UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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CHICAGO, IL 60604-3590

US EPA RECORDS CENTER REGION 5
481012

REPLY TO THE ATTENTION OF SR-6J

CERTIFIED MAIL RETURN RECEIPT REQUESTED

November 30, 1999

Mr. Reed Oslan, Esq.
Kirkland & Ellis
200 East Randolph Dr.
61st Floor
Chicago, IL 60601

Re: Himco Dump, Superfund Site, Elkhart, IN, Supplemental Field Investigation\Risk Assessment Analytical Data Package Summary for the Construction Debris Area

Dear Mr. Oslan:

Enclosed are the documents we spoke about in our November 29, 1999, telephone conversation in regards to the Himco Dump phase I soil gas sampling. I have included summaries of the Analytical Data for soil, groundwater and soil vapor samples collected during the 1998 Supplemental Field Investigation. The Analytical Data Package contains the following:

- Table 2.1, Occurrence, Distribution and Selection of Chemicals of Potential Concern Himco Dump Superfund Site/ Construction Debris Area, 1995 and 1998, **Combined Shallow Aquifer Data Set for Ground Water**.

- Table 2.1, Occurrence, Distribution and Selection of Chemicals of Potential Concern Himco Dump, Superfund Site/ Construction Debris Area, **Surface Soil Data**.

- Table 2.1, Occurrence, Distribution and Selection of Chemicals of Potential Concern Himco Dump, Superfund Site/ Construction Debris Area, **Total Soil Data**.

- Table, Summary of Chemicals Detected in **Ground Water**, Fall 1998, Himco Dump, Superfund Site.

- Table, Summary of Chemicals Detected in **Active Soil Vapor Samples**, Fall 1998, Himco Dump, Superfund Site.

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- Table, Summary of Chemicals Detected in **Soil**, Fall 1998, Himco Dump, Superfund Site.

- Figure 2-1, Supplemental Field Investigation/Risk Assessment, Himco Dump, Superfund Site, **Final Soil Boring Locations**, (1 full size copy).

- Figure 2-2, Supplemental Field Investigation/Risk Assessment, Himco Dump, Superfund Site, **Final Monitoring Well Sampling Locations**, (1 half size copy).

- Figure 2-3, Supplemental Field Investigation/Risk Assessment, Himco Dump, Superfund Site, **Final Soil Gas Sampling Locations**, (1 full size copy).

- Figure A, Supplemental Field Investigation/Risk Assessment, Himco Dump, Superfund Site, Soil Gas Isoconcentration Map, **Total BTEX.**

- Figure B, Supplemental Field Investigation/Risk Assessment, Himco Dump, Superfund Site, Soil Gas Isoconcentration Map, **Total Chlorinated Ethanes.**

- Figure C, Supplemental Field Investigation/Risk Assessment, Himco Dump, Superfund Site, Soil Gas Isoconcentration Map, **Total Chlorinated Ethenes.**

- Figure D, Supplemental Field Investigation/Risk Assessment, Himco Dump, Superfund Site, Soil Gas Isoconcentration Map, **Vinyl Chloride**.

Please feel free to contact me if any additional information is needed. I look forward to meeting with you on Dec. 14, 1999.

Sincerely,

Gwendolyn Massenburg
Remedial Project Manager

enclosures

cc: Larry Johnson, ORC, US EPA

Table 7.5.13. Ground Water Site Risk Summary for Himco Downgradient Well Locations: Well Pair WT101A/WT114A Hypothetical Exposure Location.

Chemical Risk Driver	Cancer Risk				Hazard Quotient (HQ)			
	Inhal	Ingest	Derm	Total	Inhal	Ingest	Derm	Total
Adult Resident								
Antimony	NE				NE	b	b	
Arsenic	NE	3.31E-04	1.56E-06	3.33E-04	NE	b	b	
Iron	NE				NE	b	b	
Manganese	NE				NE	b	b	
Thallium	NE				NE	b	b	
Bis(2-ethylhexyl)phthalate	NE	8.36E-07	3.48E-05	3.56E-05	NE	b	b	
Benzene	2.33E-05	1.86E-06	3.92E-07	2.56E-05	0.74	b	b	0.74
Subtotal	2.33E-05	3.34E-04	3.68E-05		0.74			
Cumulative Total[a]				**3.94E-04**				**0.74**
Child Resident								
Antimony	NA	c	c		NA	2.21	0.081	2.29
Arsenic	NA	c	c		NA	3.15	0.012	3.16
Iron	NA	c	c		NA	4.14	0.302	4.44
Manganese	NA	c	c		NA	3.87	0.282	4.15
Thallium	NA	c	c		NA	2.19	0.008	2.20
Bis(2-ethylhexyl)phthalate	NA	c	c		NA	0.013	0.433	0.446
Benzene	NA	c	c		NA	0.092	0.016	0.107
Subtotal						15.66	1.13	
Cumulative Total[a]								**16.80**

[a]Cumulative Total includes risk and hazard values from all analytes for a receptor in this medium.
[b]Adult not evaluated for non-carcinogenic risk for ingestion and dermal contact. The child's risk is the more conservative evaluation.
[c]Child not evaluated for carcinogen risk; adult receptor was age-adjusted.
Inhal = Inhalation Pathway
Ingest = Ingestion Pathway
Derm = Dermal Pathway

NE = Not evaluated; only volatile constituents analyzed.
NC = Not calculated; chemical-specific factor(s) not available.
NA = Not applicable; pathway not evaluated.

Table 7.5.14. Ground Water Site Risk Summary for Himco Downgradient Well Locations: Well WT115A Exposure Location.

Chemical Risk Driver	Cancer Risk				Hazard Quotient (HQ)			
	Inhal	Ingest	Derm	Total	Inhal	Ingest	Derm	Total
Adult Resident								
Antimony	NE				NE	b	b	
Arsenic	NE	2.69E-05	1.27E-07	2.70E-05	NE	b	b	
Iron	NE				NE	b	b	
Manganese	NE				NE	b	b	
Thallium	NE				NE	b	b	
Bis(2-ethylhexyl)phthalate	NE	5.64E-07	2.35E-05	2.41E-05	NE	b	b	
Benzene	1.56E-05	1.30E-06	2.74E-07	1.72E-05	0.52	b	b	0.52
Subtotal	1.56E-05	2.88E-05	2.39E-05		0.52			
Cumulative Total[a]				**6.83E-05**				**0.52**
Child Resident								
Antimony	NA	c	c		NA	2.21	0.081	2.29
Arsenic	NA	c	c		NA	0.26	0.00098	0.26
Iron	NA	c	c		NA	0.63	0.046	0.68
Manganese	NA	c	c		NA	1.48	0.108	1.59
Thallium	NA	c	c		NA	2.51	0.0092	2.52
Bis(2-ethylhexyl)phthalate	NA	c	c		NA	0.009	0.293	0.302
Benzene	NA	c	c		NA	0.064	0.011	0.075
Subtotal						7.16	0.55	
Cumulative Total[a]								**7.71**

[a]Cumulative Total includes risk and hazard values from all analytes for a receptor in this medium.
[b]Adult not evaluated for non-carcinogenic risk for ingestion and dermal contact. The child's risk is the more conservative evaluation.
[c]Child not evaluated for carcinogen risk; adult receptor was age-adjusted.
Inhal = Inhalation Pathway
Ingest = Ingestion Pathway
Derm = Dermal Pathway

NE = Not evaluated; only volatile constituents analyzed.
NC = Not calculated; chemical-specific factor(s) not available.
NA = Not applicable; pathway not evaluated.

Table 7.5.15. Ground Water Site Risk Summary for Himco Downgradient Well Locations: Well Pair WT116A/WT119A Hypothetical Exposure Location.

Chemical Risk Driver	Cancer Risk				Hazard Quotient (HQ)			
	Inhal	Ingest	Derm	Total	Inhal	Ingest	Derm	Total
Adult Resident								
Antimony						b	b	
Arsenic	NE	8.06E-05	3.81E-07	8.10E-05	NE	b	b	
Iron	NE				NE	b	b	
Manganese	NE				NE	b	b	
Thallium	NE				NE	b	b	
Bis(2-ethylhexyl)phthalate	NE	1.42E-06	5.92E-05	6.06E-05	NE	b	b	
Carbazole	NE	1.58E-06	6.41E-06	7.99E-06	NE	b	b	
Benzene	3.90E-05	3.25E-06	6.84E-07	4.29E-05	1.29	b	b	1.29
1,2-Dichloropropane	NC	4.87E-06	8.80E-07	5.75E-06	1.23			1.23
Subtotal	3.90E-05	9.17E-05	6.76E-05		2.52			
Cumulative Total[a]				**1.98E-04**				**2.52**
Child Resident								
Antimony	NA	c	c		NA	5.11	0.19	5.30
Arsenic	NA	c	c		NA	0.77	0.0030	0.77
Iron	NA	c	c		NA	0.75	0.054	0.80
Manganese	NA	c	c		NA	1.53	0.11	1.64
Thallium	NA	c	c		NA	1.37	0.0050	1.38
Bis(2-ethylhexyl)phthalate	NA	c	c		NA	0.022	0.737	0.759
Carbazole	NA	c	c		NA			
Benzene	NA	c	c		NA	0.160	0.027	0.187
1,2-Dichloropropane	NA	c	c		NA			
Subtotal						9.70	1.13	
Cumulative Total[a]								**10.83**

[a]Cumulative Total includes risk and hazard values from all analytes for a receptor in this medium.
[b]Adult not evaluated for non-carcinogenic risk for ingestion and dermal contact. The child's risk is the more conservative evaluation.
[c]Child not evaluated for carcinogen risk; adult receptor was age-adjusted.
Inhal = Inhalation Pathway
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TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN -DRAFT
Himco Dump Superfund Site/Construction Debris Area, '95 and '98 Combined Shallow Aquifer Data Set for Ground Water

Scenario Timeframe: Current/Future
Medium: Ground Water
Exposure Medium: Ground Water
Exposure Point: Tap Water/Water Vapor

Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
Inorganics															
Aluminum	58	J	393		ug/L	WT116A95	7/9	26.0-200	393	119.4	3700 N	50	SMCL	no	BSL
Anitmony	20.4	J	43.2	J	ug/L	WT119A98	2/9	12.8-42.2	43.2	17.6	1.5 N	6	MCL	yes	ASL
Arsenic	1.0	J	24.3	J	ug/L	WT114A98	6/9	0.90-3.8	24.3	1.2	0.045 C	50	MCL	yes	ASL
Barium	33.5	J	238	J	ug/L	WT114A98	9/9	200?	238	43.1	260 N	2000	MCL	no	BSL
Beryllium	0.4		0.6	J	ug/L	WT114A98	2/9	0.40-0.60	0.6	0.5	7.3 N	4	MCL	no	BKG
Cadmium	1.1		1.7	J	ug/L	WT114A95	3/9	1.1-4.6	1.7	1.5	1.8 N	5	MCL	no	BSL
Calcium	27000	J	546000		ug/L	WT116A95	9/9	5000	546000	93025	800 mg/day			yes	>NUT
Chromium	7.1	J	13.1		ug/L	WT101A98	5/9	4.0-7.0	13.1	13.4	18 N	100	MCL	no	BKG
Cobalt	10.9	J	13.8	J	ug/L	WT114A95	3/9	5.9-7.8	13.8	6	220 N			no	BSL
Copper	1.7		5.4		ug/L	WT119A98	2/9	1.7-4.1	5.4	5.8	140 N	1300	MCL	no	BKG
Iron	1360		28100		ug/L	WT101A98	9/9	11.7-100	28100	39.2	10 mg/day	300	SMCL	yes	>NUT
Lead	3.4	J	3.4	J	ug/L	WT119A98	1/9	0.5-1.7	3.4	0.6	0.4 N	15	MCL	yes	ASL
Magnesium	14700		55400		ug/L	WT116A95	9/9	5000	55400	15425	170 mg/day			no	NUT
Manganese	279		3080		ug/L	WT101A98	9/9	15	3080	25.6	170 N			yes	ASL
Mercury	0.1	J	0.1	J	ug/L	multiple	1/9	0.10-0.20	0.1	0.1	1.1 N	2	MCL	no	BKG
Nickel	9.7	J	23.8	J	ug/L	WT101A95	3/9	28.3	23.8	33.9	73 N	100	MCL	no	BSL

(1) Minimum/maximum detected concentration from '95 and '98 combined ground water data.

(2) The arithmetic mean of upgradient well-pair WT102A/WT112A based on '95/'98 combined ground water data.

Constituents not detected were replaced by one-half the quantitation limit.

(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1)

(4) Rationale Codes

Selection Reason:
- Infrequent Detection but Associated Historically (HIST)
- Frequent Detection (FD)
- Toxicity Information Available (TX)
- Above Screening Levels (ASL)
- Quantitation Limit is greater than Risk-Based Concentration (QL>RBC)

Deletion Reason:
- Infrequent Detection (IFD)
- Background Levels (BKG)
- No Toxicity Information (NTX)
- Essential Nutrient (NUT)
- Below Screening Level (BSL)

Definitions:
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Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (Max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
Potassium	3580	J	38000		ug/L	WT116A95	9/9	5000	38000	1752.5	5850 mg/day			no	NUT
Selenium	6.0	J	6.0	J	ug/L	WT119A98	1/6	3.6-6.0	6.0	2	18 N	50	MCL	no	BSL
Silver	2.5		2.5		ug/L	WT116A95	1/9	2.5-5.3	2.5	7.4	18 N	100	SMCL	no	BKG
Sodium	12100		201000	J	ug/L	WT116A95	9/9	5000	201000	31475	10,000 mg/day			no	NUT
Thallium	5.3	J	6.7	J	ug/L	WT114A95	3/9	0.40-4.7	6.7	2.5	0.29 N	2	MCL	yes	ASL
Vanadium	10.4	J	20.9	J	ug/L	WT101A95	3/9	4.5-12.3	20.9	12.1	26 N			no	BSL
Zinc	1.8	J	45.4		ug/L	WT116A95	6/9	0.90-3.2	45.4	3.8	1100 N	5000	SMCL	no	BSL
Cyanide	7.8		31.9		ug/L	WT116A98	5/9	10.0-10.0	31.9	6.5	73 N			no	BSL
Volatile Organics															
Chloromethane	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	1.5 C			yes	QL>RBC
Bromomethane	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.87 N			yes	QL>RBC
Vinyl Chloride	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	2 C	2	MCL	yes	QL>RBC
Methylene Chloride	0.7	J	1.0	J	ug/L	WY115A95	2/9	10.0-10.0	1.0	ND	4.3 C			no	BSL
Carbon Disulfide	0.7	J	0.7	J	ug/L	WT114A95	1/9	10.0-10.0	0.7	ND	100 N			no	BSL
1,1-Dichloroethene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.046 C	7	MCL	yes	QL>RBC
1,1-Dichloroethane	4.0	J	7.0	J	ug/L	WT116A95	5/9	10.0-10.0	7.0	ND	81 N			no	BSL
total 1,2-Dichloroethene	1.0	J	1.0	J	ug/L	WT116A95	1/9	10.0-10.0	1.0	ND	6.1 N	100	MCL	no	BSL

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Chloroform	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.16 C	100	MCL	yes	QL>RBC
1,2-Dichloroethane	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.12 C	5	MCL	yes	QL>RBC
Carbon Tetrachloride	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.17 C	5	MCL	yes	QL>RBC
Bromodichloromethane	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.18 C	100	MCL	yes	QL>RBC
1,2-Dichloropropane	4.0	J	4.0	J	ug/L	WT116A95	1/9	10.0-10.0	4.0	ND	0.16 C	5	MCL	yes	ASL
cis-1,3-Dichloropropene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.081 C			yes	QL>RBC
Trichloroethene	0.9	J	0.9	J	ug/L	WT116A95	1/9	10.0-10.0	0.9	ND	1.6 C	5	MCL	no	BSL
Dibromochloromethane	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	1.0 C			yes	QL>RBC
1,1,2-Trichloroethane	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.20 C	5	MCL	yes	QL>RBC
Benzene	1.0	J	15		ug/L	WT116A95	3/9	10.0-10.0	15	ND	0.39 C	5	MCL	yes	ASL
trans-1,3-Dichloropropene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.081 C			yes	QL>RBC
Bromoform	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	8.5 C	100	MCL	yes	QL>RBC
Tetrachloroethene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	1.1 C	5	MCL	yes	QL>RBC
1,1,2,2-Tetrachloroethane	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.055 C			yes	QL>RBC
Chlorobenzene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	3.9 N			yes	QL>RBC
Ethylbenzene	0.7	J	0.7	J	ug/L	WT116A95	1/9	10.0-10.0	0.7	ND	130 N	700	MCL	no	BSL

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Exposure Medium: Ground Water
Exposure Point: Tap Water/Water Vapor

Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
Semivolatile Organics															
bis(2-Chloroethyl)ether	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	0.0098 C			yes	QL>RBC
2-Chlorophenol	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	3.8 N			yes	QL>RBC
1,3-Dichlorobenzene	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	1.7 N	600	MCL	yes	QL>RBC
1,4-Dichlorobenzene	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	0.047 C	600	MCL	yes	QL>RBC
2,2'-Oxybis(1-chloropropane)	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	0.27 C			yes	QL>RBC
N-Nitroso-di-n-propylamine	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	0.0096 C			yes	QL>RBC
Hexachloroethane	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	4.8 C			yes	QL>RBC
Nitrobenzene	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	0.34 N			yes	QL>RBC
2-Nitrophenol	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	none			no	NTX
bis(2-Chloroethoxy)methane	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	none			no	NTX
Naphthalene	0.4	J	0.4	J	ug/l	WT116A95	1/9	10.0-10.0	0.4	ND	0.62 N			no	BSL
Hexachlorobutadiene	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	0.86 C			yes	QL>RBC
4-Chloro-3-methylphenol	ND		ND		ug/l		0/9	10.0-10.0	ND	ND	none			no	NTX
2-Methylnaphthalene	0.5	J	0.5	J	ug/L	WT116A95	1/9	10.0-10.0	0.5	ND	150 N (III*)			no	BSL
2,4,6-Trichlorophenol	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	6.1 C			yes	QL>RBC
2-Nitroaniline	ND		ND		ug/L		0/9	25.0-26.0	ND	ND	0.22 N			yes	QL>RBC

(1) Minimum/maximum detected concentration from '95 and '98 combined ground water data.
(2) The arithmetic mean of upgradient well-pair WT102A/WT112A based on '95/'98 combined ground water data.
Constituents not detected were replaced by one-half the quantitation limit.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1),
or Risk-Based Concentration Table, April 1, 1998, U.S. EPA Region III, (Cancer benchmark value = 1E-06, HQ=0.1)
(4) Rationale Codes

Selection Reason:
- Infrequent Detection but Associated Historically (HIST)
- Frequent Detection (FD)
- Toxicity Information Available (TX)
- Above Screening Levels (ASL)
- Quantitation Limit is greater than Risk-Based Concentration (QL>RBC)

Deletion Reason:
- Infrequent Detection (IFD)
- Background Levels (BKG)
- No Toxicity Information (NTX)
- Essential Nutrient (NUT)
- Below Screening Level (BSL)

Definitions:
- N/A = Not Applicable
- SQL = Sample Quantitation Limit
- COPC = Chemical of Potential Concern
- ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered
- ND = Not Detected
- MCL = Federal Maximum Contaminant Level
- SMCL = Secondary Maximum Contaminant Level
- J = Estimated Value
- C = Carcinogenic
- N = Non-Carcinogenic
- RBC = Risk-Based Concentration

TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN -DRAFT
Himco Dump Superfund Site/Construction Debris Area, '95 and '98 Combined Shallow Aquifer Data Set for Ground Water

Scenario Timeframe: Current/Future
Medium: Ground Water
Exposure Medium: Ground Water
Exposure Point: Tap Water/Water Vapor

Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
Dimethylphthalate	7.0	J	7.0	J	ug/L	WT101A98	1/9	10.0-10.0	7.0	ND	37000 N			no	BSL
Acenaphthylene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	none			no	NTX
2,6-Dinitrotoluene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	3.7 C			yes	QL>RBC
3-Nitroaniline	ND		ND		ug/L		0/9	25.0-26.0	ND	ND	none			no	NTX
Acenaphthene	3.0	J	3.0	J	ug/L	WT116A95	1/9	10.0-10.0	3.0	ND	37 N			no	BSL
2,4-Dinitrophenol	ND		ND		ug/L		0/9	25.0-26.0	ND	ND	7.3 N			yes	QL>RBC
Dibenzofuran	2.0	J	2.0	J	ug/L	WT116A95	1/9	10.0-10.0	2.0	ND	2.4 N			no	BSL
2,4-Dinitrotoluene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	7.3 N			yes	QL>RBC
Diethylphthalate	0.2	J	19	J	ug/L	WT101A98	4/9	10.0-10.0	19	3.9	29000 N			no	BSL
4-Chlorophenyl-phenylether	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	none			no	NTX
Fluorene	3.0	J	3.0	J	ug/L	WT116A95	1/9	10.0-10.0	3.0	ND	24 N			no	BSL
4-Nitroaniline	ND		ND		ug/L		0/9	25.0-26.0	ND	ND	none			no	NTX
4,6-Dinitro-2-methylphenyl	ND		ND		ug/L		0/9	25.0-26.0	ND	ND	0.37 N (III*)			yes	QL>RBC
4-Bromophenyl-phenylether	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	none			no	NTX
Hexachlorobenzene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.042 C			yes	QL>RBC
Pentachlorophenol	ND		ND		ug/L		0/9	25.0-26.0	ND	ND	0.56 C	1	MCL	yes	QL>RBC
Phenanthrene	0.2	J	0.2	J	ug/L	WT116A95	1/9	10.0-10.0	0.2	ND	none	1	MCL	no	NTX

(1) Minimum/maximum detected concentration from '95 and '98 combined ground water data.
(2) The arithmetic mean of upgradient well-pair WT102A/WT112A based on '95/'98 combined ground water data.
Constituents not detected were replaced by one-half the quantitation limit.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1)
or Risk-Based Concentration Table, April 1, 1998, U.S. EPA Region III, (Cancer benchmark value = 1E-06, HQ=0.1),
(4) Rationale Codes

Selection Reason:
- Infrequent Detection but Associated Historically (HIST)
- Frequent Detection (FD)
- Toxicity Information Available (TX)
- Above Screening Levels (ASL)
- Quantitation Limit is greater than Risk-Based Concentration (QL>RBC)

Deletion Reason:
- Infrequent Detection (IFD)
- Background Levels (BKG)
- No Toxicity Information (NTX)
- Essential Nutrient (NUT)
- Below Screening Level (BSL)

Definitions:
- N/A = Not Applicable
- SQL = Sample Quantitation Limit
- COPC = Chemical of Potential Concern
- ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered
- ND = Not Detected
- MCL = Federal Maximum Contaminant Level
- SMCL = Secondary Maximum Contaminant Level
- J = Estimated Value
- C = Carcinogenic
- N = Non-Carcinogenic
- RBC = Risk-Based Concentration

TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN -DRAFT
Himco Dump Superfund Site/Construction Debris Area, '95 and '98 Combined Shallow Aquifer Data Set for Ground Water

Scenario Timeframe: Current/Future
Medium: Ground Water
Exposure Medium: Ground Water
Exposure Point: Tap Water/Water Vapor

Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
Anthracene	0.3	J	0.3	J	ug/L	WT116A95	1/9	10.0-10.0	0.3	ND	180 C			no	BSL
Carbazole	6.0	J	6.0	J	ug/L	WT116A95	1/9	10.0-10.0	6.0	ND	3.4 C			yes	ASL
3-3'-Dichlorobenzidine	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.15 C			yes	QL>RBC
Benzo(a)anthracene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.092 C			yes	QL>RBC
Chrysene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	9.2 C			yes	QL>RBC
bis(2-Ethylhexyl)phthalate	0.4	J	15	J	ug/L	WT116A95	5/9	10.0-10.0	15	2.3	4.8 C			yes	ASL
Benzo(b)fluoranthene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.092 C			yes	QL>RBC
Benzo(k)fluoranthene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.92			yes	QL>RBC
Benzo(a)pyrene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.0092 C	0.2	MCL	yes	QL>RBC
Indeno(1,2,3-cd)pyrene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.092 C			yes	QL>RBC
Dibenz(a,h)anthracene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	0.0092 C			yes	QL>RBC
Benzo(g,h,i)perylene	ND		ND		ug/L		0/9	10.0-10.0	ND	ND	none			no	NTX

(1) Minimum/maximum detected concentration from '95 and '98 combined ground water data.
(2) The arithmetic mean of upgradient well-pair WT102A/WT112A based on '95/'98 combined ground water data.
Constituents not detected were replaced by one-half the quantitation limit.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1)
(4) Rationale Codes

Selection Reason:
- Infrequent Detection but Associated Historically (HIST)
- Frequent Detection (FD)
- Toxicity Information Available (TX)
- Above Screening Levels (ASL)
- Quantitation Limit is greater than Risk-Based Concentration (QL>RBC)

Deletion Reason:
- Infrequent Detection (IFD)
- Background Levels (BKG)
- No Toxicity Information (NTX)
- Essential Nutrient (NUT)
- Below Screening Level (BSL)

Definitions:
- N/A = Not Applicable
- SQL = Sample Quantitation Limit
- COPC = Chemical of Potential Concern
- ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered
- ND = Not Detected
- MCL = Federal Maximum Contaminant Level
- SMCL = Secondary Maximum Contaminant Level
- J = Estimated Value
- C = Carcinogenic
- N = Non-Carcinogenic
- RBC = Risk-Based Concentration

TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN -DRAFT
Himco Dump Superfund Site/Construction Debris Area, Surface Soil Data

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil
Exposure Point: Ingestion/Dermal Contact

Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
Inorganics															
Aluminum	2260		5670		mg/kg	SB10-0.5	18/18	10.0	5670	3920	7500 N			no	BSL
Anitmony	13.1	J	13.1	J	mg/kg	SB07-0.5	1/18	8.7-11.2	13	ND	3 N			yes	ASL
Arsenic	0.83	J	12.5	J	mg/kg	SB11-0.5	18/18	10.0	12.5	1.1	0.038 C			yes	ASL
Barium	13		172		mg/kg	SB20-0.5	18/18	1	172	35.5	520 N			no	BSL
Beryllium	0.10	J	0.6	J	mg/kg	SB15-0.5	9/18	0.10-0.20	0.6	0.27	15 N			no	BSL
Cadmium	1.0		1.2		mg/kg	multiple	7/18	0.90-1.0	1.2	ND	3.7 N			no	BSL
Calcium	710	J	69200	J	mg/kg	SB20-0.5	18/18	20	69200	386	800mg/day			no	NUT
Chromium	4.8		25.1		mg/kg	SB20-0.5	18/18	10	25.1	4.5	210 C			no	BSL
Cobalt	2.8	J	5.1	J	mg/kg	SB15-0.5	15/18	20	5.1	3.3	330 N			no	BSL
Copper	3.8	J	2,110		mg/kg	SB14-0.5	18/18	25	2,110	3.8	280 N			yes	ASL
Iron	3450		26000		mg/kg	SB15-0.5	18/18	10	26000	4690	10mg/day			no	NUT
Lead	5.2		695	J	mg/kg	SB15-0.5	18/18	0.5	695	7	400			yes	ASL
Magnesium	697	J	9940	J	mg/kg	SB20-0.5	18/18	20	9940	440	170mg/day			no	NUT
Manganese	58.7		592		mg/kg	SB20-0.5	18/18	1	592	70	310 N			yes	ASL
Mercury	0.05	J	27.9		mg/kg	SB20-0.5	12/18	0.05-0.06	27.9	ND	2.2 N			yes	ASL
Nickel	6.0		21	J	mg/kg	SB15-0.5	11/18	5.9-16.5	21	6.5	150 N			no	BSL

(1) Minimum/maximum detected concentration from '98 Construction Debris Area surface soil (0-0.5') data.
(2) The minimum detected concentration from '92 Himco Dump RI/FS background surface soil (0-2') data.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1)
(4) Rationale Codes
Selection Reason: Infrequent Detection but Associated Historically (HIST)
Frequent Detection (FD)
Toxicity Information Available (TX)
Above Screening Levels (ASL)
Quantitation Limit is greater than Risk-Based Concentration (QL>RBC)
Deletion Reason: Infrequent Detection (IFD)
Background Levels (BKG)
No Toxicity Information (NTX)
Essential Nutrient (NUT)
Below Screening Level (BSL)

Definitions:
N/A = Not Applicable
SQL = Sample Quantitation Limit
COPC = Chemical of Potential Concern
ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered
ND = Not Detected
MCL = Federal Maximum Contaminant Level
SMCL = Secondary Maximum Contaminant Level
J = Estimated Value
C = Carcinogenic
N = Non-Carcinogenic
RBC = Risk-Based Concentration

TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN -DRAFT
Himco Dump Superfund Site/Construction Debris Area, Surface Soil Data

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil
Exposure Point: Ingestion/Dermal Contact

Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (Max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
Potassium	210		539	J	mg/kg	SB18-0.5	13/18	125-192	539	115	5850mg/day			no	NUT
Selenium	0.6		1.0	J	mg/kg	SB19-0.5	5/18	010-0.12	1	0.25	37 N			no	BSL
Silver	1.9		1.9		mg/kg	SB20-0.5	1/18	0.90-1.2	1.9	ND	37 N			no	BSL
Sodium	20.4	J	127		mg/kg	SB11-0.5	18/18	500	127	ND	10000mg/day			no	NUT
Thallium	0.1		0.1		mg/kg	multiple	3/18	0.09-0.40	0.1	ND	0.6 N			no	BSL
Vanadium	6.5	J	12.8		mg/kg	SB20-0.5	18/18	1.0	12.8	10.4	52 N			no	BSL
Zinc	15.5		427		mg/kg	SB15-0.5	18/18	2.0	427	8.4	2200 N			no	BSL
Cyanide	0.05	J	4.2		mg/kg	SB10-0.5	17/18	0.1	4.2	ND	27 N			no	BSL
Volatile Organics															
Methylene Chloride	0.034		0.034		mg/kg	SB03-0.5	1/18	10.0-20.0	0.034		8.5 C			no	BSL
Acetone	0.002	J	0.003	J	mg/kg	SB17-0.5	4/18	10.0-11.0	0.003		140 N			no	BSL
Semivolatile Organics															
bis(2-Chloroethyl)ether	ND		ND		mg/kg		0/18	0.340-0.370	ND		0.18 C			yes	QL>RBC
bis(2-Chloroethoxy)methan	ND		ND		mg/kg		0/18	0.350-0.400	ND		none			no	NTX
4-Chloro-3-methylphenol	ND		ND		mg/kg		0/18	0.350-0.400	ND		none			no	NTX
2-Nitroaniline	ND		ND		mg/kg		0/18	0.880-1.0	ND		0.33 N			yes	QL>RBC
Acenaphthylene	0.096	J	0.096	J	mg/kg	SB19-0.5	1/18	0.350-0.400	0.096		none			no	NTX

(1) Minimum/maximum detected concentration from '98 Construction Debris Area surface soil (0-0.5') data.
(2) The minimum detected concentration from '92 Himco Dump RI/FS background surface soil (0-2') data.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1)
(4) Rationale Codes

Selection Reason:
- Infrequent Detection but Associated Historically (HIST)
- Frequent Detection (FD)
- Toxicity Information Available (TX)
- Above Screening Levels (ASL)
- Quantitation Limit is greater than Risk-Based Concentration (QL>RBC)

Deletion Reason:
- Infrequent Detection (IFD)
- Background Levels (BKG)
- No Toxicity Information (NTX)
- Essential Nutrient (NUT)
- Below Screening Level (BSL)

Definitions:
- N/A = Not Applicable
- SQL = Sample Quantitation Limit
- COPC = Chemical of Potential Concern
- ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered
- ND = Not Detected
- MCL = Federal Maximum Contaminant Level
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- J = Estimated Value
- C = Carcinogenic
- N = Non-Carcinogenic
- RBC = Risk-Based Concentration

TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN -DRAFT
Himco Dump Superfund Site/Construction Debris Area, Surface Soil Data

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil
Exposure Point: Ingestion/Dermal Contact

Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
3-Nitroaniline	ND		ND		mg/kg		0/18	0.880-1.0	ND		none			no	NTX
Acenaphthene	0.073	J	0.180	J	mg/kg	SB20-0.5	2/18	0.350-0.400	0.180		260 N			no	BSL
4-Chlorophenyl-phenylether	ND		ND		mg/kg		0/18	0.350-0.400	ND		none			no	NTX
4-Nitroaniline	ND		ND		mg/kg		0/18	0.880-1.0	ND		none			no	NTX
4,6-Dinitro-2-methylphenyl	ND		ND		mg/kg		0/18	0.880-1.0	ND		0.78 N			yes	QL>RBC
4-Bromophenyl-phenylether	ND		ND		mg/kg		0/18	0.350-0.400	ND		none			no	NTX
Hexachlorobenzene	ND		ND		mg/kg		0/18	0.350-0.400	ND		0.28 C			yes	QL>RBC
Phenanthrene	0.037	J	0.460		mg/kg	SB20-0.5	8/18	0.350-0.400	0.460		none			no	NTX
Anthracene	0.059	J	0.110	J	mg/kg	SB20-0.5	5/18	0.350-0.400	0.110		1400 C			no	BSL
Carbazole	0.037	J	0.064		mg/kg	SB17-0.5	4/18	0.350-0.400	0.064		22C			no	BSL
Di-n-butylphthalate	0.095	J	0.095	J	mg/kg	SB19-0.5	1/18	0.350-0.400	0.095		550 N			no	BSL
Fluoranthene	0.059	J	1.2		mg/kg	SB20-0.5	10/18	0.350-0.400	1.2		200 N			no	BSL
Pyrene	0.064	J	1.2		mg/kg	SB20-0.5	10/18	0.350-0.400	1.2		15 N			no	BSL
Butylbenzylphthalate	0.054	J	0.054	J	mg/kg	SB14-0.5	1/18	0.350-0.400	0.054		930 Sat			no	BSL
Benzo(a)anthracene	0.039	J	0.780		mg/kg	SB20-0.5	9/18	0.270-0.350	0.780		0.56 C			yes	ASL
Chrysene	0.047	J	0.880		mg/kg	SB20-0.5	9/18	0.270-0.350	0.880		56 C			no	BSL

(1) Minimum/maximum detected concentration from '98 Construction Debris Area surface soil (0-0.5') data.
(2) The minimum detected concentration from '92 Himco Dump RI/FS background surface soil (0-2') data.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1).
(4) Rationale Codes

Selection Reason:
- Infrequent Detection but Associated Historically (HIST)
- Frequent Detection (FD)
- Toxicity Information Available (TX)
- Above Screening Levels (ASL)
- Quantitation Limit is greater than Risk-Based Concentration (QL>RBC)

Deletion Reason:
- Infrequent Detection (IFD)
- Background Levels (BKG)
- No Toxicity Information (NTX)
- Essential Nutrient (NUT)
- Below Screening Level (BSL)

Definitions:
- N/A = Not Applicable
- SQL = Sample Quantitation Limit
- COPC = Chemical of Potential Concern
- ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered
- ND = Not Detected
- MCL = Federal Maximum Contaminant Level
- SMCL = Secondary Maximum Contaminant Level
- J = Estimated Value
- C = Carcinogenic
- N = Non-Carcinogenic
- Sat = Soil Saturation
- RBC = Risk-Based Concentration

TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN -DRAFT
Himco Dump Superfund Site/Construction Debris Area, Surface Soil Data

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil
Exposure Point: Ingestion/Dermal Contact

Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
bis(2-Ethylhexyl)phthalate	0.042	J	0.690	J	mg/kg	SB07-0.5	12/18	0.370	0.690		32 C			no	BSL
Di-n-octylphthalate	0.070	J	0.120	J	mg/kg	SB20-0.5	2/18	0.350-0.400	0.120		110 N			no	BSL
Benzo(b)fluoranthene	0.044	J	1.6		mg/kg	SB15-0.5	10/18	0.350-0.400	1.6		0.056 C			yes	ASL
Benzo(k)fluoranthene	0.050	J	1.2		mg/kg	SB20-0.5	7/18	0.350-0.400	1.2		5.6 C			no	BSL
Benzo(a)pyrene	0.053	J	1.3		mg/kg	SB20-0.5	10/18	0.350-0.400	1.3		0.056 C			yes	ASL
Indeno(1,2,3-cd)pyrene	0.041	J	1.2		mg/kg	multiple	10/18	0.350-0.400	1.2		0.56 C			yes	ASL
Dibenz(a,h)anthracene	0.058	J	0.450		mg/kg	SB20-0.5	6/18	0.350-0.400	0.450		0.056 C			yes	ASL
Benzo(g,h,I)perylene	0.039	J	1.5		mg/kg	SB15-0.5	12/18	0.350-0.400	1.5		none			no	NTX

(1) Minimum/maximum detected concentration from '98 Construction Debris Area surface soil (0-0.5') data.
(2) The minimum detected concentration from '92 Himco Dump RI/FS background surface soil (0-2') data.
(3) Risk-Based Concentration Table, May 1, 1998; U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1)
(4) Rationale Codes

Selection Reason:
- Infrequent Detection but Associated Historically (HIST)
- Frequent Detection (FD)
- Toxicity Information Available (TX)
- Above Screening Levels (ASL)
- Quantitation Limit is greater than Risk-Based Concentration (QL>RBC)

Deletion Reason:
- Infrequent Detection (IFD)
- Background Levels (BKG)
- No Toxicity Information (NTX)
- Essential Nutrient (NUT)
- Below Screening Level (BSL)

Definitions:
- N/A = Not Applicable
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- COPC = Chemical of Potential Concern
- ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered
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Himco Dump Superfund Site/Construction Debris Area, Total Soil Data

Scenario Timeframe: Current/Future
Medium: Total Soil
Exposure Medium: Soil/Dust-Volatilization
Exposure Point: Ingestion/Dermal Contact/Inhalation

Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
Inorganics															
Aluminum	1360		8860		mg/kg	SB16-6	47/47	10.0	8860	3920	7500 N			yes	ASL
Anitmony	4.3		13.1	J	mg/kg	SB07-0.5	2/47	8.6-13.8	13.1	ND	3 N			yes	ASL
Arsenic	0.55	J	12.5	J	mg/kg	SB11-0.5	47/47	0.5	12.5	1.1	0.038 C			yes	ASL
Barium	7.8		444		mg/kg	SB19-2	47/47	1	444	35.5	520 N			no	BSL
Beryllium	0.10	J	0.9	J	mg/kg	SB16-6	23/47	0.10-0.70	0.9	0.27	15 N			no	BSL
Cadmium	1		2		mg/kg	SB15-6	14/47	0.90-1.2	2	ND	3.7 N			no	BSL
Calcium	361	J	85900	J	mg/kg	SB16-6	47/47	20	85900	386	800mg/day			no	NUT
Chromium	3.3		25.1		mg/kg	SB20-0.5	47/47	1	25.1	4.5	210 C			no	BSL
Cobalt	1.9	J	10.8		mg/kg	SB15-6	40/47	1.7-3.4	10.8	3.3	330 N			no	BSL
Copper	3.1	J	2,220		mg/kg	SB15-6	47/47	2	2,220	3.8	280 N			yes	ASL
Iron	1330		26000		mg/kg	SB15-0.5	47/47	10	26000	4690	10mg/day			no	NUT
Lead	5.2		695	J	mg/kg	SB15-0.5	47/47	0.5	695	7	400			yes	ASL
Magnesium	333	J	22600		mg/kg	SB15-6	47/47	20	22600	440	170mg/day			no	NUT
Manganese	14.8		1410		mg/kg	SB15-6	47/47	1	1410	70	310 N			yes	ASL
Mercury	0.05	J	27.9		mg/kg	SB20-0.5	28/47	0.05-0.06	27.9	ND	2.2 N			yes	ASL
Nickel	6		298		mg/kg	SB15-6	28/47	5.8-16.5	298	6.5	150 N			yes	ASL

(1) Minimum/maximum detected concentration from '98 Construction Debris Area soil data (all depths).
(2) The minimum detected concentration from '92 Himco Dump RI/FS background surface soil (0-2') data.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1)
(4) Rationale Codes Selection Reason: Infrequent Detection but Associated Historically (HIST)
Frequent Detection (FD)
Toxicity Information Available (TX)
Above Screening Levels (ASL)
Quantitation Limit is greater than Risk-Based Concentration (QL>RBC)
Deletion Reason: Infrequent Detection (IFD)
Background Levels (BKG)
No Toxicity Information (NTX)
Essential Nutrient (NUT)
Below Screening Level (BSL)

Definitions:
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Scenario Timeframe: Current/Future
Medium: Total Soil
Exposure Medium: Soil/Dust-Volatilization
Exposure Point: Ingestion/Dermal Contact/Inhalation

Chemical	(1) Minimum Concentration	Minimum Qualifier	(1) Maximum Concentration	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (Max)	(2) Background Value	(3) Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	(4) Rationale for Contaminant Deletion or Selection
Potassium	210	J	586	J	mg/kg	SB19-6	35/47	125-198	586	115	5850mg/day			no	NUT
Selenium	0.6	J	1.6	J	mg/kg	SB19-2	12/47	0.10-0.60	1.6	0.25	37 N			no	BSL
Silver	1		3.1		mg/kg	SB20-2	5/47	0.80-1.40	3.1	ND	37 N			no	BSL
Sodium	20.4	J	525		mg/kg	SB04-2	46/47	16.8	525	ND	10000mg/day			no	BSL
Thallium	0.1	J	0.5		mg/kg	SB16-2	5/47	0.08-0.40	0.5	ND	0.6 N			no	BSL
Vanadium	3.7	J	18		mg/kg	SB18-2	47/47	1	18	10.4	52 N			no	BSL
Zinc	10		1120		mg/kg	SB15-6	47/47	2	1120	8.4	2200 N			no	BSL
Cyanide	0.05	J	4.9		mg/kg	SB10-2	42/47	0.10-0.11	4.9	ND	27 N			no	BSL
Volatile Organics															
Methylene Chloride	0.034		0.075		mg/kg	SB19-2	3/47	0.010-0.024	0.075		8.5 C			no	BSL
Acetone	0.002	J	0.022		mg/kg	SB15-2	10/47	0.010-0.013	0.022		140 N			no	BSL
Carbon Disulfide	0.002	J	0.002	J	mg/kg	SB16-6	1/47	0.010-0.015	0.002		35 N			no	BSL
1,1-Dichloroethane	0.002	J	0.002	J	mg/kg	SB16-6	1/47	0.010-0.015	0.002		57 N			no	BSL
Benzene	0.004	J	0.004	J	mg/kg	SB16-6	1/47	0.010-0.015	0.004		0.62 C			no	BSL
Ethylbenzene	0.014		0.014		mg/kg	SB16-6	1/46	0.010-0.015	0.014		230 Sat			no	BSL
Xylene	0.009	J	0.009	J	mg/kg	SB16-6	1/46	0.010-0.015	0.009		210 Sat			no	BSL

(1) Minimum/maximum detected concentration from '98 Construction Debris Area soil data (all depths).
(2) The minimum detected concentration from '92 Himco Dump RI/FS background surface soil (0-2') data.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1)
(4) Rationale Codes
Selection Reason: Infrequent Detection but Associated Historically (HIST)
Frequent Detection (FD)
Toxicity Information Available (TX)
Above Screening Levels (ASL)
Quanitation Limit is greater than Risk-Based Concentration (QL>RBC)
Deletion Reason: Infrequent Detection (IFD)
Background Levels (BKG)
No Toxicity Information (NTX)
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Exposure Point: Ingestion/Dermal Contact/Inhalation

Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
Semivolatile Organics															
bis(2-Chloroethyl)ether	ND		ND		mg/kg		0/47	0.330-0.690	ND		0.18 C			yes	QL>RBC
1,2-Dichlorobenzene	0.098	J	0.098	J	mg/kg	SB16-6	1/47	0.330-0.690	0.098		370 Sat			no	BSL
4-Methylphenol	0.050	J	0.050	J	mg/kg	SB20-2	1/47	0.330-0.690	0.050		39 N(III*)			no	BSL
N-Nitroso-di-n-propylamine	ND		ND		mg/kg		0/47	0.330-0.690	ND		0.063 C			yes	QL>RBC
2-Nitrophenol	ND		ND		mg/kg		0/47	0.330-0.870	ND		none			no	NTX
bis(2-Chloroethoxy)methane	ND		ND		mg/kg		0/47	0.330-0.690	ND		none			no	NTX
Naphthalene	0.038	J	2.2		mg/kg	SB20-6	6/47	0.330-0.690	2.2		5.5 N			no	BSL
4-Chloro-3-methylphenol	ND		ND		mg/kg		0/47	0.330-0.690	ND		none			no	NTX
2-Methylnaphthalene	0.048	J	1.0		mg/kg	SB20-6	3/47	0.330-0.690	1.0		310 N(III*)			no	BSL
2-Nitroaniline	ND		ND		mg/kg		0/47	0.340-1.7	ND		0.33 N			yes	QL>RBC
Acenaphthylene	0.067	J	2.3		mg/kg	SB20-6	6/47	0.330-0.690	2.3		none			no	NTX
3-Nitroaniline	ND		ND		mg/kg		0/47	0.390-1.7	ND		none			no	NTX
Acenaphthene	0.037	J	0.890		mg/kg	SB20-6	6/47	0.330-0.690	0.890		260 N			no	BSL
Dibenzofuran	0.078	J	1.5		mg/kg	SB20-6	3/47	0.330-0.690	1.5		21 N			no	BSL

(1) Minimum/maximum detected concentration from '98 Construction Debris Area soil data (all depths).
(2) The minimum detected concentration from '92 Himco Dump RI/FS background surface soil (0-2') data.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1),
or Risk-Based Concentration Table, April 1, 1998, U.S. EPA Region III, (Cancer benchmark value = 1E-06, HQ=0.1)
(4) Rationale Codes

Selection Reason:
- Infrequent Detection but Associated Historically (HIST)
- Frequent Detection (FD)
- Toxicity Information Available (TX)
- Above Screening Levels (ASL)
- Quanitation Limit is greater than Risk-Based Concentration (QL>RBC)

Deletion Reason:
- Infrequent Detection (IFD)
- Background Levels (BKG)
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Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
Diethylphthalate	0.064	J	0.064	J	mg/kg	SB-16-6	1/47	0.330-0.690	0.064		4400 N			no	BSL
4-Chlorophenyl-phenylether	ND		ND		mg/kg		0/47	0.330-0.690	ND		none			no	NTX
Fluorene	0.044	J	2.5		mg/kg	SB20-6	5/47	0.330-0.690	2.5		180 N			no	BSL
4-Nitroaniline	ND		ND		mg/kg		0/47	0.830-1.7	ND		none			no	NTX
4,6-Dinitro-2-methylphenyl	ND		ND		mg/kg		0/47	0.830-1.7	ND		0.78 N			yes	QL>RBC
4-Bromophenyl-phenylether	ND		ND		mg/kg		0/47	0.330-0.690	ND		none			no	NTX
Hexachlorobenzene	ND		ND		mg/kg		0/47	0.330-0.690	ND		0.28 C			yes	QL>RBC
Phenanthrene	0.037	J	18.0		mg/kg	SB20-6	21/47	0.340-0.690	18.0		none			no	NTX
Anthracene	0.041	J	4.9	J	mg/kg	SB20-6	13/47	0.340-0.690	4.9		1400 C			no	BSL
Carbazole	0.037	J	1.5		mg/kg	SB20-6	9/47	0.330-0.690	1.5		22 C			no	BSL
Di-n-butylphthalate	0.037	J	0.095	J	mg/kg	SB19-0.5	2/47	0.330-0.690	0.095		550 N			no	BSL
Fluoranthene	0.043	J	29.0		mg/kg	SB20-6	26/47	0.350-0.690	29.0		200 N			no	BSL
Pyrene	0.040	J	21.0		mg/kg	SB20-6	26/47	0.340-0.690	21.0		15 N			yes	ASL
Butylbenzylphthalate	0.054	J	0.06	J	mg/kg	SB16-6	8/47	0.330-0.690	0.06		930 Sat			no	BSL
Benzo(a)anthracene	0.039	J	9.7		mg/kg	SB20-6	23/47	0.340-0.690	9.7		0.56 C			yes	ASL
Chrysene	0.047	J	9.7		mg/kg	SB20-6	23/47	0.340-0.690	9.7		56 C			no	BSL

(1) Minimum/maximum detected concentration from '98 Construction Debris Area soil data (all depths).
(2) The minimum detected concentration from '92 Himco Dump RI/FS background surface soil (0-2') data.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1)
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Chemical	Minimum Concentration (1)	Minimum Qualifier	Maximum Concentration (1)	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Quantitation Limits	Concentration Used for Screening (max)	Background Value (2)	Screening Toxicity Value (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for Contaminant Deletion or Selection (4)
bis(2-Ethylhexyl)phthalate	0.037	J	30.0		mg/kg	SB14-6	32/47	0.330-1.5	30.0		32 C			no	BSL
Di-n-octylphthalate	0.070	J	0.130	J	mg/kg	SB19-6	3/47	0.330-0.690	0.130		110 N			no	BSL
Benzo(b)fluoranthene	0.038	J	9.7		mg/kg	SB20-6	26/47	0.340-0.690	9.7		0.056 C			yes	ASL
Benzo(k)fluoranthene	0.038	J	10.0		mg/kg	SB20-6	19/47	0.340-0.690	10.0		5.6 C			yes	ASL
Benzo(a)pyrene	0.053	J	11.0		mg/kg	SB20-6	24/47	0.340-0.690	11.0		0.056 C			yes	ASL
Indeno(1,2,3-cd)pyrene	0.041	J	6.4		mg/kg	SB20-6	24/47	0.340-0.690	6.4		0.56 C			yes	ASL
Dibenz(a,h)anthracene	0.043	J	2.0		mg/kg	SB20-6	16/27	0.340-0.690	2.0		0.056 C			yes	ASL
Benzo(g,h,i)perylene	0.038	J	7.1		mg/kg	SB20-6	29/47	0.340-0.690	7.1		none			no	NTX

(1) Minimum/maximum detected concentration from '98 Construction Debris Area soil data (all depths).
(2) The minimum detected concentration from '92 Himco Dump RI/FS background surface soil (0-2') data.
(3) Risk-Based Concentration Table, May 1, 1998, U.S. EPA Region IX, (Cancer benchmark value = 1E-06, HQ=0.1)
(4) Rationale Codes

Selection Reason:
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SUMMARY OF CHEMICALS DETECTED IN GROUND WATER
FALL 1998
HIMCO DUMP SUPERFUND SITE

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	Sample location		WT101A			WT101A duplicate			WT102A			WT112A			WT114A			WT115A			WT116A	
2	Date sampled		10/21/98			10/21/98			10/19/98			10/20/98			10/20/98			10/21/98			10/21/98	
3	Units		µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
4		Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual
5	**TOTAL METALS**																					
6	Aluminum	<	26.0		<	26.0		27.6		J	<	26.0	J	<	26.0	J	94.1		J	58.0		J
7	Antimony	<	42.2		<	42.2		<	42.2	J	<	42.2	J	<	42.2	J	<	42.2		<	42.2	J
8	Arsenic	3.6		J	3.3		J	<	0.90	J	<	0.90	J	24.3		J	0.90			1.0		J
9	Barium	91.2		J	85.5		J	47 3		J	36.6		J	238		J	<	33.5	J	192		J
10	Beryllium	<	0.60		<	0.60		<	0.60	J	<	0.60	J	0.60		J	<	0.60		<	0.60	J
11	Calcium	377000			361000			17100		J	19000		J	27000		J	293000			60900		J
12	Chromium	13.1			11.3			20.3		J	7.5		J	12.0		J	10.4			<	7.0	J
13	Cobalt	<	7.8		<	7.8		<	7.8	J	<	7.8	J	11.9		J	<	7.8		<	7.8	J
14	Copper	<	4.1		<	4.1		<	4.1	J	<	4.1	J	<	4.1	J	<	4.1		<	4.1	J
15	Iron	28100			26900			96 8		J	<	11.7	J	17900		J	4590			4490		J
16	Lead	<	0.50		<	0.50		<	0.50	J	<	0.50	J	<	0.50	J	<	0.50		<	0.50	J
17	Magnesium	14700			13900			16600		J	14000		J	24800		J	20300			52700		J
18	Manganese	3080			2940			61.5		J	6.7		J	306		J	513			662		J
19	Mercury	<	0.10		<	0.10		0.10		J	<	0.10	J	<	0.10	J	<	0.10		0.10		J
20	Nickel	<	28.3		<	28.3		73.0		J	<	23.8	J	<	23.8	J	<	28.3		<	28.3	J
21	Potassium	3630		J	3630		J	1610		J	1330		J	6640		J	3580		J	25200		J
22	Selenium	3.0		R	3.0		R	<	6.0	J	<	6.0	J	<	6.0	J	3.0		R	6.0		R
23	Silver	<	5.3		<	5.3		6.1		J	<	5.3	J	<	5.3	J	<	5.3		<	5.3	J
24	Sodium	35800			33100			48000		J	13300		J	47100		J	12100			<	179000	J
25	Thallium	<	0.40		<	0.40		<	0.40	J	<	0.40	J	<	0.40	J	<	0.40		<	0.40	J
26	Zinc	<	3.2		<	3.2		<	3.2	J	<	3.2	J	3.2		J	3.7		J	<	3 2	J
27	Cyanide	17.9		J	14.4		J	8.5		J	7.3		J	7.8		J	12.4		J	31.9		
28																						
29	**VOLATILE ORGANICS**																					
30	1,1-Dichloroethane	<	10		<	10		<	10		<	10		4		J	<	10		5		J
31																						
32	**SEMIVOLATILE ORGANICS**																					
33	Diethylphthalate	19		J	9		J	<	10		<	10		2		J	<	10	J	<	10	
34	bis(2-Ethylhexyl)phthalate	<	10	J	<	10		3		J	<	10		<	10		<	10	J	2		J

RL=Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J=Estimated Value
R=Rejected Value (The data value is unusable.)

SUMMARY OF CHEMICALS DETECTED IN GROUND WATER
FALL 1998
HIMCO DUMP SUPERFUND SITE

	A	W	X	Y	Z	AA	AB	AC	AD
1	Sample location		WT119A			WT119A dup			
2	Date sampled		10/22/98			10/22/98			
3	Units		µg/L			µg/L			
4		Result	RL	Qual	Result	RL	Qual		
5	**TOTAL METALS**								
6	Aluminum	258		J	249		J		
7	Antimony	43.2		J	<	42.2			
8	Arsenic	5.8		J	5.3				
9	Barium	78.3			76.0				
10	Beryllium	<	0.60	J	<	0.60	J		
11	Calcium	143000			142000				
12	Chromium	7.8			<	7.0			
13	Cobalt	<	7.8		<	7.8			
14	Copper	5.4			4.9				
15	Iron	1690			1690				
16	Lead	3.4		J	2.4		J		
17	Magnesium	44800			44500				
18	Manganese	279			278				
19	Mercury	<	0 10		<	0.10			
20	Nickel	<	28.3		<	28.3			
21	Potassium	11500		J	11200		J		
22	Selenium	6.0		J	6.0		J		
23	Silver	<	5 3		<	5.3			
24	Sodium	69100			68200				
25	Thallium	<	0.40		<	0.40			
26	Zinc	<	4.9		<	4.9			
27	Cyanide	12		J	15.2				
28									
29	**VOLATILE ORGANICS**								
30	1,1-Dichloroethane	<	10		<	10			
31									
32	**SEMIVOLATILE ORGANICS**								
33	Diethylphthalate	<	10		<	10			
34	bis(2-Ethylhexyl)phthalate	<	10		<	10			

RL=Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J=Estimated Value
R=Rejected Value (The data value is unusable.)

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB03-0.5			SB03-2			SB04-0.5			SB04-2		
Date sampled	10/12/98			10/12/98			10/19/98			10/19/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	4080			3960			3340			5130		
Antimony	<	11.5	J	<	11.3	J	<	9.0		<	9.0	
Arsenic	1.6			1.3			1.00		J	1.1		J
Barium	27.9			21.9			21.2			39.5		
Beryllium	<	0.20		<	0.20		0.10		J	0.20		J
Cadmium	<	1.0		1.0			<	1.0		<	1.0	
Calcium	1670		J	480		J	1020			1530		
Chromium	5.2		J	5.3		J	4.8			6.4		
Cobalt	<	3.4		<	3.4		<	1.7		<	1.7	
Copper	15.9		J	4.3			3.8		J	3.3		J
Iron	3450			2530			4120			5070		
Lead	9.8			11.7			8.1		J	7.8		J
Magnesium	697		J	333		J	724			833		
Manganese	58.7			14.8			69.9			86.2		
Mercury	<	0.06		<	0.06		0.05		J	0.05		J
Nickel	<	8.4		<	8.2		<	6.1		<	6.0	
Potassium	253		J	<	127		<	198		288		J
Selenium	0.80		J	0.90		J	<	0.10		<	0.10	
Silver	<	0.90		<	0.90		<	1.1		<	1.1	
Sodium	20.4		J	39.0		J	34.5		J	525		
Thallium	<	0.40		<	0.40		<	0.08		<	0.08	
Vanadium	7.8			5.7		J	7.0		J	9.4		J
Zinc	26.0			14.4			15.6			17.3		
Cyanide	0.05		J	0.2		J	<	0.10		0.10		J
VOLATILE ORGANICS												
Units	µg/kg			µg/kg			µg/kg			µg/kg		
Methylene Chloride	34			<	18		<	11		<	11	
Acetone	2		J	2		J	<	11		<	11	
Carbon Disulfide	<	11		<	11		<	11		<	11	
1,1-Dichloroethane	<	11		<	11		<	11		<	11	
Benzene	<	11		<	11		<	11		<	11	
Ethylbenzene	<	11		<	11		<	11		<	11	
Xylene (total)	<	11		<	11		<	11		<	11	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB03-0.5			SB03-2			SB04-0.5			SB04-2		
Date sampled	10/12/98			10/12/98			10/19/98			10/19/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	360		<	360		<	350		<	350	
4-Methylphenol	<	360		<	360		<	350		<	350	
Naphthalene	<	360		<	360		<	350		<	350	
2-Methylnaphthalene	<	360		<	360		<	350		<	350	
Acenaphthylene	<	360		<	360		<	350		<	350	
Acenaphthene	<	360		<	360		<	350		<	350	
Dibenzofuran	<	360		<	360		<	350		<	350	
Diethylphthalate	<	360		<	360		<	350		<	350	
Fluorene	<	360		<	360		<	350		<	350	
Phenanthrene	<	360		<	360		<	350		<	350	
Anthracene	<	360		<	360		<	350		<	350	
Carbazole	<	360	J	<	360	J	<	350		<	350	
Di-n-butylphthalate	<	360		<	360		<	350		<	350	
Fluoranthene	<	360		<	360		<	350		<	350	
Pyrene	<	360		<	360		<	350		<	350	
Butylbenzylphthalate	<	360		<	360		<	350		<	350	
Benzo(a)anthracene	<	360		<	360		<	350		<	350	
Chrysene	<	360		<	360		<	350		<	350	
bis(2-Ethylhexyl)phthalate	140		J	<	360	J	<	350		<	350	
Di-n-octylphthalate	<	360		<	360		<	350		<	350	
Benzo(b)fluoranthene	<	360		<	360		<	350		<	350	
Benzo(k)fluoranthene	<	360		<	360		<	350		<	350	
Benzo(a)pyrene	<	360		<	360		<	350		<	350	
Indeno(1,2,3-cd)pyrene	<	360		<	360		<	350		<	350	
Dibenz(a,h)anthracene	<	360		<	360		<	350		<	350	
Benzo(g,h,i)perylene	<	360		<	360		61		J	50		J

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB04-6			SB05-0.5			SB05-2			SB06-0.5		
Date sampled	10/19/98			10/19/98			10/19/98			10/19/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	3340			2580			3070			4220		
Antimony	<	10.3		<	8.9		<	8.8		<	9.4	
Arsenic	0.60		J	1.2		J	0.60		J	2.1		J
Barium	18.7			44.7			34.5			51.8		
Beryllium	<	0.10		0.20		J	0.30		J	<	0.10	
Cadmium	<	1.1		1.1			<	1.0		<	1.0	
Calcium	2070			5460			4180			1750		
Chromium	5.1			7.0			8.3			4.5		
Cobalt	<	1.9		3.2		J	3.1		J	3.3		J
Copper	3.1		J	16.4			17.1			20.4		
Iron	2570			4590			4360			6200		
Lead	6.2		J	56.9			22.3			13.4		J
Magnesium	346			2390			2050			746		
Manganese	58.1			109			66.4			337		
Mercury	<	0.06		0.08		J	0.06		J	<	0.06	
Nickel	<	6.9		6.2		J	12.3		J	9.6		J
Potassium	<	227		<	195		419		J	219		J
Selenium	<	0.10		<	0.10		<	0.10		<	0.10	
Silver	<	1.3		<	1.1		<	1.1		<	1.2	
Sodium	110		J	50.2		J	50.6		J	24.8		J
Thallium	<	0.1		<	0.08		<	0.08		<	0.09	
Vanadium	3.7		J	8.3		J	9.2		J	8.5		J
Zinc	10.0			72.9			52.4			52.3		
Cyanide	0.20		J	0.30		J	0.20		J	0.30		J
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	13		<	11		<	10		<	11	
Acetone	<	13		<	11		<	10		<	11	
Carbon Disulfide	<	13		<	11		<	10		<	11	
1,1-Dichloroethane	<	13		<	11		<	10		<	11	
Benzene	<	13		<	11		<	10		<	11	
Ethylbenzene	<	13		<	11		<	10		<	11	
Xylene (total)	<	13		<	11		<	10		<	11	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB04-6			SB05-0.5			SB05-2			SB06-0.5		
Date sampled	10/19/98			10/19/98			10/19/98			10/19/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	420		<	350		<	340		<	360	
4-Methylphenol	<	420		<	350		<	340		<	360	
Naphthalene	<	420		<	350		<	340		<	360	
2-Methylnaphthalene	<	420		<	350		<	340		<	360	
Acenaphthylene	<	420		<	350		<	340		<	360	
Acenaphthene	<	420		<	350	J	<	340		<	360	
Dibenzofuran	<	420		<	350		<	340		<	360	
Diethylphthalate	<	420		<	350		<	340		<	360	
Fluorene	<	420		<	350		<	340		<	360	
Phenanthrene	<	420		46		J	140		J	<	360	
Anthracene	<	420		<	350		<	340		<	360	
Carbazole	<	420		<	350		<	340		<	360	
Di-n-butylphthalate	<	420	J	<	350		<	340		<	360	J
Fluoranthene	<	420		130		J	210		J	<	360	
Pyrene	<	420		140		J	210		J	<	360	
Butylbenzylphthalate	<	420		<	350		<	340		<	360	
Benzo(a)anthracene	<	420		75	75	J	120		J	<	360	
Chrysene	<	420		84	84	J	110		J	<	360	
bis(2-Ethylhexyl)phthalate	<	420		<	350		420			<	360	
Di-n-octylphthalate	<	420		<	350		<	340		<	360	
Benzo(b)fluoranthene	<	420		110		J	140		J	<	360	
Benzo(k)fluoranthene	<	420		<	350		38		J	<	360	
Benzo(a)pyrene	<	420		89	89	J	110		J	<	360	
Indeno(1,2,3-cd)pyrene	<	420		79		J	62		J	<	360	
Dibenz(a,h)anthracene	<	420		<	350		<	340		<	360	
Benzo(g,h,i)perylene	74		J	110		J	78		J	<	360	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB06-0.5 Dup			SB06-2			SB07-0.5			SB07-2		
Date sampled	10/19/98			10/19/98			10/21/98			10/21/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	3000			2770			3100			1730		
Antimony	<	9.4		<	9.0		13.1		J	<	8.7	J
Arsenic	1.4		J	1.1		J	2.3		J	0.70		J
Barium	47.7			40.4			13.0			7.8		
Beryllium	<	0.10		0.30		J	0.20		J	0.10		J
Cadmium	<	1.0		<	1.0		<	1.0		<	0.90	
Calcium	1660			728			1320			2140		
Chromium	5.5			4.6			6.0			5.1		
Cobalt	1.9		J	2.8		J	4.0			1.9		
Copper	19.9			22.6			7.4			6.4		
Iron	4800			3660			5240			4390		
Lead	17.2		J	9.4		J	5.2			6.5		S*
Magnesium	598			470			1140			1160		
Manganese	296			227			133			44.7		
Mercury	<	0.06		<	0.05		<	0.05		<	0.05	
Nickel	7.0		J	<	6.0		6.0			<	5.8	
Potassium	<	205		227		J	234			226		
Selenium	<	0.10		<	0.10		<	0.10	J	<	0.10	J
Silver	<	1.2		<	1.1		<	1.1		<	1.1	
Sodium	<	18.1		32.6		J	41.6			<	16.8	
Thallium	<	0.09		<	0.08		0.10		J	<	0.08	J
Vanadium	7.0		J	5.2		J	8.1			4.7		
Zinc	45.0			41.0			20.2			40.0		
Cyanide	<	0.10		<	0.10		0.20		J	<	0.10	J
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	11		<	11		<	10		<	10	
Acetone	<	11		<	11		<	10		<	10	
Carbon Disulfide	<	11		<	11		<	10		<	10	
1,1-Dichloroethane	<	11		<	11		<	10		<	10	
Benzene	<	11		<	11		<	10		<	10	
Ethylbenzene	<	11		<	11		<	10		<	10	
Xylene (total)	<	11		<	11		<	10		<	10	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB06-0.5 Dup			SB06-2			SB07-0.5			SB07-2		
Date sampled	10/19/98			10/19/98			10/21/98			10/21/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	370		<	350		<	340		<	340	
4-Methylphenol	<	370		<	350		<	340		<	340	
Naphthalene	<	370		<	350		<	340		<	340	
2-Methylnaphthalene	<	370		<	350		<	340		<	340	
Acenaphthylene	<	370		<	350		<	340		<	340	
Acenaphthene	<	370		<	350		<	340	J	<	340	
Dibenzofuran	<	370		<	350		<	340		<	340	
Diethylphthalate	<	370		<	350		<	340		<	340	
Fluorene	<	370		<	350		<	340		<	340	
Phenanthrene	<	370		<	350		<	340		<	340	
Anthracene	<	370		<	350		<	340		<	340	
Carbazole	<	370		<	350		<	340		<	340	
Di-n-butylphthalate	<	370	J	<	350	J	<	340	J	<	340	J
Fluoranthene	<	370		<	350		<	340		<	340	
Pyrene	<	370		<	350		<	340	J	<	340	
Butylbenzylphthalate	<	370		<	350		<	340		<	340	
Benzo(a)anthracene	<	370		<	350		<	340		<	340	
Chrysene	<	370		<	350		<	340		<	340	
bis(2-Ethylhexyl)phthalate	<	370		460			690		J	700		J
Di-n-octylphthalate	<	370		<	350		<	340	J	<	340	J
Benzo(b)fluoranthene	<	370		<	350		<	340		<	340	
Benzo(k)fluoranthene	<	370		<	350		<	340		<	340	
Benzo(a)pyrene	<	370		<	350		<	340		<	340	
Indeno(1,2,3-cd)pyrene	<	370		<	350		<	340		<	340	
Dibenz(a,h)anthracene	<	370		<	350		<	340		<	340	
Benzo(g,h,i)perylene	250		J	<	350		<	340		<	340	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB08-0.5			SB08-2			SB09-0.5			SB09-0.5 Dup		
Date sampled	10/20/98			10/20/98			10/21/98			10/21/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	3150			1900			2480			2500		
Antimony	<	8.7		<	8.6		<	9.0		<	8.9	
Arsenic	1.1		J	0.55		J	1.1		J	1.7		J
Barium	14.8		J	126			14.1		J	13.4		J
Beryllium	<	0.12		<	0.12		<	0.13		<	0.13	
Cadmium	<	0.95		<	0.94		<	0.98		<	0.97	
Calcium	953		J	<	6060		19600			2650		
Chromium	5.3			5.3			5.7			5.4		
Cobalt	3.3		J	1.9		J	3.1		J	2.8		J
Copper	5.3			5.1		J	9.2			9.1		
Iron	4680			2590			4750			4610		
Lead	5.4			6.9		J	6.7			6.7		
Magnesium	919		J	1040			2380			1410		
Manganese	105			35.8			172			144		
Mercury	0.05		J	<	0.05		<	0.05		0.06		J
Nickel	<	5.9		6.7		J	7.0		J	9.5		
Potassium	<	192		<	190		264		J	<	196	
Selenium	<	0.12		<	0.12		<	0.13		<	0.13	J
Silver	<	1.1		<	1.1		<	1.1		<	1.1	
Sodium	29.9		J	32.7		J	36.2		J	37.6		J
Thallium	<	0.08		<	0.08		<	0.09		<	0.08	
Vanadium	10.0		J			J	7.2		J	8.8		J
Zinc	15.5						26.2			22.2		
Cyanide	0.92		J			J	0.56		J	0.37		J
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	10		<	10		<	11		<	10	
Acetone	<	10		<	10		<	11		<	10	
Carbon Disulfide	<	10		<	10		<	11		<	10	
1,1-Dichloroethane	<	10		<	10		<	11		<	10	
Benzene	<	10		<	10		<	11		<	10	
Ethylbenzene	<	10		<	10		<	11		<	10	
Xylene (total)	<	10		<	10		<	11		<	10	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB08-0.5			SB08-2			SB09-0.5			SB09-0.5 Dup		
Date sampled	10/20/98			10/20/98			10/21/98			10/21/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	350		<	340		<	350		<	350	
4-Methylphenol	<	350		<	340		<	350		<	350	
Naphthalene	<	350		<	340		<	350		<	350	
2-Methylnaphthalene	<	350		<	340		<	350		<	350	
Acenaphthylene	<	350		<	340		<	350		<	350	
Acenaphthene	<	350		<	340		<	350		<	350	
Dibenzofuran	<	350		<	340		<	350		<	350	
Diethylphthalate	<	350		<	340		<	350		<	350	
Fluorene	<	350		<	340		<	350		<	350	
Phenanthrene	<	350		<	340		<	350		<	350	
Anthracene	<	350		<	340		<	350		<	350	
Carbazole	<	350		<	340		<	350		<	350	
Di-n-butylphthalate	<	350		<	340		<	350	J	<	350	J
Fluoranthene	<	350		<	340		<	350		<	350	
Pyrene	<	350		<	340		<	350		<	350	
Butylbenzylphthalate	<	350		<	340		<	350		<	350	
Benzo(a)anthracene	<	350		<	340		<	350		<	350	
Chrysene	<	350		<	340		<	350		<	350	
bis(2-Ethylhexyl)phthalate	<	360		<	1500		440		J	470		J
Di-n-octylphthalate	<	350		<	340		<	350	J	<	350	J
Benzo(b)fluoranthene	<	350		<	340		<	350		<	350	
Benzo(k)fluoranthene	<	350		<	340		<	350		<	350	
Benzo(a)pyrene	<	350		<	340		<	350		<	350	
Indeno(1,2,3-cd)pyrene	<	350		<	340		<	350		<	350	
Dibenz(a,h)anthracene	<	350		<	340		<	350		<	350	
Benzo(g,h,i)perylene	<	350		<	340		<	350		<	350	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB09			SB10-0.5			SB10-0.5 Dup			SB10-2		
Date sampled	10/21/98			10/20/98			10/20/98			10/20/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	2120			4230			5670			3610		
Antimony	<	8.8		<	9.1		<	9.2		<	8.9	
Arsenic	0.80		J	1.5		J	1.4		J	1.2		J
Barium	12.1		J	51.7			55.1			48.7		
Beryllium	<	0.13		<	0.13		<	0.13		<	0.13	
Cadmium	<	0.96		<	0.99		1.2			<	0.97	
Calcium	12600			586		J	710		J	361		J
Chromium	5.2			5.5			7.0			5.5		
Cobalt	2.8		J	3.4		J	3.3		J	3.1		J
Copper	8.0			35.1			37.2			38.1		
Iron	3620			4780			5330			4290		
Lead	6.0			21.1		J	28.9		J	16.3		J
Magnesium	3500			559		J	766		J	503		J
Manganese	62.6			317			319			169		
Mercury	<	0.05		<	0.05		0.07		J	<	0.05	
Nickel	<	5.9		8.1		J	8.1		J	<	6.0	
Potassium	<	194		<	200		297		J	238		J
Selenium	<	0.13	J	<	0.13		<	0.13		<	0.13	
Silver	<	1.1		<	1.1		<	1.1		<	1.1	
Sodium	32.6		J	34.3		J	45.5		J	39.3		J
Thallium	<	0.08		<	0.09		<	0.09		<	0.08	
Vanadium	7.6		J	10.1		J	10.4		J	9.5		J
Zinc	24.1			58.3			68.9			50.1		
Cyanide	0.58		J	4.2			0.58		J	4.9		
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	10		<	11		<	11		<	10	
Acetone	<	10		<	11		<	11		<	10	
Carbon Disulfide	<	10		<	11		<	11		<	10	
1,1-Dichloroethane	<	10		<	11		<	11		<	10	
Benzene	<	10		<	11		<	11		<	10	
Ethylbenzene	<	10		<	11		<	11		<	10	
Xylene (total)	<	10		<	11		<	11		<	10	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB09			SB10-0.5			SB10-0.5 Dup			SB10-2		
Date sampled	10/21/98			10/20/98			10/20/98			10/20/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	350		<	360		<	360		<	340	
4-Methylphenol	<	350		<	360		<	360		<	340	
Naphthalene	<	350		<	360		<	360		<	340	
2-Methylnaphthalene	<	350		<	360		<	360		<	340	
Acenaphthylene	<	350		<	360		<	360		<	340	
Acenaphthene	<	350		<	360		<	360		<	340	
Dibenzofuran	<	350		<	360		<	360		<	340	
Diethylphthalate	<	350		<	360		<	360		<	340	
Fluorene	<	350		<	360		<	360		<	340	
Phenanthrene	<	350		<	360		<	360		<	340	
Anthracene	<	350		<	360		<	360		<	340	
Carbazole	<	350		<	360		<	360		<	340	
Di-n-butylphthalate	<	350	J	<	360		<	360		<	340	
Fluoranthene	<	350		<	360		<	360		<	340	
Pyrene	<	350		<	360		<	360		<	340	
Butylbenzylphthalate	<	350		<	360		<	360		<	340	
Benzo(a)anthracene	<	350		<	360		<	360		<	340	
Chrysene	<	350		<	360		<	360		<	340	
bis(2-Ethylhexyl)phthalate	2600		J	140		J	150		J	71		J
Di-n-octylphthalate	<	350	J	56		J	70		J	<	340	
Benzo(b)fluoranthene	<	350		<	360		<	360		<	340	
Benzo(k)fluoranthene	<	350		<	360		<	360		<	340	
Benzo(a)pyrene	<	350		<	360		<	360		<	340	
Indeno(1,2,3-cd)pyrene	<	350		<	360		<	360		<	340	
Dibenz(a,h)anthracene	<	350		<	360		<	360		<	340	
Benzo(g,h,i)perylene	<	350		<	360		<	360		<	340	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB10-6			SB11-0.5			SB11-2			SB11-6		
Date sampled	10/20/98			10/21/98			10/21/98			10/21/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	3320			4740			3360			4270		
Antimony	<	9.0		<	8.9	J	9.2		J	<	8.8	J
Arsenic	0.64		J	12.5		J	4.7		J	2.8		J
Barium	24.7		J	102			57.0			55.8		
Beryllium	<	0.13		0.50		J	0.20		J	0.20		J
Cadmium	<	0.99		1.1			<	1.0		<	1.0	
Calcium	535		J	21900			26400			7620		
Chromium	7.6			12.6			9.2			17.2		
Cobalt	<	1.7		3.2			3.4			6.8		
Copper	12.7			149			46.1			45.9		
Iron	1330			11100			8820			21200		
Lead	8.0		S	160		J	92.9		J	186		J
Magnesium	678		J	5950			11400			2580		
Manganese	86.6			492			278			398		
Mercury	<	0.05		0.20			0.20			0.20		
Nickel	<	6.1		12.0			<	5.9		10.0		
Potassium	<	198		462			287			377		
Selenium	<	0.13		<	0.10	J	<	0.10	J	<	0.10	J
Silver	<	1.1		<	1.1		<	1.1		<	1.1	
Sodium	29.8		J	127			54.7			49.1		
Thallium	0.09			0.10			<	0.08		<	0.08	
Vanadium	<	10.9		11.3			8.9			11.3		
Zinc	24.9			294			136			109		
Cyanide	0.16		J	0.40		J	<	0.10	J	0.30		J
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	11		<	11		<	10		<	10	
Acetone	<	11		<	11		<	10		<	10	
Carbon Disulfide	<	11		<	11		<	10		<	10	
1,1-Dichloroethane	<	11		<	11		<	10		<	10	
Benzene	<	11		<	11		<	10		<	10	
Ethylbenzene	<	11		<	11		<	10		<	10	
Xylene (total)	<	11		<	11		<	10		<	10	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB10-6			SB11-0.5			SB11-2			SB11-6		
Date sampled	10/20/98			10/21/98			10/21/98			10/21/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	350		<	360		<	340		<	340	
4-Methylphenol	<	350		<	360		<	340		<	340	
Naphthalene	<	350		<	360		<	340		<	340	
2-Methylnaphthalene	<	350		<	360		<	340		<	340	
Acenaphthylene	<	350		<	360		<	340		<	340	
Acenaphthene	<	350		<	360		160		J	<	340	
Dibenzofuran	<	350		<	360		78		J	<	340	
Diethylphthalate	<	350		<	360		<	340		<	340	
Fluorene	<	350		<	360		160		J	<	340	
Phenanthrene	<	350		<	200	J	3300			<	340	
Anthracene	<	350		<	360		460			<	340	
Carbazole	<	350		<	360		210		J	<	340	
Di-n-butylphthalate	<	350		<	360	J	<	340		<	340	J
Fluoranthene	<	350		400			4600			51		J
Pyrene	<	350		470			3800			<	340	
Butylbenzylphthalate	<	350		<	360		<	340		<	340	
Benzo(a)anthracene	<	350		280		J	1500			42		J
Chrysene	<	350		320		J	1400			51		J
bis(2-Ethylhexyl)phthalate	<	350		42		J	74		J	39		J
Di-n-octylphthalate	<	350		<	360	J	<	340	J	<	340	J
Benzo(b)fluoranthene	<	350		560			1900			75		J
Benzo(k)fluoranthene	<	350		150		J	560			<	340	
Benzo(a)pyrene	<	350		430			1500			57		J
Indeno(1,2,3-cd)pyrene	<	350		540			490			48		J
Dibenz(a,h)anthracene	<	350		140		J	130		J	<	340	
Benzo(g,h,i)perylene	<	350		710			470			63		J

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB12-0.5			SB12-2			SB12-6			SB13-0.5		
Date sampled	10/20/98			10/20/98			10/20/98			10/20/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	2260			1360			2280			3900		
Antimony	<	8.8		<	8.7		<	8.8		<	9.4	
Arsenic	1.1		J	0.70		J	0.9		J	2.1		J
Barium	13.8		J	8.0		J	14.2		J	65.8		
Beryllium	0.25		J	<	0.12		<	0.13		0.30		J
Cadmium	<	0.96		<	0.95		<	0.96		1.2		
Calcium	1060			2990			1510			9970		
Chromium	5.1			3.3			6.3			8.5		
Cobalt	2.8		J	3.5		J	3.4		J	3.2		J
Copper	6.2			4.6		J	12.5			18.9		
Iron	4080			2470			4570			5970		
Lead	6.1		J	5.4			7.1		J	167		
Magnesium	853		J	1920			1140			1550		
Manganese	128			47.4			52.9			326		
Mercury	<	0.05		<	0.05		<	0.05		0.10		J
Nickel	<	5.9		<	5.9		<	5.9		8.8		J
Potassium	<	193		<	192		<	194		423		J
Selenium	<	0.12		<	0.12		0.13			<	0.10	
Silver	<	1.1		<	1.1		<	1.1		<	1.2	
Sodium	38.2		J	30.5		J	61.5		J	48.6		J
Thallium	<	0.08		<	0.08		<	0.08		<	0.09	
Vanadium	6.5		J	5.6		J	9.2		J	8.5		J
Zinc	22.8			15.1			38.9			109		
Cyanide	0.17		J	0.18		J	0.25		J	0.50		J
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	10		<	10		<	10		<	11	J
Acetone	<	10		<	10		<	10		<	11	J
Carbon Disulfide	<	10		<	10		<	10		<	11	J
1,1-Dichloroethane	<	10		<	10		<	10		<	11	J
Benzene	<	10		<	10		<	10		<	11	J
Ethylbenzene	<	10		<	10		<	10			11	R
Xylene (total)	<	10		<	10		<	10			11	R

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB12-0.5			SB12-2			SB12-6			SB13-0.5		
Date sampled	10/20/98			10/20/98			10/20/98			10/20/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	350		<	340		<	690		<	370	
4-Methylphenol	<	350		<	340		<	690		<	370	
Naphthalene	<	350		<	340		<	690		<	370	
2-Methylnaphthalene	<	350		<	340		<	690		<	370	
Acenaphthylene	<	350		<	340		<	690		<	370	
Acenaphthene	<	350		<	340		<	690		<	370	
Dibenzofuran	<	350		<	340		<	690		<	370	
Diethylphthalate	<	350		<	340		<	690		<	370	
Fluorene	<	350		<	340		<	690		<	370	
Phenanthrene	<	350		<	340		<	690		<	370	
Anthracene	<	350		<	340		<	690		<	370	
Carbazole	<	350		<	340		<	690		<	370	
Di-n-butylphthalate	<	350		<	340		<	690		<	370	
Fluoranthene	<	350		<	340		<	690		100		J
Pyrene	<	350		<	340		<	690		110		J
Butylbenzylphthalate	<	350		<	340		<	690		<	370	
Benzo(a)anthracene	<	350		<	340		<	690		64		J
Chrysene	<	350		<	340		<	690		72		J
bis(2-Ethylhexyl)phthalate	440			290		J	3400			160		J
Di-n-octylphthalate	<	350		<	340		<	690		<	370	
Benzo(b)fluoranthene	<	350		<	340		<	690		93		J
Benzo(k)fluoranthene	<	350		<	340		<	690		370		
Benzo(a)pyrene	<	350		<	340		<	690		66		J
Indeno(1,2,3-cd)pyrene	<	350		<	340		<	690		57		J
Dibenz(a,h)anthracene	<	350		<	340		<	690		370		
Benzo(g,h,i)perylene	<	350		<	340		<	690		81		J

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB13-2			SB13-6			SB14-0.5			SB14-2		
Date sampled	10/20/98			10/20/98			10/20/98			10/20/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	3980			3220			4120			4500		
Antimony	<	9.2		<	9.1		<	11.2		<	8.8	
Arsenic	0.90		J	0.90		J	0.83		J	1.1		J
Barium	35.7			33.6			115			36.2		J
Beryllium	0.20		J	0.30		J	0.33		J	<	71.3	
Cadmium	1.3			<	1.0		<	1.2		<	106.4	
Calcium	9300			12000			32700			2840		
Chromium	14.2			12.9			14.6			6.7		
Cobalt	3.9		J	3.3		J	4.3		J	3.0		J
Copper	14.4			17.0			2110			18.7		
Iron	9180			11300			9410			4680		
Lead	58.7			45.6		J	191		J	19.6		J
Magnesium	3060			3000			3880			1180		
Manganese	203			220			539			170		
Mercury	0.08		J	0.10		J	0.25		J	0.06		J
Nickel	12.0		J	15.4		J	8.0		J	<	5.9	
Potassium	310		J	279		J	278		J	277		J
Selenium	<	0.10	J	0.10			<	0.16	J	<	0.13	
Silver	<	1.1		<	1.1		<	1.4		<	1.1	
Sodium	54.7		J	74.3		J	83.7		J	40.5		J
Thallium	<	0.09		<	0.09		<	0.11		<	0.08	
Vanadium	9.8		J	6.0		J	11.3		J	9.9		J
Zinc	175			90.9			161			49.8		
Cyanide	0.30		J	0.90		J	0.14		J	0.12		J
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	10		<	11		<	12		<	10	
Acetone	<	10		<	11		<	12		<	10	
Carbon Disulfide	<	10		<	11		<	12		<	10	
1,1-Dichloroethane	<	10		<	11		<	12		<	10	
Benzene	<	10		<	11		<	12		<	10	
Ethylbenzene	<	10		<	11		<	12		<	10	
Xylene (total)	<	10		<	11		<	12		<	10	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB13-2			SB13-6			SB14-0.5			SB14-2		
Date sampled	10/20/98			10/20/98			10/20/98			10/20/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	350		<	360		<	400		<	340	
4-Methylphenol	<	350		<	360		<	400		<	340	
Naphthalene	<	350		<	360		<	400		<	340	
2-Methylnaphthalene	<	350		<	360		<	400		<	340	
Acenaphthylene	<	350		<	360		<	400		<	340	
Acenaphthene	<	350		<	360		<	400		<	340	
Dibenzofuran	<	350		<	360		<	400		<	340	
Diethylphthalate	<	350		<	360		<	400		<	340	
Fluorene	<	350		<	360		<	400		<	340	
Phenanthrene	<	350		<	360		<	400		<	340	
Anthracene	<	350		<	360		<	400		<	340	
Carbazole	<	350		<	360		<	400		<	340	
Di-n-butylphthalate	<	350		<	360		<	400		<	340	
Fluoranthene	<	350		43		J	59		J	<	340	
Pyrene	<	350		44		J	64		J	40		J
Butylbenzylphthalate	<	350		<	360		54		J	<	340	
Benzo(a)anthracene	<	350		<	360		41		J	<	340	
Chrysene	<	350		<	360		59		J	<	340	
bis(2-Ethylhexyl)phthalate	150		J	960			190		J	2900		
Di-n-octylphthalate	<	350		<	360		<	400		<	340	
Benzo(b)fluoranthene	<	350		38		J	82		J	<	340	
Benzo(k)fluoranthene	<	350		<	360		400			<	340	
Benzo(a)pyrene	<	350		<	360		53		J	<	340	
Indeno(1,2,3-cd)pyrene	<	350		<	360		48		J	<	340	
Dibenz(a,h)anthracene	<	350		<	360		400			<	340	
Benzo(g,h,i)perylene	<	350		<	360		86		J	<	340	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB14-6			SB15-0.5			SB15-2			SB15-6		
Date sampled	10/20/98			10/19/98			10/19/98			10/19/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	2630			3470			2860			8750		
Antimony	<	9.5		<	9.8		<	9.1		<	9.4	
Arsenic	0.60		J	6.0		J	4.4		J	7.0		J
Barium	43.7		J	102			133			112		
Beryllium	<	0.14		0.60		J	0.50		J	0.80		J
Cadmium	<	1.0		1.1			1.2			2.0		
Calcium	9350			16400			26800			31700		
Chromium	15.5			12.9			14.0			17.9		
Cobalt	3.0		J	5.1		J	5		J	10.8		
Copper	25.3			113			283			2220		
Iron	3920			26000			19400			13500		
Lead	127		J	695		J	287			231		J
Magnesium	1650			4810			5420			22600		
Manganese	184			514			399			1410		
Mercury	0.11		J	0.40			0.50			0.10		J
Nickel	9.8			21.0		J	23.7		J	298		
Potassium	210		J	363		J	385		J	566		J
Selenium	<	0.14		<	0.10		<	0.10		<	0.10	J
Silver	<	1.2		1.2			2.0			<	1.2	
Sodium	43.0		J	<	65.0	J	60.9		J	184		J
Thallium	<	0.09		0.10			<	0.08		<	0.09	
Vanadium	8.0		J	11.1		J	10.2		J	17.1		
Zinc	249			427			465			1120		
Cyanide	<	0.11		1.1		J	0.90		J	4.7		
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	11		<	11		<	11		<	10	
Acetone	<	11		<	11		22			<	10	
Carbon Disulfide	<	11		<	11		<	11		<	10	
1,1-Dichloroethane	<	11		<	11		<	11		<	10	
Benzene	<	11		<	11		<	11		<	10	
Ethylbenzene	<	11		<	11		<	11		<	10	
Xylene (total)	<	11		<	11		<	11		<	10	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB14-6			SB15-0.5			SB15-2			SB15-6		
Date sampled	10/20/98			10/19/98			10/19/98			10/19/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	370		<	370		<	350		<	330	
4-Methylphenol	<	370		<	370		<	350		<	330	
Naphthalene		120	J	<	370		<	350			38	J
2-Methylnaphthalene	<	370		<	370		<	350		<	330	
Acenaphthylene	<	370		<	370		<	350		67		J
Acenaphthene	<	370		73		J	<	350		<	330	
Dibenzofuran	<	370		<	370		<	350		<	330	
Diethylphthalate	<	370		<	370		<	350		<	330	
Fluorene	<	370		<	370		<	350		<	330	
Phenanthrene	<	370		360		J	280		J	170		J
Anthracene	<	370		63		J	53		J	41		J
Carbazole	<	370		37		J	<	350		<	330	
Di-n-butylphthalate	<	370		<	370	J	<	350	J	<	330	
Fluoranthene	44		J	730			450			360		
Pyrene		53	J	900			540			430		
Butylbenzylphthalate	<	370		<	370		<	350		<	330	
Benzo(a)anthracene	<	370		620			260		J	250		J
Chrysene	<	370		760			270		J	260		J
bis(2-Ethylhexyl)phthalate	30000			<	370		<	350		<	330	
Di-n-octylphthalate	<	370		<	370		<	350		<	330	
Benzo(b)fluoranthene	52		J	1600			390			490		
Benzo(k)fluoranthene	<	370		400			140		J	140		J
Benzo(a)pyrene	<	370		1000			290		J	430		
Indeno(1,2,3-cd)pyrene	<	370		1200			230		J	400		
Dibenz(a,h)anthracene	<	370		320		J	57		J	99		J
Benzo(g,h,i)perylene	38		J	1500			310		J	550		

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB16-05			SB16-2			SB16-6			SB16-6 Dup		
Date sampled	10/15/98			10/15/98			10/15/98			10/15/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	3340			4600			4820			8860		
Antimony	<	10.7	J	<	10.7	J	<	12.8	J	<	13.3	J
Arsenic	3.9			3.8			4.7			5.5		
Barium	32.5			55.5			54.3			95.7		
Beryllium	<	0.20		<	0.20		0.80		J	0.90		J
Cadmium	<	0.90		<	0.90		<	1.10		<	1.10	
Calcium	14000		J	14800		J	41200			85900		J
Chromium	7.9		J	9.6			13.1		J	11.3		
Cobalt	4.8		J	4.3		J	3.8		J	<	4.0	
Copper	16.4			49.0			18.3			18.9		
Iron	8530			7460			10800			16600		
Lead	17.6			32.2			28.2			26.6		
Magnesium	4860		J	3530		J	5460		J	7860		J
Manganese	298			294			228			588		
Mercury	<	0.05		<	0.05		<	0.06		<	0.06	
Nickel	10.8			8.8			11.8			12.1		
Potassium	289		J	318		J	283		J	450		J
Selenium	0.60		J	0.70		J	1.4		J	1.3		J
Silver	<	0.80		<	0.80		<	1.0		<	1.1	
Sodium	29.8		J	78.0			219			378		
Thallium	<	0.40		0.50			0.50			<	0.50	
Vanadium	9.9			11.9			<	14.4		15.1		
Zinc	66.5			109			78.0			78.6		
Cyanide	0.10		J	0.08		J	1.0			0.50		
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	18		<	24		<	13		<	25	
Acetone	2		J	<	10	J	<	12	J	<	14	
Carbon Disulfide	<	11		<	10		<	12		2		J
1,1-Dichloroethane	<	11		<	10		1		J	2		J
Benzene	<	11		<	10		3		J	4		J
Ethylbenzene	<	11		<	10		12			14		
Xylene (total)	<	11		<	10		7		J	9		J

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB16-05			SB16-2			SB16-6			SB16-6 Dup		
Date sampled	10/15/98			10/15/98			10/15/98			10/15/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	350		<	350		98		J	63		J
4-Methylphenol	<	350		<	350		<	410		<	390	
Naphthalene	<	350		<	350		120		J	130		J
2-Methylnaphthalene	<	350		<	350		<	410		<	390	
Acenaphthylene	<	350		<	350		<	410		<	390	
Acenaphthene	<	350		<	350		<	410		<	390	
Dibenzofuran	<	350		<	350		<	410		<	390	
Diethylphthalate	<	350		<	350		64		J	46		J
Fluorene	<	350		<	350		<	410		<	390	
Phenanthrene	37		J	100		J	270		J	250		J
Anthracene	<	350		<	350		53		J	57		J
Carbazole	<	350		<	350		<	410		<	390	
Di-n-butylphthalate	<	350		<	350		<	410		390		
Fluoranthene	91		J	210		J	710			<	660	
Pyrene	76		J	190		J	670			610		
Butylbenzylphthalate	<	350	J	<	350	J	60		J	<	390	J
Benzo(a)anthracene	39		J	100		J	400		J	350		J
Chrysene	47		J	110		J	450			400		
bis(2-Ethylhexyl)phthalate	410		J	160		J	270		J	120		J
Di-n-octylphthalate	<	350	J	<	350	J	<	410	J	<	390	J
Benzo(b)fluoranthene	44		J	120		J	750			430		
Benzo(k)fluoranthene	50		J	120		J	900			440		
Benzo(a)pyrene	53		J	120		J	530			450		
Indeno(1,2,3-cd)pyrene	41		J	82		J	380		J	360		J
Dibenz(a,h)anthracene	350			43		J	160		J	150		J
Benzo(g,h,i)perylene	39		J	89		J	280		J	250		J

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB17-0.5			SB17-2			SB18-0.5			SB18-2		
Date sampled	10/15/98			10/15/98			10/19/98			10/19/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	3230			5110			4320			6200		
Antimony	<	11.0	J	<	10.9	J	<	9.5		<	9.2	
Arsenic	1.5			2.7			1.5		J	4.8		J
Barium	29.7			37.4			81.1			89.8		
Beryllium	<	0.20		<	0.20		0.40		J	0.20		J
Cadmium	1.0			<	0.90		1.0			1.2		
Calcium	6220		J	<	18900	J	4230			13000		
Chromium	6.3		J	9.5			10.5			19.8		
Cobalt	<	3.3		4.3		J	4.5		J	5.9		J
Copper	63.9			11.9			41.7			25.6		
Iron	3760			6680			8960			15000		
Lead	19.9			10.9			67.4			83.4		
Magnesium	1440		J	4450		J	1810			4440		
Manganese	73.3			192			474			513		
Mercury	<	0.05		<	0.05		0 30			0.10		J
Nickel	<	8.1		8.0			<	6.4		15.0		J
Potassium	<	125		283		J	539		J	210		J
Selenium	0.80		J	0.80		J	<	0.10		<	0 10	
Silver	<	0.90		<	0.90		<	1.2		<	1.2	
Sodium	27.4		J	65.4			75.7		J	78.2		J
Thallium	<	0.40		<	0.40		<	0.09		<	0.09	
Vanadium	6.9			10.4			11.2		J	18.0		
Zinc	54.0			26.6			103			160		
Cyanide	0.06		J	0.60			0.50		J	1.5		J
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	20		<	10		<	11		<	11	
Acetone	3		J	<	10	J	<	11		<	11	
Carbon Disulfide	<	11		<	10		<	11		<	11	
1,1-Dichloroethane	<	11		<	10		<	11		<	11	
Benzene	<	11		<	10		<	11		<	11	
Ethylbenzene	<	11		<	10		<	11		<	11	
Xylene (total)	<	11		<	10		<	11		<	11	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB17-0.5			SB17-2			SB18-0.5			SB18-2		
Date sampled	10/15/98			10/15/98			10/19/98			10/19/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	360		<	350		<	370		<	360	
4-Methylphenol	<	360		<	350		<	370		<	360	
Naphthalene	<	360		<	350		<	370		50		J
2-Methylnaphthalene	<	360		<	350		<	370		48		J
Acenaphthylene	<	360		<	350		<	370		83		J
Acenaphthene	<	360	J	<	350		<	370		37		J
Dibenzofuran	<	360		<	350		<	370		<	360	
Diethylphthalate	<	360		<	350		<	370		<	360	
Fluorene	<	360		<	350		<	370		44		J
Phenanthrene	380			83		J	320		J	590		
Anthracene	59		J	<	350		67		J	130		J
Carbazole	64		J	<	350		46		J	49		J
Di-n-butylphthalate	<	360		<	350		<	370		<	360	
Fluoranthene	760			150		J	510			1200		
Pyrene	510		J	120		J	470			1500		
Butylbenzylphthalate	<	360	J	<	350	J	<	370		<	360	
Benzo(a)anthracene	260		J	66		J	<	270		770		
Chrysene	330		J	76		J	<	270		780		
bis(2-Ethylhexyl)phthalate	51		J	36		J	<	370		<	360	
Di-n-octylphthalate	<	360	J	<	350	J	<	370		<	360	
Benzo(b)fluoranthene	280		J	55		J	410			1000		
Benzo(k)fluoranthene	340		J	77		J	89		J	340		J
Benzo(a)pyrene	280		J	62		J	280		J	900		
Indeno(1,2,3-cd)pyrene	270		J	58		J	200		J	720		
Dibenz(a,h)anthracene	120		J	350			58		J	200		J
Benzo(g,h,i)perylene	220		J	47		J	240		J	820		

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB18-6			SB19-0.5			SB19-2			SB19-6		
Date sampled	10/19/98			10/15/98			10/15/98			10/15/98		
Units	mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS												
Aluminum	5540			4120			4090			5210		
Antimony	<	10.6		<	11.2	J	<	11.4	J	<	13.8	J
Arsenic	3.4		J	3.4			6.1			4.6		
Barium	130			53.5			444			168		
Beryllium	0.30		J	<	0.20		<	0.20		<	0.20	
Cadmium	<	1.2		<	1.0		<	1.0		<	1.2	
Calcium	14300			5070		J	21700		J	70500		J
Chromium	11.1			6.9		J	13.1			14.3		
Cobalt	5.7		J	5.0		J	4.9		J	5.4		J
Copper	36.0			50.6			113			48.8		
Iron	7950			6700			9130			11200		
Lead	88.9			49.8			172			131		
Magnesium	3470			2050		J	5220		J	12600		J
Manganese	312			373			286			250		
Mercury	0.09		J	0.06			0.20			0.10		
Nickel	9.4		J	13.5			14.7			11.3		
Potassium	328		J	210		J	370		J	586		J
Selenium	<	0.20		1.0		J	1.6		J	<	0.60	
Silver	<	1.3		<	0.90		1.0			<	1.1	
Sodium	87.1		J	36.2		J	86.3			344		
Thallium	<	0.10		<	0.40		<	0.40		<	0.50	
Vanadium	16.1			<	10.1		12.7			12.7		
Zinc	182			81.6			434			307		
Cyanide	0.40		J	0.10		J	0.90			0.60		
VOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	11		<	19		75			57		
Acetone	<	11		2		J	4		J	7		J
Carbon Disulfide	<	11		<	11		<	11		<	15	
1,1-Dichloroethane	<	11		<	11		<	11		<	15	
Benzene	<	11		<	11		<	11		<	15	
Ethylbenzene	<	11		<	11		<	11		<	15	
Xylene (total)	<	11		<	11		<	11		<	15	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB18-6			SB19-0.5			SB19-2			SB19-6		
Date sampled	10/19/98			10/15/98			10/15/98			10/15/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS												
Units		µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	370		<	360		<	370		<	490	
4-Methylphenol	<	370		<	360		<	370		<	490	
Naphthalene	<	370		<	360		<	370		<	490	
2-Methylnaphthalene	<	370		<	360		<	370		<	490	
Acenaphthylene	<	370		96		J	290		J	<	490	
Acenaphthene	<	370		<	360		<	370		<	490	
Dibenzofuran	<	370		<	360		<	370		<	490	
Diethylphthalate	<	370		<	360		<	370		<	490	
Fluorene	<	370		<	360		71		J	<	490	
Phenanthrene	86		J	160		J	450			190		J
Anthracene	<	370		76		J	170		J	<	490	
Carbazole	<	370		<	360		49		J	<	490	
Di-n-butylphthalate	<	370		95		J	37		J	<	490	
Fluoranthene	130		J	490			1700			490		
Pyrene	170		J	530			1900			420		J
Butylbenzylphthalate	<	370		<	360	J	<	370	J	<	490	J
Benzo(a)anthracene	77		J	310		J	1100			330		J
Chrysene	100		J	300		J	970			380		J
bis(2-Ethylhexyl)phthalate	<	370		73		J	160		J	170		J
Di-n-octylphthalate	<	370		<	360	J	<	370	J	130		J
Benzo(b)fluoranthene	100		J	380			1700			690		
Benzo(k)fluoranthene	370			360			2100			830		
Benzo(a)pyrene	89		J	430			1400			480		J
Indeno(1,2,3-cd)pyrene	54		J	370			1100			410		J
Dibenz(a,h)anthracene	370			130		J	360		J	140		J
Benzo(g,h,i)perylene	93		J	340		J	940			400		J

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB20-0.5			SB20-2			SB20-6		
Date sampled	10/15/98			10/15/98			10/16/98		
Units	mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS									
Aluminum	3950			4870			3420		
Antimony	<	11.1	J	<	11.1	J	<	10.9	J
Arsenic	5.8			10.8			8.1		
Barium	172			201			72.2		
Beryllium	<	0.20		<	0.70		0.7		J
Cadmium	<	1.0		1.1			<	0.9	
Calcium	69200		J	24900		J	28700		J
Chromium	25.1			14.0			11.1		
Cobalt	4.9		J	5.4		J	6		J
Copper	242			664			54.4		
Iron	8700			20600			11500		
Lead	161			238			105		
Magnesium	9940		J	7730		J	8990		J
Manganese	592			454			200		
Mercury	27.9			4.5			1.2		
Nickel	<	16.5		22.3			11		
Potassium	404		J	483		J	339		J
Selenium	0.60		J	1.3		J	0.7		J
Silver	1.9			3.1			1.1		
Sodium	105			184			92.5		
Thallium	<	0.40		0.50			<	0.4	
Vanadium	12.8			15.8			12.9		
Zinc	324			537			121		
Cyanide	3.3			4.3			1.2		
VOLATILE ORGANICS									
Units		µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	13		<	17		<	11	
Acetone	<	11	J	2		J	2		J
Carbon Disulfide	<	11		<	11		<	11	
1,1-Dichloroethane	<	11		<	11		<	11	
Benzene	<	11		<	11		<	11	
Ethylbenzene	<	11		<	11		<	11	
Xylene (total)	<	11		<	11		<	11	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN SOIL
Fall 1998
HIMCO DUMP SUPERFUND SITE

Sample location	SB20-0.5			SB20-2			SB20-6		
Date sampled	10/15/98			10/15/98			10/16/98		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS									
Units		µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	360		<	360		<	350	
4-Methylphenol	<	360		50		J	<	350	
Naphthalene	<	360		290		J	2200		
2-Methylnaphthalene	<	360		160		J	1000		
Acenaphthylene	<	360		140		J	2300		
Acenaphthene	180		J	220		J	890		
Dibenzofuran	<	360		170		J	1500		
Diethylphthalate	<	360		<	360		<	350	
Fluorene	<	360		250		J	2500		
Phenanthrene	460			1900			18000		
Anthracene	110		J	450			4900		J
Carbazole	58		J	280		J	1500		
Di-n-butylphthalate	<	360		<	360		<	350	
Fluoranthene	1200			2100			29000		
Pyrene	1200			2500			21000		
Butylbenzylphthalate	<	360	J	<	360	J	<	350	J
Benzo(a)anthracene	780			1700			9700		
Chrysene	880			1400			9700		
bis(2-Ethylhexyl)phthalate	90		J	62		J	81		J
Di-n-octylphthalate	120		J	<	360		<	350	J
Benzo(b)fluoranthene	1200			2800			9700		
Benzo(k)fluoranthene	1200			1200			10000		
Benzo(a)pyrene	1300			1700			11000		
Indeno(1,2,3-cd)pyrene	1200			1200			6400		
Dibenz(a,h)anthracene	450			450			2000		
Benzo(g,h,i)perylene	1000			1100			7100		

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
J= Estimated Value

SUMMARY OF CHEMICALS DETECTED IN ACTIVE SOIL VAPOR SAMPLES
FALL 1998
HIMCO DUMP SUPERFUND SITE

Sample Location	TT-11		TT-12		TT-13		TT-14			TT-14 Duplicate	
Units	µg/m³		µg/m³		µg/m³		µg/m³			µg/m³	
	Result	RL	Result	RL	Result	RL	Result	RL	Qual	Result	RL
Analyte											
Vinyl Chloride	<	0.26	<	0.24	<	33	77.31		J	104.59	
Bromomethane	<	0.52	<	0.48	<	66	1.00			<	63.70
Chloroethane	<	0.26	<	0.24	198.11321		35.93			<	31.80
1,1-Dichloroethene	<	0.26	<	0.24	<	33	6.82			<	31.80
Carbon Disulfide	1.17		<	0.24	<	33	86.40		J	131.88	
Acetone	<	2.6	<	2.4	<	330	<	2.30		<	318.00
Methylene Chloride	<	0.26	<	0.24	<	33	6.82		J	<	31.80
trans-1,2-Dichloroethene	<	0.26	<	0.24	<	33	11.82			<	31.80
1,1-Dichloroethane	<	0.26	<	0.24	471.70		500.23		J	2364.71	
2-Butanone	<	2.6	<	2.4	<	330	<	2.30		<	318.00
Chloroform	<	0.26	<	0.24	<	33	<	0.23		<	31.80
1,1,1-Trichloroethane	<	0.26	<	0.24	<	33	245.57		J	300.14	
Carbon Tetrachloride	<	0.26	<	0.24	<	33	40.02			<	31.80
Benzene	1.83		1.44		466.98		181.90		J	195.54	
1,2-Dichloroethane	<	0.26	<	0.24	<	33	<	0.23		<	31.80
Trichloroethene	<	0.26	<	0.24	<	33	268.30		J	268.30	
1,2-Dichloropropane	<	0.26	<	0.24	<	33	24.56			<	31.80
trans-1,3-Dichloropropene	<	0.26	<	0.24	<	33	<	0.23		<	31.80
Toluene	<	0.26	<	0.24	226.41509		95.50		J	90.95	
cis-1,3-Dichloropropene	<	0.26	<	0.24	<	33	<	0.23		<	31.80
Tetrachloroethene	<	0.26	<	0.24	<	33	227.38		J	254.66	
2-Hexanone	<	0.26	<	0.24	<	33	<	0.23		<	31.80
Chlorobenzene	<	0.26	<	0.24	<	33	10.91			<	31.80
Ethyl Benzene	<	0.26	0.5388415		3066.04		418.37		J	341.06	
m,p-Xylene	<	0.26	1.26		7075.47		727.60		J	395.63	
o-Xylene	<	0.26	<	0.24	221.70		391.09		J	318.33	
Styrene	<	0.26	<	0.24	<	33	12.73			<	31.80
cis-1,2-Dichloroethene	<	0.26	<	0.24	<	33	286.49		J	245.57	

Notes
J=Estimated value
NR=Not Measured

SUMMARY OF CHEMICALS DETECTED IN ACTIVE SOIL VAPOR SAMPLES
FALL 1998
HIMCO DUMP SUPERFUND SITE

Sample Location	TT-15		TT-16		TT-17		TT-18		TT-19		
Units	µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Qual
Analyte											
Vinyl Chloride	<	0.47	61.06		20.39		175.12		18047.2		J
Bromomethane	<	0.94	<	1.83	<	16.12	<	59.91	<	157.3	
Chloroethane	<	0.47	<	3.62	<	8.06	<	29.95	<	78.7	
1,1-Dichloroethene	<	0.47	<	1.83	<	8.06	69.124424		134.19713		
Carbon Disulfide	<	2.77	4.70		18.97		921.66		2776.49		
Acetone	<	4.70	<	18.30	<	80.60	<	299.50	<	787.0	
Methylene Chloride	<	0.47	<	1.83	<	8.06	<	29.95	786.67		
trans-1,2-Dichloroethene	<	0.47	4.5561296		<	8.06	<	29.95	<	78.7	
1,1-Dichloroethane	<	0.47	89.24		56.90		<	29.95	<	78.7	
2-Butanone	<	4.70	<	18.30	<	80.60	<	299.50	<	787.0	
Chloroform	<	0.47	<	1.83	<	8.06	<	29.95	<	78.7	
1,1,1-Trichloroethane	<	0.47	<	1.83	40.30	8.06	<	29.95	<	78.7	
Carbon Tetrachloride	<	0.47	<	1.83	<	8.06	<	29.95	<	78.7	
Benzene	<	2.07	187.88		37.46	8.06	198.16	29.95	<	78.7	
1,2-Dichloroethane	<	0.47	<	1.83	<	8.06	<	29.95	<	78.7	
Trichloroethene	<	0.47	13.62		9.48	8.06	341.01	29.95	<	78.7	
1,2-Dichloropropane	<	0.47	17.85		13.75		<	29.95	<	78.7	
trans-1,3-Dichloropropene	<	0.47	<	1.83	<	8.06	<	29.95	<	78.7	
Toluene	0.89		5.64		35.09		239.63		<	78.7	
cis-1,3-Dichloropropene	<	0.47	<	1.83	<	8.06	<	29.95	<	78.7	
Tetrachloroethene	<	0.47	<	1.83	NR		460.83		<	78.7	
2-Hexanone	<	0.47	<	1.83	NR		<	29.95	<	78.7	
Chlorobenzene	<	0.47	<	1.83	NR		50.69		<	78.7	
Ethyl Benzene	1.08		<	1.83	NR		3179.72		148.07959		
m,p-Xylene	1.41		2.40		NR		1705.07		92.549745		
o-Xylene	0.52		<	1.83	NR		599.08		<	78.7	
Styrene	<	0.47	<	1.83	NR		<	29.95	<	78.7	
cis-1,2-Dichloroethene	<	0.47	17.38		<	8.06	64.52		555.29847		

Notes
J=Estimated value
NR=Not Measured

SUMMARY OF CHEMICALS DETECTED IN ACTIVE SOIL VAPOR SAMPLES
FALL 1998
HIMCO DUMP SUPERFUND SITE

Sample Location	TT-20		TT-21		TT-22			TT-23		TT-24	
Units	µg/m³		µg/m³		µg/m³			µg/m³		µg/m³	
	Result	RL	Result	RL	Result	RL	Qual	Result	RL	Result	RL
Analyte											
Vinyl Chloride	<	0.15	NR		0.15			<	0.12	<	0.12
Bromomethane	<	0.3	NR		<	0.26		<	0.24	<	0.24
Chloroethane	<	0.15	NR		0.56			<	0.12	<	0.12
1,1-Dichloroethene	<	0.15	NR		<	0.13		<	0.12	<	0.12
Carbon Disulfide	<	0.15	NR		0.30			<	0.12	<	0.12
Acetone	1.51		NR		3.71			1.51		1.19	
Methylene Chloride	0.57		NR		<	0.13		<	0.12	<	0.12
trans-1,2-Dichloroethene	<	0.15	NR		0.39			<	0.12	<	0.12
1,1-Dichloroethane	<	0.15	NR		46.38		J	<	0.12	<	0.12
2-Butanone	<	1.5	NR		<	1.30		<	1.17	<	1.16
Chloroform	<	0.15	NR		1.46	0.13		0.30	0.12	0.61	0.12
1,1,1-Trichloroethane	<	0.15	NR		4.87	0.13		0.28	0.12	0.22	0.12
Carbon Tetrachloride	<	0.15	NR		0.13	0.13		0.12	0.12	<	0.12
Benzene	0.36	0.15	NR		0.93	0.13		<	0.12	<	0.12
1,2-Dichloroethane	<	0.15	NR		<	0.13		<	0.12	<	0.12
Trichloroethene	<	0.15	NR		3.48	0.13		<	0.12	<	0.12
1,2-Dichloropropane	<	0.15	NR		<	0.13		<	0.12	<	0.12
trans-1,3-Dichloropropene	<	0.15	NR		0.18	0.13		<	0.12	<	0.12
Toluene	1.30		NR		0.28			<	0.12	<	0.12
cis-1,3-Dichloropropene	<	0.15	NR		0.14			<	0.12	<	0.12
Tetrachloroethene	<	0.15	NR		301.48		J	11.62		0.202514	
2-Hexanone	<	0.15	NR		<	0.13		<	0.12	<	0.12
Chlorobenzene	<	0.15	NR		<	0.13		<	0.12	<	0.12
Ethyl Benzene	0.16		NR		<	0.13		<	0.12	<	0.12
m,p-Xylene	0.54		NR		0.30			<	0.12	<	0.12
o-Xylene	0.18		NR		<	0.13		<	0.12	<	0.12
Styrene	0.54		NR		0.67			<	0.12	<	0.12
cis-1,2-Dichloroethene	<	0.15	NR		<	0.13		<	0.12	<	0.12

Notes
J=Estimated value
NR=Not Measured

SUMMARY OF CHEMICALS DETECTED IN ACTIVE SOIL VAPOR SAMPLES
FALL 1998
HIMCO DUMP SUPERFUND SITE

Sample Location	TT-25		TT-26			TT-26 (Duplicate)		TT-27		TT-28	
Units	µg/m³		µg/m³			µg/m³		µg/m³		µg/m³	
	Result	RL	Result	RL	Qual	Result	RL	Result	RL	Result	RL
Analyte											
Vinyl Chloride	<	0.115	21614.468		J	23214.29		<	30.76	<	2.36
Bromomethane	<	0.23	<	149.98		<	848.21	66.287879		<	4.71
Chloroethane	<	0.115	<	74.99		<	424.12	<	30.76	<	2.36
1,1-Dichloroethene	<	0.115	313.18924			<	424.12	<	30.76	<	2.36
Carbon Disulfide	0.12		3043.67			6250.00		<	30.76	7.07	2.36
Acetone	2.53		<	749.89		<	4241.07	<	307.76	<	23.56
Methylene Chloride	<	0.115	<	74.99		<	424.12	<	30.76	<	2.36
trans-1,2-Dichloroethene	<	0.115	<	74.99		<	424.12	<	30.76	<	2.36
1,1-Dichloroethane	<	0.115	441.1116			<	424.12	<	30.76	<	2.36
2-Butanone	<	1.15	<	749.89		<	4241.07	<	307.76	<	23.56
Chloroform	<	0.115	277.90	74.99		<	424.12	<	30.76	<	2.36
1,1,1-Trichloroethane	0.25	0.115	<	74.99		<	424.12	<	30.76	<	2.36
Carbon Tetrachloride	<	0.115	<	74.99		<	424.12	<	30.76	<	2.36
Benzene	<	0.115	220.5558	74.99		<	424.12	<	30.76	103.68	
1,2-Dichloroethane	<	0.115	<	74.99		<	424.12	<	30.76	<	2.36
Trichloroethene	<	0.115	14997.794	74.99	J	21429	424.12	90	30.76	14.137606	
1,2-Dichloropropane	<	0.115	<	74.99		<	424.12	<	30.76	<	2.36
trans-1,3-Dichloropropene	<	0.115	<	74.99		<	424.12	<	30.76	<	2.36
Toluene	<	0.115	10586.678			13392.86		<	30.76	6.60	
cis-1,3-Dichloropropene	<	0.115	<	74.99		<	424.12	<	30.76	<	2.36
Tetrachloroethene	1.0824505		43670.049		J	80357.143		4024.6212		61.262959	
2-Hexanone	<	0.115	<	74.99		<	424.12	<	30.76	<	2.36
Chlorobenzene	<	0.115	<	74.99		<	424.12	<	30.76	<	2.36
Ethyl Benzene	<	0.115	10145.6			15178.57		<	30.76	51.84	
m,p-Xylene	<	0.115	5734.45			8482.14		<	30.76	51.84	
o-Xylene	<	0.115	1411.56			1964.29		<	30.76	30.63	
Styrene	<	0.115	361.71			<	424.12	<	30.76	2.64	
cis-1,2-Dichloroethene	<	0.115	1940.89			1741.07		<	30.76	5.66	

Notes
J=Estimated value
NR=Not Measured

SUMMARY OF CHEMICALS DETECTED IN ACTIVE SOIL VAPOR SAMPLES
FALL 1998
HIMCO DUMP SUPERFUND SITE

Sample Location	TT-29		TT-30		TT-31		TT-32			TT-33	
Units	µg/m³		µg/m³		µg/m³		µg/m³			µg/m³	
	Result	RL	Result	RL	Result	RL	Result	RL	Qual	Result	RL
Analyte											
Vinyl Chloride	<	0.30	<	0.31	<	0.31	17.87			<	3.44
Bromomethane	<	0.60	<	0.62	<	0.62	<	1.88		<	6.89
Chloroethane	<	0.30	<	0.31	<	0.31	2.73			3.76	
1,1-Dichloroethene	<	0.30	0.45		0.31		1.79			<	3.44
Carbon Disulfide	<	1.47	<	0.95	<	1.06	9.87			7.35	
Acetone	<	2.98	<	3.09	<	3.08	<	9.40		<	34.43
Methylene Chloride	<	0.30	<	0.31	<	0.31	<	0.94		<	3.44
trans-1,2-Dichloroethene	<	0.30	0.52		0.45		4.04			6.89	
1,1-Dichloroethane	<	0.30	<	0.31	<	0.31	362.01		J	9.18	
2-Butanone	<	2.98	<	3.09	<	3.08	<	9.40		<	34.43
Chloroform	<	0.30	<	0.31	<	0.31	<	0.94		<	3.44
1,1,1-Trichloroethane	7.35	0.30	<	0.31	<	0.31	<	0.94		<	3.44
Carbon Tetrachloride	<	0.30	<	0.31	<	0.31	<	0.94		<	3.44
Benzene	1.52		1.86		2.02		40.90			211.20	
1,2-Dichloroethane	<	0.30	<	0.31	<	0.31	1.69			<	3.44
Trichloroethene	<	0.30	<	0.31	<	0.31	16.46			8.72	
1,2-Dichloropropane	<	0.30	<	0.31	<	0.31	9.87			<	3.44
trans-1,3-Dichloropropene	<	0.30	<	0.31	<	0.31	<	0.94		<	3.44
Toluene	0.33		0.67		0.67		4.00			20.20	
cis-1,3-Dichloropropene	<	0.30	<	0.31	<	0.31	<	0.94		<	3.44
Tetrachloroethene	224.97704		<	0.31	<	0.31	1.6925247			<	3.44
2-Hexanone	<	0.30	<	0.31	<	0.31	<	0.94		<	3.44
Chlorobenzene	<	0.30	<	0.31	<	0.31	10.813352			17.906336	
Ethyl Benzene	<	0.30	0.81		0.63		1.79	0.94		22.04	
m,p-Xylene	0.51	0.30	1.52		1.25		4.51	0.94		64.28	
o-Xylene	<	0.30	0.76		0.53		4.70	0.94		4.59	
Styrene	<	0.30	<	0.31	<	0.31	<	0.94		<	3.44
cis-1,2-Dichloroethene	<	0.30	0.44		0.33		8.93	0.94		9.18	

Notes
J=Estimated value
NR=Not Measured

SUMMARY OF CHEMICALS DETECTED IN ACTIVE SOIL VAPOR SAMPLES
FALL 1998
HIMCO DUMP SUPERFUND SITE

Sample Location	TT-34			TT-35		TT-36		TT-37			TT-38	
Units	µg/m³			µg/m³		µg/m³		µg/m³			µg/m³	
	Result	RL	Qual	Result	RL	Result	RL	Result	RL	Qual	Result	RL
Analyte												
Vinyl Chloride	216.90			<	0.22	<	0.22	<	0.22		<	0.23
Bromomethane	<	8.96		<	0.44	<	0.44	<	0.44		<	0.45
Chloroethane	5.66			<	0.22	<	0.22	<	0.22		<	0.23
1,1-Dichloroethene	<	4.48		<	0.22	<	0.22	<	0.22		<	0.23
Carbon Disulfide	29.23			1.25		<	0.22	0.61			0.63	
Acetone	<	44.79		<	2.23	<	2.22	<	2.18		<	2.26
Methylene Chloride	<	4.48		<	0.22	<	0.22	<	0.22		<	0.23
trans-1,2-Dichloroethene	20.74			<	0.22	<	0.22	<	0.22		<	0.23
1,1-Dichloroethane	47.15			<	0.22	<	0.22	<	0.22		<	0.23
2-Butanone	<	44.79		<	2.23	<	2.22	<	2.18		<	2.26
Chloroform	<	4.48		<	0.22	<	0.22	<	0.22		<	0.23
1,1,1-Trichloroethane	<	4.48		<	0.22	0.32		0.83			0.68	
Carbon Tetrachloride	<	4.48		<	0.22	<	0.22	<	0.22		<	0.23
Benzene	754.36			<	0.22	<	0.22	<	0.22		<	0.23
1,2-Dichloroethane	<	4.48		<	0.22	<	0.22	<	0.22		<	0.23
Trichloroethene	43.38			<	0.22	<	0.22	<	0.22		<	0.23
1,2-Dichloropropane	<	4.48		<	0.22	<	0.22	<	0.22		<	0.23
trans-1,3-Dichloropropene	<	4.48		<	0.22	<	0.22	<	0.22		<	0.23
Toluene	188.59			<	0.45	<	0.23	<	0.41		<	0.35
cis-1,3-Dichloropropene	<	4.48		<	0.22	<	0.22	<	0.22		<	0.23
Tetrachloroethene	377.18058			0.76		2.67		126.75		J	14.00	
2-Hexanone	<	4.48		1.78		<	0.22	<	0.22		<	0.23
Chlorobenzene	<	4.48		<	0.22	<	0.22	<	0.22		<	0.23
Ethyl Benzene	1037.25		J	<	0.22	<	0.22	<	0.22		<	0.23
m,p-Xylene	895.80			<	0.22	<	0.22	<	0.22		<	0.23
o-Xylene	339.46			<	0.22	<	0.22	<	0.22		<	0.23
Styrene	<	4.48		<	0.22	<	0.22	<	0.22		<	0.23
cis-1,2-Dichloroethene	38.19			<	0.22	<	0.22	<	0.22		<	0.23

Notes
J=Estimated value
NR=Not Measured

SUMMARY OF CHEMICALS DETECTED IN ACTIVE SOIL VAPOR SAMPLES
FALL 1998
HIMCO DUMP SUPERFUND SITE

Sample Location	TT-39			TT-39 (Dup)			TT-40			TT-41	
Units	Result	µg/m³ RL	Qual	Result	µg/m³ RL	Qual	Result	µg/m³ RL	Qual	Result	µg/m³ RL
Analyte											
Vinyl Chloride	<	0.22		<	0.22		<	0.23		<	0.2
Bromomethane	<	0.44		<	0.44		<	0.45		<	0.41
Chloroethane	<	0.22		<	0.22		<	0.23		<	0.2
1,1-Dichloroethene	<	0.22		<	0.22		0.50			<	0.2
Carbon Disulfide	0.45			0.26			0.72			1.27	
Acetone	<	2.23		<	2.22		<	2.26		<	2.04
Methylene Chloride	<	0.22		<	0.22		1.45			<	0.2
trans-1,2-Dichloroethene	<	0.22		<	0.22		2.54			<	0.2
1,1-Dichloroethane	<	0.22		<	0.22		4.16			<	0.2
2-Butanone	<	2.23		<	2.22		<	2.26		<	2.04
Chloroform	<	0.22		<	0.22		2.90			<	0.2
1,1,1-Trichloroethane	0.76			0.67			9.05			0.26	
Carbon Tetrachloride	<	0.22		<	0.22		<	0.23		<	0.2
Benzene	<	0.22		<	0.22		1.13			<	0.2
1,2-Dichloroethane	<	0.22		<	0.22		<	0.23		<	0.2
Trichloroethene	<	0.22		<	0.22		76.96		J	<	0.2
1,2-Dichloropropane	<	0.22		<	0.22		<	0.23		<	0.2
trans-1,3-Dichloropropene	<	0.22		<	0.22		<	0.23		<	0.2
Toluene	2.37			0.71			2.49			0.36	
cis-1,3-Dichloropropene	<	0.22		<	0.22		<	0.23		<	0.2
Tetrachloroethene	107.24		J	88.97		J	1131.73		J	<	0.2
2-Hexanone	<	0.22		<	0.22		<	0.23		<	0.2
Chlorobenzene	<	0.22		<	0.22		<	0.23		<	0.2
Ethyl Benzene	<	0.22		<	0.22		0.63			<	0.2
m,p-Xylene	<	0.22		<	0.22		0.91			<	0.2
o-Xylene	<	0.22		<	0.22		0.38			<	0.2
Styrene	<	0.22		<	0.22		<	0.23		<	0.2
cis-1,2-Dichloroethene	<	0.22		<	0.22		7.70			<	0.2

Notes
J=Estimated value
NR=Not Measured

SUMMARY OF CHEMICALS DETECTED IN ACTIVE SOIL VAPOR SAMPLES
FALL 1998
HIMCO DUMP SUPERFUND SITE

Sample Location	TT-42		TT-43		TT-44		TT-45			TT-46	
Units	µg/m³		µg/m³		µg/m³		µg/m³			µg/m³	
	Result	RL	Result	RL	Result	RL	Result	RL	Qual	Result	RL
Analyte											
Vinyl Chloride	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
Bromomethane	0.609		<	0.44	<	0.45	<	0.43		<	0.45
Chloroethane	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
1,1-Dichloroethene	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
Carbon Disulfide	0.23		0.61		0.28		0.57			1.35	
Acetone	<	2.17	<	2.18	<	2.27	<	2.17		2.34	
Methylene Chloride	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
trans-1,2-Dichloroethene	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
1,1-Dichloroethane	<	0.22	<	0.22	<	0.23	2.57			1.53	
2-Butanone	<	2.17	<	2.18	<	2.27	<	2.17		<	2.25
Chloroform	1.6100957		<	0.22	<	0.23	1.04			1.67	
1,1,1-Trichloroethane	0.25		0.22		<	0.23	100.00		J	5.86	
Carbon Tetrachloride	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
Benzene	<	0.22	<	0.22	<	0.23	<	0.22		0.27	
1,2-Dichloroethane	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
Trichloroethene	<	0.22	<	0.22	<	0.23	1.57			0.28	
1,2-Dichloropropane	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
trans-1,3-Dichloropropene	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
Toluene	0.87		0.70		0.73		0.42			3.65	
cis-1,3-Dichloropropene	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
Tetrachloroethene	1.04		10.03		1.41		1.22			7.21	
2-Hexanone	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
Chlorobenzene	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
Ethyl Benzene	<	0.22	<	0.22	<	0.23	<	0.22		0.30	
m,p-Xylene	<	0.22	<	0.22	<	0.23	<	0.22		0.54	
o-Xylene	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
Styrene	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22
cis-1,2-Dichloroethene	<	0.22	<	0.22	<	0.23	<	0.22		<	0.22

Notes
J=Estimated value
NR=Not Measured

SUMMARY OF CHEMICALS DETECTED IN ACTIVE SOIL VAPOR SAMPLES
FALL 1998
HIMCO DUMP SUPERFUND SITE

Sample Location	TT-46 (Duplicate)		TT-47			TT-48		TT-49			TT-50	
Units	µg/m³		µg/m³			µg/m³		µg/m³			µg/m³	
	Result	RL	Result	RL	Qual	Result	RL	Result	RL	Qual	Result	RL
Analyte												
Vinyl Chloride	<	0.22	<	0.23		<	0.22	<	0.21		<	0.21
Bromomethane	<	0.45	0.63			<	0.43	0.81			<	0.43
Chloroethane	<	0.22	<	0.23		<	0.22	4.28			<	0.21
1,1-Dichloroethene	<	0.22	<	0.23		<	0.22	0.56			<	0.21
Carbon Disulfide	0.63		1.22			1.08		1.16			0.25	
Acetone	<	2.23	<	2.26		<	2.16	<	2.14		<	2.13
Methylene Chloride	<	0.22	<	0.23		<	0.22	<	0.21		<	0.21
trans-1,2-Dichloroethene	<	0.22	<	0.23		<	0.22	0.51			<	0.21
1,1-Dichloroethane	0.94		6.79			4.75		282.66		J	0.32	
2-Butanone	<	2.23	<	2.26		<	2.16	<	2.14		<	2.13
Chloroform	1.03		2.40			0.22		<	0.21		<	0.21
1,1,1-Trichloroethane	3.39		67.87		J	6.04		7.28			0.27	
Carbon Tetrachloride	<	0.22	<	0.23		<	0.22	<	0.21		<	0.21
Benzene	<	0.22	<	0.23		0.99		6.00			0.22	
1,2-Dichloroethane	<	0.22	<	0.23		<	0.22	0.38			<	0.21
Trichloroethene	<	0.22	<	0.23		2.76		40.26			1.02	
1,2-Dichloropropane	<	0.22	<	0.23		<	0.22	4.71			<	0.21
trans-1,3-Dichloropropene	<	0.22	<	0.23		<	0.22	<	0.21		<	0.21
Toluene	0.80		1.22			6.91		1.24			0.40	
cis-1,3-Dichloropropene	<	0.22	<	0.23		<	0.22	<	0.21		<	0.21
Tetrachloroethene	5.36		2.04			4.75		38.54			2.09	
2-Hexanone	<	0.22	<	0.23		<	0.22	<	0.21		<	0.21
Chlorobenzene	<	0.22	<	0.23		<	0.22	<	0.21		<	0.21
Ethyl Benzene	<	0.22	<	0.23		0.37		6.00			<	0.21
m,p-Xylene	<	0.22	<	0.23		<	0.22	9.42			<	0.21
o-Xylene	<	0.22	<	0.23		<	0.22	3.55			<	0.21
Styrene	<	0.22	<	0.23		<	0.22	<	0.21		<	0.21
cis-1,2-Dichloroethene	<	0.22	<	0.23		<	0.22	2.83			<	0.21

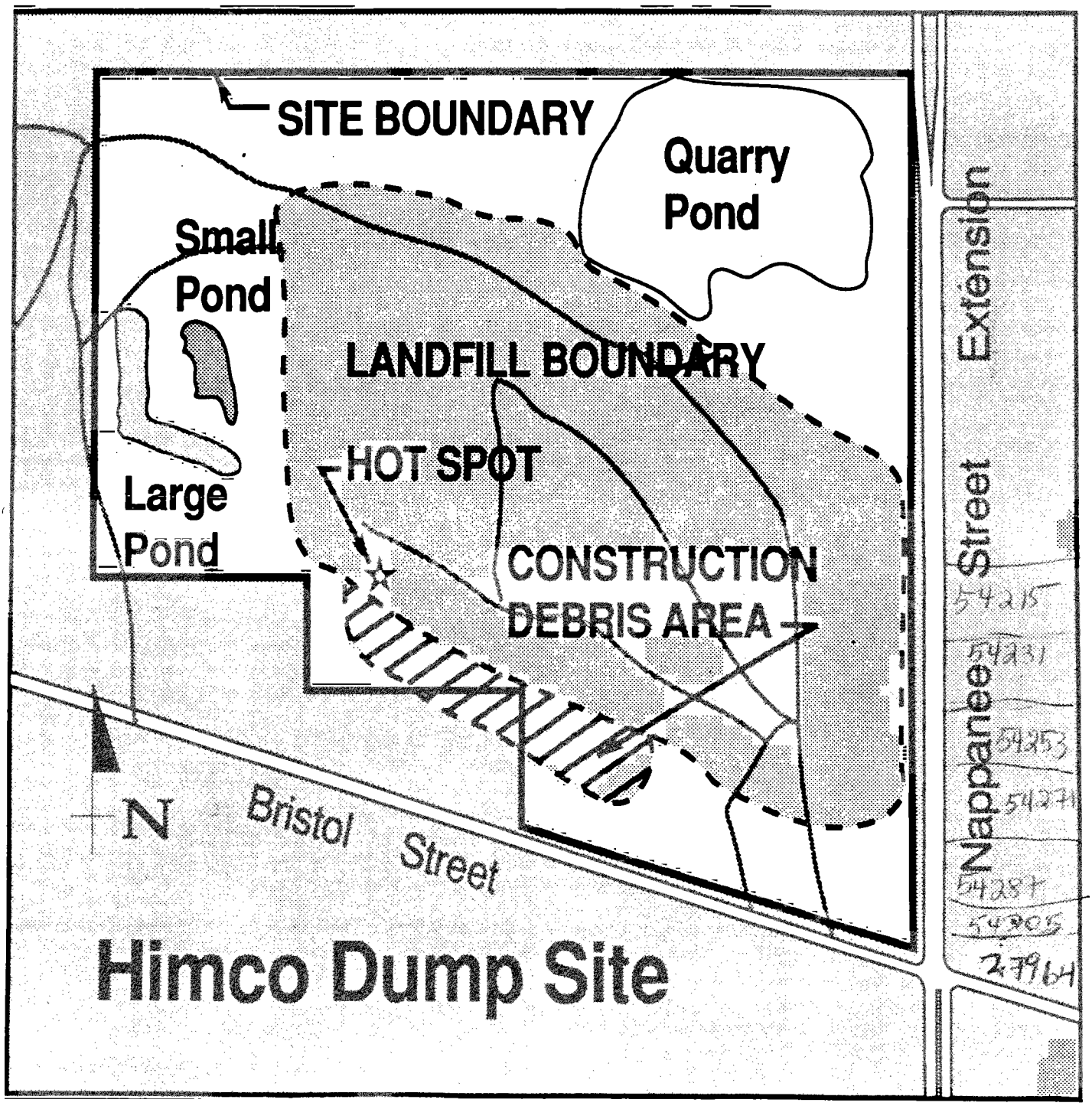
Notes
J=Estimated value
NR=Not Measured

SUMMARY OF CHEMICALS DETECTED IN ACTIVE SOIL VAPOR SAMPLES
FALL 1998
HIMCO DUMP SUPERFUND SITE

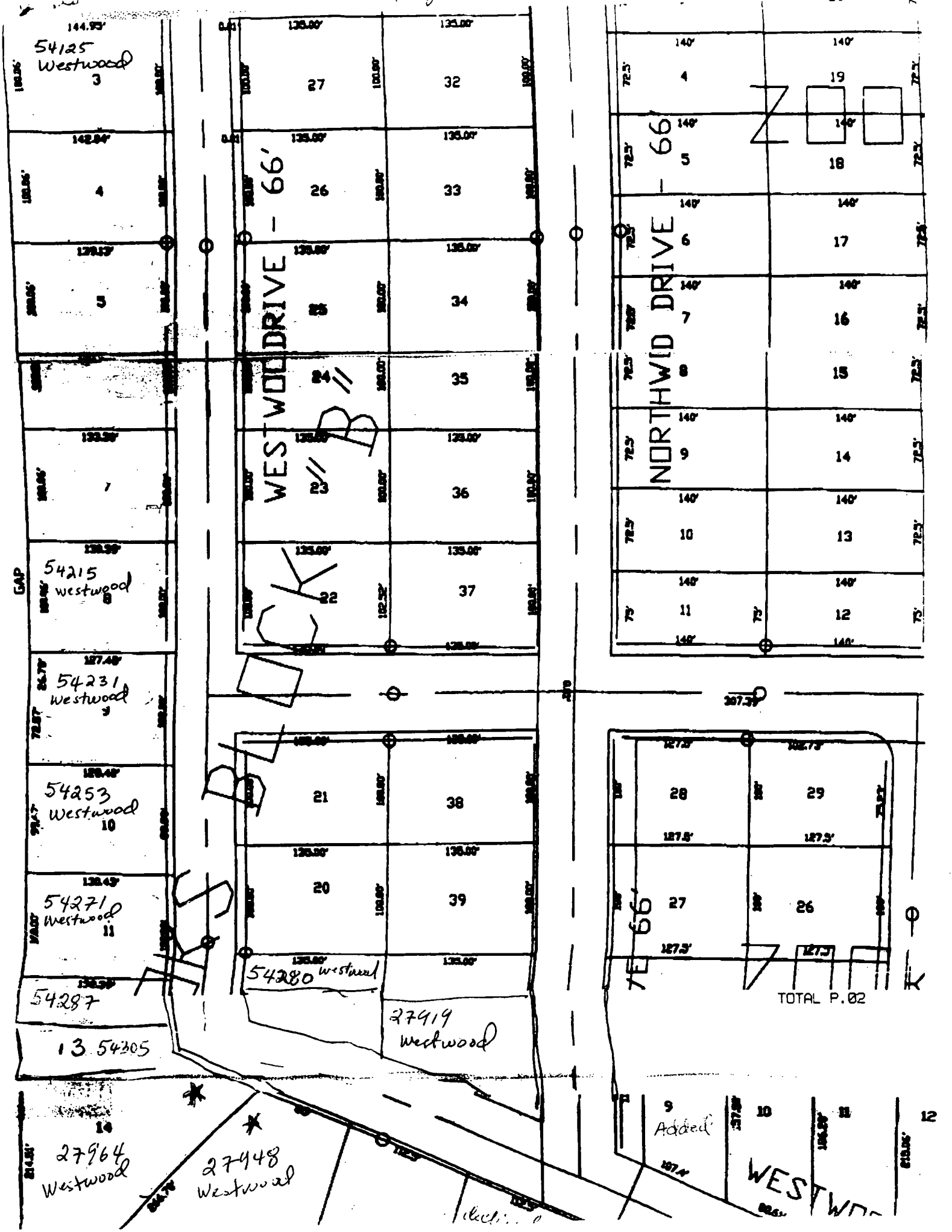
Sample Location	TT-51		TT-52		TT-53	
Units	µg/m³		µg/m³		µg/m³	
	Result	RL	Result	RL	Result	RL
Analyte						
Vinyl Chloride	<	0.23	<	0.23	<	0.22
Bromomethane	<	0.45	<	0.45	<	0.45
Chloroethane	<	0.23	<	0.45	<	0.22
1,1-Dichloroethene	<	0.23	<	0.23	<	0.22
Carbon Disulfide	0.44		0.50		<	0.22
Acetone	<	2.25	<	2.27	<	2.24
Methylene Chloride	<	0.23	<	0.23	<	0.22
trans-1,2-Dichloroethene	<	0.23	<	0.23	<	0.22
1,1-Dichloroethane	9.02		<	0.23	<	0.22
2-Butanone	<	2.25	<	2.27	<	2.24
Chloroform	<	0.23	<	0.23	<	0.22
1,1,1-Trichloroethane	0.37		<	0.23	<	0.22
Carbon Tetrachloride	<	0.23	<	0.23	<	0.22
Benzene	0.45		<	0.23	<	0.22
1,2-Dichloroethane	<	0.23	<	0.23	<	0.22
Trichloroethene	<	0.23	<	0.23	<	0.22
1,2-Dichloropropane	<	0.23	<	0.23	<	0.22
trans-1,3-Dichloropropene	<	0.23	<	0.23	<	0.22
Toluene	0.45		<	0.23	<	0.22
cis-1,3-Dichloropropene	<	0.23	<	0.23	<	0.22
Tetrachloroethene	1.85		<	0.23	<	0.22
2-Hexanone	<	0.23	<	0.23	<	0.22
Chlorobenzene	<	0.23	<	0.23	<	0.22
Ethyl Benzene	<	0.23	<	0.23	<	0.22
m,p-Xylene	<	0.23	<	0.23	<	0.22
o-Xylene	<	0.23	<	0.23	<	0.22
Styrene	<	0.23	<	0.23	<	0.22
cis-1,2-Dichloroethene	<	0.23	<	0.23	<	0.22

Notes
J=Estimated value
NR=Not Measured

FIGURE 2


SITE BOUNDARY
Quarry Pond
Small Pond
LANDFILL BOUNDARY
HOT SPOT
Large Pond
CONSTRUCTION DEBRIS AREA
N
Bristol Street
Nappanee Street Extension
Himco Dump Site

Page 1


54125 Westwood
3
4
5
7
54215 westwood
8
54231 Westwood
9
54253 Westwood
10
54271 Westwood
11
54287
13 54305
14
27964 Westwood
27948 Westwood
GAP
WESTWOOD DRIVE - 66'
27
26
25
24
23
22
21
20
32
33
34
35
36
37
38
39
54280 westwood
27919 Westwood
NORTHWID DRIVE - 66'
4
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28
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27
26
TOTAL P.02
9
Added
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WESTWO