GERAGHTY & MILLER, INC.
Environmental Services

Ground Water *Engineering* *Hydrocarbon* *Remediation* *Education*

January 6, 1992

VIA FEDERAL EXPRESS

Steven Smith, P.E.
Monsanto Company
800 North Lindbergh Boulevard - G4WM
St. Louis, Missouri 63167

Re: Chemical Data - Dead Creek Investigation (Project No. NY60507)

Dear Steve:

Enclosed are data summary tables for the soil/sediment samples collected at Dead Creek - Sector B, Site L, and Site M. If you have any questions or need clarification, do not hesitate to call us.

Sincerely,

GERAGHTY & MILLER, INC.

Brian Blum

Brian Blum
Project Manager
Direct Dial: (516) 391-5281

Dennis Colton
Project Director
Direct Dial: (516) 391-5236

BB/DC:rr
Enclosure
cc: Gordan Grundmann - F3WB
Alan Faust - F2WJ

NY605/SMITH.LTR

CER 006585

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DRAFT

Table _. Summary of Volatile Compounds Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	A-B1	B-B1	C-B1	D-B1	E-B1	F-B1	G-B1	H-B1
Sample Depth:	0-2 ft	0-2 ft	0-1.5 ft	0-1.5 ft	0-2.0 ft	0-2 ft	0-2 ft	0-2 ft
Sample Date:	10/18/91	10/18/91	10/21/91	10/21/91	10/21/91	10/22/91	10/22/91	10/23/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Parameters								
Methylene chloride	<28	1300 B	28 BJ	94 B	33 BJ	50 B	19 B	39 BJ
Acetone	<56	<1800	430 B	1700 B	890 B	350 B	140 B	270 B
Carbon disulfide	63	<920	8 J	27 J	19 J	13 J	13 J	10 J
2-Butanone	31 BJ	3700 B	<94	230 B	<130	180 B	81 B	200 B
Benzene	<28	<920	<47	<49	<64	<61	<13	<50
Tetrachloroethene	<28	<920	<47	<49	<64	30 J	<13	<50
Toluene	<28	5300	<47	<49	35 J	25 J	<13	69
Chlorobenzene	1,600 E	2000	990	1800	440	1100	92	710
Ethylbenzene	<28	<920	<47	<49	<64	44 J	8 J	15 J
Xylenes	<28	360 J	<47	40 J	<64	<61	<13	<50

ug/kg Micrograms per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
B The compound was detected in the associated method blank.
E Compound concentration exceeded the calibration range of the instrument.

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Table _. Summary of Volatile Compounds Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Site L	Site L	Site L	Site L	Site L	Site L
Sample Identification:	I-B2	J-B2	L1	L1	L2	L3	L4	L5
Sample Depth:	0-2 ft	0-1.5 ft	3-8 ft	8-14 ft	8-10 ft	9-11 ft	8-10 ft	7-8.5 ft
Sample Date:	10/24/91	10/24/91	10/16/91	10/16/91	10/15/91	10/16/91	10/15/91	10/15/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Parameters								
Methylene chloride	37 B	<16	890 B	3100 B	8500 BJ	<7.0	<6.0	<7.0
Acetone	290 B	240	<1300	<5800	<32000	16	<13	<14
Carbon disulfide	11 J	36	<630	<2900	<16000	<7.0	<6.0	<7.0
2-Butanone	200	<31	<1300	<5800	<32000	23 B	<13	25 B
Benzene	<30	<16	<630	<2900	5700 J	<7.0	<6.0	<7.0
Tetrachloroethene	<30	<16	<630	<2900	<16000	<7.0	<6.0	<7.0
Toluene	<30	<16	4500	32000	400000	<7.0	<6.0	<7.0
Chlorobenzene	650	7400 E	5300	900 J	3600 J	66	12	30
Ethylbenzene	<30	<16	<630	<2900	<16000	<7.0	<6.0	<7.0
Xylenes	<30	44	540 J	<2900	11000 J	<7.0	<6.0	<7.0

ug/kg Micrograms per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
B The compound was detected in the associated method blank.
E Compound concentration exceeded the calibration range of the instrument.

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CER 006587

DRAFT

Table _. Summary of Volatile Compounds Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site M	Dead Creek	Site L	Site M
Sample Identification:	M3	Equipment	Equipment	Equipment
Sample Depth:	0-8 ft	Blank	Blank	Blank
Sample Date:	11/5/91	10/21/91	10/16/91	11/5/91
Units:	ug/kg dw	ug/L	ug/L	ug/L
Parameters				
Methylene chloride	<2200	10	<5.0	<5.0
Acetone	<4600	9.0 BJ	<10	<10
Carbon disulfide	<2200	<5.0	<5.0	<5.0
2-Butanone	<4600	<10	<10	<10
Benzene	<2200	<5.0	<5.0	<5.0
Tetrachloroethene	<2200	<5.0	<5.0	<5.0
Toluene	<2200	<5.0	<5.0	<5.0
Chlorobenzene	10000	<5.0	<5.0	<5.0
Ethylbenzene	820 J	<5.0	<5.0	<5.0
Xylenes	<2200	<5.0	<5.0	<5.0

ug/kg Micrograms per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
B The compound was detected in the associated method blank.
E Compound concentration exceeded the calibration range of the instrument.

CER 006588

EPA/CERRO COPPER/EIL/PCB ATTORNEY WORK PRODUCT / ATTORNEY CLIENT PRIVILEGE

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Table _. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	A-B1*	B-B1*	C-B1	D-B1
Sample Depth:	0-2 ft	0-2 ft	0-1.5 ft	0-1.5 ft
Sample Date:	10/18/91	10/18/91	10/21/91	10/21/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Parameters				
Phenol	<6200	<490	<12000	<650
2-Chlorophenol	<6200	460 J/<490	<12000	150 J
1,3-Dichlorobenzene	650 J/690 J	180 J/180 J	<12000	350 J
1,4-Dichlorobenzene	1900 J/2000 J	2300/2000	1800 J	1700
1,2-Dichlorobenzene	850 J/960 J	<490	<12000	1200
4-Methylphenol	<6200	<490	<12000	<650
Isophorone	<6200	<490	<12000	<650
2,4-Dimethylphenol	<6200	<490	<12000	<650
2,4-Dichlorophenol	<6200	840/880	<12000	<650
1,2,4-Trichlorobenzene	<6200/3400 J	1600/1600	3800 J	3400
Naphthalene	<5400/ 5100 J	1100/1000	<12000	350 J
4-Chloroaniline	<6200	<490	<12000	<650
2-Methylnaphthalene	1800 J/1700 J	<490	<12000	240 J
2,4,6-Trichlorophenol	<6200	1300/1400	<12000	<650
2,4,5-Trichlorophenol	<31000	<2500	<62000	<3300
Acenaphthylene	720 J/960 J	<490	<12000	<650
Acenaphthene	530 J/440 J	230 J/270 J	<12000	430 J
Dibenzofuran	1200 J/1300 J	160 J/170 J	<12000	350 J
Diethylphthalate	<6200	<490	<12000	<650
Fluorene	1500 J/1600 J	340 J/310 J	<12000	950
N-Nitrosodiphenylamine	<6200	520/760	<12000	<650
Hexachlorobenzene	<6200	<490	<12000	<650
Pentachlorophenol	<31000	1400 J/2900	<62000	1500 J
Phenanthrene	6400/6400	870/<490	1600 J	900
Anthracene	1700 J/1800 J	430 J/<490	<12000	370 J
Di-n-butylphthalate	<6200	<490	<12000	<650
Fluoranthene	5400 J/5400 J	1800/<490	3200 J	840
Pyrene	7500/7300	6600/4300	5600 J	3400
Butylbenzylphthalate	<6200	<490	<12000	<650
Benzo(a)anthracene	3700 J/3600 J	1600/1800	1600 J	950
bis(2-Ethylhexyl)phthalate	12000 B/10000 B	2400 B/1900 B	7100 J	1300
Chrysene	9400/8100	1700/1200	2500 J	1300
Benzo(b)fluoranthene	30000/23000	2700/4000	2700 J	2100
Benzo(k)fluoranthene	15000/13000	1900/<490	3200 J	1100
Benzo(a)pyrene	10000/8700	1900/1900	2300 J	1200
Indeno(1,2,3-cd)pyrene	9000/8600	700/1000	<12000	730
Dibenzo(a,h)anthracene	3900 J/3300 J	<490	<12000	<650
Benzo(g,h,i)perylene	12000/13000	650/1000	1500 J	1100

*	This sample was analyzed twice.
ug/kg	Micrograms per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
B	The compound was detected in the associated method blank.
E	Compound concentration exceeded the calibration range of the instrument.
D	Compound concentration is at a secondary dilution factor.

CER 006589

DEAD-3.XLS

Table _. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	E-B1	F-B1	G-B1	H-B1
Sample Depth:	0-2.0 ft	0-2 ft	0-2 ft	0-2 ft
Sample Date:	10/21/91	10/22/91	10/22/91	10/23/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Parameters				
Phenol	<850	<810	<860	<660
2-Chlorophenol	120 J	110 J	<860	<660
1,3-Dichlorobenzene	760 J	1100	<860	410 J
1,4-Dichlorobenzene	1600	5700	110 J	1300
1,2-Dichlorobenzene	1700	11000	<860	2500
4-Methylphenol	<850	<810	<860	120 J
Isophorone	<850	270 J	<860	<660
2,4-Dimethylphenol	<850	140 J	<860	87 J
2,4-Dichlorophenol	340 J	250 J	<860	96 J
1,2,4-Trichlorobenzene	4400	12000	<860	2300
Naphthalene	300 J	500 J	<860	210 J
4-Chloroaniline	<850	<810	<860	<660
2-Methylnaphthalene	100 J	320 J	<860	140 J
2,4,6-Trichlorophenol	350 J	<810	<860	<660
2,4,5-Trichlorophenol	96 J	<4100	<4300	<3300
Acenaphthylene	<850	<810	<860	<660
Acenaphthene	<850	480 J	<860	<660
Dibenzofuran	<850	280 J	<860	<660
Diethylphthalate	<850	<810	<860	<660
Fluorene	170 J	880	<860	120 J
N-Nitrosodiphenylamine	<850	<810	<860	<660
Hexachlorobenzene	110 J	<810	<860	<660
Pentachlorophenol	1600 J	1600 J	<4300	390 J
Phenanthrene	410 J	1700	<860	350 J
Anthracene	130 J	1300	<860	<660
Di-n-butylphthalate	<850	<810	<860	<660
Fluoranthene	880	5200	<860	430 J
Pyrene	2500	16000 E	<860	1200
Butylbenzylphthalate	<850	<810	<860	<660
Benzo(a)anthracene	480 J	5400	<860	360 J
bis(2-Ethylhexyl)phthalate	1200	820	86 J	910
Chrysene	840 J	4700	<860	510 J
Benzo(b)fluoranthene	1100	5600	<860	770
Benzo(k)fluoranthene	670 J	5200	<860	780
Benzo(a)pyrene	550 J	5300	170 J	680
Indeno(1,2,3-cd)pyrene	270 J	2100	<860	460 J
Dibenzo(a,h)anthracene	<850	<810	<860	<660
Benzo(g,h,i)perylene	380 J	2100	<860	330 J

*	This sample was analyzed twice.
ug/kg	Micrograms per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
B	The compound was detected in the associated method blank.
E	Compound concentration exceeded the calibration range of the instrument.
D	Compound concentration is at a secondary dilution factor.

CER 006590

DEAD-3.XLS

Table _. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Site L	Site L
Sample Identification:	I-B2	J-B2*	L1*	L1*
Sample Depth:	0-2 ft	0-1.5 ft	3-8 ft	8-14 ft
Sample Date:	10/24/91	10/24/91	10/16/91	10/16/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Parameters				
Phenol	<660	<1000	13000	13000
2-Chlorophenol	<660	<1000	<3300	<3800
1,3-Dichlorobenzene	<660	2000	4300	<3800
1,4-Dichlorobenzene	1100	12000	93000 E/100000 D	3200 J
1,2-Dichlorobenzene	<660	<1000	7700	2900 J
4-Methylphenol	<660	<1000	3200 J	5500
Isophorone	<660	<1000	<3300	<3800
2,4-Dimethylphenol	<660	<1000	<3300	<3800
2,4-Dichlorophenol	<660	<1000	2400 J	<3800
1,2,4-Trichlorobenzene	380 J	<1000	73000 E/79000 D	5500
Naphthalene	190 J	2100	7300	<3800
4-Chloroaniline	<660	<1000	13000	270000 E/260000 D
2-Methylnaphthalene	<660	7000	2300 J	1600 J
2,4,6-Trichlorophenol	<660	<1000	1500 J	<3800
2,4,5-Trichlorophenol	<3300	<5100	<17000	<19000
Acenaphthylene	<660	<1000	280 J	<3800
Acenaphthene	98 J	2600	3100 J	<3800
Dibenzofuran	70 J	2000	3000 J	<3800
Diethylphthalate	<660	<1000	1000 J	<3800
Fluorene	150 J	4600	5000	<3800
N-Nitrosodiphenylamine	<660	<1000	<3300	<3800
Hexachlorobenzene	<660	<1000	4800	<3800
Pentachlorophenol	320 J	<5100	28000	29000
Phenanthrene	320 J	2900	23000	<3800
Anthracene	<660	2700	4200	<3800
Di-n-butylphthalate	<660	<1000	1800 J	<3800
Fluoranthene	580 J	4700	16000	<3800
Pyrene	1900	17000 E/12000 D	23000	<3800
Butylbenzylphthalate	<660	<1000	5400	<3800
Benzo(a)anthracene	700	5000	8600	<3800
bis(2-Ethylhexyl)phthalate	<660	<1000	<3300	<3800
Chrysene	1200	7000	8200	<3800
Benzo(b)fluoranthene	1600	6100	5400	<3800
Benzo(k)fluoranthene	980	5000	4600	<3800
Benzo(a)pyrene	900	4400	5300	<3800
Indeno(1,2,3-cd)pyrene	700	2800	2900 J	<3800
Dibenzo(a,h)anthracene	<660	<1000	<3300	<3800
Benzo(g,h,i)perylene	880	3200	3200 J	<3800

* This sample was analyzed twice.
ug/kg Micrograms per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
B The compound was detected in the associated method blank.
E Compound concentration exceeded the calibration range of the instrument.
D Compound concentration is at a secondary dilution factor.

Table _. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site L	Site L	Site L	Site L
Sample Identification:	L2	L3*	L4	L5
Sample Depth:	8-10 ft	9-11 ft	8-10 ft	7-8.5 ft
Sample Date:	10/15/91	10/16/91	10/15/91	10/15/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Parameters				
Phenol	16000	<460	<420	<450
2-Chlorophenol	2600 J	<460/13 J	<420	<450
1,3-Dichlorobenzene	<4200	<460	<420	<450
1,4-Dichlorobenzene	13000	28 J/18 J	<420	<450
1,2-Dichlorobenzene	3400 J	<460/10 J	<420	<450
4-Methylphenol	7100	<460	<420	<450
Isophorone	<4200	<460	<420	<450
2,4-Dimethylphenol	<4200	<460	<420	<450
2,4-Dichlorophenol	11000	<460	<420	<450
1,2,4-Trichlorobenzene	<4200	<460	<420	<450
Naphthalene	<4200	<460/96 J	<420	<450
4-Chloroaniline	49000	320 J/43 J	<420	<450
2-Methylnaphthalene	3100 J	<460/21 J	<420	<450
2,4,6-Trichlorophenol	<4200	<460	<420	<450
2,4,5-Trichlorophenol	<21000	<2300	<2100	<2300
Acenaphthylene	<4200	<460	<420	<450
Acenaphthene	<4200	<460/83 J	<420	<450
Dibenzofuran	<4200	<460/42 J	<420	<450
Diethylphthalate	<4200	<460	<420	<450
Fluorene	<4200	<460/79 J	<420	<450
N-Nitrosodiphenylamine	<4200	<460	<420	<450
Hexachlorobenzene	<4200	<460	<420	<450
Pentachlorophenol	<21000	<2300	<2100	<2300
Phenanthrene	<4200	91 J/420 J	<420	<450
Anthracene	<4200	28 J/150 J	<420	<450
Di-n-butylphthalate	<4200	<460	<420	<450
Fluoranthene	<4200	130 J/520	<420	<450
Pyrene	<4200	130 J/420 J	<420	<450
Butylbenzylphthalate	<4200	<460	<420	<450
Benzo(a)anthracene	<4200	75 J/280 J	<420	<450
bis(2-Ethylhexyl)phthalate	<4200	2200 B/<450	17 BJ	44 BJ
Chrysene	<4200	76 J/300 J	<420	<450
Benzo(b)fluoranthene	<4200	58 J/190 J	<420	<450
Benzo(k)fluoranthene	<4200	<460/190 J	<420	<450
Benzo(a)pyrene	<4200	70 J/220 J	<420	<450
Indeno(1,2,3-cd)pyrene	<4200	<460/110 J	<420	<450
Dibenzo(a,h)anthracene	<4200	<460/27 J	<420	<450
Benzo(g,h,i)perylene	<4200	<460/49 J	<420	<450

* This sample was analyzed twice.
ug/kg Micrograms per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
B The compound was detected in the associated method blank.
E Compound concentration exceeded the calibration range of the instrument.
D Compound concentration is at a secondary dilution factor.

Table _. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois

Sample Location:	Site M	Dead Creek	Site L	Site M
Sample Identification:	M3	Equipment	Equipment	Equipment
Sample Depth:	0-8 ft	Blank	Blank	Blank
Sample Date:	11/5/91	10/21/91	10/16/91	11/5/91
Units:	ug/kg dw	ug/L	ug/L	ug/L
Parameters				
Phenol	< 12000	< 10	< 10	< 10
2-Chlorophenol	< 12000	< 10	< 10	< 10
1,3-Dichlorobenzene	4100 J	< 10	< 10	< 10
1,4-Dichlorobenzene	40000	< 10	< 10	< 10
1,2-Dichlorobenzene	26000	< 10	< 10	< 10
4-Methylphenol	< 12000	< 10	< 10	< 10
Isophorone	< 12000	< 10	< 10	< 10
2,4-Dimethylphenol	< 12000	< 10	< 10	< 10
2,4-Dichlorophenol	< 12000	< 10	< 10	< 10
1,2,4-Trichlorobenzene	14000	< 10	< 10	< 10
Naphthalene	3300 J	< 10	< 10	< 10
4-Chloroaniline	< 12000	< 10	< 10	< 10
2-Methylnaphthalene	6900 J	< 10	< 10	< 10
2,4,6-Trichlorophenol	< 12000	< 10	< 10	< 10
2,4,5-Trichlorophenol	< 59000	< 50	< 10	< 50
Acenaphthylene	< 12000	< 10	< 10	< 10
Acenaphthene	< 12000	< 10	< 10	< 10
Dibenzofuran	< 12000	< 10	< 10	< 10
Diethylphthalate	< 12000	< 10	< 10	< 10
Fluorene	5200 J	< 10	< 10	< 10
N-Nitrosodiphenylamine	< 12000	< 10	< 10	< 10
Hexachlorobenzene	< 12000	< 10	< 10	< 10
Pentachlorophenol	< 59000	< 50	< 50	< 50
Phenanthrene	11000 J	< 10	< 10	< 10
Anthracene	2500 J	< 10	< 10	< 10
Di-n-butylphthalate	< 12000	< 10	< 10	< 10
Fluoranthene	21000	< 10	< 10	< 10
Pyrene	23000	< 10	< 10	< 10
Butylbenzylphthalate	< 12000	< 10	< 10	0.2 J
Benzo(a)anthracene	9400 J	< 10	< 10	< 10
bis(2-Ethylhexyl)phthalate	18000 B	< 10	1.0 J	< 10
Chrysene	12000	< 10	< 10	< 10
Benzo(b)fluoranthene	15000	< 10	< 10	< 10
Benzo(k)fluoranthene	9300 J	< 10	< 10	< 10
Benzo(a)pyrene	7500 J	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	3700 J	< 10	< 10	< 10
Dibenzo(a,h)anthracene	1200 J	< 10	< 10	< 10
Benzo(g,h,i)perylene	6000 J	< 10	< 10	< 10

*	This sample was analyzed twice.
ug/kg	Micrograms per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
B	The compound was detected in the associated method blank.
E	Compound concentration exceeded the calibration range of the instrument.
D	Compound concentration is at a secondary dilution factor.

DRAFT

Table _. Summary of PCBs Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	A-B1	A-B2	A-B3	B-B1	B-B3	B-B2	C-B1	C-B2
Sample Depth:	0-2 ft	2-4 ft	5-6 ft	0-2 ft	2-4 ft	4-6 ft	0-1.5 ft	1.5-3.5 ft
Sample Date:	10/18/91	10/18/91	10/18/91	10/18/91	10/18/91	10/18/91	10/21/91	10/21/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Parameters								
Aroclor 1248	< 150,000	280	< 110	250,000	140	< 110	440,000	420
Aroclor 1254	180,000 J	128 J	310	< 230,000	< 200	< 220	< 120,000	< 250
Aroclor 1260	130,000 J	< 230	< 210	< 230,000	< 200	< 220	< 120,000	< 250

ug/kg Micrograms per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
X Due to the presence of Aroclor 1248, 1254 and 1260, the quantitation is based on one peak only.

EPA/CERRO COPPER/EIL/PCB ATTORNEY WORK PRODUCT / ATTORNEY CLIENT PRIVILEGE

CER 006594

DRAFT

Table _. Summary of PCBs Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	C-B3	D-B1	D-B2	D-B3	E-B1	E-B3	E-B2	F-B1
Sample Depth:	3.5-5.5 ft	0-1.5 ft	2.0-4.0 ft	4.0-6.0 ft	0.-2.0 ft	2.0-4.0 ft	4.0-6.0 ft	0-2 ft
Sample Date:	10/21/91	10/21/91	10/21/91	10/21/91	10/21/91	10/21/91	10/21/91	10/22/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Parameters								
Aroclor 1248	<120	86,000	<120	<110	68,000	<110	<110	92,000
Aroclor 1254	220 J	53,000 J	<240	<210	46,000 J	<230	<230	56,000 J
Aroclor 1260	<240	<63,000	<240	<210	<82,000	<230	<230	<78,000

ug/kg Micrograms per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
X Due to the presence of Aroclor 1248, 1254 and 1260, the quantitation is based on one peak only.

EPA/CERRO COPPER/EIL/PCB ATTORNEY WORK PRODUCT / ATTORNEY CLIENT PRIVILEGE

DRAFT

Table _. Summary of PCBs Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	F-B2	F-B3	G-B1	G-B2	G-B3	H-B1	H-B2	H-B3
Sample Depth:	2-4 ft	4-6 ft	0-2 ft	2-4 ft	4-6 ft	0-2 ft	2-4 ft	4-6 ft
Sample Date:	10/22/91	10/22/91	10/22/91	10/23/91	10/23/91	10/23/91	10/23/91	10/23/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Parameters								
Aroclor 1248	< 120	< 110	20,000 J	< 110	120	54,000	120	< 120
Aroclor 1254	< 250	< 210	30,000 J	400	910	13,000 J	< 220	< 240
Aroclor 1260	< 250	< 210	42,000	< 220	250	< 32,000	< 220	< 240

ug/kg Micrograms per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
X Due to the presence of Aroclor 1248, 1254 and 1260, the quantitation is based on one peak only.

EPA/CERRO COPPER/EIL/PCB ATTORNEY WORK PRODUCT / ATTORNEY CLIENT PRIVILEGE

CER 006596

DRAFT

Table _. Summary of PCBs Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Site L	Site L
Sample Identification:	I-B2	I-B3	I-B1	J-B2	J-B3	J-B1	L1	L1
Sample Depth:	0-2 ft	1.5-3 ft	3-5 ft	0-1.5 ft	1.5-3 ft	3-5 ft	3-8 ft	8-14 ft
Sample Date:	10/24/91	10/24/91	10/24/91	10/24/91	10/24/91	10/24/91	10/16/91	10/16/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw	ug/kg dw
Parameters								
Aroclor 1248	12,000 J	330	390	93,000 J	230	< 120	120,000 J	< 18,000
Aroclor 1254	18,000 J	680 X	230 X	110,000 J	350 X	< 230	< 310,000	< 36,000
Aroclor 1260	23,000 J	370 J	210 J	98,000 J	200 J	< 230	380,000	16,000 J

ug/kg Micrograms per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
X Due to the presence of Aroclor 1248, 1254 and 1260, the quantitation is based on one peak only.

EPA/CERRO COPPER/EIL/PCB ATTORNEY WORK PRODUCT / ATTORNEY CLIENT PRIVILEGE

CER 006597

DRAFT

Table _. Summary of PCBs Detected for Dead Creek-Sector B, and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site M	Site M	Site M	Dead Creek	Site L	Site M
Sample Identification:	M1	M2	M3	Equipment	Equipment	Equipment
Sample Depth:	0-3 ft	0-3.5 ft	0-8 ft	Blank	Blank	Blank
Sample Date:	11/5/91	11/5/91	11/5/91	10/21/91	10/16/91	11/5/91
Units:	ug/kg dw	ug/kg dw	ug/kg dw	ug/L	ug/L	ug/L
Parameters						
Aroclor 1248	13,000	6,900	210,000	<0.50	<0.50	<0.50
Aroclor 1254	8,000 X	4,200 X	81,000 J	<1.0	<1.0	<1.0
Aroclor 1260	8,300	3,800	72,000 J	<1.0	<1.0	<1.0

ug/kg Micrograms per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
X Due to the presence of Aroclor 1248, 1254 and 1260, the quantitation is based on one peak only.

CER 006598

EPA/CERRO COPPER/EIL/PCB ATTORNEY WORK PRODUCT / ATTORNEY CLIENT PRIVILEGE

DRAFT

Table _. Summary of Inorganic Parameters Detected in Dead Creek-Sector B, and Sites L and M, Sauget Canokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	A-B1	A-B2	A-B3	B-B1	B-B2	B-B3
Sample Depth:	0-2 ft	2-4 ft	5-6 ft	0-2 ft	4-6 ft	2-4 ft
Sample Date:	10/18/91	10/18/91	10/18/91	10/18/91	10/18/91	10/18/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	5780	9310	9290	49200	7170	7460
Antimony	20.3 B	< 14.2	< 13.3	< 14.6	< 13.5	< 12.6
Barium	2970	240	230	1980	202	274
Cadmium	51.7	< 1.4	< 1.3	22.0	< 1.4	< 1.3
Calcium	12500	9650	16000	17300	16100	18500
Chromium	134	12.3	12.0	71.1	10.4	10.9
Cobalt	17.2 B	7.4 B	11.0 B	10.3 B	8.7 B	10.5 B
Copper	12100	28.3	29.9	3160	21.8	23.6
Iron	39000	19500	15800	24200	17600	14400
Magnesium	3130	6860	7680	3030	7160	7460
Manganese	108	226	306	119	177	252
Nickel	1170	18.5	23.6	292	19.3	22.6
Potassium	830 B	2940	1800	1070 B	1470	1700
Silver	11.7	< 2.8	< 2.7	5.1	< 2.7	< 2.5
Sodium	225 B	251 B	269 B	259 B	281 B	304 B
Vanadium	23.3	23.5	24.9	16.4	20.2	22.2
Zinc	13600	106	1010	5140	65.0	133
Mercury	1.2	0.03	0.03	1.1	0.03	0.02
Lead	1520	14.6	12.5	696	10	11.7
Selenium	6.2	< 1.4	< 1.3	4.4	< 1.4	< 1.3
Arsenic	1006	4.5	12.2	72.2	11.1	2.5
Cyanide	17.4	< 0.36	< 0.33	2.5	< 0.34	< 0.31

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
B Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA Not analyzed.

CER 006599

Table _. Summary of Inorganic Parameters Detected in Dead Creek-Sector B, and Sites L and M, Sauget Canokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	C-B1	C-B2	C-B3	D-B1	D-B2	D-B3
Sample Depth:	0-1.5 ft	1.5-3.5 ft	3.5-5.5 ft	0-1.5 ft	2.0-4.0 ft	4.0-6.0 ft
Sample Date:	10/21/91	10/21/91	10/21/91	10/21/91	10/21/91	10/21/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	11800	21000	7010	6590	21500	11000
Antimony	20.5 B	<14.2	<14.2	41.9	<13.7	<12.8
Barium	4480	241	724	8640	294	252
Cadmium	37.5	12.5	<1.4	69.6	36.6	<1.3
Calcium	12500	5150	12000	20400	5870	17200
Chromium	187	47.3	12.6	104	50.5	16.6
Cobalt	12.3 B	10.1 B	11.1 B	12.4 B	11.0 B	8.1 B
Copper	10300	66.1	321	25100	46.8	28.8
Iron	27300	18600	18700	48700	19100	16200
Magnesium	3660	4930	6540	3380	4830	7770
Manganese	106	110	582	153	117	337
Nickel	417	127	41.4	1280	106	18.8
Potassium	2030	3100	1460	1010 B	2910	2180
Silver	12.1	<2.8	<2.8	21.0	<2.7	<2.6
Sodium	300 B	254 B	221 B	362 B	231 B	211 B
Vanadium	38.4	50.0	22.4	30.8	58.2	30.6
Zinc	11700	3500	1090	26100	5280	94.9
Mercury	3.6	0.080	0.040	5.0	0.080	0.060
Lead	1550	38.2	15.2	2660	53.4	10.8
Selenium	5.8	<1.4	<1.5	9.45	<1.5	<1.2
Arsenic	198	13.2	4.2	63.1	15.1	6.7
Cyanide	<0.48	NA	NA	<0.49	NA	NA

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
B Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA Not analyzed.

Table _. Summary of Inorganic Parameters Detected in Dead Creek-Sector B, and Sites L and M, Sauget Canokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	E-B1	E-B3	E-B2	F-B1	F-B2	F-B3
Sample Depth:	0-2.0 ft	2.0-4.0 ft	4.0-6.0 ft	0-2 ft	2-4 ft	4-6 ft
Sample Date:	10/21/91	10/21/91	10/21/91	10/22/91	10/22/91	10/22/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	12300	9910	16300	9890	20200	10600
Antimony	33.3	<13.4	<14.2	42.6	<14.2	<12.1
Barium	8020	241	272	4110	312	259
Cadmium	38.8	3.6	1.5	243	7.7	<1.2
Calcium	16100	7430	18200	11100	6520	20600
Chromium	296	20.7	21.4	107	49.2	15.5
Cobalt	10.7 B	17.2	8.2 B	29.9	11.6 B	7.3 B
Copper	19400	33.0	29.0	12300	174	26.7
Iron	46600	15800	24000	86400	21800	16200
Magnesium	3440	5100	7670	3730	5200	8290
Manganese	96.4	101	702	557	132	493
Nickel	686	104	21.2	2020	181	18.7
Potassium	1260 B	1900	2980	1610 B	2970	2200
Silver	19.0	<2.7	<2.8	16.1	<2.8	<2.4
Sodium	446 B	177 B	276 B	355 B	178 B	186 B
Vanadium	54.8	30.4	43.6	54.9	59.6	29.4
Zinc	18500	2770	84.2	42800	4100	69.4
Mercury	3.3	0.050	0.030	3.9	0.090	0.030
Lead	1810	18.6	13.7	2310	34.3	12.5
Selenium	6.2	<1.2	<1.3	8.7	<1.4	<1.2
Arsenic	107	12.9	3.9	83.2	13.1	4.4
Cyanide	0.78	NA	NA	1.5	NA	NA

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
B Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA Not analyzed.

CER 006601

MET-DEAD.XLS

Table _. Summary of Inorganic Parameters Detected in Dead Creek-Sector B, and Sites L and M, Sauget Canokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	G-B1	G-B2	G-B3	H-B1	H-B2	H-B3
Sample Depth:	0-2 ft	2-4 ft	4-6 ft	0-2 ft	2-4 ft	4-6 ft
Sample Date:	10/22/91	10/23/91	10/23/91	10/23/91	10/23/91	10/23/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	6970	8300	13300	12100	9180	8450
Antimony	44.5	< 13.3	< 12.9	20.7 B	< 12.8	< 14.5
Barium	8850	172	248	2040	204	175
Cadmium	112	< 1.3	11.8	80.7	5.8	5.3
Calcium	9360	11300	3880	11200	6190	6310
Chromium	104	13.3	32.0	63.1	84.5	14.8
Cobalt	24.9	17.5	24.4	12.2 B	8.9 B	12.0 B
Copper	17500	16.9	72.5	3560	26.5	19.3
Iron	62900	12600	12900	36100	9480	11400
Magnesium	2570	7050	3660	3670	4240	4960
Manganese	132	207	72.3	141	82.2	83.2
Nickel	1440	37.6	444	587	127	231
Potassium	796 B	1680	1930	1900 B	1510	1790
Silver	17.4	< 2.7	< 2.6	6.0	< 2.6	< 2.9
Sodium	307 B	137 B	149 B	203 B	131 B	149 B
Vanadium	54.4	23.1	35.5	47.6	23.7	27.5
Zinc	31000	412	6340	13100	2180	2390
Mercury	0.29	0.040	0.030	1.7	0.040	0.03
Lead	1810	11.5	22.6	1340	15.4	11.3
Selenium	3.7	< 1.3	< 1.3	4.3	< 1.4	< 1.4
Arsenic	96.7	19.1	12.1	52.9	6.4	15.5
Cyanide	0.72	NA	NA	0.70	NA	NA

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
B Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA Not analyzed.

Table _. Summary of Inorganic Parameters Detected in Dead Creek-Sector B, and Sites L and M, Sauget Canokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	I-B2	I-B3	I-B1	J-B2	J-B3	J-B1
Sample Depth:	0-2 ft	1.5-3 ft	3-5 ft	0-1.5 ft	1.5-3 ft	3-5 ft
Sample Date:	10/24/91	10/24/91	10/24/91	10/24/91	10/24/91	10/24/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	15400	13300	9750	5640	13700	7280
Antimony	< 19.0	< 13.5	< 14.0	44.0	< 14.6	< 13.9
Barium	1890	294	189	9510	279	258
Cadmium	71.8	< 19.3	< 1.4	82.7	16.9	1.6
Calcium	7760	4860	14900	23600	3940	18000
Chromium	100	25.1	15.0	125	150	15.9
Cobalt	17.2 B	6.0 B	8.6 B	26.8 B	7.9 B	8.0 B
Copper	4070	232	24.3	30100	276	90.5
Iron	31700	17400	19900	54900	14000	15800
Magnesium	4040	4120	7420	2860 B	3110	7420
Manganese	128	85.8	534	240	74.0	488
Nickel	548	222	19.8	2670	377	34.3
Potassium	2420	2200	1940	< 595	2070	1650
Silver	4.2	< 2.7	< 2.7	50.4	< 2.9	< 2.7
Sodium	215 B	162 B	180 B	452 B	1464	187 B
Vanadium	44.1	35.2	25.6	58.9	34.7	21.8
Zinc	9960	3280	83.3	4500	4300	524
Mercury	0.25	0.090	0.070	0.14	0.10	0.10
Lead	1360	44.5	14.1	1820	76.8	26.2
Selenium	3.9	< 2.7	< 1.4	< 6.0	< 2.9	< 2.7
Arsenic	89.5	7.3	11.1	70.5	8.4	4.4
Cyanide	0.53	NA	NA	< 0.79	NA	NA

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
B Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA Not analyzed.

CER 006603

MET-DEAD.XLS

Table _ Summary of Inorganic Parameters Detected in Dead Creek-Sector B, and Sites L and M, Sauget Canokia, Illinois.

Sample Location:	Site L	Site L	Site L	Site L	Site L	Site L
Sample Identification:	L1	L1	L2	L3	L4	L5
Sample Depth:	3-8 ft	8-14 ft	8-10 ft	9-11 ft	8-10 ft	7-8.5 ft
Sample Date:	10/16/91	10/16/91	10/15/91	10/16/91	10/15/91	10/15/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	7320	6660	3190	12800	5290	2810
Antimony	<11.6	<12.3	<12.6	<13.7	<12.8	<13.6
Barium	1440	235	1360	208	194	213
Cadmium	42.0	<1.2	<1.3	<1.4	<1.3	<1.4
Calcium	75500	18200	21300	22400	15500	15700
Chromium	27.0	11	3.9	17.8	7.8	4.1
Cobalt	8.3 B	7.3 B	<2.5	8.4 B	5.9 B	<2.7
Copper	308	96.1	<6.3	19.4	9.7	52.9
Iron	24000	12400	1400	21700	11800	1790
Magnesium	5150	7210	705 B	9440	6570	384 B
Manganese	535	269	88.1	782	258	10.1
Nickel	95.9	473	71.9	24.7	113	<10.8
Potassium	1130 B	1390	975 B	2280	1090 B	993 B
Silver	<2.3	<2.5	<2.5	<2.7	<2.6	<2.7
Sodium	296 B	347 B	226 B	303 B	332 B	<136
Vanadium	27.6	19.7	131	35.4	15.6	7.7 B
Zinc	4240	364	756	77.0	35.6	6.4
Mercury	1.8	0.19	0.010	0.030	0.010	0.020
Lead	664	106	5.3	11.7	7.6	8.7
Selenium	<1.2	<1.2	<1.3	<1.4	<1.3	<1.4
Arsenic	49.2	90.9	68.7	10.1	4.9	12.6
Cyanide	0.46	<0.31	NA	NA	NA	NA

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
B Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA Not analyzed.

CER 006604

MET-DEAD.XLS

Table _. Summary of Inorganic Parameters Detected in Dead Creek-Sector B, and Sites L and M, Sauget Canokia, Illinois.

Sample Location:	Site M	Site M	Site M	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	M1	M2	M3	Equipment	Equipment	Equipment
Sample Depth:	0-3 ft	0-3.5 ft	0-6 ft	Blank	Blank	Blank
Sample Date:	11/5/91	11/5/91	11/5/91	10/21/91	10/21/91	10/24/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	ug/L	ug/L	ug/L
Parameters						
Aluminum	4670	7220	7290	<200	<200	<200
Antimony	<30.8	16.6 B	41.2	<50.0	<50.0	<50.0
Barium	1760	3080	9060	40.8 B	<10	<10.0
Cadmium	17.2	8.6	47.2	<5.0	<5.0	<5.0
Calcium	11500	5560	12500	844 B	462 B	497 B
Chromium	80	89.5	183	<10.0	<10.0	<10.0
Cobalt	18.8 B	9.1 B	20.6 B	<10.0	<10.0	<10.0
Copper	8150	13400	21000	68.9	<25.0	<25.0
Iron	16300	20600	48500	435	98.4 B	171
Magnesium	6200	3090	4340	168 B	<50.0	<50.0
Manganese	154	162	178	<10.0	<10.0	<10.0
Nickel	1390	959	2490	<40.0	<40.0	<40.0
Potassium	758 B	1080 B	969 B	<1000	<1000	<1000
Silver	18.0	19.6	26.0	<10.0	<10.0	<10.0
Sodium	<309	211 B	<336	8140	665 B	<500
Vanadium	19.3 B	29.3	37.7	<10.0	<10.0	<10.0
Zinc	9930	12300	31600	140	375	29.7
Mercury	0.07	0.38	0.45	<0.20	<0.20	<0.20
Lead	625	796	1910	5.5	<3.0	<5.0
Selenium	<3.1	<1.6	<3.2	<5.0	<5.0	<10
Arsenic	25.2	7.0	94.0	<10.0	<10.0	<10
Cyanide	NA	NA	1.3	NA	NA	NA

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
B Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA Not analyzed.

CER 006605

Table _. Summary of Inorganic Parameters Detected in Dead Creek-Sector B, and Sites L and M, Sauget Canokia, Illinois.

Sample Location:	Site L	Site M
Sample Identification:	Equipment	Equipment
Sample Depth:	Blank	Blank
Sample Date:	10/16/91	11/5/91
Units:	ug/L	ug/L
Parameters		
Aluminum	<200	<200
Antimony	<50.0	<50.0
Barium	<10.0	<10.0
Cadmium	<5.0	<5.0
Calcium	341 B	396 B
Chromium	<10.0	<10.0
Cobalt	<10.0	<10.0
Copper	<25.0	81.4
Iron	151	<50.0
Magnesium	<50.0	<50.0
Manganese	<10.0	<10.0
Nickel	<40.0	<40.0
Potassium	<1000	<1000
Silver	<10.0	<10.0
Sodium	997 B	<500
Vanadium	<10.0	<10.0
Zinc	<20.0	<20.0
Mercury	<0.20	<0.20
Lead	<3.0	<3.0
Selenium	<5.0	5.0
Arsenic	<10.0	<10.0
Cyanide	<10	<10

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
B	Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA	Not analyzed.

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MET-DEAD.XLS