U	170U	170U
Phenol	170U	170U	170U	170U	170U	170U	170U
Pyrene	170U	170U	170U	170U	170U	170U	170U
Total SVOC's	**ND**	**ND**	**32**	**19**	**20**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	WC BP COMP 1	WC BP COMP 2	WC BP-COMP 3	WC REF1 COMP 1	WC REF1 COMP 2	WC REF2 COMP 1	WC REF2 COMP 2
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/4/1999	11/1/1999	11/1/1999	10/4/1999	11/1/1999	11/2/1999	11/2/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,4-Trichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,2-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,3-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,4-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
2,2'-Oxybis(1-Chloropropane)	170U	170U	170U	170U	170U	170U	170U
2,4,5-Trichlorophenol	420U	420U	420U	420U	420U	420U	420U
2,4,6-Trichlorophenol	170U	170U	170U	170U	170U	170U	170U
2,4-Dichlorophenol	170U	170U	170U	170U	170U	170U	170U
2,4-Dimethylphenol	170U	170U	170U	170U	170U	170U	170U
2,4-Dinitrophenol	420U	420U	420U	420U	420U	420U	420U
2,4-Dinitrotoluene	170U	170U	170U	170U	170U	170U	170U
2,6-Dinitrotoluene	170U	170U	170U	170U	170U	170U	170U
2-Chloronaphthalene	170U	170U	170U	170U	170U	170U	170U
2-Chlorophenol	170U	170U	170U	170U	170U	170U	170U
2-Methyl-4,6-dinitrophenol	420U	420U	420U	420U	420U	420U	420U
2-Methylnaphthalene	170U	170U	170U	170U	170U	170U	170U
2-Methylphenol (o-cresol)	170U	170U	170U	170U	170U	170U	170U
2-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
2-Nitrophenol	170U	170U	170U	170U	170U	170U	170U
3&4-Methylphenol (m&p-cresol)	170U	170U	170U	170U	170U	170U	170U
3,3'-Dichlorobenzidine	170U	170U	170U	170U	170U	170U	170U
3-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
4-Bromophenylphenyl ether	170U	170U	170U	170U	170U	170U	170U
4-Chloro-3-methylphenol	170U	170U	170U	170U	170U	170U	170U
4-Chloroaniline	170U	170U	170U	170U	170U	170U	170U
4-Chlorophenylphenyl ether	170U	170U	170U	170U	170U	170U	170U
4-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
4-Nitrophenol	420U	420U	420U	420U	420U	420U	420U
Acenaphthene	170U	170U	170U	170U	170U	170U	170U
Acenaphthylene	170U	170U	170U	170U	170U	170U	170U
Anthracene	170U	170U	170U	170U	170U	170U	170U
Benzo(a)anthracene	170U	170U	170U	170U	170U	170U	170U
Benzo(a)pyrene	170U	170U	170U	170U	170U	170U	170U
Benzo(b)fluoranthene	170U	170U	170U	170U	170U	170U	170U
Benzo(g,h,i)perylene	170U	170U	170U	170U	170U	170U	170U
Benzo(k)fluoranthene	170U	170U	170U	170U	170U	170U	170U
bis(2-Chloroethoxy)methane	170U	170U	170U	170U	170U	170U	170U
bis(2-Chloroethyl)ether	170U	170U	170U	170U	170U	170U	170U

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	WC BP COMP 1	WC BP COMP 2	WC BP-COMP 3	WC REF1 COMP 1	WC REF1 COMP 2	WC REF2 COMP 1	WC REF2 COMP 2
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/4/1999	11/1/1999	11/1/1999	10/4/1999	11/1/1999	11/2/1999	11/2/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
bis(2-Ethylhexyl)phthalate	170U	130J	100J	84J	100J	95J	140J
Butylbenzylphthalate	170U	170U	170U	170U	170U	170U	170U
Carbazole	170U	170U	170U	170U	170U	170U	170U
Chrysene	170U	170U	170U	170U	170U	170U	170U
Dibenzo(a,h)anthracene	170U	170U	170U	170U	170U	170U	170U
Dibenzofuran	170U	170U	170U	170U	170U	170U	170U
Diethylphthalate	170U	170U	170U	170U	170U	170U	170U
Dimethylphthalate	170U	170U	170U	170U	170U	170U	170U
Di-n-butylphthalate	27J	170U	170U	170U	170U	170U	170U
Di-n-octylphthalate	170U	170U	170U	170U	170U	170U	170U
Fluoranthene	170U	170U	170U	170U	170U	170U	170U
Fluorene	170U	170U	170U	170U	170U	170U	170U
Hexachlorobenzene	170U	170U	170U	170U	170U	170U	170U
Hexachlorobutadiene	170U	170U	170U	170U	170U	170U	170U
Hexachlorocyclopentadiene	170U	170U	170U	170U	170U	170U	170U
Hexachloroethane	170U	170U	170U	170U	170U	170U	170U
Indeno(1,2,3-cd)pyrene	170U	170U	170U	170U	170U	170U	170U
Isophorone	170U	170U	170U	170U	170U	170U	170U
Naphthalene	170U	170U	170U	170U	170U	170U	170U
Nitrobenzene	170U	170U	170U	170U	170U	170U	170U
n-Nitrosodi-n-propylamine	170U	170U	170U	170U	170U	170U	170U
N-Nitrosodiphenylamine	170U	170U	170U	170U	170U	170U	170U
Pentachlorophenol	420U	420U	420U	420U	420U	420U	420U
Phenanthrene	170U	170U	170U	170U	170U	170U	170U
Phenol	170U	170U	170U	170U	170U	170U	170U
Pyrene	170U	170U	170U	170U	170U	170U	170U
Total SVOC's	**27**	**130**	**100**	**84**	**100**	**95**	**140**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	BB BP COMP 1	BB BP COMP 2	BB BP COMP 3	BB REF 1-2 COMP 1	BB REF 1-2 COMP 2	BB REF 2-2 COMP 1	CLAM BP-1 COMP 01
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	11/1/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999	11/2/1999	10/6/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1 2,4-Trichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1 2-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,3-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,4-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
2,2'-Oxybis(1-Chloropropane)	170U	170U	170U	170U	170U	170U	170U
2,4,5-Trichlorophenol	420U	420U	420U	420U	420U	420U	420U
2,4,6-Trichlorophenol	170U	170U	170U	170U	170U	170U	170U
2,4-Dichlorophenol	170U	170U	170U	170U	170U	170U	170U
2 4-Dimethylphenol	170U	170U	170U	170U	170U	170U	170U
2,4-Dinitrophenol	420U	420U	420U	420U	420U	420U	420U
2,4-Dinitrotoluene	170U	170U	170U	170U	170U	170U	170U
2,6-Dinitrotoluene	170U	170U	170U	170U	170U	170U	170U
2-Chloronaphthalene	170U	170U	170U	170U	170U	170U	170U
2-Chlorophenol	170U	170U	170U	170U	170U	170U	170U
2-Methyl-4,6-dinitrophenol	420U	420U	420U	420U	420U	420U	420U
2-Methylnaphthalene	170U	170U	170U	170U	170U	170U	170U
2-Methylphenol (o-cresol)	170U	170U	170U	170U	170U	170U	170U
2-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
2-Nitrophenol	170U	170U	170U	170U	170U	170U	170U
3&4-Methylphenol (m&p-cresol)	170U	170U	170U	170U	170U	170U	170U
3,3'-Dichlorobenzidine	170U	170U	170U	170U	170U	170U	170U
3-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
4-Bromophenylphenyl ether	170U	170U	170U	170U	170U	170U	170U
4-Chloro-3-methylphenol	170U	170U	170U	170U	170U	170U	170U
4-Chloroaniline	170U	170U	170U	170U	170U	170U	170U
4-Chlorophenylphenyl ether	170U	170U	170U	170U	170U	170U	170U
4-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
4-Nitrophenol	420U	420U	420U	420U	420U	420U	420U
Acenaphthene	170U	170U	170U	170U	170U	170U	170U
Acenaphthylene	170U	170U	170U	170U	170U	170U	170U
Anthracene	170U	170U	170U	170U	170U	170U	170U
Benzo(a)anthracene	170U	170U	170U	170U	170U	170U	170U
Benzo(a)pyrene	170U	170U	170U	170U	170U	170U	170U
Benzo(b)fluoranthene	170U	170U	170U	170U	170U	170U	170U
Benzo(g,h,i)perylene	170U	170U	170U	170U	170U	170U	170U
Benzo(k)fluoranthene	170U	170U	170U	170U	170U	170U	170U
bis(2-Chloroethoxy)methane	170U	170U	170U	170U	170U	170U	170U
bis(2-Chloroethyl)ether	170U	170U	170U	170U	170U	170U	170U

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	BB BP COMP 1	BB BP COMP 2	BB BP COMP 3	BB REF 1-2 COMP 1	BB REF 1-2 COMP 2	BB REF 2-2 COMP 1	CLAM BP-1 COMP 01
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	11/1/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999	11/2/1999	10/6/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
bis(2-Ethylhexyl)phthalate	97	170U	170U	170U	46	47J	73J
Butylbenzylphthalate	170U	170U	170U	170U	170U	170U	170U
Carbazole	170U	170U		170U	170U		170U
Chrysene	170U	170U	170U	170U	170U	170U	170U
Dibenzo(a,h)anthracene	170U	170U	170U	170U	170U	170U	170U
Dibenzofuran	170U	170U	170U	170U	170U	170U	170U
Diethylphthalate	18	170U	170U	25	170U	170U	53
Dimethylphthalate	170U	170U	170U	170U	170U	170U	170U
Di-n-butylphthalate	170U	170U	170U	170U	170U	170U	170U
Di-n-octylphthalate	170U	170U	170U	170U	170U	170U	170U
Fluoranthene	170U	170U	170U	170U	170U	170U	170U
Fluorene	170U	170U	170U	170U	170U	170U	170U
Hexachlorobenzene	170U	170U	170U	170U	170U	170U	170U
Hexachlorobutadiene	170U	170U	170U	170U	170U	170U	170U
Hexachlorocyclopentadiene	170U	170U	170U	170U	170U	170U	170U
Hexachloroethane	170U	170U	170U	170U	170U	170U	170U
Indeno(1,2,3-cd)pyrene	170U	170U	170U	170U	170U	170U	170U
Isophorone	170U	170U	170U	170U	170U	170U	170U
Naphthalene	170U	170U	170U	170U	170U	170U	170U
Nitrobenzene	170U	170U	170U	170U	170U	170U	170U
n-Nitrosodi-n-propylamine	170U	170U	170U	170U	170U	170U	170U
N-Nitrosodiphenylamine	170U	170U	170U	170U	170U	170U	170U
Pentachlorophenol	420U	420U	420U	420U	420U	420U	420U
Phenanthrene	170U	170U	170U	170U	170U	170U	170U
Phenol	170U	170U	170U	170U	170U	170U	170U
Pyrene	170U	170U	170U	170U	170U	170U	170U
Total SVOC's	**115**	**ND**	**ND**	**25**	**46**	**47**	**126**

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	CLAM BP-2 COMP 01	CLAM BP-3 COMP 01	CLAM REF-1 COMP 01	CLAM REF2-2 COMP 01	CLAM REF2-2 COMP 02	F.F BP COMP 1
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/7/1999	10/6/1999	10/8/1999	10/8/1999	10/9/1999	10/4/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,4-Trichlorobenzene	340U	170U	170U	170U	170U	170U
1,2-Dichlorobenzene	340U	170U	170U	170U	170U	170U
1,3-Dichlorobenzene	340U	170U	170U	170U	170U	170U
1,4-Dichlorobenzene	340U	170U	170U	170U	170U	170U
2,2'-Oxybis(1-Chloropropane)	340U	170U	170U	170U	170U	170U
2,4,5-Trichlorophenol	840U	420U	420U	420U	420U	420U
2,4,6-Trichlorophenol	340U	170U	170U	170U	170U	170U
2,4-Dichlorophenol	340U	170U	170U	170U	170U	170U
2,4-Dimethylphenol	340U	170U	170U	170U	170U	170U
2,4-Dinitrophenol	840U	420U	420U	420U	420U	420U
2,4-Dinitrotoluene	340U	170U	170U	170U	170U	170U
2,6-Dinitrotoluene	340U	170U	170U	170U	170U	170U
2-Chloronaphthalene	340U	170U	170U	170U	170U	170U
2-Chlorophenol	340U	170U	170U	170U	170U	170U
2-Methyl-4,6-dinitrophenol	840U	420U	420U	420U	420U	420U
2-Methylnaphthalene	340U	170U	170U	170U	170U	170U
2-Methylphenol (o-cresol)	340U	170U	170U	170U	170U	170U
2-Nitroaniline	840U	420U	420U	420U	420U	420U
2-Nitrophenol	340U	170U	170U	170U	170U	170U
3&4-Methylphenol (m&p-cresol)	340U	170U	170U	170U	170U	170U
3,3'-Dichlorobenzidine	340U	170U	170U	170U	170U	170U
3-Nitroaniline	840U	420U	420U	420U	420U	420U
4-Bromophenylphenyl ether	340U	170U	170U	170U	170U	170U
4-Chloro-3-methylphenol	340U	170U	170U	170U	170U	170U
4-Chloroaniline	340U	170U	170U	170U	170U	170U
4-Chlorophenylphenyl ether	340U	170U	170U	170U	170U	170U
4-Nitroaniline	840U	420U	420U	420U	420U	420U
4-Nitrophenol	840U	420U	420U	420U	420U	420U
Acenaphthene	340U	170U	170U	170U	170U	170U
Acenaphthylene	340U	170U	170U	170U	170U	170U
Anthracene	340U	170U	170U	170U	170U	170U
Benzo(a)anthracene	340U	170U	170U	170U	170U	170U
Benzo(a)pyrene	340U	170U	170U	170U	170U	170U
Benzo(b)fluoranthene	340U	170U	170U	170U	170U	170U
Benzo(g,h,i)perylene	340U	170U	170U	170U	170U	170U
Benzo(k)fluoranthene	340U	170U	170U	170U	170U	170U
bis(2-Chloroethoxy)methane	340U	170U	170U	170U	170U	170U
bis(2-Chloroethyl)ether	340U	170U	170U	170U	170U	170U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	CLAM BP-2 COMP 01	CLAM BP-3 COMP 01	CLAM REF-1 COMP 01	CLAM REF2-2 COMP 01	CLAM REF2-2 COMP 02	F F. BP COMP 1
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/7/1999	10/6/1999	10/8/1999	10/8/1999	10/9/1999	10/4/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
bis(2-Ethylhexyl)phthalate	170J	55J	73J	47J	66J	150
Butylbenzylphthalate	340U	170U	170U	170U	170U	170U
Carbazole	340U	170U	170U	170U	170U	170U
Chrysene	340U	170U	170U	170U	170U	170U
Dibenzo(a,h)anthracene	340U	170U	170U	170U	170U	170U
Dibenzofuran	340U	170U	170U	170U	170U	170U
Diethylphthalate	120	53	59	52	49	19
Dimethylphthalate	340U	170U	170U	170U	170U	170U
Di-n-butylphthalate	340U	170U	170U	170U	170U	170U
Di-n-octylphthalate	340U	170U	170U	170U	170U	170U
Fluoranthene	340U	170U	170U	170U	170U	170U
Fluorene	340U	170U	170U	170U	170U	170U
Hexachlorobenzene	340U	170U	170U	170U	170U	170U
Hexachlorobutadiene	340U	170U	170U	170U	170U	170U
Hexachlorocyclopentadiene	340U	170U	170U	170U	170U	170U
Hexachloroethane	340U	170U	170U	170U	170U	170U
Indeno(1,2,3-cd)pyrene	340U	170U	170U	170U	170U	170U
Isophorone	340U	170U	170U	170U	170U	170U
Naphthalene	340U	170U	170U	170U	170U	170U
Nitrobenzene	340U	170U	170U	170U	170U	170U
n-Nitrosodi-n-propylamine	340U	170U	170U	170U	170U	170U
N-Nitrosodiphenylamine	340U	170U	170U	170U	170U	170U
Pentachlorophenol	840U	420U	420U	420U	420U	420U
Phenanthrene	340U	170U	170U	170U	170U	170U
Phenol	340U	170U	170U	170U	170U	170U
Pyrene	340U	170U	170U	170U	170U	170U
Total SVOC's	290	108	132	99	115	169

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	F F BP COMP 2	F.F. BP COMP 3	F F. CS B COMP 1	F.F CS-D COMP 1	F.F REF 1 COMP 1	F F REF 2 COMP 1	F F REF 2 COMP 2
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/6/1999	10/6/1999	10/5/1999	10/4/1999	10/8/1999	10/8/1999	10/8/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,4-Trichlorobenzene	340U	340U	340U	170U	170U	170U	340U
1,2-Dichlorobenzene	340U	340U	340U	170U	170U	170U	340U
1,3-Dichlorobenzene	340U	340U	340U	170U	170U	170U	340U
1,4-Dichlorobenzene	340U	340U	340U	170U	170U	170U	340U
2,2'-Oxybis(1-Chloropropane)	340U	340U	340U	170U	170U	170U	340U
2,4,5-Trichlorophenol	840U	840U	840U	420U	420U	420U	840U
2,4,6-Trichlorophenol	340U	340U	340U	170U	170U	170U	340U
2,4-Dichlorophenol	340U	340U	340U	170U	170U	170U	340U
2,4-Dimethylphenol	340U	340U	340U	170U	170U	170U	340U
2,4-Dinitrophenol	840U	840U	840U	420U	420U	420U	840U
2,4-Dinitrotoluene	340U	340U	340U	170U	170U	170U	340U
2,6-Dinitrotoluene	340U	340U	340U	170U	170U	170U	340U
2-Chloronaphthalene	340U	340U	340U	170U	170U	170U	340U
2-Chlorophenol	340U	340U	340U	170U	170U	170U	340U
2-Methyl-4,6-dinitrophenol	840U	840U	840U	420U	420U	420U	840U
2-Methylnaphthalene	340U	340U	340U	170U	170U	170U	340U
2-Methylphenol (o-cresol)	340U	340U	340U	170U	170U	170U	340U
2-Nitroaniline	840U	840U	840U	420U	420U	420U	840U
2-Nitrophenol	340U	340U	340U	170U	170U	170U	340U
3&4-Methylphenol (m&p-cresol)	340U	340U	340U	170U	170U	170U	340U
3,3'-Dichlorobenzidine	340U	340U	340U	170U	170U	170U	340U
3-Nitroaniline	840U	840U	840U	420U	420U	420U	840U
4-Bromophenylphenyl ether	340U	340U	340U	170U	170U	170U	340U
4-Chloro-3-methylphenol	340U	340U	340U	170U	170U	170U	340U
4-Chloroaniline	340U	340U	340U	170U	170U	170U	340U
4-Chlorophenylphenyl ether	340U	340U	340U	170U	170U	170U	340U
4-Nitroaniline	840U	840U	840U	420U	420U	420U	840U
4-Nitrophenol	840U	840U	840U	420U	420U	420U	840U
Acenaphthene	340U	340U	340U	170U	170U	170U	340U
Acenaphthylene	340U	340U	340U	170U	170U	170U	340U
Anthracene	340U	340U	340U	170U	170U	170U	340U
Benzo(a)anthracene	340U	340U	340U	170U	170U	170U	340U
Benzo(a)pyrene	340U	340U	340U	170U	170U	170U	340U
Benzo(b)fluoranthene	340U	340U	340U	170U	170U	170U	340U
Benzo(g,h,i)perylene	340U	340U	340U	170U	170U	170U	340U
Benzo(k)fluoranthene	340U	340U	340U	170U	170U	170U	340U
bis(2-Chloroethoxy)methane	340U	340U	340U	170U	170U	170U	340U
bis(2-Chloroethyl)ether	340U	340U	340U	170U	170U	170U	340U

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	F F BP COMP 2	F F BP COMP 3	F F CS B COMP 1	F F CS-D COMP 1	F F REF 1 COMP 1	F F REF 2 COMP 1	F F REF 2 COMP 2
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/6/1999	10/6/1999	10/5/1999	10/4/1999	10/8/1999	10/8/1999	10/8/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
bis(2-Ethylhexyl)phthalate	230	340U	340U	130	170	280	99
Butylbenzylphthalate	340U	340U	340U	170U	170U	170U	340U
Carbazole	340U	340U	340U	170U	170U	170U	340U
Chrysene	340U	340U	340U	170U	170U	170U	340U
Dibenzo(a,h)anthracene	48	340U	340U	22	170U	170U	340U
Dibenzofuran	340U	340U	340U	170U	170U	170U	340U
Diethylphthalate	37	36	93	22	18	20	340U
Dimethylphthalate	340U	340U	340U	170U	170U	170U	340U
Di-n-butylphthalate	340U	340U	340U	170U	170U	170U	340U
Di-n-octylphthalate	340U	340U	340U	170U	170U	170U	340U
Fluoranthene	340U	340U	340U	170U	170U	170U	340U
Fluorene	340U	340U	340U	170U	170U	170U	340U
Hexachlorobenzene	340U	340U	340U	170U	170U	170U	340U
Hexachlorobutadiene	340U	340U	340U	170U	170U	170U	340U
Hexachlorocyclopentadiene	340U	340U	340U	170U	170U	170U	340U
Hexachloroethane	340U	340U	340U	170U	170U	170U	340U
Indeno(1 2 3-cd)pyrene	54	340U	340U	170U	170U	170U	340U
Isophorone	340U	340U	340U	170U	170U	170U	340U
Naphthalene	340U	340U	340U	170U	170U	170U	340U
Nitrobenzene	340U	340U	340U	170U	170U	170U	340U
n-Nitrosodi-n-propylamine	340U	340U	340U	170U	170U	170U	340U
N-Nitrosodiphenylamine	340U	340U	340U	170U	170U	170U	340U
Pentachlorophenol	840U	840U	840U	420U	420U	420U	840U
Phenanthrene	340U	340U	340U	170U	170U	170U	340U
Phenol	340U	340U	340U	170U	170U	170U	340U
Pyrene	340U	340U	340U	170U	170U	170U	340U
Total SVOC's	**369**	**36**	**93**	**174**	**188**	**300**	**99**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	FF REF 2 COMP 3	PTISS B-1 DC B	PTISS B-2 DC B	PTISS B-3 DC B	PTISS C-1 DC C	PTISS C-2 DC C	PTISS C-3 DC C	PTISS D-1 DC D
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/8/1999	10/5/1999	10/5/1999	10/5/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,4-Trichlorobenzene	170U	170U	170U	170U	170U	170U	170U	170U
1,2-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U	170U
1,3-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U	170U
1,4-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U	170U
2,2'-Oxybis(1-Chloropropane)	170U	170U	170U	170U	170U	170U	170U	170U
2,4,5-Trichlorophenol	420U	420U	420U	420U	420U	420U	420U	420U
2,4,6-Trichlorophenol	170U	170U	170U	170U	170U	170U	170U	170U
2,4-Dichlorophenol	170U	170U	170U	170U	170U	170U	170U	170U
2,4-Dimethylphenol	170U	95J	170U	170U	170U	170U	170U	170U
2,4-Dinitrophenol	420U	420U	420U	420U	420U	420U	420U	420U
2,4-Dinitrotoluene	170U	170U	170U	170U	170U	170U	170U	170U
2,6-Dinitrotoluene	170U	170U	170U	170U	170U	170U	170U	170U
2-Chloronaphthalene	170U	170U	170U	170U	170U	170U	170U	170U
2-Chlorophenol	170U	170U	170U	170U	170U	170U	170U	170U
2-Methyl-4,6-dinitrophenol	420U	420U	420U	420U	420U	420U	420U	420U
2-Methylnaphthalene	170U	170U	170U	170U	170U	170U	170U	170U
2-Methylphenol (o-cresol)	170U	170U	170U	170U	170U	170U	170U	170U
2-Nitroaniline	420U	420U	420U	420U	420U	420U	420U	420U
2-Nitrophenol	170U	170U	170U	170U	170U	170U	170U	170U
3&4-Methylphenol (m&p-cresol)	170U	170U	170U	170U	170U	170U	170U	170U
3,3'-Dichlorobenzidine	170U	170U	170U	170U	170U	170U	170U	170U
3-Nitroaniline	420U	420U	420U	420U	420U	420U	420U	420U
4-Bromophenylphenyl ether	170U	170U	170U	170U	170U	170U	170U	170U
4-Chloro-3-methylphenol	170U	170U	170U	170U	170U	170U	170U	170U
4-Chloroaniline	170U	170U	170U	170U	170U	170U	170U	170U
4-Chlorophenylphenyl ether	170U	170U	170U	170U	170U	170U	170U	170U
4-Nitroaniline	420U	420U	420U	420U	420U	420U	420U	420U
4-Nitrophenol	420U	420U	420U	420U	420U	420U	420U	420U
Acenaphthene	170U	170U	170U	170U	170U	170U	170U	170U
Acenaphthylene	170U	69J	170U	170U	170U	170U	170U	170U
Anthracene	170U	170U	170U	170U	170U	170U	170U	170U
Benzo(a)anthracene	170U	170U	170U	170U	170U	170U	170U	170U
Benzo(a)pyrene	170U	670	170U	170U	18J	170U	170U	170U
Benzo(b)fluoranthene	170U	430	170U	170U	26J	18J	170U	170U
Benzo(g,h,i)perylene	170U	500	170U	170U	170U	170U	170U	170U
Benzo(k)fluoranthene	170U	320	170U	170U	25J	30J	170U	170U
bis(2-Chloroethoxy)methane	170U	170U	170U	170U	170U	170U	170U	170U
bis(2-Chloroethyl)ether	170U	170U	170U	170U	170U	170U	170U	170U

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	FF REF 2 COMP 3	PTISS B-1 DC B	PTISS B-2 DC B	PTISS B-3 DC B	PTISS C-1 DC C	PTISS C-2 DC C	PTISS C-3 DC C	PTISS D-1 DC D
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/8/1999	10/5/1999	10/5/1999	10/5/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
bis(2-Ethylhexyl)phthalate	140J	170U	170U	94J	53J	93J	170U	170U
Butylbenzylphthalate	170U	170U	170U	170U	170U	170U	170U	170U
Carbazole								
Chrysene	170U	170U	170U	170U	22J	25J	170U	170U
Dibenzo(a,h)anthracene	170U	110J	170U	170U	170U	170U	170U	170U
Dibenzofuran	170U	170U	170U	170U	170U	170U	170U	170U
Diethylphthalate	37J	15J	170U	170U	170U	170U	13J	170U
Dimethylphthalate	170U	170U	170U	170U	170U	170U	170U	170U
Di-n-butylphthalate	170U	170U	170U	170U	170U	170U	14J	170U
Di-n-octylphthalate	170U	170U	170U	170U	170U	170U	170U	170U
Fluoranthene	170U	170U	170U	170U	25J	32J	170U	170U
Fluorene	170U	170U	170U	170U	170U	170U	170U	170U
Hexachlorobenzene	170U	170U	170U	170U	170U	170U	170U	170U
Hexachlorobutadiene	170U	170U	170U	170U	170U	170U	170U	170U
Hexachlorocyclopentadiene	170U	170U	170U	170U	170U	170U	170U	170U
Hexachloroethane	170U	170U	170U	170U	170U	170U	170U	170U
Indeno(1,2,3-cd)pyrene	170U	520	170U	170U	30J	23J	170U	170U
Isophorone	170U	170U	170U	170U	170U	170U	170U	170U
Naphthalene	170U	170U	170U	170U	170U	170U	170U	170U
Nitrobenzene	170U	170U	170U	170U	170U	170U	170U	170U
n-Nitrosodi-n-propylamine	170U	170U	170U	170U	170U	170U	170U	170U
N-Nitrosodiphenylamine	170U	170U	170U	170U	170U	170U	170U	170U
Pentachlorophenol	420U	420U	420U	420U	420U	420U	420U	420U
Phenanthrene	170U	170U	170U	170U	17J	16J	170U	170U
Phenol	170U	170U	170U	170U	170U	170U	170U	170U
Pyrene	170U	170U	170U	170U	22J	29J	170U	170U
Total SVOC's	**177**	**2729**	**ND**	**94**	**238**	**266**	**27**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	PTISS D-2 DC D	PTISS D-3 DC D	PTISS E-1 DC E	PTISS E-2 DC E	PTISS F-1 DC F	PTISS F-3 DC F	PTISS PRAIRIE DUPONT R2
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/4/1999	10/4/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/8/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,4-Trichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,2-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,3-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
1,4-Dichlorobenzene	170U	170U	170U	170U	170U	170U	170U
2,2'-Oxybis(1-Chloropropane)	170U	170U	170U	170U	170U	170U	170U
2,4,5-Trichlorophenol	420U	420U	420U	420U	420U	420U	420U
2,4,6-Trichlorophenol	170U	170U	170U	170U	170U	170U	170U
2 4-Dichlorophenol	170U	170U	170U	170U	170U	170U	170U
2 4-Dimethylphenol	170U	170U	170U	170U	51J	170U	170U
2 4-Dinitrophenol	420U	420U	420U	420U	420U	420U	420U
2 4-Dinitrotoluene	170U	170U	170U	170U	170U	170U	170U
2,6-Dinitrotoluene	170U	170U	170U	170U	170U	170U	170U
2-Chloronaphthalene	170U	170U	170U	170U	170U	170U	170U
2-Chlorophenol	170U	170U	170U	170U	170U	170U	170U
2-Methyl-4,6-dinitrophenol	420U	420U	420U	420U	420U	420U	420U
2-Methylnaphthalene	170U	170U	170U	170U	170U	170U	170U
2-Methylphenol (o-cresol)	170U	170U	170U	170U	170U	170U	170U
2-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
2-Nitrophenol	170U	170U	170U	170U	170U	170U	170U
3&4-Methylphenol (m&p-cresol)	170U	170U	170U	170U	170U	170U	170U
3,3'-Dichlorobenzidine	170U	170U	170U	170U	170U	170U	170U
3-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
4-Bromophenylphenyl ether	170U	170U	170U	170U	170U	170U	170U
4-Chloro-3-methylphenol	170U	170U	170U	170U	170U	170U	170U
4-Chloroaniline	170U	170U	170U	170U	170U	170U	170U
4-Chlorophenylphenyl ether	170U	170U	170U	170U	170U	170U	170U
4-Nitroaniline	420U	420U	420U	420U	420U	420U	420U
4-Nitrophenol	420U	420U	420U	420U	420U	420U	420U
Acenaphthene	170U	170U	170U	170U	170U	170U	170U
Acenaphthylene	170U	170U	170U	170U	32J	170U	170U
Anthracene	170U	170U	170U	170U	170U	170U	170U
Benzo(a)anthracene	170U	170U	170U	170U	170U	170U	170U
Benzo(a)pyrene	170U	34J	170U	170U	140J	170U	37J
Benzo(b)fluoranthene	170U	170U	170U	170U	59J	170U	16J
Benzo(g,h,i)perylene	170U	68J	170U	39J	360	170U	390
Benzo(k)fluoranthene	170U	25J	170U	170U	52J	170U	21J
bis(2-Chloroethoxy)methane	170U	170U	170U	170U	170U	170U	170U
bis(2-Chloroethyl)ether	170U	170U	170U	170U	170U	170U	170U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	PTISS D-2 DC D	PTISS D-3 DC D	PTISS E-1 DC E	PTISS E-2 DC E	PTISS F-1 DC F	PTISS F-3 DC F	PTISS PRAIRIE DUPONT R2
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/4/1999	10/4/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/8/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
bis(2-Ethylhexyl)phthalate	170U	170U	50J	170U	170U	170U	170U
Butylbenzylphthalate	170U	170U	170U	170U	170U	170U	170U
Carbazole							
Chrysene	170U	170U	170U	170U	170U	170U	170U
Dibenzo(a,h)anthracene	170U	68J	170U	30J	76J	170U	400
Dibenzofuran	170U	170U	170U	170U	170U	170U	170U
Diethylphthalate	170U	170U	170U	170U	170U	170U	170U
Dimethylphthalate	170U	170U	170U	170U	170U	170U	170U
Di-n-butylphthalate	170U	170U	170U	170U	170U	170U	170U
Di-n-octylphthalate	170U	170U	170U	170U	170U	170U	170U
Fluoranthene	170U	170U	170U	170U	170U	170U	170U
Fluorene	170U	170U	170U	170U	170U	170U	170U
Hexachlorobenzene	170U	170U	170U	170U	170U	170U	170U
Hexachlorobutadiene	170U	170U	170U	170U	170U	170U	170U
Hexachlorocyclopentadiene	170U	170U	170U	170U	170U	170U	170U
Hexachloroethane	170U	170U	170U	170U	170U	170U	170U
Indeno(1,2,3-cd)pyrene	170U	78J	170U	38J	300	170U	440
Isophorone	170U	170U	170U	170U	170U	170U	170U
Naphthalene	170U	170U	170U	170U	170U	170U	170U
Nitrobenzene	170U	170U	170U	170U	170U	170U	170U
n-Nitrosodi-n-propylamine	170U	170U	170U	170U	170U	170U	170U
N-Nitrosodiphenylamine	170U	170U	170U	170U	170U	170U	170U
Pentachlorophenol	420U	420U	420U	420U	420U	420U	420U
Phenanthrene	170U	170U	170U	170U	170U	170U	170U
Phenol	170U	170U	170U	170U	170U	170U	170U
Pyrene	170U	170U	170U	170U	170U	170U	170U
Total SVOC's	**ND**	**273**	**50**	**107**	**1070**	**ND**	**1304**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	PTISS REF 2-1 RC	SHRIMP BP COMP	SHRIMP REF1 COMP	SHRIMP REF2 COMP	SN REF1 COMP 1	SN REF2-1 COMP1	SNCS-B COMP1
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/8/1999	10/6/1999	10/7/1999	10/8/1999	10/8/1999	10/8/1999	10/5/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,4-Trichlorobenzene	170U	340U	340U	340U	340U	170U	170U
1,2-Dichlorobenzene	170U	340U	340U	340U	340U	170U	170U
1 3-Dichlorobenzene	170U	340U	340U	340U	340U	170U	170U
1,4-Dichlorobenzene	170U	340U	340U	340U	340U	170U	170U
2,2'-Oxybis(1-Chloropropane)	170U	340U	340U	340U	340U	170U	170U
2 4,5-Trichlorophenol	420U	840U	840U	840U	840U	420U	420U
2,4,6-Trichlorophenol	170U	340U	340U	340U	340U	170U	170U
2,4-Dichlorophenol	170U	340U	340U	340U	340U	170U	170U
2,4-Dimethylphenol	170U	340U	340U	340U	340U	170U	170U
2,4-Dinitrophenol	420U	840U	840U	840U	840U	420U	420U
2,4-Dinitrotoluene	170U	340U	340U	340U	340U	170U	170U
2,6-Dinitrotoluene	170U	340U	340U	340U	340U	170U	170U
2-Chloronaphthalene	170U	340U	340U	340U	340U	170U	170U
2-Chlorophenol	170U	340U	340U	340U	340U	170U	170U
2-Methyl-4,6-dinitrophenol	420U	840U	840U	840U	840U	420U	420U
2-Methylnaphthalene	170U	340U	340U	340U	340U	170U	170U
2-Methylphenol (o-cresol)	170U	340U	340U	340U	340U	170U	170U
2-Nitroaniline	420U	840U	840U	840U	840U	420U	420U
2-Nitrophenol	170U	340U	340U	340U	340U	170U	170U
3&4-Methylphenol (m&p-cresol)	170U	340U	340U	340U	140J	170U	63J
3 3'-Dichlorobenzidine	170U	340U	340U	340U	340U	170U	170U
3-Nitroaniline	420U	840U	840U	840U	840U	420U	420U
4-Bromophenylphenyl ether	170U	340U	340U	340U	340U	170U	170U
4-Chloro-3-methylphenol	170U	340U	340U	340U	340U	170U	170U
4-Chloroaniline	170U	340U	340U	340U	340U	170U	170U
4-Chlorophenylphenyl ether	170U	340U	340U	340U	340U	170U	170U
4-Nitroaniline	420U	840U	840U	840U	840U	420U	420U
4-Nitrophenol	420U	840U	840U	840U	840U	420U	420U
Acenaphthene	170U	340U	340U	340U	340U	170U	170U
Acenaphthylene	170U	340U	340U	340U	340U	170U	170U
Anthracene	170U	340U	340U	340U	340U	170U	170U
Benzo(a)anthracene	170U	340U	340U	340U	340U	170U	170U
Benzo(a)pyrene	15J	340U	340U	340U	340U	170U	170U
Benzo(b)fluoranthene	170U	340U	340U	340U	340U	170U	170U
Benzo(g,h,i)perylene	240	340U	340U	340U	340U	170U	170U
Benzo(k)fluoranthene	170U	340U	340U	340U	340U	170U	170U
bis(2-Chloroethoxy)methane	170U	340U	340U	340U	340U	170U	170U
bis(2-Chloroethyl)ether	170U	340U	340U	340U	340U	170U	170U

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	PTISS REF 2-1 RC	SHRIMP BP COMP	SHRIMP REF1 COMP	SHRIMP REF2 COMP	SN REF1 COMP 1	SN REF2-1 COMP1	SNCS-B COMP1
SOL_DESC	Biota	Biota	Biota	Biota	Biota	Biota	Biota
SAMP_DATE	10/8/1999	10/6/1999	10/7/1999	10/8/1999	10/8/1999	10/8/1999	10/5/1999
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
bis(2-Ethylhexyl)phthalate	170U	340U	98J	92J	150J	78J	110J
Butylbenzylphthalate	170U	340U	340U	340U	340U	170U	170U
Carbazole		340U	340U	340U	340U	170U	170U
Chrysene	170U	340U	340U	340U	340U	170U	170U
Dibenzo(a,h)anthracene	180	340U	340U	340U	340U	170U	170U
Dibenzofuran	170U	340U	340U	340U	340U	170U	170U
Diethylphthalate	170U	44	59	57	62	58	54
Dimethylphthalate	170U	340U	340U	340U	340U	170U	170U
Di-n-butylphthalate	170U	340U	340U	340U	340U	170U	170U
Di-n-octylphthalate	170U	340U	340U	340U	340U	170U	170U
Fluoranthene	170U	340U	340U	340U	340U	170U	170U
Fluorene	170U	340U	340U	340U	340U	170U	170U
Hexachlorobenzene	170U	340U	340U	340U	340U	170U	170U
Hexachlorobutadiene	170U	340U	340U	340U	340U	170U	170U
Hexachlorocyclopentadiene	170U	340U	340U	340U	340U	170U	170U
Hexachloroethane	170U	340U	340U	340U	340U	170U	170U
Indeno(1,2 3-cd)pyrene	220	340U	340U	340U	340U	170U	170U
Isophorone	170U	340U	340U	340U	340U	170U	170U
Naphthalene	170U	340U	340U	340U	340U	170U	170U
Nitrobenzene	170U	340U	340U	340U	340U	170U	170U
n-Nitrosodi-n-propylamine	170U	340U	340U	340U	340U	170U	170U
N-Nitrosodiphenylamine	170U	340U	340U	340U	340U	170U	170U
Pentachlorophenol	420U	840U	840U	840U	840U	420U	420U
Phenanthrene	170U	340U	340U	340U	340U	170U	170U
Phenol	170U	340U	340U	340U	340U	170U	170U
Pyrene	170U	340U	340U	340U	340U	170U	170U
Total SVOC's	**655**	**44**	**157**	**149**	**352**	**136**	**227**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	SNCS-C COMP1	SNCS-D COMP1	SRM (NIST 1974)
SOL_DESC	Biota	Biota	Biota
SAMP_DATE	10/4/1999	10/4/1999	1/26/2000
UNITS	ug/kg	ug/kg	ug/kg
1,2,4-Trichlorobenzene	170U	170U	170U
1,2-Dichlorobenzene	170U	170U	170U
1,3-Dichlorobenzene	170U	170U	170U
1,4-Dichlorobenzene	170U	170U	170U
2,2'-Oxybis(1-Chloropropane)	170U	170U	170U
2,4,5-Trichlorophenol	420U	420U	420U
2,4,6-Trichlorophenol	170U	170U	170U
2,4-Dichlorophenol	170U	170U	170U
2,4-Dimethylphenol	170U	170U	50U
2,4-Dinitrophenol	420U	420U	420U
2,4-Dinitrotoluene	170U	170U	170U
2,6-Dinitrotoluene	170U	170U	170U
2-Chloronaphthalene	170U	170U	170U
2-Chlorophenol	170U	170U	170U
2-Methyl-4,6-dinitrophenol	420U	420U	420U
2-Methylnaphthalene	170U	170U	170U
2-Methylphenol (o-cresol)	170U	170U	31U
2-Nitroaniline	420U	420U	420U
2-Nitrophenol	170U	170U	170U
3&4-Methylphenol (m&p-cresol)	170U	8200	170U
3,3'-Dichlorobenzidine	170U	170U	170U
3-Nitroaniline	420U	420U	420U
4-Bromophenylphenyl ether	170U	170U	170U
4-Chloro-3-methylphenol	170U	170U	170U
4-Chloroaniline	170U	170U	170U
4-Chlorophenylphenyl ether	170U	170U	170U
4-Nitroaniline	420U	420U	420U
4-Nitrophenol	420U	420U	420U
Acenaphthene	170U	170U	170U
Acenaphthylene	170U	170U	170U
Anthracene	170U	170U	170U
Benzo(a)anthracene	170U	170U	170U
Benzo(a)pyrene	31J	170U	170U
Benzo(b)fluoranthene	79J	170U	170U
Benzo(g,h,i)perylene	170U	170U	170U
Benzo(k)fluoranthene	170U	170U	170U
bis(2-Chloroethoxy)methane	170U	170U	170U
bis(2-Chloroethyl)ether	170U	170U	170U

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.1
Sauget Area 1
Biota Sample Analytical Results
Method 8270C Semivolatile Organic Compound Data

SAMP_ID	SNCS-C COMP1	SNCS-D COMP1	SRM (NIST 1974)
SOL_DESC	Biota	Biota	Biota
SAMP_DATE	10/4/1999	10/4/1999	1/26/2000
UNITS	ug/kg	ug/kg	ug/kg
bis(2-Ethylhexyl)phthalate	97J	230	67J
Butylbenzylphthalate	170U	170U	170U
Carbazole	170U	170U	170U
Chrysene	34J	170U	170U
Dibenzo(a,h)anthracene	170U	170U	170U
Dibenzofuran	170U	170U	170U
Diethylphthalate	63	57	32U
Dimethylphthalate	170U	170U	170U
Di-n-butylphthalate	170U	170U	170U
Di-n-octylphthalate	170U	170U	170U
Fluoranthene	170U	170U	170U
Fluorene	170U	170U	170U
Hexachlorobenzene	170U	170U	170U
Hexachlorobutadiene	170U	170U	170U
Hexachlorocyclopentadiene	170U	170U	170U
Hexachloroethane	170U	170U	170U
Indeno(1,2,3-cd)pyrene	170U	170U	170U
Isophorone	170U	170U	170U
Naphthalene	170U	170U	170U
Nitrobenzene	170U	170U	170U
n-Nitrosodi-n-propylamine	170U	170U	170U
N-Nitrosodiphenylamine	170U	170U	170U
Pentachlorophenol	420U	420U	420U
Phenanthrene	170U	170U	170U
Phenol	170U	170U	170U
Pyrene	170U	170U	170U
Total SVOC's	304	8487	67

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.2
Sauget Area 1
Biota Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	BB BP COMP 1	BB BP COMP 2	BB BP COMP 3	BB REF 1-2 COMP 1	BB REF 1-2 COMP 2	BB REF 2-2 COMP 1	CLAM BP-1 COMP 01
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	11/1/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999	11/2/1999	10/6/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Decachlorobiphenyl	50U	50U	50U	50U	50U	50U	50U
Dichlorobiphenyl	10U	10U	10U	10U	10U	10U	10U
Heptachlorobiphenyl	30U	30U	30U	30U	30U	30U	30U
Hexachlorobiphenyl	52	43	20U	20U	20U	20U	20U
Monochlorobiphenyl	10U	10U	10U	10U	10U	10U	10U
Nonachlorobiphenyl	50U	50U	50U	50U	50U	50U	50U
Octachlorobiphenyl	30U	30U	30U	30U	30U	30U	30U
Pentachlorobiphenyl	52	33	20U	20U	20U	20U	20U
Tetrachlorobiphenyl	20U	20U	20U	20U	20U	20U	20U
Trichlorobiphenyl	10U	10U	10U	10U	10U	10U	10U
Total PCB s	**104**	**76**	**ND**	**ND**	**ND**	**ND**	**ND**

Table A-8.2
Sauget Area 1
Biota Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	CLAM BP-2 COMP 01	CLAM BP-3 COMP 01	CLAM REF-1 COMP 01	CLAM REF2-2 COMP 01	CLAM REF2-2 COMP 02	F F BP COMP 1	F F BP COMP 2
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/7/1999	10/6/1999	10/8/1999	10/8/1999	10/9/1999	10/4/1999	10/6/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Decachlorobiphenyl	100U	50U	50U	50U	50U	50U	100U
Dichlorobiphenyl	20U	10U	10U	10U	10U	10U	20U
Heptachlorobiphenyl	60U	30U	30U	30U	30U	30U	60U
Hexachlorobiphenyl	40U	20U	20U	20U	20U	22	19J
Monochlorobiphenyl	20U	10U	10U	10U	10U	10U	20U
Nonachlorobiphenyl	100U	50U	50U	50U	50U	50U	100U
Octachlorobiphenyl	60U	30U	30U	30U	30U	30U	60U
Pentachlorobiphenyl	40U	20U	20U	20U	20U	8 7J	40U
Tetrachlorobiphenyl	40U	20U	20U	20U	20U	20U	40U
Trichlorobiphenyl	20U	10U	10U	10U	10U	10U	20U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**30.7**	**19**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.2
Sauget Area 1
Biota Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	F F BP COMP 3	F F CS B COMP 1	F.F CS-D COMP 1	F.F REF 1 COMP 1	F F. REF 2 COMP 1	F F REF 2 COMP 2	FF REF 2 COMP 3	PTISS B-1 DC B
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/6/1999	10/5/1999	10/4/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/5/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Decachlorobiphenyl	100U	100U	50U	50U	100U	100U	100U	50U
Dichlorobiphenyl	20U	20U	10U	10U	20U	20U	20U	10U
Heptachlorobiphenyl	60U	460	44	30U	60U	60U	60U	30U
Hexachlorobiphenyl	40U	1000	380	20U	40U	40U	40U	20U
Monochlorobiphenyl	20U	20U	10U	10U	20U	20U	20U	10U
Nonachlorobiphenyl	100U	100U	50U	50U	100U	100U	100U	50U
Octachlorobiphenyl	60U	130	30U	30U	60U	60U	60U	30U
Pentachlorobiphenyl	40U	2100	510	20U	40U	40U	40U	20U
Tetrachlorobiphenyl	40U	3200	240	20U	40U	40U	40U	20U
Trichlorobiphenyl	20U	600	13	10U	20U	20U	20U	10U
Total PCB's	**ND**	**7490**	**1187**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate, ND-none detected

Table A-8.2
Sauget Area 1
Biota Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	PTISS B-2 DC B	PTISS B-3 DC B	PTISS C-1 DC C	PTISS C-2 DC C	PTISS C-3 DC C	PTISS D-1 DC D	PTISS D-2 DC D	PTISS D-3 DC D
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/5/1999	10/5/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Decachlorobiphenyl	50U	50U	20J	35J	50U	100U	50U	50U
Dichlorobiphenyl	10U	10U	10U	10U	10U	20U	10U	10U
Heptachlorobiphenyl	30U	30U	30U	30U	30U	60U	30U	30U
Hexachlorobiphenyl	20U	20U	26	34	20U	40U	20U	20U
Monochlorobiphenyl	10U	10U	10U	10U	10U	20U	10U	10U
Nonachlorobiphenyl	50U	50U	50U	50U	50U	100U	50U	50U
Octachlorobiphenyl	30U	30U	30U	30U	30U	60U	30U	30U
Pentachlorobiphenyl	20U	20U	34	54	20U	40U	20U	20U
Tetrachlorobiphenyl	20U	20U	20U	20U	20U	40U	20U	20U
Trichlorobiphenyl	10U	10U	10U	10U	10U	20U	10U	10U
Total PCB's	**ND**	**ND**	**80**	**123**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate, ND-none detected

Table A-8.2
Sauget Area 1
Biota Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	PTISS E-1 DC E	PTISS E-2 DC E	PTISS F-1 DC F	PTISS F-3 DC F	PTISS PRAIRIE DUPONT R2	PTISS REF 2-1 RC	SHRIMP BP COMP
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999	10/6/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Decachlorobiphenyl	50U	50U	50U	50U	50U	50U	100U
Dichlorobiphenyl	10U	10U	10U	10U	10U	10U	20U
Heptachlorobiphenyl	30U	30U	30U	30U	30U	30U	60U
Hexachlorobiphenyl	20U	20U	20U	20U	20U	20U	40U
Monochlorobiphenyl	10U	10U	10U	10U	10U	10U	20U
Nonachlorobiphenyl	50U	50U	50U	50U	50U	50U	100U
Octachlorobiphenyl	30U	30U	30U	30U	30U	30U	60U
Pentachlorobiphenyl	20U	20U	20U	20U	20U	20U	40U
Tetrachlorobiphenyl	20U	20U	20U	20U	20U	20U	40U
Trichlorobiphenyl	10U	10U	10U	10U	10U	10U	20U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.2
Sauget Area 1
Biota Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	SHRIMP REF1 COMP	SHRIMP REF2 COMP	SN REF1 COMP 1	SN REF2-1 COMP1	SNCS-B COMP1	SNCS-C COMP1	SNCS-D COMP1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/7/1999	10/8/1999	10/8/1999	10/8/1999	10/5/1999	10/4/1999	10/4/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Decachlorobiphenyl	100U	100U	100U	50U	50U	50U	50U
Dichlorobiphenyl	20U	20U	20U	10U	10U	10U	10U
Heptachlorobiphenyl	60U	60U	60U	30U	30U	30U	30U
Hexachlorobiphenyl	40U	40U	40U	20U	79	110	26
Monochlorobiphenyl	20U	20U	20U	10U	10U	10U	10U
Nonachlorobiphenyl	100U	100U	100U	50U	50U	50U	50U
Octachlorobiphenyl	60U	60U	60U	30U	30U	30U	30U
Pentachlorobiphenyl	22J	40U	40U	20U	170	250	51
Tetrachlorobiphenyl	40U	40U	40U	20U	200	76	20U
Trichlorobiphenyl	20U	20U	20U	10U	22	10U	10U
Total PCB's	**22**	**ND**	**ND**	**ND**	**471**	**436**	**77**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.2
Sauget Area 1
Biota Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	LMB BP COMP 1	LMB BP COMP 2	LMB BP COMP 3	LMB REF 1 COMP 1	LMB REF 1 COMP 2	LMB REF 2 COMP 1	LMB REF 2 COMP 2
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/4/1999	11/3/1999	11/2/1999	11/1/1999	11/1/1999	10/8/1999	11/2/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Decachlorobiphenyl	50U	50UJ	50U	50U	50U	50UJ	50UJ
Dichlorobiphenyl	10U	10UJ	10U	10U	10U	10UJ	10UJ
Heptachlorobiphenyl	16J	30UJ	21J	30U	30U	30UJ	30UJ
Hexachlorobiphenyl	120J	44J	150	20U	9 3J	20UJ	20UJ
Monochlorobiphenyl	10U	10UJ	10U	10U	10U	10UJ	10UJ
Nonachlorobiphenyl	50U	50UJ	50U	50U	50U	50UJ	50UJ
Octachlorobiphenyl	30U	30UJ	30U	30U	30U	30UJ	30UJ
Pentachlorobiphenyl	110J	30J	130	20U	9 5J	20UJ	20UJ
Tetrachlorobiphenyl	46J	20UJ	19J	20U	20U	20UJ	20UJ
Trichlorobiphenyl	10U	10UJ	10U	10U	10U	10UJ	10UJ
Total PCB's	**292**	**74**	**320**	**ND**	**18.8**	**ND**	**ND**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-8.2
Sauget Area 1
Biota Sample Analytical Results
Method 680 Polychlorinated Biphenyl Data

Sample Id	WC BP COMP 1	WC BP COMP 2	WC BP-COMP 3	WC REF1 COMP 1	WC REF1 COMP 2	WC REF2 COMP 1	WC REF2 COMP 2
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/4/1999	11/1/1999	11/1/1999	10/4/1999	11/1/1999	11/2/1999	11/2/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Decachlorobiphenyl	50U	100U	100U	50U	50U	50U	50U
Dichlorobiphenyl	10U	20U	20U	10U	10U	10U	10U
Heptachlorobiphenyl	30U	60U	60U	30U	30U	30U	30U
Hexachlorobiphenyl	20U	40U	40U	20U	20U	20U	20U
Monochlorobiphenyl	10U	20U	20U	10U	10U	10U	10U
Nonachlorobiphenyl	50U	100U	100U	50U	50U	50U	50U
Octachlorobiphenyl	30U	60U	60U	30U	30U	30U	30U
Pentachlorobiphenyl	20U	40U	40U	20U	20U	20U	20U
Tetrachlorobiphenyl	20U	40U	40U	20U	20U	20U	20U
Trichlorobiphenyl	10U	20U	20U	10U	10U	10U	10U
Total PCB's	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.3
Sauget Area 1
Biota Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	BB BP COMP 1	BB BP COMP 2	BB BP COMP 3	BB REF 1-2 COMP 1	BB REF 1-2 COMP 2	BB REF 2-2 COMP 1	CLAM BP-1 COMP 01
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	11/1/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999	11/2/1999	10/6/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
4 4'-DDD	13U	13U	26U	1 2J	1 8J	26U	5 3U
4,4'-DDE	21	29	3 4J	12J	9 8J	4 7J	5 3U
4 4'-DDT	13U	13U	26U	13U	13U	26U	5 3U
Aldrin	6 8U	6 8U	14U	6 8U	6 8U	14U	2 7U
Alpha Chlordane	6 8U	12	14U	1 1J	1 1J	2 5J	2 7U
Dieldrin	13U	13U	26U	2 8J	1 7J	3 8J	5 3U
Endosulfan I	6 8U	6 8U	14U	6 8U	6 8U	14U	2 7U
Endosulfan II	13U	13U	26U	13U	13U	14U	5 3U
Endosulfan sulfate	13U	13U	26U	13U	13U	26U	5 3U
Endrin	13U	13U	26U	2 6J	13U	26U	5 3U
Endrin aldehyde	13U	13U	26U	13U	13U	26U	5 3U
Endrin ketone	13U	13U	26U	13U	6 8U	26U	5 3U
Gamma Chlordane	11	6 8U	14U	6 2J	6 1J	14U	2 7U
Heptachlor	6 8U	6 8U	2 8J	6 8U	6 8U	14U	2 7U
Heptachlor epoxide	6 8U	6 8U	14U	6 8U	6 8U	14U	2 7U
Methoxychlor	68U	68U	140U	68U	68U	140U	27U
Toxaphene	680U	680U	720U	680U	680U	720U	140U
alpha-BHC	6 8U	6 8U	14U	6 8U	6 8U	14U	2 7U
beta-BHC	6 8U	6 8U	14U	6 8U	6 8U	14U	2 7U
delta-BHC	6 8U	6 8U	14U	6 8U	6 8U	14U	2 7U
gamma-BHC (Lindane)	6 8U	6 8U	14U	0 94J	1 2J	14U	2 7U
Total Pesticides	**32**	**41**	**6.2**	**26.84**	**21.7**	**11**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.3
Sauget Area 1
Biota Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	CLAM BP-2 COMP 01	CLAM BP-3 COMP 01	CLAM REF-1 COMP 01	CLAM REF2-2 COMP 01	CLAM REF2-2 COMP 02	F F BP COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/7/1999	10/6/1999	10/8/1999	10/8/1999	10/9/1999	10/4/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
4,4'-DDD	40U	26U	26U	26U	5 3U	13U
4,4'-DDE	40U	26U	26U	26U	5 3U	4 1J
4,4'-DDT	40U	26U	26U	26U	5 3U	13U
Aldrin	20U	14U	14U	14U	2 7U	6 8U
Alpha Chlordane	20U	14U	14U	14U	2 7U	6 8U
Dieldrin	40U	26U	26U	26U	5 3U	13U
Endosulfan I	20U	14U	14U	14U	2 7U	6 8U
Endosulfan II	40U	26U	26U	26U	5 3U	13U
Endosulfan sulfate	40U	26U	26U	26U	5 3U	13U
Endrin	40U	26U	26U	26U	5 3U	13U
Endrin aldehyde	40U	26U	26U	26U	5 3U	13U
Endrin ketone	40U	26U	26U	26U	5 3U	13U
Gamma Chlordane	20U	14U	14U	14U	2 7U	6 8U
Heptachlor	2 3J	14U	14U	14U	2 7U	6 8U
Heptachlor epoxide	20U	14U	14U	14U	2 7U	6 8U
Methoxychlor	5 4J	140U	140U	140U	27U	68U
Toxaphene	1100U	720U	720U	720U	140U	680U
alpha-BHC	20U	14U	14U	14U	2 7U	6 8U
beta-BHC	20U	14U	14U	14U	2 7U	6 8U
delta-BHC	20U	14U	14U	14U	2 7U	6 8U
gamma-BHC (Lindane)	20U	14U	14U	14U	2 7U	6 8U
Total Pesticides	**7.7**	**ND**	**ND**	**ND**	**ND**	**4.1**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-8.3
Sauget Area 1
Biota Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	F F BP COMP 2	F.F. BP COMP 3	F.F. CS-D COMP 1	F.F. REF 1 COMP 1	F.F REF 2 COMP 1	F.F. REF 2 COMP 2	PTISS B-1 DC B	PTISS B-2 DC B
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/6/1999	10/6/1999	10/4/1999	10/8/1999	10/8/1999	10/8/1999	10/5/1999	10/5/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
4,4'-DDD	20U	20U	13U	13U	20U	20U	26U	26U
4,4'-DDE	9 1J	10J	13U	3 5J	20U	1.3J	1 7J	1 2J
4,4'-DDT	20U	20U	13U	13U	20U	20U	26U	26U
Aldrin	10U	10U	6 8U	6.8U	10U	10U	5 4J	2 8J
Alpha Chlordane	10U	10U	6 8U	6.8U	10U	10U	14U	14U
Dieldrin	20U	20U	13U	4.7J	20U	1 6J	26U	26U
Endosulfan I	10U	10U	6.8U	6.8U	10U	10U	14U	14U
Endosulfan II	20U	20U	13U	13U	20U	20U	26U	26U
Endosulfan sulfate	20U	20U	13U	13U	20U	20U	26U	26U
Endrin	20U	20U	13U	13U	20U	20U	26U	26U
Endrin aldehyde	20U	20U	13U	13U	20U	20U	26U	26U
Endrin ketone	20U	20U	13U	13U	20U	20U	26U	26U
Gamma Chlordane	10U	10U	6 8U	6.8U	10U	1.2J	3 6J	2 1J
Heptachlor	10U	10U	6.8U	6.8U	10U	10U	14U	14U
Heptachlor epoxide	10U	10U	6.8U	6.8U	10U	10U	7 7J	2 5J
Methoxychlor	100U	100U	68U	68U	100U	100U	140U	140U
Toxaphene	1000U	1000U	680U	680U	1000U	1000U	720U	720U
alpha-BHC	10U	10U	6.8U	6.8U	10U	10U	14U	14U
beta-BHC	10U	10U	6.8U	6 8U	10U	10U	14U	14U
delta-BHC	10U	10U	6 8U	6.8U	10U	10U	14U	14U
gamma-BHC (Lindane)	10U	10U	6.8U	6.8U	10U	10U	14U	14U
Total Pesticides	**9.1**	**10**	**ND**	**8.2**	**ND**	**4.1**	**18.4**	**8.6**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.3
Sauget Area 1
Biota Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	PTISS B-3 DC B	PTISS C-1 DC C	PTISS C-2 DC C	PTISS C-3 DC C	PTISS D-1 DC D	PTISS D-2 DC D	PTISS D-3 DC D	PTISS E-1 DC E
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/5/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/6/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
4,4'-DDD	26U	26U	26U	26U	40U	26U	26U	26U
4,4'-DDE	2 1J	8 2J	20J	26U	40U	26U	26U	26U
4,4'-DDT	26U	2 9J	11J	26U	40U	26U	26U	26U
Aldrin	3J	4 8J	12J	14U	20U	14U	14U	14U
Alpha Chlordane	14U	14U	14U	14U	20U	14U	14U	14U
Dieldrin	26U	26U	26U	26U	40U	26U	26U	26U
Endosulfan I	14U	14U	14U	14U	20U	14U	14U	14U
Endosulfan II	26U	26U	26U	26U	40U	26U	26U	26U
Endosulfan sulfate	26U	26U	26U	26U	40U	26U	26U	26U
Endrin	26U	26U	26U	26U	40U	26U	26U	26U
Endrin aldehyde	26U	6.5J	16J	26U	40U	26U	26U	26U
Endrin ketone	26U	26U	26U	26U	40U	26U	26U	26U
Gamma Chlordane	2 8J	3 9J	10J	14U	20U	14U	14U	14U
Heptachlor	14U	14U	14U	14U	20U	14U	14U	14U
Heptachlor epoxide	4 4J	6 8J	15	14U	20U	14U	14U	14U
Methoxychlor	140U	140U	26J	140U	200U	140U	140U	140U
Toxaphene	720U	720U	720U	720U	1100U	720U	720U	720U
alpha-BHC	14U	14U	14U	14U	20U	14U	14U	14U
beta-BHC	14U	14U	14U	14U	20U	14U	14U	14U
delta-BHC	14U	14U	14U	14U	20U	14U	14U	14U
gamma-BHC (Lindane)	14U	14U	14U	14U	20U	14U	14U	14U
Total Pesticides	**12.3**	**33.1**	**110**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-8.3
Sauget Area 1
Biota Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	PTISS E-2 DC E	PTISS F-1 DC F	PTISS F-3 DC F	PTISS PRAIRIE DUPONT R2	PTISS REF 2-1 RC	SHRIMP BP COMP	SHRIMP REF1 COMP
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/6/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999	10/6/1999	10/7/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
4 4'-DDD	26U	26U	26U	26U	26U	4 0U	4 0U
4 4'-DDE	26U	26U	26U	26U	26U	4 0U	4 0U
4 4'-DDT	26U	26U	26U	26U	26U	4 0U	4 0U
Aldrin	1J	14U	0 81J	14U	1J	2 0U	2 0U
Alpha Chlordane	14U	14U	14U	14U	14U	2 0U	2 0U
Dieldrin	26U	26U	26U	26U	26U	4 0U	4 0U
Endosulfan I	14U	14U	14U	14U	14U	2 0U	2 0U
Endosulfan II	26U	26U	26U	26U	26U	4 0U	4 0U
Endosulfan sulfate	26U	26U	26U	26U	26U	4 0U	4 0U
Endrin	26U	26U	26U	26U	26U	4 0U	4 0U
Endrin aldehyde	26U	26U	26U	26U	26U	4 0U	4 0U
Endrin ketone	26U	26U	26U	26U	26U	4 0U	4 0U
Gamma Chlordane	14U	3 1J	14U	14U	14U	2 0U	2 0U
Heptachlor	2 9J	1 8J	1 9J	14U	3 8J	2 0U	2 0U
Heptachlor epoxide	14U	14U	14U	14U	14U	2 0U	2 0U
Methoxychlor	140U	140U	140U	140U	140U	20U	20U
Toxaphene	720U	720U	720U	720U	720U	110U	110U
alpha-BHC	14U	14U	14U	14U	14U	2 0U	2 0U
beta-BHC	14U	14U	14U	14U	14U	2 0U	2 0U
delta-BHC	14U	14U	14U	14U	14U	2 0U	2 0U
gamma-BHC (Lindane)	14U	14U	14U	14U	14U	2 0U	2 0U
Total Pesticides	**3.9**	**4.9**	**2 71**	**ND**	**4.8**	**ND**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-8.3
Sauget Area 1
Biota Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	SHRIMP REF2 COMP	SN REF1 COMP 1	SN REF2-1 COMP1	SNCS-B COMP1	SNCS-C COMP1	SNCS-D COMP1	SRM (NIST 1974)	LMB BP COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/5/1999	10/4/1999	10/4/1999	1/26/2000	10/4/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
4,4'-DDD	4 0U	7 9U	5 3U	26U	26U	26U	39J	13U
4,4'-DDE	4 0U	7 9U	5 3U	30	29	26U	19J	13U
4,4'-DDT	4 0U	7 9U	5 3U	26U	26U	26U	8 6J	13U
Aldrin	2 0U	4 1U	2 7U	14U	14U	14U	6 2U	6 8U
Alpha Chlordane	2 0U	4 1U	2 7U	14U	14U	14U	6 2U	6 8U
Dieldrin	4 0U	7 9U	5 3U	26U	26U	26U	4 3U	13U
Endosulfan I	2 0U	4 1U	2 7U	14U	14U	14U	6 2U	6 8U
Endosulfan II	4 0U	7 9U	5 3U	26U	26U	26U	60U	13U
Endosulfan sulfate	4 0U	3 7J	5 3U	26U	26U	26U	60U	13U
Endrin	4 0U	7 9U	5 3U	26U	26U	26U	60U	13U
Endrin aldehyde	4 0U	7 9U	5 3U	26U	26U	26U	16U	13U
Endrin ketone	4 0U	7 9U	5 3U	26U	7 1J	26U	8 8U	13U
Gamma Chlordane	2 0U	4 1U	2 7U	41	22	9 5J	6 6U	19J
Heptachlor	2 0U	4 1U	2 7U	14U	14U	14U	6 2U	1 5J
Heptachlor epoxide	2 0U	4 1U	2 7U	66	24	14U	6 2U	6 8U
Methoxychlor	20U	41U	27U	140U	140U	140U	62U	68U
Toxaphene	110U	220U	140U	720U	720U	720U	600U	680U
alpha-BHC	2 0U	4 1U	2 7U	14U	14U	14U	6 2U	6 8U
beta-BHC	2 0U	4 1U	2 7U	14U	14U	14U	6 2U	6 8U
delta-BHC	2 0U	4 1U	2 7U	14U	14U	14U	6U	6 8U
gamma-BHC (Lindane)	2 0U	4 1U	2 7U	14U	14U	14U	6 1U	6 8U
Total Pesticides	**ND**	**3.7**	**ND**	**137**	**82.1**	**9.5**	**66.6**	**20.5**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-8.3
Sauget Area 1
Biota Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	LMB BP COMP 2	LMB BP COMP 3	LMB REF 1 COMP 1	LMB REF 1 COMP 2	LMB REF 2 COMP 1	LMB REF 2 COMP 2	WB BP FILLET 2
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	11/3/1999	11/2/1999	11/1/1999	11/1/1999	10/8/1999	11/2/1999	10/4/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
4 4 -DDD	13U	13U	13U	5 3U	13U	13U	4 0U
4 4'-DDE	15	21	5 2J	3 5J	5 9J	6 6J	9 2J
4 4'-DDT	13U	13U	13U	5 3U	13U	13U	4 0U
Aldrin	6 8U	6 8U	6 8U	2 7U	6 8U	6 8U	2 0U
Alpha Chlordane	6 8U	6 8U	6 8U	2 7U	6 8U	6 8U	2 0U
Dieldrin	13U	13U	13U	5 3U	5 6J	5 3J	4 0U
Endosulfan I	6 8U	6 8U	6 8U	2 7U	6 8U	6 8U	2 0U
Endosulfan II	13U	13U	13U	5 3U	13U	13U	4 0U
Endosulfan sulfate	13U	13U	13U	5 3U	13U	13U	4 0U
Endrin	13U	13U	13U	5 3U	13U	13U	4 0U
Endrin aldehyde	13U	13U	13U	5 3U	13U	13U	4 0U
Endrin ketone	13U	13U	13U	5 3U	13U	13U	4 0U
Gamma Chlordane	6 8U	15	6 8U	2 7U	6 8U	6 8U	4 7J
Heptachlor	6 8U	6 8U	6 8U	2 7U	6 8U	6 8U	2 0U
Heptachlor epoxide	6 8U	6 8U	6 8U	2 7U	6 8U	6 8U	2 0U
Methoxychlor	68U	68U	68U	27U	68U	68U	20UJ
Toxaphene	680U	680U	680U	270U	680U	680U	110U
alpha-BHC	6 8U	6 8U	6 8U	2 7U	6 8U	6 8U	2 0U
beta-BHC	6 8U	6 8U	6 8U	2 7U	6 8U	6 8U	2 0U
delta-BHC	6 8U	6 8U	6 8U	2 7U	6 8U	6 8U	2 0U
gamma-BHC (Lindane)	6 8U	6 8U	6 8U	2 7U	6 8U	6 8U	2 0U
Total Pesticides	**15**	**36**	**5.2**	**3.5**	**11.5**	**11 9**	**13.9**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.3
Sauget Area 1
Biota Sample Analytical Results
Method 8081A Pesticide Data

Sample Id	WC BP COMP 1	WC BP COMP 2	WC REF1 COMP 1	WC REF1 COMP 2	WC REF2 COMP 1	WC REF2 COMP 2
Description	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/4/1999	11/1/1999	10/4/1999	11/1/1999	11/2/1999	11/2/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
4 4'-DDD	13U	4 0U	2 6U	2 6U	2 6U	2 6U
4 4'-DDE	13U	4 0U	1 2J	0 80J	2 6U	2 6U
4 4'-DDT	13U	4 0U	2 6U	2 6U	2 6U	2 6U
Aldrin	6 8U	2 0U	1 4U	1 4U	1 4U	1 4U
Alpha Chlordane	6 8U	2 0U	1 4U	1 4U	1 4U	1 4U
Dieldrin	13U	4 0U	2 6U	2 6U	2 6U	2 6U
Endosulfan I	6 8U	2 0U	1 4U	1 4U	1 4U	1 4U
Endosulfan II	13U	4 0U	2 6U	2 6U	2 6U	2 6U
Endosulfan sulfate	13U	4 0U	2 6U	2 6U	2 6U	2 6U
Endrin	13U	4 0U	2 6U	2 6U	2 6U	2 6U
Endrin aldehyde	13U	4 0U	2 6U	2 6U	2 6U	2 6U
Endrin ketone	13U	4 0U	2 6U	2 6U	2 6U	2 6U
Gamma Chlordane	6 8U	2 0U	1 4U	1 4U	1 4U	1 4U
Heptachlor	6 8U	2 0U	1 3J	1 1J	1 8J	1 4U
Heptachlor epoxide	6 8U	2 0U	1 4U	1 4U	1 4U	1 4U
Methoxychlor	68U	20UJ	14U	14U	14U	14U
Toxaphene	680U	110U	72U	72U	72U	72U
alpha-BHC	6 8U	2 0U	1 4U	1 4U	1 4U	1 4U
beta-BHC	6 8U	2 0U	1 4U	1 4U	1 4U	1 4U
delta-BHC	6 8U	2 0U	1 4U	1 4U	1 4U	1 4U
gamma-BHC (Lindane)	6 8U	2 0U	1 4U	1 4U	1 4U	1 4U
Total Pesticides	**ND**	**ND**	**2 5**	**1 9**	**1 8**	**ND**

Notes U not detected J estimated value N tentatively identified R rejected M EMPC D result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-8.4
Sauget Area 1
Biota Sample Analytical Results
Method 8151A Herbicide Compound Data

Sample Id	BB BP COMP 1	BB BP COMP 2	BB BP COMP 3	BB REF 1-2 COMP 1	BB REF 1-2 COMP 2	BB REF 2-2 COMP 1	CLAM BP-1 COMP 01
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	11/1/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999	11/2/1999	10/6/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-T	10U	10U	10U	20U	10U	10U	100U
2,4,5-TP (Silvex)	10U	10U	10U	20U	10U	10U	100U
2,4-D	10U	10U	10U	20U	10U	10U	100U
2,4-DB	10U	10U	10U	20U	10U	10U	100U
Dalapon	2000U	2000U	2000U	4000U	2000U	2000U	20000U
Dicamba	10U	20U	20U	40U	20U	20U	200U
Dichloroprop	100U	100U	6.6J	200U	100U	100U	32J
Dinoseb	100U	100U	100U	200U	100U	100U	1000U
MCPA	2000U	2000U	2000U	8600	2000U	2000U	20000U
MCPP	2000U	2000U	2000U	4000U	2000U	2000U	20000U
Pentachlorophenol	20U	20U	20U	40U	20U	20U	200U
Total Herbicides	**ND**	**ND**	**6.6**	**8600**	**ND**	**ND**	**32**

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.4
Sauget Area 1
Biota Sample Analytical Results
Method 8151A Herbicide Compound Data

Sample Id	CLAM BP-2 COMP 01	CLAM BP-3 COMP 01	CLAM REF-1 COMP 01	CLAM REF2-2 COMP 01	CLAM REF2-2 COMP 02	F F BP COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/7/1999	10/6/1999	10/8/1999	10/8/1999	10/9/1999	10/4/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-T	10U	20U	10U	10U	100U	10U
2,4,5-TP (Silvex)	10U	20U	10U	10U	100U	10U
2,4-D	10U	20U	10U	10U	100U	10U
2,4-DB	10U	20U	10U	10U	100U	10
Dalapon	2000U	4000U	2000U	2000U	20000U	2000U
Dicamba	10U	40U	20U	20U	200U	2 6J
Dichloroprop	20J	3 2J	6 5J	10J	87J	6 7J
Dinoseb	100U	200U	100U	100U	1000U	100U
MCPA	2000U	4000U	2000U	1400	40000U	3100
MCPP	2000U	4000	2000U	2000U	40000U	2000U
Pentachlorophenol	20U	40U	20U	20U	200U	2 2J
Total Herbicides	**20**	**4003.2**	**6.5**	**1410**	**87**	**3121.5**

Table A-8.4
Sauget Area 1
Biota Sample Analytical Results
Method 8151A Herbicide Compound Data

Sample Id	F F BP COMP 2	F F. BP COMP 3	F.F CS-D COMP 1	F.F REF 1 COMP 1	F F REF 2 COMP 1	F F REF 2 COMP 2	FF REF 2 COMP 3
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/6/1999	10/6/1999	10/4/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-T	10U	20U	10U	10U	10U	10U	10U
2,4,5-TP (Silvex)	10U	20U	10U	10U	10U	10U	10U
2,4-D	10U	20U	10U	10U	10U	10U	10U
2,4-DB	6 5	20U	10U	10	10U	10U	10U
Dalapon	2000U	4000U	2000U	2000U	2000U	2000U	2000U
Dicamba	20U	40U	20U	20U	20U	20U	20U
Dichloroprop	100U	200U	100U	5 1J	100U	100U	100U
Dinoseb	100U	200U	100U	100U	100U	100U	100U
MCPA	3300	4000U	2000U	2400	2000U	2000U	2000U
MCPP	2000U	4000U	2000U	2000U	2000U	2000U	2000U
Pentachlorophenol	1J	40U	5 8J	2 2J	6 8U	1 5J	20U
Total Herbicides	**3307.5**	**ND**	**5.8**	**2417.3**	**ND**	**1.5**	**ND**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.4
Sauget Area 1
Biota Sample Analytical Results
Method 8151A Herbicide Compound Data

Sample Id	PTISS B-1 DC B	PTISS B-2 DC B	PTISS B-3 DC B	PTISS C-1 DC C	PTISS C-2 DC C	PTISS C-3 DC C	PTISS D-1 DC D	PTISS D-2 DC D
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/5/1999	10/5/1999	10/5/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
2,4 5-T	1 1J	10U	10U	10U	10U	10U	10U	10U
2 4 5-TP (Silvex)	10U	10U	10U	10U	10U	10U	10U	10U
2 4-D	10U	10U	10U	10U	10U	10U	10U	10U
2 4-DB	10U	10U	10U	10U	10U	10U	10U	10U
Dalapon	2000U	2000U	2000U	2000U	2000U	2000U	2000U	2000U
Dicamba	4 3J	20U	20U	20U	20U	20U	20U	20U
Dichloroprop	100U	100U	100U	100U	100U	100U	100U	100U
Dinoseb	100U	100U	100U	100U	100U	100U	100U	100U
MCPA	2000U	2000U	2000U	2000U	2000U	2000U	2000U	2000U
MCPP	1100	2000U	2000U	1300	1800	2000U	680J	2000U
Pentachlorophenol	1 6J	2 8J	4 9J	9 7	16	2 7J	1 2J	20U
Total Herbicides	**1107**	**2.8**	**4.9**	**1309 7**	**1816**	**2.7**	**681 2**	**ND**

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-8.4
Sauget Area 1
Biota Sample Analytical Results
Method 8151A Herbicide Compound Data

Sample Id	PTISS D-3 DC D	PTISS E-1 DC E	PTISS E-2 DC E	PTISS F-1 DC F	PTISS F-3 DC F	PTISS PRAIRIE DUPONT R2	PTISS REF 2-1 RC
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/4/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-T	10U	10U	10U	10U	10U	10U	10U
2,4,5-TP (Silvex)	10U	10U	10U	10U	10U	10U	10U
2,4-D	10U	10U	10U	10U	10U	10U	10U
2,4-DB	10U	10U	10U	10U	10U	10U	10U
Dalapon	2000U	2000U	2000U	2000U	2000U	2000U	2000U
Dicamba	20U	20U	20U	20U	20U	20U	1 8J
Dichloroprop	100U	100U	100U	7J	100U	100U	100U
Dinoseb	100U	100U	100U	100U	100U	100U	100U
MCPA	2000U	2000U	2000U	2000U	2000U	2000U	2000U
MCPP	400J	2000U	2000U	2000U	2000U	2000U	1300
Pentachlorophenol	20U	20U	20U	20U	20U	20U	2J
Total Herbicides	**400**	**ND**	**ND**	**7**	**ND**	**ND**	**1303.8**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-8.4
Sauget Area 1
Biota Sample Analytical Results
Method 8151A Herbicide Compound Data

Sample Id	SHRIMP BP COMP	SHRIMP REF1 COMP	SHRIMP REF2 COMP	SN REF1 COMP 1	SN REF2-1 COMP1	SNCS-B COMP1	SNCS-C COMP1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/6/1999	10/7/1999	10/8/1999	10/8/1999	10/8/1999	10/5/1999	10/4/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-T	10U	10U	10U	10U	10U	10U	10U
2,4,5-TP (Silvex)	10U	10U	1.3J	6.3J	10U	10U	10U
2,4-D	10U	10U	10U	10U	10U	10U	10U
2,4-DB	10U	10U	10U	10U	10U	10U	10U
Dalapon	2000U	2000U	2000U	2000U	2000U	2000U	2000U
Dicamba	20U	20U	20U	20U	8.4	20U	20U
Dichloroprop	100U	100U	100U	100U	100U	100U	100U
Dinoseb	100U	100U	100U	100U	100U	2000U	100U
MCPA	2000U	2000U	2000U	6400	2000U	2000U	2000U
MCPP	2000U	2000U	4400	2600	2000U	3300	2000U
Pentachlorophenol	1.8J	3 9J	1.5J	15	20U	1 1J	5 8J
Total Herbicides	**1.8**	**3.9**	**4402.8**	**9021.3**	**8.4**	**3301.1**	**5.8**

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.4
Sauget Area 1
Biota Sample Analytical Results
Method 8151A Herbicide Compound Data

Sample Id	SNCS-D COMP1	LMB BP COMP 1	LMB BP COMP 2	LMB BP COMP 3	LMB REF 1 COMP 1	LMB REF 1 COMP 2	LMB REF 2 COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/4/1999	10/4/1999	11/3/1999	11/2/1999	11/1/1999	11/1/1999	10/8/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-T	10U	10U	10UJ	10U	10U	10U	10UJ
2,4,5-TP (Silvex)	10U	10U	10UJ	10U	10U	10U	10UJ
2,4-D	10U	10U	10UJ	10U	10U	10U	10UJ
2,4-DB	10U	10UJ	10UJ	10U	10U	10U	10UJ
Dalapon	2000U	2000UJ	2000UJ	2000U	2000U	2000U	2000UJ
Dicamba	20U	1.9J	20UJ	10U	20U	20U	20UJ
Dichloroprop	100U	100UJ	100UJ	100U	100U	100U	100UJ
Dinoseb	100U	100UJ	100UJ	100U	100U	100U	100UJ
MCPA	2000U	2000U	2000UJ	1800J	2000U	2000U	2000UJ
MCPP	2000U	2000U	2000UJ	2000U	2000U	2000U	2000UJ
Pentachlorophenol	20U	10U	20UJ	10U	10U	10U	20UJ
Total Herbicides	**ND**	**1.9**	**ND**	**1800**	**ND**	**ND**	**ND**

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.4
Sauget Area 1
Biota Sample Analytical Results
Method 8151A Herbicide Compound Data

Sample Id	LMB REF 2 COMP 2	WB BP FILLET 1	WB BP FILLET 2	WC BP COMP 1	WC REF1 COMP 1	WC REF1 COMP 2	WC REF2 COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	11/2/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	11/1/1999	11/2/1999
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-T	10U	10U	10U	10UJ	10U	10U	10U
2,4,5-TP (Silvex)	10U	10U	10U	10UJ	10U	10U	10U
2,4-D	10U	10U	10U	10UJ	10U	10U	10U
2,4-DB	10U	10U	10U	10UJ	10U	10U	10U
Dalapon	2000U	2000U	2000U	2000UJ	2000U	2000U	2000U
Dicamba	20U	20U	20U	20UJ	20U	20U	20U
Dichloroprop	100U	100U	100U	100UJ	100U	100U	100U
Dinoseb	100U	100U	100U	100UJ	100U	100U	100U
MCPA	2000U	2000U	2000U	2000UJ	2000U	2000U	2000U
MCPP	2000U	2000U	2000U	2000UJ	2000U	2000U	2000U
Pentachlorophenol	10U	20U	20U	20UJ	20U	20U	3 8J
Total Herbicides	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**3 8**

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.4
Sauget Area 1
Biota Sample Analytical Results
Method 8151A Herbicide Compound Data

Sample Id	WC REF2 COMP 2
Description	Biota
Sample Date	11/2/1999
Units	ug/kg
2,4,5-T	10U
2,4,5-TP (Silvex)	10U
2,4-D	10U
2,4-DB	10U
Dalapon	2000U
Dicamba	20U
Dichloroprop	100U
Dinoseb	100U
MCPA	2000U
MCPP	2000U
Pentachlorophenol	20U
Total Herbicides	**ND**

Notes U-not detected, J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-8.5
Sauget Area 1
Biota Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	BB BP COMP 1	BB BP COMP 1FD	BB BP COMP 2	BB BP COMP 3	BB REF 1-2 COMP 1	BB REF 1-2 COMP 2	BB REF 2-2 COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	0.0109	0.012	0.0102	0.011	0.0208	0.0207	0.0027
1,2,3,4,6,7,8,9-OCDF	0.00061	0.0007	0.0012	0.00076	0.0016	0.0008U	0.00052
1,2,3,4,6,7,8-HpCDD	0.0024	0.002	0.003	0.0015	0.0018	0.003	0.00081
1,2,3,4,6,7,8-HpCDF	0.00056	0.00053	0.001U	0.0002U	0.0004U	0.0004U	0.0002U
1,2,3,4,7,8,9-HpCDF	0.0002U	0.0003U	0.0013U	0.0003U	0.0005U	0.0005U	0.0002U
1,2,3,4,7,8-HxCDD	0.0002U	0.00026	0.001U	0.0002U	0.0004U	0.0004U	0.0002U
1,2,3,4,7,8-HxCDF	0.001	0.00093	0.0014	0.00059	0.00049	0.00048	0.00026
1,2,3,6,7,8-HxCDD	0.0015	0.0013	0.0024	0.00078	0.00062	0.0012	0.00039
1,2,3,6,7,8-HxCDF	0.00022	0.00027	0.0007U	0.0002U	0.0003U	0.0003U	0.0001U
1,2,3,7,8,9-HxCDD	0.0002U	0.0002U	0.001U	0.0003U	0.0004U	0.0004U	0.0002U
1,2,3,7,8,9-HxCDF	0.0002U	0.0002U	0.0009U	0.00069	0.0003U	0.0004U	0.0001U
1,2,3,7,8-PeCDD	0.00088	0.00086	0.0011	0.00042	0.0004U	0.0005U	0.0002U
1,2,3,7,8-PeCDF	0.0002U	0.0001U	0.0006U	0.0002U	0.0003U	0.0003U	0.0001U
2,3,4,6,7,8-HxCDF	0.00037	0.00027	0.0008U	0.00016	0.0003U	0.0003U	0.0001U
2,3,4,7,8-PeCDF	0.0016	0.0015	0.0016	0.00077	0.00033	0.0003U	0.0001U
2,3,7,8-TCDD	0.00087	0.0008	0.001U	0.00033	0.00042	0.0005U	0.0002
2,3,7,8-TCDF	0.0034	0.0032	0.0041	0.0016	0.0003U	0.00091	0.0001U
Total HpCDD	0.0027	0.0024	0.003	0.002	0.0023	0.0036	0.00081
Total HpCDF	0.0059	0.0038	0.0051	0.0018	0.0014	0.0013	0.0002U
Total HxCDD	0.0015	0.0016	0.0024	0.00078	0.00062	0.0012	0.00039
Total HxCDF	0.0317	0.0177	0.038	0.0106	0.0076	0.0081	0.0033
Total PeCDD	0.0015	0.00086	0.0011	0.00042	0.0004U	0.0005U	0.0002U
Total PeCDF	0.0507	0.0334	0.0491	0.0187	0.0153	0.0183	0.0097
Total TCDD	0.0012	0.0012	0.001U	0.00033	0.00093	0.00081	0.0002
Total TCDF	0.0596	0.0344	0.053	0.022	0.0148	0.0253	0.0085

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, *EB-equipment blank, FD-field duplicate,* ND-none detected.

Table A-8.5
Sauget Area 1
Biota Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	CLAM BP-1 COMP 01	CLAM BP-2 COMP 01	CLAM BP-3 COMP 01	CLAM REF-1 COMP 01	CLAM REF2-2 COMP 01	CLAM REF2-2 COMP 02
Description	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1 2,3,4,6,7,8,9-OCDD	0 0034	0 0151	0 0057	0 0124	0 0102	0 0068
1,2,3,4,6,7,8,9-OCDF	0 0003U	0 0012U	0 0007U	0 0011U	0 0018	0 0004U
1,2,3,4,6,7,8-HpCDD	0 0003U	0 0014	0 0006U	0 0008U	0 001	0 00059
1 2,3,4,6,7,8-HpCDF	0 0002U	0 0005U	0 0003U	0 0005U	0 0003U	0 0002U
1 2,3,4,7,8,9-HpCDF	0 0002U	0 0008U	0 0005U	0 0007U	0 0005U	0 0003U
1,2,3,4,7,8-HxCDD	0 0002U	0 0006U	0 0004U	0 0005U	0 0003U	0 0002U
1,2,3,4,7,8-HxCDF	0 0001U	0 0004U	0 0002U	0 0003U	0 0002U	0 0001U
1,2,3,6,7,8-HxCDD	0 0002U	0 0005U	0 0003U	0 0005U	0 0003U	0 0002U
1 2,3,6 7,8-HxCDF	0 0001U	0 0003U	0 0002U	0 0003U	0 0002U	0 0001U
1 2 3,7 8,9-HxCDD	0 0002U	0 0006U	0 0004U	0 0006U	0 0004U	0 0002U
1,2,3,7,8,9-HxCDF	0 0001U	0 0004U	0 0003U	0 0004U	0 0003U	0 0002U
1,2,3,7,8-PeCDD	0 0001U	0 0004U	0 0003U	0 0004U	0 0003U	0 0002U
1 2,3 7 8-PeCDF	0 0001U	0 0003U	0 0002U	0 0003U	0 0002U	0 0001U
2,3,4,6,7,8-HxCDF	0 0001U	0 0003U	0 0002U	0 0003U	0 0002U	0 0001U
2 3 4 7,8-PeCDF	0 0001U	0 0003U	0 0002U	0 0003U	0 0002U	0 0001U
2 3 7 8-TCDD	0 0001U	0 0003U	0 0002U	0 0003U	0 0002U	0 0001U
2 3 7 8-TCDF	0 00031	0 0015	0 00066	0 0003U	0 0002U	0 00025
Total HpCDD	0 0003U	0 0034	0 0006U	0 0008U	0 0024	0 0011
Total HpCDF	0 0002U	0 0006U	0 0004U	0 0006U	0 0004U	0 0002U
Total HxCDD	0 0002U	0 00055	0 0004U	0 0005U	0 0003U	0 00026
Total HxCDF	0 0001U	0 0004U	0 0002U	0 0003U	0 0002U	0 0001U
Total PeCDD	0 0001U	0 0004U	0 0003U	0 0004U	0 0003U	0 0002U
Total PeCDF	0 0001U	0 0013	0 0014	0 0021	0 0002U	0 00025
Total TCDD	0 00017	0 0014	0 0011	0 0037	0 0023	0 00007
Total TCDF	0 00093	0 008	0 0046	0 0017	0 0002U	0 0014

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.5
Sauget Area 1
Biota Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	F F BP COMP 1	F F BP COMP 2	F F BP COMP 3	F F CS B COMP 1	F F CS-D COMP 1	F F REF 1 COMP 1	F F REF 2 COMP 1	F F REF 2 COMP 2
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	1/25/2000	1/26/2000	1/26/2000	1/25/2000	1/26/2000	1/25/2000	1/25/2000	1/25/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1 2 3 4 6 7 8 9-OCDD	0 0089	0 0269	0 0238	1 68	0 213	0 0223	0 0526	0 0233
1 2 3 4 6 7 8 9-OCDF	0 0044	0 0011U	0 0013	0 57	0 0481	0 0016	0 018	0 0014
1 2 3 4 6 7 8 HpCDD	0 0012	0 0018	0 0016	0 211	0 0274	0 0018	0 0047	0 0023
1 2 3 4 6 7 8-HpCDF	0 001	0 0005U	0 0004U	0 0994	0 0154	0 0002U	0 0016	0 0004U
1 2 3 4 7 8 9 HpCDF	0 00058	0 0009U	0 0006U	0 0073	0 0011	0 0003U	0 0007U	0 0007U
1 2 3 4 7 8-HxCDD	0 0002U	0 0006U	0 0004U	0 0053	0 0012	0 0003U	0 0005U	0 0005U
1 2 3 4 7 8-HxCDF	0 00077	0 0004U	0 00041	0 0096	0 0028	0 0004	0 00057	0 0003U
1 2 3 6 7 8-HxCDD	0 0006	0 0005U	0 0004U	0 0323	0 0073	0 00058	0 00066	0 00067
1 2 3 6 7 8-HxCDF	0 0001U	0 0003U	0 0003U	0 0041	0 001	0 0002U	0 0003U	0 0003U
1 2 3 7 8 9-HxCDD	0 0002U	0 0006U	0 0005U	0 0103	0 0018	0 0003U	0 0005U	0 0005U
1 2 3 7 8 9-HxCDF	0 0002U	0 0005U	0 0004U	0 0002U	0 0003U	0 0002U	0 0004U	0 0004U
1 2 3 7 8-PeCDD	0 0002U	0 0006U	0 0005U	0 021	0 0035	0 0003U	0 00095	0 0005U
1 2 3 7 8-PeCDF	0 0001U	0 0004U	0 0003U	0 0052	0 0003U	0 0002U	0 0004U	0 0004U
2 3 4 6 7 8-HxCDF	0 0001U	0 0004U	0 0003U	0 006	0 0013	0 0002U	0 0004U	0 0003U
2 3 4 7 8-PeCDF	0 00046	0 0004U	0 0003U	0 0127	0 0026	0 0002U	0 0004U	0 0004U
2 3 7 8-TCDD	0 00072	0 0005U	0 0004U	0 0188	0 0022	0 00046	0 00086	0 0005U
2 3 7 8-TCDF	0 0078	0 0046	0 0052	0 113	0 0313	0 003	0 0013	0 0005U
Total HpCDD	0 0012	0 0028	0 0026	0 371	0 0503	0 0026	0 0074	0 0023
Total HpCDF	0 0067	0 002	0 0018	0 447	0 0712	0 0015	0 0067	0 0006U
Total HxCDD	0 0006	0 0006U	0 0004U	0 0942	0 0202	0 00058	0 00066	0 00067
Total HxCDF	0 0136	0 0072	0 0073	0 328	0 126	0 0073	0 0032	0 0029
Total PeCDD	0 0002U	0 0006U	0 0005U	0 161	0 0137	0 0003U	0 00095	0 0005U
Total PeCDF	0 0189	0 0106	0 0085	0 261	0 134	0 012	0 009	0 0101
Total TCDD	0 00072	0 0005U	0 0004U	0 0828	0 0081	0 00087	0 0012	0 0005U
Total TCDF	0 025	0 0141	0 0144	0 381	0 173	0 0182	0 0107	0 0126

Notes U not detected J estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-8.5
Sauget Area 1
Biota Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	F F REF 2 COMP 3	LMB BP COMP 1	LMB BP COMP 2	LMB BP COMP 3	LMB REF 1 COMP 1	LMB REF 1 COMP 2	LMB REF 2 COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1 2,3,4,6,7,8,9-OCDD	0 068	0 0086M	0 0161M	0 0145M	0.0123	0.0105	0 0106
1,2,3,4,6,7,8,9-OCDF	0 0006U	0 0017M	0 0021M	0 0025M	0.001U	0 0007U	0 0008U
1,2,3,4,6,7,8-HpCDD	0 0042	0 0014M	0 002M	0 0018M	0 0008U	0 0005U	0 0007U
1,2,3 4,6,7,8-HpCDF	0 0003U	0.0001U	0 0002U	0 0003U	0 0005U	0 0003U	0 0004U
1 2,3 4 7,8,9-HpCDF	0 0005U	0 0002U	0 0003U	0 0005U	0 0008U	0 0005U	0 0006U
1,2,3,4,7,8-HxCDD	0 0003U	0 0002U	0 0003U	0 0004U	0 0006U	0 0003U	0 0004U
1,2,3,4,7,8-HxCDF	0 00023	0 00048	0 0002U	0 0003U	0 00084	0 0002U	0 0011
1,2,3,6,7,8-HxCDD	0 00044	0 00054	0 00038M	0 0003U	0 0005U	0 0003U	0 0003U
1,2,3,6,7,8-HxCDF	0 0002U	0 00023	0 0002U	0 0002U	0 0003U	0 0002U	0 0002U
1,2,3,7,8,9-HxCDD	0 0004U	0 0001U	0 0003U	0 0004U	0.0007U	0 0003U	0 0004U
1,2,3,7,8,9-HxCDF	0 0003U	0 0001U	0 0002U	0 0003U	0 0005U	0 0003U	0 0003U
1,2,3,7,8-PeCDD	0 0003U	0 00076M	0 00063M	0 00081	0 0006U	0 0004U	0 0005U
1,2,3,7,8-PeCDF	0 0002U	0 00008U	0 0001U	0 0011	0 0004U	0 0002U	0 0003U
2,3,4,6,7,8-HxCDF	0 0002U	0 00038	0 0002U	0 0003U	0 0004U	0 0002U	0 0003U
2 3 4,7,8-PeCDF	0 0003U	0 00071	0 00062M	0 00097	0 0004U	0 0002U	0 0003U
2 3 7 8-TCDD	0 00048	0 0009	0 00075	0 0011M	0 0004U	0 0003U	0 0003U
2 3,7,8-TCDF	0 00095	0 0114	0 0083	0 0081	0 0003U	0 0002U	0 0016J
Total HpCDD	0 0073	0 0014	0 002	0 0018M	0 0008U	0 0005U	0 0007U
Total HpCDF	0.0004U	0 0067	0.0058M	0 007M	0 0046M	0.0023M	0 0058M
Total HxCDD	0 0016	0 00054	0 0014M	0 0004U	0 0006U	0 0003U	0 0004U
Total HxCDF	0 0017	0 0363M	0 0299M	0 0343M	0 0226M	0 0096M	0 0299M
Total PeCDD	0 0003U	0 00076M	0 00063M	0 00081	0.0006U	0.0004U	0 0005U
Total PeCDF	0 0062	0 0425M	0 0377M	0 0343M	0 0311M	0 0153M	0 0509M
Total TCDD	0 00048	0 0009M	0 00075	0 0011M	0 0004U	0 0003U	0 0003U
Total TCDF	0 0122	0 0704M	0 0594M	0 0529M	0 0291M	0 0219M	0 0727M

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.5
Sauget Area 1
Biota Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	LMB REF 2 COMP 2	PTISS B-1 DC B	PTISS B 2 DC B	PTISS B-3 DC B	PTISS C-1 DC C	PTISS C-2 DC C	PTISS C 3 DC C	PTISS D-1 DC D
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	1/25/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1 2 3 4 6 7 8 9-OCDD	0 0055	1 39	3 57	2 17	22 73	15 06	1 09	0 343
1 2 3 4 6 7 8 9-OCDF	0 0018U	0 14	0 89	0 252	13 88	7 93	0 64	0 125
1 2 3 4 6 7 8-HpCDD	0 0014U	0 155	0 393	0 288	5 23	2 81	0 125	0 0352
1 2 3 4 6 7 8-HpCDF	0 0007U	0 0403	0 165	0 076	2 81	1 75	0 0759	0 0195
1 2 3 4 7 8 9-HpCDF	0 0012U	0 0034	0 0151	0 0039	0 148	0 104	0 0052	0 0014
1 2 3 4 7 8-HxCDD	0 001U	0 0022	0 0045	0 0087	0 0294	0 0263	0 0011	0 0001U
1 2 3 4 7 8-HxCDF	0 0011	0 0033	0 0074	0 0068	0 0834	0 0574	0 0022	0 00094
1 2 3 6 7 8-HxCDD	0 0008U	0 0053	0 0133	0 0169	0 167	0 104	0 0045	0 0011
1 2 3 6 7 8-HxCDF	0 0006U	0 0016	0 0033	0 0165	0 0456	0 0359	0 0019	0 0014
1 2 3 7 8 9-HxCDD	0 0011U	0 0052	0 0101	0 0283	0 1	0 0843	0 0022	0 00089
1 2 3 7 8 9-HxCDF	0 0008U	0 0002U	0 00024	0 0006U	0 005	0 0036	0 0001U	0 0001U
1 2 3 7 8-PeCDD	0 0011U	0 0014	0 002	0 0134	0 0199	0 015	0 0001U	0 0002U
1 2 3 7 8-PeCDF	0 0006U	0 0005	0 0018	0 0012	0 008	0 0089	0 00072	0 0001U
2 3 4 6 7 8-HxCDF	0 0007U	0 0026	0 0058	0 026	0 0619	0 0498	0 0032	0 0015
2 3 4 7 8-PeCDF	0 0006U	0 0017	0 0063	0 0035	0 0205	0 018	0 00096	0 0001U
2 3 7 8-TCDD	0 0008U	0 0003U	0 00072	0 0062	0 006	0 0039	0 0001U	0 0002U
2 3 7 8-TCDF	0 0006U	0 0048	0 0074	0 0086	0 047	0 0468	0 0022	0 001
Total HpCDD	0 0014U	0 276	0 746	0 531	9 85	5 3	0 234	0 065
Total HpCDF	0 0022M	0 118	0 586	0 208	10 33	5 39	0 285	0 0649
Total HxCDD	0 001U	0 0389	0 0977	0 173	1 05	0 726	0 0312	0 0079
Total HxCDF	0 0148M	0 0469	0 114	0 125	1 78	1 22	0 0535	0 0168
Total PeCDD	0 0011U	0 0105	0 0235	0 116	0 291	0 158	0 0068	0 0013
Total PeCDF	0 0313M	0 0154	0 0415	0 0287	0 284	0 259	0 0098	0 0019
Total TCDD	0 0008U	0 0035	0 0304	0 124	0 436	0 554	0 0172	0 0028
Total TCDF	0 0345M	0 0274	0 0541	0 0517	0 289	0 288	0 0132	0 0038

Notes U-not detected J-estimated value N tentatively identified R-rejected M EMPC D-result from diluted analysis EB equipment blank FD field duplicate ND none detected

Table A-8.5
Sauget Area 1
Biota Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	PTISS D-2 DC D	PTISS D-3 DC D	PTISS E-1 DC E	PTISS E-2 DC E	PTISS F-1 DC F	PTISS F-3 DC F	PTISS PRAIRIE DUPONT R2	PTISS REF 2-1 RC
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000	1/31/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3 4,6,7,8,9-OCDD	0 599	0 773	0 278	0 0344	0 0833	0 0569	0 0871	0 0832
1 2,3,4,6,7,8,9-OCDF	0 222	0 247	0 0817	0 0085	0 0335	0 0226	0 0085	0 00062
1,2,3,4,6,7,8-HpCDD	0 0703	0 0977	0 0319	0 004	0 0116	0 0074	0 0061	0 0021
1,2,3,4,6,7,8-HpCDF	0 0348	0 0472	0 0173	0 0023	0 0074	0 0057	0 0014	0 0002U
1 2,3,4,7,8,9-HpCDF	0 0027	0 0028	0 0013U	0 0007U	0 0006U	0 0006U	0 001U	0 0002U
1,2,3,4,7,8-HxCDD	0 00067	0 0012	0 0004U	0 0006U	0 0005U	0 0005U	0 0009U	0 0002U
1 2,3,4,7,8-HxCDF	0 0014	0 0017	0 00091U	0 0004U	0 0004U	0 0004U	0 0006U	0 0001U
1,2,3,6,7,8-HxCDD	0 0026	0 0044	0 0004U	0 0005U	0 0005U	0 0005U	0 0008U	0 0002U
1 2,3 6,7,8-HxCDF	0 001	0 0015	0 0003U	0 0004U	0 0003U	0 0003U	0 0006U	0 0001U
1,2,3,7,8,9-HxCDD	0 0016	0 0044	0 0004U	0 0005U	0 0005U	0 0005U	0 0008U	0 0002U
1,2,3,7,8,9-HxCDF	0 0001U	0 0001U	0 0003U	0 0005U	0 0004U	0 0004U	0 0007U	0 0001U
1,2,3,7,8-PeCDD	0 00048	0 0002U	0 0003U	0 0005U	0 0004U	0 0004U	0 0007U	0 0002U
1,2,3,7,8-PeCDF	0 0001U	0 0001U	0 0003U	0 0004U	0 0003U	0 0004U	0 0006U	0 0001U
2,3,4,6,7,8-HxCDF	0 0011	0 0018	0 0003U	0 0004U	0 0003U	0 0004U	0 0006U	0 0001U
2,3 4 7 8-PeCDF	0 00064	0 00066	0 0003U	0 0004U	0 0003U	0 0004U	0 0006U	0 0001U
2 3 7,8-TCDD	0 0002U	0 0002U	0 0004U	0 0005U	0 0004U	0 0005U	0 0008U	0 0001U
2 3,7,8-TCDF	0 0019	0 0023	0 0003U	0 0005U	0 0004U	0 0004U	0 0007U	0 0001U
Total HpCDD	0 134	0 192	0 0604	0 0075	0 0211	0 014	0 0127	0 0059
Total HpCDF	0 125	0 148	0 0544	0 0059	0 0256	0 0173	0 0059	0 0002U
Total HxCDD	0 0199	0 0362	0 006	0 0005U	0 0032	0 0025	0 0008U	0 0014
Total HxCDF	0 0244	0 0331	0 0096	0 0004U	0 0064	0 003	0 0006U	0 0001U
Total PeCDD	0 006	0 0076	0 001U	0 0005U	0 0004U	0 0004U	0 0007U	0 0002U
Total PeCDF	0 0061	0 0083	0 0003U	0 0004U	0 0003U	0 0004U	0 0006U	0 0001U
Total TCDD	0 0085	0 0101	0 0018U	0 0005U	0 0031	0 0028	0 0008U	0 0001U
Total TCDF	0 0134	0 0165	0 0003U	0 0005U	0 0024	0 0004U	0 0007U	0 0001U

Table A-8.5
Sauget Area 1
Biota Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SHRIMP BP COMP	SHRIMP REF 1 COMP	SHRIMP REF 2 COMP	SN FEF1 COMP 1	SN REF2-1 COMP 1	SNCS-B COMP 1	SNCS-C COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	1/26/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4,6,7,8,9-OCDD	0 0198	0 0166	0 0299	0 288	0 323	1 36	12 95
1,2,3,4,6 7,8,9-OCDF	0 0043	0 0011	0 0005U	0 0021	0 0014	0 405	6 02
1,2,3,4,6 7,8-HpCDD	0 0031	0 0011	0 0024	0 0077	0 0085	0 164	1 56
1,2 3,4,6,7,8-HpCDF	0 0015	0 0003U	0 0002U	0 0002U	0 0002U	0 0837	1 05
1 2 3,4,7,8,9-HpCDF	0 0004U	0 0005U	0 0003U	0 0004U	0 0003U	0 0054	0 0733
1 2 3,4,7,8-HxCDD	0 0003U	0 0004U	0 0003U	0 0002U	0 0002U	0 0022	0 0071
1 2,3,4,7,8-HxCDF	0 0002U	0 0002U	0 0002U	0 0001U	0 0001U	0 0043	0 029
1,2,3,6,7,8-HxCDD	0 0002U	0 0003U	0 0003U	0 0002U	0 0002U	0 0085	0 0599
1 2 3,6,7,8-HxCDF	0 0002U	0 0002U	0 0002U	0 0001U	0 0001U	0 0015	0 0121
1 2,3,7 8,9-HxCDD	0 0003U	0 0004U	0 00069	0 0002U	0 0002U	0 0066	0 0239
1 2,3,7,8,9-HxCDF	0 0002U	0 0003U	0.0002U	0 0002U	0 0002U	0 0002U	0 0012
1,2,3,7,8-PeCDD	0.0003U	0 0004U	0 0003U	0 0002U	0 0002U	0 0026	0 006
1 2,3,7,8-PeCDF	0.0002U	0 0003U	0 0002U	0 0001U	0 0001U	0 0006	0 0023
2,3,4,6,7,8-HxCDF	0 0002U	0 0002U	0 0002U	0 0001U	0 0001U	0 0028	0 0207
2,3,4,7,8-PeCDF	0 0002U	0 0003U	0 0002U	0 0001U	0 0002U	0 0021	0 0109
2,3,7,8-TCDD	0 0002U	0 0003U	0 0003U	0 0001U	0 0002U	0 0012	0 0014
2 3,7,8-TCDF	0 0018	0 0002U	0 0002U	0 0001U	0 0001U	0 0049	0 0221
Total HpCDD	0 0076	0 0035	0.0098	0 0204	0 0221	0 308	2 84
Total HpCDF	0 0046	0 001	0 00037	0 0012	0 00097	0 313	4 16
Total HxCDD	0 005	0 0023	0 0071	0 0021	0 0023	0 0794	0 368
Total HxCDF	0 0028	0.0011	0.00062	0 0001U	0 00039	0 0735	0 635
Total PeCDD	0.002	0.002	0 0042	0 0002U	0 0002U	0 0353	0 138
Total PeCDF	0.0025	0 0003U	0.00054	0 0001U	0 0002U	0 0351	0 192
Total TCDD	0 0002U	0 0003U	0 00053	0 00035	0 0002U	0 0608	0 526
Total TCDF	0 0049	0 0002U	0 0002U	0 0001U	0 0001U	0 0533	0 231

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.5
Sauget Area 1
Biota Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	SNCS-D COMP 1	WC BP COMP 1	WC BP COMP 2	WC BP COMP 3	WC REF1 COMP 1	WC REF1 COMP 2	WC REF2 COMP 1	WC REF2 COMP 2
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000	1/25/2000
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,2,3,4 6,7,8,9-OCDD	3 4	0 099M	0 0046M	0 0014M	0 0184M	0 0098M	0 0008U	0 0027M
1,2,3,4,6,7,8,9-OCDF	1 2	0 0212M	0 0006U	0 0004U	0 0038M	0 0016M	0 0006U	0 0006U
1,2,3,4,6,7,8-HpCDD	0 436	0 0134	0 0005U	0 0003U	0 0023M	0 0012M	0 0005U	0 0005U
1 2,3 4,6,7,8-HpCDF	0 249	0 0025	0 0002U	0 0002U	0 0002U	0 0004U	0 0003U	0 0002U
1 2,3,4 7,8 9-HpCDF	0 013	0 0004U	0 0004U	0 0003U	0 0003U	0 0006U	0 0004U	0 0003U
1,2,3,4,7 8-HxCDD	0 0047	0 0003U	0 0003U	0 0002U	0 0003U	0 0005U	0 0003U	0 0002U
1 2,3 4 7,8-HxCDF	0 0078	0 0002U	0 0002U	0 0001U	0 0002U	0 0003U	0 0002U	0 0001U
1 2 3 6 7 8-HxCDD	0 0173	0 0003U	0 0003U	0 0002U	0 0002U	0 0004U	0 0003U	0 0002U
1,2 3 6,7 8-HxCDF	0 0044	0 0002U	0 0002U	0 0001U	0 0001U	0 0003U	0 0002U	0 0001U
1 2 3 7 8,9-HxCDD	0 0118	0 0003U	0 0003U	0 0002U	0 0003U	0 0005U	0 0003U	0 0002U
1,2 3 7 8 9-HxCDF	0 0002U	0 0002U	0 0002U	0 0002U	0 0002U	0 0004U	0 0002U	0 0002U
1 2,3 7,8-PeCDD	0 003	0 0003U	0 0003U	0 0002U	0 0002U	0 0004U	0 0003U	0 0002U
1 2,3,7,8-PeCDF	0 0011	0 0002U	0 0002U	0 0001U	0 0002M	0 0013	0 0002U	0 0002U
2 3 4 6 7 8-HxCDF	0 0087	0 0002U	0 0002U	0 0001U	0 0002U	0 0003U	0 0002U	0 0002U
2 3 4 7 8-PeCDF	0 0045	0 0002U	0 0002U	0 0001U	0 0001U	0 0003U	0 0002U	0 0002U
2 3 7 8-TCDD	0 00061	0 0231	0 0002U	0 0002U	0 0002U	0 0004U	0 0002U	0 0002U
2 3 7 8-TCDF	0 0083	0 0011	0 0016	0 0012	0 0001U	0 0003U	0 0002U	0 0002U
Total HpCDD	0 855	0 0196	0 0005U	0 0003U	0 0034M	0 0012	0 0005U	0 0005U
Total HpCDF	0 81	0 0129	0 00089	0 00051M	0 0019	0 00048M	0 0003U	0 0003U
Total HxCDD	0 13	0 0003U	0 0003U	0 0002U	0 0003U	0 0005U	0 0003U	0 0002U
Total HxCDF	0 187	0 0045M	0 0039M	0 0019M	0 0012M	0 0011M	0 001	0 00094M
Total PeCDD	0 0519	0 0003U	0 0003U	0 0002U	0 0002U	0 0004U	0 0003U	0 0002U
Total PeCDF	0 0918	0 0029M	0 0054M	0 0022M	0 0022M	0 0013	0 0017	0 0018M
Total TCDD	0 0792	0 0369	0 0002U	0 0002U	0 0002U	0 0004U	0 0002U	0 0002U
Total TCDF	0 121	0 0081M	0 0107M	0 0053M	0 0049M	0 0036M	0 0027	0 0035M

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.5
Sauget Area 1
Biota Sample Analytical Results
Method 8290 PCDD/PCDF Data

Sample Id	WC REF2 COMP 2FD
Description	Biota
Sample Date	1/25/2000
Units	*ug/kg*
1,2,3,4,6,7,8,9-OCDD	0.0005U
1,2,3,4,6,7,8,9-OCDF	0.0004U
1,2,3,4,6,7,8-HpCDD	0.0003U
1,2,3,4,6,7,8-HpCDF	0.0002U
1,2,3,4,7,8,9-HpCDF	0.0003U
1,2,3,4,7,8-HxCDD	0.0002U
1,2,3,4,7,8-HxCDF	0.0001U
1,2,3,6,7,8-HxCDD	0.0002U
1,2,3,6,7,8-HxCDF	0.0001U
1,2,3,7,8,9-HxCDD	0.0002U
1,2,3,7,8,9-HxCDF	0.0002U
1,2,3,7,8-PeCDD	0.0001U
1,2,3,7,8-PeCDF	0.0001U
2,3,4,6,7,8-HxCDF	0.0001U
2,3,4,7,8-PeCDF	0.0001U
2,3,7,8-TCDD	0.0001U
2,3,7,8-TCDF	0.00039
Total HpCDD	0.0003U
Total HpCDF	0.0002U
Total HxCDD	0.0002U
Total HxCDF	0.0015
Total PeCDD	0.0001U
Total PeCDF	0.003
Total TCDD	0.0001U
Total TCDF	0.0052

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.6
Sauget Area 1
Biota Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	BB BP COMP 1	BB BP COMP 2	BB BP COMP 3	BB REF 1-2 COMP 1	BB REF 1-2 COMP 2	BB REF 2-2 COMP 1	CLAM BP-1 COMP 01
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	11/1/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999	11/2/1999	10/6/1999
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	12	7 7J	18	66	31	5 9J	7 5J
Antimony							
Arsenic							
Barium							
Beryllium	0 91U	0 91U	1U	0 91U	0 91U	0 91U	0 91U
Cadmium	0 45U	0 45U	0 5U	0 45U	0 45U	0 45U	0 45U
Calcium							
Chromium	0 29J	0 27J	0 7	0 4J	0 48	0 34J	0 22J
Cobalt							
Copper	0 79J	0 85J	0 89J	1J	1 1J	1 1J	0 60J
Hardness as CaCO3							
Iron							
Lead	0 25J	0 45U	0 5U	0 23J	0 18J	0 45U	0 45U
Magnesium							
Manganese							
Molybdenum							
Nickel	9 1U	9 1U	10U	9 1U	9 1U	9 1U	9 1U
Potassium							
Selenium	0 45U	0 45U	0 5U	0 45U	0 5	0 48	0 45U
Silver							
Sodium							
Thallium							
Vanadium							
Zinc	19	22	18	20	24	16	8 9

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD field duplicate ND-none detected

Table A-8.6
Sauget Area 1
Biota Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	CLAM BP-2 COMP 01	CLAM BP-3 COMP 01	CLAM REF-1 COMP 01	CLAM REF2-2 COMP 01	CLAM REF2-2 COMP 02	F F BP COMP 1	F F BP COMP 2
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/7/1999	10/6/1999	10/8/1999	10/8/1999	10/9/1999	10/4/1999	10/6/1999
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	11	13	14	15	26	24	52
Antimony							
Arsenic							
Barium							
Beryllium	0 91U	0 91U	0 91U	0 91U	1 0U	0 91U	1U
Cadmium	0 074J	0 12J	0 53	0 16J	0 61	0 45U	0 5U
Calcium							
Chromium	0 72	1 1	0 79	1 5	2 2	0 32J	0 3J
Cobalt							
Copper	0 98J	0 99J	2 4	1 6J	2 4	0 5J	0 78J
Hardness as CaCO3							
Iron							
Lead	0 45U	0 25J	0 44J	0 45U	0 59	0 45U	0 5U
Magnesium							
Manganese							
Molybdenum							
Nickel	9 1U	9 1U	9 1U	9 1U	10U	9 1U	10U
Potassium							
Selenium	0 45U	0 45U	0 45U	0 45U	0 48J	0 54	0 5U
Silver							
Sodium							
Thallium							
Vanadium							
Zinc	14	22	52	21	35	24	33

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.6
Sauget Area 1
Biota Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	F.F BP COMP 3	F.F. CS B COMP 1	F.F. CS-D COMP 1	F.F. REF 1 COMP 1	F.F. REF 2 COMP 1	F.F. REF 2 COMP 2	FF REF 2 COMP 3	PTISS B-1 DC B
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/6/1999	10/5/1999	10/4/1999	10/8/1999	10/8/1999	10/8/1999	10/8/1999	10/5/1999
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	44	9 8J	22	13	80	100	8 3J	43
Antimony								
Arsenic								
Barium								
Beryllium	0 91U	1U	0.91U	0 91U	0.91U	0.91U	1U	0.91U
Cadmium	0 45U	0 5U	0.45U	0 45U	0 45U	0.45U	0 5U	1.2
Calcium								
Chromium	0.26J	0.4J	0.37J	0.24J	0 44J	0 47	1 7	0 26J
Cobalt								
Copper	1.7J	9	1.5J	0.45J	0 42J	0 75J	0 54J	63
Hardness as CaCO3								
Iron								
Lead	0.59	1.1	0 48	0.45U	0 45U	0.37J	0 5U	6
Magnesium								
Manganese								
Molybdenum								
Nickel	9 1U	10U	9 1U	9.1U	9 1U	9 1U	10U	1 7J
Potassium								
Selenium	0.53	0.5U	0.46	0 45U	0 56	0 65	0 5U	0.45U
Silver								
Sodium								
Thallium								
Vanadium								
Zinc	32	46	53	17	33	27	25	56

Notes U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected.

Table A-8.6
Sauget Area 1
Biota Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	PTISS B-2 DC B	PTISS B-3 DC B	PTISS C-1 DC C	PTISS C-2 DC C	PTISS C-3 DC C	PTISS D-1 DC D	PTISS D-2 DC D	PTISS D-3 DC D	PTISS E-1 DC E
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/5/1999	10/5/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999	10/6/1999
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	23	170	1400	1400	38	120	93	110	21
Antimony									
Arsenic									
Barium									
Beryllium	0 91U	1U	1U	0 14J	0 91U	1U	0 91U	0 91U	0 91U
Cadmium	0 72	0 39J	3 5	5 3	0 06J	0 29J	0 45U	0 45U	0 13J
Calcium									
Chromium	0 17J	2 6	7 1	9	0 19J	0 59	0 36J	0 53	0 45U
Cobalt									
Copper	30	35	250	390	8 1	10	4 8	3 5	1 8J
Hardness as CaCO3									
Iron									
Lead	3 9	3 8	47	76	2 4	4 4	1 5	2 3	0 66
Magnesium									
Manganese									
Molybdenum									
Nickel	1 6J	6 3J	80	110	2 7J	3 5J	1 6J	2 5J	9 1U
Potassium									
Selenium	0 45U	0 5U	0 5U	0 45U	0 45U	0 5U	0 45U	0 45U	0 45U
Silver									
Sodium									
Thallium									
Vanadium									
Zinc	46	77	590	610	27	54	28	27	23

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate ND-none detected

Table A-8.6
Sauget Area 1
Biota Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	PTISS E-2 DC E	PTISS F-1 DC F	PTISS F-3 DC F	PTISS PRAIRIE DUPONT R2	PTISS REF 2-1 RC	SHRIMP BP COMP	SHRIMP REF1 COMP
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/6/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999	10/6/1999	10/7/1999
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	17	44	30	160	360	28	60
Antimony							
Arsenic							
Barium							
Beryllium	1U	1U	1U	1U	1U	1 0U	0 91U
Cadmium	0 5U	0 5U	0 097J	0 5U	0 5U	0 50U	0 45U
Calcium							
Chromium	0 5U	0 5U	0 5U	0 25J	0 53	0 23J	0 26J
Cobalt							
Copper	2 9	1 9J	2 1	0 95J	1 3J	8 3	8 5
Hardness as CaCO3							
Iron							
Lead	0 51	1 2	0 44J	0 3J	0 64	0 39J	0 38J
Magnesium							
Manganese							
Molybdenum							
Nickel	10U	2 6J	1 2J	10U	10U	10U	9 1U
Potassium							
Selenium	0 5U	0 5U	0 5U	0 5U	0 5U	0 50U	0 47
Silver							
Sodium							
Thallium							
Vanadium							
Zinc	27	20	26	8 3	6 8	16	15

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.6
Sauget Area 1
Biota Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	SHRIMP REF2 COMP	SN REF1 COMP 1	SN REF2-1 COMP1	SNCS-B COMP1	SNCS-C COMP1	SNCS-D COMP1	SRM (NIST 2976)	LMB BP COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/8/1999	10/8/1999	10/8/1999	10/5/1999	10/4/1999	10/4/1999	1/26/2000	10/4/1999
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	100	710	590	400	320	500	120	13U
Antimony								
Arsenic								
Barium								
Beryllium	0 83U	0 83U	0 91U	0 91U	0 91U	1 0U	1 0U	0 91U
Cadmium	0 42U	0 42U	0 069J	0 16J	0 60	0 67	0 81	0 45U
Calcium								
Chromium	0 28J	1 9	1 2	0 89	3 1	2 2	0 56	0 55
Cobalt								
Copper	16	12	10	31	120	73	4 2	0 41J
Hardness as CaCO3								
Iron								
Lead	0 61	3 0	2 3	2 6	11	7 2	1 3	0 45U
Magnesium								
Manganese								
Molybdenum								
Nickel	8 3U	1 9J	1 7J	2 0J	21	11	9 1U	9 1U
Potassium								
Selenium	0 61	0 42U	0 49	0 45U	0 45U	0 50U	2 8	0 63
Silver								
Sodium								
Thallium								
Vanadium								
Zinc	17	12	12	16	110	90	140	15J

Notes U-not detected J-estimated value, N-tentatively identified, R-rejected, M-EMPC D-result from diluted analysis, EB-equipment blank FD-field duplicate, ND-none detected

Table A-8.6
Sauget Area 1
Biota Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	LMB BP COMP 2	LMB BP COMP 3	LMB REF 1 COMP 1	LMB REF 1 COMP 2	LMB REF 2 COMP 1	LMB REF 2 COMP 2	WC BP COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	11/3/1999	11/2/1999	11/1/1999	11/1/1999	10/8/1999	11/2/1999	10/4/1999
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	19J	33J	35J	81J	22J	27J	5 8UJ
Antimony							
Arsenic							
Barium							
Beryllium	0 91U	1U	1U	0 91U	0 91U	0 83U	0 91U
Cadmium	0 45U	0 5U	0 5U	0 45U	0 45U	0 42U	0 45U
Calcium							
Chromium	0 45J	0 93	0 35J	0 36J	0 19J	0 22J	0 45U
Cobalt							
Copper	0 52J	0 68J	0 84J	0 48J	0 36J	0 4J	0 25J
Hardness as CaCO3							
Iron							
Lead	0 45U	0 5U	0 5U	0 45U	0 45U	0 42U	0 45U
Magnesium							
Manganese							
Molybdenum							
Nickel	9 1U	10U	10U	9 1U	9 1U	8 3U	9 1U
Potassium							
Selenium	0 45U	0 6	0 5U	0 53	0 75	0 86	0 45U
Silver							
Sodium							
Thallium							
Vanadium							
Zinc	17J	19J	15J	13J	9 2J	8 5J	7 9J

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND none detected

Table A-8.6
Sauget Area 1
Biota Sample Analytical Results
Method 6010B/7470A/9010B Inorganic Data

Sample Id	WC BP COMP 2	WC BP-COMP 3	WC REF1 COMP 1	WC REF1 COMP 2	WC REF2 COMP 1	WC REF2 COMP 2
Description	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	11/1/1999	11/1/1999	10/4/1999	11/1/1999	11/2/1999	11/2/1999
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	5 8UJ	8 6U	5 0UJ	9 4U	5 7UJ	4 9U
Antimony						
Arsenic						
Barium						
Beryllium	0 91U	0 83U	0 83U	0 91U	1 0U	0 91U
Cadmium	0 45U	0 42U	0 42U	0 45U	0 50U	0 45U
Calcium						
Chromium	0 22J	0 42U	0 42U	0 21J	0 50U	0 45U
Cobalt						
Copper	0 57J	1 7U	0 32J	0 23J	2 0U	0 21J
Hardness as CaCO3						
Iron						
Lead	0 45U	0 42U	0 42U	0 45U	0 50U	0 45U
Magnesium						
Manganese						
Molybdenum						
Nickel	9 1U	8 3U	8 3U	9 1U	10U	9 1U
Potassium						
Selenium	0 45U	0 42U	0 42U	0 45U	0 73	0 45U
Silver						
Sodium						
Thallium						
Vanadium						
Zinc	7 1J	9 2J	7 1J	7 0J	6 4J	5 4J

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

Table A-8.7
Sauget Area 1
Biota Sample Analytical Results
Other Data

Sample Id	BB BP COMP 1	BB BP COMP 2	BB BP COMP 3	BB REF 1-2 COMP 1	BB REF 1-2 COMP 2	BB REF 2-2 COMP 1	CLAM BP-1 COMP 01
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	11/1/1999	10/7/1999	10/7/1999	10/8/1999	10/8/1999	11/2/1999	10/6/1999
% Lipids	1 4	1 7	0 3	1	1 4	1	0 09
Antimony (mg/kg)	0 18U	0 18U	0 2U	0 18U	0 18U	0 18U	0 18U
Arsenic (mg/kg)	1 8U	5U	1 8U	1 8U	4 5U	0 91U	4 5U
Mercury (mg/kg)	0 05J	0 075J	0 26	0 1	0 086J	0 05J	0 074U
Silver (mg/kg)	0 091U	0 1U	0 1U	0 091U	0 091U	0 091U	0 015J

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.7
Sauget Area 1
Biota Sample Analytical Results
Other Data

Sample Id	CLAM BP-2 COMP 01	CLAM BP-3 COMP 01	CLAM REF-1 COMP 01	CLAM REF2-2 COMP 01	CLAM REF2-2 COMP 02	F F BP COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/7/1999	10/6/1999	10/8/1999	10/8/1999	10/9/1999	10/4/1999
% Lipids	0 23	0 05	0 12	0.12	0.09	1 5
Antimony (mg/kg)	0 18U	0 18U	0 18U	0.18U	0.20U	0 18U
Arsenic (mg/kg)	4 5U	0.96J	4.2U	0.65J	5.0U	5U
Mercury (mg/kg)	0 091U	0.10U	0.095U	0.074U	0.077U	0.052J
Silver (mg/kg)	0 091U	0.091U	0.091U	0.091U	0.10U	0.1U

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.7
Sauget Area 1
Biota Sample Analytical Results
Other Data

Sample Id	F F BP COMP 2	F.F BP COMP 3	F.F CS B COMP 1	F.F. CS-D COMP 1	F F. REF 1 COMP 1	F.F. REF 2 COMP 1	F F REF 2 COMP 2
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/6/1999	10/6/1999	10/5/1999	10/4/1999	10/8/1999	10/8/1999	10/8/1999
% Lipids	1 8	1 6	1 1	1.3	2.6	1	1 1
Antimony (mg/kg)	0 2U	0 18U	0 2U	0 18U	0 18U	0.18U	0 18U
Arsenic (mg/kg)	1U	2U	5U	5U	1.8U	2U	2U
Mercury (mg/kg)	0 6	0 1U	0 095U	0 018J	0.05J	0.051J	0 064J
Silver (mg/kg)	0 1U	0 1U	0 1U	0 1U	0.091U	0.1U	0 1U

Notes U-not detected, J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.7
Sauget Area 1
Biota Sample Analytical Results
Other Data

Sample Id	FF REF 2 COMP 3	PTISS B-1 DC B	PTISS B-2 DC B	PTISS B-3 DC B	PTISS C-1 DC C	PTISS C-2 DC C	PTISS C-3 DC C	PTISS D-1 DC D
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/8/1999	10/5/1999	10/5/1999	10/5/1999	10/4/1999	10/4/1999	10/4/1999	10/4/1999
% Lipids	1 7							
Antimony (mg/kg)	0 2U	0 21	0 15J	0 2U	0 71	1 2	0 2U	0 2U
Arsenic (mg/kg)	5U	0 25J	0 91U	0 91U	2 4	4 3	0 43J	0 32J
Mercury (mg/kg)	0 046J	0 0031J	0 0082J	0 011J	0 011J	0 028	0 02U	0 018U
Silver (mg/kg)	0 1U	0 023J	0 025J	0 028J	0 19	0 5	0 1U	0 02J

Notes U-not detected J-estimated value N-tentatively identified R-rejected M-EMPC, D-result from diluted analysis EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.7
Sauget Area 1
Biota Sample Analytical Results
Other Data

Sample Id	PTISS D-2 DC D	PTISS D-3 DC D	PTISS E-1 DC E	PTISS E-2 DC E	PTISS F-1 DC F	PTISS F-3 DC F	PTISS PRAIRIE DUPONT R2
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/4/1999	10/4/1999	10/6/1999	10/6/1999	10/7/1999	10/7/1999	10/8/1999
% Lipids							
Antimony (mg/kg)	0 15J	0 18U	0 13J	0 2U	0 2U	0 13J	0 2U
Arsenic (mg/kg)	1U	1U	1U	0 91U	0 56J	0 42J	0 91U
Mercury (mg/kg)	0 017U	0 018U	0 02U	0 018U	0 02U	0 017U	0 018U
Silver (mg/kg)	0 1U	0 1U	0 1U	0 091U	0 091U	0 083U	0 091U

Table A-8.7
Sauget Area 1
Biota Sample Analytical Results
Other Data

Sample Id	PTISS REF 2-1 RC	SHRIMP BP COMP	SHRIMP REF1 COMP	SHRIMP REF2 COMP	SN REF1 COMP 1	SN REF2-1 COMP1	SNCS-B COMP1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/8/1999	10/6/1999	10/7/1999	10/8/1999	10/8/1999	10/8/1999	10/5/1999
% Lipids		0.03	0.27	0.38	0.13	0.16	0.09
Antimony (mg/kg)	0 2U	0.16J	0.18U	0.17U	0.17U	0 18U	0.18U
Arsenic (mg/kg)	1 1J	2.0U	2.0U	1.2J	1.5	1.6	2.0
Mercury (mg/kg)	0 017U	0.095U	0.091U	0.083U	0.087U	0.091U	0.071U
Silver (mg/kg)	0 1U	0.090J	0 059J	0.062J	0.023J	0 018J	0 065J

Notes: U-not detected, J-estimated value, N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.7
Sauget Area 1
Biota Sample Analytical Results
Other Data

Sample Id	SNCS-C COMP1	SNCS-D COMP1	SRM (NIST 1974)	SRM (NIST 2976)	LMB BP COMP 1	LMB BP COMP 2	LMB BP COMP 3	LMB REF 1 COMP 1
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	10/4/1999	10/4/1999	1/26/2000	1/26/2000	10/4/1999	11/3/1999	11/2/1999	11/1/1999
% Lipids	0 17	0 26	0 38		1 8	1 5	1 5	0 87
Antimony (mg/kg)	0 12J	0 20U		0 20U	0 18U	0 18U	0 2U	0 2U
Arsenic (mg/kg)	1 6	1 8		11	4 5UJ	10UJ	4 5UJ	5UJ
Mercury (mg/kg)	0 077U	0 077U		0 075J	0 016UJ	0 057J	0 064J	0 097J
Silver (mg/kg)	0 063J	0 068J		0 10U	0 091U	0 1U	0 091U	0 1U

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate ND-none detected

Table A-8.7
Sauget Area 1
Biota Sample Analytical Results
Other Data

Sample Id	LMB REF 1 COMP 2	LMB REF 2 COMP 1	LMB REF 2 COMP 2	WB BP FILLET 1	WB BP FILLET 2	WC BP COMP 1	WC BP COMP 2
Description	Biota	Biota	Biota	Biota	Biota	Biota	Biota
Sample Date	11/1/1999	10/8/1999	11/2/1999	10/4/1999	10/4/1999	10/4/1999	11/1/1999
% Lipids	0 66	2 4	0 83	0 20	1 5	0 15	0 18
Antimony (mg/kg)	0 18U	0 18U	0 17U			0 18U	0 18U
Arsenic (mg/kg)	5UJ	1 8UJ	5UJ			0 45J	1 8UJ
Mercury (mg/kg)	0 14J	0 1J	0 1J			0 02UJ	0 10UJ
Silver (mg/kg)	0 091U	0 091U	0 1U			0 091U	0 091U

Notes U-not detected J-estimated value N-tentatively identified, R-rejected, M-EMPC, D-result from diluted analysis, EB-equipment blank, FD-field duplicate, ND-none detected

Table A-8.7
Sauget Area 1
Biota Sample Analytical Results
Other Data

Sample Id	WC BP-COMP 3	WC REF1 COMP 1	WC REF1 COMP 2	WC REF2 COMP 1	WC REF2 COMP 2
Description	Biota	Biota	Biota	Biota	Biota
Sample Date	11/1/1999	10/4/1999	36465	36466	36466
% Lipids	0 16	0 56	0 25	0 59	0 48
Antimony (mg/kg)	0 17U	0 17U	0 18U	0 20U	0 18U
Arsenic (mg/kg)	1 7UJ	2 0UJ	1 0UJ	2 0UJ	0 91UJ
Mercury (mg/kg)	0 027J	0 037J	0 052J	0 052J	0 041J
Silver (mg/kg)	0 083U	0 083U	0 091U	0 10U	0 091U

Notes U-not detected J-estimated value N-tentatively identified R-rejected, M-EMPC D-result from diluted analysis EB-equipment blank FD-field duplicate ND-none detected

APPENDIX B
TREATABILITY STUDY PROGRESS REPORT

TREATABILITY STUDY PROGRESS REPORT
SAUGET AREA 1 SEDIMENTS AND SOURCE AREAS

In accordance with Section 12 0 of the Sauget Area 1 Engineering Evaluation/Cost Analysis (EE/CA) and Remedial Investigation/Feasibility Study (RI/FS) Support Sampling Plan (SSP) dated June 25, 1999, a pilot treatability sampling program is to be performed as part of the evaluation of remedial alternatives for sediments and source areas Leachate treatability pilot tests are being conducted separately and are not discussed in this report Soil and sediment samples collected during implementation of the sampling plan were to be subsequently submitted to qualified and permitted contractors for pilot and bench scale testing using low temperature thermal desorption, incineration and stabilization technologies The sampling program involved collection of soil and sediment samples from pre-determined locations within defined source areas and pre-selected creek segments (Dead Creek) as specified in the SSP The selection of sampling locations within each area was determined by reviewing boring logs complete with geology information and photo-ionization detector (PID) measurements that were obtained during implementation of the SSP These data were reviewed and locations were selected that were determined to be representative of the material in each respective area

The pilot testing for incineration was to be performed at an off-site facility since incinerator units are typically not mobile. The media that were required by the SSP to be pilot tested using incineration as the technology were materials from the source areas The pilot testing for thermal desorption was to be conducted on site since thermal desorption units are typically mobile and less expensive to operate locally The media that were required by the SSP to be pilot tested using thermal desorption were materials from the source areas and sediments from Dead Creek. Pilot treatability tests for stabilization were to be conducted on Dead Creek sediments only at an off-site laboratory However, after recent conversations between representatives of Solutia Inc and Region V of the United States Environmental Protection Agency (USEPA), a determination was made that pilot testing of the Dead Creek sediments would not be necessary since this material is to be removed and placed in an on-site containment cell Thus, these pilot testing procedures only involve materials from the source areas

The purpose of the pilot treatability sampling and testing is to determine if low temperature thermal desorption and incineration are feasible technologies to treat materials collected from specified areas discussed above Ideally, the pilot testing would involve sample profiling to determine specific parameters related to the sample's characteristics (i.e moisture content, percent soil, grain size, etc), and analyzing the sample in a laboratory to determine what chemical constituents are initially present Furthermore, the test should include implementation of a trial run (or bench scale run) of the sample A trial run involves running a portion of the sample through a thermal desorption or incineration unit (or a scaled down unit) By performing a trial run, valuable data are gathered that eliminate most of the uncertainty related to the feasibility

of each respective technology. However, state and federal permits must be in place prior to conducting thermal treatment activities if certain chemical compounds are present in the sample. Based on historical data for samples collected and analyzed at the Sauget site, polychlorinated biphenyls (PCBs) and dioxins are known to be present. In order to thermally treat materials with these constituents, the facility must be permitted under provisions of the Resource Conservation and Recovery Act (RCRA) and Toxic Substance Control Act (TSCA).

Currently, the pilot testing samples from source areas have been collected and are stored in five-gallon plastic containers on site. Approximately eight cubic feet of soil (or 60 gallons) were collected in mid-April for pilot testing purposes. A search was concurrently performed for vendors who are qualified to perform incineration and have the requisite RCRA and TSCA permits. One facility, Safety Kleen, in Coffeeville, Kansas was identified. A generator waste profile was completed and sent to Safety Kleen along with a one-quart sample. Safety Kleen personnel analyzed the sample in their on-site laboratory and reviewed the generator waste profile. The results from this analysis indicate that the material might be capable of incineration; however, several problems were identified. One problem involves the presence of volatile metals in the samples. During incineration, these metals will generate significant off-gasses and cause non-compliances with the facility's air permit. A second problem caused by the presence of metals in high concentrations is the disposal of the ash, which will be produced at the conclusion of the incineration process. Since the metals are elements and will not be destroyed during the thermal treatment process, the thermally treated ash will have a higher concentration of metals than the original material. Thus, secondary treatment of the ash (such as solidification) may be necessary prior to disposal and would greatly affect the cost. A third problem identified involves the heterogeneous nature of source area waste and associated materials handling problems. Large pieces of concrete, brick and other debris are present and will cause problems in feeding the material into the incineration unit. Finally, the cost to haul all of the source area material from Cahokia, Illinois to Coffeeville, Kansas would be high.

To determine the possibility of off-site incineration pilot testing, Mr. Lance Richards of Roux Associates, Inc. contacted Messrs. Bill Waltrip and Bob Kenworthy of Safety Kleen by telephone. Mr. Waltrip and Mr. Kenworthy both agreed that a pilot test would require approximately 40 cubic yards of material and that their on-site incinerator would have to be modified to treat the gas emissions while burning. Towards the conclusion of the conversation, it was concurred that a pilot test would not be feasible due to the amount of sample required, the problems associated with high metal concentrations, and the down time of their incinerator.

A concurrent search has been conducted to locate qualified vendors with thermal desorption capabilities that are permitted under the provisions of RCRA and TSCA. No vendors were located; however, several vendors indicated that they could perform the treatment studies if certain actions were taken. One vendor, Purgo Inc., claims that they could perform thermal desorption activities on PCB-contaminated materials if they were

to transport the material to Canada where RCRA and TSCA requirements do not apply Roy F Weston reported that they could possibly get a provision from the State of Pennsylvania to thermally treat PCB and dioxin containing materials on a temporary research and development basis This provision, however, would require at least 90 days to obtain approvals and still may be declined Lastly, Separation and Recovery Systems (SRS) claims that they may be able to obtain a provision from the State of Illinois and conduct the testing at the Sauget site This option would involve mobilization and possible concerns from the public and the USEPA From the information that was gathered while searching for a thermal desorption contractor with sufficient permits, it was concluded that no thermal desorption vendors currently exist which have both the required RCRA and TSCA permits

Other problems with thermal desorption were determined while discussing pilot testing possibilities with contractors The main problem that was identified is that thermal desorption does not reach high enough temperatures to destroy PCBs According to technical personnel at Roy F Weston, Safety Kleen and SRS, temperatures must reach a minimum of 2,200 degrees Fahrenheit to achieve the required 99 99 percent destruction rate (referred to as "four nines destruction") that is required by RCRA Thermal desorption units rarely exceed 1,800 degrees Fahrenheit temperatures Secondly, many problems between the public, generator and the USEPA have historically occurred in Region V concerning thermal treatment Considering the historical public concerns, the technical ineffectiveness in destroying PCBs, and the lack of contractors holding both RCRA and TSCA permits, this remedial alternative is unattractive

In summary, pilot treatability testing has been determined to be infeasible for both thermal treatment and incineration technologies due to technical and permitting limitations In both cases, actual field implementation would incur significant excavation and materials handling problems associated with removing the source area material for transport or on-site treatment. Anticipated local air emission problems and exposure risks coupled with materials handling safety and transportation risks significantly curtail the feasibility of pursuing either option as a final remedy. Given that thermal desorption will not achieve required destruction efficiencies of PCBs and that incineration would result in volatile metals emissions and subsequent disposal problems, it is strongly recommended that future remedies focus on cover and containment options that will allow source area waste to be left in place.

APPENDIX C
SLUG TEST DATA ANALYSES

Data Set: \\Server\shared\Projects\Solutia\Sauget\STGSh.aqt
'le: Area G Shallow Horizon
.te: 02/21/01
ıme: 16:03:51

PROJECT INFORMATION

Test Well: ShallowSiteG

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 2.212 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 20

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
1.	2.124	11.	0.3087
2.	1.839	12.	0.2459
3.	1.517	13.	0.195
4.	1.182	14.	0.1527
5.	0.9915	15.	0.1173
6.	0.812	16.	0.08702
7.	0.6763	17.	0.06138
8.	0.5701	18.	0.03719
9.	0.4697	19.	0.01408
10.	0.3849	20.	-0.00578

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0002048	ft/sec
y0	2.539	ft

UTOMATIC ESTIMATION RESULTS

⊏stimated Parameters

Parameter	Estimate	Std. Error	
K	0.0002048	3.696E-06	ft/sec
y0	2.539	0.03619	ft

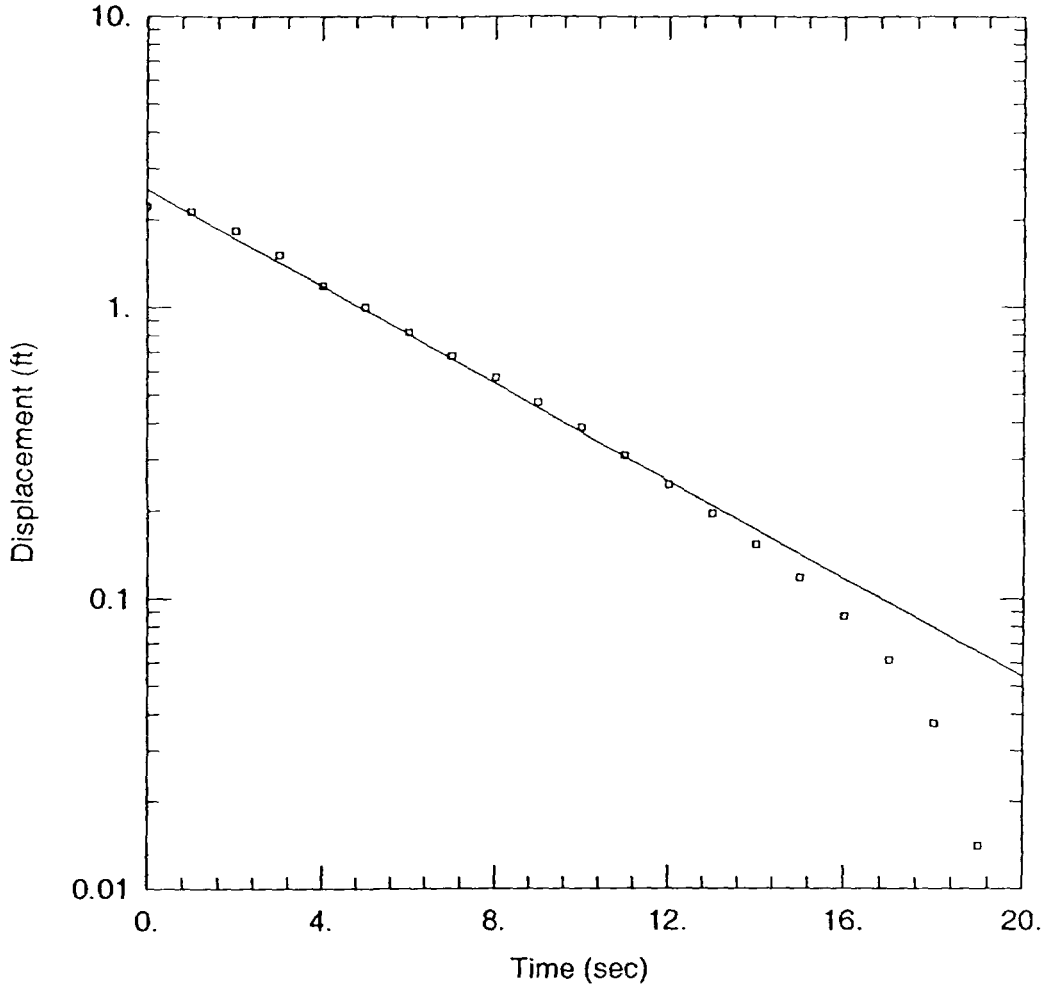
Parameter Correlations

	K	y0
K	1.00	0.78
y0	0.78	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 0.01927 ft^2
Variance . . . . . 0.001071 ft^2
Std. Deviation . . . . . 0.03272 ft
Mean . . . . . -0.008989 ft
No. of Residuals . . . . . 20.
No. of Estimates 2



AREA G SHALLOW HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STGSh.aqt
Date: 02/21/01 Time: 16:04:02

PROJECT INFORMATION

Test Well: ShallowSiteG

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STGSH)

Initial Displacement: 2.212 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0002048 ft/sec
y0 = 2.539 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STGInt.aqt
Title: Area G Intermediate Horizon
Date: 02/21/01
Time: 16:01:55

PROJECT INFORMATION

Test Well: IntermediateSiteG

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 4.408 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 10

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.2	1.067	1.2	0.803
0.4	1.418	1.4	1.08
0.6	1.568	1.6	0.9063
0.8	0.4871	1.8	0.2798
1.	-1.248	2.	-0.26

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001139	ft/sec
y0	1.641	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.001139	0.0009787	ft/sec
y0	1.641	1.014	ft

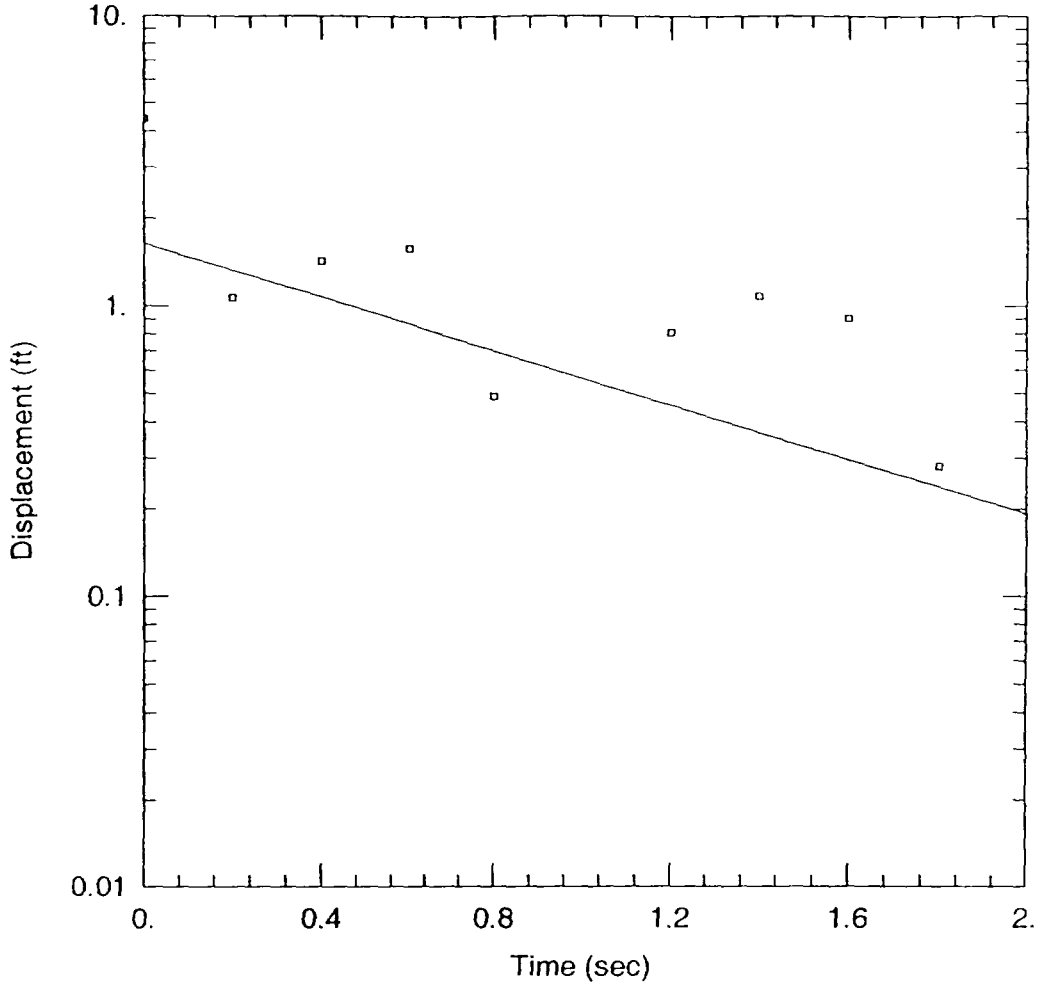
Parameter Correlations

	K	y0
K	1.00	0.81
y0	0.81	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 5.216 ft^2
Variance . . . . . 0.652 ft^2
Std. Deviation . . . . . 0.8075 ft
Mean . . . . . 0.003943 ft
No. of Residuals . . . . . 10.
No. of Estimates 2



AREA G INTERMEDIATE HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STGInt.aqt
Date: 02/21/01 Time: 16:02:13

PROJECT INFORMATION

Test Well: IntermediateSiteG

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STGINT)

Initial Displacement: 4.408 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.001139 ft/sec
y0 = 1.641 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STGD.aqt
tle: Area G Deep Horizon
ate: 02/21/01
Time: 15:57:30

PROJECT INFORMATION

Test Well: DeepSiteG

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 6.423 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 25

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.12	5.948	1.68	-0.8893
0.24	5.162	1.8	-1.884
0.36	3.644	1.92	-0.2849
0.48	4.243	2.04	0.4127
0.6	4.327	2.16	0.7062
0.72	3.737	2.28	0.7767
0.84	3.027	2.4	0.716
0.96	2.734	2.52	0.469
1.08	2.325	2.64	0.2242
1.2	2.902	2.76	0.0489
1.32	2.706	2.88	-0.0628
1.44	1.912	3.	-0.0044
1.56	1.508		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001106	ft/sec
y0	6.761	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.001106	0.0001803	ft/sec
y0	6.761	0.7777	ft

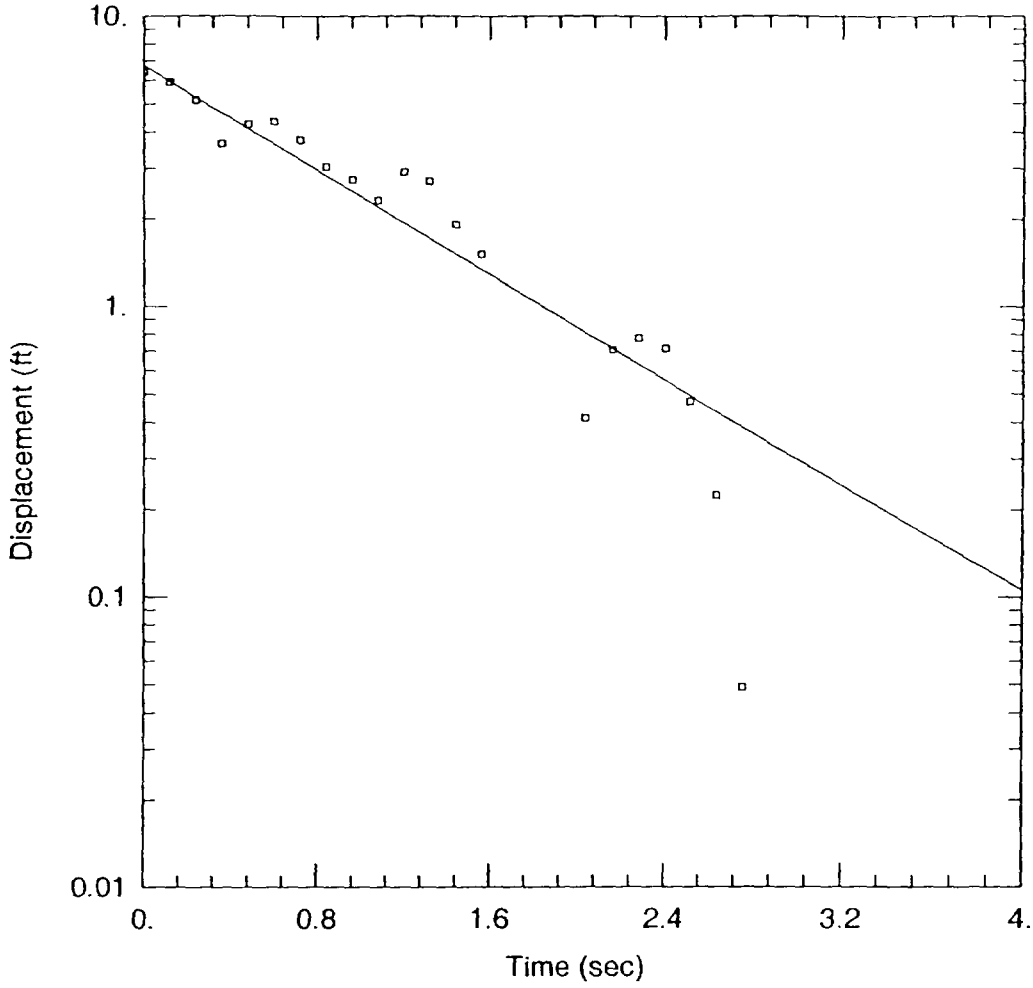
Parameter Correlations

	K	y0
K	1.00	0 76
y0	0.76	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 18.53 ft^2
Variance . . . . . 0.8055 ft^2
Std. Deviation . . . . . 0.8975 ft
Mean . . . . . -0.08338 ft
No. of Residuals . . . . . 25.
No. of Estimates 2



AREA G DEEP HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STGD.aqt
Date: 02/21/01 Time: 15:57:10

PROJECT INFORMATION

Test Well: DeepSiteG

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STGD)

Initial Displacement: 6.423 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.001106 ft/sec
y0 = 6.761 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STHSh.aqt
Title: Area H Shallow Horizon
Date: 02/21/01
Time: 16:08:22

PROJECT INFORMATION

Test Well: ShallowSiteH

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 2.428 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 28

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
1.	2.313	15.	0.3734
2.	1.889	16.	0.325
3.	1.732	17.	0.2853
4.	1.433	18.	0.2448
5.	1.198	19.	0.2116
6.	1.021	20.	0.1784
7.	0.9297	21.	0.1506
8.	0.8499	22.	0.1221
9.	0.7813	23.	0.1
10.	0.6965	24.	0.078
11.	0.6221	25.	0.0589
12.	0.5427	26.	0.0372
13.	0.4809	27.	0.0192
14.	0.421	28.	-0.00033

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0001418	ft/sec
y0	2.626	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0001418	3.15E-06	ft/sec
y0	2.626	0.04144	ft

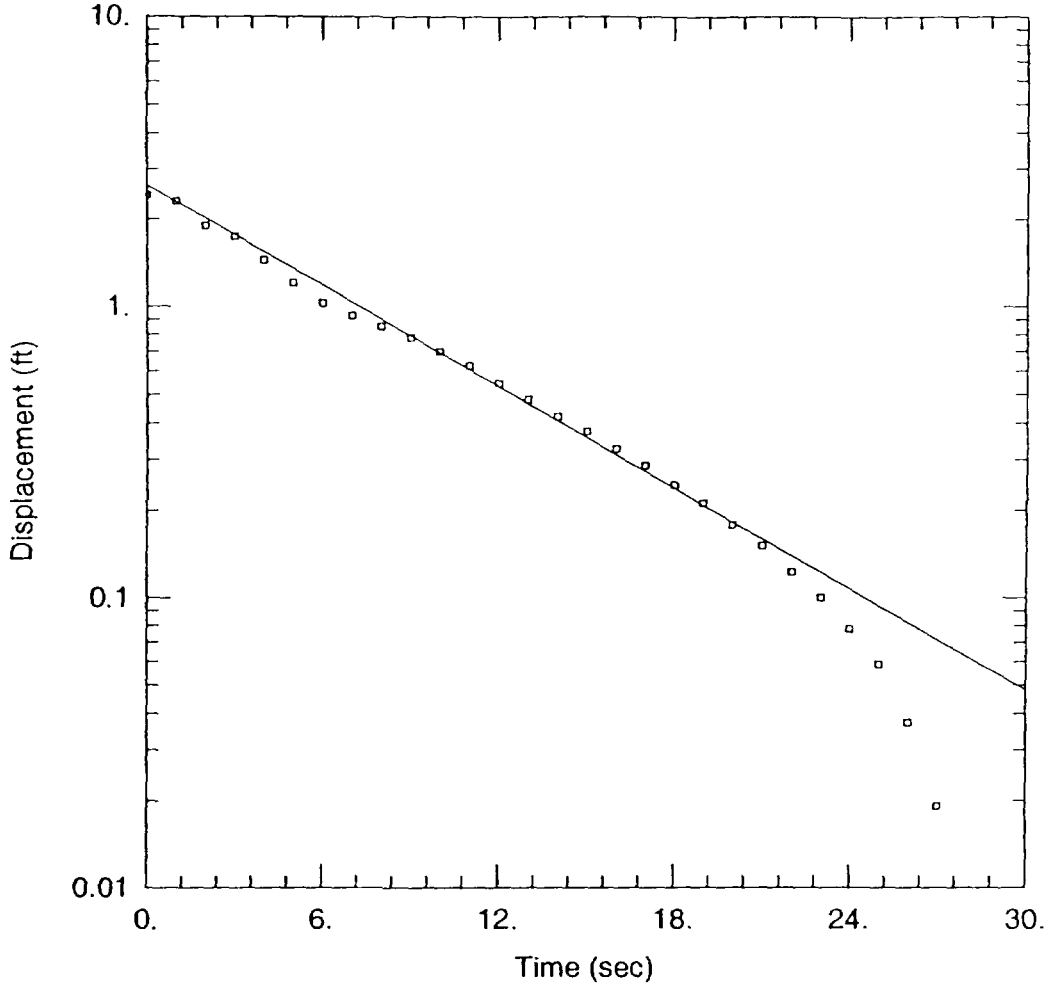
Parameter Correlations

	K	y0
K	1.00	0.76
y0	0.76	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 0.06107 ft^2
Variance . . . . . 0.002349 ft^2
Std. Deviation . . . . . 0.04846 ft
Mean . . . . . -0.0008077 ft
No. of Residuals . . . . . 28.
No. of Estimates 2



AREA H SHALLOW HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STHSh.aqt
Date: 02/21/01 Time: 16:08:31

PROJECT INFORMATION

Test Well: ShallowSiteH

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STHSH)

Initial Displacement: 2.428 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001418 ft/sec
y0 = 2.626 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STHint.aqt
Title: Area H Intermediate Horizon
Date: 02/21/01
Time: 16:06:35

PROJECT INFORMATION

Test Well: IntermediateSiteH

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 4.102 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 12

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.08	3.139	0.56	1.469
0.16	3.261	0.64	1.562
0.24	-1.883	0.72	1.607
0.32	-0.4149	0.8	1.613
0.4	1.413	0.88	0.6625
0.48	1.519	0.96	0.2101

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0007017	ft/sec
y0	2.006	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0007017	0.001458	ft/sec
y0	2.006	1.169	ft

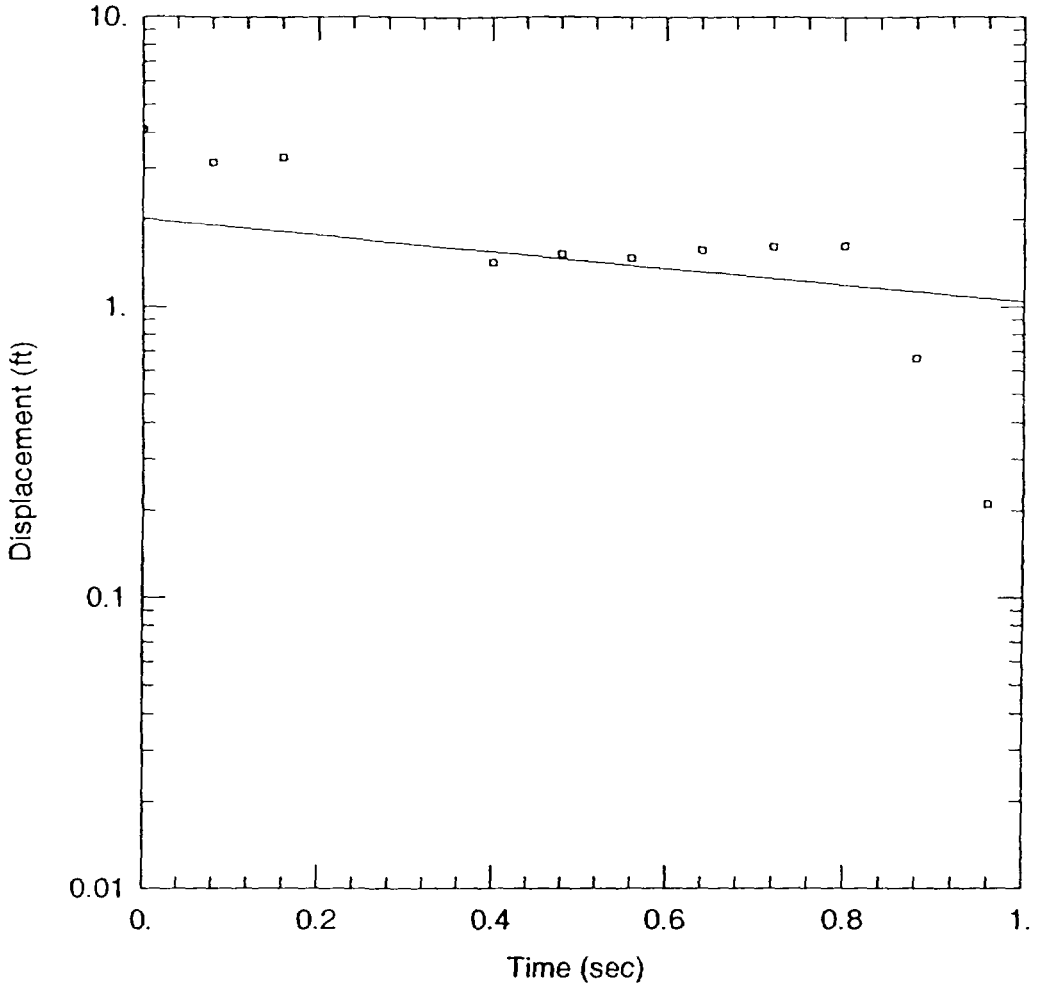
Parameter Correlations

	K	y0
K	1.00	0.83
y0	0.83	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 21.17 ft^2
Variance . . . . . 2.117 ft^2
Std. Deviation . . . . . 1.455 ft
Mean . . . . . 0.009191 ft
No. of Residuals . . . . . 12.
No. of Estimates 2



AREA H INTERMEDIATE HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STHint.aqt
Date: 02/21/01 Time: 16:06:51

PROJECT INFORMATION

Test Well: IntermediateSiteH

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STHINT)

Initial Displacement: 4.102 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0007017 ft/sec
y0 = 2.006 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STHD.aqt
Title: Area H Deep Horizon
Date: 02/21/01
Time: 16:05:17

PROJECT INFORMATION

Test Well: DeepSiteH

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 6.2 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 22

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.1	-1.623	1.2	1.484
0.2	2.631	1.3	1.84
0.3	2.15	1.4	2.404
0.4	2.058	1.5	2.055
0.5	1.368	1.6	1.5
0.6	1.779	1.7	2.483
0.7	1.203	1.8	2.112
0.8	1.408	1.9	-0.3206
0.9	1.984	2.	-1.429
1.	1.916	2.1	-0.7344
1.1	-1.503	2.2	0.5393

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0006037	ft/sec
y0	3.014	ft

JTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0006037	0.000377	ft/sec
y0	3.014	0.8602	ft

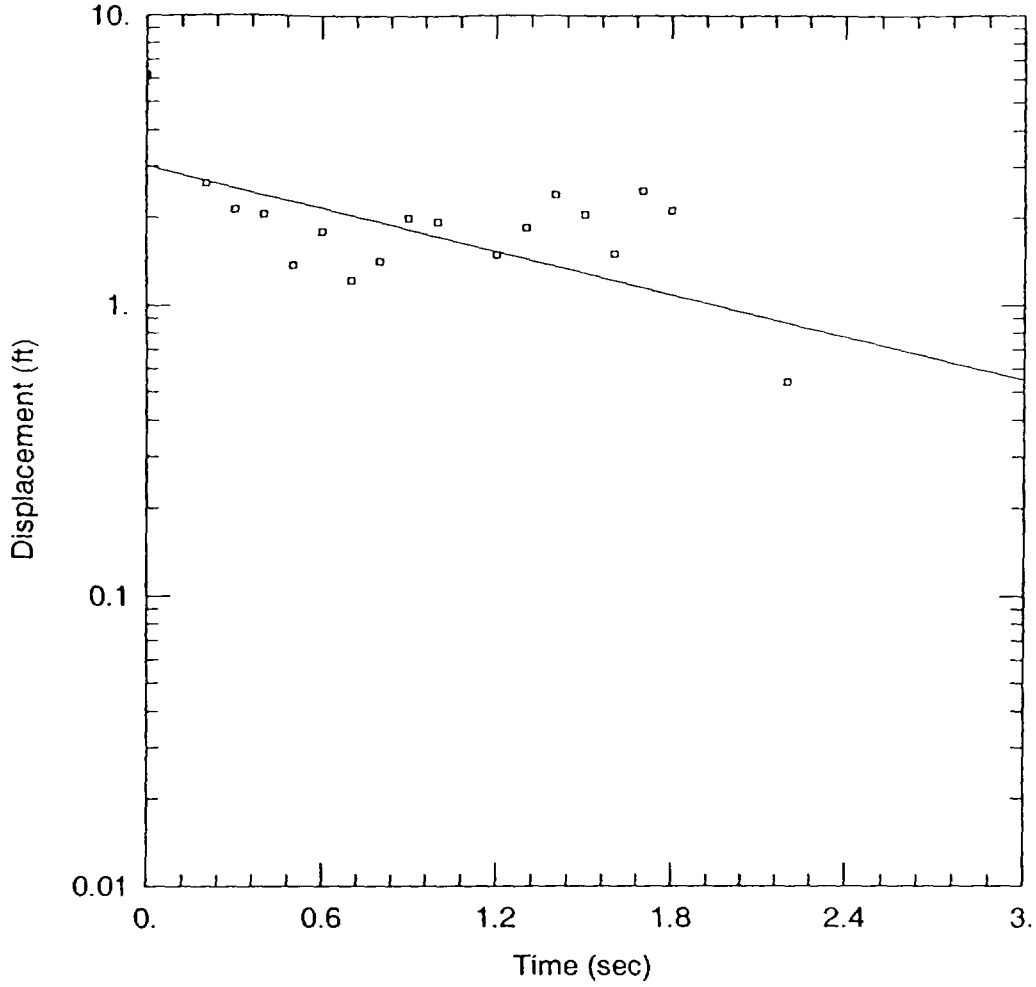
Parameter Correlations

	K	y0
K	1.00	0.83
y0	0.83	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 24.87 ft^2
Variance . . . . . 1.309 ft^2
Std. Deviation . . . . . 1.144 ft
Mean . . . . . -0.0131 ft
No. of Residuals . . . . . 21.
No. of Estimates 2



AREA H DEEP HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STHD.aqt
Date: 02/21/01 Time: 16:05:29

PROJECT INFORMATION

Test Well: DeepSiteH

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STHD)

Initial Displacement: 6.2 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0006037 ft/sec
y0 = 3.014 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STISh.aqt
Title: Area I Shallow Horizon
Date: 02/21/01
Time: 16:09:49

PROJECT INFORMATION

Test Well: ShallowSiteEye

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 1. ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 22

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
1.	0.9077	12.	0.1823
1.	0.7377	13.	0.1614
3.	0.6141	14.	0.1412
4.	0.5199	15.	0.122
5.	0.4448	16.	0.104
6.	0.3845	17.	0.08702
7.	0.334	18.	0.07041
8.	0.2935	19.	0.05308
9.	0.2592	20.	0.03575
10.	0.2307	21.	0.01806
11.	0.2054	22.	0.00036

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0001486	ft/sec
y0	0.9348	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0001486	1.573E-05	ft/sec
y0	0.9348	0.02523	ft

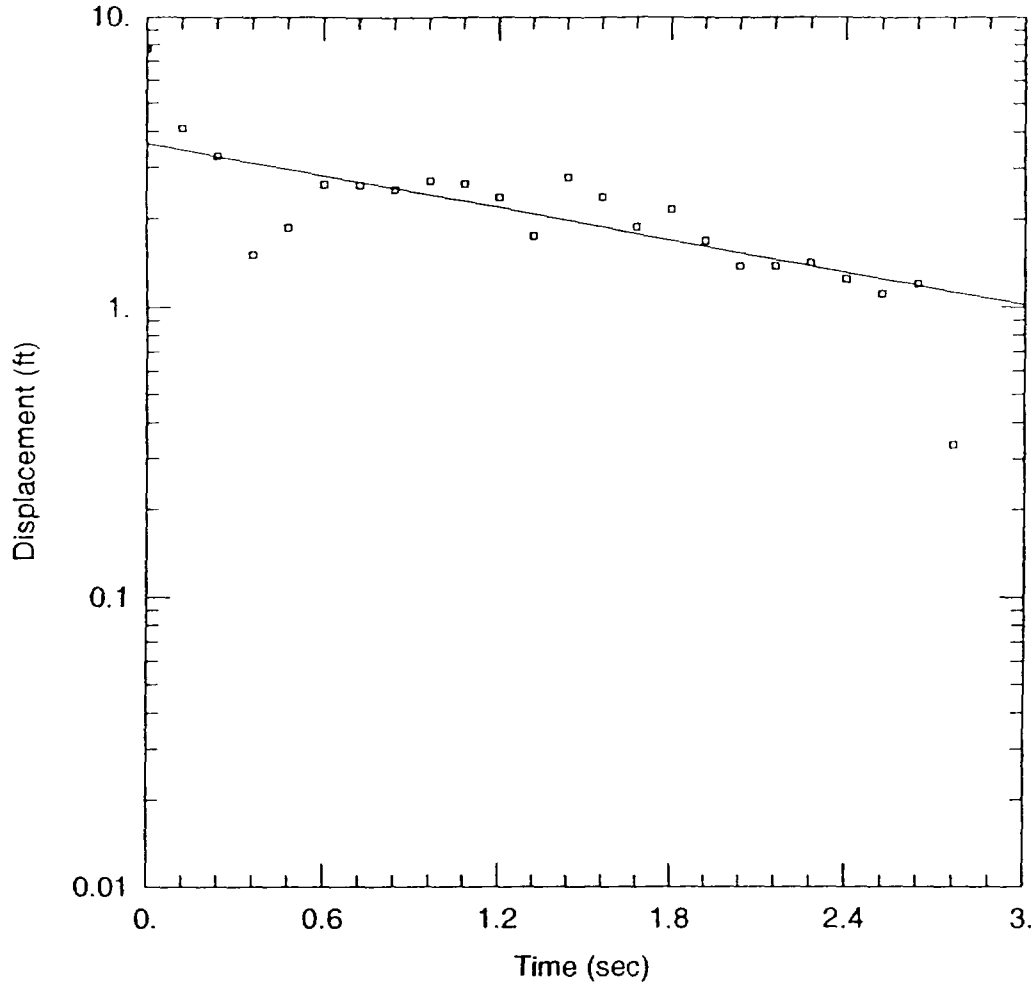
Parameter Correlations

	K	y0
K	1.00	0.73
y0	0.73	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 0.01904 ft^2
Variance . . . . . 0.0009518 ft^2
Std. Deviation . . . . . 0.03085 ft
Mean . . . . . -0.00114 ft
No. of Residuals . . . . . 22.
No. of Estimates 2



AREA N DEEP HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STND.aqt
Date: 02/21/01 Time: 16:14:21

PROJECT INFORMATION

Test Well: DeepSiteN

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STND)

Initial Displacement: 7.776 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.000451 ft/sec
y0 = 3.624 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STND.aqt
Title: Area N Deep Horizon
Date: 02/21/01
Time: 16:14:11

PROJECT INFORMATION

Test Well: DeepSiteN

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 7.776 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 25

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.12	4.086	1.68	1.874
0.24	3.282	1.8	2.152
0.36	1.513	1.92	1.678
0.48	1.87	2.04	1.372
0.6	2.618	2.16	1.373
0.72	2.604	2.28	1.409
0.84	2.514	2.4	1.246
0.96	2.687	2.52	1.112
1.08	2.63	2.64	1.2
1.2	2.354	2.76	0.3358
1.32	1.745	2.88	-1.12
1.44	2.755	3.	-3.876
1.56	2.362		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.000451	ft/sec
y0	3.624	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.000451	0.0002204	ft/sec
y0	3.624	0.8742	ft

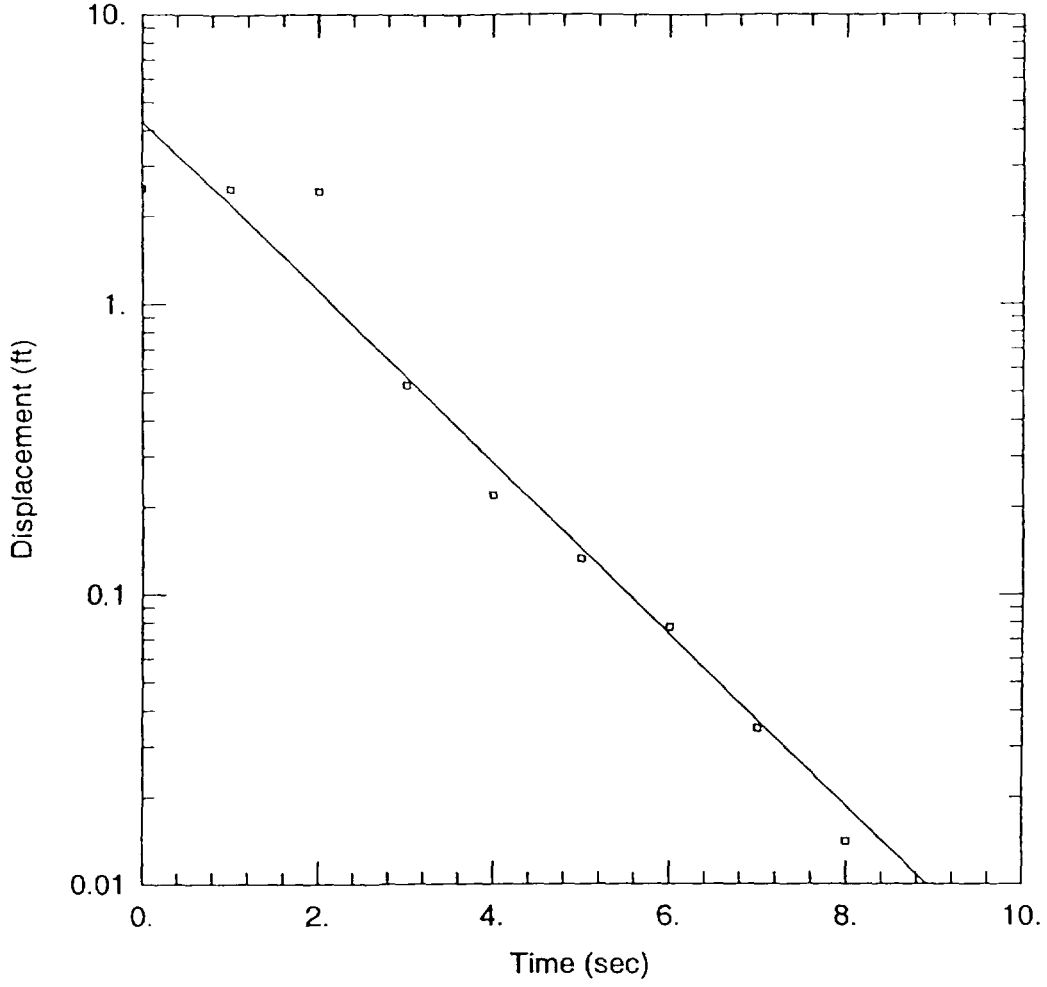
Parameter Correlations

	K	y0
K	1.00	0.82
y0	0.82	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 32. ft^2
Variance . . . . . 1.454 ft^2
Std. Deviation . . . . . 1.206 ft
Mean . . . . . -0.07024 ft
No. of Residuals . . . . . 24.
No. of Estimates 2



AREA N INTERMEDIATE HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STNInt.aqt
Date: 02/21/01 Time: 16:14:46

PROJECT INFORMATION

Test Well: IntermediateSiteN

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STNINT)

Initial Displacement: 2.51 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0007232 ft/sec
y0 = 4.299 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STNInt.aqt
Title: Area N Intermediate Horizon
Date: 02/21/01
Time: 16:14:40

PROJECT INFORMATION

Test Well: IntermediateSiteN

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 2.51 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 10

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
1.	2.463	6.	0.07691
2.	2.427	7.	0.03466
3.	0.5243	8.	0.01408
4.	0.2199	9.	0.00542
5.	0.1321	10.	-0.00433

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0007232	ft/sec
y0	4.299	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0007232	0.0001043	ft/sec
y0	4.299	8.344	ft

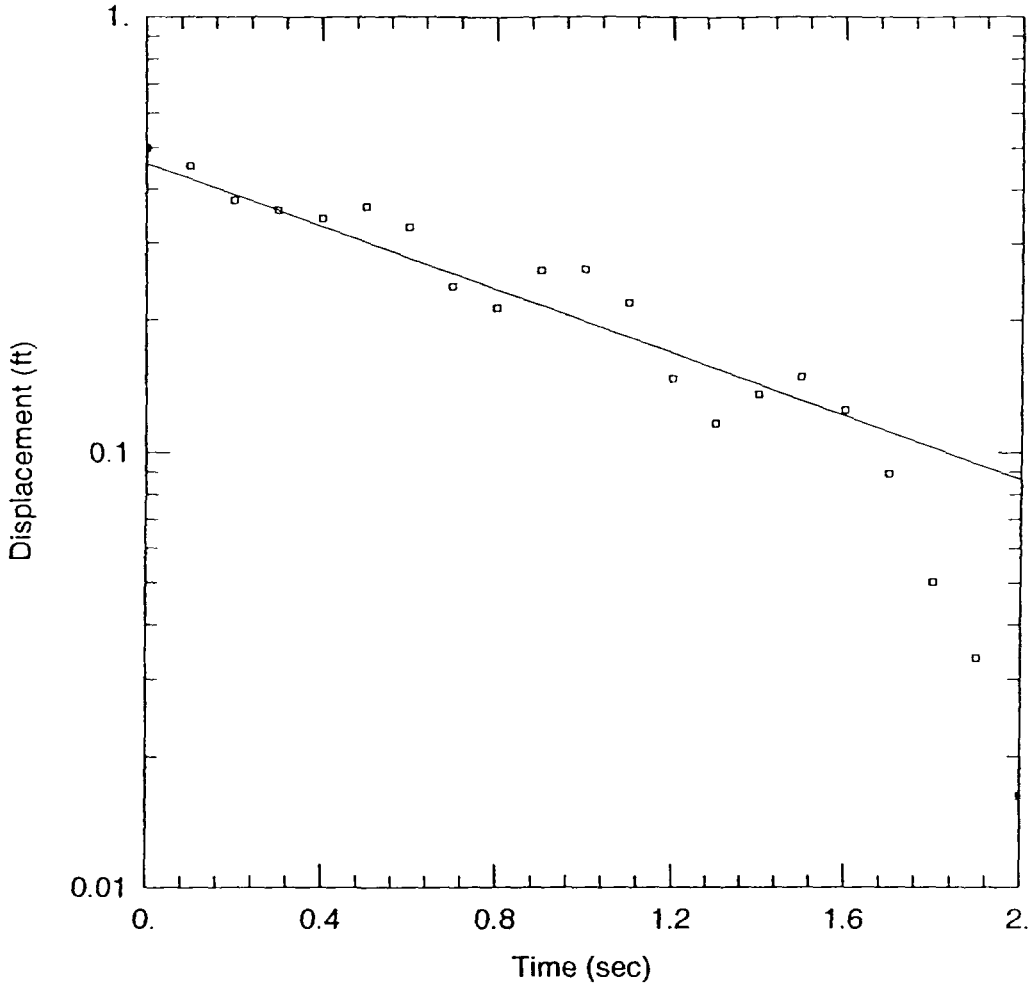
Parameter Correlations

	K	y0
K	1.00	0.99
y0	0.99	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 0.02551 ft^2
Variance . . . . . 0.003644 ft^2
Std. Deviation . . . . . 0.06037 ft
Mean . . . . . 0.02687 ft
No. of Residuals . . . . . 9.
No. of Estimates 2



AREA N SHALLOW HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STNSh.aqt
Date: 02/21/01 Time: 16:15:13

PROJECT INFORMATION

Test Well: ShallowSiteN

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STNSH)

Initial Displacement: 0.5 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0008875 ft/sec
y0 = 0.4588 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STNSh.aqt
Title: Area N Shallow Horizon
Date: 02/21/01
Time: 16:15:06

PROJECT INFORMATION

Test Well: ShallowSiteN

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 0.5 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 20

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.1	0.4521	1.1	0.2192
0.2	0.3759	1.2	0.1473
0.3	0.3571	1.3	0.1159
0.4	0.3427	1.4	0.1351
0.5	0.3647	1.5	0.149
0.6	0.3278	1.6	0.1246
0.7	0.2394	1.7	0.08918
0.8	0.2134	1.8	0.05019
0.9	0.26	1.9	0.03358
1.	0.2621	2.	0.01625

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0008875	ft/sec
y0	0.4588	ft

UTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0008875	0.0001003	ft/sec
y0	0.4588	0.03573	ft

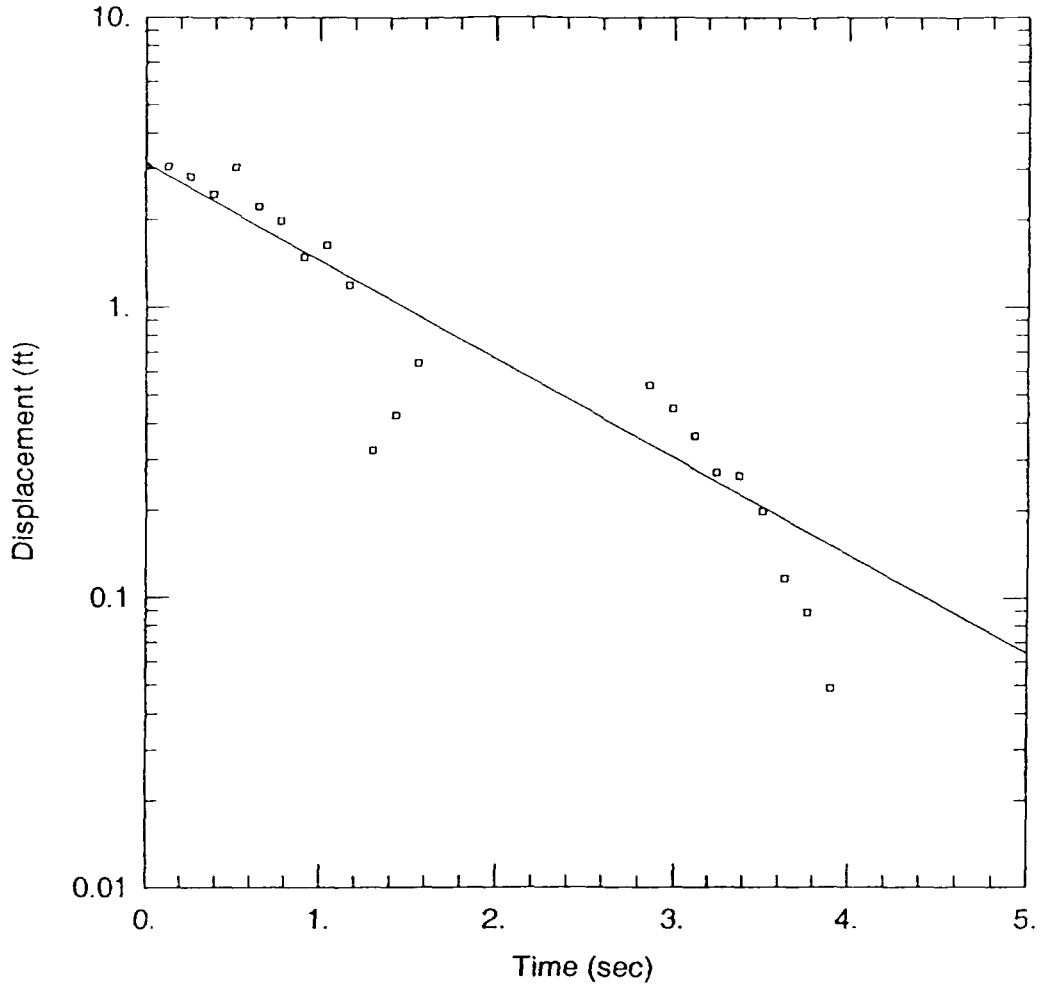
Parameter Correlations

	K	y0
K	1.00	0.83
y0	0.83	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 0.02565 ft^2
Variance . . . . . 0.001509 ft^2
Std. Deviation . . . . . 0.03884 ft
Mean . . . . . -0.002744 ft
No. of Residuals . . . . . 19.
No. of Estimates 2



AREA L DEEP HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STLD.aqt
Date: 02/21/01 Time: 16:12:48

PROJECT INFORMATION

Test Well: DeepSiteL

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STLD)

Initial Displacement: 3.065 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0008279 ft/sec
y0 = 3.144 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STLD.aqt
Title: Area L Deep Horizon
Date: 02/21/01
Time: 16:12:42

PROJECT INFORMATION

Test Well: DeepSiteL

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 3.065 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 24

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.13	3.043	2.86	0.5405
0.26	2.811	2.99	0.4484
0.39	2.446	3.12	0.3629
0.52	3.03	3.25	0.2708
0.65	2.223	3.38	0.2621
0.78	1.977	3.51	0.1977
0.91	1.488	3.64	0.1159
1.04	1.628	3.77	0.08882
1.17	1.189	3.9	0.04875
1.3	0.3217	4.03	-0.00758
1.43	0.4246	4.16	-0.0769
1.56	0.6434	4.29	-0.09749

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0008279	ft/sec
y0	3.144	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0008279	0.0001378	ft/sec
y0	3.144	0.3744	ft

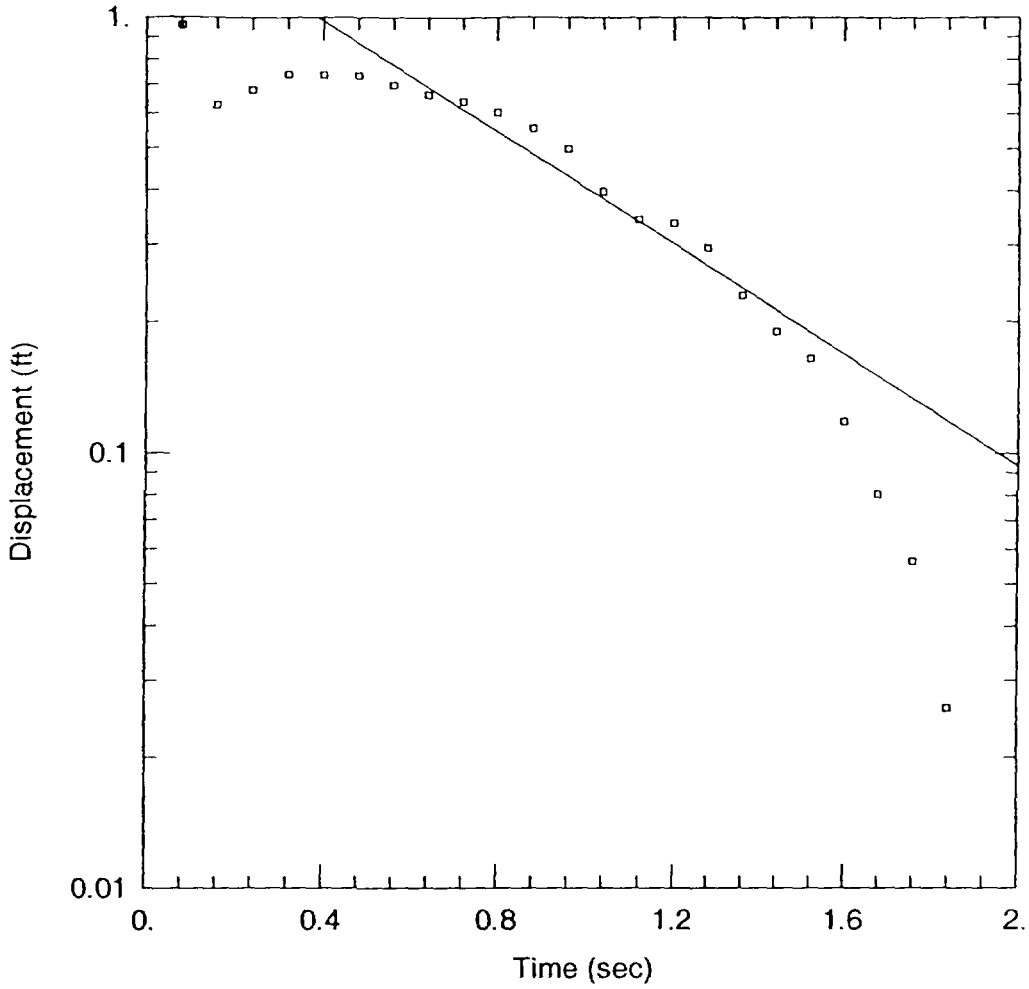
Parameter Correlations

	K	y0
K	1.00	0.85
y0	0.85	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 1.827 ft^2
Variance . . . . . 0.08698 ft^2
Std. Deviation . . . . . 0.2949 ft
Mean . . . . . 0.0162 ft
No. of Residuals 23
No. of Estimates 2



AREA L INTERMEDIATE HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STLInt.aqt
Date: 02/21/01 Time: 16:13:12

PROJECT INFORMATION

Test Well: IntermediateSiteL

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STLINT)

Initial Displacement: 1.1 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.001562 ft/sec
y0 = 1.762 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STLInt.aqt
Title: Area L Intermediate Horizon
Date: 02/21/01
Time: 16:13:05

PROJECT INFORMATION

Test Well: IntermediateSiteL

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 1.1 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 25

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.08	0.9584	1.12	0.3434
0.16	0.625	1.2	0.3358
0.24	0.6792	1.28	0.2957
0.32	0.7377	1.36	0.2296
0.4	0.7355	1.44	0.1896
0.48	0.7311	1.52	0.1646
0.56	0.6965	1.6	0.1181
0.64	0.6597	1.68	0.08015
0.72	0.638	1.76	0.05632
0.8	0.6033	1.84	0.02599
0.88	0.5557	1.92	-0.00217
0.96	0.4983	2.	-0.02167
1.04	0.3975		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001562	ft/sec
y0	1.762	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.001562	0.0001356	ft/sec
y0	1.762	0.09197	ft

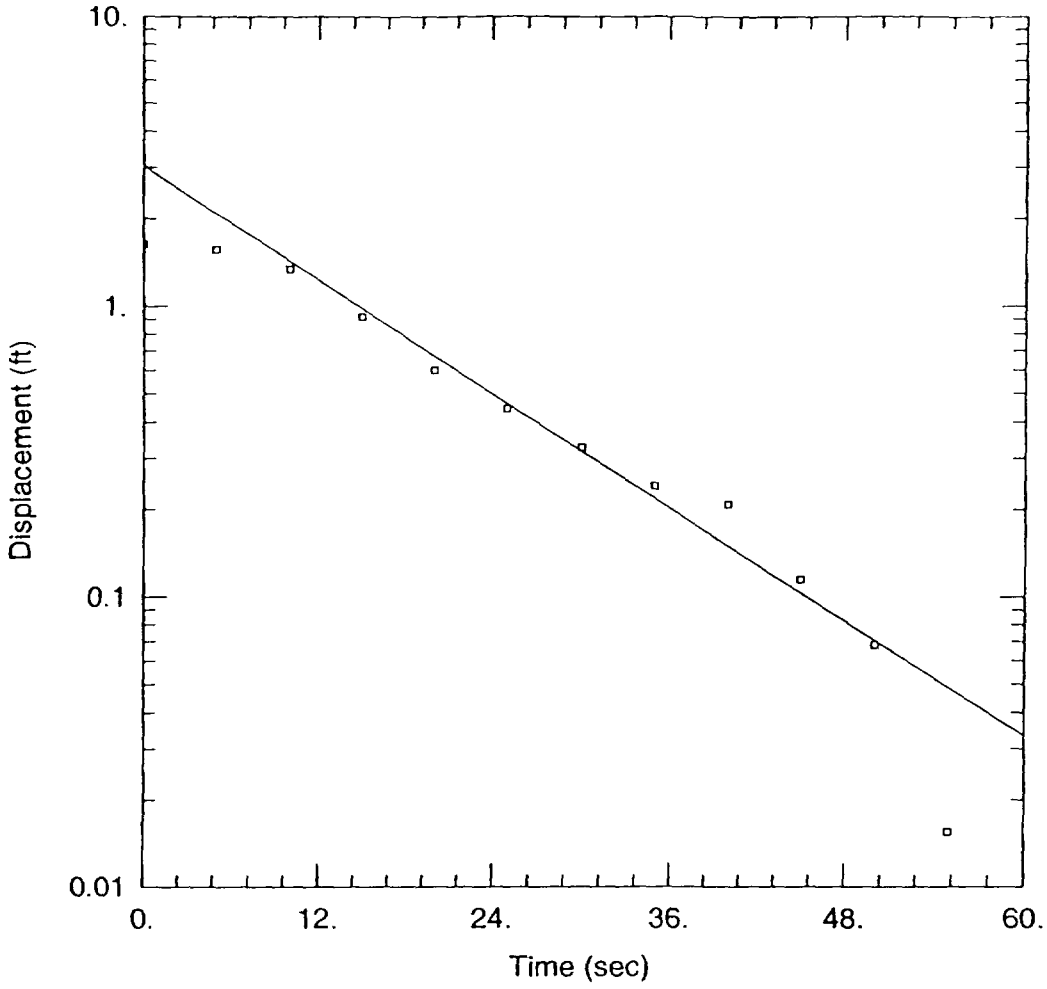
Parameter Correlations

	K	y0
K	1.00	0.82
y0	0 82	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 0.2961 ft^2
Variance . . . . . 0.01346 ft^2
Std. Deviation . . . . . 0.116 ft
Mean . . . . . -0.01324 ft
No. of Residuals . . . . . 24.
No. of Estimates 2



AREA L SHALLOW HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STLSh.aqt
Date: 02/21/01 Time: 16:13:44

PROJECT INFORMATION

Test Well: ShallowSiteL

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STLSH)

Initial Displacement: 1.63 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 7.992E-05 ft/sec
y0 = 3.023 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STLSh.aqt
Title: Area L Shallow Horizon
Date: 02/21/01
Time: 16:13:36

PROJECT INFORMATION

Test Well: ShallowSiteL

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 1.63 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 12

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
5.	1.568	35.	0.2401
10.	1.335	40.	0.2087
15.	0.9146	45.	0.1145
20.	0.6012	50.	0.06788
25.	0.4423	55.	0.01553
30.	0.3275	60.	-0.03863

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	7.992E-05	ft/sec
y0	3.023	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	7.992E-05	3.322E-06	ft/sec
y0	3.023	0.1364	ft

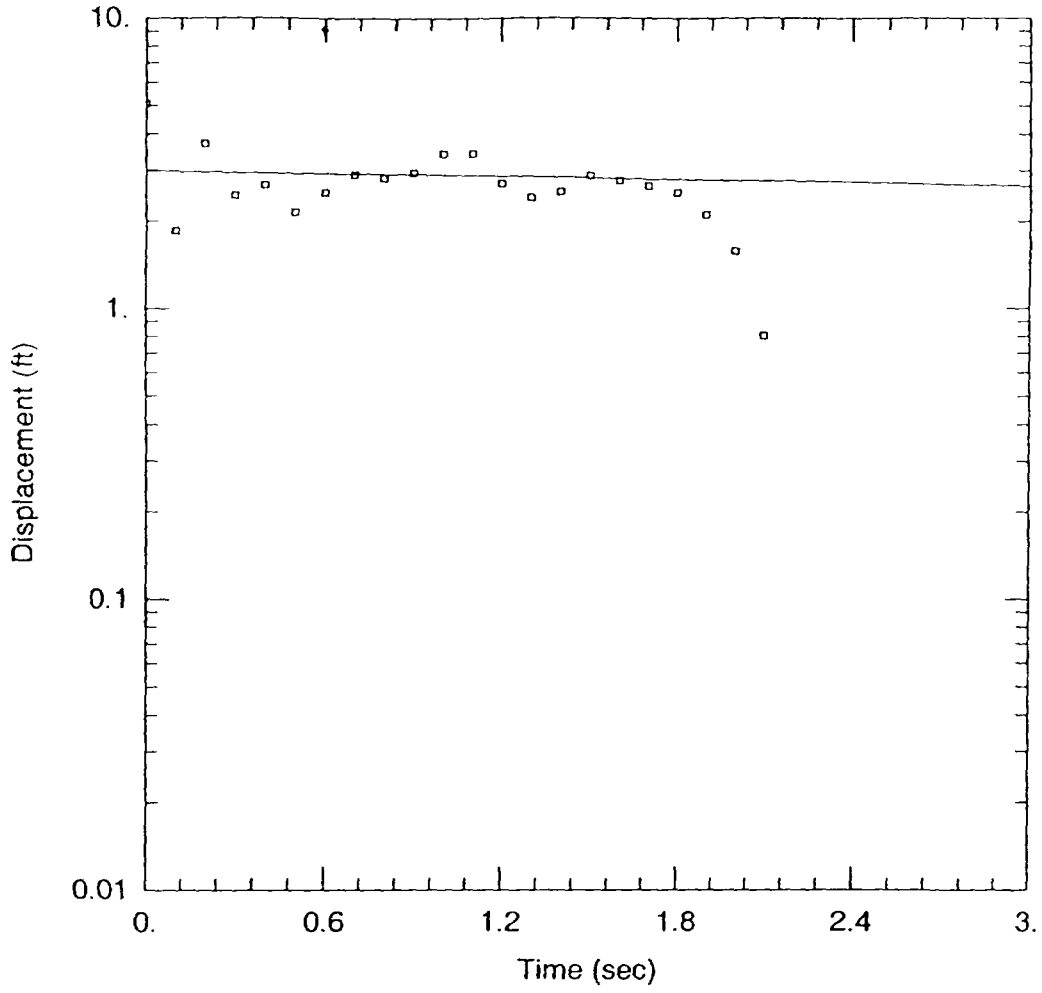
Parameter Correlations

	K	y0
K	1.00	0.91
y0	0.91	1.00

Residual Statistics

for weighted residuals

Sum of Squares	0.01287 ft^2
Variance	0.00143 ft^2
Std. Deviation	0.03782 ft
Mean	-0.003811 ft
No. of Residuals	11.
No. of Estimates	2



AREA I DEEP HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STID.aqt
Date: 02/21/01 Time: 16:09:01

PROJECT INFORMATION

Test Well: DeepSiteEye

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STID)

Initial Displacement: 5.085 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.004175 ft/sec
y0 = 2.988 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STID.aqt
Title: Area I Deep Horizon
Date: 02/21/01
Time: 16:08:50

PROJECT INFORMATION

Test Well: DeepSiteEye

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 5.085 ft
Casing Radius: 0.833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 22

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.1	1.852	1.2	2.694
0.2	3.715	1.3	2.41
0.3	2.472	1.4	2.516
0.4	2.677	1.5	2.862
0.5	2.145	1.6	2.763
0.6	2.507	1.7	2.647
0.7	2.885	1.8	2.501
0.8	2.802	1.9	2.108
0.9	2.92	2.	1.571
1.	3.413	2.1	0.7988
1.1	3.41	2.2	-0.02979

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.004175	ft/sec
y0	2.988	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.004175	0.01117	ft/sec
y0	2.988	0.3795	ft

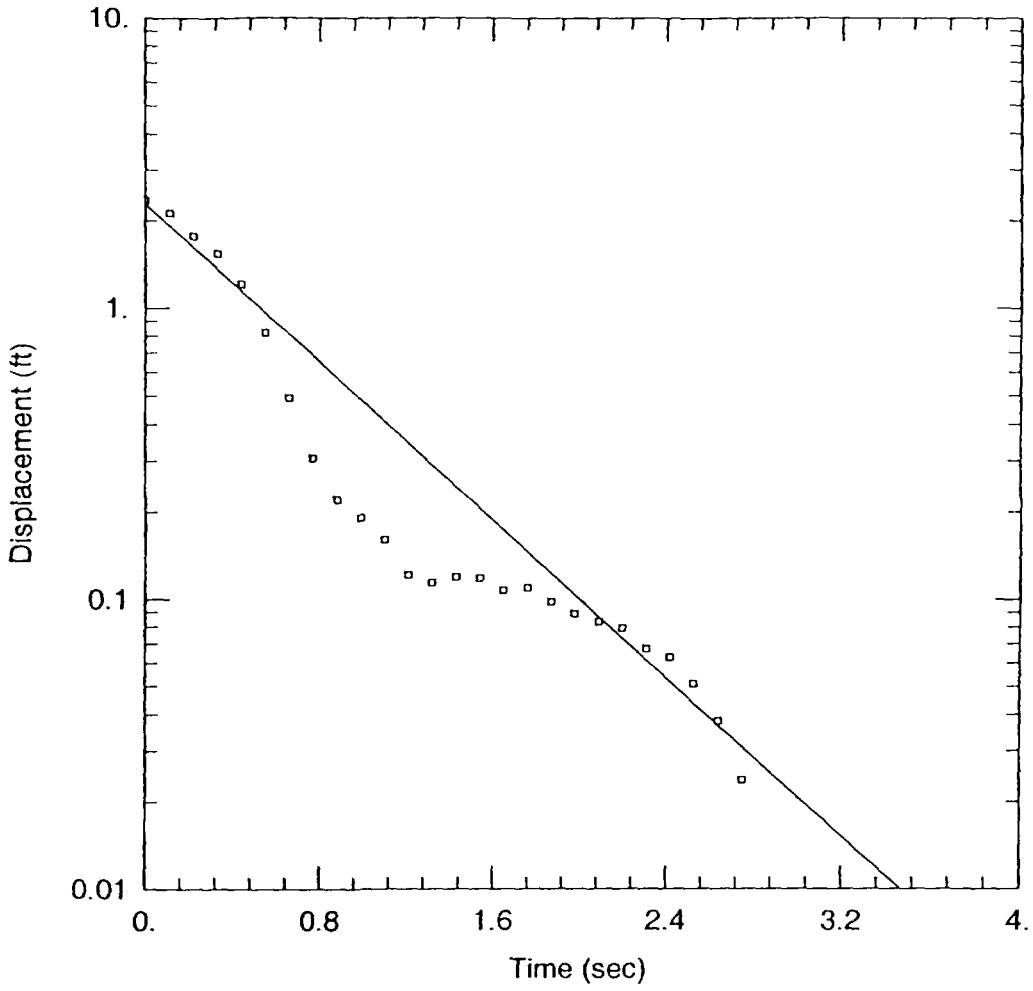
Parameter Correlations

	K	y0
K	1.00	0.84
y0	0 84	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . 11.26 ft^2
Variance . . . . . 0.5629 ft^2
Std. Deviation . . . . . 0.7503 ft
Mean . . . . . -0.00501 ft
No. of Residuals . . . . . 22.
No. of Estimates 2



AREA I INTERMEDIATE HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STIInt.aqt
Date: 02/21/01 Time: 16:09:32

PROJECT INFORMATION

Test Well: IntermediateSiteEye

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

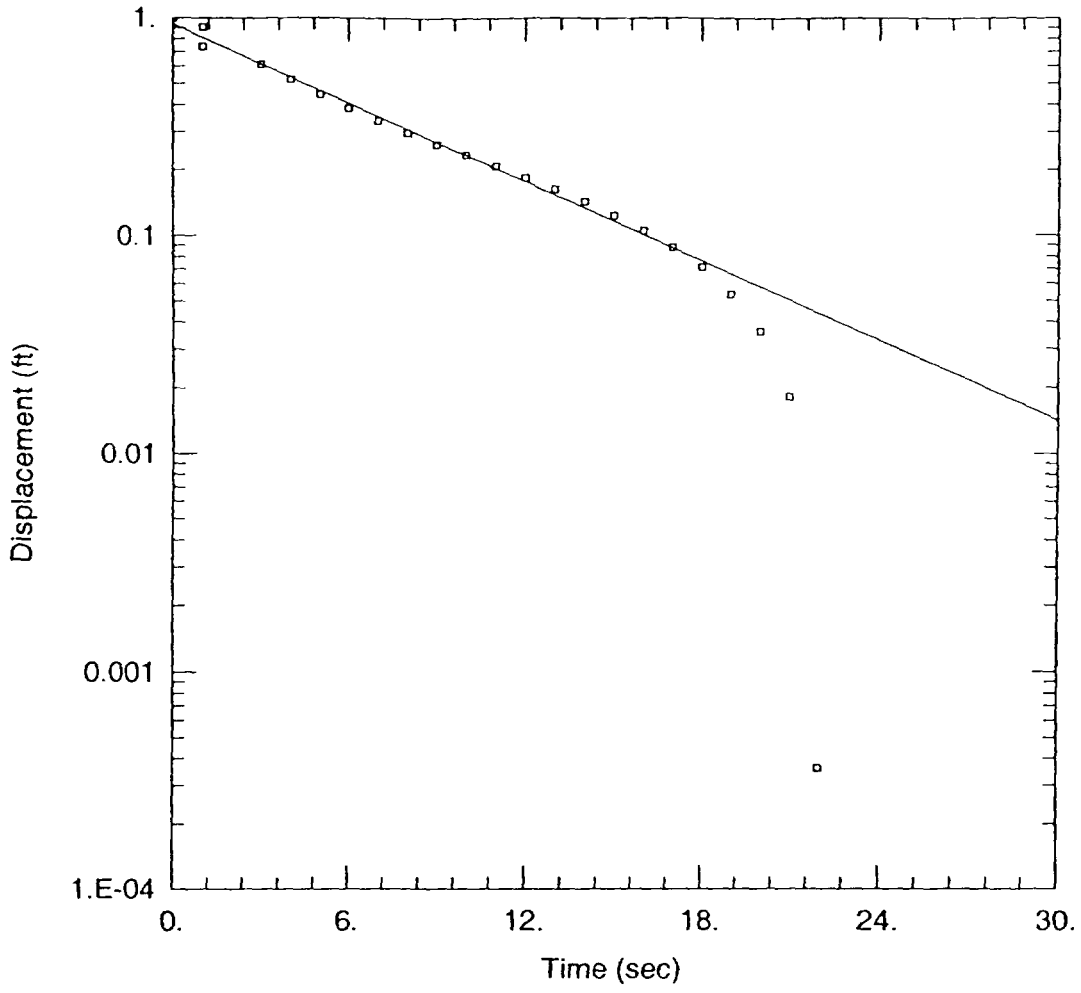
WELL DATA (STIINT)

Initial Displacement: 2.361 ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.001664 ft/sec
y0 = 2.282 ft



AREA I SHALLOW HORIZON

Data Set: \\Server\shared\Projects\Solutia\Sauget\STISh.aqt
Date: 02/21/01 Time: 16:09:58

PROJECT INFORMATION

Test Well: ShallowSiteEye

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (STISH)

Initial Displacement: 1. ft
Wellbore Radius: 0.333 ft
Screen Length: 5. ft
Casing Radius: 0.0833 ft
Well Skin Radius: 0.666 ft
Total Well Penetration Depth: 5. ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0001486 ft/sec
y0 = 0.9348 ft

Data Set: \\Server\shared\Projects\Solutia\Sauget\STIInt.aqt
Title: Area I Intermediate Horizon
Date: 02/21/01
Time: 16:09:21

PROJECT INFORMATION

Test Well: IntermediateSiteEye

AQUIFER DATA

Saturated Thickness: 93. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Initial Displacement: 2.361 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.666 ft
Screen Length: 5. ft
Total Well Penetration Depth: 5. ft
Gravel Pack Porosity: 0.

No. of observations: 28

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.11	2.117	1.65	0.1072
0.22	1.772	1.76	0.1094
0.33	1.544	1.87	0.09749
0.44	1.21	1.98	0.08882
0.55	0.8265	2.09	0.08341
0.66	0.4929	2.2	0.07908
0.77	0.3065	2.31	0.06716
0.88	0.221	2.42	0.06283
0.99	0.1906	2.53	0.05091
1.1	0.1603	2.64	0.03791
1.21	0.1213	2.75	0.02383
1.32	0.1137	2.86	0.00758
1.43	0.1192	2.97	-0.013
1.54	0.1181	3.08	-0.02599

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001664	ft/sec
y0	2.282	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.001664	0.0001299	ft/sec
y0	2.282	0.1212	ft

Parameter Correlations

	K	y0
K	1.00	0.79
y0	0.79	1.00

Residual Statistics

for weighted residuals

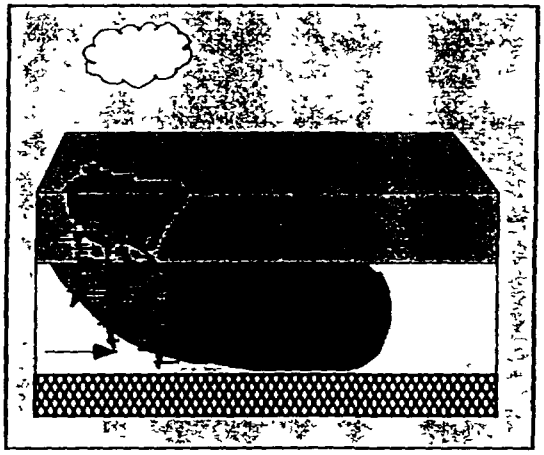
Sum of Squares . . . . . 0.205 ft^2
Variance . . . . . 0.007883 ft^2
Std. Deviation . . . . . 0.08879 ft
Mean . . . . . 0.01025 ft
No. of Residuals . . . . . 28.
No. of Estimates 2

APPENDIX D
SOURCE EVALUATION STUDY
SAUGET AREA 1

SOURCE EVALUATION STUDY

Sauget Area 1

Sauget and Cahokia, Illinois



Submitted to
Solutia Inc.

May 21, 2001

Groundwater Services, Inc.
2211 Norfolk, Suite 1000, Houston, Texas 77098

May 21, 2001

GROUNDWATER
SERVICES, INC.

EXECUTIVE SUMMARY

An evaluation of the source of impacted groundwater at Site I within Sauget Area 1 was performed to evaluate two questions:

1) *What is the dominant source mechanism at the site?*
2) *What is the effect of an intensive pump-and-treat system on the lifetime of the source?*

Dominant Source Mechanism

Two source mechanisms that have the potential to be active at the Sauget site are: 1) *leaching* of unsaturated source materials, and 2) residual Dense Nonaqueous Phase Liquid *(DNAPL) dissolution* (see Figure 1). Six general indicators were evaluated to assess which of these two source mechanisms are primarily responsible for the observed plumes associated with Site I.

The analysis indicated that *DNAPL dissolution* is a major source mechanism at Site I based on an analysis of six different indicators. The following indicators support the conclusion that trapped residual DNAPL is present: dissolved constituent concentrations increase with depth, site constituents extend from the water table to the bottom of the water-bearing interval, and three constituents are found at concentrations that suggest the possible presence of non-mobile residual DNAPL. Some leaching of unsaturated waste/soil materials may also be occurring, as some constituents did not show increasing concentrations with depth. Overall, however, DNAPL dissolution appears to be the dominant source mechanism at Site I.

Source Conceptual Model

If DNAPL dissolution is the dominant source mechanism at Site I, it is likely that the DNAPL in the unconsolidated valley fill deposits is present as thin vertical fingers and small horizontal pools throughout the entire vertical extent of the water-bearing unit. Only a small fraction of the total DNAPL mass can ever be removed by pumping any "free-phase" DNAPL pools, if they are found. The rest of the DNAPL is immobile, and will serve as a long-term continuing source of constituents to groundwater.

The current natural mass removal rate via dissolution from the Site I source zone was estimated to be 7000 kg/yr assuming uniform source concentrations throughout the source zone.

Effect of Pumping

As shown by DNAPL dissolution expressions, increasing the flow rate through a DNAPL source zone will significantly decrease the concentration of constituents in the extracted groundwater. For example, if the flowrate through a DNAPL source zone is increased by a factor of 8.9 (to 1500 gpm) due to intensive pumping, the resulting concentration is likely to decrease by a factor of 3.6 while pumping is active, resulting in an overall increase in the mass removal rate of only 2.5 times. Therefore, an intensive pump-and-treat system at Site I with 8.9 times the natural flowrate through the source area (an achievable pumping rate if there is no reinjection) would result in an initial mass removal rate of 17,500 kg/yr.

A planning level source lifetime calculation was done to estimate the relative performance of various remediation schemes. This analysis, while not providing high-confidence estimates of the absolute time to cleanup, does indicate that with an assumed mass of 410,000 kg of VOCs + SVOCs in the saturated zone below Site I, intensive pumping over a 10 to 30 year period does not appear to have an appreciable effect on overall source lifetime (i.e., $\leq$ 10% reduction). Similar limitations are expected for Sites G/H/L as well.

INTRODUCTION

As requested by Solutia Inc. (Solutia), Groundwater Services, Inc. (GSI), has completed a study of hydrogeologic, source, and fate and transport data from the Sauget Area 1 located in Sauget and Cahokia, Illinois. The study was conducted to: 1) help determine what type of source mechanisms are responsible for dissolved constituents found in the affected groundwater, and 2) determine the feasibility of remediating this source area by aggressive pumping. This letter report summarizes the results of the study.

PROJECT BACKGROUND

An extensive RI/FS study of Sauget Area 1 is now being conducted by Solutia. Data from two groundwater monitoring well transects indicates the presence of dissolved constituents migrating west in groundwater from the vicinity of one of the six source areas in Area 1 (i.e., Site I) at concentrations exceeding Illinois Class II groundwater standards.

Source Site I

Site I originally was a sand and gravel pit which received industrial and municipal wastes from 1931 to 1957. Site I is approximately 19 acres in area and underlies a large, fenced, controlled-access, gravel covered truck parking lot and the Sauget City Hall and associated parking lots (Sauget Area 1 EE/CA and RI/FS Support Sampling Plan). Soil samples collected from Site I have indicated elevated levels of volatile organic compounds (e.g., benzene, chlorobenzene); semi-volatile organic compounds (e.g., naphthalene, trichlorobenzene); pesticides; herbicides; PCBs; and metals.

Hydrogeology

Sauget Area 1 is located in the Mississippi River floodplain in an area referred to as the American Bottoms. The geology of the area is described as consisting of unconsolidated valley fill deposits (Cahokia Alluvium) overlying glacial outwash material (Henry Formation). In general, the permeability of the unconsolidated material increases with depth, with the outwash material being comprised of medium- to coarse-grained sand and gravel. The hydrogeologic conceptual model divides the unconsolidated water-bearing unit into three horizons: the shallow horizon (generally 15-30 ft deep), the middle horizon (generally 30-70 ft deep), and the deep horizon (generally 70-110 ft deep).

These unconsolidated deposits are underlain by limestone and dolomite bedrock.

Study Constituents

For this study, two classes of constituents were evaluated. The two constituent classes were selected based on prevalence and concentration in groundwater, and include:

- Volatile Organic Compounds (chlorinated and non-chlorinated), and
- Semi-Volatile Organic Compounds (chlorinated and non-chlorinated).

SOURCE MECHANISMS

Knowledge of which source mechanisms are active at a site is important for developing an accurate conceptual model of constituent fate and transport, and for developing appropriate remedial responses. Two source mechanisms that have the potential to be active at the Sauget site are leaching of unsaturated source materials and residual DNAPL dissolution (see Figure 1).

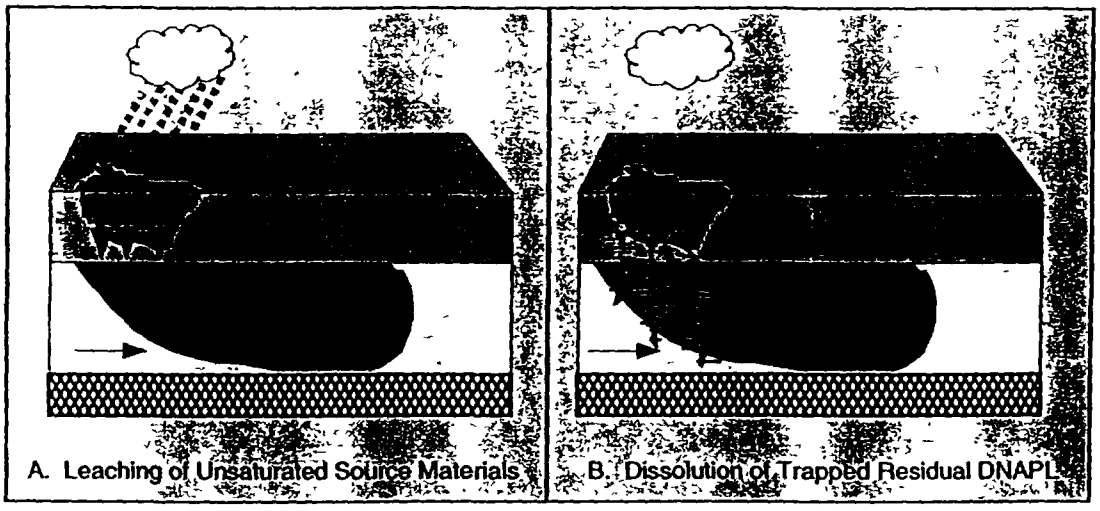


FIGURE 1. Two Potential Groundwater Source Mechanisms

Leaching of unsaturated source materials (see Panel A in Figure 1) results from infiltration of rainfall through near-surface source materials such as waste materials in the source areas and contaminated unsaturated soils. Residual DNAPL dissolution (see Panel B in Figure 1) occurs when soluble organic

constituents dissolve from trapped residual DNAPL fingers and pools that entered the subsurface when the source area was active.

EVIDENCE OF SOURCE MECHANISMS

The available groundwater data were evaluated to help assess the likelihood that the two most likely source mechanisms are present at the site. The following six indicators were used:

General Indicators of Strong DNAPL Dissolution Processes:

- Indicator 1: Concentrations are generally increasing with depth.
- Indicator 2: Constituents are found deep in the water-bearing unit.
- Indicator 3: Concentrations are above 1% of the pure-phase solubility.
- Indicator 4: Results of EPA Quick Reference Fact Sheet "Estimating Potential for Occurrence of DNAPL at Superfund Sites," (Newell and Ross, 1992).

General Indicators of Strong Soil Leaching Processes:

- Indicator 5: Leachate concentrations (as indicated from TCLP tests of unsaturated waste materials) are greater than groundwater concentrations in the shallow horizon.
- Indicator 6: Concentrations in the shallowest horizon are greater than in deeper horizons.

To assess these indicators, groundwater constituent data were compiled (see Tables 1-2). Data from the groundwater transect (well AA-I-S1 for Site I) were used to evaluate constituent concentrations in the shallow horizon (< 30 ft deep) vs. middle horizon (30-70 ft deep) vs. deep horizon (70-110 ft deep) (see Table 1). Note that only the transect monitoring well closest to the source area was evaluated.

RESULTS

Indicator 1: An evaluation of groundwater data for Site I shows that the sum of *maximum* detectable VOCs + SVOCs in groundwater concentrations from the deep horizon is 47.5 mg/L, compared to only 22.1 mg/L in the shallow horizon (see Table 1). This trend is also seen in the majority of the individual VOC and SVOC constituents. For example, the maximum chlorobenzene concentration increases from 8.7 mg/L in the shallow horizon, to 20 mg/L in the middle horizon, and to 34 mg/L in the deep horizon. Of the five constituents with maximum concentrations greater than 1 mg/L, three (chlorobenzene, 1,2,4-trichlorobenzene, and 1,4-dichlorobenzene) have their maximum

concentrations in the middle or deep horizon. The other two, cis/trans 1,2-dichloroethene and 4-chloroaniline, have the maximum concentration in the shallow horizon.

Indicator 2: Site constituents are found throughout the entire depth of the unconsolidated unit, from the water table surface to locations over 100 ft deep.

Indicator 3: Three site constituents (chlorobenzene, 1,4 dichlorobenzene, and fluoranthene) are found in concentrations that exceed 1% of each respective pure-phase solubility (see Table 1).

Indicator 4: Based on site historical data and observed groundwater concentrations, the EPA Fact Sheet "Estimating Potential for Occurrence of DNAPL at Superfund Sites," shows a "**High-Moderate**" Potential for DNAPL at Site I.

Indicator 5: Of the six constituents where a comparison could be made, five had higher concentrations in the groundwater than in the leachate from waste materials, suggesting that leaching was not responsible for the highest groundwater concentrations at Site I (see Table 2).

Indicator 6: As described above, only two of the five constituents with concentrations greater than 1 mg/L (cis/trans 1,2-dichloroethene and 4-chloroaniline) have their maximum concentrations in the shallow horizon.

KEY POINT: SITE I SOURCE MECHANISMS

DNAPL dissolution is a major source mechanism at Site I based on an analysis of the evaluated indicators. Dissolved constituent concentrations increase with depth, site constituents extend from the water table to the bottom of the water-bearing interval, and three constituents are found at concentrations that suggest the possible presence of non-mobile residual DNAPL.

Some leaching of unsaturated waste/soil materials may also be occurring, as some constituents such as 4-chloroaniline did not show increasing concentrations with depth. Overall, however, DNAPL dissolution appears to be the dominant source mechanism at Site I.

POTENTIAL FOR SOURCE REMEDIATION

Conceptual Model of Source

The following discussion summarizes our conceptual model of the DNAPL source located in the saturated zone beneath Site I:

- DNAPL is present as "fingers" and "pools" in the saturated zone extending from approximately 15 to 110 ft below the surface (see Figure 2 for a conceptual figure).

  Supporting Information: "Once penetration of the capillary fringe occurs, downward movement will continue until all the CHC (chlorinated hydrocarbon) solvent is present as suspended fingers (ganglia) in the porous media and/or as pools of CHC perched on low-permeability zones. Once a pool starts to form on top of a low-permeability layer somewhere above the bottom of the aquifer, a continued supply of CHC will cause (1) enlargement of the pool, (2) penetration of the layer, and/or (3) spawning of new downward-moving fingers at the perimeter of the layer." Johnson and Pankow (1992)

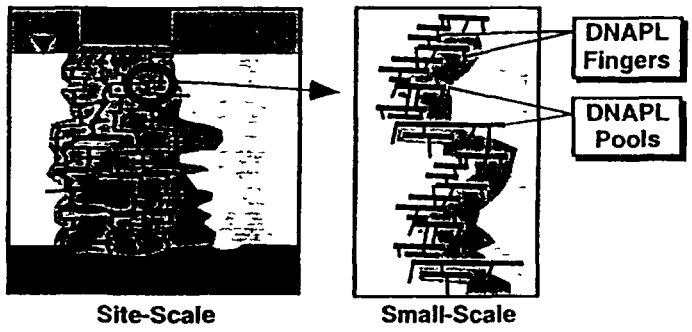


FIGURE 2. Conceptual Model of DNAPL Source Zone

- Small horizontal pools of DNAPL are present throughout the entire vertical extent of the saturated zone, and not just at the bottom of the unit.

  Supporting Information: "In granular aquifers, small horizontal zones of residual or free-phase DNAPL need not be caused by particularly low permeability zones such as silt or clay. A minor contrast in grain size distribution and hence permeability, as from a coarse sand layer to a fine sand, causes variation in DNAPL entry pressure. A DNAPL will accumulate on the finer-grained layer while spreading laterally until it reaches the edge of the layer, or until the height of the free-product accumulation on the layer exceeds the entry pressure for the layer." Pankow and Cherry (1996)

- Much or most of the DNAPL mass is present in the trapped residual state that cannot be recovered by pumping.

  Supporting Information: "Note that after the continuous NAPL body has been converted to a residual form, the individual NAPL blobs are held very tightly in the porous media by capillary forces. Wilson and Conrad (1984) evaluated the force required to mobilize and completely sweep away residual blobs in porous media in terms of the hydraulic gradient a pumping system would have to generate to either 1) begin blob mobilization, or 2) mobilize all blobs in a porous medium. This relationship, presented as a graph of hydraulic conductivity vs. required hydraulic gradient, indicates that mobilization of NAPL blobs by pumping will occur only in very coarse porous media with a very high hydraulic gradient.

The rest of the blobs will stay trapped in the porous media, serving as a long-term source of dissolved contaminants." (Wiedemeier et al., 1999)

(Note: For the unconsolidated alluvial fill deposits at this site, Wilson and Conrad's analysis indicates that a gradient of 0.5 ft/ft would be required to begin to mobilize NAPL blobs. This is 500 times the current hydraulic gradient, and impossible to effect over the entire source area without extensive pumping and re-injection).

- It is extremely unlikely that any DNAPL that may be present at the site is still mobile or will become mobile under current conditions.

  Supporting Information: "Once the release of DNAPL into the subsurface ceases, subsurface movement of DNAPL also ceases soon thereafter, perhaps within weeks or months at solvent sites. The resulting immobile DNAPL then exists in the DNAPL source zone as "residual" non-aqueous liquid and also possibly as "free-product" accumulations ponded on lower permeability layers within aquifers, or on the tops of aquitards. The free-product DNAPL will not become mobile again unless a release of more DNAPL causes further accumulation in the same zones, or unless there are changes in pressure in the surrounding water phase due to groundwater pumping or injection." Pankow and Cherry (1996)

- The presence of pools that can be pumped is relatively rare at DNAPL sites, and if such pools are found and pumped, only a small fraction of the total DNAPL in place is removed.

  Supporting Information: "In field investigations of sites where extensive solvent contamination exists, pools of free-product solvent are only rarely found, even when their existence is not in doubt." "It is the author's experience that chlorinated solvents with their high densities form thick pools only rarely." Pankow and Cherry (1996)

  "Therefore, in a practical sense, NAPL removal translates to recovery of a small percentage of NAPL at a site (i.e., whatever continuous NAPL can be collected)." Wiedemeier et al., (1999)

- The presence of DNAPL pools and fingers will only occupy a small fraction of the available pore space in the source zone.

  Supporting Information: "However, heterogeneity has a marked influence on the direction of DNAPL migration. A random distribution of permeability and displacement pressure will result in a highly erratic pattern of DNAPL flow..." "The remarkable sensitivity of DNAPL penetration to the capillary-hydraulic properties can be expected to result in highly complex, seemingly chaotic saturation distributions in the subsurface." "Even in the idealized case of a perfectly homogeneous medium, DNAPL can be expected to penetrate in the form of narrow, elongated distributions in which the mean saturation of DNAPL is small." Pankow and Cherry (1996)

- The source will persist for a long time.

  Supporting Information: "These calculations suggest that zones of residual DNAPL and especially pool DNAPL can persist in the subsurface and contribute to groundwater contamination for decades to centuries." "For most chlorinated solvents, the rate of

dissolution of pools will be sufficiently slow that the DNAPL source zones will cause significant contamination of the groundwater for centuries or more." Pankow and Cherry (1996)

- Pumping can increase the rate that mass is removed from the source, but the removal efficiency will be much less than the removal efficiency for natural attenuation.

  Supporting Information: "However, the increase in mass removal (by pumping) will not be in proportion to the increase in the groundwater pumping rate because of limitations on the DNAPL dissolution kinetics, and because of further dilution with clean water from outside the source zone." Pankow and Cherry (1996)

KEY POINT: CONCEPTUAL MODEL FOR SOURCE

Most of the Site I DNAPL in the unconsolidated valley fill deposits is present as thin vertical fingers and small horizontal pools throughout the entire vertical extent of the water-bearing unit. Only a small fraction of the total DNAPL mass can ever be removed by pumping free-phase pools, if they are found. Under current conditions, the rest of the DNAPL is immobile, and will serve as a long-term continuing source of constituents to groundwater.

ESTIMATED NATURAL DISSOLUTION RATE

Natural Groundwater Flushing Rate

Separate hydraulic conductivity and hydraulic gradient data were developed for the shallow, middle, and deep horizons of the unconsolidated deposits.

The hydraulic conductivity estimates developed for the model were based on: 1) literature reports, and 2) preliminary analysis of RI/FS slug test data. The literature reference (Ritchey and Schicht, 1982) reported that the hydraulic conductivity for the unconsolidated material used for water supply in the American Bottoms area ranged from $5x10^{-2}$ to $1.4x10^{-1}$ cm/sec.

The analysis of RI/FS slug test data from Site I wells showed the following hydraulic conductivities:

Horizon	Site I (well ST-I-S) (cm/sec)
Shallow	$4.5x10^{-3}$
Middle	$5.1x10^{-2}$
Deep	$1.3x10^{-1}$

Using the data from the literature report, slug test results, and calibration work, the following hydraulic conductivities were used in the model:

- Shallow Horizon: $1x10^{-2}$ cm/sec
- Middle Horizon: $1x10^{-1}$ cm/sec
- Deep Horizon: $1x10^{-1}$ cm/sec

Using RI/FS potentiometric surface maps provided by Roux Associates, Inc., the following hydraulic gradients were used in the model:

- Shallow Horizon: 0.001 ft/ft
- Middle Horizon: 0.001 ft/ft
- Deep Horizon: 0.001 ft/ft

These values yield the following representative values for groundwater Darcy velocity at the site:

- Shallow Horizon: 10.4 ft/yr
- Middle Horizon: 104 ft/yr
- Deep Horizon: 104 ft/yr

As shown by the data, the shallow horizon of the unconsolidated deposits is less permeable, and has a much lower groundwater velocity than the more coarse-grained middle and deep horizons.

The hydrogeologic conceptual model divides the unconsolidated water-bearing unit into three horizons: the shallow horizon (generally 15-30 ft deep), the middle horizon (generally 30-70 ft deep), and the deep horizon (generally 70-110 ft deep). Therefore the assumed saturated thicknesses for the shallow, middle, and deep units were: 15 ft, 40 ft, and 40 ft, respectively. When a 1400 ft wide source zone is assumed (the width of Site I perpendicular to groundwater flow), a naturally-occurring groundwater flushing rate of 168 gpm is obtained (3.1 gpm for the shallow unit, 82.5 gpm for the middle unit, and 82.5 gpm for the deep unit).

Natural Mass Removal Rate

The average total VOC + SVOC concentrations from the transect well closest to Site I (well AA-I-S1) are 13.3 mg/L, 21.9, mg/L, and 19.9 mg/L for the shallow, middle, and deep horizons, respectively. For this planning-level calculation, it was assumed that these concentrations extended throughout the entire width of the Site I source zone, a potential overestimation

(however, if all other source removal calculations use the same assumptions, the relative results will be accurate). Therefore, the mass removal rate under natural conditions was estimated by multiplying average VOC + SVOC concentrations for each horizon by the flow for each horizon, and converting to a mass rate of kg/yr leaving the source zone (3.78 L/gal; 1440 min/day; 365 day/yr; 10^{-6} kg/mg). This calculation resulted in the following naturally-occurring mass removal rate totaling approximately 7000 kg/yr from all three horizons:

• Shallow Horizon:	82 kg/yr
• Middle Horizon:	3,613 kg/yr
• Deep Horizon:	3,271 kg/yr
TOTAL:	6,966 kg/yr

KEY POINT: NATURAL MASS REMOVAL RATE

The natural mass removal rate from the Site I source zone is estimated to be 7000 kg/yr assuming uniform source concentrations throughout the source zone.

Assumed Flowrate From An Intensive Pump-and-Treat System

Three methods were evaluated to provide a planning-level estimate of the flowrate from an intensive pump-and-treat system at Site I (see Appendix A). First, an empirical well yield relationship (Driscoll, 1986) based on transmissivity, expected drawdown, and assumptions for other variables in the nonequilibrium (Jacob) equation was used. The second method was based on typical well yields from regional water supply wells as reported by Schicht (1965):

> "It is a general practice of industries and municipalities to place a well in operation and pump it at high rates, often about 1000 gpm."

The third method was based on evaluating specific capacity (well yield divided by drawdown) provided by Schicht (1965).

These calculation approaches suggest that an intensive pumping system for Site I could yield 1000–2500 gpm. For the purpose of this project, a value of 1500 gpm was used.

KEY POINT: GROUNDWATER FLOWRATE FROM INTENSIVE PUMPING

An intensive pump-and-treat system was assumed to have a yield of 1500 gpm.

EFFECT OF PUMPING GROUNDWATER

Because most of the DNAPL is trapped and cannot be removed by direct pumping, a groundwater pump-and-treat system will generally not remove DNAPL directly, but instead will slowly dissolve the DNAPL trapped in fingers and pools. While this dissolution process is relatively slow and inefficient, it will remove DNAPL mass.

Dissolution Kinetics for DNAPL Fingers and Pools

Several analyses have been performed to evaluate the effect of increased pumping rates on the DNAPL dissolution rate for both fingers and pools. In a key paper written by Hunt et al. in 1988, the authors developed relationships for the kinetics of dissolution in NAPL source zones. They evaluated laboratory studies and mass transfer approaches used in the chemical engineering literature, and derived dissolution expressions for residual NAPL ganglia (also called "fingers" or "blobs"). They concluded that:

"Ganglion lifetimes are weakly dependent on flow velocity such that to decrease the lifetime from 100 years to 10 years requires a three order of magnitude increase (x1000) in flow velocity."

In other words, increasing the groundwater pumping rate will increase the finger dissolution rate, but only slightly based on this relationship:

$$\frac{\text{mass transfer rate with pumping}}{\text{mass transfer rate without pumping}} = 10^{\frac{\log 10\left[\frac{Q_{pumping}}{Q_{natural}}\right]}{3}}$$

Using this NAPL dissolution relationships reported by Hunt et al. (1988), a 1500 gpm pumping system (a 8.9 times increase in the natural flow rate through the system) would result in a 8.9 fold *increase* in water flushed through the system, but a 4.3 fold *decrease* in effluent concentrations, resulting in a net increase in mass removed only by a factor of 2.1:

$$\frac{\text{mass transfer rate with pumping}}{\text{mass transfer rate without pumping}} = 10^{\frac{\log 10\left[\frac{1500\ gpm}{168\ gpm}\right]}{3}} = 2.1$$

The same type of concentration reduction is expected when higher groundwater flowrates are used to dissolve NAPL pools. Dissolution kinetic relationships developed by Johnson and Pankow (1992) indicate that the mass

transfer rate (and pool lifetime) changes with the square root of groundwater velocity:

$$\text{Pool Dissolution Time (yrs)} = 2.43\text{x}10^{-5}\ \rho\ C_{sat}\ [\ l_p^3/D_v\ v_d\ ]^{0.5}$$

where:

ρ	=	DNAPL density (g/m^3)
C_{sat}	=	saturation concentration (g/m^3)
l_p	=	length of pool in direction of groundwater flow (m)
D_v	=	vertical dispersion coefficient (m^2/s)
v_d	=	Darcy velocity for groundwater (m/day)

Therefore, increasing the groundwater flowrate over a pool by a factor of 8.9 would result in an initial concentration *decrease* by a factor of 3.0 (approximately the square root of 8.9), and the overall *increase* in the mass removal rate by only a factor of 3.0.

Note that these theoretical expressions are supported by lab and field data (e.g., see Pankow and Cherry, 1996). Because source zones include a mixture of pools and fingers, it was assumed in this study that increasing the groundwater flowrate through the source zone by a factor of 8.9 (by pumping) would increase the mass transfer by a factor of 2.5 (the mid-point of finger value of 2.1 and pool values 3.0) when pumping was started. This is because groundwater concentrations decrease by a factor of 3.6 due to mass transfer effects. Note that after pumping is stopped, the concentrations would rebound and increase by a factor by the same amount (in the case of these calculations, by a factor of 3.6).

KEY POINT: EFFECT OF PUMPING GROUNDWATER ON CONCENTRATIONS

As shown by DNAPL dissolution expressions, the mass removal rate from a DNAPL source zone is only weakly dependent on the groundwater pumping rate. For example, if the flowrate though a DNAPL source zone is increased by a factor of 8.9 due to intensive pumping, the mass removal rate will only increase by a factor of 2.5 (a representative value for effects of pumping on DNAPL finger and DNAPL pool dissolution) because concentrations in the recovered groundwater would be reduced by a factor of 3.6 due to mass transfer effects.

Mass Removal Rate of Intensive Pump-and-Treat System

Under an intensive pumping scenario with an increase in natural flow (from 168 gpm to approximately 1500 gpm), the groundwater concentrations being removed from the source are expected to fall to between one-third to one-fifth

of the observed concentrations under lower flow, natural conditions. Assuming a middle value of post-pumping concentrations that are 3.6 times smaller than the natural concentrations, the initial VOC + SVOC effluent concentrations from an intensive groundwater pump-and-treat system are estimated to be: 3.7 mg/L, 6.0 mg/L, and 5.5 mg/L for the shallow, middle, and deep units, respectively.

Therefore, under an intensive pump-and-treat scenario where 1500 gpm are being flushed through the Site I source zone (an 8.9-fold increase in the flushing rate), the initial mass removal rate is predicted to only increase by a factor of 2.5, from 7000 kg/yr to 17,500 kg/yr due to mass transfer effects related to DNAPL dissolution. Note that this is only the initial mass removal rate for the intensive pumping case, and that this concentration will drop slowly over time as mass is removed from the system.

KEY POINT: MASS REMOVAL RATE FROM INTENSIVE PUMPING

An intensive pump-and-treat system was estimated to have an initial mass removal rate of 17,500 kg/yr, accounting for both the increased flowrate through the system and decreased concentrations in groundwater.

Effect of Pumping on Source Lifetime

Estimating source longevity is a process involving considerable uncertainty, as the original mass in place, mass removal rate, and the change in the mass removal rate over time must all be known. While absolute estimates have a high level of uncertainty, the relative comparison of remediation alternatives can be made with more confidence. In the analysis below, the absolute values for source lifetime should be considered highly uncertain, while the relative comparisons should be considered more accurate.

Estimated Source Mass

A range of estimates of source mass were developed, assuming that the entire saturated zone below Site I is affected by DNAPL. Then the calculated mass removal rates for natural attenuation and an intensive pump-and-treat system were used to estimate source longevity.

Source mass is a function of source volume, the porosity, the residual saturation of DNAPL in the source zone, and the fraction of source volume containing DNAPL. At Site I, the estimated source volume is 1400 ft by 95 ft by 500 ft, or 66,500,000 ft^3. Residual saturation (the fraction of open pore space occupied by DNAPL) values are typically assumed to be between 0.01 and 0.15

(see Pankow and Cherry, 1996), and a value of 0.05 was used for this analysis. A porosity of 0.35 was considered representative of the unconsolidated alluvial deposits at the site. Finally, it was assumed that 1% of the aquifer volume contains residual DNAPL.

Based on these assumptions, a planning-level estimate for the volume of DNAPL under Site I was estimated to be 87,000 gallons. Assuming an average density of 1.25 (based on an average of the density of chlorobenzene and 1,4-dichlorobenzene, two of the most commonly-found site constituents), the estimated mass of DNAPL is approximately 410,000 kg. Note that the actual mass may be more or less, but for the purpose of performing relative calculations of source longevity this value appeared to provide reasonable results.

KEY POINT: SITE I SOURCE MASS ESTIMATE

A planning-level source mass estimate of 410,000 kg of VOCs+SVOCs was estimated for the DNAPL source zone below Site I. There is considerable uncertainty in this estimate, with the actual mass potentially being higher or lower than 410,000 kg.

Source Decay Model

A simple source model, originally developed as part of the BIOSCREEN model (Newell et. al. 1996, EPA/600/R-96/087) and now being included as part of the BIOCHLOR model (Aziz et al., 2000, EPA/600/R-00/008) was used to estimate the lifetime of the groundwater source at Site I under different remediation options.

In this simple box model, the source zone is considered to be located in a box containing some mass of dissolvable contaminants. The rate at which contaminants leave the box is estimated from the rate at which flowing groundwater removes contaminants from the box. The time required to achieve a cleanup standard can then be estimated by comparing the mass of contaminants in the box vs. the time required to remove contaminants from the box. To more closely match real-site conditions, the source concentration is assumed to decay over time, in proportion to the remaining source mass (Wiedemeier et al., 1999). With this assumption, the source concentration over time can be described using:

$$C_t = C_{so} \exp^{(-k_s t)}$$

where:

C_t = Source concentration at time t (mg/L)
C_{so} = Observed source concentration at t = 0 (mg/L)
t = Time (years)
k_s = Source decay coefficient (1/year)

(Note that this decay coefficient is **not** related in any way to first-order decay coefficients reported in the literature for natural attenuation, as the literature values typically represent decay half-lives from 0.1 to 10 years and represent biodegradation of dissolved contaminants in the plume *once they have left the source.* The source decay coefficient values represent how quickly a source zone is being depleted, and will usually have much longer half-lives, typically tens or hundreds of years.)

The source decay coefficient, representing how quickly the source is being depleted, can be derived using estimates of the source mass and rate that contaminants leave the source (Newell et al., 1996):

$$k_s = \frac{Q \cdot C_{so}}{M_o}$$

where:

Q = Groundwater flowrate through source zone (L/year)
C_{so} = Observed source concentration at time = 0 (mg/L)(or kg/L)
M_0 = Dissolvable mass in source at time = 0 (mg)(or kg)

This model assumes that the only mass leaving the source zone is dissolved in the water flowing through the source zone. Note that Q and C_{so} are related; the thickness of the source zone should be matched with an appropriate average concentration for that entire depth horizon.

With a first-order source decay term, the source concentration at any time can be derived, providing the time required to reach any concentration:

$$t = -\frac{1}{k_s} \ln\left(\frac{C_t}{C_{so}}\right)$$

where:

t = Time required to reach concentration C_t (years)

Five Source Lifetime Cases

For this analysis, five different cases were evaluated using the source lifetime described above:

Case 1: Natural attenuation only (initial removal rate of 7000 kg/yr)

Case 2: 1 year of intensive pump-and-treat (initial removal rate of 17,500 kg/yr), followed by natural attenuation

Case 3: 5 years of intensive pump-and-treat (initial removal rate of 17,500 kg/yr), followed by natural attenuation

Case 4: 10 years of intensive pump-and-treat (initial removal rate of 17,500 kg/yr), followed by natural attenuation

Case 5: 30 years of intensive pump-and-treat (initial removal rate of 17,500 kg/yr), followed by natural attenuation

With this approach (see Appendix B), the following times to cleanup were estimated:

		Estimated Time to Cleanup (years)	% Reduction from Natural Attenuation Only
Case 1	Natural Attenuation Only	488	-
Case 2	1 Yr of Intensive Pump-and-Treat + Natural Attenuation	486	0.4% reduction
Case 3	5 Yrs of Intensive Pump-and-Treat + Natural Attenuation	480	2% reduction
Case 4	10 Yrs of Intensive Pump-and-Treat + Natural Attenuation	472	3% reduction
Case 5	30 Yrs of Intensive Pump-and-Treat + Natural Attenuation	441	10% reduction

Figure 3 shows a comparison of source concentrations vs. time for two of the six cases.

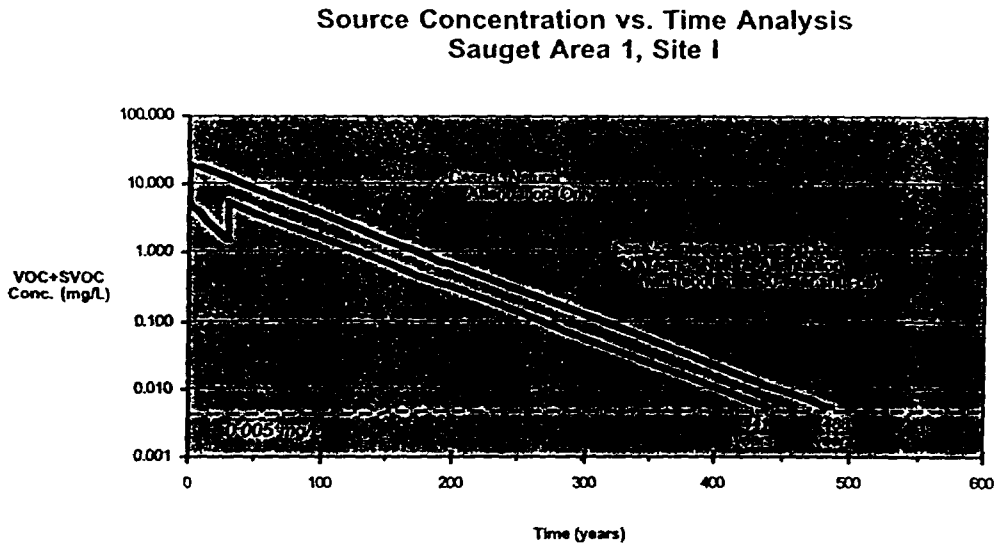


FIGURE 3. Source concentration vs. time graphs for Case 1 (Natural Attenuation Only) and Case 5 (30 Years of Intensive Pump-and-Treat + Natural Attenuation). For Case 1, concentrations start at 20 mg/L and decline as a first order decay relationship over time. For Case 5, the source concentration starts at 20 mg/L, but concentrations are reduced by a factor of 3.6 due to mass transfer effects caused by the almost 9 times increase in groundwater flow through the source zone. After 30 years, pumping is stopped, groundwater flow is restored to natural conditions, and mass transfer effects cause an increase in concentration by a factor of 3.6 (the "rebound" effect). Overall, the source modeling exercise shows that with the source assumptions described in the text, the time required to restore groundwater is reduced only slightly by 30 years of intensive pumping, from 488 years to 441 years (10% reduction).

Sensitivity Analysis

The source lifetime analysis has several areas of uncertainty, and should be used to evaluate relative differences between remediation alternatives rather than to provide an absolute source lifetime estimate. Significant sources of uncertainty include:

- *The assumption that concentrations observed in well AA-I-S1 extend throughout the entire 1400 ft source width of Site I.* If some sections of the 1400 ft source width of Site I are lower concentration, the following impact on the source lifetime is expected: 1) for the natural attenuation case, the overall source lifetime estimates will not change as both the removal rate and the mass in the source are functions of the source width; and 2) for the

pumping case, some reduction in overall source lifetime is expected as source mass is dependent on source width but removal rate is not (it is dependent on pumping rate and expected concentrations).

- *The assumptions that the source is represented by a residual DNAPL saturation of 0.05 and that 1% of the source zone is impacted by DNAPL residual.* These assumptions have a great deal of uncertainty (the literature reports that residual saturations can be as high as 0.50), and were selected in part to yield source lifetimes in the range of several hundreds of years to match the source conceptual model discussed above. If the source is much smaller than the estimated 410,000 kg of VOCs+SVOCs, then the impact of a pumping system will be greater, and greater than a 1% to 10% reduction in source lifetime will be realized. If the source mass is only 41,000 kg (an unlikely event based on the persistence of the source to date), then an intensive pump-and-treat system is predicted to reduce the source lifetime by from 49 years (natural attenuation alone) to 22 years (intensive pumping). Conversely, if the mass is greater, a pump-and-treat system will have less of an effect.

Other, potentially less significant sources of uncertainty are:

- *The assumption that concentrations under a pumping scenario will be smaller than concentrations observed under natural flow conditions.* While there is uncertainty in the actual amount, it has been demonstrated in lab studies and the field that increasing the flowrate through a DNAPL source zone will result in lowered concentrations (for example, see Pankow and Cherry, 1996). Therefore we expect some concentration reduction with a pump-and-treat scenario.

- *The assumption that the flow throughout each interval is uniform and that the concentration in each interval can be calculated by averaging each sample point.* These assumptions were used in the mass removal calculation. While there may be some uncertainty in these assumptions, the large number of vertical samples reduces the potential error.

- *The assumption of a first-order decay relationship for the source dissolution rate.* This assumption is based on observations about source decay, and is now used in two EPA peer-reviewed models, BIOSCREEN and BIOCHLOR. While the exact source concentrations curve may not be exactly first order, it will almost certainly fit a first-order decay curve better than assuming constant source concentrations until the source is exhausted. (Note that the use of the first order decay model for the source

does not mean that literature-based first-order decay constants for dissolved constituents were used. A source decay constant is based on removal rate and initial source mass, while a biodegradation rate is based on how fast concentrations decay after they leave the source. This study used a source decay approach, and did not use biodegradation rates to estimate source lifetime).

- *No availability effects related to desorption of constituents at low concentrations have been considered.* Slow desorption of non-available fraction of constituents sorbed to aquifer materials will likely reduce the efficiency of any flushing technology. More pronounced effects may be observed for intensive pumping scenarios.

Additional Analysis

A similar analysis was performed for Sites G/H/L using the same calculation approach as was used for Site I (Appendix B). Two cases were performed, and show little impact from a five-year intensive pumping program:

		Estimated Time to Cleanup (years)	% Reduction from Natural Attenuation Only
Case 6	Natural Attenuation Only – Sites G/H/L	434	-
Case 7	5 Yrs of Intensive Pump-and-Treat + Natural Attenuation	427	2% reduction

An evaluation of other constituents present in Sites G/H/I/L groundwater, such as herbicides, pesticides, dioxins, and metals indicates that some constituents will like achieve cleanup goals faster than the VOCs + SVOCs analyzed for this source report, and others may take longer. Ratios of the maximum observed concentrations at Area 1 vs. the Illinois Class I standard for representative constituents provide a general indication of how quickly various constituents may achieve cleanup goals:

CONSTITUENT (Constituent Class)	MAXIMUM CONCENTRATION IN GROUNDWATER (ug/L)	ILLINOIS CLASS I STANDARD (ug/L)	RATIO OF MAX. CONC. / ILLINOIS CLASS I STD.
Chlorobenzene (VOC)	34,000	100	340
2,4-dichlorobenzene (SVOC)	14,000	75	187
Alpha-BHC (Herbicide)	72	0.03	2400
2,4-D (Pesticide)	190	70	2.7
Total PCBs (PCB)	12	0.5	24
Cu (Metal)	3000	650	4.6
Ni (Metal)	7800	100	78
Pb (Metal)	3600	7.5	480
Zn (Metal)	33,000	5000	6.6

On the basis of this general evaluation, alpha-BHC may take longer to achieve cleanup goals than the VOCs+SVOCs, while 2,4-D may take less time. Other factors, such as the mass of each constituent in the source zone and the constituent-specific fate and transport process will determine the ultimate time required to remediate the Area 1 source zones.

KEY POINT: ESTIMATED SOURCE LIFETIMES FOR SEVEN CASES

A planning level source lifetime calculation was done to estimate the relative performance of various remediation schemes. This analysis, while not providing high-confidence estimates of the absolute time to cleanup, does indicate that with an assumed mass of 410,000 kg of VOCs + SVOCs in the saturated zone below Site I, intensive pumping over a 1 to 30 year period does not appear to have an appreciable effect on overall source lifetime (i.e., $\leq$ 10% reduction). Similar limitations are expected at Sites G/H/L as well.

CONCLUSIONS

Based on the overall groundwater source evaluation at Site I of Sauget Area 1, DNAPL dissolution appears to be the dominant source mechanism. Planning level source lifetime calculations indicate that intensive groundwater pumping will not have an appreciable effect on the overall source lifetime at Site I or at Site G/H/L.

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GROUNDWATER SERVICES, INC.

TABLE 1

SUMMARY OF SITE I GROUNDWATER CONCENTRATIONS BY DEPTH AND COMPARISON TO CONSTITUENT SOLUBILITY

Sampling Period: November to December 1999

Solutia Inc.

Area 1, Sauget and Cahokia, Illinois

Detected Constituent	0-30 ft Depth Conc (mg/L)	30-20 ft Depth Conc (mg/L)	20+ ft Depth Conc (mg/L)	Solubility (mg/L)
VOCs				
1,1-Dichloroethane	0.96	<0.5	<1.0	5,060
1,1-Dichloroethene	0.032 J	<0.5	<1.0	2,250
Benzene	0.62	0.19	0.14 J	1,750
Chlorobenzene	8.7	20.0	**34.0**	***472***
cis/trans-1,2-Dichloroethene	1.2	0.31	0.001 J	3,500 (7)
Ethylbenzene	0.87	0.27	0.074	169
Tetrachloroethene	<0.5	<0.5	0.001 J	200
Toluene	0.018 J	**0.086 J**	0.00089 J	526
Vinyl Chloride	0.97	0.32	0.0012 J	2,760
Xylenes, total	<0.5	0.023 J	0.014	186
SVOCs				
1,2,4-Trichlorobenzene	<0.01	<0.5	**2.7**	300
1,2-Dichlorobenzene	0.13	0.32 J	**0.5**	156
1,3-Dichlorobenzene	0.11	**0.29 J**	0.150 J	NA
1,4-Dichlorobenzene	4.4	**10 D**	9.7 D	***73.8***
2,4,5-Trichlorophenol	<0.01	<0.5	0.0018 J	1,200
2,4-Dichlorophenol	<0.01	0.042	0.047 J	4,500
2-Chlorophenol	0.0055 J	0.039	**0.052**	22,000
2-Methylnaphthalene	<0.01	<0.5	0.0013 J	NA
2-Methylphenol (o-cresol)	<0.01	0.003 J	<0.4	26,000
4-Chloroaniline	**4.1 D**	1.7 D	0.018	5,300
Acenaphthene	<0.01	<0.5	0.00033 J	4.24
Carbazole	0.0014 J	0.013	**0.013**	7.48
Di-n-butylphthalate	<0.01	0.00034 J	0.00051 J	11.2
Dibenzofuran	<0.01	0.019 J	<0.4	NA
Diethylphthalate	<0.01	0.0051 J	<0.4	1,080
Fluoranthene	<0.01	0.022 J	<0.4	***0.206***
Hexachlorobenzene	<0.01	<0.5	0.001 J	6.2
N-Nitrosodiphenylamine	0.0053	**0.028**	0.02	35.1
Naphthalene	0.0042 J	0.024	**0.066**	31
Phenanthrene	<0.01	**0.089 J**	0.0013 J	NA
Phenol	<0.01	0.0044 J	<0.4	82,800
bis(2-chloroethyl)ether	0.0011 J	<0.5	<0.4	17,200
bis(2-ethylhexyl)phthalate	0.00069 J	<0.09	<0.072	0.34
Total Detected Conc. (mg/L)	**22.1**	**33.8**	**47.5**	

Notes:

1) Table includes only those compounds detected in at least one groundwater sample for each constituent class. Comparison to solubility includes groundwater sampled at any depth in source area monitoring well.
2) Groundwater samples included are from nearest source area monitoring well only (i.e., AA-I-S1).
3) J = Estimated value. D = Diluted sample. NA = Not available.
4) Bold type denotes maximum groundwater concentration by depth.
5) Underlined bold italics type denotes maximum groundwater concentration exceeds 1% of constit. solubility.
6) Lowest solubility of cis/trans-1,2-Dichloroethene pair indicated.
7) Solubility data from Illinois Tiered Approach to Corrective Action Objectives (TACO).
8) For comparison purposes, non-detectable concentrations are taken as the detection limit shown.

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TABLE 2
SUMMARY OF SITE I GROUNDWATER CONCENTRATIONS BY DEPTH VERSUS TCLP WASTE DATA
Sampling Period: November to December 1999

Solutia Inc.
Area 1, Sauget and Cahokia, Illinois

Detected Constituent	0-30 ft Depth Conc (mg/L)	30-70 ft Depth Conc (mg/L)	70 Ft+ Depth Conc (mg/L)	Max TCLP Conc (mg/L)	Media With Max Conc
VOCs					
1,1-Dichloroethane	0.96	<0.5	<1.0	NA	-
1,1-Dichloroethene	**0.032 I**	<0.5	<1.0	<0.02	GW
Benzene	**0.62**	0.19	0.14 J	0.14	GW
Chlorobenzene	8.7	20.0	**34.0**	8.9	GW
cis/trans-1,2-Dichloroethene	1.2	0.31	0.001 J	NA	-
Ethylbenzene	0.87	0.27	0.074	NA	-
Tetrachloroethene	<0.5	<0.5	0.001 J	0.29	-
Toluene	0.018 J	0.086 J	0.00089 J	NA	-
Vinyl Chloride	**0.97**	0.32	0.0012 J	<0.04	GW
Xylenes, total	<0.5	0.023 J	0.014	NA	-
SVOCs					
1,2,4-Trichlorobenzene	<0.01	<0.5	2.7	NA	-
1,2-Dichlorobenzene	0.13	0.32 J	0.5	NA	-
1,3-Dichlorobenzene	0.11	0.29 J	0.150 J	NA	-
1,4-Dichlorobenzene	4.4	**10 D**	9.7 D	1.3	GW
2,4,5-Trichlorophenol	<0.01	<0.5	0.0018 J	**1.4**	TCLP
2,4-Dichlorophenol	<0.01	0.042	0.047 J	NA	-
2-Chlorophenol	0.0055 J	0.039	0.052	NA	-
2-Methylnaphthalene	<0.01	<0.5	0.0013 J	NA	-
2-Methylphenol (o-cresol)	<0.01	0.003 J	<0.4	0.014 J	-
4-Chloroaniline	4.1 D	1.7 D	0.018	NA	-
Acenaphthene	<0.01	<0.5	0.00033 J	NA	-
Carbazole	0.0014 J	0.013	0.013	NA	-
Di-n-butylphthalate	<0.01	0.00034 J	0.00051 J	NA	-
Dibenzofuran	<0.01	0.019 J	<0.4	NA	-
Diethylphthalate	<0.01	0.0051 J	<0.4	NA	-
Fluoranthene	<0.01	0.022 J	<0.4	NA	-
Hexachlorobenzene	<0.01	<0.5	0.001 J	<0.05	-
N-Nitrosodiphenylamine	0.0053	0.028	0.02	NA	-
Naphthalene	0.0042 J	0.024	0.066	NA	-
Phenanthrene	<0.01	0.089 J	0.0013 J	NA	-
Phenol	<0.01	0.0044 J	<0.4	NA	-
bis(2-chloroethyl)ether	0.0011 J	<0.5	<0.4	NA	-
bis(2-ethylhexyl)phthalate	0.00069 J	<0.09	<0.072	NA	-

GW Conc. Greater	**5**
TCLP Conc. Greater	**1**

Notes:
1) Table includes only those compounds detected in at least one groundwater sample for each constituent class. Comparison to TCLP waste concentration includes groundwater sampled at any depth in source area monitoring well.
2) Groundwater samples included are collected from nearest source area monitoring well only (i.e., AA-I-S1).
3) J = Estimated value. D = Diluted sample.
4) Underlined bold type denotes maximum groundwater concentration or TCLP concentration.
5) TCLP waste data from unsaturated waste samples.
6) NA = Not analyzed.
7) For comparison purposes, non-detectable concentrations are taken as the detection limit shown.

May 21, 2001

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APPENDIX A
DESIGN PUMPING RATE OF HYDRAULIC CONTAINMENT WELLS
Groundwater Alternative D, Intensive Pumping, Sites G, H, I, and L
Sauget Area 1, Sauget and Cahokia, Illinois

PROBLEM: What is estimated pumping rate and number of wells for intensive pumping system for Site I + Sites G/H/L plume?

ASSUMPTIONS:

K = 0.1 cm/sec for middle, deep horizon

b = 80 ft (40 ft middle horizon, 40 ft deep horizon)

i = 0.001 ft/ft

Available drawdown (s) = 15 ft (thickness of shallow unit) (this equals thickness of shallow saturated horizon)

METHOD: Use three different methods to develop a basis for flowrates for an intensive pumping system for the combined Site I + Site G/H/L plume areas.

Method 1. First, an empirical well pumping rate relationship (Driscoll, 1986) based on transmissivity, expected drawdown, and assumptions for other variables in the nonequilibrium (Jacob) equation was used. For this site, a transmissivity of 170,000 gpd/ft was calculated (based on an assumed hydraulic conductivity of 0.1 cm/sec and a saturated thickness of 80 ft for the combined middle and deep horizons).

For unconfined units:

$$\frac{Q}{s} = \frac{T}{1500} \qquad \text{(Eqn. 3, Q in gpm, s in ft, T in gpd/ft)}$$

$$Q(gpm) = \frac{\left(T\ \frac{gpd}{ft}\right)(s\ ft)}{1500}$$

$$T = (K)(b_T)$$

$$T = \left(0.1\frac{cm}{sec}\right)\left(\frac{86400\ sec}{day}\right)\left(\frac{in}{2.54\ cm}\right)\left(\frac{ft}{12\ in}\right)(80\,ft)\left(\frac{7.48\ gal}{ft^3}\right)$$

$$T = 170{,}000\ gpd/ft$$

$$Q(gpm) = \frac{\left(170{,}000\ \frac{gpd}{ft}\right)(15\,ft)}{1500}$$

$Q = 1700$ *gpm*

so that:

Q = 1700 gpm for pumping from a regional pumping well

Method 2. Schicht (1965) reports that "It is a general practice of industries and municipalities *to place a well in operation and pump it at high rates, often about 1000 gpm." Therefore based* on this method:

Q = 1000 gpm for pumping from a regional pumping well

Method 3. Schicht also reports the specific capacity from three wells in T2N, R10W (where Area 1 is located) as being 152.5, 188, and 158 gpm/ft, respectively. By averaging these specific capacities (166 gpm/ft), and multiplying by an assumed drawdown of 15 ft, a pumping rate of 2490 gpm is obtained. As would be expected, use of specific capacities results in a wide range of predicted well pumping rates due to the effects of well construction, well condition, and local hydrogeologic conditions.

Q = 2500 gpm for pumping from a regional pumping well

RESULT: These calculation approaches suggest that a regional pumping well could yield from 1000 to 2500 gpm in the Area 1 location.

Therefore, it was assumed that the total pumping rate of any intensive pumping system would also be in this range, although the flow would be distributed among several wells. Therefore the following conceptual design was developed:

Qtotal = 1500 gpm total flowrate (based on lower-middle range of flowrate estimates to be conservative)

APPENDIX B
RELATIVE SOURCE LIFETIME OF AREA I UNDER NATURAL ATTENUATION VS. INTENSIVE PUMP AND TREAT
Groundwater Alternative D, Intensive Pumping, Sites G, H, I, and L
Sauget Area 1, Sauget and Cahokia, Illinois

I. SOURCE LIFETIME CALCULATION: SITE I

PROBLEM: What is relative source lifetime of Site I under natural attenuation vs. intensive pump and treat conditions?

ASSUMPTIONS:

1. Source Volume = $(1400\,ft)(500\,ft)(95\,ft)\left(7.48\frac{gal}{ft^3}\right)(0.35)(0.05)(0.01) = 87{,}000\ gals$

   Source Mass = $(87{,}000\,gal)\left(\frac{3.78L}{gal}\right)\left(\frac{1.25kg}{L}\right) = 410{,}000\ kg$

   Where: width = 1400 ft; length = 500 ft; sat. thickness = 95 ft; porosity = 0.35; assumed residual saturation = 0.05; fraction of source containing residual saturation = 0.01. (see text)

2. Current Mass Removal Rate: 7000 kg/yr (Natural Attenuation) (see text)
   Initial Intensive Pumping Removal Rate: 17,500 kg/yr (Intensive Pump-and-Treat) (see text).

3. Case 1 Natural Attenuation Only – Site I
   Case 2 1 Yr of Intensive Pump-and-Treat + Natural Attenuation – Site I
   Case 3 5 Yrs of Intensive Pump-and-Treat + Natural Attenuation – Site I
   Case 4 10 Yrs of Intensive Pump-and-Treat + Natural Attenuation – Site I
   Case 5 30 Yrs of Intensive Pump-and-Treat + Natural Attenuation – Site I

4. Starting concentration under natural conditions: 20 mg/L (representative of middle and deep units in 1999). Starting concentration under pumping conditions: 5.5 mg/L (due to mass-transfer effects for deep and middle units; factor of 3.6 reduction).

5. Assumed ending concentration: 0.005 mg/L (MCL for several constituents).

MODEL:

$$\frac{C_{(t)}}{C_{(now)}} = e^{-k_1 t}$$ (from BIOSCREEN and BIOCHLOR models; see text)

$$k_s = \frac{Mass\ Removal\ Rate\ (kg/yr)}{Mass\ (kg)}$$ (k_s = source decay constant)

$$t(yr) = \frac{-\ln\left(\frac{C_t}{C_{now}}\right)}{k_s}$$

Model Applied to Case 1: Natural Attenuation Only

$$k_s = \frac{7000 \frac{kg}{yr}}{410{,}000\ kg} = 0.017\ yr^{-1}$$

$$t(yr) = \frac{-\ln\left(\frac{0.005}{20}\right)}{0.017}$$

RESULT (Case 1): $t = 488\ years$

Model Applied to Case 2: Intensive Pump and Treat With 1 Year of Pumping

$$k_s = \frac{17{,}500 \frac{kg}{yr}}{410{,}000\ kg} = 0.043\, yr^{-1}$$

$$\frac{C_{1yr}}{C_{now}} = e^{-k_s t}$$

$$\frac{C_{1yr}}{5.5\ mg/L} = e^{-(0.043 yr^{-1})(1yr)}$$

$$C_{1\ yr} = 5.27\ mg/L$$

Time to cleanup after 1 yr of pumping is finished, with 3.6-times increase in concentration due to rebound (5.27 mg/L * 3.6 = 19.0 mg/L).

$$\frac{0.005\ mg/L}{19.0\ mg/L} = e^{-(0.017 yr^{-1})(t\ yrs)}$$

$$t = \frac{-\ln\left(\frac{0.005}{19.0}\right)}{0.017}$$

$$t = 485\ years$$

RESULT (Case 2): Total time to cleanup (Intensive Pump-and-Treat for 1 yr) = 1 + 485 = 486 years

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Model Applied to Case 3: Intensive Pump and Treat With 5 Years of Pumping

$$k_s = \frac{17{,}500 \frac{kg}{yr}}{410{,}000\ kg} = 0.043\ yr^{-1}$$

$$\frac{C_{5\ yrs}}{C_{now}} = e^{-k_s t}$$

$$\frac{C_{5\ yrs}}{5.5\ mg/L} = e^{-(0.043\ yr^{-1})(5\ yrs)}$$

$$C_{5\ yrs} = 4.44\ mg/L$$

Time to cleanup after 5 yrs of pumping is finished, with 3.6-times increase in concentration due to rebound (4.44 mg/L * 3.6 = 16.0 mg/L).

$$\frac{0.005\ mg/L}{16.0\ mg/L} = e^{-(0.017\ yr^{-1})(t\ yrs)}$$

$$t = \frac{-\ln\left(\frac{0.005}{16.0}\right)}{0.017}$$

$$t = 475\ years$$

RESULT (Case 3): Total time to cleanup (Intensive Pump-and-Treat for 5 yrs) = 5 + 475 = 480 years

Model Applied to Case 4: Intensive Pump and Treat With 10 Years of Pumping

$$k_s = \frac{17{,}500 \frac{kg}{yr}}{410{,}000\ kg} = 0.043\,yr^{-1}$$

$$\frac{C_{10yrs}}{C_{now}} = e^{-k_s t}$$

$$\frac{C_{10yrs}}{5.5\ mg/L} = e^{-(0.043yr^{-1})(10yrs)}$$

$$C_{10\ yrs} = 3.58\ mg/L$$

Time to cleanup after 10 yrs of pumping is finished, with 3.6-times increase in concentration due to rebound (3.58 mg/L * 3.6 = 12.9 mg/L).

$$\frac{0.005\ mg/L}{12.9\ mg/L} = e^{-(0.017yr^{-1})(t\ yrs)}$$

$$t = \frac{-\ln\left(\frac{0.005}{12.9}\right)}{0.017}$$

$$t = 462\ years$$

RESULT (Case 4): Total time to cleanup (Intensive Pump-and-Treat for 10 yrs) = 10 + 462 = 472 years

Model Applied to Case 5: Intensive Pump and Treat With 30 Years of Pumping

$$k_s = \frac{17{,}500 \frac{kg}{yr}}{410{,}000\ kg} = 0.043\,yr^{-1}$$

$$\frac{C_{30yrs}}{C_{now}} = e^{-k_s t}$$

$$\frac{C_{30yrs}}{5.5\ mg/L} = e^{-(0.043yr^{-1})(30yrs)}$$

$$C_{30\ yrs} = 1.51\ mg/L$$

Time to cleanup after 30 yrs of pumping is finished, with 3.6-times increase in concentration due to rebound (1.51 mg/L * 3.6 = 5.4 mg/L).

$$\frac{0.005\ mg/L}{5.4\ mg/L} = e^{-(0.017 yr^{-1})(t\ yrs)}$$

$$t = \frac{-\ln\left(\frac{0.005}{5.4}\right)}{0.017}$$

$$t = 411\ years$$

RESULT (Case 5): Total time to cleanup (Intensive Pump-and-Treat for 30 yrs) = 30 + 411 = **441 years**

CONCLUSION: Comparison of Cleanup Times – Site I

Case 1	Natural Attenuation Only	488 years
Case 2	1 Yr of Intensive Pump-and-Treat + Natural Attenuation	486 years
Case 3	5 Yrs of Intensive Pump-and-Treat + Natural Attenuation	480 years
Case 4	10 Yrs of Intensive Pump-and-Treat + Natural Attenuation	472 years
Case 5	30 Yrs of Intensive Pump-and-Treat + Natural Attenuation	441 years

II. SOURCE LIFETIME CALCULATION: SITES G/H/L

PROBLEM: What is relative source lifetime of Sites G/H/L under natural attenuation vs. intensive pump and trea conditions?

ASSUMPTIONS:

1. Assume Sites G/H/L together have approximately same dimensions as Site I, with 1% of the starting mass as Site I, because VOC+SVOC concentrations are much lower leaving Sites G/H/L (~ 0.20 mg/L) than Site I (~ 20 mg/L).

2. Assume ratio of source mass at Sites G/H/L and Site I are proportional to ratio of representative concentrations and width parallel to groundwater flow leaving Sites G/H/L and Site I.

$$\text{Source Mass} = \left(\frac{\text{representative conc. Sites G/H/L mg/L}}{\text{representative conc. Site I mg/L}}\right)(\text{Est. Mass Site I kg})$$

$$= \left(\frac{0.20\ \text{mg/L}}{20\ \text{mg/L}}\right)(410{,}000\ \text{kg})$$

$$= 4100\ \text{kgs}$$

3. Current Mass Removal Rate: Assume 1% of Site I mass removal rate based on ratio of representative concentration at Site I (20 mg/L VOC+SVOC) to representative concentration at Sites G/H/L (0.20 mg/L VOC+SVOC).

Natural Source Removal Rate =

$$\left(\frac{\text{representative conc. Sites G/H/L mg/L}}{\text{representative conc. Site I mg/L}}\right)\left(\frac{\text{Width Sites G/H/L}}{\text{Width Site I}}\right)(\text{Est. Mass Removal Rate Site I kg/yr})$$

$$= \left(\frac{0.20\ \text{mg/L}}{20\ \text{mg/L}}\right)\left(\frac{750\ \text{ft}}{1400\ \text{ft}}\right)(7000\ \text{kg/yr})$$

$$= 35\ \text{kg/yr}$$

Use Initial Intensive Pumping Removal Rate of 2.5 times 34 kg/yr (Intensive Pump-and-Treat= 87.5 kg/yr

4. Run analysis for two cases:

   Case 6 Natural Attenuation Only – Site G/H/L

   Case 7 5 Yrs of Intensive Pump-and-Treat + Natural Attenuation – Site G/H/L

5. Starting concentration under natural conditions: 0.20 mg/L (representative of middle and deep units in 1999). Starting concentration under pumping conditions: 0.056 mg/L (due to mass-transfer effects for middle and deep units; factor of 3.6 reduction).

6. Assumed ending concentration: 0.005 mg/L (MCL for several constituents).

MODEL:

$$\frac{C_{(t)}}{C_{(now)}} = e^{-k_s t} \quad \text{(from BIOSCREEN and BIOCHLOR models; see text)}$$

$$k_s = \frac{Mass\ Removal\ Rate\ (kg/yr)}{Mass\ (kg)} \quad (k_s = \text{source decay constant})$$

$$t(yr) = \frac{-\ln\left(\frac{C_t}{C_{now}}\right)}{k_s}$$

Model Applied to Case 6: Natural Attenuation Only

$$k_s = \frac{35 \frac{kg}{yr}}{4100\ kg} = 0.0085\ yr^{-1}$$

$$t(yr) = \frac{-\ln\left(\frac{0.005}{0.2}\right)}{0.0085}$$

RESULT (Case 6): $t = 434\ years$

Model Applied to Case 7: Intensive Pump and Treat With 5 Years of Pumping

$$k_s = \frac{87.5 \frac{kg}{yr}}{4100\ kg} = 0.021 yr^{-1}$$

$$\frac{C_{1yr}}{C_{now}} = e^{-k_s t}$$

Starting concentration under pumping conditions: 0.056 mg/L (due to mass-transfer effects for deep and middle units; factor of 3.6 reduction).

$$\frac{C_{5yr}}{0.056\ mg/L} = e^{-(0.021 yr^{-1})(5 yrs)}$$

$$C_{5\ yr} = 0.050\ mg/L$$

Time to cleanup after 5 yrs of pumping is finished, with 3.6-times increase in concentration due to rebound (0.050 mg/L * 3.6 = 0.18 mg/L).

$$\frac{0.005\ mg/L}{0.18\ mg/L} = e^{-(0.00085 yr^{-1})(t\ yrs)}$$

$$t = \frac{-\ln\left(\frac{0.005}{0.18}\right)}{0.0085}$$

$$t = 422\ years$$

RESULT (Case 7): Total time to cleanup (Intensive Pump-and-Treat for 5 yrs) = 5 + 422 = 427 years

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CONCLUSION: Comparison of Cleanup Times – Sites G/H/L

Case 6	Natural Attenuation Only – Sites G/H/L	434 years
Case 7	30 Yrs of Intensive Pump-and-Treat + Natural Attenuation – Sites G/H/L	427 years

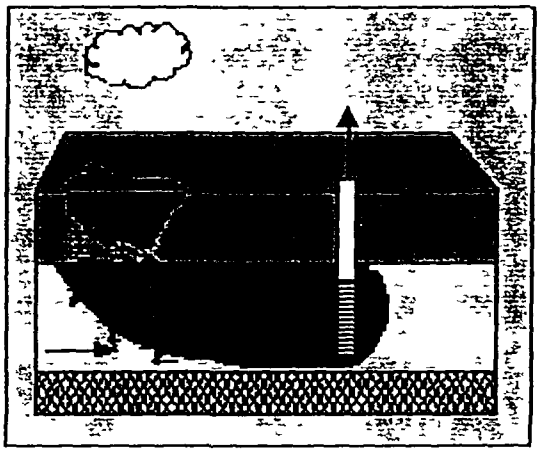
APPENDIX E
GROUND WATER PUMPING RATES

APPENDIX D

GROUNDWATER PUMPING RATES

Sauget Area 1

Sauget and Cahokia, Illinois



Submitted to
Solutia Inc.

May 16, 2001

Groundwater Services, Inc.
2211 Norfolk, Suite 1000, Houston, Texas 77098

APPENDIX D
GROUNDWATER PUMPING RATE CALCULATIONS
Sauget Area 1, Sauget and Cahokia, Illinois

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May 16, 2001

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APPENDIX D.1
DESIGN PUMPING RATE OF LEACHATE CONTROL WELLS
Fill Area Leachate Recovery
Sauget Area 1, Sauget and Cahokia, Illinois

PROBLEM: What is potential pumping rate from well used for Leachate Recovery?

ASSUMPTIONS:

K = 0.01 cm/sec for waste material/shallow horizon

b = 15 ft for shallow unit

Available drawdown (s) = 0.5 ft (assume wells on 100 ft centers will be used, so limited drawdown is available)

Shallow horizon is unconfined

Assume t = 365 days to reflect steady-state pumping pumping rate

S = 7.2×10^{-2} (unconfined aquifer; see Groundwater and Wells, pg. 1021)

R = 0.25 ft (assume 6 inch diameter wells)

METHOD: Use unsteady state flow equation (e.g., from Groundwater & Wells pg. 1021).

$$Q(gpm) = \frac{\left(T\ \frac{gpd}{ft}\right)(s\ ft)}{264 \log\left[\frac{0.3\left(T\frac{gpd}{ft}\right)(t\ day)}{\left(r^2 ft^2\right)(S)}\right]}$$

(Eqn. 1, Q in gpm, s in ft, T in gpd/ft)

$$T = (K)(b_T)$$

$$T = \left(0.01\frac{cm}{sec}\right)\left(\frac{86400\ sec}{day}\right)\left(\frac{in}{2.54\ cm}\right)\left(\frac{ft}{12\ in}\right)(15 ft)\left(\frac{7.48\ gal}{ft^3}\right)$$

$$T = 3{,}180\ gpd/ft$$

$$Q(gpm) = \frac{\left(3180\ \frac{gpd}{ft}\right)(1\ ft)}{264 \log\left[\frac{0.3\left(3180\frac{gpd}{ft}\right)(365\ days)}{\left(0.25^2 ft^2\right)\left(7.2\times10^{-2}\right)}\right]}$$

$$Q = 1.5\ gpm$$

CONCLUSION: Use **1 gpm** to account for well efficiency, safety factor.

APPENDIX D.2
DESIGN PUMPING RATE OF HYDRAULIC CONTAINMENT WELLS
Groundwater Alternative B, Hydraulic Containment, Site I
Sauget Area 1, Sauget and Cahokia, Illinois

PROBLEM: What is estimated pumping rate and number of wells required for hydraulic containment?

ASSUMPTIONS:

K = 0.1 cm/sec for all units (conservative assumption; shallow horizon actually 10^{-2} cm/sec)

b = 95 ft (assume 15 ft shallow horizon, 40 ft middle horizon, 40 ft deep horizon)

i = 0.001 ft/ft

L = 1600 ft (required capture length at line of wells perpendicular to groundwater flow for Site I only.

Surface infiltration from bluffs to Site 1 are reflected in flow gradient at site.

METHOD: Use Capture Zone Equations from Javandel and Tsang (1986) as presented in Gorelick et al, 1993):

Number of Wells	Distance Between Dividing Streamlines at Line of Wells (L)
1	Q/(2 T i)
2	Q/(T i)
3	3 Q / (2 T i)

Where:

Q = Constant pumping rate for each well
T = Transmissivity
i = Hydraulic gradient

For one well:

$$(L\ ft) = \frac{(Q\ gpm)}{(2\ (T\ gpm/ft)(i\ ft/ft))}$$

$$(Q\ gpm) = (L\ ft)[2\ (T\ gpm/ft)(i\ ft/ft)]$$

Where:

T = K b (use units of gpm/ft to provide Q in gpm)

$$(T\ gpm/ft) = \left(10^{-1}\frac{cm}{sec}\right)\left(\frac{1\ ft}{30.48\ cm}\right)(95\ ft)\left(\frac{60\ sec}{min}\right)\left(7.48\frac{gal}{ft^3}\right)$$

$T = 140\ gpm/ft$

Yielding:

$$(Q\ gpm) = (1600\ ft)[2\ (140\ gpm/ft)(0.001\ ft/ft)]$$

Q = 448 gpm for one-well case (no safety factor)

For two well case, total flow is the same (448 gpm), therefore Q per well is 224 gpm.
For three well case, total flow is the same (448 gpm), therefore Q per well is 149 gpm.

Assume that a three-well system will be used to provide redundancy and increased safety factor, and allow for more reliable capture while one well is shut off. For a three well case, the recommended distance between each pair of wells (L_{well}) is given by Gorelick et al., 1993 and Javandel and Tsang, 1986 as:

$$L_{well} = \frac{2^{0.333}\ (Q\ gpm)}{\pi\ (T\ gpm/ft)(\ i\ ft/ft)}$$

$$L_{well} = \frac{2^{0.333}\ (149\ gpm)}{\pi\ (140\ gpm/ft)(\ 0.001\ ft/ft)}$$

$L_{well} =$ **428 ft**

CONCLUSION: Use **three recovery wells** to capture groundwater flowing beneath Site I.

While the required pumping rate for each well is estimated to be 149 gpm, assume **175 gpm per well** to include a safety factor, or a **total flow of 525 gpm.**

Place one well in the middle of the Site I groundwater flow path, one well **430 ft to the north** (i.e., perpendicular to groundwater flow), and one well **430 ft to the south** (i.e., perpendicular to groundwater flow).

REFERENCES

Gorelick, S.M., R.A. Freeze, D. Donohue, and J.F. Keely, 1993. Groundwater Contamination, Optional Capture and Containment, Lewis Publishers, Boca Raton, Florida.

Javandel, I, and C.F. Tsang, 1986. "Capture-Zone Type Curves: A Tool for Aquifer Cleanup", Ground Water, Vol. 24, pp. 616-625.

APPENDIX D.3
DESIGN PUMPING RATE OF HYDRAULIC CONTAINMENT WELLS
Groundwater Alternative C, Hydraulic Containment, Sites G, H, I and L
Sauget Area 1, Sauget and Cahokia, Illinois

PROBLEM: What is estimated pumping rate and number of wells required for hydraulic containment?

ASSUMPTIONS:

K = 0.1 cm/sec for all units (conservative assumption; shallow horizon actually 10^{-2} cm/sec)

b = 95 ft (assume 15 ft shallow horizon, 40 ft middle horizon, 40 ft deep horizon)

i = 0.001 ft/ft

L = 2200 ft (required capture length at line of wells perpendicular to groundwater flow for Site I and Sites G/ H/L

Surface infiltration from bluffs to Site 1 are reflected in flow gradient at site.

METHOD: Use Capture Zone Equations from Javandel and Tsang (1986) as presented in Gorelick et al, 1993):

Number of Wells	Distance Between Dividing Streamlines at Line of Wells (L)
1	Q/(2 T i)
2	Q/(T i)
3	3 Q / (2 T i)

Where:

Q = Constant pumping rate for each well
T = Transmissivity
i = Hydraulic gradient

For one well:

$$(L\ ft) = \frac{(Q\ gpm)}{(2\ (T\ gpm/ft)(i\ ft/ft))}$$

$$(Q\ gpm) = (L\ ft)[2\ (T\ gpm/ft)(i\ ft/ft)]$$

Where:

T = K b (use units of gpm/ft to provide Q in gpm)

$$(T\ \text{gpm/ft}) = \left(10^{-1}\ \frac{\text{cm}}{\text{sec}}\right)\left(\frac{1\ \text{ft}}{30.48\ \text{cm}}\right)(95\ \text{ft})\left(\frac{60\ \text{sec}}{\text{min}}\right)\left(7.48\ \frac{\text{gal}}{\text{ft}^3}\right)$$

$T = 140\ \text{gpm/ft}$

Yielding:

$$(Q\ \text{gpm}) = (2200\ \text{ft})[2\ (140\ \text{gpm/ft})(0.001\ \text{ft/ft})]$$

Q = 616 gpm for one-well case (no safety factor)

For two well case, total flow is the same (616 gpm), therefore Q per well is 308 gpm.
For three well case, total flow is the same (616 gpm), therefore Q per well is 205 gpm.

Assume that a three-well system will be used to provide redundancy and increased safety factor, and allow for more reliable capture while one well is shut off. For a three well case, the recommended distance between each pair of wells (L_{well}) is given by Gorelick et al., 1993 and Javandel and Tsang, 1986 as:

$$L_{well} = \frac{2^{0.333}\ (Q\ \text{gpm})}{\pi\ (T\ \text{gpm/ft})(i\ \text{ft/ft})}$$

$$L_{well} = \frac{2^{0.333}\ (205\ \text{gpm})}{\pi\ (140\ \text{gpm/ft})(0.001\ \text{ft/ft})}$$

$L_{well} = 587\ \text{ft}$

CONCLUSION: Use **three recovery wells** to capture groundwater flowing beneath Site I and Sites G/H/L.

While the required pumping rate for each well is estimated to be 205 gpm, assume **250 gpm per well** to include a safety factor, or a **total flow of 750 gpm.**

Place one well in the middle of the Site I and Sites G/H/L groundwater flow path, one well **590 ft to the north** (i.e., perpendicular to groundwater flow), and one well **590 ft to the south** (i.e., perpendicular to groundwater flow).

REFERENCES

Gorelick, S.M., R.A. Freeze, D. Donohue, and J.F. Keely, 1993. Groundwater Contamination, Optional Capture and Containment, Lewis Publishers, Boca Raton, Florida.

Javandel, I, and C.F. Tsang, 1986. "Capture-Zone Type Curves: A Tool for Aquifer Cleanup", Ground Water, Vol. 24, pp. 616-625.

May 16, 2001

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APPENDIX D.4
DESIGN PUMPING RATE OF HYDRAULIC CONTAINMENT WELLS
Groundwater Alternative D, Intensive Pumping, Sites G, H, I and L
Sauget Area 1, Sauget and Cahokia, Illinois

PROBLEM: What is estimated pumping rate and number of wells for intensive pumping system for Site I +Sites G/H/L plume?

ASSUMPTIONS:

K = 0.1 cm/sec for middle, deep horizon

b = 80 ft (40 ft middle horizon, 40 ft deep horizon)

i = 0.001 ft/ft

Available drawdown (s) = 15 ft (thickness of shallow unit) (this equals thickness of shallow saturated horizon)

Method: Use three different methods to develop a basis for flowrates for an intensive pumping system for the combined Site I + Site G/H/L plume areas.

Method 1. First, an empirical well pumping rate relationship (Driscoll, 1986) based on transmissivity, expected drawdown, and assumptions for other variables in the nonequilibrium (Jacob) equation was used. For this site, a transmissivity of 170,000 gpd/ft was calculated (based on an assumed hydraulic conductivity of 0.1 cm/sec and a saturated thickness of 80 ft for the combined middle and deep horizons).

For unconfined units:

$$\frac{Q}{s} = \frac{T}{1500} \qquad \text{(Eqn. 3, Q in gpm, s in ft, T in gpd/ft)}$$

$$Q(gpm) = \frac{\left(T\ \frac{gpd}{ft}\right)(s\ ft)}{1500}$$

$$T = (K)(b_T)$$

$$T = \left(0.1\frac{cm}{sec}\right)\left(\frac{86400\ \text{sec}}{day}\right)\left(\frac{in}{2.54\ cm}\right)\left(\frac{ft}{12\ in}\right)(80\,ft)\left(\frac{7.48\ gal}{ft^3}\right)$$

$$T = 170{,}000\ gpd/ft$$

$$Q(gpm) = \frac{\left(170{,}000\ \frac{gpd}{ft}\right)(15\,ft)}{1500}$$

$Q = 1700$ *gpm*

so that:

Q = 1700 gpm for pumping from a regional pumping well

Method 2. Schicht (1965) reports that "It is a general practice of industries and municipalities to place a well in operation and pump it at high rates, often about 1000 gpm." Therefore based on this method:

Q = 1000 gpm for pumping from a regional pumping well

Method 3. Schicht also reports the specific capacity from three wells in T2N, R10W (where Area 1 is located) as being 152.5, 188, and 158 gpm/ft, respectively. By averaging these specific capacities (166 gpm/ft), and multiplying by an assumed drawdown of 15 ft, a pumping rate of 2490 gpm is obtained. As would be expected, use of specific capacities results in a wide range of predicted well pumping rates due to the effects of well construction, well condition, and local hydrogeologic conditions.

Q = 2500 gpm for pumping from a regional pumping well

These calculation approaches suggest that a regional pumping well could yield from 1000 to 2500 gpm in the Area 1 location.

Therefore it was assumed that the total pumping rate of any intensive pumping system would also be in this range, although the flow would be distributed among several wells. Therefore the following conceptual design was developed:

Qtotal = 1500 gpm total flowrate (based on lower-middle range of flowrate estimates to be conservative)

No. Wells = 6 wells (based on shape of affected groundwater zone, reasonable pattern of coverage)

Q per well: 250 gpm (1500 gpm total flowrate divided by six wells)

APPENDIX F
COST ESTIMATE CALCULATIONS

Sauget Area 1 Cost Estimate
Summary

Fill Alternative C: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H and L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Total	$6,217,230	$4,270,757	$10,487,986

Fill Alternative D: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Boundary Leachate Control (Sites G, H, I and L)			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Boundary Leachate Control (Sites G, H, I and L)	$1,169,435	$6,471,832	$7,641,267
Total	$7,386,665	$10,742,589	$18,129,254

Fill Alternative E: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery (90%); **Source Solidification (10%)**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H,A232 L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery (90%)	$1,151,933	$7,347,542	$8,499,475
Source Solidification (10%)	$10,211,315	$0	$10,211,315
Total	$21,818,277	$11,618,299	$33,436,576

Fill Alternative E: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery (80%); **Source Solidification (20%)**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery (80%)	$1,053,904	$6,832,901	$7,886,805
Source Solidification (20%)	$19,890,286	$0	$19,890,286
Total	$31,399,219	$11,103,657	$42,502,877

Sauget Area 1 Cost Estimate
Summary

Fill Alternative E: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery (70%); **Source Solidification (30%)**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery (70%)	$925,495	$6,252,837	$7,178,332
Source Solidification (30%)	$29,569,257	$0	$29,569,257
Total	$40,949,781	$10,523,594	$51,473,375

Fill Alternative E: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery (60%); **Source Solidification (40%)**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery (60%)	$805,791	$5,688,609	$6,494,401
Source Solidification (40%)	$39,248,228	$0	$39,248,228
Total	$50,509,049	$9,959,366	$60,468,415

Fill Alternative E: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery (50%); **Source Solidification (50%)**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery (50%)	$684,682	$5,133,352	$5,818,034
Source Solidification (50%)	$48,927,199	$0	$48,927,199
Total	$60,066,911	$9,404,109	$69,471,020

Fill Alternative F: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery; **Source Excavation (10%) & On-Site**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery	$1,288,252	$7,952,411	$9,240,662
Source Excavation (10%)	$5,812,383	$4,348,323	$10,160,706
Total	$17,555,664	$16,571,490	$34,127,155

Fill Alternative F: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery; **Source Excavation (20%) & On-Site**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery	$1,288,252	$7,952,411	$9,240,662
Source Excavation (20%)	$9,728,878	$4,397,858	$14,126,736
Total	$21,472,159	$16,621,026	$38,093,184

Fill Alternative F: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery; **Source Excavation (30%) & On -Site**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery	$1,288,252	$7,952,411	$9,240,662
Source Excavation (30%)	$13,275,142	$4,446,159	$17,721,301
Total	$25,018,423	$16,669,326	$41,687,749

Sauget Area 1 Cost Estimate
Summary

Fill Alternative F: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery; **Source Excavation (40%) & On-Site**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery	$1,288,252	$7,952,411	$9,240,662
Source Excavation (40%)	$16,620,747	$4,493,820	$21,114,567
Total	$28,364,028	$16,716,988	$45,081,016

Fill Alternative F: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery; **Source Excavation (50%) & On-Site**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery	$1,288,252	$7,952,411	$9,240,662
Source Excavation (50%)	$19,834,149	$4,541,074	$24,375,223
Total	$31,577,430	$16,764,241	$48,341,671

Fill Alternative F: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery; **Source Excavation (10%) & Off-Site**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery	$1,288,252	$7,952,411	$9,240,662
Source Excavation (10%)	$9,468,041	$0	$9,468,041
Total	$21,211,322	$12,223,168	$33,434,490

Fill Alternative F: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery; **Source Excavation (20%) & Off-Site**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery	$1,288,252	$7,952,411	$9,240,662
Source Excavation (20%)	$18,936,082	$0	$18,936,082
Total	$30,679,363	$12,223,168	$42,902,531

Fill Alternative F: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery; **Source Excavation (30%) & Off-Site**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery	$1,288,252	$7,952,411	$9,240,662
Source Excavation (30%)	$28,404,123	$0	$28,404,123
Total	$40,147,404	$12,223,168	$52,370,572

Fill Alternative F: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery; **Source Excavation (40%) & Off-Site**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery	$1,288,252	$7,952,411	$9,240,662
Source Excavation (40%)	$37,872,164	$0	$37,872,164
Total	$49,615,446	$12,223,168	$61,838,613

Sauget Area 1 Cost Estimate
Summary

Fill Alternative F: Institutional Controls; Ground-Water Monitoring; DNAPL Recovery beneath Fill Areas G, H and I; Low Permeability Cover, Sites G, H and L; Low Permeability Asphaltic Cover, Site I; Pre-Design Investigation; Utility Relocation; Leachate Recovery; **Source Excavation (50%) & Off-Site**			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
DNAPL Recovery, Sites G, H and I	$221,239	$248,380	$469,619
Low Permeability Cover, Sites G, H, L	$2,010,634	$421,177	$2,431,810
Low Permeability Asphaltic Cover, Site I	$3,641,229	$170,030	$3,811,259
Pre-Design Investigation	$2,500,000	$0	$2,500,000
Utility Relocation	$1,737,800	$0	$1,737,800
Leachate Recovery	$1,288,252	$7,952,411	$9,240,662
Source Excavation (50%)	$47,340,206	$0	$47,340,206
Total	$59,083,487	$12,223,168	$71,306,654

Sauget Area 1 Cost Estimate
Summary

Ground Water Alternative A: Institutional Controls; Ground-Water Monitoring			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
Total	$344,128	$3,431,170	$3,775,298

Ground Water Alternative B: Institutional Controls; Ground-Water Monitoring, Abandonment of Existing Residential Wells, Hydraulic Containment Downgradient of Site I			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-water Monitoring	$177,528	$2,810,718	$2,988,246
Abandonment of Existing Wells	$19,251	$0	$19,251
Hydraulic Containment Downgradient of Site I	$314,044	$6,147,793	$6,461,837
Total	$677,423	$9,578,963	$10,256,386

Ground Water Alternative C: Institutional Controls; Ground-Water Monitoring; Abandownment of Existing Residential Wells, Hydraulic Containment Downgradient of Sites G, H, I and L			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-Water Monitoring	$177,528	$2,810,718	$2,988,246
Abandonment of Existing Wells	$19,251	$0	$19,251
Hydraulic Containment Down-gradient of Sites G, H, I & L	$400,539	$7,841,046	$8,241,585
Total	$763,918	$11,272,216	$12,036,134

Ground Water Alternative D: Institutional Controls; Ground-Water Monitoring; Plume Recovery; Ground-Water Treatment			
	Capital Costs	O&M Costs	Total
Institutional Controls	$166,600	$620,452	$787,052
Ground-Water Monitoring	$177,528	$2,810,718	$2,988,246
Abandonment of Existing Wells	$19,251	$0	$19,251
Plume Recovery	$606,421	$712,873	$1,319,293
Ground-Water Treatment	$1,952,085	$46,302,538	$48,254,623
Total	$2,921,885	$50,446,581	$53,368,466

NOTE: Numbers shown on the following spreadsheets are rounded. Actual numbers used in calculation have more significant digits, so calculated totals vary somewhat from totals determined using rounded numbers.

Assume initial capital cost to upgrade fencing, etc is 25,000

New Fencing: Sites H and L

	Unit	Unit Cost	Quantity	
10-ft Galvanized Security Fence, 3-Strand Barbed Wire	LF	47.2	3000	141,600
			Total, Capital Cost	166,600

Assume annual cost of 4 quarterly inspections + report @ $5,000/quarter
Assume annual cost of fencing repairs, signage replacement of $25,000
Assume annual cost of $5000 for public meetings/information distribution

			PV
0.07	30	50000	$620,452
0.07	100	50000	$713,463
0.07	500	50000	$714,286

Installation Costs

Deep Zone (100 ft td)

Item	Unit	Unit Cost	Quantity	Extended Cost	
Mob/Demob	LS	2,401	0 1	240 1	Based on ten cluster
OVA	DAY	184 3	3	552 9	
Decon	DAY	205 34	3	616 02	
2-in SS Well Casing	LF	21 73	90	1955 7	
2-in SS Well Screen	LF	18 41	10	184 1	
2-in Submersible Pump	DAY	63 86	3	191 58	
Hollow-stem Auger, 8-in OD	LF	43 66	100	4366	
2-in Screen Filter Pack	LF	9 27	12	111 24	
Surface Pad, 4x4x4in	EA	18 43	1	18 43	
2-in Well, Portland Cement Grout	LF	0 92	86	79 12	
2-in Well, Bentonite Seal	EA	34.34	1	34 34	
8x8x5-ft Steel Cover	EA	365 64	1	365 64	
5-ft Guard Posts	EA	61.84	4	247 36	
				S8,963	

Intermediate Zone (60 ft td)

Item	Unit	Unit Cost	Quantity	Extended Cost
Mob/Demob	LS	2,401	0	0
OVA	DAY	184.3	2	368 6
Decon	DAY	205 34	2	410 68
2-in SS Well Casing	LF	21 73	50	1086.5
2-in SS Well Screen	LF	18 41	10	184 1
2-in Submersible Pump	DAY	63.86	2	127 72
Hollow-stem Auger, 8-in OD	LF	43.66	60	2619.6
2-in Screen Filter Pack	LF	9.27	12	111 24
Surface Pad, 4x4x4in	EA	18 43	1	18 43
2-in Well, Portland Cement Grout	LF	0.92	46	42 32
2-in Well, Bentonite Seal	EA	34 34	1	34 34
8x8x5-ft Steel Cover	EA	365.64	1	365.64
5-ft Guard Posts	EA	61 84	4	247.36
		Subtotal, Deep Well		S5,617

Shallow Zone (30 ft td)	Item	Unit	Unit Cost	Quantity	Extended Cost
	Mob/Demob	LS	2,401	0	0
	OVA	DAY	184 3	1	184 3
	Decon	DAY	205 34	1	205 34
	2-in SS Well Casing	LF	21 73	20	434 6
	2-in SS Well Screen	LF	18 41	10	184 1
	2-in Submersible Pump	DAY	63 86	1	63 86
	Hollow-stem Auger, 8-in OD	LF	43 66	30	1309 8
	2-in Screen Filter Pack	LF	9 27	12	111 24
	Surface Pad, 4x4x4in	EA	18 43	1	18 43
	2-in Well, Portland Cement Grout	LF	0 92	16	14 72
	2-in Well, Bentonite Seal	EA	34 34	1	34 34
	8x8x5-ft Steel Cover	EA	365 64	1	365 64
	5-ft Guard Posts	EA	61 84	4	247 36
					$3,174
Total, per Well Cluster					$17,753
No of Clusters					10
Total, Well Installation					$177,528

Costs are installed costs and include equipment, labor and materials
Assumptions
All work done in level D

Sampling and Analysis, Annual Costs -Quarterly Frequency					
	Volatiles	EA	175	120	21000
	Semi-Volatiles	EA	456 67	120	54800
	Metals	EA	289 67	120	34760
	PCBs/Pest	EA	206 67	120	24800
	Dioxins	EA	182 5	120	21900
	Herbicides	EA	225	120	27000
	OVA	DAY	184	24	4416
	Pump	MO	178 43	4	714
	Flow calibrator	MO	212	4	848
	Truck	DAY	32 69	24	785
	PPE	DAY	50	24	1200
	Drums	EA	65 19	192	12516
	Sampling Crew	HR	85 25	480	40920
	Drum Loading	EA	6 21	192	1192
	Drum Transport	MI	1 5	2008	3012
Labor	Drum Disposal	EA	140	192	26880
Equipment	Report	EA	15000	4	60000
Report					336744

No clusters	10
wells/cluster	3
samples/event	30
Quarterly	4
Semi Annual	2

Sampling and Analysis, Annual Costs -Semi-annual Frequency					
	Volatiles	EA	175	60	10500
	Semi-Volatiles	EA	456 67	60	27400
	Metals	EA	289 67	60	17380
	PCBs	EA	206 67	60	12400
	Dioxins	EA	182 5	60	10950
	Herbicides	EA	225	60	13500
	OVA	DAY	184	12	2208
	Pump	MO	178 43	2	357
	Flow calibrator	MO	212	2	424
	Truck	DAY	32 69	12	392
	PPE	DAY	50	12	600
	Drums	EA	65 19	96	6258
	Sampling Crew	HR	85 25	240	20460
	Drum Loading	EA	6 21	96	596
	Drum Transport	MI	1 5	1004	1506
	Drum Disposal	EA	140	96	13440
	Report	EA	15000	2	30000
					168372

PV, 5 yr@qtrly	0 07	5	$1,380,718	
PV, 25 yr@semi-annual			$1,398,978	
			$2,779,696	
PV, 5 yr@semi-annual	0 07	5	$690,359	
PV, 30 yr@semi-annual	0 07	30	$2,089,337	

PV, O&M	0 07	2500	30	$31,023
assume 2,500/year	0 07	2500	100	$35,673
	0 07	2500	500	$35,714

Total PV, monitoring + O&M $2,810,718

PV, 100 yr@semi-annual	0 07	100	$2,402,544
PV, 95 yr@ semi			$1,712,185
PV, 100 (5 qtr, 95 semi)			$3,092,903
PV O&M (100)			$35,673
Total PV			$3,128,576
PV, 100 yr@semi-annual	0 07	500	$2,405,316
PV, 95 yr@ semi			$1,714,957
PV, 500 (5 qtr, 495 semi)			$3,095,675
PV O&M (500)			$35,714
Total PV			$3,131,390

Captial Costs

Item	Unit	Unit Cost	Quantity	Extended Cost	
Product Recovery Pump, 1/3HP, 230V, Controls, Probe, Corrosive Liquid	Ea	8,242	4	32,968	(1 spare)
Explosion Proof Electrical Receptacle	Ea	427.68	3	1,283	
50 Ft Flexible Discharge Hose	Ea	159	9	1,431	
250 gal bulk container, polyethylene	Ea	749.95	3	2,250	
Slab for Secondary Containment (2)	SF	6.38	72	459	
55-gal DOT drum	Ea	65.19	54	3,520	
Haz Mat'l Storage Building, 8 drum cap.	Ea	11,448	1	11,448	
1st Year Drum Disposal	Ea	300	18	5,400	
Hauling 1st Year	Mi	1.44	2008	2,892	
1st Year Labor for Recovery	Hr	85.25	1872	159,588	
Total				221,239	

Operation and Maintenance Costs

Disposal of Drummed Liquid Waste	Ea	300	6	1,800	
Hauling: 4 trips/year	Mi	1.44	2008	2,892	
Quarterly Reports	Ea	3000	4	12,000	
Labor - 2 Man Crew	Hr	85.25	360	30,690	
Pump O&M	Ea	393.96	12	4,728	
Electrical					
Total Annual				52,109	
0.07		6		$248,380	

For simplicity, put first year of drum disposal in capital items, then average drum disposal over 6 years for the remainder
O&M labor is averaged over remaining 6 years

Costs are installed costs and include equipment, labor and materials.
Assumptions:
All work done in level D.

AREA G

Capital Costs	Item	Unit	Unit Cost	Quantity	Extended Cost
	Clearing	Ac	65.31	4.33	283
	Unclassified Fill for Base Contours	CY	7.05	20833	146,873
	Geonet for Gas Collection - geotextile 2 sides	SF	0.42	188750	79,275
	Sand Bedding Layer	CY	12.22	3495	42,709
	Geocomposite	SF	0.8	188750	151,000
	Geonet for Drainage - geotextile one side	SF	0.36	188750	67,950
	Unclassified Fill for Cover (18-in)	CY	7.05	10485	73,919
	Topsoil (6-in)	CY	24.25	3495	84,754
	Seeding, Vegetative Cover	Ac	1,741	4.33	7,539
	Automated Sprinkler	Ac	4,451	4.33	19,273
	Grass Ditching, 3 ftDeep, 2:1 Slopes	LF	11.11	1800	19,998
	Gas Venting System	LF	19.1	300	5,730
	Design (15% of capital costs)				104,895
		Subtotal, Capital Costs			804,197
O&M Costs	Fertilize, 800 lb/ac (2/yr)	Ac	83.83	8.66	726
	Mowing (16/yr)	Ac	30.18	69.28	2,091
	Quarterly Inspection	EA	1500	4	6,000
	Misc Repair	LS	3000	1	3,000
					11,817

Costs are installed costs and include equipment, labor and materials.
Assumptions:
All work done in level D.
All fill imported from off-Site.
Present Value for G H and L calculated at the end of L

AREA H

Capital Costs	Item	Unit	Unit Cost	Quantity	Extended Cost
	Clearing	Ac	65.31	5.22	341
	Unclassified Fill for Base Contours	CY	7.05	30247	213,241
	Geonet for Gas Collection - geotextile 2 sides	SF	0.42	227500	95,550
	Sand Bedding Layer	CY	12.22	4213	51,483
	Geocomposite	SF	0.8	227500	182,000
	Geonet for Drainage - geotextile one side	SF	0.36	227500	81,900
	Unclassified Fill for Cover (18-in)	CY	7.05	12639	89,105
	Topsoil (6-in)	CY	24.25	4213	102,165
	Seeding, Vegetative Cover	Ac	1,741	5.22	9,088
	Automated Sprinkler	Ac	4,451	5.22	23,234
	Grass Ditching, 3 ftDeep, 2:1 Slopes	LF	11.11	2000	22,220
	Gas Venting System	LF	19.1	300	5,730
	Design (15% of capital costs)				131,409
		Subtotal, Capital Costs			1,007,466
O&M Costs	Fertilize, 800 lb/ac (2/yr)	Ac	83.82	10.44	875
	Mowing (16/yr)	Ac	30.18	83.52	2,521
	Quarterly Inspection	EA	1500	4	6,000
	Misc Repair	LS	3000	1	3,000
					12,396

Costs are installed costs and include equipment, labor and materials.
Assumptions:
All work done in level D.
All fill imported from off-Site.
Present Value for G H and L calculated at the end of L

AREA L

	Item	Unit	Unit Cost	Quantity	Extended Cost
Capital Costs	Clearing	Ac	65.31	1.12	73
	Unclassified Fill for Base Contours	CY	7.05	3150	22,208
	Geonet for Gas Collection - geotextile 2 sides	SF	0.42	48600	20,412
	Sand Bedding Layer	CY	12.22	900	10,998
	Geocomposite	SF	0.8	48600	38,880
	Geonet for Drainage - geotextile one side	SF	0.36	48600	17,496
	Unclassified Fill for Cover (18-in)	CY	7.05	2700	19,035
	Topsoil (6-in)	CY	24.25	900	21,825
	Seeding, Vegetative Cover	Ac	1,741	1.12	1,950
	Automated Sprinkler	Ac	4,451	1.12	4,985
	Grass Ditching, 3 ftDeep, 2:1 Slopes	LF	11.11	900	9,999
	Gas Venting System	LF	19.1	270	5,157
	Design (15% of capital costs)				25,953
		Subtotal, Capital Costs			198,970
O&M Costs	Fertilize, 800 lb/ac (2/yr)	Ac	83.82	2.24	188
	Mowing (16/yr)	Ac	30.18	17.92	541
	Quarterly Inspection	EA	1500	4	6,000
	Misc Repair	LS	3000	1	3,000
					9,729
					33,941
Total Annual O&M, G, H & L			0.07	30	421,177
PV, 30 yr period					

Costs are installed costs and include equipment, labor and materials.
Assumptions:
All work done in level D.
All fill imported from off-Site.

Capital Costs	Item	Unit	Unit Cost	Quantity	Extended Cost
	Grubbing	Ac	65.31	16.88	1,102
	Unclassified Fill for Base Contours	CY	7.05	33423	235,632
	Geonet for Gas Collection - geotextile 2 sides	SF	0.42	735375	308,858
	Sand Bedding Layer	CY	12.22	13618	166,412
	Geocomposite	SF	0.8	735375	588,300
	Geonet for Drainage - geotextile one side	SF	0.36	735375	264,735
	Unclassified Fill for Cover (18-in)	CY	7.05	40854	288,021
	Gravel Base (8-in)	CY	20.66	18157	375,131
	Asphalt, 3-in intermediate course	TN	48.56	11950	580,282
	Prime Coat	SY	0.49	81708	40,037
	Tack Coat	SY	0.53	81708	43,305
	Asphalt, 1-in wearing course	TN	55.67	3983	221,748
	Automated Sprinkler	Ac	4,451	0	0
	Grass Ditching, 3 ftDeep, 2:1 Slopes	LF	11.11	3800	42,218
	Gas Venting System	LF	19.1	550	10,505
	Design (15% of capital costs)				474,943
		Subtotal, Capital Costs			3,641,229
					0
O&M Costs	Resurface (2)	TN	55.67	3983	221,748
	Quarterly Monitoring				
		0.07	10		112,726
		0.07	20		57,304
	Present Value				170,030

Includes resurfacing at 10 years and 20 years.

Costs are installed costs and include equipment, labor and materials.
Assumptions:
All work done in level D.
All fill imported from off-Site.

per well	Item	Unit	Unit Cost	Quantity	Extended Cost	
	10,000-gal Horiz Plastic Sump w/6-in NPT	EA	5,956	0 0179	106 36	2 divided by no of wells
	Mobilize Rig & Crew	LS	2,401	0 0089	21 44	1 divided by no of wells
	10 hp liquid ring pump (2 active, 2 standby)	EA	9,885	0 0357	353 04	4 divided by no of wells
	Seal water tank	EA	424 55	4	1698 20	
	2 in stainless steel casing	LF	21 73	15	325 95	
	2-in stainless steel screen	LF	18 41	10	184 10	
	8-in hollow stem auger	LF	43 66	25	1091 50	
	55-gal drum for cuttings	EA	65 19	1	65 19	
	2-in screen filter pack	LF	9 27	12	111 24	
	Surface pad (4'x4'x4-in)	EA	20 74	1	20 74	
	2-in well p-c grout	LF	0 92	11	10 12	
	2-in well bentonite seal	EA	85 87	1	85 87	
	6--in stainless steel header	LF	57 84	50	2892 00	
	2-in dia ss pipe	LF	21 73	10	217 30	
	Elbow	EA	264 9	2	529 80	
	Valve	EA	82 26	1	82 26	
	Pressure Gauge	EA	95 74	1	95 74	
					7890 84	
	No of wells	112				

Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost
	Well Installation	EA	7,891	112	883,774
	Leachate Treatment System	EA	285,661	1	285,661
				Total, Capital Costs	1,169,435
O&M Costs	Coal Based General Pupose Carbon, 8x30 Sieve, 10,000 lb	LB	0 77	0	0
	Remove, Replace Carbon, 10,000 lb	LB	0 77	200,000	154,000
	Remove, Reinstall Carbon Adsorber Unit	EA	297 31	20	5,946
	Discharge to POTW	Kgal	2	63598	127,196
	Load Haz Waste Solids	CY	2.18	285	621
	Transport 20 CY Loads	MI	1 44	7028	10,120
	Solids Disposal	CY	140	285	39,886
	Labor - 2 Man Crew	HR	85 25	0	0
	Leachate Pump Replacement	EA	2,500	0 0	0
	Pump&Motor Maintentance/Repair	EA	393 96	0	0
	Electrical	KWH	0 06	62867	3,772
	Operators (4)	EA	45,000	4	180,000
				Total, Annual O&M	$521,542
		Discount Value	Period		
O&M Present Value		0 07	30		6,471,832

Item	Unit	Unit Cost	Quantity	Extended Cost
12-in force main water line	lf	70	7,700	539000
Telephone line	lf	15	7,700	115500
Telephone junction box	ea	$10,000	2	20000
12-in sanitary sewer	lf	90	7,700	693000
Cable television	lf	20	7,700	154000
Cable tv splice box		5000	2	10000
Gas line (new)	lf	25	7,700	192500
Gas line (abandon)	lf	3	4,600	13800
				1737800

Water line costs from City of Nashville
Telephone costs from Southwestern Bell
Sanitary sewer costs from City of Nashville
Cable television costs from Warner Cable
Gas line costs from Entex

Capital Costs

Item	Unit	Unit Cost	Quantity	Extended Cost
Mob/Demob	LS	2,401	1	2401
OVA	DAY	184 3	1	184 3
Decon	DAY	205 34	1	205 34
4-in SS Well Casing	LF	21 73	20	434 6
4-in SS Well Screen	LF	18 41	10	184 1
Solo II Leachate Pumps with Metal Floats et al	EA	$2,500	1	2500
Compressor	EA	11,000	0 025	275
Hollow-stem Auger, 11-in OD	LF	43 66	30	1309 8
2-in Screen Filter Pack	LF	9 27	12	111 24
Surface Pad, 4x4x4in	EA	18 43	1	18 43
2-in Well, Portland Cement Grout	LF	0 92	16	14.72
2-in Well, Bentonite Seal	EA	34 34	1	34.34
8x8x5-ft Steel Cover	EA	365 64	1	365 64
5-ft Guard Posts	EA	61 84	4	247 36
		per well installation costs		$8,286

Required No. of Leachate Recovery Wells

% of Surface Area	50%	60%	70%	80%	90%	100%
No of Wells	60	72	84	97	107	121
Annual Carbon Usage (lb)	100,000	120,000	140,000	160,000	180,000	200,000

All work assumed to be performed in level D
Treatment system costs scaled down from the 480 gpm system using the following formula
Cost a = cost b(capacity a/capacity b)^0 6
Recovery pump and compressor costs based on vendor quote
One 82 cfm compressor for 40 recovery wells, therefore use 0 025 for compressor quantity/well
Pumps replaced every three years

Recovery Well Coverage: 50%					
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost
	Well Installation	EA	8,286	60	497,152
	Leachate Treatment System	EA	187,530	1	187,530
				Total, Capital Costs	684,682
O&M Costs	Coal Based General Pupose Carbon, 8x30 Sieve, 10,000 lb	LB	0.77	0	0
	Remove, Replace Carbon, 10,000 lb	LB	0.77	100,000	77,000
	Remove, Reinstall Carbon Adsorber Unit	EA	297.31	10	2,973
	Discharge to POTW	Kgal	2	31536	63,072
	Load Haz Waste Solids	CY	2.18	142	311
	Transport 20 CY Loads	MI	1.44	3514	5,060
	Solids Disposal	CY	140	142	19,943
	Labor - 2 Man Crew	HR	85.25	80	6,820
	Leachate Pump Replacement	EA	2,500	20	50,000
	Pump&Motor Mainentance/Repair	EA	393.96	12	4,728
	Electrical	KWH	0.06	62867	3,772
	Operators (4)	EA	45,000	4	180,000
				Total, Annual O&M	$413,678
		Discount Value	Period		
O&M Present Value		0.07	30		5,133,352

Recovery Well Coverage: 60%					
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost
	Well Installation	EA	8,286	72	596,583
	Leachate Treatment System	EA	209,209	1	209,209
				Total, Capital Costs	805,791
O&M Costs	Coal Based General Pupose Carbon, 8x30 Sieve, 10,000 lb	LB	0.77	0	0
	Remove, Replace Carbon, 10,000 lb	LB	0.77	120,000	92,400
	Remove, Reinstall Carbon Adsorber Unit	EA	297.31	12	3,568
	Discharge to POTW	Kgal	2	37843	75,686
	Load Haz Waste Solids	CY	2.18	171	373
	Transport 20 CY Loads	MI	1.44	4016	5,783
	Solids Disposal	CY	140	171	23,932
	Labor - 2 Man Crew	HR	85.25	96	8,184
	Leachate Pump Replacement	EA	2,500	24	60,000
	Pump&Motor Mainentance/Repair	EA	393.96	12	4,728
	Electrical	KWH	0.06	62867	3,772
	Operators (4)	EA	45,000	4	180,000
				Total, Annual O&M	$458,425
		Discount Value	Period		
O&M Present Value		0.07	30		5,688,609

Recovery Well Coverage: 70%					
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost
	Well Installation	EA	8,286	84	696,013
	Leachate Treatment System	EA	229,482	1	229,482
				Total, Capital Costs	925,495
O&M Costs	Coal Based General Pupose Carbon, 8x30 Sieve, 10,000 lb	LB	0.77	0	0
	Remove, Replace Carbon, 10,000 lb	LB	0.77	140,000	107,800
	Remove, Reinstall Carbon Adsorber Unit	EA	297.31	14	4,162
	Discharge to POTW	Kgal	2	44150	88,300
	Load Haz Waste Solids	CY	2.18	199	435
	Transport 20 CY Loads	MI	1.44	5020	7,229
	Solids Disposal	CY	140	199	27,920
	Labor - 2 Man Crew	HR	85.25	112	9,548
	Leachate Pump Replacement	EA	2,500	28	70,000
	Pump&Motor Mainentance/Repair	EA	393.96	12	4,728
	Electrical	KWH	0.06	62867	3,772
	Operators (4)	EA	45,000	4	180,000
				Total, Annual O&M	$503,894
		Discount Value	Period		
O&M Present Value		0.07	30		6,252,837

Recovery Well Coverage: 80%					
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost
	Well Installation	EA	8,286	97	803,729
	Leachate Treatment System	EA	250,175	1	250,175
				Total, Capital Costs	1,053,904
O&M Costs	Coal Based General Pupose Carbon, 8x30 Sieve, 10,000 lb	LB	0.77	0	0
	Remove, Replace Carbon, 10,000 lb	LB	0.77	160,000	123,200
	Remove, Reinstall Carbon Adsorber Unit	EA	297.31	16	4,757
	Discharge to POTW	Kgal	2	50983	101,966
	Load Haz Waste Solids	CY	2.18	228	497
	Transport 20 CY Loads	MI	1.44	5522	7,952
	Solids Disposal	CY	140	228	31,909
	Labor - 2 Man Crew	HR	85.25	129	11,026
	Leachate Pump Replacement	EA	2,500	32.3	80,833
	Pump&Motor Mainentance/Repair	EA	393.96	12	4,728
	Electrical	KWH	0.06	62867	3,772
	Operators (4)	EA	45,000	4	180,000
				Total, Annual O&M	$550,639
		Discount Value	Period		
O&M Present Value		0.07	30		6,832,901

Recovery Well Coverage: 90%					
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost
	Well Installation	EA	8,286	107	886,588
	Leachate Treatment System	EA	265,345	1	265,345
				Total, Capital Costs	1,151,933
O&M Costs	Coal Based General Pupose Carbon, 8x30 Sieve, 10,000 lb	LB	0 77	0	0
	Remove, Replace Carbon, 10,000 lb	LB	0 77	180,000	138,600
	Remove, Reinstall Carbon Adsorber Unit	EA	297 31	18	5,352
	Discharge to POTW	Kgal	2	56239	112,478
	Load Haz Waste Solids	CY	2 18	256	559
	Transport 20 CY Loads	MI	1 44	6526	9,397
	Solids Disposal	CY	140	256	35,897
	Labor - 2 Man Crew	HR	85 25	143	12,162
	Leachate Pump Replacement	EA	2,500	35 7	89,167
	Pump&Motor Mainentance/Repair	EA	393 96	12	4,728
	Electrical	KWH	0 06	62867	3,772
	Operators (4)	EA	45,000	4	180,000
				Total, Annual O&M	$592,112
		Discount Value	Period		
O&M Present Value		0.07	30		7,347,542

Recovery Well Coverage: 100%					
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost
	Well Installation	EA	8,286	121	1,002,590
	Leachate Treatment System	EA	285,661	1	285,661
				Total, Capital Costs	1,288,252
O&M Costs	Coal Based General Pupose Carbon, 8x30 Sieve, 10,000 lb	LB	0.77	0	0
	Remove, Replace Carbon, 10,000 lb	LB	0.77	200,000	154,000
	Remove, Reinstall Carbon Adsorber Unit	EA	297.31	20	5,946
	Discharge to POTW	Kgal	2	63598	127,196
	Load Haz Waste Solids	CY	2.18	285	621
	Transport 20 CY Loads	MI	1.44	7028	10,120
	Solids Disposal	CY	140	285	39,886
	Labor - 2 Man Crew	HR	85.25	161	13,754
	Leachate Pump Replacement	EA	2,500	40.3	100,833
	Pump&Motor Mainentance/Repair	EA	393.96	12	4,728
	Electrical	KWH	0.06	62867	3,772
	Operators (4)	EA	45,000	4	180,000
				Total, Annual O&M	$640,856
		Discount Value	Period		
O&M Present Value		0.07	30		7,952,411

Use 400 yd^3/day for production rate (bank yd^3)	300
Working Hours/Day	8
Production Rate (yd^3/hr)	37 5
Level B Protection for Excavation	

	Waste Volume (yd^3)		% of Volume 10 0%	20 0%	30 0%	40 0%	50 0%
Site G	139,715		13,972	27,943	41,915	55,886	69,858
Site H	168,432		16,843	33,686	50,530	67,373	84,216
Site I	680,827		68,083	136,165	204,248	272,331	340,414
Site L	18,069		1,807	3,614	5,421	7,228	9,035
Total	1,007,043		100,704	201,409	302,113	402,817	503,522
	Equivalent Tonnage (1 5 T/yd)		151,056	302,113	453,169	604,226	755,282
	Equivalent Machine Hrs		2,685	5,371	8,056	10,742	13,427

	Percentage of Waste Volume to be Remediated:		**10%**			Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization	lump sum			0		
	Personnel Mobilization (use 5% of construction cost		0 005		48,395		
	Equipment Mobilization (use 1% of construction cost)		0 01		96,790		
	Performance Bond (3% of cost)		0 03		290,369		
	Equipment	Mo	141,571	15 5	2,197,581		
	Labor	Hr	638 19	2,685	1,713,826		
	Equipment Maintenance	Mo	922	15.5	14,312		
	Type I Portland Cement	TN	77 73	37,764	2,935,404		
	Stabilize Wet Wastes	Cu Yd	100 00	10,070	1,007,043		
	Load Stabilized Wastes	Cu Yd	3 67	10,070	36,958		
	Transport Stabilized Wastes	Mi	1 44	252,768	363,986		
	Dispose Stabilized Wastes	Cu Yd	140	10,070	1,409,860		
	Demob (use 1% of cost)		0 01		96,790		
	Install Monitoring Wells (4 Clusters)				0		
	Total				**10,211,315**	$101	$68

	Percentage of Waste Volume to be Remediated:			20%		Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization	lump sum			0		
	Personnel Mobilization (use .5% of construction cost		0.005		48,395		
	Equipment Mobilization (use 1% of construction cost)		0.01		96,790		
	Performance Bond (3% of cost)		0.03		290,369		
	Equipment	Mo	141,571	31.0	4,395,163		
	Labor	Hr	638.19	5,371	3,427,652		
	Equipment Maintenance	Mo	922	31.0	28,624		
	Type I Portland Cement	TN	77.73	75,528	5,870,809		
	Stabilize Wet Wastes	Cu Yd	100.00	20,141	2,014,086		
	Load Stabilized Wastes	Cu Yd	3.67	20,141	73,917		
	Transport Stabilized Wastes	Mi	1.44	505,536	727,971		
	Dispose Stabilized Wastes	Cu Yd	140	20,141	2,819,720		
	Demob (use 1% of cost)		0.01		96,790		
					0		
	Total				**19,890,286**	$99	$66

	Percentage of Waste Volume to be Remediated:			30%		Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization	lump sum			0		
	Personnel Mobilization (use .5% of construction cost		0.005		48,395		
	Equipment Mobilization (use 1% of construction cost)		0.01		96,790		
	Performance Bond (3% of cost)		0.03		290,369		
	Equipment	Mo	141,571	46.6	6,592,744		
	Labor	Hr	638.19	8,056	5,141,478		
	Equipment Maintenance	Mo	922	46.6	42,936		
	Type I Portland Cement	TN	77.73	113,292	8,806,213		
	Stabilize Wet Wastes	Cu Yd	100.00	30,211	3,021,129		
	Load Stabilized Wastes	Cu Yd	3.67	30,211	110,875		
	Transport Stabilized Wastes	Mi	1.44	758,303	1,091,957		
	Dispose Stabilized Wastes	Cu Yd	140	30,211	4,229,581		
	Demob (use 1% of cost)		0.01		96,790		
	Install Monitoring Wells (4 Clusters)				0		
	Total				**29,569,257**	$98	$65

	Percentage of Waste Volume to be Remediated:			40%		Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization	lump sum			0		
	Personnel Mobilization (use 5% of construction cost		0.005		48,395		
	Equipment Mobilization (use 1% of construction cost)		0.01		96,790		
	Performance Bond (3% of cost)		0.03		290,369		
	Equipment	Mo	141,571	62.1	8,790,325		
	Labor	Hr	638.19	10,742	6,855,304		
	Equipment Maintenance	Mo	922	62.1	57,248		
	Type I Portland Cement	TN	77.73	151,056	11,741,618		
	Stabilize Wet Wastes	Cu Yd	100.00	40,282	4,028,172		
	Load Stabilized Wastes	Cu Yd	3.67	40,282	147,834		
	Transport Stabilized Wastes	Mi	1.44	1,011,071	1,455,942		
	Dispose Stabilized Wastes	Cu Yd	140	40,282	5,639,441		
	Demob (use 1% of cost)		0.01		96,790		
	Install Monitoring Wells (4 Clusters)				0		
	Total				**39,248,228**	$97	$65

	Percentage of Waste Volume to be Remediated:			50%		Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization	lump sum			0		
	Personnel Mobilization (use .5% of construction cost		0.005		48,395		
	Equipment Mobilization (use 1% of construction cost)		0.01		96,790		
	Performance Bond (3% of cost)		0.03		290,369		
	Equipment	Mo	141,571	77.6	10,987,906		
	Labor	Hr	638.19	13,427	8,569,130		
	Equipment Maintenance	Mo	922	77.6	71,560		
	Type I Portland Cement	TN	77.73	188,821	14,677,022		
	Stabilize Wet Wastes	Cu Yd	100.00	50,352	5,035,215		
	Load Stabilized Wastes	Cu Yd	3.67	50,352	184,792		
	Transport Stabilized Wastes	Mi	1.44	1,263,839	1,819,928		
	Dispose Stabilized Wastes	Cu Yd	140	50,352	7,049,301		
	Demob (use 1% of cost)		0.01		96,790		
	Install Monitoring Wells (4 Clusters)				0		
	Total				**48,927,199**	$97	$65

Use 500 yd^3/day for
production rate (bank yd^3) 500
Working Hours/Day 8
Production Rate (yd^3/hr) 62 5
Level B Protection for
Excavation

	Waste Volume	% Above	Volume Above	% of Volume				
	(yd^3)	Water Table		10 0%	20 0%	30 0%	40 0%	50 0%
Site G	139,715	0 60	83,829	8,383	16,766	25,149	33,532	41,915
Site H	168,432	0 60	101,059	10,106	20,212	30,318	40,424	50,530
Site I	680,827	0 48	326,797	32,680	65,359	98,039	130,719	163,398
Site L	18,069	1 00	18,069	1,807	3,614	5,421	7,228	9,035
Total	1,007,043			52,975	105,951	158,926	211,902	264,877
	Equivalent Tonnage (1 5 T/yd)			79,463	158,926	238,389	317,852	397,316
	Equivalent Machine Hrs			848	1,695	2,543	3,390	4,238

	Percentage of Waste Volume to be Remediated:				**10%**		Equivalent Unit Cost	
Capital Costs	Item		Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization		lump sum					
	Personnel Mobilization (use 5% of construction cost			0 005		27,210		
	Equipment Mobilization (use 1% of construction cost)			0 01		54,421		
	Performance Bond (3% of cost)			0 03		163,262		
	Crawler-mounted 3 125 yd^3 hydraulic excavator		Hr	297 97	848	252,561	$4 77	
	3 0 yd^3 Wheel Loader		Hr	145.64	848	123,445	$2 33	
	Unclassified Fill		Cu Yd	9 81	52,975	519,689		
	Cell Design & Construction		Cu Yd	67 42	52,975	3,571,755		
	Stabilize Wet Wastes		Cu Yd	100 00	5,298	529,754		
	Transport to Cell (2 trucks/excavator)		Hr	80 05	1,695	135,702		
	Place in Cell: D7		Hr	242 11	848	205,214		
	Intermediate Cover (20% of Waste Volume)		Cu Yd	9 81	10,595	103,938	$85.82	
	Demob (use 1% of cost)			0 01		54,421		
	Install Monitoring Wells (4 Clusters)		LS	17,752 79	4	71,011		
	Total					**5,812,383**	$110	$73

O&M Costs							
	Fertilize, 800 lb/ac (2/yr)		Ac	105 24	10 33	1,087	
	Mowing (16/yr)		Ac	43 38	82 63	3,584	
	Quarterly Inspection		EA	1500	4	6,000	
	Quarterly Monitoring		Per Year	336,744	1	336,744	
	Misc Repair		LS	3000	1	3,000	
	Total					350,416	
PV, 30 yr period			0 07	30		$4,348,323	
				Total, Capital + O&M		**10,160,706**	$192

	Percentage of Waste Volume to be Remediated:			20%		Equivalent Unit Cost	
Capital Costs	Item		Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization		lump sum			0		
	Personnel Mobilization (use 5% of construction cost			0 005		45,772		
	Equipment Mobilization (use 1% of construction cost)			0 01		91,544		
	Performance Bond (3% of cost)			0 03		274,631		
	Crawler-mounted 3 125 yd^3 hydraulic excavator		Hr	297 97	1,695	505,123	$4 77	
	3 0 yd^3 Wheel Loader		Hr	145 64	1,695	246,891	$2 33	
	Unclassified Fill		Cu Yd	9 81	105,951	1,039,378		
	Cell Design & Construction		Cu Yd	51 10	105,951	5,413,769		
	Stabilize Wet Wastes		Cu Yd	100 00	10,595	1,059,508		
	Transport to Cell (2 trucks/excavator)		Hr	80 05	3,390	271,404		
	Place in Cell D7		Hr	242 11	1,695	410,428		
	Intermediate Cover (20% of Waste Volume)		Cu Yd	9 81	21,190	207,876	$59 49	
	Demob (use 1% of cost)			0 01		91,544		
	Install Monitoring Wells (4 Clusters)		LS	17,752 79	4	71,011		
	Total					**9,728,878**	$92	$61

O&M Costs							
	Fertilize, 800 lb/ac (2/yr)		Ac	105 24	19 15	2,016	
	Mowing (16/yr)		Ac	43 38	153 24	6,647	
	Quarterly Inspection		EA	1500	4	6,000	
	Quarterly Monitoring		Per Year	336,744	1	336,744	
	Misc Repair		LS	3000	1	3,000	
	Total					354,408	
PV, 30 yr period			0 07	30		$4,397,858	
					Total, Capital + O&M	**14,126,736**	$133

	Percentage of Waste Volume to be Remediated:				30%		Equivalent Unit Cost	
Capital Costs	Item		Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization		lump sum			0		
	Personnel Mobilization (use 5% of construction cost			0 005		62,579		
	Equipment Mobilization (use 1% of construction cost)			0 01		125,158		
	Performance Bond (3% of cost)			0 03		375,473		
	Crawler-mounted 3 125 yd^3 hydraulic excavator		Hr	297 97	2,543	757,684	$4 77	
	3 0 yd^3 Wheel Loader		Hr	145 64	2,543	370,336	$2 33	
	Unclassified Fill		Cu Yd	9 81	158,926	1,559,066		
	Cell Design & Construction		Cu Yd	43 45	158,926	6,904,854		
	Stabilize Wet Wastes		Cu Yd	100 00	15,893	1,589,262		
	Transport to Cell (2 trucks/excavator)		Hr	80 05	5,086	407,105		
	Place in Cell D7		Hr	242 11	2,543	615,642		
	Intermediate Cover (20% of Waste Volume)		Cu Yd	9 81	31,785	311,813	$61.84	
	Demob (use 1% of cost)			0 01		125,158		
	Install Monitoring Wells (4 Clusters)		LS	17,752 79	4	71,011		
	Total					**13,275,142**	$84	$56
O&M Costs	Fertilize, 800 lb/ac (2/yr)		Ac	105 24	27 76	2,922		
	Mowing (16/yr)		Ac	43 38	222 09	9,634		
	Quarterly Inspection		EA	1500	4	6,000		
	Quarterly Monitoring		Per Year	336,744	1	336,744		
	Misc Repair		LS	3000	1	3,000		
	Total					358,300		
PV, 30 yr period			0 07	30		$4,446,159		
					Total, Capital + O&M	**17,721,301**	$112	

	Percentage of Waste Volume to be Remediated:			40%		Equivalent Unit Cost	
Capital Costs	Item		Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization		lump sum			0		
	Personnel Mobilization (use 5% of construction cost			0 005		78,435		
	Equipment Mobilization (use 1% of construction cost)			0 01		156,870		
	Performance Bond (3% of cost)			0 03		470,609		
	Crawler-mounted 3 125 yd^3 hydraulic excavator		Hr	297 97	3,390	1,010,245	$4 77	
	3 0 yd^3 Wheel Loader		Hr	145 64	3,390	493,782	$2 33	
	Unclassified Fill		Cu Yd	9 81	211,902	2,078,755		
	Cell Design & Construction		Cu Yd	38 72	211,902	8,205,739		
	Stabilize Wet Wastes		Cu Yd	100 00	21,190	2,119,017		
	Transport to Cell (2 trucks/excavator)		Hr	80 05	6,781	542,807		
	Place in Cell D7		Hr	242 11	3,390	820,856		
	Intermediate Cover (20% of Waste Volume)		Cu Yd	9 81	42,380	415,751	$57 12	
	Demob (use 1% of cost)			0 01		156,870		
	Install Monitoring Wells (4 Clusters)		LS	17,752 79	4	71,011		
	Total					**16,620,747**	$78	$52

O&M Costs							
	Fertilize, 800 lb/ac (2/yr)		Ac	105 24	36 25	3,815	
	Mowing (16/yr)		Ac	43 38	290 02	12,581	
	Quarterly Inspection		EA	1500	4	6,000	
	Quarterly Monitoring		Per Year	336,744	1	336,744	
	Misc Repair		LS	3000	1	3,000	
	Total					362,141	
PV, 30 yr period			0 07	30		$4,493,820	
				Total, Capital + O&M		**21,114,567**	$100

	Percentage of Waste Volume to be Remediated:			50%		Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization	lump sum			0		
	Personnel Mobilization (use 5% of construction cost		0 005		93,664		
	Equipment Mobilization (use 1% of construction cost)		0 01		187,328		
	Performance Bond (3% of cost)		0 03		561,985		
	Crawler-mounted 3 125 yd^3 hydraulic excavator	Hr	297 97	4,238	1,262,807	$4 77	
	3 0 yd^3 Wheel Loader	Hr	145 64	4,238	617,227	$2 33	
	Unclassified Fill	Cu Yd	9 81	264,877	2,598,444		
	Cell Design & Construction	Cu Yd	35 42	264,877	9,381,315		
	Stabilize Wet Wastes	Cu Yd	100 00	26,488	2,648,771		
	Transport to Cell (2 trucks/excavator)	Hr	80 05	8,476	678,509		
	Place in Cell D7	Hr	242 11	4,238	1,026,070		
	Intermediate Cover (20% of Waste Volume)	Cu Yd	9 81	52,975	519,689	$53.81	
	Demob (use 1% of cost)		0 01		187,328		
	Install Monitoring Wells (4 Clusters)	LS	17,752 79	4	71,011		
	Total				**19,834,149**	$75	$50

O&M Costs						
	Fertilize, 800 lb/ac (2/yr)	Ac	105 24	44 67	4,701	
	Mowing (16/yr)	Ac	43 38	357.38	15,503	
	Quarterly Inspection	EA	1500	4	6,000	
	Quarterly Monitoring	Per Year	336,744	1	336,744	
	Misc Repair	LS	3000	1	3,000	
	Total				365,949	
PV, 30 yr period		0 07	30		$4,541,074	
				Total, Capital + O&M	**24,375,223**	$92

Note Unit cost for cell construction based on actual costs for on-site cell built for sediment
Scaled up from 50,000 yd of disposal capacity using cost a = cost b(cap a/cap b)^0 6

	Capacity (yd^3)		Unit Cost
	50,000	3,450,000	
10%	52,975	3,571,755	67 42
20%	105,951	5,413,769	51 10
30%	158,926	6,904,854	43 45
40%	211,902	8,205,739	38 72
50%	264,877	9,381,315	35 42

Considering typical depth to groundwater of 15 ft, use maximum cell depth = 10 ft
Use 1 2 x disposal volume to determine actual cell volume & resulting footprint
Considering 3H 1V sideslopes, add 60 ft each way to determine total footprint

	Waste Capacity	Cell Volume	Area (ft^2)	Area (ac)
10%	52,975	63570	224956	5 16
20%	105,951	127141	417189	9 58
30%	158,926	190711	604631	13 88
40%	211,902	254282	789592	18 13
50%	264,877	317852	972969	22 34

Use 500 yd^3/day for
production rate (bank yd^3) 500
Working Hours/Day 8
Production Rate (yd^3/hr) 62 5
Level B Protection

	Waste Volume	% Above	Volume Above	% of Volume				
	(yd^3)	Water Table		10 0%	20 0%	30 0%	40 0%	50 0%
Site G	139,715	0 60	83,829	8,383	16,766	25,149	33,532	41,915
Site H	168,432	0 60	101,059	10,106	20,212	30,318	40,424	50,530
Site I	680,827	0 48	326,797	32,680	65,359	98,039	130,719	163,398
Site L	18,069	1 00	18,069	1,807	3,614	5,421	7,228	9,035
Total	1,007,043			52,975	105,951	158,926	211,902	264,877
	Equvalent Tonnage (1 5 T/yd)			79,463	158,926	238,389	317,852	397,316
	Equivalent Machine Hrs			848	1,695	2,543	3,390	4,238

	Percentage of Waste Volume to be Remediated:			**10%**		Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization	lump sum			0		
	Personnel Mobilization (use 5% of construction cost		0 005		44,872		
	Equipment Mobilization (use 1% of construction cost)		0 01		89,744		
	Performance Bond (3% of cost)		0 03		269,233		
	Crawler-mounted 3 125 yd^3 hydraulic excavator	Hr	297 97	848	252,561	$4 77	
	3 0 yd^3 Wheel Loader	Hr	145 64	848	123,445	$2 33	
	Unclassified Fill	Cu Yd	9 81	52,975	519,689		
	Stabilize Wet Wastes	Cu Yd	100 00	5,298	529,754		
	Transport (rail) & dispose Lone Mountain	TN	95	79,463	7,548,997		
	Demob (use 1% of cost)		0 01		89,744		
	Total				**9,468,041**	$179	$119

	Percentage of Waste Volume to be Remediated:			20%		Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization	lump sum			0		
	Personnel Mobilization (use 5% of construction cost		0 005		89,744		
	Equipment Mobilization (use 1% of construction cost)		0 01		179,489		
	Performance Bond (3% of cost)		0 03		538,467		
	Crawler-mounted 3 125 yd^3 hydraulic excavator	Hr	297 97	1,695	505,123	$4 77	
	3 0 yd^3 Wheel Loader	Hr	145 64	1,695	246,891	$2 33	
	Unclassified Fill	Cu Yd	9 81	105,951	1,039,378		
	Stabilize Wet Wastes	Cu Yd	100 00	10,595	1,059,508		
	Transport (rail) & dispose Lone Mountain	TN	95	158,926	15,097,994		
	Demob (use 1% of cost)		0 01		179,489		
	Total				**18,936,082**	$179	$119

	Percentage of Waste Volume to be Remediated:			30%		Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Characterization	lump sum			0		
	Personnel Mobilization (use 5% of construction cost		0 005		134,617		
	Equipment Mobilization (use 1% of construction cost)		0 01		269,233		
	Performance Bond (3% of cost)		0 03		807,700		
	Crawler-mounted 3 125 yd^3 hydraulic excavator	Hr	297 97	2,543	757,684	$4 77	
	3 0 yd^3 Wheel Loader	Hr	145 64	2,543	370,336	$2 33	
	Unclassified Fill	Cu Yd	9 81	158,926	1,559,066		
	Stabilize Wet Wastes	Cu Yd	100 00	15,893	1,589,262		
	Transport (rail) & dispose Lone Mountain	TN	95	238,389	22,646,990		
	Demob (use 1% of cost)		0 01		269,233		
	Total				**28,404,123**	$179	$119

	Percentage of Waste Volume to be Remediated:			40%		Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Charactenzation	lump sum			0		
	Personnel Mobilization (use 5% of construction cost		0 005		179,489		
	Equipment Mobilization (use 1% of construction cost)		0 01		358,978		
	Performance Bond (3% of cost)		0 03		1,076,934		
	Crawler-mounted 3 125 yd^3 hydraulic excavator	Hr	297 97	3,390	1,010,245	$4 77	
	3 0 yd^3 Wheel Loader	Hr	145 64	3,390	493,782	$2 33	
	Unclassified Fill	Cu Yd	9 81	211,902	2,078,755		
	Stabilize Wet Wastes	Cu Yd	100 00	21,190	2,119,017		
	Transport (rail) & dispose Lone Mountain	TN	95	317,852	30,195,987		
	Demob (use 1% of cost)		0 01		358,978		
	Total				**37,872,164**	$179	$119

	Percentage of Waste Volume to be Remediated:			50%		Equivalent Unit Cost	
Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost	per yd	per ton
	Source Charactenzation	lump sum			0		
	Personnel Mobilization (use 5% of construction cost		0 005		224,361		
	Equipment Mobilization (use 1% of construction cost)		0 01		448,722		
	Performance Bond (3% of cost)		0 03		1,346,167		
	Crawler-mounted 3 125 yd^3 hydraulic excavator	Hr	297 97	4,238	1,262,807	$4 77	
	3 0 yd^3 Wheel Loader	Hr	145 64	4,238	617,227	$2 33	
	Unclassified Fill	Cu Yd	9 81	264,877	2,598,444		
	Stabilize Wet Wastes	Cu Yd	100 00	26,488	2,648,771		
	Transport (rail) & dispose Lone Mountain	TN	95	397,316	37,744,984		
	Demob (use 1% of cost)		0 01		448,722		
	Total				**47,340,206**	$179	$119

Abandonment of Existing Residential Wells

Capital Costs	Item		Unit	Unit Cost	Qty	Extended Cost
	Notification & Permits		ls	7500	1	7,500
	Mobilize/Demob Drill Rig		LS	1762.6	1	1,763
	Pull Well Pump		LS	881.3	4	3,525
	Cement Grout		lf	14.69	200	2,938
	Remove Above-Ground Assemblies		LS	881.3	4	3,525
						19,251
	Unit Rate:	440.65				
	Mobilize: Unit Rate x	4	hrs			
	Pull Pump: Unit Rate x	2	hrs			
	Above-Ground: Unit Rate x	2	hrs			

Plume Recovery
Downgradient of Sites G, H, I and L

Capital Costs	Item	Unit	Unit Cost	Quantity	Extended Cost	per well	no wells
	Mob/Demob Rig & Cre	LS	3308	1	3308		6
	12-in ss Well Casing, Flush Thread, 10-ft Section	LF	402 58	480	193238	80	
	12-in ss Well Casing, Flush Thread, 5-ft Section	LF	430 33	0	0	0	
	12-in ss Well Screen, 10-ft Sections	LF	359 72	120	43166	20	
	12-in ss Well Plug	EA	767 56	6	4605	1	
	GW Pump, 5 HP, 230V, Controls, Probe	EA	4233	6	25398	1	
	HS Auger, 16-in OD	LF	110 28	600	66168	100	
	Drums	EA	65 19	228	14863	38	
	Cuttings Disposal						
	4 GW Pump Control Panel	EA	4308	2	8616		
	Gravel Pack, 8-in Well	LF	19 82	132	2616	22	
	Surface Seal, Concrete	EA	3659	6	21954	1	
	8-in Well, Cement Grout	LF	11 02	456	5025	76	
	Bentonite Seal	EA	178 18	6	1069	1	
	Restricted Area, Well Protection	EA	1077	6	6462	1	
	6-in CS Piping	LF	27 46	3600	98856	600	
	Cat 225 Trenching, 1 5 CY	CY	1 23	711	875		
	950 3 CY Backfill with Excavated Mat'l	CY	1 7	711	1209		
	Vibrating Plate Compaction	CY	4 85	711	3449		
	500 gpm Transfer Pump	EA	4111	4	16444		
	Well House	EA	10000	1	10000		
	Design (15% of capital costs)				79098		
					606421		

O&M Costs	Well Pump Maintenance	EA	581.58	32	18611	1
	Xfer Pump Maintenance	EA	581.58	16	9305	
	Pump Replacement	EA	4233	4	16932	
	Electrical	EA/year	2100	6	12600	
					57448	1

Discount Rate	Period	Present Value
0.07	30	$712,873
0.07	100	$819,738
0.07	500	$820,683

Costs are installed costs and include equipment, labor and materials.
Assumptions:
All work done in level D.

Hydraulic Containment
Downgradient of Site I

Capital Costs	Item	Unit	Unit Cost	Quantity	Extended Cost	per well	no wells
	Mob/Demob Rig & Crew	LS	3308	1	3308		3
	12-in ss Well Casing, Flush Thread, 10-ft Section	LF	402 58	240	96619	80	
	12-in ss Well Casing, Flush Thread, 5-ft Section	LF	430 33	0	0	0	
	12 in ss Well Screen, 10-ft Sections	LF	359 72	60	21583	20	
	12-in ss Well Plug	EA	767 56	3	2303	1	
	GW Pump, 5 HP, 230V, Controls, Probe	EA	4233	3	12699	1	
	HS Auger, 16-in OD	LF	110 28	300	33084	100	
	Drums	EA	65 19	114	7432	38	
	Cuttings Disposal						
	4 GW Pump Control Panel	EA	4308	1	4308		
	Gravel Pack, 8-in Well	LF	19 82	66	1308	22	
	Surface Seal, Concrete	EA	3659	3	10977	1	
	8-in Well, Cement Grout	LF	11 02	228	2513	76	
	Bentonite Seal	EA	178 18	3	535	1	
	Restricted Area, Well Protection	EA	1077	3	3231	1	
	6-in CS Piping	LF	27 46	1800	49428	600	
	Cat 225 Trenching, 1 5 CY	CY	1 23	711	875		
	950 3 CY Backfill with Excavated Mat'l	CY	1 7	711	1209		
	Vibrating Plate Compaction	CY	4 85	711	3449		
	500 gpm Transfer Pump	EA	4111	2	8222		
	Well House	EA	10000	1	10000		
	Design (15% of capital costs)				40962		
					314044		

O&M Costs	Well Pump Maintenance	EA	581 58	16	9305	1
	Xfer Pump Maintenance	EA	581 58	8	4653	
	Pump Replacement	EA	4233	1	4233	
	Electrical	EA/year	2100	3	6300	1
	Discharge to POTW	gal	0 002	2 35E+08	470938	
					495429	

Discount Rate	Period	Present Value
0 07	30	6,147,793
0 07	100	$7,069,394
0 07	500	$7,077,550

Costs are installed costs and include equipment, labor and materials

Assumptions.
All work done in level D.

Estimated Flow Rates	gpm	annual
Downgradient of I	448	2 35E+08
Downgradient of G, H, I & L	616	3 24E+08

Costs for the hydraulic containment system downgradient of G, H, I & L were scaled up using the following formula Cost a = cost b (capacity a/capacity b)^0.6, where capacity a = 750 gpm
capacity b = 500 gpm

Cap cost a =	$400,539
O&M cost a =	$7,841,046
O&M (100 yr)	$9,016,478
O&M (500 yr)	$9,026,881

Metals Precipitation

Capital Costs	Item	Unit	Unit Cost	Qty	Extended Cost
	12-in Structural Slab on Grade	SF	7.82	1257	9,830
	1,575-gal Conical Bottom XLPE Tank (chemicals)	EA	2,307	2	4,614
	pH Controller	EA	1,099	1	1,099
	pH Pump Pulser Board	EA	239.51	1	240
	Analog pH Analyzer	EA	589.76	1	590
	pH Coax Cable - 12 ft	EA	100.88	2	202
	Submersion Assembly	EA	206.76	1	207
	Pumping System	EA	2,027	1	2,027
	40-ft Dia, 546 GPM Waste Flow Contact Clarifier	EA	230,785	1	230,785
	12-in Carbon Steel Piping	LF	51.41	1000	51,410
	Cat 225, 1.5 CY Trenching	CY	0.88	296	261
	950 3 CY Backfill w/ Excavated Mat'l	CY	1.22	296	361
	Vibrating Plate Compaction	CY	3.26	296	966
	20 HP, 500 GPM Centrifugal Pump	EA	3,818	2	7,636
	Design (15% of capital costs)				46,534
					356,761
O&M Costs	Hydrated Lime, Powdered, Bulk	TN	97.54	8.3	810
	Alum (Bulk)	TN	240.06	10	2,401
	Pump&Motor Maintenance & Repair	EA	393.96	8	3,152
	Electrical	per yr	3,215	1	3,215
	Solids Loading	CY	2.18	80	174
	Solids Transport (4 trips/yr)	MI	1.44	2008	2,892
	Solids Stabilization and Disposal (Haz)	TN	241.33	67.4	16,266
					28,908

Carbon Adsorption					
Capital	Item	Unit	Unit Cost	Quantity	Extended Cost
	12-in Structural Slab on Grade	SF	7.82	661.5	5,173
	Saturation Indicator	EA	106.53	1	107
	Dual Bed, 2 71/2 ft Dia, 175 GPM Series, 10,000 lb ea	EA	101,676	3	305,028
	200 GPM 10 HP Xfer Pump w/ Motor, Valves, Piping	EA	4,318	3	12,954
Filtration	8-in slab	SF	6.38	150	957
	6-in Class C PVC Piping	LF	8.27	100	827
	7-ft Dia Automatic Pressure Filter	EA	19,007	4	76,028
	500-GPM Pump	EA	4,111	1	4,111
	Building	EA	30,000	1	30,000
	Wet Well, 12-ftx36-in		6,581	1	6,581
	500 GPD Packaged Lift Station		126,076	1	126,076
	Design (15% of capital cost)				85,176
					653,018
Total Capital Costs (Precipitation, Adsorption, Filtration)					1,009,778

Carbon O&M	Coal Based General Pupose Carbon, 8x30 Sieve, 10,000 lb	LB	0.77	0	0
	Remove, Replace Carbon, 10,000 lb	LB	0.77	170000	130,900
	Remove, Reinstall Carbon Adsorber Unit	EA	297.31	17	5,054
	Discharge to POTW	gal	0.002	7.9E+08	1,576,800
	Pump&Motor Mainentance/Repair	EA	393.96	12	4,728
	Electrical	KWH	0.06	62867	3,772
	Operators (4)	EA	45,000	4	180,000
					$1,901,254
Total O&M Costs					$1,930,162

	Discount Value	Period	
Present Value	0.07	30	$23,951,463
	0.07	100	$27,541,969
	0.07	500	$27,573,746

Costs are installed costs and include equipment, labor and materials.
Assumptions:
All work done in level D.

	gpm	annual
Estimated Flow Rates Downgradient of G, H, I & L	1500	7.88E+08

Original estimate for 500 gpm system.
Costs for the 1,500 gpm plume recovery system downgradient of G, H, I & L were scaled up using the formula: Cost a = cost b (capacity a/capacity b)^0.6, where capacity a = 1500 gpm
capacity b = 500 gpm

Cap cost a =	$1,952,085
O&M cost a =	$46,302,538
O&M (100 yr)	$53,243,640
O&M (500 yr)	$53,305,071

Low Permeability Cover Area G	
Clearing	4.33 Ac
Unclassified fill	20833 CY
Geonet (gas)	188750 SF
Sand bedding	3495 CY
Geocomposite	188750 SF
Geonet (drainage)	188750 SF
Unclassified fill	10485 CY
Topsoil	3495 CY
Seeding	4.33 Ac
Sprinkler	4.33 Ac
Ditching	1800 LF
Gas Collection	300 LF

Protective Cover Area G	
Clearing	4.33 Ac
Unclassified fill	20833 CY
Geotextile	188750 SF
Crushed limestone	4660 CY
Geotextile	188750 SF
Geogrid	188750 SF
Unclassified fill	10485 CY
Topsoil	3495 CY
Seeding	4.33 Ac
Sprinkler	4.33 Ac
Ditching	1800 LF

Acreage	4.33
Area	188750 FT2
Fill vol/6 in	3495
Fill vol/ 8 in	4660
Fill for contours	20833
Perimeter	1800
Area (YD2)	20972 YD2

Low Permeability Cover Area H	
Clearing	5.22 Ac
Unclassified fill	30247 CY
Geonet (gas)	227500 SF
Sand bedding	4213 CY
Geocomposite	227500 SF
Geonet (drainage)	227500 SF
Unclassified fill	12639 CY
Topsoil	4213 CY
Seeding	5 22 Ac
Sprinkler	5.22 Ac
Ditching	2000 LF
Gas Collection	300 LF

Protective Cover Area H	
Clearing	5.22 Ac
Unclassified fill	30247 CY
Geotextile	227500 SF
Crushed limestone	5617 CY
Geotextile	227500 SF
Geogrid	227500 SF
Unclassified fill	12639 CY
Topsoil	4213 CY
Seeding	5.22 Ac
Sprinkler	5.22 Ac
Ditching	2000 LF

Acreage	5.22
Area	227500
Fill vol/6 in	4213
Fill vol/ 8 in	5617
Fill for contours	30247
Perimeter	2000
Area (YD2)	25278

Low Permeability Cover Area I		
Clearing	16 88	Ac
Unclassified fill	33423	CY
Geonet (gas)	735375	SF
Sand bedding	13618	CY
Geocomposite	735375	SF
Geonet (drainage)	735375	SF
Unclassified fill	40854	CY
Topsoil	13618	CY
Seeding	16 88	Ac
Sprinkler	16 88	Ac
Ditching	3800	LF
Gas Collection	550	LF

Low Permeability Cover Area L		
Clearing	1 12	Ac
Unclassified fill	3150	CY
Geonet (gas)	48600	SF
Sand bedding	900	CY
Geocomposite	48600	SF
Geonet (drainage)	48600	SF
Unclassified fill	2700	CY
Topsoil	900	CY
Seeding	1 12	Ac
Sprinkler	1 12	Ac
Ditching	900	LF
Gas Collection	270	LF

Protective Cover Area I		
Clearing	16 88	Ac
Unclassified fill	33423	CY
Geotextile	735375	SF
Crushed limestone	18157	CY
Geotextile	735375	SF
Geogrid	735375	SF
Unclassified fill	40854	CY
Topsoil	13618	CY
Seeding	16 88	Ac
Sprinkler	16 88	Ac
Ditching	3800	LF

Protective Cover Area L		
Clearing	1 12	Ac
Unclassified fill	3150	CY
Geotextile	48600	SF
Crushed limestone	1200	CY
Geotextile	48600	SF
Geogrid	48600	SF
Unclassified fill	2700	CY
Topsoil	900	CY
Seeding	1 12	Ac
Sprinkler	1 12	Ac
Ditching	900	LF

Acreage	16 88		
Area	735375		
Fill vol/6 in	13618		
Fill vol/ 8 in	18157		
Fill for contours	33423		
Perimeter	3800		
Area (YD2)	81708		
Fill/12 in	27236		
Fill/4 in	9079		
Fill/3 in	6809		
Fill/1 in	2269 667		

Acreage	1 12	
Area	48600	
Fill vol/6 in	900	
Fill vol/ 8 in	1200	
Fill for contours	3150	
Perimeter	900	
Area (YD2)	5400	

Asphaltic Cover Area I		
Clearing	16 88	Ac
Unclassified fill	33423	CY
Geonet (gas)	735375	SF
Sand bedding	13618	CY
Geocomposite	735375	SF
Geonet (draina	735375	SF
Unclassified fill	27236	CY
Base (8 in)	18157	CY
Asphalt (4 in)	9079	CY
Sprinkler	0	Ac
Ditching	3800	LF
Gas Collection		
Asphalt 3in	11950	TN
Asphalt 1 in	3983	TN

Trenching		length	vol	
depth	4	500	148	CY
width	2	1000	296	CY
		2400	711	CY

Waste Volumes

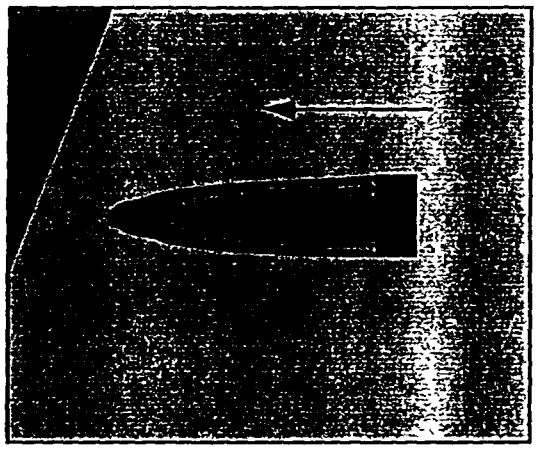
APPENDIX G
ESTIMATED CLASS I PLUME LENGTH

APPENDIX F

ESTIMATED ULTIMATE CLASS I PLUME LENGTH

Sauget Area 1

Sauget and Cahokia, Illinois



Submitted to
Solutia Inc.

May 30, 2001

Groundwater Services, Inc.
2211 Norfolk, Suite 1000, Houston, Texas 77098

May 30, 2001

INTRODUCTION

As requested by Solutia Inc. (Solutia), Groundwater Services, Inc. (GSI), has estimated the ultimate Class I plume length from Sauget Area using a predictive equation. This equation considers advection, dispersion, sorption, and decay. A conservative analysis was performed to yield upper-range plume length estimates.

PREDICTIVE EQUATION

The Domenico (1987) semi-analytical solution for reactive transport with first order decay and a two-dimensional (i.e., planar) source geometry was used as the predictive equation for this analysis. The Martin-Hayden and Robbins (1997) improvements were incorporated into the predictive equation, and degradation reactions were assumed to occur only in the aqueous phase.

$$C(x,y,z,t) = \frac{C_o}{8} f_x f_y f_z$$

$$f_x = \exp\left(\frac{x\left[1-\left(1+4\lambda\alpha_x/v_s\right)^{0.5}\right]}{2\alpha_x}\right) * erfc\left(\frac{x-vt\left(1+4\lambda\alpha_x/v_s\right)^{0.5}}{2\left(\alpha_x vt\right)^{0.5}}\right) +$$

$$\exp\left(\frac{x\left[1+\left(1+4\lambda\alpha_x/v_s\right)^{0.5}\right]}{2\alpha_x}\right) * erfc\left(\frac{x+vt\left(1+4\lambda\alpha_x/v_s\right)^{0.5}}{2\left(\alpha_x vt\right)^{0.5}}\right)$$

$$f_y = \text{erf}\left(\frac{(y+Y/2)}{2\left(\alpha_y x\right)^{0.5}}\right) - \text{erf}\left(\frac{(y-Y/2)}{2\left(\alpha_y x\right)^{0.5}}\right)$$

$$f_z = \text{erf}\left(\frac{(z+Z)}{2\left(\alpha_z x\right)^{0.5}}\right) - \text{erf}\left(\frac{(z-Z)}{2\left(\alpha_z x\right)^{0.5}}\right)$$

where:

$C(x, y, z, t)$ = Concentration at distance x downstream of source and distance y off centerline of plume at time t (mg/L)

Co = Concentration in source area at t=0 (mg/L)

x = Distance downgradient of source (ft)

y = Distance from plume centerline of source (ft)

z = Distance from top of saturated zone to measurement point (assumed to be 0; concentration is always given at top of saturated zone).

α_x = Longitudinal ground-water dispersivity (ft)

α_y = Transverse ground-water dispersivity (ft)

α_z = Vertical ground-water dispersivity (ft)

n_e = Effective soil porosity

λ = First-Order degradation rate coefficient (day^{-1})

v_s = Seepage velocity (ft/yr) = $Ki/(n_e)$

v = Chemical velocity (ft/yr) = v_s/R

K = Hydraulic conductivity (ft/yr)

R = Constituent retardation factor

i = Hydraulic gradient (cm/cm)

Y = Source width (ft)

Z = Source depth (ft)

CONCEPTUAL MODEL

Source materials, either present in the waste materials or in the saturated zone, leach or dissolve constituents into groundwater in the unconsolidated alluvium and glacial outwash underlying the area. The groundwater in the shallow horizon of the unconsolidated deposits moves slower than the groundwater in the deeper horizon because the shallow horizon is comprised of relatively fine-grained alluvial material compared to the deeper coarse-grained outwash materials. Groundwater flow in the unconsolidated deposits is westerly, towards the Mississippi River.

The migration of constituents in groundwater is controlled by: 1) the direction and velocity of groundwater; 2) dispersion processes (primarily longitudinal and transverse dispersion); 3) sorption effects; and 4) naturally occurring in-situ degradation.

Although selected well clusters indicated that there is some downward component to groundwater flow, the modeling study assumed horizontal groundwater flow as the dominant flow component. Three different horizons of the unconsolidated water-bearing unit were modeled (shallow, middle, and deep; see Modeling Approach below) so that plume migration in all horizons of the unconsolidated deposits may be addressed. Migration of dissolved

constituents from the slower, shallow horizon of the water-bearing unit to the deeper, faster horizon was addressed by the model of the deeper horizon.

For this study, only constituent migration in the unconsolidated deposits was modeled. No transport (if any) through the bedrock was addressed. Note that information from the literature indicates that because of "... low permeability and poor water quality with depth, the bedrock does not constitute an important aquifer in the area" (Ritchey and Schicht, 1982).

MODELING APPROACH

APPROACH

The predictive equation was adjusted to match existing data from the three-well transect downgradient of Site I by adjusting the decay term. After this calibration process, ultimate plume lengths to Illinois Class I standards were estimated by extrapolating the results from the predictive equation. Note that this process is functionally an extrapolation process that is driven by the transect data, and that similar results would likely be realized if a regression approach were used instead of the predictive equation.

Model Input Data

Hydrogeology

Using the data from the literature report, slug test results, and calibration work, the following conservative (i.e., overestimation of seepage velocity) hydraulic conductivities were used in the model:

- Shallow Horizon: $1x10^{-2}$ cm/sec
- Middle Horizon: $1x10^{-1}$ cm/sec
- Deep Horizon: $1x10^{-1}$ cm/sec

Using RI/FS potentiometric surface maps provided by Roux Associates, Inc., the following hydraulic gradients were used in the model:

- Shallow Horizon: 0.001 ft/ft
- Middle Horizon: 0.001 ft/ft
- Deep Horizon: 0.001 ft/ft

These values, together with an assumed effective porosity of 0.35 (see Attachment 1), yielded the following representative values for groundwater seepage velocity at the site:

- Shallow Horizon: 29.6 ft/yr
- Middle Horizon: 296 ft/yr
- Deep Horizon: 296 ft/yr

As shown by the data, the shallow horizon of the unconsolidated deposits is less permeable, and has a much lower groundwater velocity than the more coarse-grained middle and deep intervals.

(Note that the selection of many of the parameters in the predictive equation are likely to have only a minor effect on the modeling results due to the nature of this analysis. The predictive equation serves as an extrapolation tool when the predictive model is calibrated each time to new input data.)

Dispersivity

Dispersivity is the modeling input parameter that represents how powerful the mixing processes are in a porous media. To be conservative (see model sensitivity analysis), a longitudinal dispersivity of 40 ft and a transverse dispersivity of 4 ft (transverse/longitudinal ratio of 0.1) were used. No vertical dispersion was assumed.

Sorption

Hydrophobic sorption reflects how transport of dissolved constituents is retarded due to the adsorption to naturally occurring carbon on the matrix of the water-bearing unit. To account for sorption effects, a retardation factor (the ratio of groundwater seepage velocity to dissolved constituent velocity) was calculated for each constituent and used in the model. The retardation factor is related to both chemical properties of the constituent (i.e., the organic/carbon partition coefficient (K_{oc})) and the amount of naturally occurring organic carbon on the matrix (f_{oc}). For this study, no f_{oc} data were available, so a default value of 0.001 g/g was used (e.g., see ASTM, 1998). K_{oc} values and the resulting retardation factors for the constituents modeled for this study are shown below:

Constituent	Koc (L/kg)	Retardation Factor (R) (-)
1,1-Dichloroethene	58.9	1.3
1,2,4-Trichlorobenzene	1,780	9.6
1,4-Dichlorobenzene	617	4.0
2,4-Dichlorophenol	147	1.7
4-Chloroaniline	66.1	1.3
Benzene	58.9	1.3
Bis(2-Chloroethyl)ether	15.5	1.1
Chlorobenzene	219	2.1
Naphthalene	2,000	10.7
Trichloroethene	166	1.8
Vinyl chloride	18.6	1.1

Note: K_{oc} values from Illinois TACO guidance.

Degradation

In general, degradation rate data from the literature were *not* used for this modeling study. Rather, the first order rate constants were used as calibration parameters for all modeling runs. All data were entered into the model, and then the first order rate constants for most constituents were altered by trial-and-error until a best fit line of predicted concentrations to actual concentrations was obtained. In some cases, half-lives from other intervals at the site or literature values from the Illinois TACO guidance were used if there were not enough detectable values for calibration. Resulting degradation half-lives (in years) for each run are shown below:

	Degradation Half-Lives Used in Model (yrs)		
Constituent	Shallow Interval	Middle Interval	Deep Interval
1,1-Dichlorethene	15	0.36*	-
1,2,4-Trichlorobenzene	-	-	0.28
1,4-Dichlorobenzene	1	1.5	2.25
2,4-Dichlorophenol	-	2.8	7
4-Chloroaniline	5	0.9	0.9**
Benzene	-	2.9	4.7
Bis-(2-chloroethyl) ether	-	-	1*
Chlorobenzene	-	2	1.25
Naphthalene	-	-	2
Trichloroethene	2.5	-	2.5**
Vinyl Chloride	6	1	1**

Note: Constituents with no detectable concentrations or concentrations below Illinois Class II groundwater standards are indicated by "-".
* Half-life taken from Illinois TACO guidance.
** Half-life taken from adjacent interval.

Source Information

The predictive equation simulated the source term as a vertical plane source. For Site I, the source term was established downgradient of the waste materials through well AA-I-S1 and was 1400 ft wide and 30 - 35 ft deep for each model run (shallow, middle, and deep intervals). The source was assumed to begin in 1950, or 50 years before sampling was performed in the year 2000. Starting concentrations of each constituent were the concentrations in well AA-I-S1 for each horizon of the water-bearing unit.

Data from wells constructed within the source areas were not used, as these wells either had concentrations lower than the transect wells, or did not have multiple wells screened in each horizon of the water-bearing unit (shallow, middle, or deep) which could be used as part of the transect.

Field Data for Comparison

Each model was calibrated from actual data collected as part of the RI/FS study. At each of the three sampling locations (AA-I-S1, AA-I-S2, and AA-I-S3), the maximum concentration of each constituent for the shallow, middle, and deep horizons was determined and used in the model.

PREDICTIVE EQUATION RESULTS

The results of the plume analysis using the predictive equation are presented in Figure F-1. Benzene in the middle horizon had the longest predicted ultimate plume length to Class I standards, 5357 ft from the source. Because of the conservative assumptions used in the analysis, actual ultimate plume lengths are likely to be shorter than the plume length estimates from the predictive equation.

The length of the benzene plume, 5357 ft, supports the conclusion that this predictive analysis is a conservative one. The longest plume reported in any of over 630 non-karst BTEX plumes reported in six multiple-site plume studies is only 3600 ft (Rice et al., 1995; Mace et al., 1997; GSI, 1997; Newell and Connor, 1998; Wiedemeier et al., 1999; and Aziz et al., 1999). In addition, benzene is biodegraded aerobically, which indicates that it is likely to have an ultimate plume length that is shorter than those derived from the predictive equation.

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ATTACHMENT 1

An effective porosity of 0.35 was selected to reflect recommended values for porosity in Freeze and Cherry (1979) (0.25 to 0.40 for gravels, 0.25-0.50 for sands), Domenico and Schwartz (1990) (0.31 to 0.46 for coarse sand, 0.25 – 0.38 for fine gravel), Todd (1980) (0.39 for coarse sand, 0.34 for fine gravel), Fetter (1988) (0.25 to 0.50 for well sorted sand or gravel), EPA (1998) (0.2 to 0.35 for effective porosity, gravely sand), the Illinois TACO guidance (0.43 is one permissible value), and the American Society for Testing and Materials (1998) (0.38). Note that the effective porosity has been reported to be equal to total porosity for sediments by many literature sources (e.g., Fetter, 1998; Todd, 1980), and 2-5% of total volume less than total porosity by Smith and Wheatcraft (1993). Even with the Smith and Wheatcraft approach, an effective porosity estimate of 0.35 appears to be well within the recommended ranges in the literature.

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