EPA Region 5 Records Ctr.
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U.S. Environmental Protection Agency

Supplemental Site Investigations/ Site Characterization Report Himco Dump Superfund Site Elkhart, Indiana

Final

Volume 2 of 4
Appendix A - H

December 2002

Appendix A

1998 Supplemental Site Investigation
Soil Boring Logs

HTRW DRILLING LOG

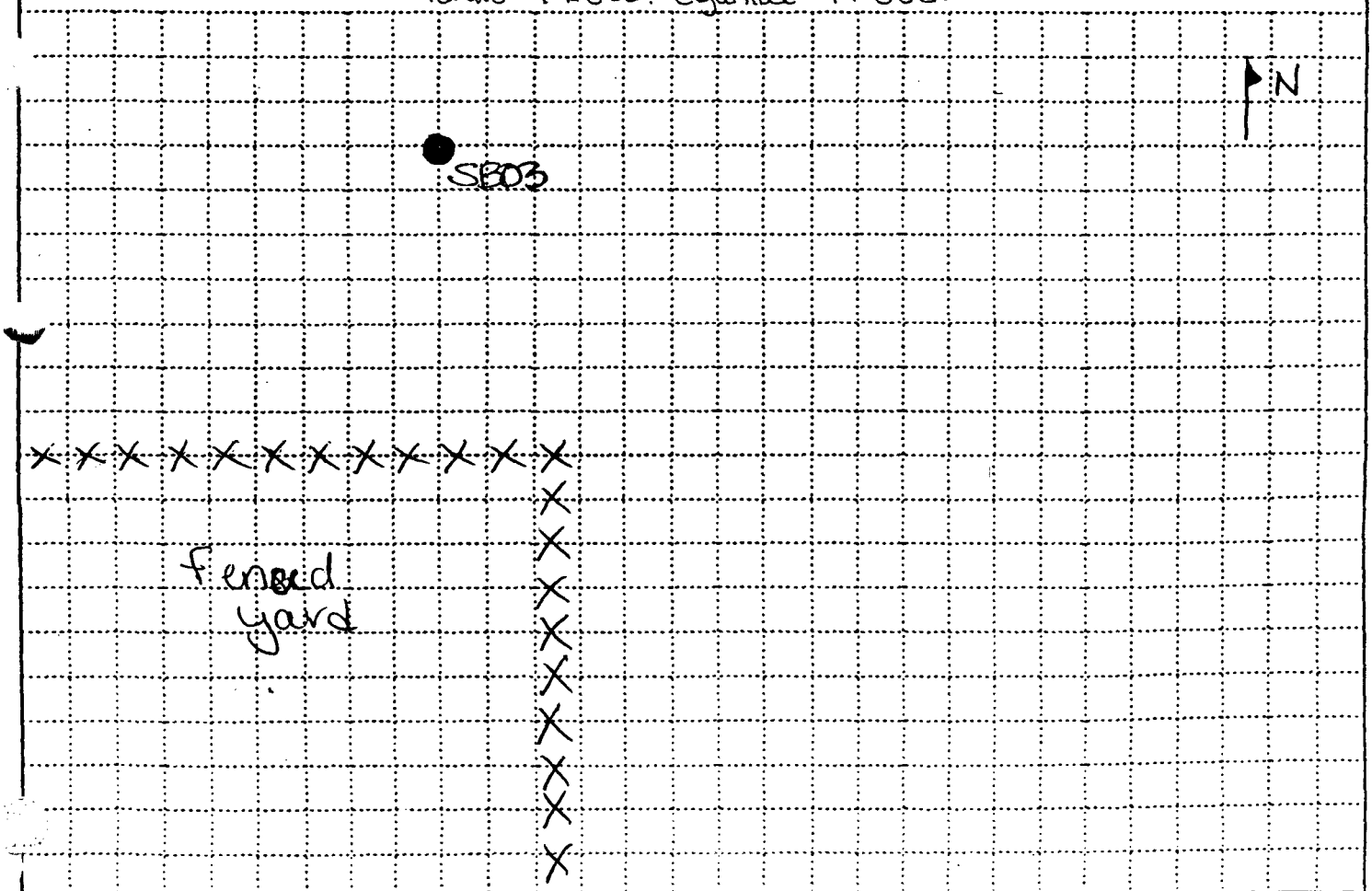
DISTRICT	OMAHA
HOLE NUMBER	SB03
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM CAS~~ ~~AUGERS CAS~~ ~~3" OD stainless steel split spoons CAS~~ 4 1/4" ID ~~STAINS~~ HOLLOW STEM AUGERS bullet bit on augers CME Continuous Sampler
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/12/98
11. DATE COMPLETED	10/12/98
12. OVERBURDEN THICKNESS	3.0 ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
14. TOTAL DEPTH OF HOLE	3.0 ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	2	2	SVOCs - 2	Cyanide - 2	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smith

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz. SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE HOLE NO. SB03

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB-03

PROJECT: Himco Dump Superfund Site

INSPECTOR: Carolyn Schaefer

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	SP, Poorly graded Sand, brown, loose dry, very fine trace gravel.	PID calib with 100 ppm isobutylene		ECMK2 2x4oz VOA 1x8oz SVOCs MEBQC1 1x8oz CN 1x8oz metals SB03-0.5 0.5		shovel 0-0.5' 10/12/98
	1		BZ=0.0 HS=0.0				Use CME continuous sampler from 0.5-3.0 ft
	2		HS=0.0		ECMK3 2x4oz 1x8oz VOA, SVOCs MEBQC2 1x8oz CN 1x8oz metals SB03-2 2.0		Poor recovery ~1 ft, encountered tin can, move over and ~~and~~ drill from 1-3 ft, recovery = 2 ft, refusal @ 3 ft.
	3	plastic BOTTOM OF HOLE = 3.0 ft					
	4						
	5						
	6						
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB03

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

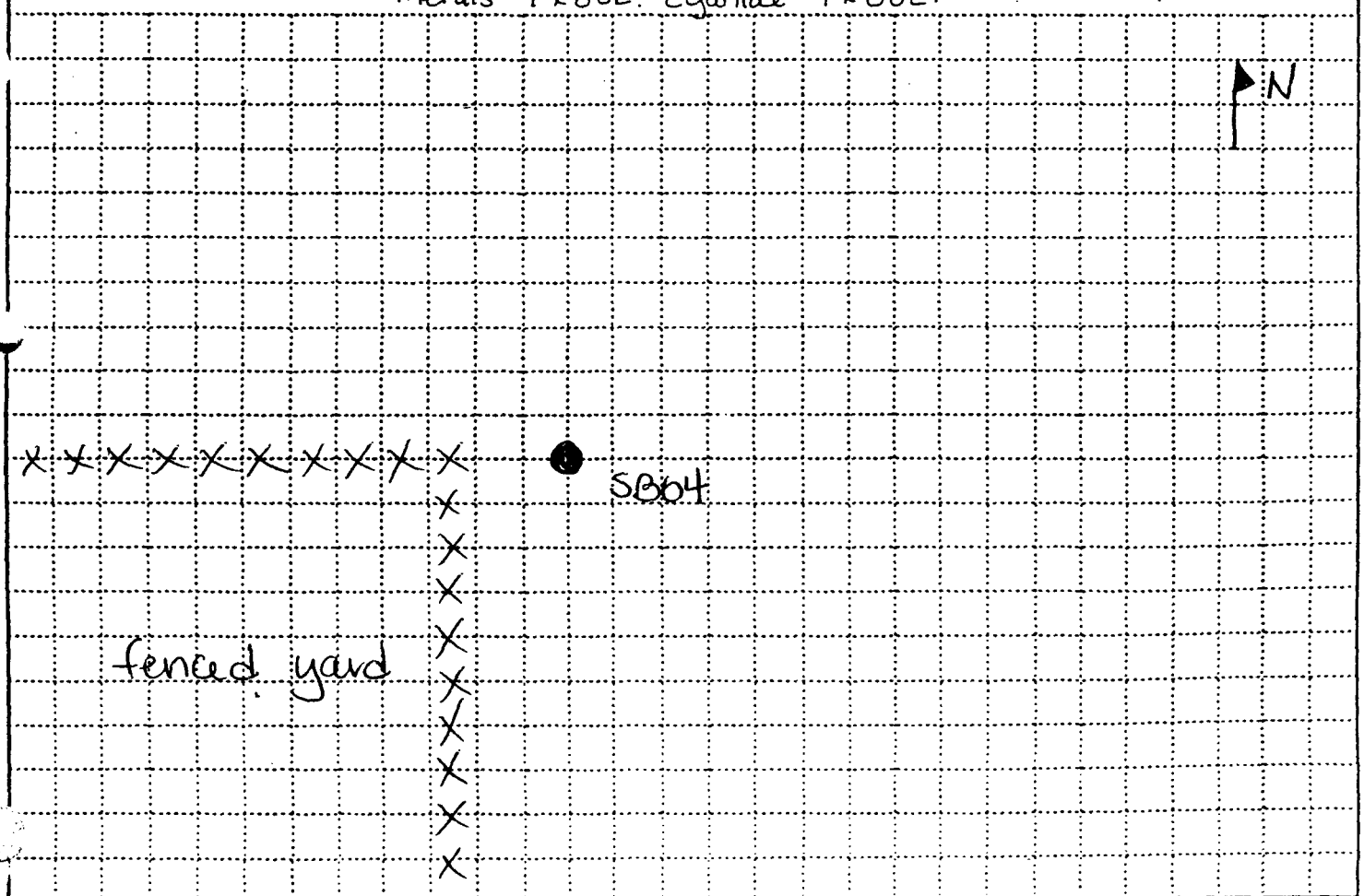
DISTRICT	OMAHA
HOLE NUMBER	SB04
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM CAS~~ ~~AUGERS CAS~~ 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/19/98
11. DATE COMPLETED	10/19/98
12. OVERBURDEN THICKNESS	6.0 ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
14. TOTAL DEPTH OF HOLE	6.0 ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smeyle

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz. SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE HOLE NO. SB04

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

TRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB04

PROJECT: HIMCO DUMP SUPERFUND SITE

INSPECTOR: Carolyn Smuafie

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded sand (SP) with silt, fine sand, dry, dark brown	HS=0.0 Bz=0.0		ECML6 MEBQE3		10/19/98 Collect soil 0-0.5' with shovel
	1				ECML7 MEBQE4 0.5-2'	8	N=25 Recovery=1.4'
						10	
						15	
	2	SP with silt Same as above	HS=0.0 Bz=0.0			12	N=33 Recovery=1.7'
						15	
	3					18	
						14	
	4	Poorly graded sand (SP) fine grained sand, tan, dry, plastic sheeting encountered	HS=0.0 Bz=0.0		ECML8 MEBQE5 2-6'	21	N=37 Recovery=1.6'
	5					22	
						15	
						13	
	6	BOTTOM OF HOLE = 6.0 ft					
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB04

ENC FORM 5056A-R. AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB05
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM AUGERS~~ ~~AUGERS~~ 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/19/98
11. DATE COMPLETED	10/19/98
12. OVERBURDEN THICKNESS	6.0'
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
14. TOTAL DEPTH OF HOLE	6.0'
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

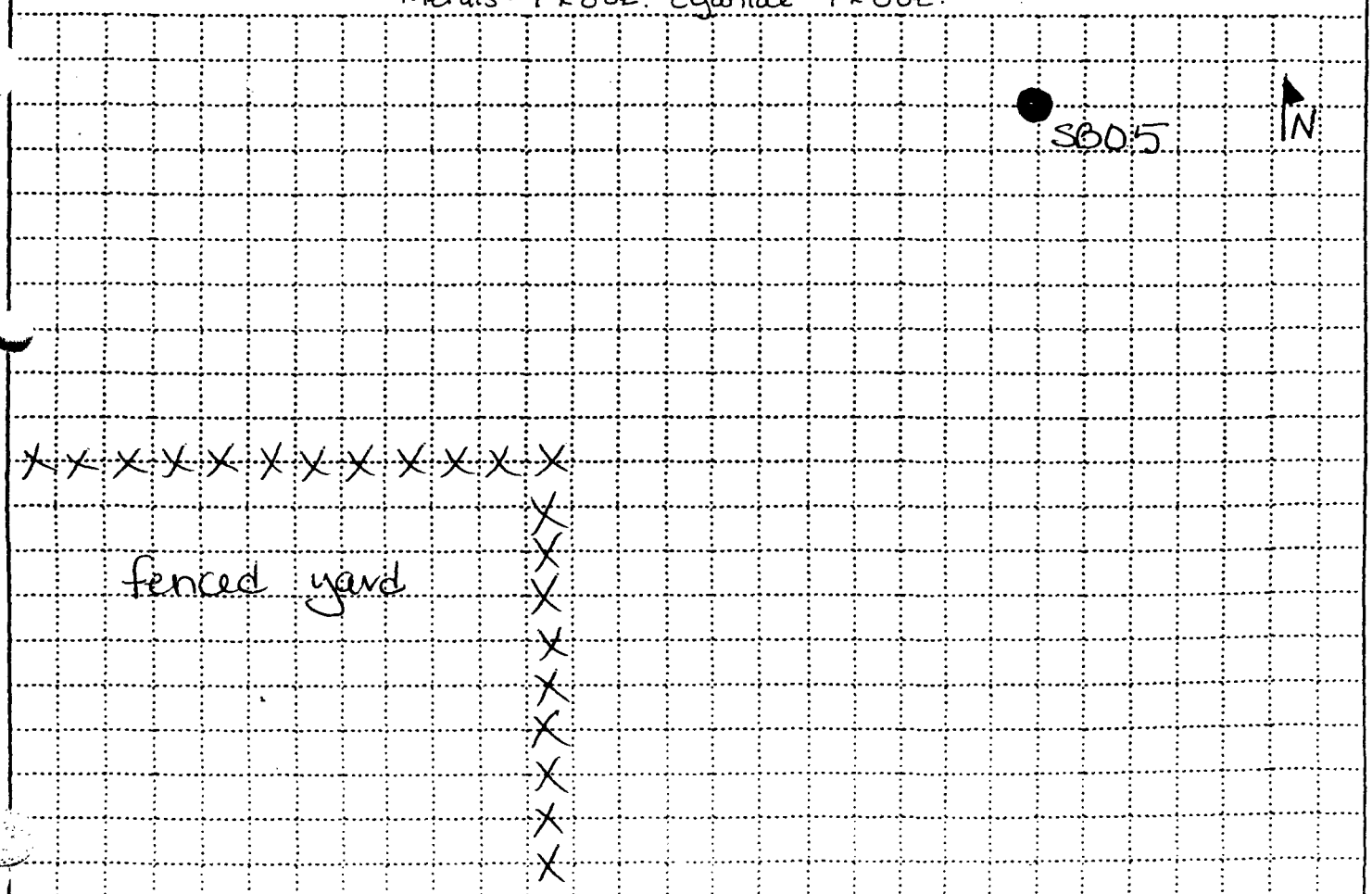
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	2	2	SVOCs - 2	Cyanide - 2	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smoyer

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE HOLE NO. SB05

ITRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB05

PROJECT: Himco Dump Superfund Site

INSPECTOR: Carolyn Snafe

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded sand (SP) with silt, dry, dark brown, fine sand	HS=0.0 BZ=0.0		ECML4 MEBQE1 + MS/MSD		10/19/98 Collect sample with shovel
	1	Poorly graded sand (SP), fine sand, dry, tan			ECML5 MEBQE2	3 / 6 / 5	N=11 Recovery = 1.3'
	2	Plastic fragments and wood, some sand as above	HS=0.0 BZ=0.0		not enough soil	11 / 28 / 10 / 24	N=38 Recovery=1.0'
	4	Wood fragments, some sand	HS=0.0 BZ=0.0		not enough soil	18 / 3 / 3 / 2	N=6 Recovery=1.0' not enough soil for sample 2-6' offset, no recovery refusal @ 2' in offset hole
	6	BOTTOM OF BORING = 6.0ft					
	7						
	8						
	9						
	10						

PROJECT: Himco Dump Superfund Site

HOLE NO. SB05

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT: OMAHA		HOLE NUMBER: SB06
1. COMPANY NAME: US ARMY CORPS OF ENGINEERS	2. DRILL SUBCONTRACTOR: OMAHA DISTRICT	SHEET 1 OF 2 SHEETS
3. PROJECT: HIMCO DUMP SUPERFUND SITE	4. LOCATION: ELKHART, INDIANA	
5. NAME OF DRILLER: AL OAKS	6. MANUFACTURER'S DESIGNATION OF DRILL: GUS PECH GP-750	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: ~~4 1/4" ID HOLLOW STEM~~ ~~AUGERS~~ CAS; 3" OD stainless steel split spoons	8. HOLE LOCATION: SEE BELOW	
	9. SURFACE ELEVATION	
	10. DATE STARTED: 10/19/98	11. DATE COMPLETED: 10/19/98
12. OVERBURDEN THICKNESS: 4.2'	15. DEPTH GROUNDWATER ENCOUNTERED: not encountered	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE: 4.2'	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

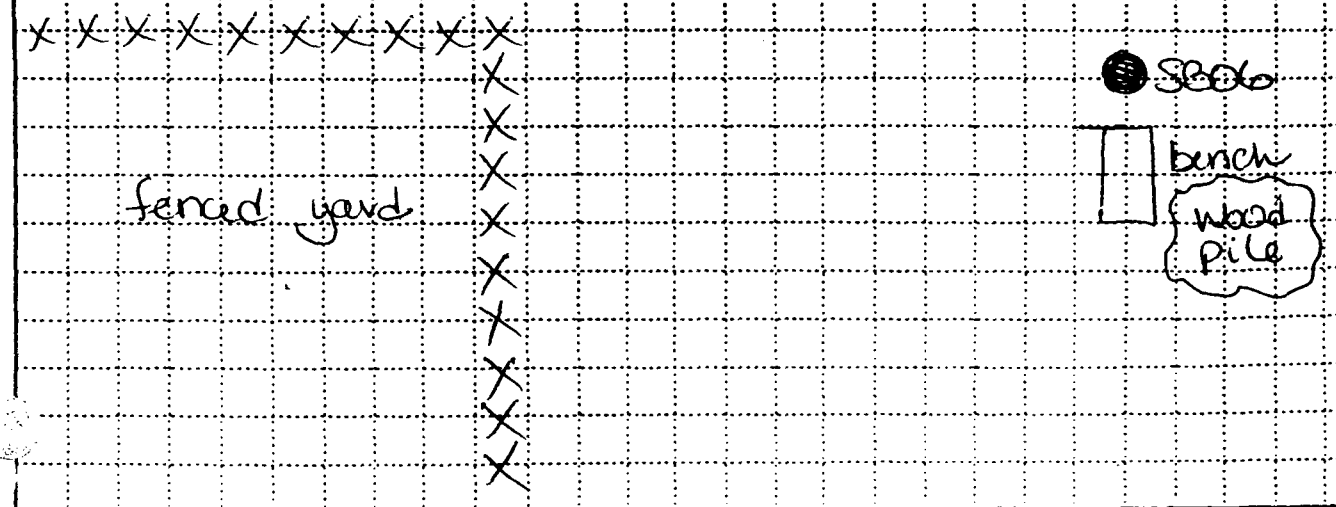
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smeafle

LOCATION SKETCH/COMMENTS: VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT: HIMCO DUMP SUPERFUND SITE | HOLE NO. SB06

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

TRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB06

PROJECT: HIMCO DUMP SUPERFUND SITE

INSPECTOR: Carolyn Shuefle

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded Sand (SP) with silt, roots, dry, fine sand, dark brown	HS=0.0 BZ=0.0	field sample / duplicate	ECML9/ MEBGF6 ECMM61/ MEBGF7		10/19/98 collected soil sample 0-0.5' with shovel
	1				ECMM7 MEBGF4	5 / 4 / 3	N=7 Recovery = 1.2'
	2	SP with silt same as above plastic sheeting, wood fragments	HS=0.0 BZ=0.0		not enough soil	10 / 11 / 11 / 12	N=22 Recovery=1.0'
	3						
	4	Plastic sheeting					
	5	BOTTOM OF HOLE= 4.2ft	HS=0.0 BZ=0.0		not enough Soil	60	N=NA Recovery = ∅ refusal @ 4.2'
	6						
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB06

ENG FORM 5056A-R. AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT: OMAHA		HOLE NUMBER: SB07
1. COMPANY NAME: US ARMY CORPS OF ENGINEERS	2. DRILL SUBCONTRACTOR: OMAHA DISTRICT	SHEET 1 OF 2 SHEETS
3. PROJECT: HIMCO DUMP SUPERFUND SITE	4. LOCATION: ELKHART, INDIANA	
5. NAME OF DRILLER: AL OAKS	6. MANUFACTURER'S DESIGNATION OF DRILL: GUS PECH GP-750	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: ~~4 1/4" ID HOLLOW STEM AUGERS~~ CAS; 3" OD stainless steel split spoons	8. HOLE LOCATION: SEE BELOW	
	9. SURFACE ELEVATION:	
	10. DATE STARTED: 10/21/98	11. DATE COMPLETED: 10/21/98
12. OVERBURDEN THICKNESS: 3.1 ft	15. DEPTH GROUNDWATER ENCOUNTERED: not encountered	
13. DEPTH DRILLED INTO ROCK: -0-	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: —	
14. TOTAL DEPTH OF HOLE: 3.1 ft	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): —	

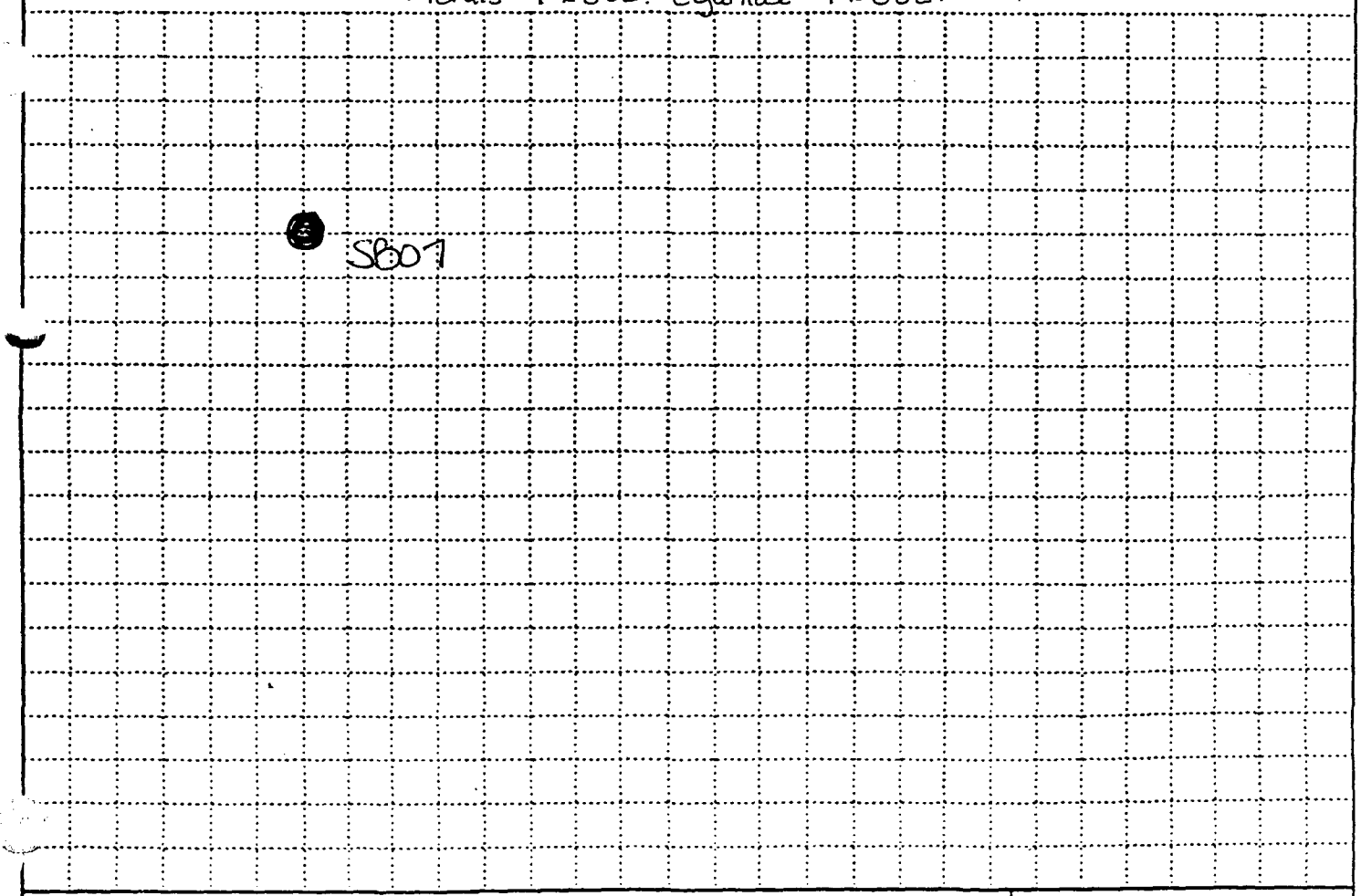
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	-0-	-0-	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	2	2	SVOCs - 2	Cyanide - 2	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Shaefer

LOCATION SKETCH/COMMENTS: VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT: HIMCO DUMP SUPERFUND SITE	HOLE NO. SB07

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

ITRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB07

PROJECT: HIMCO DUMP SUPERFUND SITE

INSPECTOR: Carolyn Grunfeld

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded sand (SP), fine grained sand, tan, dry, loose, glass fragments	HS=0.0 BZ=0.0		ECMP9 MEBQH6 MS/MSD +		10/21/98 Collect 0-0.5' with shovel
	1				ECMQ6 MEBQH7	1 5 3	N=8 Rec=1.3ft
	2	Poorly graded sand (SP), same as above with plastic debris	HS=0.0 BZ=0.0			2 3	N=63+ Rec=0.5ft refusal @ 3.1' not enough for sample
	3	BOTTOM OF HOLE	=3.1ft			60	
	4						
	5						
	6						
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB07

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB08
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM AUGERS~~ GAS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/20/98
11. DATE COMPLETED	10/20/98
12. OVERBURDEN THICKNESS	6.0 ft
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	6.0 ft
15. DEPTH GROUNDWATER ENCOUNTERED	—
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

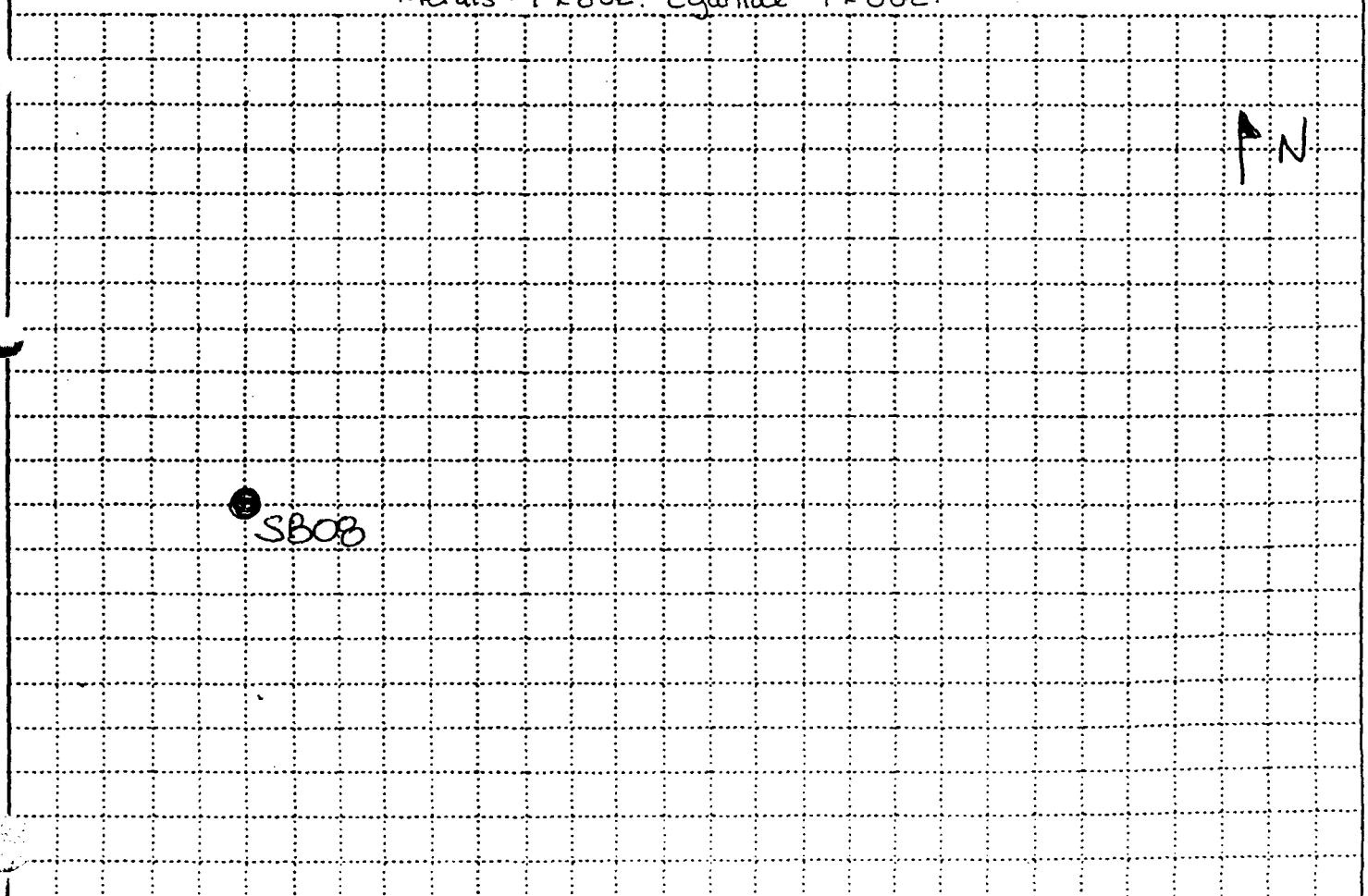
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	2	2	SVOCs - 2	Cyanide - 2	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Slaughter

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE

HOLE NO. SB08

ENG FORM 5056-R, AUG 94

(Proponent: CECW-EG)

ITRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB 08

PROJECT: Himco Dump Superfund Site

INSPECTOR: Carolyn Smarfel

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded Sand with silt (SP), dry, dk brown, fine Sand	HS=0.0 BZ=0.0		MEBQF5 EGMM8		10/20/98 Collect soil 0-0.5' with a shovel
	1				EGMM9 MEBQF6	1	N = 4 Recovery=1.3'
						2	
						2	
	2	Poorly graded sand (SP), dry, fine grained, tan, wood fragments and shingles + tar paper	HS=0.0 BZ=0.0			1	N=6 Recovery=1.0'
	3					3	
						3	
						4	
	4	Same as above with wood fragments	HS=0.0 BZ=0.0			4	N=11 Recovery=0.5' not enough soil from 2'-6' for a sample, too much debris
	5					5	
						6	
	6					2	
		BOTTOM OF HOLE = 6.0 ft					
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB08

ENG FORM 5056A-R. AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB09
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM~~ CAS ~~AUGERS~~ CAS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/21/98
11. DATE COMPLETED	10/21/98
12. OVERBURDEN THICKNESS	2.5'
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	2.5'
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

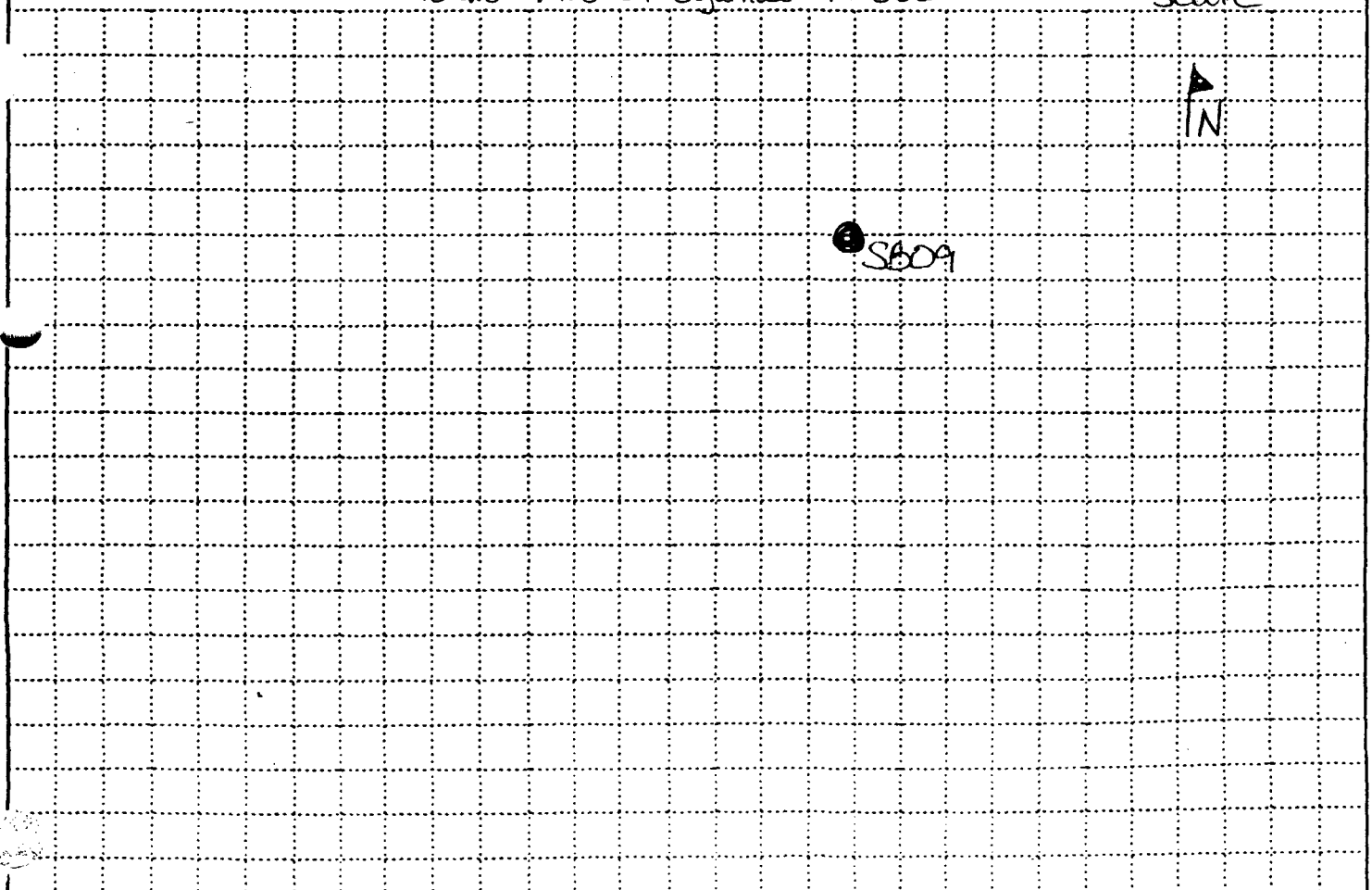
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Shaffer

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE HOLE NO. SB09

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

TRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER SB09

PROJECT Himco Dump Superfund Site

INSPECTOR C. Schwadel

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded sand (SP), loose, dry, fine grained sand, brown	HS=0.0 BZ=0.0	field sample / field duplicate	ECMP01 MEBQH3 / ECMP71 MEBQH4		10/21/98 Collect 0-0.5' sample with shovel
	1				ECMP8 MEBQH5	1	
						2	N=7
						5	Recovery=1.4'
	2	Same as above with wall board and particle board				6	
	3	BOTTOM OF HOLE = 2.5ft	HS=0.0 BZ=0.0			60	N=60+ refusal @ 2.5', not enough for sample
	4						
	5						
	6						
	7						
	8						
	9						
	10						

PROJECT HIMCO DUMP SUPERFUND SITE HOLE NO. SB09

ENG FORM 5056A-R. AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB10
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM~~ GAS ~~AUGERS~~ GAS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/20/98
11. DATE COMPLETED	10/20/98
12. OVERBURDEN THICKNESS	6.0ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
14. TOTAL DEPTH OF HOLE	6.0ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

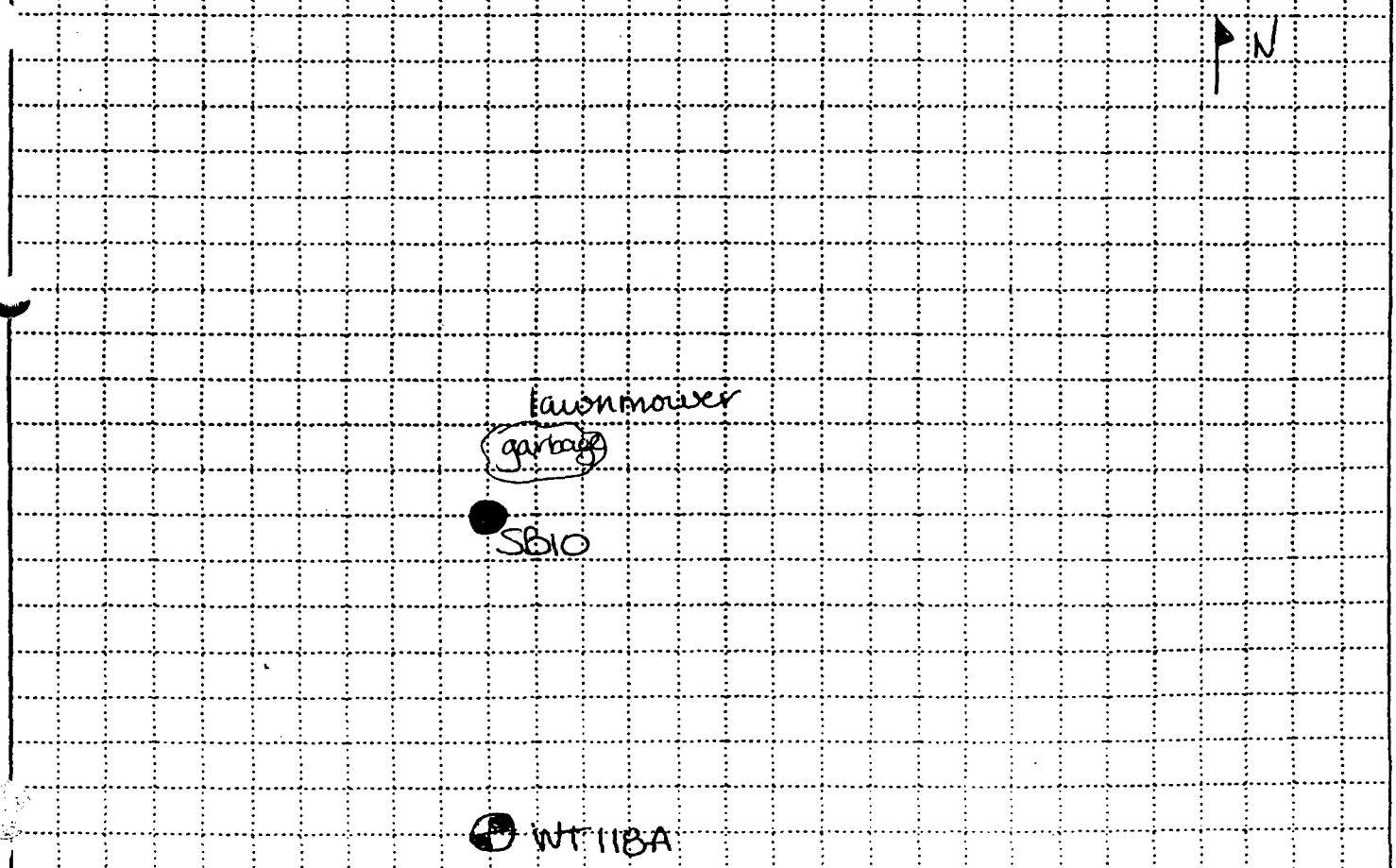
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	4	4	SVOCs - 4	Cyanide - 4	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smith

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT	HOLE NO.
HIMCO DUMP SUPERFUND SITE	SB10

TRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB 10

PROJECT: HIMCO DUMP SUPERFUND SITE

INSPECTOR: Carolyn Smapal

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded sand with silt (SP), dry, fine grained, dark brown	HS=0.0 BZ=0.0	Field sample / dupe	MEBQF7/ ECMN0 MEBQF8/ ECMN1		10/20/98 Collect soil 0-0.5' with shovel
	1	SP same as above with glass fragments			ECMN2 MEBQF9 0.5-2'	1 / 2 / 4	N=6 Recovery=1.2'
	2	same as above	HS=0.0 BZ=0.0			2 / 3 / 2 / 3	N=5 Recovery=1.8'
	4	Poorly graded sand (SP), fine, dry, tan, with wood fragments and particle board	HS=0.0 BZ=0.0		ECMN3 MEBQG0 2-6'	6 / 4 / 2 / 2	N=6 Recovery=1.6'
	6	BOTTOM OF HOLE = 6.0'					
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB10

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB11
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET	1 OF 2 SHEETS
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4¼" ID HOLLOW STEMS~~ ~~AUGERS~~ CAS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/21/98
11. DATE COMPLETED	10/21/98
12. OVERBURDEN THICKNESS	3.0ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE	3.0ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

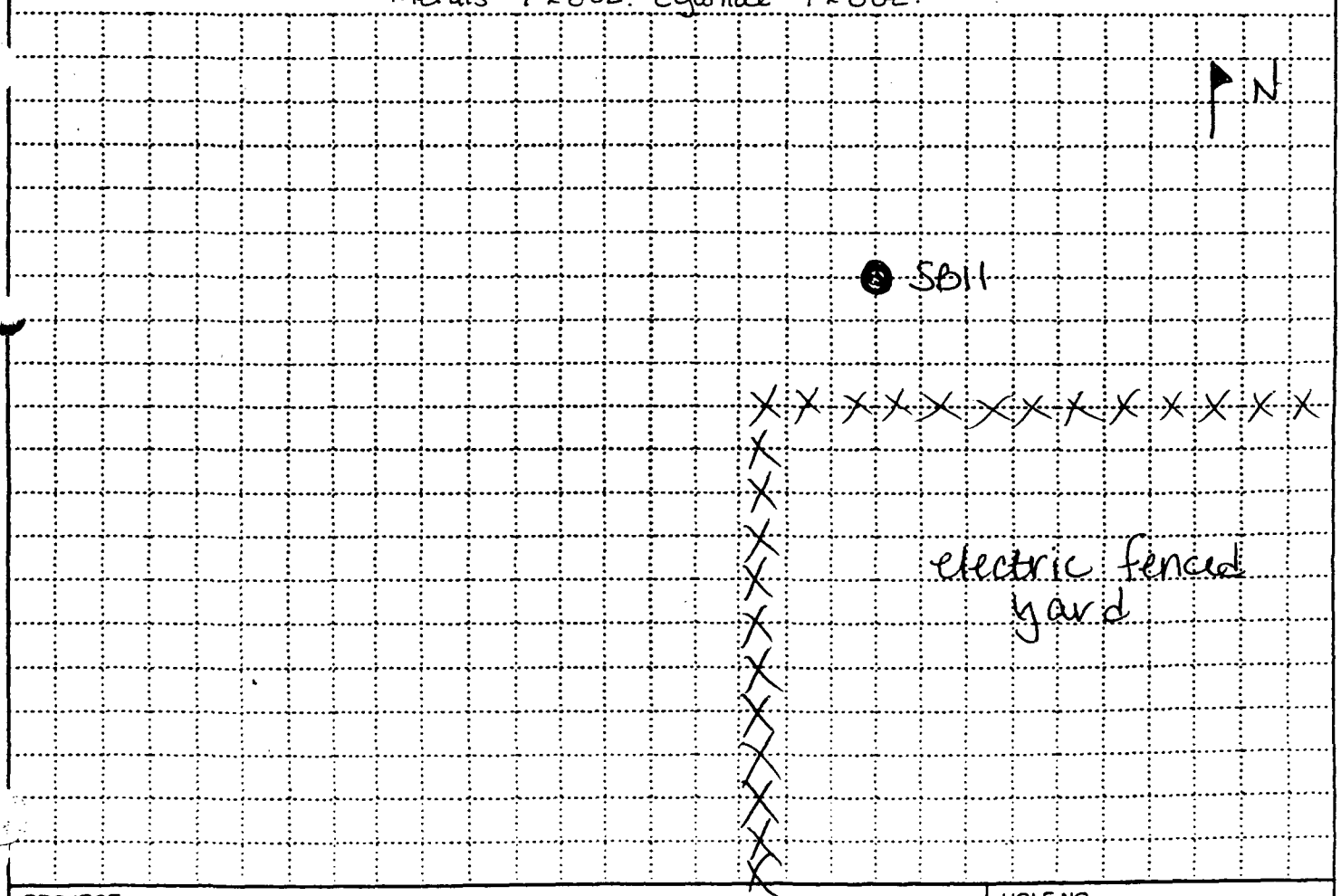
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smoke

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE

HOLE NO. SB11

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

ITRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB11

PROJECT: HIMCO DUMP SUPERFUND SITE

INSPECTOR: Carolyn Sturgeon

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded gravel with sand (GP), fine, rounded gravel, fine sand, brown, dry, glass fragments	HS=0.0 BZ=0.0		ECMP3 MEBQH0		10/21/98 use shovel to collect 0-0.5' sample
	1				ECMP4 MEBQH1	15	N=10 Recovery=1.2ft
						5	
						5	
	2	Poorly graded sand (SP) with rounded gravel, dry, fine sand, brown Concrete	HS=0.0 BZ=0.0		ECMP5 MEBQH2	40	N=100+ Recovery=1.0'
						40	
	3	BOTTOM OF HOLE=3.0ft				60	refusal @ 3.0' collect 2-6' sample from 2-3'
	4						
			~~HS=0.0 GAS~~ ~~BZ=0.0 GAS~~				
	5						
	6						
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB11

EN; FORM 5056A-R. AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB12
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM~~ GRS ~~AUGERS~~ GRS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/20/98
11. DATE COMPLETED	10/20/98
12. OVERBURDEN THICKNESS	6.0 ft
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	6.0 ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

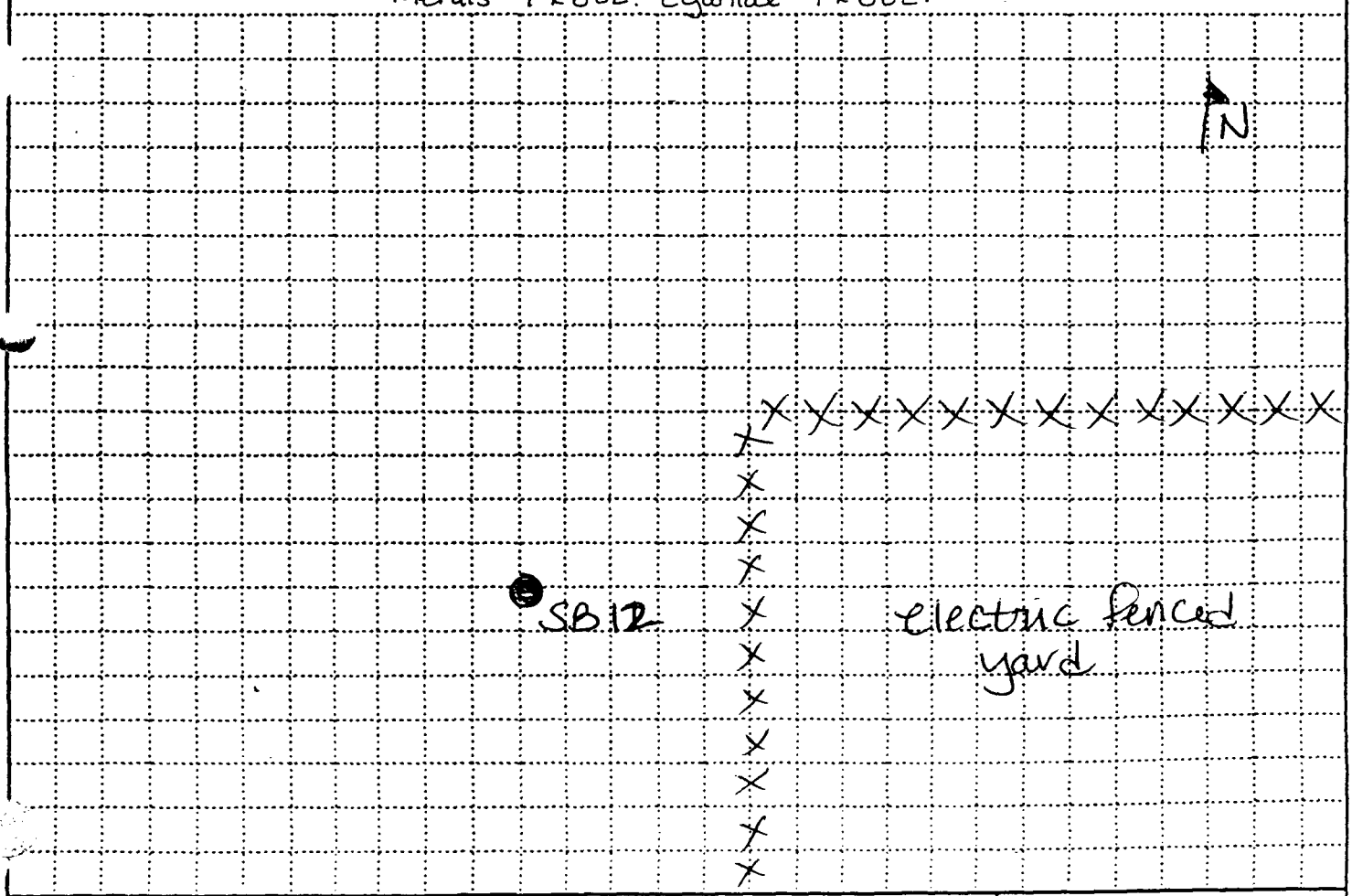
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smaglie

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT	HIMCO DUMP SUPERFUND SITE	HOLE NO.	SB12

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

TRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER SB12

PROJECT HIMCO DUMP SUPERFUND SITE

INSPECTOR Carolyn Samuel

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded sand (SP) with silt, dry, fine sand, brown, dense	HS=0.0 BZ=0.0		MEBQ67 ECMPØ MS/MSD +		10/20/98 collect 0-0.5' with shovel
	1				ECMP1 MEBQ68	5 10 10	N=20 Recovery=1.2'
	2	Poorly graded sand (SP) with silt (same as above	HS=0.0 BZ=0.0			5 9 12 15	N=21 Recovery=1.8'
	3	plastic fragments, duct tape, wood fragments					
	4	Poorly graded sand (SP), fine grained sand, dry, loose, tan	HS=0.0 BZ=0.0		MEBQ69 ECMP2	4 3 2 5	N=5 Recovery=1.7'
	5						
	6	BOTTOM OF HOLE =6.0'					
	7						
	8						
	9						
	10						

PROJECT HIMCO DUMP SUPERFUND SITE

HOLE NO. SB12

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB 13
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM AUGERS~~ GAS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/20/98
11. DATE COMPLETED	10/20/98
12. OVERBURDEN THICKNESS	4.7ft
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	~~4.7.61~~ GAS 4.7ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

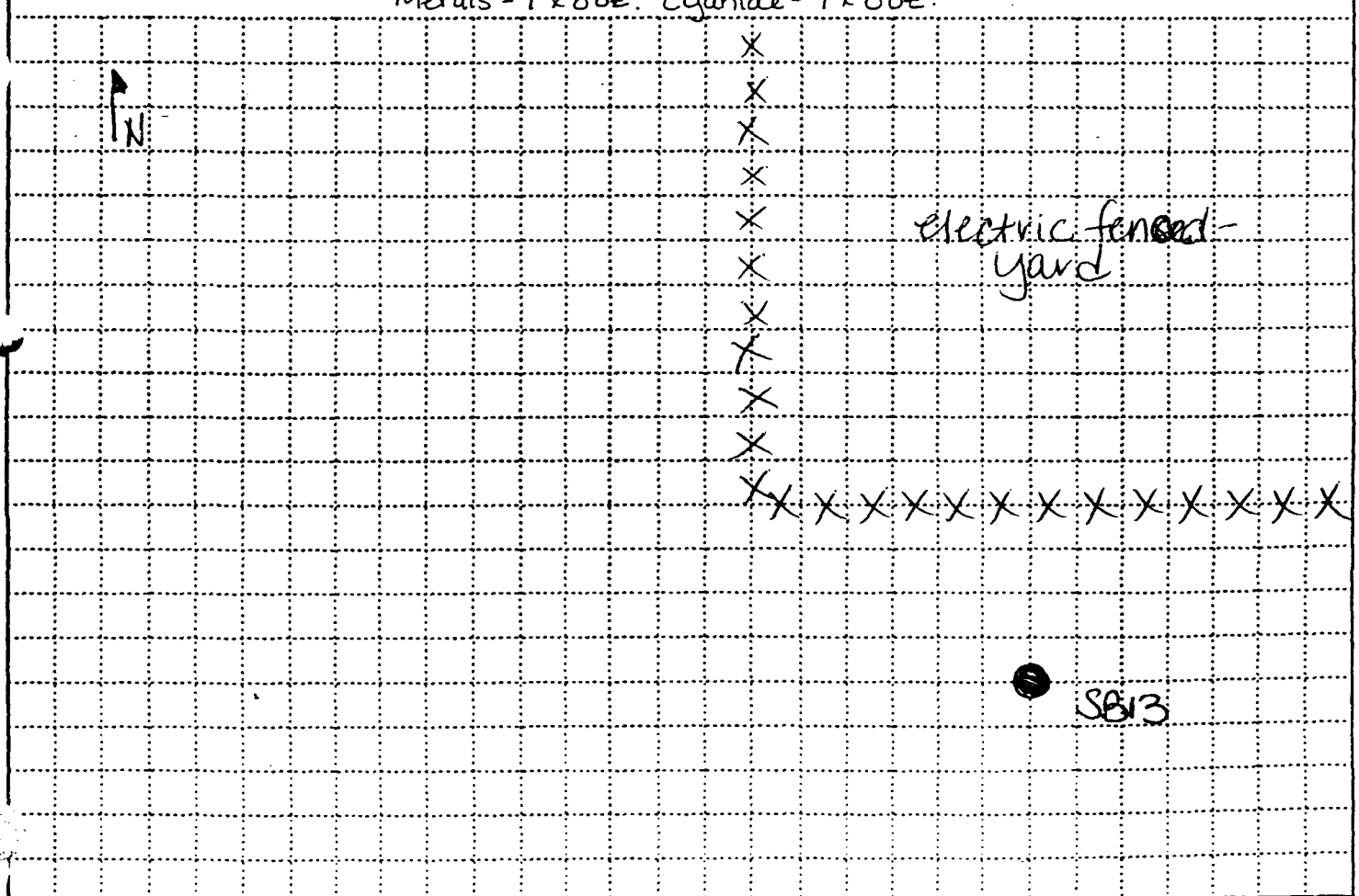
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Shuey

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE

HOLE NO. SB13

ENG FORM 5056-R, AUG 94

(Proponent: CECW-EG)

ITRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB13

PROJECT: HIMCO DUMP SUPERFUND SITE

INSPECTOR: Carolyn Simple

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded sand with silt (SP), dry, fine sand, brown			ECMN7 MEBQG4 0-0.5'		10/20/98 Collect 0-0.5' Sample with shovel
	1		HS=0.0 BZ=0.0		ECMN8 MEBQG5 0.5-2'	3	
						10	N=15 Recovery=1.2'
						5	
	2	Poorly graded sand (SP), dense, fine grained sand, dry, tan concrete rubble, wood, glass			MEBQG6 ECMN9 2-4'	15	
	3		HS=0.0 BZ=0.0			10	N=42 Recovery=1.8'
						32	
						7	
	4	Poorly graded sand Same as above with concrete rubble, wood, glass				57	refusal @ 4.7'
	5		HS=0.0 BZ=0.0	BOTTOM OF HOLE= 4.7'		60	N=60+ Recovery=0.7'
	6						
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB13

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB14
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM~~ CAS ~~AUGERS~~ CAS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/20/98
11. DATE COMPLETED	10/20/98
12. OVERBURDEN THICKNESS	5.0 ft
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	5.0 ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

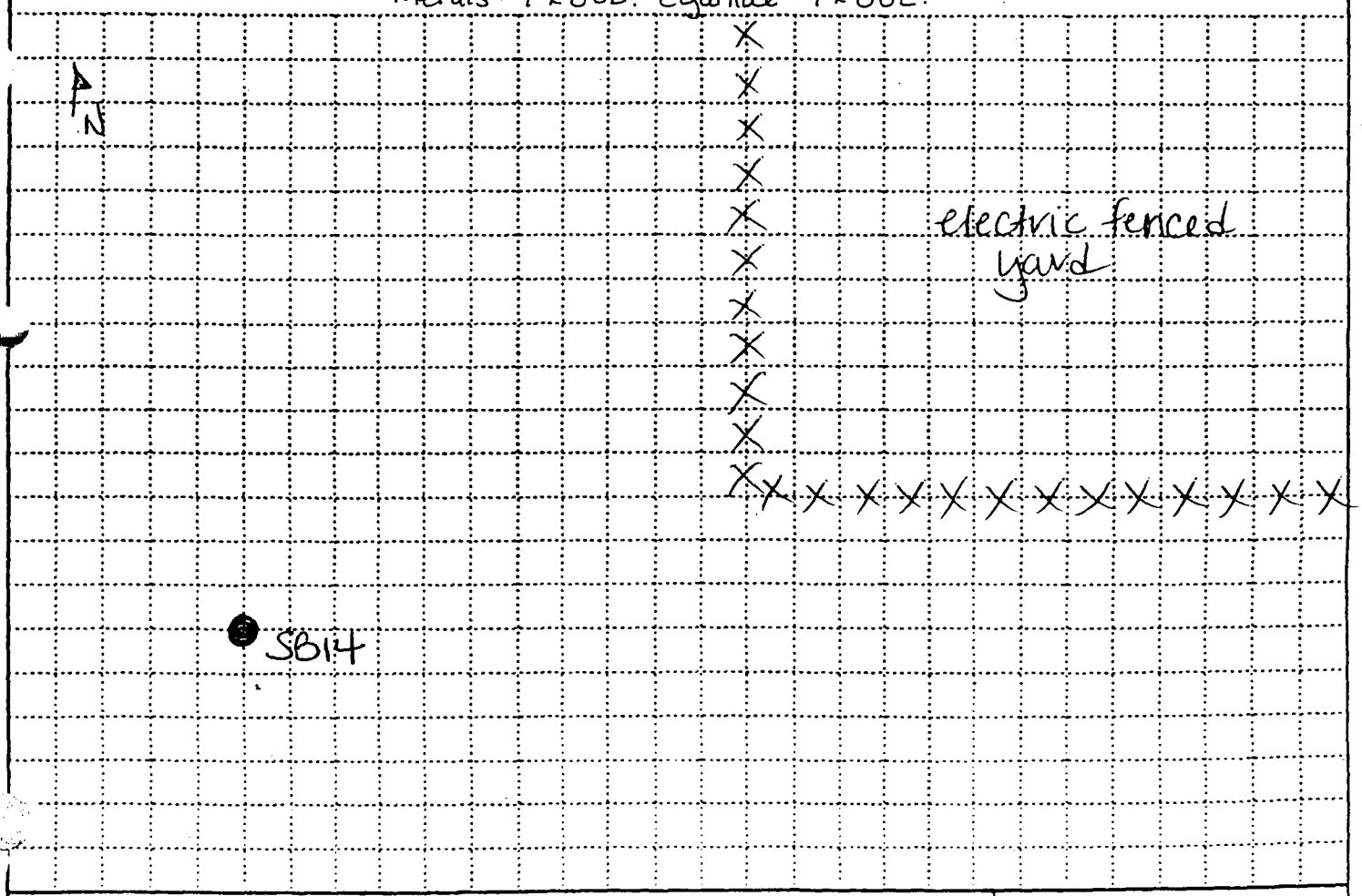
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smagle

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE

HOLE NO. SB14

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB14

PROJECT: Himco Dump Superfund Site

INSPECTOR: Carolyn Sumafel

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded sand (SP) with silt, dry, brown, fine sand	HS=0.0 BZ=0.0		ECMN4 MEBQG1		10/20/98 use shovel to Collected soil 0-0.5
	1				ECMN5 MEBQG2	4	
						7	N=14 Recovery=1.2'
						7	
	2	Poorly graded sand (SP) ~~w/~~ CAS fine sand, dry, tan	HS=0.0 BZ=0.0		ECMN6 MEBQG3	15	
	3					50	N=68
						18	Recovery=1.7'
						37	
	4	Poorly graded sand (SP), same as above, plastic, wood fragments, metal	HS=0.0 BZ=0.0			46	
						17	N=77+ ~~Recovery=0.9'~~
	5	BOTTOM OF HOLE = 5.0'				60	refusal @ 5.0' not enough soil for sample
	6						use soil from 2-4' for sample 2-6'
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB14

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB15
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM~~ ~~AUGERS~~ 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/19/98
11. DATE COMPLETED	10/19/98
12. OVERBURDEN THICKNESS	6.0ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
14. TOTAL DEPTH OF HOLE	6.0ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

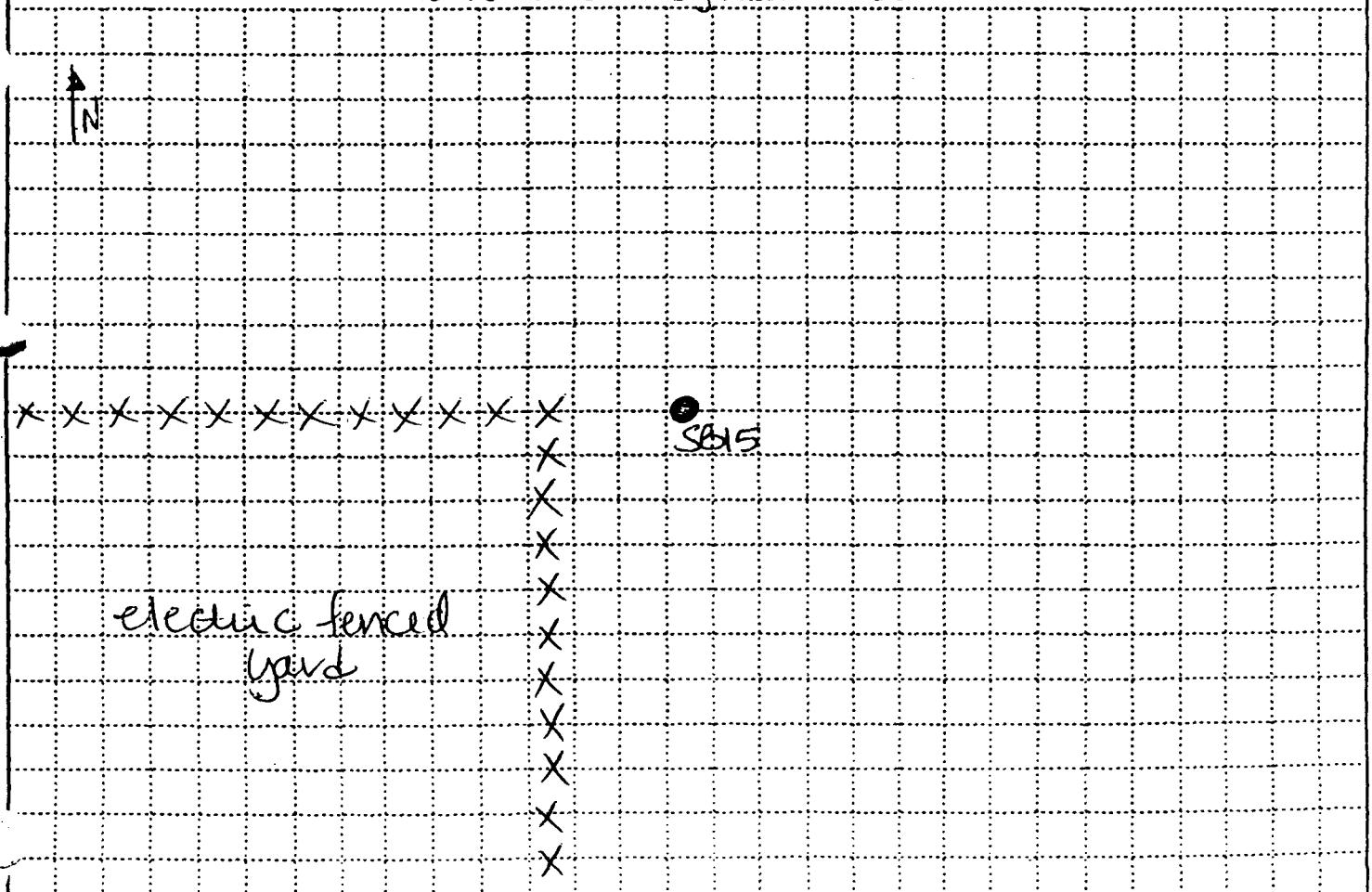
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smafe

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE

HOLE NO. SB15

ENG FORM 5056-R, AUG 94

(Proponent: CECW-EG)

TRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB15

PROJECT: Himco Dump Superfund Site

INSPECTOR: Carolyn Sinaf

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded Sand with silt (SP), fine sand, dry, dark brown			ECMK8 MEBQD5		10/19/98 Collect soil 0-0.5' with shovel
	1		HS=0.0 BZ=0.0		ECMK9 MEBQD6	4	
						3	N=8 Recovery=1.1'
						5	
	2	SP with silt same as above with glass fragments				9	
	3		HS=0.0 BZ=0.0			11	N=26 Recovery=1.5'
						15	
	4					3	
		Poorly graded sand (SP), black, moist, plastic and glass fragments			ECML0 MEBQD7	5	
	5		HS=0.0 BZ=0.0			7	N=11 Recovery=1.7'
						4	
	6					8	
		BOTTOM OF HOLE = 6.0'					
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB15

HTRW DRILLING LOG

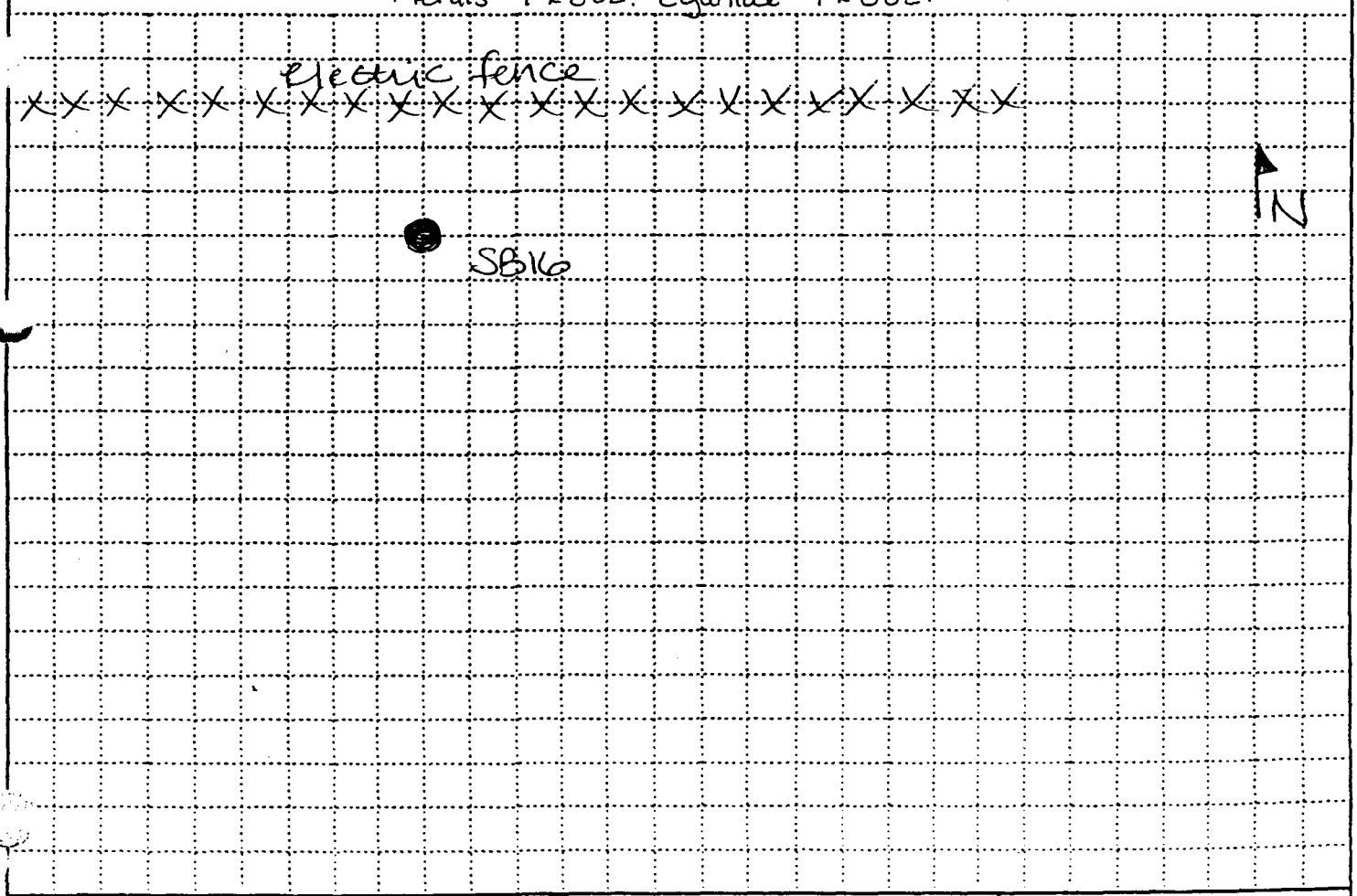
DISTRICT	OMAHA
HOLE NUMBER	SB16
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM~~ ~~AUGERS~~ GAS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/15/98
11. DATE COMPLETED	10/15/98
12. OVERBURDEN THICKNESS	6.0 ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
14. TOTAL DEPTH OF HOLE	6.0 ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	4	4	SVOCs - 4	Cyanide - 4	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smuafe

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz. SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE HOLE NO. SB16

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB16

PROJECT: Himco Dump Superfund Site

INSPECTOR: Carolyn Schafer

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Silty sand, dry, dk brown, fine sand	HS=0.0 BZ=0.0		MEBQD1 ECMJ9	12	10/15/98
	1				MEBQD2 metals, ca ECMK5 VOAs, SVOCs 0.5-2'	10	N=20 Rec=1.6'
						10	
						10	
	2	Silty sand, Same as above	HS=0.0 BZ=0.0		MEBQD3 metals, ca ECMK6 VOAs, SVOCs field dupe: MEBQD4 ECMK7 2'-6'	12	N=22 Rec=1.8'
						11	
	3	Poorly graded (SP) sand, dry, tan fine sand				11	
						12	
	4		HS=0.0 BZ=0.0			8	N=6 Rec=1.5'
						4	
	5	Poorly graded gravel (GP), wet, loose, black				2	
						3	
	6	BOTTOM OF HOLE	= 6.0'				
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB16

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB17
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM~~ CAS ~~AUGERS~~ CAS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/15/98
11. DATE COMPLETED	10/15/98
12. OVERBURDEN THICKNESS	2.2 ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE	2.2 ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

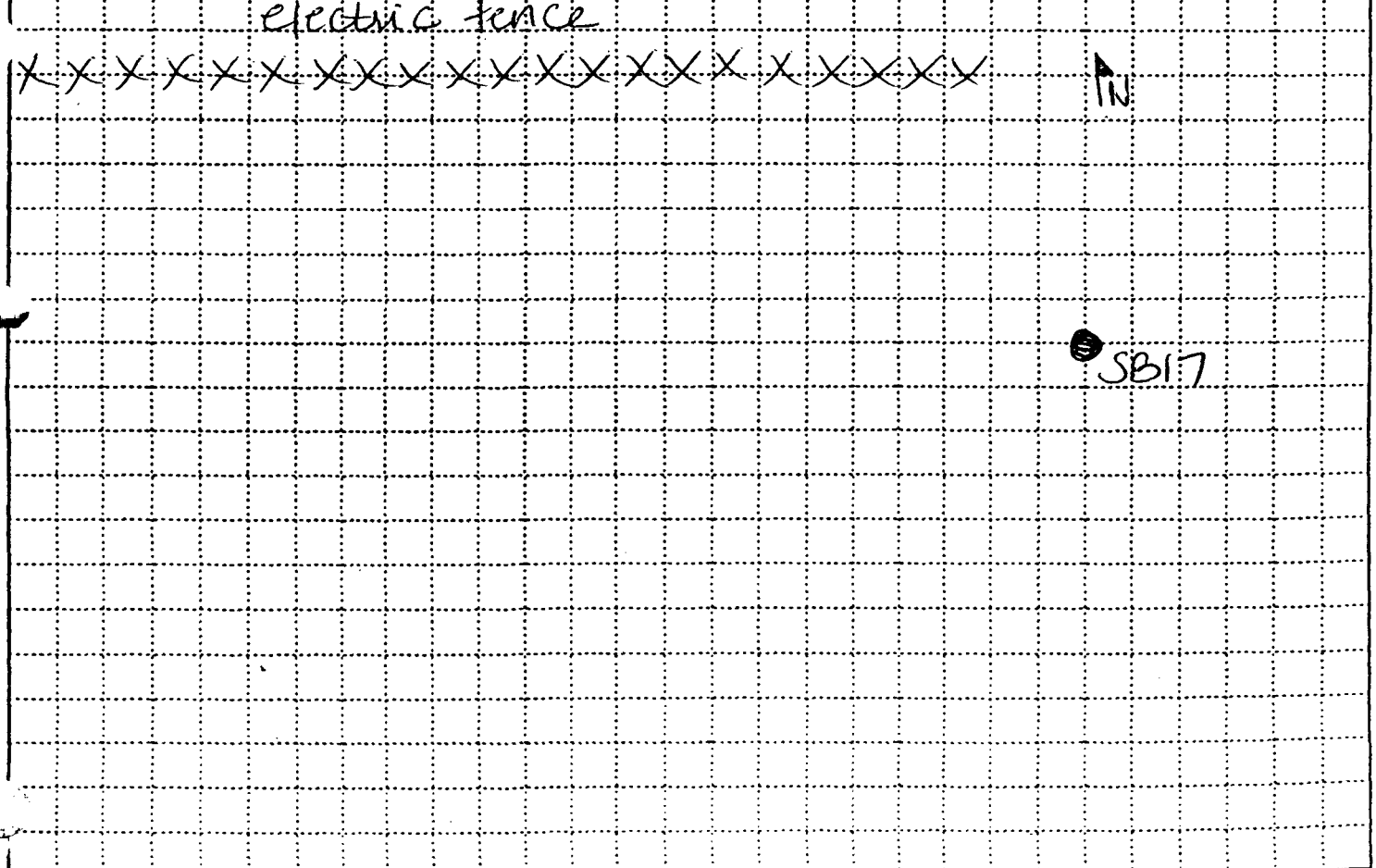
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	2	2	SVOCs - 2	Cyanide - 2	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Schnapp

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT	HOLE NO.
HIMCO DUMP SUPERFUND SITE	SB17

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

ITRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB17

PROJECT: Himco Dump Superfund Site

INSPECTOR: Carolyn Senafe

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Silty sand dk brown, loose, dry, fine sand brick and concrete debris	HS=0.0 BZ=0.0		ECMJ7 MEBQC9	4	10/15/98 collect 0-0.5' with shovel
	1				ECMJ8 VOAS SVOCs MEBQD0 metals CN	6	N=8 Rec=2'
						3	
	2					3	
		BOTTOM OF HOLE=	2.2'			20	N=60+ Rec=Ø
	3					60	refusal @2.2'
	4						
	5						
	6						
	7						
	8						
	9						
	10						

PROJECT: Himco Dump Superfund Site

HOLE NO. SB17

ENG FORM 5056A-R. AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB18
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM CAS~~ ~~AUGERS~~ CAS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/19/98
11. DATE COMPLETED	10/19/98
12. OVERBURDEN THICKNESS	6.0ft
15. DEPTH GROUNDWATER ENCOUNTERED	4.0ft
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
14. TOTAL DEPTH OF HOLE	6.0ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

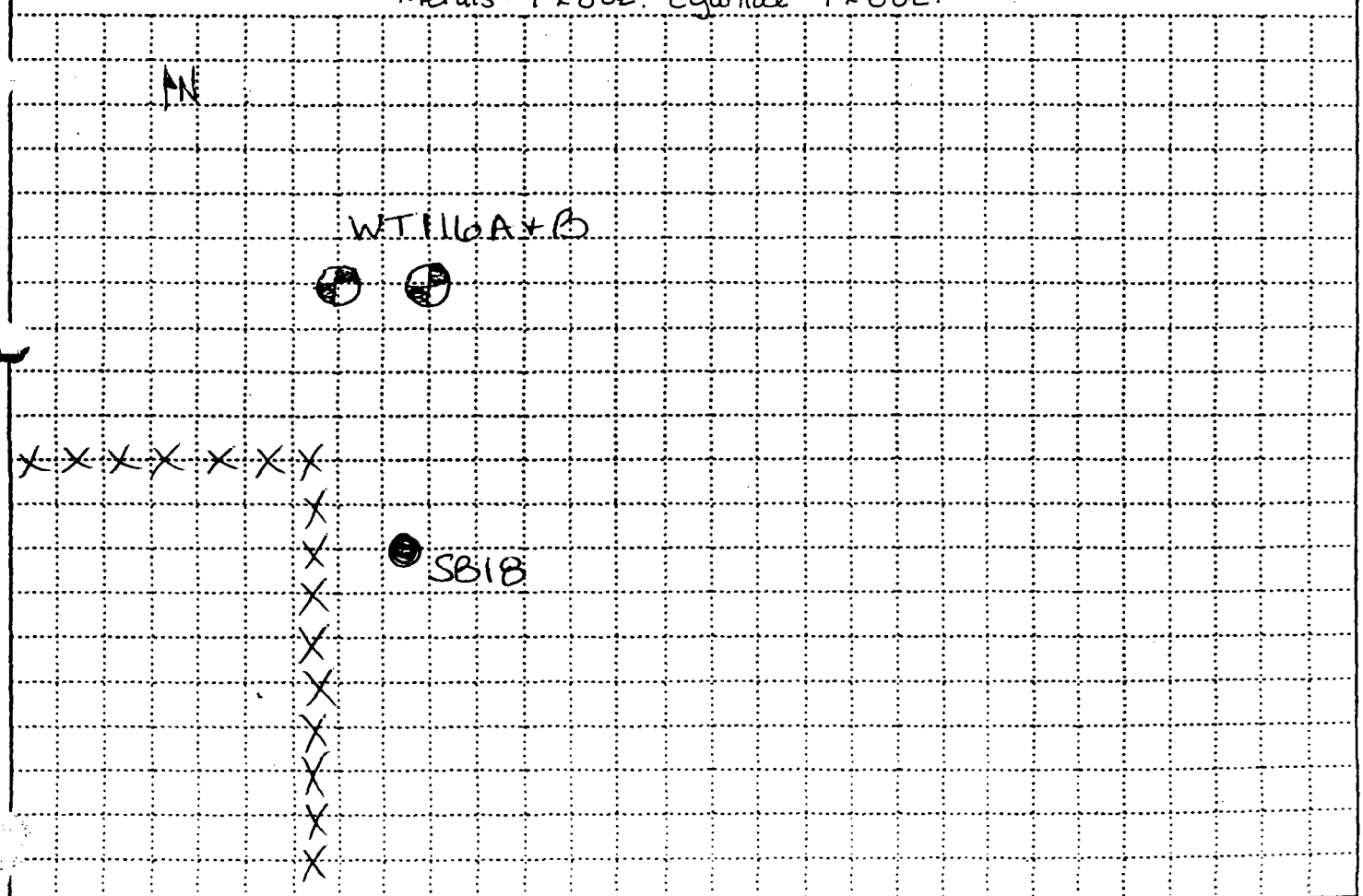
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Semaphore

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT	HOLE NO.
HIMCO DUMP SUPERFUND SITE	SB18

TRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER SB18

PROJECT HIMCO DUMP SUPERFUND SITE

INSPECTOR Cameron Shrafel

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Poorly graded sand with silt, (SP), fine sand, dry, dark brown	HS=0.0 BZ=0.0		ECML1 MEBQ08		10/19/98 collect soil from 0-0.5' with shovel
	1				ECML2 MEBQ09	15	
						24	N=34 Recovery=1.2'
						10	
	2	Poorly graded sand with silt same as above	HS=0.0 BZ=0.0			15	
	3					20	N=40 Recovery=1.8'
						20	
						22	
	4	Poorly graded sand (SP) with gravel, medium grained sand, saturated, black, wood and plastic fragments	HS=0.0 BZ=0.0		ECML3 MEBQ10	15	
	5					16	N=30 Recovery=1.6'
						14	
						3	
	6	BOTTOM OF HOLE = 6.0'					
	7						
	8						
	9						
	10						

PROJECT HIMCO DUMP SUPERFUND SITE HOLE NO. SB18

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB19
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM AUGERS~~ ~~CAS~~ 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/15/98
11. DATE COMPLETED	10/15/98
12. OVERBURDEN THICKNESS	6.0 ft
15. DEPTH GROUNDWATER ENCOUNTERED	4.5 ft
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE	6.0 ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

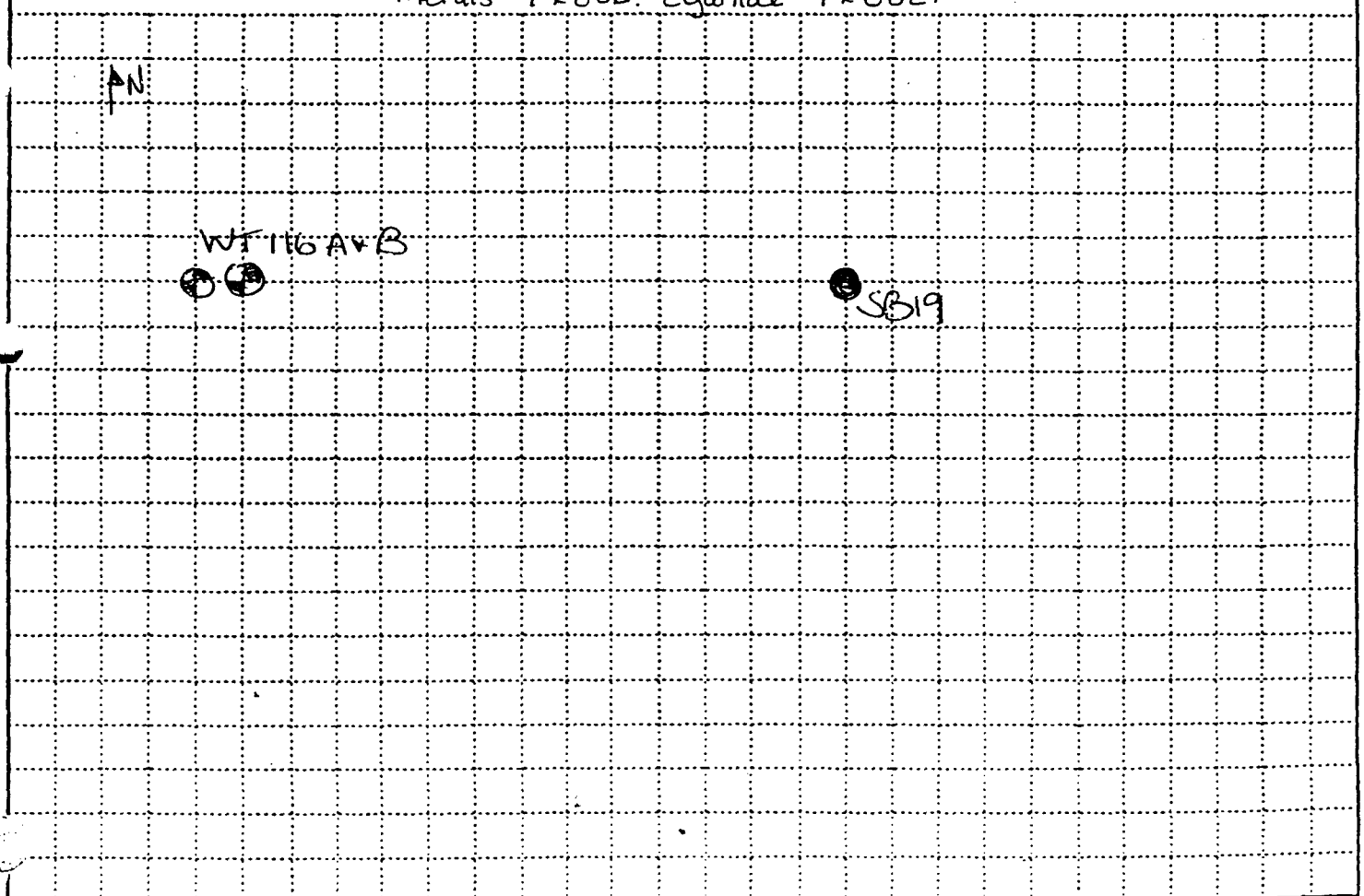
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Smagle

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE

HOLE NO. SB19

ENG FORM 5056-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER SB19

PROJECT Himco Dump Superfund Site

INSPECTOR Carolyn Semafore

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Silty sand, dense, dry, fine sand, dk brown	headspace= 0.0		MEBQC6 metals, CN ECMJ4 VOCs, SVOCs	4	10/15/98 Collect 0-0.5' with shovel
					ECMJ5 VOCs, SVOCs	14	N=28
	1	brick and concrete debris	Breathing Zone = 0.0		MEBQC7 metals, CN	14	RCC= 1.8'
						14	
	2	Silty sand Same as above	HS=0.0 BZ=0.0		MEBQC8 metals, CN ECMJ6 VOAs, SVOCs	8	N=39
	3					18	Rec=1.5'
		brick and concrete debris				21	
						21	
	4	Silty sand Same as above	Sewer odor HS=0.0 BZ=0.0			18	
4.5' ▽		Poorly graded gravel with sand (GP), wet, sewer odor, black, rounded fine gravel				40	N=64
	5					24	Rec=1.6'
						45	
	6	BOTTOM OF HOLE	=6.0'				
	7						
	8						
	9						
	10						

PROJECT Himco Dump Superfund Site HOLE NO. SB19

ENG FORM 5056A-R, AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	SB20
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 2
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	~~4 1/4" ID HOLLOW STEM~~ ~~AUGERS~~ GAS; 3" OD stainless steel split spoons
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/15/98
11. DATE COMPLETED	10/15/98
12. OVERBURDEN THICKNESS	5.3 ft
15. DEPTH GROUNDWATER ENCOUNTERED	not encountered
13. DEPTH DRILLED INTO ROCK	0
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	—
14. TOTAL DEPTH OF HOLE	5.3 ft
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	—

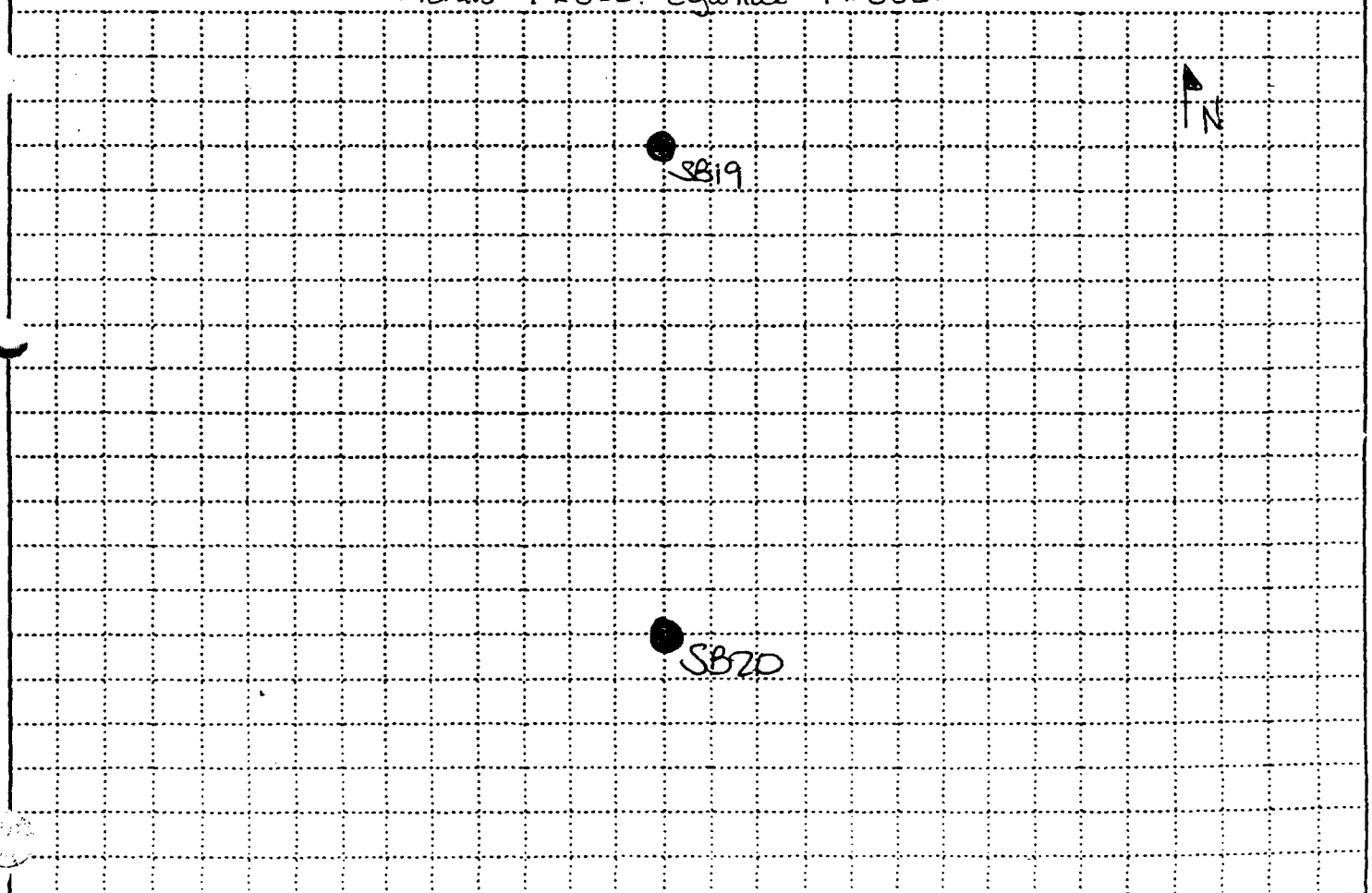
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	—

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	3	3	SVOCs - 3	Cyanide - 3	—	

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
	✓			Carolyn Sunerfel

LOCATION SKETCH/COMMENTS VOCs - 2 x 4 oz. SVOCs - 1 x 4 oz. Metals - 1 x 8 oz. Cyanide - 1 x 8 oz.

SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE | HOLE NO. SB20

ENG FORM 5056-R, AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: SB20

PROJECT: Himco Dump Superfund Site

INSPECTOR: Carolyn Smith

SHEET 2 OF 2 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Silty sand, loose, dry, dk brown, fine sand	Headspace = HS=0.0 Breathing zone = BZ=0.0		MEBQ03 metals, CN ECMK4 VOA, SVOCs	2	10/15/98
					ECMK0 VOA, SVOCs	2	
	1				MEBQ04 metals, CN 0.5-2'	4	N=6 Recovery=1.8'
						10	
	2	Poorly graded sand (SP) with silt, dk brown, dry, fine sand, glass fragments	HS=0.0 BZ=0.0			14	
						8	N=24 Recovery=1.7'
	3					16	
						6	
	4	Same as above refusal @ 5.3'	HS=0.0 BZ=0.0		2-5.3 MEBQC5 metals, CN ECMK1 VOAs, SVOCs	13	
						14	N=74+ Recovery=1.0'
	5					60	~~refusal @ 5.3'~~ concrete?
		BOTTOM OF HOLE=	5.3'				
	6						
	7						
	8						
	9						
	10						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. SB20

HTRW DRILLING LOG

DISTRICT	OMAHA
HOLE NUMBER	WT119A
1. COMPANY NAME	US ARMY CORPS OF ENGINEERS
2. DRILL SUBCONTRACTOR	OMAHA DISTRICT
SHEET / SHEETS	1 OF 3
3. PROJECT	HIMCO DUMP SUPERFUND SITE
4. LOCATION	ELKHART, INDIANA
5. NAME OF DRILLER	AL OAKS
6. MANUFACTURER'S DESIGNATION OF DRILL	GUS PECH GP-750
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	4 1/4" ID HOLLOW STEM AUGERS; 2" x 3" stainless steel ~~augers~~ CAS split spoons; bullet bit on augers
8. HOLE LOCATION	SEE BELOW
9. SURFACE ELEVATION	
10. DATE STARTED	10/14/98
11. DATE COMPLETED	10/19/98
12. OVERBURDEN THICKNESS	18.0'
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	18.0 ft
15. DEPTH GROUNDWATER ENCOUNTERED	9.5'
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	9.4'
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

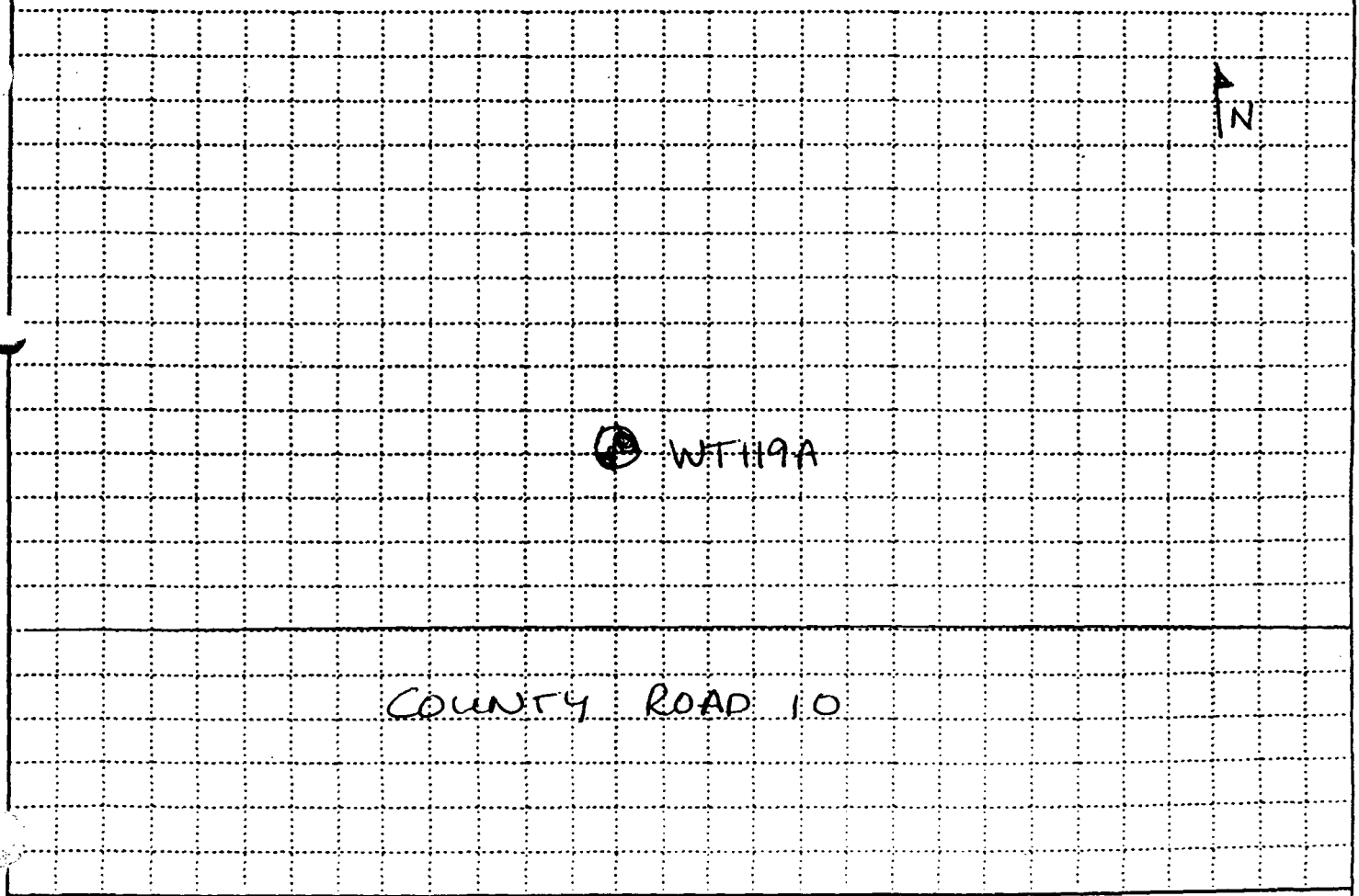
18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	0	0	0

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	TAL METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	0	0	SVOCs - 0	Cyanide - 0		

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		✓		Carolyn Schaefer

LOCATION SKETCH/COMMENTS

SCALE: not to scale



PROJECT HIMCO DUMP SUPERFUND SITE

HOLE NO. WT119A

ENG FORM 5056-R, AUG 94

(Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: WT119A

PROJECT: Himco Dump Superfund Site

INSPECTOR: Carolyn Smith

SHEET 2 OF 3 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	0	Sandy silt (SM) dry, brown, trace gravel, fine sand roots, rounded gravel				2	10/14/98 1015 2" split spoons
	1		B2=0.0			3	Rec: 1.8'
						3	N=6
						4	
	2	Poorly graded sand ~~Sandy silt~~ with silt fine sand, dry (SP)				5	
		dk brown	B2=0.0			11	Rec = 2.0'
	3	Color change to				13	N = 24
		reddish brown				15	
	4	Poorly graded sand same as above becoming more coarse, reddish brown				10	
			B2=0.0			10	
	5					11	Rec = 1.8' N=21
						10	
	6					9	
	7	Poorly graded sand, ~~medium~~ fine grained, dry tan	B2=0.0			8	N=15
						7	Rec = 2.0
						7	
	8	Poorly graded sand (SP), tan				3	
1230 9.4'						4	N=7
1045 9.5' ▽	9		B2=0.0			3	Rec = 2.0'
	10	wet				4	

PROJECT: Himco Dump Superfund Site

HOLE NO. WT119A

ENG FORM 5056A-R. AUG 94 (Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE NUMBER: WT119A

PROJECT: HIMCO DUMP SUPERFUND SITE

INSPECTOR: Carolyn Schmaehl

SHEET 2 OF 3 SHEETS

ELEV. (a)	DEPTH (b)	DESCRIPTION OF MATERIALS (c)	FIELD SCREENING RESULTS (d)	GEOTECH SAMPLE OR CORE BOX NO. (e)	ANALYTICAL SAMPLE NO. (f)	BLOW COUNT (g)	REMARKS (h)
	10	Poorly graded sand (SP), saturated, loose, tan, medium grained sand, rounded	B2=0.0			1	
						1	N=2
	11					1	Rec=2.0'
						3	
	12					2	
		Poorly graded sand (SP), saturated tan, fine sand	B2=0.0			2	N=5
	13					3	Rec=2'
						3	
	14	SP same as above				2	1225 Water level @9.4'
			B2=0.0			1	N=2
	15					1	Rec=1.0ft
						1	
	16	SP same as above				2	
		Well graded sand with gravel, loose, rounded gravel, fine to coarse sand, saturated, brown	B2=0.0			1	
	17					1	N=2 Rec=1.5'
						1	added 15 gallons of water to augers
	18	BOTTOM OF HOLE = 18.0'					remove inner bit, add 35 gallons water
							monitoring well installed
	19						see well installation diagram
	20						

PROJECT: HIMCO DUMP SUPERFUND SITE

HOLE NO. WT119A

ENG FORM 5056A-R, AUG 94

(Proponent: CECW-EG)

Appendix B

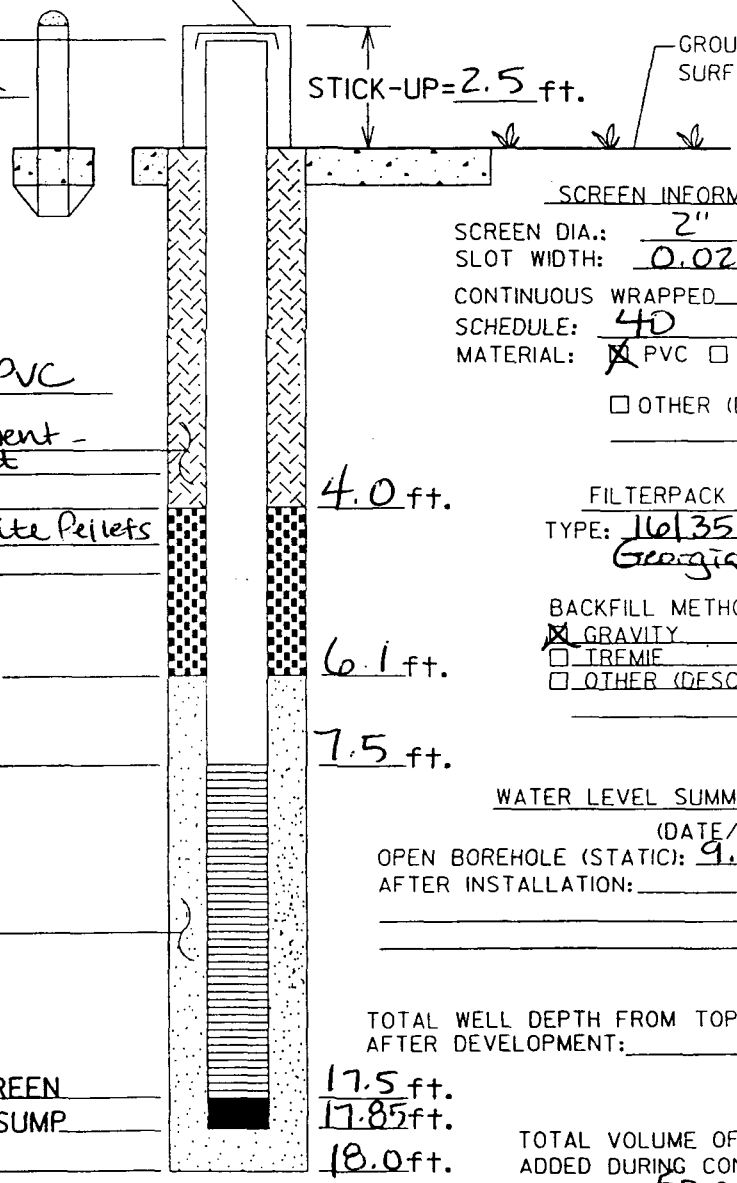
1998 Supplemental Site Investigation Monitoring Well Construction Diagram

PROJECT			WELL NUMBER
HIMCO DUMP SUPERFUND SITE			WT 119A
E INSTALLED	STARTED Oct 14	COMPLETED Oct 14, 1998	LOCATION (Coordinates or Station)
SIGNATURE OF INSPECTOR/INSTALLER Carolyn Sweet			ELEVATION OF HOLE
TOTAL DEPTH OF BOREHOLE 18.0 ft	BORING DIAMETER 8"		ELEVATION OF GROUND WATER IN WELL (DATE)

MONITORING WELL CONSTRUCTION DIAGRAM

NO SCALE

(ALL MEASUREMENTS FROM GROUND SURFACE)



PROTECTIVE CASING _____

TYPE OF PROTECTIVE CASING: _____

TOP OF WELL _____

PROTECTIVE POSTS 2 x

CASING DIAMETER: 2" ☒ I.D. ☐ O.D.

TYPE OF PIPE JOINTS: Threaded

TYPE OF BLANK CASING: PVC

BACKFILL/GROUT MIX ETC. (DESCRIBE) Cement - bentonite grout

TOP OF SEAL _____

TYPE OF SEAL: Pellonite Pellets

PELLET DIAMETER: 3/8"

TOP OF FILTERPACK _____

TOP OF SCREEN _____

FILTERPACK _____

BOTTOM OF WELL SCREEN _____

BOTTOM OF CAP OR SUMP _____

BOTTOM OF BORING _____

LENGTH OF SOLID PIPE: 10 ft.

WELL SCREEN LENGTH: 10 ft.

SCREEN INFORMATION

SCREEN DIA.: 2" ☒ I.D. ☐ O.D.

SLOT WIDTH: 0.020

CONTINUOUS WRAPPED YES ☒ NO ☐

SCHEDULE: 40

MATERIAL: ☒ PVC ☐ STAINLESS STEEL

☐ OTHER (DESCRIBE) _____

FILTERPACK MATERIAL

TYPE: 16/35 Georgia Silica

BACKFILL METHOD: _____

☒ GRAVITY

☐ TREMIE

☐ OTHER (DESCRIBE) _____

WATER LEVEL SUMMARY

(DATE/TIME/LEVEL)

OPEN BOREHOLE (STATIC): 9.4 ft 10/14/98

AFTER INSTALLATION: 1230

TOTAL WELL DEPTH FROM TOP OF CASING AFTER DEVELOPMENT: _____

TOTAL VOLUME OF WATER ADDED DURING CONSTRUCTION (IF ANY): 50 gallons

REVISED 09-1998

Appendix C

1998 and 2000 Supplemental Site Investigation Monitoring Well Development Records and Photos

1998 Supplemental Site Investigation Records

WELL DEVELOPMENT LOG

PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT116A

OPENED: DATE 10/14/98 TIME 0925		CLOSED: DATE 10/14/98 TIME 1323	
Water Level (TOC) 9.49	ft	Water Level (TOC) 11.60	ft
Well Depth (TOC) 14.85	ft	Well Depth (TOC) 16.36	ft
Design Depth (TOC) 15.0	ft	Design Depth (TOC) 15.0	ft
Est. Sed. In Well 0.15	ft	Est. Sed. In Well 0	ft
Depth to Floating Product (TOC) N/A	ft	Depth to Floating Product (TOC) N/A	ft
Floating Product Thickness N/A	ft	Total Water Removed 24	gals

SURGING/BAILING DATA

METHOD/EQUIPMENT OF DEVELOPMENT: QED Well Wizard without Wipers

TIME		TOTAL GAL.	WATER CLARITY	REMARKS (Amt./Type of Sediment, etc.)
SURGING	PUMPING			
0938-0948		0	-	-
	0948-1020	4	Black	Slight petroleum or organic smell, some filter pack sand.
1020-1050		4	-	-
	1050-1103	8	Black	Slight petroleum or organic smell, some filter pack sand.
1112-1132		8	-	-

CONTINUOUS PUMPING DATA

PUMPING METHOD: QED Well Wizard

TIME	TOTAL GAL.	pH	TEMP. (°C)	SP. COND. (mV)	TURB. (NTU)	REMARKS
1153	12	7.45	16.0	-34.0	>200	Black Colored
1158	13	7.40	15.9	-29.7	>200	Visibly clearing
1203	14	7.40	15.5	-29.9	-	Turbidity meter not working
1209	15	7.42	15.3	-31.2	-	"
1214	16	7.40	15.1	-30.0	-	"
1218	17	7.37	15.1	-28.5	-	"
1225	18	7.38	14.9	-28.6	23.7	Turbidity meter placed on AC jack

* Total includes water removed during surging and bailing.

COMMENTS: Well cap opened at 0820 and allowed to vent prior to starting work. Slight petroleum or organic smell. PID readings at 0923 = 0.0 ppm background; 0.0 ppm at top of well casing. One well volume = (15.0-9.49) * 0.17= 0.9 gals.

INSPECTOR: Richard J. Grabowski

WELL DEVELOPMENT LOG (CONTINUED)

PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT116A

TIME	TOTAL GAL.	pH	TEMP. (^{0}C)	SP. COND. (mV)	TURB. (NTU)	REMARKS
1230	19	7.36	14.9	-28.1	21.9	
1237	20	7.37	14.8	-28.0	13.4	
1241	21	7.37	14.8	-28.5	18.8	
1245	22	7.38	14.8	-28.9	13.9	
1251	23	7.37	14.7	-28.3	15.9	
1259	24	7.37	14.6	-28.2	15.1	Pump shut down. End of development

COMMENTS:

INSPECTOR: Richard J Grabowski

WELL DEVELOPMENT LOG

PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT119A

OPENED: DATE 10/15/98 TIME 0732		CLOSED: DATE 10/15/98 TIME 1350	
Water Level (TOC) 11.52	ft	Water Level (TOC) 11.60	ft
Well Depth (TOC) 18.34	ft	Well Depth (TOC) 20.32	ft
Design Depth (TOC) 20.4	ft	Design Depth (TOC) 20.4	ft
Est. Sed. In Well 2.06	ft	Est. Sed. In Well 0.08	ft
Depth to Floating Product (TOC) N/A	ft	Depth to Floating Product (TOC) N/A	ft
Floating Product Thickness N/A	ft	Total Water Removed 63	gals

SURGING/BAILING DATA

METHOD/EQUIPMENT OF DEVELOPMENT: QED Well Wizard without Wipers

TIME		TOTAL GAL.	WATER CLARITY	REMARKS (Amt./Type of Sediment, etc.)
SURGING	PUMPING			
	0830-0834	3	Brown	Large amount of fine sand.
0836-0856		3	-	-
	0900-0920	12	Brown	Large amount of fine sand.
0927-0947		12	-	-
	1002-1007	15	Brown	Some fine sand.
1009-1059		21	Brown	Some fine sand.

CONTINUOUS PUMPING DATA

PUMPING METHOD: QED Well Wizard

TIME	TOTAL GAL.	pH	TEMP. (^{0}C)	SP. COND. (mV)	TURB. (NTU)	REMARKS
1138	21	-	-	-	-	Begin continuous pumping.
1145	24	6.81	14.0	-3.2	>200	
1153	27	6.82	14.1	-2.2	>200	
1200	30	6.87	14.0	-6.0	54.2	
1207	33	6.95	14.1	-9.7	38.8	
1213	36	6.95	14.2	-9.3	34.1	
1220	39	6.92	15.6	-8.2	53.4	

* Total includes water removed during surging and bailing.

COMMENTS: One well volume = (20.4-11.52) * 0.17 =1.5 gals.

INSPECTOR: Richard J. Grabowski

WELL DEVELOPMENT LOG (CONTINUED)

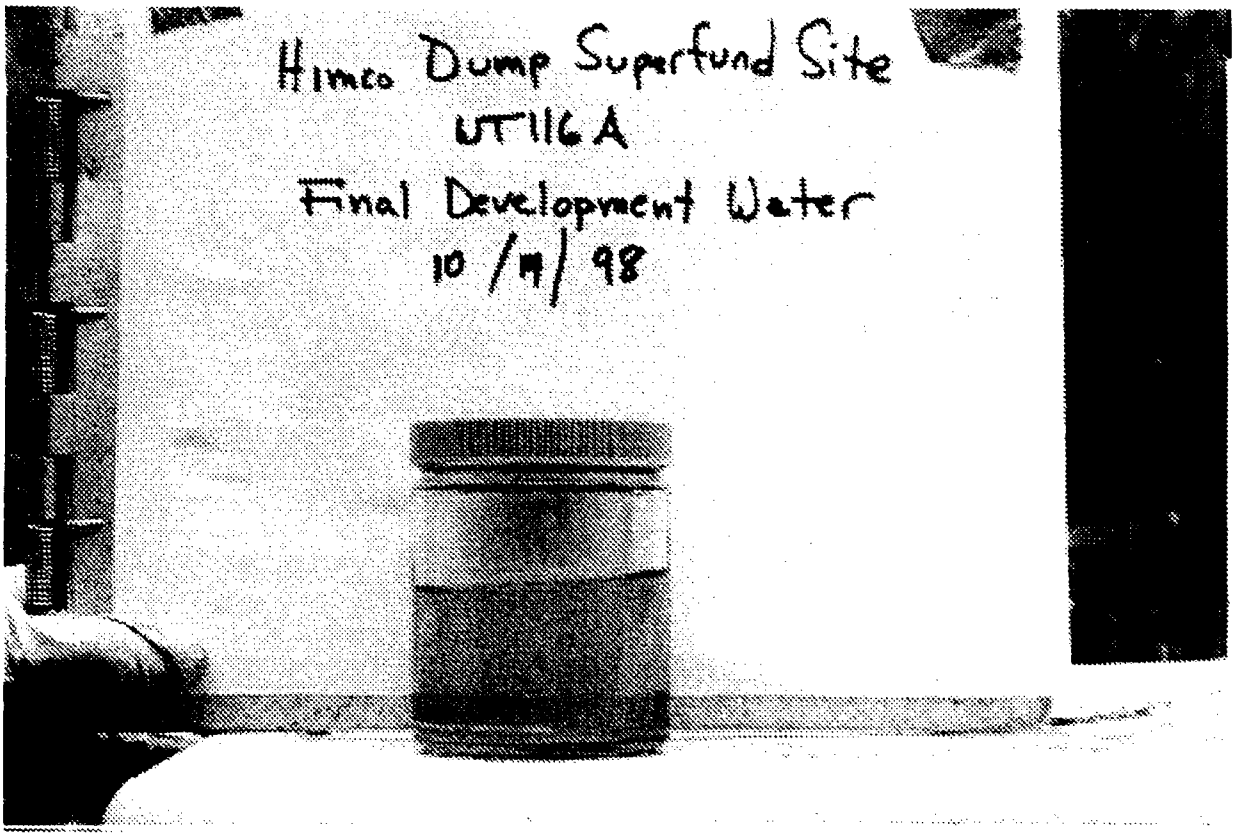
PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT119A

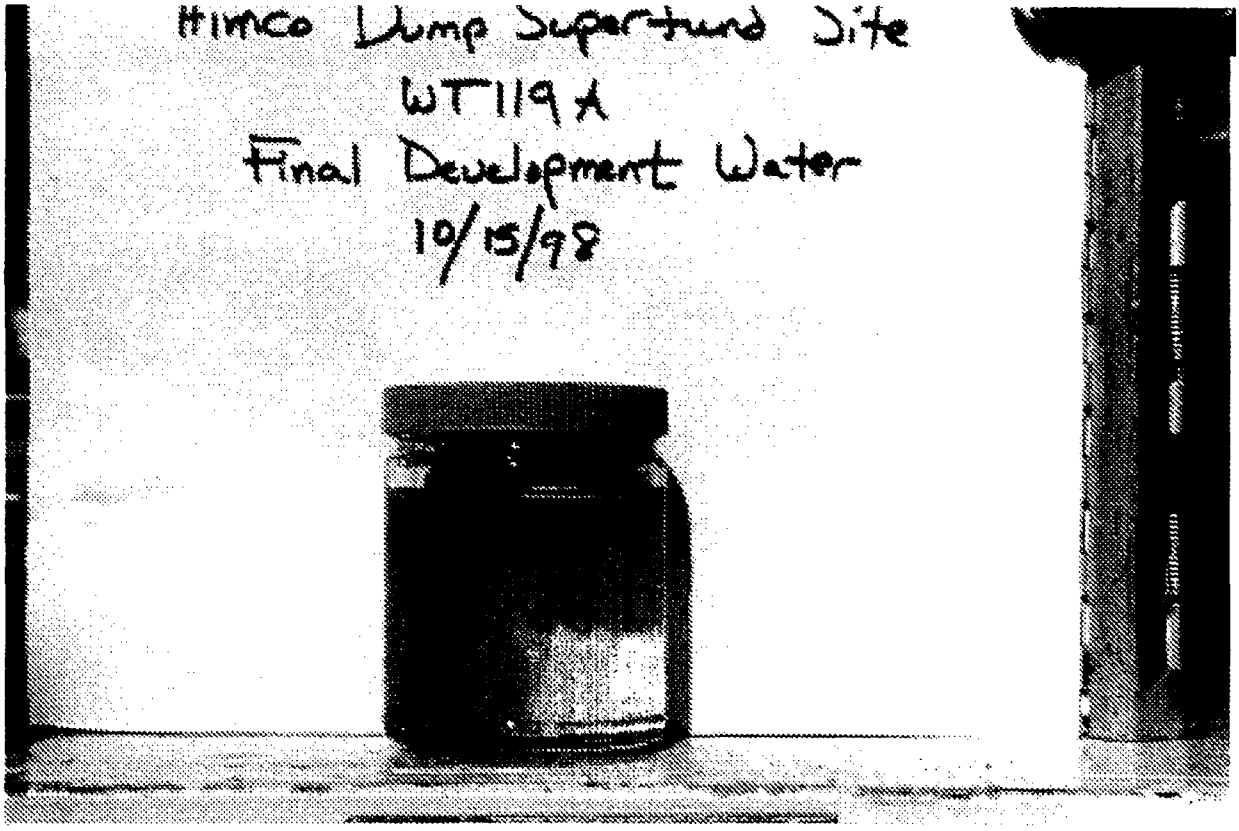
TIME	TOTAL GAL.	pH	TEMP. (^{0}C)	SP. COND. (mV)	TURB. (NTU)	REMARKS
1228	42	7.00	15.1	-12.7	38.1	
1236	45	6.99	15.8	-11.8	28.8	
1243	48	6.97	15.5	-10.8	24.8	
1250	51	6.92	15.4	-7.6	21.5	
1300	54	6.89	15.6	-10.8	18.8	
1306	57	6.94	16.1	-10.8	17.6	
1314	60	6.99	16.0	-11.6	16.9	
1320	63	6.98	16.0	-11.3	16.0	Development complete.

COMMENTS:

INSPECTOR: Richard J Grabowski



Monitoring Well WT116A Final Development Water Sample



Monitoring Well WT119A Final Development Water Sample

2000 Supplemental Site Investigation Records

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project: Himco	**Well Number:** B-1
Location: Elkhart, IN	**TOC Elevation:**
Well Coordinates:	**Ground Elevation:**
Date Well Installed: 10/6/77	**Installed Well Depth (TOC):** 473'
Date Well Developed: 03/15/00	**Screened Interval (TOC):** 467-473'
Fluid Losses During Drilling:	**Casing Diameter:** 5" PVC

DEVELOPMENT DATA

☐ Initial Development ☒ Redevelopment	**Weather Conditions:** ptly sunny

Static Water Level (TOC): Initial: 8.35 Time: ____ Final: ____ Time: ____	**Sounded Depth (TOC):** Initial: 471 Time: @1028 3/15/00 Final: ≅ 472.3 Time: 1450 3/15/00	**Post Development Water:** Jar Photographed ☐ Yes ☒ No
Development Start: Date: 3/15/00 Time: 1123	**Development Finish:** Date: ____ Time: ____	*Measured Sediment Thickness in Jar: ____

Development Method (Completely describe development method to include all equipment and procedures):

Hi-capacity pump @ ≅30 gpm
5 gal in 8 sec = 37.5 gal/min @ 1146
5 gal in 8 sec @ 1235

Misc. Notes:

Submerged Volume Calculation:

One Submerged Volume: ~482 gal

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. (mg/L)	Eh (mV)	Remarks (Color, odor, etc.)
11:23									
1128			7.53	11.82	11.8	645	1.07	157	≅ Clear | D.T.W. 27.23
1147			7.61	12.86	11.8	645	0.56	3	Cl = 1.117 | DTW 27.61
12:25			7.64	15.42	93?	643	0.55	-22	27.70
12:35	~37 gpm	2664 gal	7.58	13.71	3.4?	626	0.13	-100	Cl = 1.11 HNO3 = 0 w/ 10.2 ev lamp ∠1 NTU w/ Hach 27.72
12:40		2849							

pump off

Name: L R Watson Doug Yeskis	**Firm:** USGS USEPA		
Signature: L R Watson Doug Yeskis	**Date:** 03/15/00	**Page** 1 of 2	

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project:	Well Number:
Location:	TOC Elevation:

DEVELOPMENT DATA (CONT.)

Misc. Notes: B-3 8.01, B-4 7.09, Depth to water prior to B-1 development
B-3 8.01 @ 12 37 B-4 7.10 @ 12:38
B-3 8.01 @ 1352 B-4 7.03 @ 1353

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. ( )	Eh ( )	Remarks (Color, odor, etc.)
pump on 1250		2849							
1255			7.60	13.30	1.7	626	0.27	-111	Cl = 1.10? DTW = 27.19
13:09	37.5gal	3	7.60	13.33	16	626	0.11	-131	Cl = 1.11 DTW 27.72
1333			7.63	13.34	12.3	626	0.11	-137	Cl = 1.10
stopped pump 1335		47 min ~~1351~~ 4514							
pump on 1340		4514							
1346			7.67	13.30	12.2	625	0.11	-141	Cl = 1.10?
1352			7.66	13.34	29.2	626	0.11	-142	Cl = 1.10 DTW = 28.00
1401		5291 pulled	Sample						
		for	VOA						
			SVOC			FDCK9 -			OTR#
			Br						
			Sou						
			Metals						
			checked	pH	for	VOA +	Metals		
				both	pH = 1				
	When	pulled	the	weight	(partially	sealed	pipe)	from	bottom
	of well	(used	in	sounding	the well	bottom)	a	strong	chemical
	odor	was	observed.	No	readings	detected	on	HNu	(10.2 & 11.7eV lamps used)

Name: Lee Watson Doug Yeskis	Firm: USGS USEPA
Signature: Doug Yeskis	Date: 3/14/00 Page 2 of 2

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project: Himco	**Well Number:** B-3
Location: Elkhart, IN	**TOC Elevation:**
Well Coordinates:	**Ground Elevation:**
Date Well Installed: 10/17/77	**Installed Well Depth (TOC):** 135'
Date Well Developed:	**Screened Interval (TOC):** 125-135'
Fluid Losses During Drilling:	**Casing Diameter:** 5" PVC

DEVELOPMENT DATA

☐ Initial Development ☒ Redevelopment

Weather Conditions: Partly Sunny, Pleasant

Static Water Level (TOC):
Initial: 8.01 Time:
Final: Time:

Sounded Depth (TOC):
Initial: 128.90 Time:
Final: Time:

Post Development Water:
Jar Photographed ☐Yes ☐ No

Development Start:
Date: 03/15/00
Time: 1445

Development Finish:
Date: 3/15/00
Time: 1600

*Measured Sediment Thickness in Jar:

Development Method (Completely describe development method to include all equipment and procedures):

Hi-Cap Submersible

B4 - DTW @ 1509 = 7.10
B-1 - DTW @ 1510 = 8.31

Misc. Notes: 5 gal 8.5 sec

≅10 vols 1525

Submerged Volume Calculation:

One Submerged Volume:

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. ( )	Eh ( )	Remarks (Color, odor, etc.)
1445	on								
1447									DTW 10.12
1450	35		7.63	11.68	77.9	688.7	0.68	15	DTW 10.11
1500		525	7.54	11.65	10.8	685.6	0.14	-73	DTW 10.17
1508			7.53	11.65	11.1	683.4	0.13	-87	DTW 10.15
1510	off	805							

Name: LRWatson Doug Yeskis		**Firm:** USGS	
Signature: LRWatson Doug		**Date:**	**Page** 1 **of** 2

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project:	Himco Land Fill	**Well Number:**	B-3
Location:	Elkhart, IN	**TOC Elevation:**	

DEVELOPMENT DATA (CONT.)

Misc. Notes: 138 gal/vol

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. ( )	Eh ( )	Remarks (Color, odor, etc.)
1515	ON	805							
1520			7.54	11.71	3.4	685.2	0.15	-83	
1525	35		7.54	11.73	2.8	686.6	0.14	-88	DTW 10.15
1525	off	1155							
1532									~~Bubbles in flow through chamber~~
1537			7.54	11.62	4.1	686.4	0.23	-64	
1541	off	1330							
1546	on	1330							
1555			7.54	11.61	5.8	6.84	0.13	-99	DTW 10.18
1600	off	2870							
		pulled		sample	for:				
				VOC					
				SVOC			EDCL Ø		
				Br^-					
				SO_4^{-2}					
				Metals					

Name:	Doug Yeskis	**Firm:**	USEPA
Signature:	Doug Yeskis	**Date:** 3/15/00	**Page** 2 **of** 2

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project: Himco	**Well Number:** B-4
Location: Elkhart, IN	**TOC Elevation:**
Well Coordinates:	**Ground Elevation:**
Date Well Installed: 10/7/77	**Installed Well Depth (TOC):** 173'
Date Well Developed:	**Screened Interval (TOC):** 168-173'
Fluid Losses During Drilling:	**Casing Diameter:** 5" PVC

DEVELOPMENT DATA

☐ Initial Development ☒ Redevelopment

Weather Conditions: Nearly sunny

Static Water Level (TOC):
Initial: _____ Time: _____
Final: _____ Time: _____

Sounded Depth (TOC):
Initial: _____ Time: _____
Final: _____ Time: _____

Post Development Water:
Jar Photographed ☐Yes ☐ No

Development Start:
Date: 3/15/00
Time: 1634

Development Finish:
Date: _____
Time: _____

*Measured Sediment Thickness in Jar: _____

Development Method (Completely describe development method to include all equipment and procedures):

Sub-mersible Hi-Cap

Misc. Notes: 176 gal/vol 7.5 sec to fill 5 gal bucket
4gal/min

Submerged Volume Calculation:

One Submerged Volume:

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. ( )	Eh ( )	Remarks (Color, odor, etc.)
1634	on								
1647			7.53	11.75	3.9	500	0.18	-111	Cl = 1.09? DTW 8.85'
1655		840	7.54	11.77	2.7	503	0.14	-120	Cl = 1.09
1656									
1701									
1703		960	7.61	11.78	2.9	502	0.16	-122	Cl = 1.09?

pump off

Name: Doug Yeskis	**Firm:** USEPA	
Signature: Doug Yeskis	**Date:** 3/15/00	**Page** 1 **of** 2

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project: Himco Landfill	**Well Number:** B-4
Location: Elkhart, IN	**TOC Elevation:**

DEVELOPMENT DATA (CONT.)

Misc. Notes:

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. ( )	Eh ( )	Remarks (Color, odor, etc.)
~~1605~~ 17			7.58	11.81	131	502	0.14	-122	
1706		1040	"	11.82	5.5	504	0.14	-122	
1707	off								
1712	on								
1713			7.63	11.86	4.2	504	0.16	-126	
1716		1200	7.60	11.79	10.0	503	0.14	-126	Cl=1.09 DTW=8.91
1721			7.59	11.82	3.5	508	0.07	-128	Cl=1.09 DTW-8.90 Starting Lightning
1723									began sampling
1726			Sampled		Sulfate				
1727	off	1640							

Name: Doug Yeskis	**Firm:** USEPA	
Signature: Doug Yeskis	**Date:** 3/15/00	**Page** 2 **of** 2

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project: Himco	**Well Number:** E-3
Location: Elkhart, IN	**TOC Elevation:**
Well Coordinates:	**Ground Elevation:**
Date Well Installed: 10/11/77	**Installed Well Depth (TOC):** 176
Date Well Developed:	**Screened Interval (TOC):** 171-176
Fluid Losses During Drilling:	**Casing Diameter:** 175.02 + 0.65 =

DEVELOPMENT DATA 174.98 + 0.65

☐ Initial Development ☑ Redevelopment	**Weather Conditions:** Cloudy ≅ 32°F

Static Water Level (TOC): Initial: 13.36 Time: 10:03 Final: _____ Time: _____	**Sounded Depth (TOC):** Initial: 175.63 Time: 1002 Final: 175.67 Time: _____	**Post Development Water:** Jar Photographed ☐Yes ☐ No
Development Start: Date: _____ Time: _____	**Development Finish:** Date: _____ Time: _____	***Measured Sediment Thickness in Jar:** _____

Development Method (Completely describe development method to include all equipment and procedures):

Well near road 53.48

Misc. Notes: E-1 DTW @ 0955 13.73
180 gal/vol.

Submerged Volume Calculation:

One Submerged Volume: ~180

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. ( )	Eh ( )	Remarks (Color, odor, etc.)
1042	ON								
1046	off								
1048	ON								
1051			7.18	11.45	44.5	754.3	0.71	67	
1055	37.5	412	7.39	11.48	34.6	701.3	0.17	-17	
1105			7.46	11.49	41.7	677.2	0.10	-107	

Name: L R Watson	**Firm:** USGS	
Signature: [illegible]	**Date:** 03/16/00	**Page** 1 **of** 2

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project: Himco Landfill	**Well Number:** E-3
Location: Elkhart, IN	**TOC Elevation:**

DEVELOPMENT DATA (CONT.)

Misc. Notes: DTW on E-1 @ 1145 = 13.73

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. ( )	Eh ( )	Remarks (Color, odor, etc.)
1112									10.2 Hnu ≈ 1-2 above back
1115		1162	7.50	11.49	48.1	667.5	0.09	-128	DTW 56.31
1120	off		7.52	11.48	47.7	662.0	0.09	-131	
1130	on	1350							
1135			7.51	11.45	18.2	658.0	0.12	-146	DTW 54.00
1140			7.55	11.49	19.4	654.6	0.10	-150	Many bubbles going into H-lab chamber
1145			7.56	11.48	23.6	647.2	0.10	-153	DTW 56.36
1147		1800							Sample Collected
1155	off								
				VOA's	EDC's 4				

Name: Lee Watson	**Firm:** USGS	
Signature:	**Date:**	**Page** 2 **of** 2

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project: Himco Landfill	**Well Number:** G-1
Location: ~~G-1~~ Elkhart, IN	**TOC Elevation:**
Well Coordinates:	**Ground Elevation:**
Date Well Installed: 10/17/77	**Installed Well Depth (TOC):** 43'
Date Well Developed:	**Screened Interval (TOC):** 38-43'
Fluid Losses During Drilling:	**Casing Diameter:** 5" PVC

DEVELOPMENT DATA

☐ **Initial Development** ☒ **Redevelopment** | **Weather Conditions:** Mostly Sunny, warm

Static Water Level (TOC):
Initial: 13.58 Time: 1525
Final: _____ Time: _____

Sounded Depth (TOC):
Initial: 46.82 Time: 3/13/00
Final: 46.89 Time: _____

Post Development Water:
Jar Photographed ☐Yes ☒ No

Development Start:
Date: 16:13
Time: 3/14/00

Development Finish:
Date: _____
Time: _____

*Measured Sediment Thickness in Jar: _____

Development Method (Completely describe development method to include all equipment and procedures):

Grundfos, 4-inch pump w/ Franklin Motor
Air pump w/ occassionally turning off

Misc. Notes:

Sampled at 1710 EDCL2
for VOA + sulfate

Submerged Volume Calculation:

One Submerged Volume: ~ 44 gal.

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. (mg/L)	Eh (mV)	Remarks (Color, odor, etc.)		
1616	~30	~90 gal	7.31	12.21	0?	637	0.52	-101		38.1	
1655 pump on											
1701	~30gpm	270 gal	7.44	12.07	1.57 Hach	631	0.97	-105	~1.5	37.5	DTW 15.89
1707	~30gpm	450 gal.	7.40	11.99	Hydrolab 0.92	631	0.38	-110	1.7	38.7	DTW 14.03
1715		690 gal.									
pumping	^All	Flow	Rates	50gpm	??	Calc	by	5 gal.	bucket		

Name: Doug Yeskis	**Firm:** USEPA
Signature: Doug Yeskis	**Date:** 3/14/00 **Page** 1 **of** 1

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project: Himco Landfill	**Well Number:** G-3
Location: Elkhart, IN	**TOC Elevation:**
Well Coordinates:	**Ground Elevation:**
Date Well Installed: 10/17/77	**Installed Well Depth (TOC):** 172'
Date Well Developed:	**Screened Interval (TOC):** 162-172'
Fluid Losses During Drilling:	**Casing Diameter:** 5" PVC

DEVELOPMENT DATA

☐ **Initial Development** ☒ **Redevelopment** | **Weather Conditions:** Mostly Sunny, Warm

Static Water Level (TOC):
Initial: ~~1.98~~ 1373 **Time:** 1748
Final: _____ **Time:** _____

Sounded Depth (TOC):
Initial: 169.05 **Time:** 3/14/00
Final: 169.17 **Time:** 3/14/00

Post Development Water:
Jar Photographed ☐ Yes ☒ No

Development Start:
Date: 1749
Time: 3/14/00

Development Finish:
Date: _____
Time: _____

***Measured Sediment Thickness in Jar:** _____

Development Method (Completely describe development method to include all equipment and procedures):

Misc. Notes:

Submerged Volume Calculation:

One Submerged Volume: ~175 gal

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. ( )	Eh ( )	Remarks (Color, odor, etc.) HNU		DTW
1752											24.70
1753											23.00
1756	30gpm	120 gal	7.47	11.2	>100	537.3	1.71	-88	4.5 units above bkgd	36.05	21.90
1810		540 gal	7.45	10.75	>100	620.9	0.68	-69	13	59.9	21.34
1819		810 gal							Spinning hose leak		
1830	30 gpm										

Name: Lee Watson, Doug Yeskis	**Firm:** USGS, USEPA
Signature: Doug Yeskis	**Date:** 3/14/00 **Page** 1 **of** 2

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project: Himco Landfill	**Well Number:** G-3
Location: Elkhart, IN	**TOC Elevation:**

DEVELOPMENT DATA (CONT.)

Misc. Notes:

1360 G1E1836

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. ( )	Eh ( )	Remarks (Color, odor, etc.)		
									HNU	Cl	DTW
1835	30 gpm	960 gal	7.45	11.32	~~93.5~~ 93.27 Hach	659.2	0.45	-46	23	74.5	20.45
stopped pump 1844		1230 gal									
Discharge Hose keeps breaking											
1854	pulled sample of VOAs + sulfate										
	ran pump for ~1 min to fill bottles only.										

Name: Lee Watson Doug Yeskis		**Firm:** USGS	USEPA
Signature: Doug Yeskis		**Date:** 3/14/00	**Page** 2 **of** 2

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project:	**Well Number:** J1
Location: Elkhart, IN	**TOC Elevation:**
Well Coordinates:	**Ground Elevation:**
Date Well Installed: 10/12/77	**Installed Well Depth (TOC):** 40'
Date Well Developed:	**Screened Interval (TOC):** 35-40'
Fluid Losses During Drilling:	**Casing Diameter:** 5" PVC

DEVELOPMENT DATA

☐ Initial Development ☒ Redevelopment

Weather Conditions: cold overcast

Static Water Level (TOC):
Initial: 18.54 Time:_____
Final:_____ Time:_____

Sounded Depth (TOC):
Initial:_____ Time:_____
Final:_____ Time:_____

Post Development Water:
Jar Photographed ☐Yes ☒No

Development Start:
Date:_____
Time:_____

Development Finish:
Date:_____
Time:_____

*Measured Sediment Thickness in Jar:_____

Development Method (Completely describe development method to include all equipment and procedures):

high Q pump Grundfos

Misc. Notes:

Submerged Volume Calculation:

One Submerged Volume: ~41 gal.

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. (ppm)	Eh (mV)	Remarks (Color, odor, etc.)
1610	30gpm								
1617			7.27	10.88	24.17	892	6.57	123	81.29 5ppm
1618	off	240	pump dewatered		well				
1621	on lower pump rate								
1625	15gpm		7.28	13.22	52.6	882	5.07	102	87.5
1627		330	7.30	13.26	39.4	878	6.41	94	94.7

Name: Doug Yeskis **Firm:** USEPA

Signature: Doug Yeskis **Date:** 3/16/00 **Page** 1 **of** 2

HIMCO DUMP SUPERFUND SITE
WELL DEVELOPMENT RECORD

SITE & WELL DATA

Project: Himco Landfill	**Well Number:** J1
Location: Elkhart, IN	**TOC Elevation:**

DEVELOPMENT DATA (CONT.)

Misc. Notes:

Time	Pump Rate (gpm)	Volume Removed (gal)	pH	Temp. (°C)	Turb. (ntu)	Cond. (mV)	D.O. ( )	Eh ( )	Remarks Cl^- (Color, odor, etc.)
1629		360	7.30	13.22	38	878	6.47	92	94.6
	off								
1633	on								
1634			7.29	13.14	34.6	877	5.80	92	94.2
1635		405 started pulling air							
~~1636~~									
1636	off - turned pump off								
1641	on								
1647		Sampled for:							
1648	off	495							

Name: Doug Yeskis	**Firm:** USEPA	
Signature: Doug Yeskis	**Date:** 3/16/00	**Page** 2 **of** 2

Appendix D

1996, 1998, and 2000 Supplemental Site Investigation Monitoring Well Sampling Records

1996 Supplemental Site Investigation Records

GROUND-WATER SAMPLING RECORD

Well ID: WT105A
Station #:

Facility Name: HIMCO DUMP Date: 11 / 13 / 96

Well Depth: 17.88 + 1.61 Depth to Water: 12.1 Well Diameter: 2"

Casing Material: PVC Volume Of Water per Well Volume: 1.05

Sampling Crew: R. Duwelius T. Willoughby A. Baumann

Type of Pump: Fultz Tubing Material: Teflon Pump set at 14 ft.

Weather Conditions: P. Cloudy, Flurries, Cold NOTES:

GROUND-WATER SAMPLING PARAMETERS

	Time	Water Level	Volume Pumped	Pumping Rate	D.O. (ppm)	Temp. (°C)	S.C. (m℧/cm)	pH	Eh (mV)	Turbidity (NTU)
Start @	1247									
	1249	12.15	1.5		4.29	11.54	306	7.29		69.8
Pump off	1250									
	1252	12.15	3.0		4.54	11.45	307	7.69		35.5
	1255	12.15	4		4.88	12.03	301	7.81		21.0
	1257	12.15	5		5.04	12.08	300	7.87		9.30
	1258½	12.16	6		5.09	12.18	302	7.87		7.17
	1300	12.16	7		5.07	12.26	303	7.89		3.54
	1302	12.16	8		5.12	12.18	304	7.89		.08

Filtered: Y or (N) Filter Size: _____ :m Filter Capacity: _____ Brand: _____

Sampled at: 1302 Parameters taken with: Hydrolab

Sample delievered to L. Vanderpool by R. Duwelius at 1330

Sample CRL #: _____ OTR #: _____ ITR #: _____ SAS #: _____

Parameters Collected	Number of Bottles	Bottle Lot Number
VOA's	2	B4026030
SVOC's	2	A1085030
Metals	1	C3156040

EAXX9
MEAXN2

GROUND-WATER SAMPLING RECORD

Well ID: MT 106A
Station #:

Facility Name: Himco Dump Date: 11 / 13 / 96

Well Depth: 18.48 Depth to Water: 11.15 Well Diameter: 2"

Casing Material.: SS Volume Of Water per Well Volume: 1.19

Sampling Crew: R. Duwelius, T. Willaughby, A. Baumann

Type of Pump: Fultz Tubing Material: Teflon Pump set at 14.5 ft.

Weather Conditions: P. Cloudy, Cold NOTES:

GROUND-WATER SAMPLING PARAMETERS

Time	Water Level	Volume Pumped	Pumping Rate	D.O. (ppm)	Temp. (°C)	S.C. (m.℧/cm)	pH	~~Eh~~ (mV)	Turbidity (NTU)
Start Time @ 1418									
1420	11.21	1		1.81	10.9	906	7.13		Red Color
1422	11.20	2.5		1.20	11.36	918	7.18		Red Color
1427	11.20	5		1.24	11.41	960	7.18		
1429	11.20	6		1.29	11.41	964	7.18		98.5
1431	11.20	8		1.24	11.50	968	7.19		37.4
1434	11.20	10		1.28	11.47	977	7.18		21.3
1437	11.21	12		1.27	11.45	973	7.17		11.10
1441	11.21	14		1.20	11.44	979	7.17		5.6
1446	11.21	16		1.18	11.45	982	7.17		4.88
1453	11.21			1.19	11.5	987	7.16		2.79
1454	Pump Off								

Filtered: Y or (N) Filter Size: ____ :m Filter Capacity: ____ Brand: ____

Sampled at: ____ Parameters taken with: Hydrolab

Sample delievered to ____ by R. Duwelius at 1447

Sample CRL #: ____ OTR #: ____ ITR #: ____ SAS #: ____

Parameters Collected	Number of Bottles	Bottle Lot Number
VOA's	2	B4206030
SVOC's	2	A1134020
Metals	1	C3156040

EAXY2
MEAXN3

GROUND-WATER SAMPLING RECORD

Well ID: W T111A
Station #:

Facility Name: HIMCO DUMP

Date: 11/13/96
1:04pm

Well Depth: 21.14+ Depth to Water: 14.55 Well Diameter:

Casing Material.: Volume Of Water per Well Volume: 1.18

Sampling Crew: , , ,

Type of Pump: Tubing Material: Pump set at ft.

Weather Conditions: NOTES:

GROUND-WATER SAMPLING PARAMETERS

Time	Water Level	Volume Pumped	Pumping Rate	D.O. (ppm)	Temp. (°C)	S.C. (m℧/cm)	pH	~~Eh~~ opt (mV)	Turbidity (NTU)
1:04pm									
1:23	14.75	3.0	low	.58	12.34	114	5.7		4.05
T 1:267	14.77	4.0		.50	12.43	115	5.67		3.10
1:37		5½		.55	12.44	113	5.65		2.68
1:41	pump	off.							

pH strip 5-6

Filtered: Y or N Filter Size: :m Filter Capacity: Brand:

Sampled at: Parameters taken with :

Sample delievered to by at .

Sample CRL #: OTR #: ITR #: SAS #:

Parameters Collected	Number of Bottles	Bottle Lot Number
VOA's	2, 2	
SVOC's	2, 2	A1085030
Metals	1, 1	C315~~0~~6040

DUP

EAXX9 EAXY1
MEAXN3 MEAKN4

GROUND-WATER SAMPLING RECORD

Well ID: WT115A
Station #: _____

Facility Name: Himco Dump Date: __/__/__

Well Depth: 19.22+ Depth to Water: 14.75 Well Diameter: 2

Casing Material: PVC Volume Of Water per Well Volume: .84

Sampling Crew: _____, _____, _____, _____

Type of Pump: Fultz Tubing Material: _____ Pump set at 17 ft.

Weather Conditions: _____ NOTES: _____

Purge started 3:22

GROUND-WATER SAMPLING PARAMETERS

Time	Water Level	Volume Pumped	Pumping Rate	D.O. (ppm)	Temp. (°C)	S.C. (mℳ/cm)	pH	Eh (mV)	Turbidity (NTU)
3.25	14.87	2.5		.35	11.97	1.422	6.8		43
3.28	14.91	4.0		.20	12.28	1.462	6.8		7.4
3:31	14.90	6.0		.21	12.36	1.464	6.8		3.9
3.34	14.91	8.5		.21	12.38	1.468	6.79		3.6
SAMPLE	3:35		VOA						
	3:40		SVOC						
	3:44		METALS						

Filtered: Y or (N) Filter Size: _____:m Filter Capacity: _____ Brand: _____

Sampled at: _____ Parameters taken with: Hydrolab Scout 2

Sample delievered to _____ by _____ at _____

Sample CRL #: _____ OTR #: _____ ITR #: _____ SAS #: _____

Parameters Collected	Number of Bottles	Bottle Lot Number
VOA's	2x3	
SVOC's	2x2	
Metals	1x2	

MSD

EA X Y4
MEA KN

GROUND-WATER SAMPLING RECORD

Well ID: WT116A
Station #:

Facility Name: HIMCO DUMP Date: / /

Well Depth: 14.31' Depth to Water: 8.08 Well Diameter: 2

Casing Material.: pvc Volume Of Water per Well Volume: 1.12

Sampling Crew: Ballard, Vanhoof, Duwelius,

Type of Pump: Fulflo Tubing Material: Pump set at ft.

Weather Conditions: NOTES:

GROUND-WATER SAMPLING PARAMETERS (others 10%) (opt)

Time	Water Level	Volume Pumped	Pumping Rate	D.O. (ppm)	Temp. (°C)	S.C. (mmho/cm)	±.2 pH	Eh (mV)	Turbidity (NTU)
1545									
1556		1½		3.19	8.46	3070	7.14		
1602	12'	2		0.45	10.01	3100	7.12		
Pump off at 1604									
on 1612									
1613		5		1.09	10.49	3100	7.15		
Pump off at 1614									

Filtered: Y or N Filter Size: :m Filter Capacity: Brand:

Sampled at: Parameters taken with :

Sample delievered to by at .

Sample CRL #: OTR #: ITR #: SAS #:

Parameters Collected		Number of Bottles	Bottle Lot Number
VOA's	EAXY5	2-40ml	B4206030 ← only
SVOC's		2-80's	A1134020 ← Not collect
Metals		~~2~~-1L	C3156040 ← Not collect

After 1 gallon had to lower pump

Pump off 1548 Pump off at 1604

GROUND-WATER SAMPLING RECORD

Well ID: [illegible]
Station #: _____

Facility Name: Himco Dump Date: ___/___/___

Well Depth: _____ Depth to Water: _____ Well Diameter: _____

Casing Material.: _____ Volume Of Water per Well Volume: _____

Sampling Crew: _____, _____, _____, _____

Type of Pump: _____ Tubing Material: _____ Pump set at _____ ft.

Weather Conditions: _____ NOTES: _____

_____

GROUND-WATER SAMPLING PARAMETERS

Time	Water Level	Volume Pumped	Pumping Rate	D.O. (ppm)	Temp. (°C)	S.C. (m ℳ/cm)	pH	~~Eh~~ (mV)	Turbidity (NTU)

Filtered: Y or N Filter Size: _____ :m Filter Capacity: _____ Brand: _____

Sampled at: 1500 (11/12/96) Parameters taken with : _____

Sample delievered to _____ by _____ at _____.

Sample CRL #: _____ OTR #: _____ ITR #: _____ SAS #: _____

Parameters Collected	Number of Bottles	Bottle Lot Number
VOA's	2	B4206030
SVOC's		
Metals		

EAXX8

GROUND-WATER SAMPLING RECORD

Well ID: [illegible]
Station #: _____

Facility Name: Hance Dump Date: 11/13/96

Well Depth: _____ Depth to Water: _____ Well Diameter: _____

Casing Material.: _____ Volume Of Water per Well Volume: _____

Sampling Crew: Tim, Richard, Alan, LV

Type of Pump: Fulz Tubing Material: _____ Pump set at _____ ft.

Weather Conditions: _____ NOTES: _____

GROUND-WATER SAMPLING PARAMETERS

Time	Water Level	Volume Pumped	Pumping Rate	D.O. (ppm)	Temp. (°C)	S.C. (m℧/cm)	pH	~~Eh~~ (mV)	Turbidity (NTU)

Filtered: Y or N Filter Size: _____ :m Filter Capacity: _____ Brand: _____

Sampled at: 1530 Parameters taken with : _____

Sample delievered to _____ by _____ at _____.

Sample CRL #: _____ OTR #: _____ ITR #: _____ SAS #: _____

Parameters Collected	Number of Bottles	Bottle Lot Number
VOA's	2	~~A1~~ B4206030
SVOC's	2	A1134020
Metals	1	C3156040

EA XY3
MEA KN6

1998 Supplemental Site Investigation Records

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT101A

OPENED: DATE 10/21/98 TIME 0749			CLOSED: DATE 10/21/98 TIME 0900		
Water Level (TOC)	12.96	ft	Water Level (TOC)	12.96	ft
Well Depth (TOC)	18.64	ft	Well Depth (TOC)	18.64	ft
Design Depth (TOC)	See note below	ft	Design Depth (TOC)	See note below	ft
Est. Sed. In Well	See note below	ft	Est. Sed. In Well	See note below	ft
Depth to Floating Product (TOC)	N/A	ft	Depth to Floating Product (TOC)	N/A	ft
Floating Product Thickness	N/A	ft	Total Water Removed	6	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0805	0	-	-	-	-	-	-	Begin Pumping
0809	1	6.77	14.15	3445	-77.0	-	58.8	Water Level = 12.47 ft TOC
0814	2	6.59	15.69	3489	-85.6	-	18.1	
0819	3	6.59	16.06	3536	-91.1	-	7.4	
0826	4	6.59	16.79	3537	-95.9	-	4.2	Water Level = 12.97 ft TOC
0830	5	6.59	15.99	3547	-96.6	-	3.5	
0833	6	6.59	15.86	3548	-98.6	-	2.6	
0835								Begin Sampling
0852								End Sampling

COMMENTS: No well construction diagram available. Bottom of well measured using a ORS oil water interface probe. Bottom feels solid. No significant sediment in the well. One well volume = (18.64-12.96) * 0.17 = 1 gallon.

INSPECTOR: Richard J. Grabowski

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT102A

OPENED: DATE 10/19/98 TIME 1327			CLOSED: DATE 10/19/98 TIME 1602		
Water Level (TOC)	12.69	ft	Water Level (TOC)	12.56	ft
Well Depth (TOC)	18.12	ft	Well Depth (TOC)	18.12	ft
Design Depth (TOC)	See note below	ft	Design Depth (TOC)	See note below	ft
Est. Sed. In Well	See note below	ft	Est. Sed. In Well	See note below	ft
Depth to Floating Product (TOC)	N/A	ft	Depth to Floating Product (TOC)	N/A	ft
Floating Product Thickness	N/A	ft	Total Water Removed	8	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1421	0	-	-	-	-	-	-	Begin Pumping
1424	1	6.01	15.32	2443	65.3	-	144.1	
1430	2	6.66	17.46	2215	44.9	-	24.0	Water Level = 12.59 ft TOC
1437	3	6.90	17.14	2219	48.8	-	9.8	
1442	4	7.01	16.81	2204	19.9	-	6.2	
1447	5	7.05	16.87	2198	18.2	-	3.1	Water Level = 12.59 ft TOC
1453	6	7.09	17.82	2185	18.0	-	9.6	
1500	7	7.12	18.43	2192	14.5	-	10.3	
1506	8	7.12	17.44	2196	17.9	-	7.2	
1509								Begin Sampling
1528								End Sampling

COMMENTS: No well construction diagram available. Bottom of well measured using an ORS oil water interface probe. Bottom feels solid. No significant sediment in bottom of well. One well volume = (18.12-12.69) *0.17=0.9 gal. Observed roots or other organic matter on pump when pump was pulled.

INSPECTOR: Richard J. Grabowski

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT112A

OPENED: DATE 10/20/98 TIME 0847			CLOSED: DATE 10/20/98 TIME 1000		
Water Level (TOC)	11.68	ft	Water Level (TOC)	11.68	ft
Well Depth (TOC)	17.88	ft	Well Depth (TOC)	17.88	ft
Design Depth (TOC)	17.9	ft	Design Depth (TOC)	17.9	ft
Est. Sed. In Well	0.02	ft	Est. Sed. In Well	0.02	ft
Depth to Floating Product (TOC)	N/A	ft	Depth to Floating Product (TOC)	N/A	ft
Floating Product Thickness	N/A	ft	Total Water Removed	5	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0915	0	-	-	-	-	-	-	Begin Pumping
0918	1	7.53	13.56	1941	107.2	-	60.8	Water Level = 11.68 ft TOC
0923	2	7.37	15.43	1950	109.4	-	18.7	
0928	3	7.39	15.76	1918	107.2	-	3.4	
0934	4	7.41	16.12	1889	103.2	-	1.1	
0939	5	7.42	16.22	1882	100.1	-	0.7	
0942								Begin Sampling
0949								End Sampling

COMMENTS: One well volume= (17.9-11.68)*0.17=1.1 gals. Observed roots or other organic matter on pump when pump was pulled out of the well after sampling was completed.

INSPECTOR: Richard J. Grabowski

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT114A

OPENED: DATE 10/20/98 TIME 1355			CLOSED: DATE 10/20/98 TIME 1515		
Water Level (TOC)	17.94	ft	Water Level (TOC)	17.94	ft
Well Depth (TOC)	24.68	ft	Well Depth (TOC)	24.68	ft
Design Depth (TOC)	24.7	ft	Design Depth (TOC)	24.7	ft
Est. Sed. In Well	0.02	ft	Est. Sed. In Well	0.02	ft
Depth to Floating Product (TOC)	N/A	ft	Depth to Floating Product (TOC)	N/A	ft
Floating Product Thickness	N/A	ft	Total Water Removed	7	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1415	0	-	-	-	-	-	-	Begin Pumping
1421	1	7.04	15.32	3520	-138.3	-	89.3	Water Level = 17.96 ft TOC
1425	2	6.96	16.16	3590	-136.9	-	34.0	
1429	3	6.93	16.40	3679	-132.5	-	19.2	
1433	4	6.92	16.42	3909	-130.0	-	11.1	
1439	5	6.90	16.41	3998	-128.5	-	7.5	
1444	6	6.90	16.19	4007	-118.7	-	4.3	cleaned flow-through cell out
1448	7	6.89	16.49	4021	-122.7	-	3.4	
1450								Begin Sampling
1458								End Sampling

COMMENTS: One well volume = (24.7-17.94) * 0.17 = 1.1 gals.

INSPECTOR: Richard J. Grabowski

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT115A

OPENED: DATE 10/21/98 TIME 1028			CLOSED: DATE 10/21/98 TIME 1200		
Water Level (TOC)	14.46	ft	Water Level (TOC)	14.46	ft
Well Depth (TOC)	19.79	ft	Well Depth (TOC)	19.79	ft
Design Depth (TOC)	19.9	ft	Design Depth (TOC)	19.9	ft
Est. Sed. In Well	0.11	ft	Est. Sed. In Well	0.11	ft
Depth to Floating Product (TOC)	N/A	ft	Depth to Floating Product (TOC)	N/A	ft
Floating Product Thickness	N/A	ft	Total Water Removed	15	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1039	0	-	-	-	-	-	-	Begin Pumping
1048	3	7.21	15.13	2605	-49.0	-	163.1	
1052	4	6.88	15.20	2668	-65.7	-	108.9	
1057	5	6.77	15.60	2666	-82.8	-	59.9	Water Level = 14.50 ft TOC
1101	6	6.73	15.57	2645	-92.8	-	30.9	
1105	7	6.72	15.73	2653	-99.9	-	28.6	
1109	8	-	-	-	-	-	-	YSI shut down, low battery
1112	9	6.67	15.24	2677	-80.7	-	8.9	
1115	10	6.70	15.28	2676	-100.3	-	5.7	
1119	11	6.71	15.36	2678	-108.2	-	3.1	
1123	12	6.71	16.09	2707	-117.0	-	2.3	
1127	13	6.70	16.02	2706	-118.7	-	1.9	
1132	14	6.70	15.97	2703	-122.9	-	1.4	
1138	15	6.70	15.96	2706	-127.3	-	1.7	
1140								Begin Sampling
1148								End Sampling

COMMENTS: One well volume = (19.9-14.46) * 0.17 = 0.9 gals.

INSPECTOR: Richard J. Grabowski

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT116A

OPENED: DATE 10/21/98 TIME 1430		CLOSED: DATE _____ TIME _____	
Water Level (TOC) 11.74	ft	Water Level (TOC)	ft
Well Depth (TOC) 16.36	ft	Well Depth (TOC)	ft
Design Depth (TOC) 15.0	ft	Design Depth (TOC)	ft
Est. Sed. In Well 0	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC) N/A	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness N/A	ft	Total Water Removed	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1444	0	-	-	-	-	-	-	Begin Pumping
1449	1	6.79	16.10	6540	-138.4	-	2.9	
1453	2	6.83	16.72	6675	-153.5	-	2.1	
1458	3	6.84	17.40	6673	-161.7	-	2.3	
1502	4	6.84	16.72	6729	-169.0	-	2.0	
1505	5	6.84	16.88	6717	-172.1	-	4.4	
1508	6	6.84	16.41	6744	-175.8	-	2.0	
1512								Begin Sampling
1525								End Sampling

COMMENTS: One well volume = (16.36-11.74) * 0.17 = 0.8 gals.

INSPECTOR: Richard J. Grabowski

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site

WELL NUMBER: WT119A

OPENED: DATE 10/22/98 TIME 0805		CLOSED: DATE _____ TIME _____	
Water Level (TOC) 11.65	ft	Water Level (TOC)	ft
Well Depth (TOC) 20.33	ft	Well Depth (TOC)	ft
Design Depth (TOC) 20.4	ft	Design Depth (TOC)	ft
Est. Sed. In Well 0.06	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC) N/A	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness N/A	ft	Total Water Removed	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0818	0	-	-	-	-	-	-	Begin Pumping
0822	1.5	6.90	14.59	2276	-33.2	-	7.9	
0826	3	6.77	14.96	2222	-33.7	-	5.5	
0833	4.5	6.68	15.35	2245	-35.4	-	2.3	Water Level = 11.69 ft TOC
0838	6	6.67	15.14	2228	-37.2	-	1.8	
0844	7.5	6.66	15.32	2256	-38.8	-	1.7	
0848	9	6.65	15.57	2285	-40.3	-	2.0	
0854	10.5	6.65	15.26	2246	-40.2	-	2.0	
0857								Begin Sampling
0927								End Sampling

COMMENTS: One well volume = (20.4-11.65) * 0.17 = 1.5 gals.

INSPECTOR: Richard J. Grabowski

2000 Supplemental Site Investigation Records

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WTB3

OPENED: DATE 4/26/00 TIME		CLOSED: DATE 4/26/00 TIME	
Water Level (TOC)	ft	Water Level (TOC)	ft
Well Depth (TOC) 130	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 35	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1358	0	-	-	-	-	-	-	Begin Pumping
1406	5	7.48	12.62	607	100	0.98	18	Clear, Colorless
1414	10	7.48	12.59	622	98	0.56	5.4	Clear, Colorless
1424	15	7.50	12.74	621	62	0.51	3.6	Clear, Colorless
1432	20	7.50	12.69	621	40	0.44	0.0	Clear, Colorless
1441	25	7.52	12.96	620	27	0.42	5.2	Clear, Colorless
1450	30	7.53	12.94	620	28	0.37	5.2	Clear, Colorless
1459	35	7.56	13.08	619	31	0.36	5.5	Clear, Colorless
1500								Collect Samples

COMMENTS: Organic sample number - EDCG4; inorganic sample number - SO31.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WTB4

OPENED: DATE 4/26/00 TIME		CLOSED: DATE 4/26/00 TIME	
Water Level (TOC) 6.20	ft	Water Level (TOC)	ft
Well Depth (TOC) 174	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 25	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1508	0	-	-	-	-	-	-	Begin Pumping
1516	5	7.58	11.72	440	44	0.48	5.5	
1524	10	7.58	11.74	437	18	0.36	4.9	
1531	15	7.58	11.69	437	11	0.32	4.5	
1540	20	7.59	11.70	436	7	0.28	4.3	
1547	25	7.59	11.74	434	5	0.26	4.3	
1549								Begin Sampling
1553								End Sampling

COMMENTS: Organic sample number - EDCG5; inorganic sample number - SO32.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WTE1

OPENED: DATE 5/2/00 TIME 0942		CLOSED: DATE 5/2/00 TIME	
Water Level (TOC) 12.66	ft	Water Level (TOC)	ft
Well Depth (TOC) 81.20	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 5.5	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1023	0	-	-	-	-	-	-	Begin Pumping
1026	0.5	7.06	12.12	1038	99.6	-	10.04	
1028	1	7.05	12.15	1035	72.2	-	9.5	Water Level = 12.66 ft TOC
1031	1.5	7.04	12.34	1040	8.1	-	12.6	
1033	2	7.03	12.46	1048	-48.1	0.39	14.0	
1035	2.5	7.01	12.57	1058	-83.1	0.50	11.5	
1037	3	7.01	12.58	1066	-96.0	0.61	9.1	
1040	3.5	7.01	12.58	1073	-104.7	0.76	7.5	
1042	4	7.01	12.55	1077	-108.7	0.82	6.8	
1046	4.5	7.01	12.54	1081	-113.0	0.91	5.2	
1049	5	7.01	12.55	1082	-114.5	0.94	4.6	
1051	5.5	7.01	12.61	1081	-115.7	0.95	3.9	
1052								Begin Sampling
1058								End Sampling

COMMENTS: Dissolved oxygen measurements are reading negative. No readings will be obtained until it goes positive. Verification will be performed at end of sampling. D.O. field verified as okay.
Organic sample number - EOOFH; Inorganic sample number - SO45.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WTE3

OPENED: DATE 5/2/00 TIME 1114		CLOSED: DATE 5/2/00 TIME	
Water Level (TOC) 12.24	ft	Water Level (TOC)	ft
Well Depth (TOC) 178	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 9.5	gals

PURGE METHOD: Grundfos Redi-Flo Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1121	0	-	-	-	-	-	-	Begin Pumping
1126	1	7.31	11.98	589	32.4	1.91	15.7	
1128	1.5	7.33	11.86	579	-10.9	1.22	23.7	
1129	2	7.33	11.92	579	-46.1	0.91	26.6	
1131	2.5	7.34	12.01	579	-61.8	0.84	29.9	
1133	3	7.34	12.05	579	-70.6	0.79	31.5	
1135	3.5	7.34	12.12	574	-89.6	0.74	37.6	
1137	4	7.34	12.10	566	-105.8	0.68	42.5	Water level = 12.46 ft TOC
1140	4.5	7.35	12.11	558	-119.2	0.64	40.2	
1142	5	7.36	12.07	550	-128.8	0.62	31.4	
1144	5.5	7.37	12.07	544	-131.9	0.59	27.3	Water level = 12.47 ft TOC
1145	6	7.37	12.12	539	-135.7	0.57	25.2	
1147	6.5	7.43	12.11	532	-140.8	0.53	21.9	
1149	7	7.39	12.12	524	-144.2	0.51	18.2	
1151	7.5	7.39	12.13	521	-147.7	0.49	16.8	
1153	8	7.39	12.19	518	-148.6	0.48	15.5	
1155	8.5	7.39	12.13	509	-153.4	0.44	12.6	
1158	9	7.40	12.11	504	-155.6	0.43	11.9	
1200	9.5	7.40	12.11	495	-159.5	0.40	9.5	
1201								Begin Sampling
1205								End Sampling

COMMENTS: Organic sample number - EOOFJ; inorganic sample number - SO46.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WTG1

OPENED: DATE 4/27/00 TIME		CLOSED: DATE 4/27/00 TIME	
Water Level (TOC) 12.90	ft	Water Level (TOC)	ft
Well Depth (TOC) 52.8	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 20	gals

PURGE METHOD: Grundfos Redi-Flow 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1353	0	-	-	-	-	-	-	Begin Pumping
1359	5	7.55	13.56	448	-71	0.52	0.9	Clear, colorless
1404	10	7.58	13.44	456	-96	0.35	0.7	Clear, colorless
1409	15	7.57	13.42	457	-96	0.31	0.7	
1414	20	7.55	13.47	458	-98	0.27	0.7	
1416								Collect Samples

COMMENTS: Organic sample number - EOOF8; inorganic sample number - SO37.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WTG3

OPENED: DATE 4/27/00 TIME	CLOSED: DATE 4/27/00 TIME
Water Level (TOC) 13.73 ft	Water Level (TOC) ft
Well Depth (TOC) 172 ft	Well Depth (TOC) ft
Design Depth (TOC) ft	Design Depth (TOC) ft
Est. Sed. In Well ft	Est. Sed. In Well ft
Depth to Floating Product (TOC) ft	Depth to Floating Product (TOC) ft
Floating Product Thickness ft	Total Water Removed 30 gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1256	0	-	-	-	-	-	-	Begin Pumping
1300	5	7.62	13.19	396	-53	0.81	2.3	
1308	10	7.66	13.36	402	-83	0.41	40.8	Cloudy
1315	15	7.67	13.27	401	-90	0.33	8.7	Cloudy
1322	20	7.68	13.32	403	-90	0.29	2.4	
1329	25	7.69	13.32	404	-89	0.27	1.8	
1335	30	7.71	13.33	400	-95	0.27	-	
1336								Begin Sampling
1338								End Sampling

COMMENTS: Organic sample number - EDCG9; inorganic sample number - SO36.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT101A

OPENED: DATE 5/3/00 TIME 0900		CLOSED: DATE 5/3/00 TIME	
Water Level (TOC) 11.17	ft	Water Level (TOC)	ft
Well Depth (TOC) 18.76	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 8.5	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0906	0	-	-	-	-	-	-	Begin Pumping
0911	1	6.76	12.79	1739	-133.4	2.29	65.8	Water Level = 11.18 ft TOC
0914	1.5	6.76	13.39	1742	-135.8	2.32	50.4	
0916	2	6.76	13.17	1741	-136.7	2.48	41.7	Water Level = 11.18 ft TOC
0919	2.5	6.76	13.18	1736	-137.0	2.61	33.0	
0921	3	6.76	13.19	1731	-137.1	2.70	26.9	
0923	3.5	6.76	13.22	1731	-137.3	3.01	22.8	
0926	4	6.76	13.30	1729	-137.4	3.32	19.8	
0930	4.5	6.77	13.34	1727	-137.5	3.49	15.1	
0932	5	6.77	13.23	1726	-137.4	3.73	17.0	
0935	5.5	6.77	13.21	1723	-137.3	3.96	10.0	
0936	6	6.77	13.26	1723	-137.2	4.02	9.8	
0938	6.5	6.77	13.15	1724	-137.0	4.41	7.9	Water Level = 11.18 ft TOC
0941	7	6.77	13.12	1722	-136.8	4.65	7.0	
0943	7.5	6.77	13.13	1725	-136.7	4.83	6.0	
0945	8	6.77	13.11	1721	-136.6	4.87	5.2	
0948	8.5	6.77	13.14	1722	-136.6	5.02	4.6	
0950								Begin Sampling
1000								End Sampling

COMMENTS: Organic sample number - EECFN2; inorganic sample number - SO50. Duplicate organic sample number - EECFN3; duplicate inorganic sample number - SO51.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT101B

OPENED: DATE 5/3/00 TIME 1013		CLOSED: DATE 5/3/00 TIME	
Water Level (TOC) 11.04	ft	Water Level (TOC)	ft
Well Depth (TOC) 100.8	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 7	gals

PURGE METHOD: Grunfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1022	0	-	-	-	-	-	-	Begin Pumping
1028	1.5	7.87	13.27	881	-300.7	2.07	3.8	
1031	2	7.85	13.03	880	-310.7	1.93	2.6	Water Level = 11.53 ft TOC
1035	2.5	7.83	13.24	881	-319.0	1.94	1.2	Water Level = 11.45 ft TOC
1038	3	7.79	13.28	883	-325.0	2.01	1.8	Water Level = 11.43 ft TOC
1042	3.5	7.62	13.41	913	-325.4	2.15	1.7	
1045	4	7.41	13.41	1001	-320.8	2.39	1.7	
1049	4.5	7.18	13.50	1103	-310.0	3.00	1.2	
1053	5	7.10	13.58	1150	-307.1	3.57	1.4	
1057	5.5	7.06	13.53	1167	-304.1	3.97	1.3	Water Level = 11.44 ft TOC
1100	6	7.05	13.56	1169	-305.4	4.20	1.6	
1103	6.5	7.04	13.46	1176	-304.4	4.12	1.2	
1106	7	7.04	13.45	1182	-295.5	4.14	1.2	
1107								Begin Sampling
1112								End Sampling

COMMENTS: Hydrogen Sulfide odor. Organic sample number - EECFN4; inorganic sample number - SO52.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT101C

OPENED: DATE 5/3/00 TIME 0713		CLOSED: DATE 5/3/00 TIME	
Water Level (TOC) 10.85	ft	Water Level (TOC)	ft
Well Depth (TOC) 167.5	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 10	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0728	0	-	-	-	-	-	-	Begin Pumping
0733	1	8.94	11.69	493	191.7	1.98	>200	Water Level = 11.35 ft TOC
0735	1.5	8.92	11.74	490	147.3	0.99	>200	Reduced Flow Rate
0738	2	8.84	11.83	485	103.3	0.89	>200	Water Level = 11.24 ft TOC
0741	2.5	8.50	11.91	485	-212.3	0.91	168	Water Level = 11.29 ft TOC
0745	3	8.27	11.94	487	-235.3	0.99	>200	
0748	3.5	8.00	11.93	492	-225.1	0.95	>200	
0751	4	7.82	11.98	493	-214.5	0.95	>200	Water Level = 11.21 ft TOC
0755	4.5	7.75	12.04	493	-208.4	0.99	>200	
0759	5	7.71	12.00	492	-203.2	1.08	>200	
0802	5.5	7.72	12.05	492	-203.8	1.10	>200	Water Level = 11.13 ft TOC
0806	6	7.72	12.31	492	-198.6	1.26	>200	
0809	6.5	7.72	12.37	491	-192.7	1.27	65.6	
0812	7	7.71	12.35	492	-200.5	1.30	52.2	
0816	7.5	7.71	12.17	492	-201.8	1.30	40.2	
0820	8	7.70	12.16	491	-202.0	1.29	31.8	
0825	8.5	7.69	12.39	490	-202.6	1.37	30.7	
0829	9	7.69	12.25	792	-197.3	1.37	22.0	
0834	9.5	7.67	12.44	492	-191.3	1.39	20.5	
0838	10	7.66	12.50	491	-193.2	1.39	20.9	
0839								Begin Sampling
0846								End Sampling

COMMENTS: Turbidity meter set at improper scale until 0809. Organic sample number - EOOF5; inorganic sample number SO49.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT102A

OPENED: DATE 4/25/00 TIME 1526		CLOSED: DATE 4/25/00 TIME	
Water Level (TOC) 11.41	ft	Water Level (TOC)	ft
Well Depth (TOC) 18.22	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 16	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1536	0	-	-	-	-	-	-	Begin Pumping
1542	5	7.26	13.27	1131	92	3.40	96.1	
1548	10	7.29	12.82	1122	97	3.25	7.1	
1551	12	7.33	12.84	1119	97	3.10	6.1	
1554	14	7.33	13.45	1116	99	3.14	3.7	
1557	16	7.34	13.50	1119	101	3.13	9.0	
1558								Collect Samples

COMMENTS: Organic sample number - EDPN4; inorganic sample number - SO20.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT102B

OPENED: DATE 4/25/00 TIME		CLOSED: DATE 4/25/00 TIME	
Water Level (TOC) 11.10	ft	Water Level (TOC)	ft
Well Depth (TOC) 67.62	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 20	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1423	0	-	-	-	-	-	-	Begin Pumping
1433	5	7.82	14.48	489	29	0.74	2.7	Hydrogen Sulfide Odor?
1444	9	7.73	14.71	496	29	0.42	1.4	Clear, colorless
1451	12	7.72	14.81	499	24	0.34	1.3	Clear, colorless
1501	16	7.71	14.91	500	17	0.29	3.2	Clear, colorless
1510	20	7.71	14.77	501	11	0.29	1.2	Clear, colorless
1512								Collect Samples

COMMENTS:

INSPECTOR:

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT102C

OPENED: DATE 4/25/00 TIME		CLOSED: DATE 4/25/00 TIME	
Water Level (TOC)	ft	Water Level (TOC)	ft
Well Depth (TOC) 161.96	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 36	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1256	0	-	-	-	-	-	-	Begin Pumping
1303	4	-	-	-	-	-	-	Turbid now
1307	5	9.22	13.72	357	169	0.44	>1000	
1310								Muddy!
1315	10	8.70	13.31	413	74	0.32	>1000	
1317								
1319	15							
1320								Low flow rate again
1327	20	8.16	13.44	440	123	0.33	2.2	Turbidity questionable
1331	22	8.12	13.45	442	121	0.29	2.2	Turbidity questionable
1334	24	8.10	13.45	443	120	0.29	2.0	Turbidity questionable
1338	26	8.08	1342	444	118	0.27	2.3	Turbidity questionable
1342	28	8.06	13.43	444	110	0.27	2.1	Turbidity questionable
1348	32	8.04	13.45	445	98	0.25	2.1	Turbidity questionable
1351	34	8.03	13.50	445	92	0.24	1.9	Turbidity questionable
1355	36	8.02	13.53	446	88	0.24	2.3	Turbidity questionable
1356								Collect Samples
1400								Pump Shut off

COMMENTS: Organic sample number - EDPN1; inorganic sample number - SO18.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT105A

OPENED: DATE 5/2/00 TIME 1252		CLOSED: DATE 5/2/00 TIME	
Water Level (TOC) 11.27	ft	Water Level (TOC)	ft
Well Depth (TOC) 18.62	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 7.5	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1300	0	-	-	-	-	-	-	Begin Pumping
1304	1	7.13	11.34	488	-47.1	8.51	>200	Water Level = 11.30 ft TOC
1307	1.5	7.20	11.79	473	-48.1	7.52	127.1	
1309	2	7.26	12.04	460	-59.6	7.40	54.0	
1312	2.5	7.30	12.14	456	-68.8	7.47	22.6	Water Level = 11.29 ft TOC
1315	3	7.32	12.28	454	-72.9	7.63	10.6	
1318	3.5	7.34	12.20	452	-79.4	7.65	7.4	
1321	4	7.34	1245	450	-81.4	7.55	5.7	Flo-Thru Cell - Battery low
1324	4.5	-	-	-	-	-	4.4	Water shut off
1327	5	6.62	12.20	448	32.7	7.64	3.2	Flo-Thru Cell plugged into
1329	5.5	7.00	12.03	448	-49.1	7.87	3.7	generator
1331	6	7.18	12.07	447	-62.9	7.88	2.4	
1333	6.5	7.23	12.06	447	-66.8	7.92	2.5	
1335	7	7.29	12.11	446	-70.5	7.67	1.8	
1337	7.5	7.32	12.13	446	-69.8	7.97	2.0	
1338								Begin Sampling
1342								End Sampling

COMMENTS: Organic sample number - EOOFK; inorganic sample number - SO47.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT106A

OPENED: DATE 5/2/00 TIME 1520		CLOSED: DATE 5/2/00 TIME	
Water Level (TOC) 9.18	ft	Water Level (TOC)	ft
Well Depth (TOC) 18.56	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 6	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1529	0	-	-	-	-	-	-	Begin Pumping
1534	1.5	6.84	11.52	1090	-103.0	4.02	>200	Brown colored
1536	2	6.83	11.57	1084	-103.4	4.48	>200	Water Level = 9.22 ft TOC
1538	2.5	6.83	11.69	1092	-104.9	4.90	>200	
1540	3	6.83	11.81	1086	-106.3	4.99	171	
1543	3.5	6.84	11.83	1089	-107.5	5.25	184	
1546	4	6.84	11.90	1096	-108.0	5.50	174	
1549	4.5	6.84	11.84	1101	-109.0	6.11	180	
1552	5	6.84	11.96	1100	-109.6	6.40	170	
1554	5.5	6.84	11.80	1100	-109.6	6.49	185	
1555	6	6.84	11.77	1104	-109.5	6.43	177	
1558								Begin Sampling
1604								End Sampling

COMMENTS: Organic sample number - EOOF4; inorganic sample number - SO48.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT111A

OPENED: DATE 4/28/00 TIME		CLOSED: DATE 4/28/00 TIME	
Water Level (TOC) 13.01	ft	Water Level (TOC)	ft
Well Depth (TOC) 21.71	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 32	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0922	0	-	-	-	-	-	-	Begin Pumping
0927	5	5.86	11.38	694	89	2.89	24.2	
0932	10	5.90	11.14	728	56	2.35	6.0	
0934	12	5.91	11.10	735	52	2.29	4.8	
0936	14	5.92	11.07	745	43	2.18	4.1	
0938	16	5.94	11.06	752	40	2.13	3.8	
0940	18	5.95	11.11	761	35	2.07	3.4	
0942	20	5.94	11.12	763	34	2.03	3.1	
0944	22	5.94	11.14	769	30	1.97	2.7	
0946	24	5.94	11.14	773	29	1.96	2.8	
0948	26	5.95	11.15	780	28	1.95	2.7	
0951	28	5.95	11.18	785	27	1.92	2.1	
0954	30	5.96	11.19	787	26	1.92	2.4	Hydrogen Sulfide Odor?
0957	32	5.96	11.21	792	26	1.89	2.5	
0958								Collect Samples

COMMENTS: Organic sample numbers - EOOFB; inorganic sample numbers - SO40.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT112A

OPENED: DATE 4/27/00 TIME 0745		CLOSED: DATE 4/27/00 TIME	
Water Level (TOC) 10.16	ft	Water Level (TOC)	ft
Well Depth (TOC) 17.86	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 73	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0905	0	-	-	-	-	-	-	Begin Pumping
0911	5	7.48	9.74	817	71	5.08	10.8	Slightly cloudy
0916	10	7.53	9.53	804	80	4.78	2.0	Clear, colorless
0922	15	7.55	9.50	807	87	4.76	1.1	Clear, colorless
0929	20	7.55	9.62	807	93	4.70	1.1	Clear, colorless
0935	25	7.56	9.60	806	96	4.68	1.5	Clear, colorless
0942	30	7.56	9.77	804	100	4.73	1.6	Clear, colorless
0949	35	7.57	9.79	806	102	4.70	1.0	Clear, colorless
0955	40	7.57	9.80	803	104	4.70	4.1	Clear, colorless
1002	45	7.57	9.83	805	106	4.73	2.0	Clear, colorless
1008	50	7.57	9.81	808	109	4.74	2.7	Clear, colorless
1015	55	7.57	9.65	808	112	4.77	0.9	Clear, colorless
1023	60	7.57	9.75	815	113	4.80	1.8	Clear, colorless
1031	65	7.57	9.90	811	116	4.83	1.2	Clear, colorless
1035	70	7.57	9.87	814	118	4.87	0.8	Clear, colorless
1041	73	7.57	9.86	817	119	4.89	3.1	Clear, colorless
1048								Collect Samples

COMMENTS: Organic sample number - EDCG8; inorganic sample number - SO35; metals sample number - SO36.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT112B

OPENED: DATE 4/27/00 TIME 0745		CLOSED: DATE 4/27/00 TIME	
Water Level (TOC) 10.34	ft	Water Level (TOC)	ft
Well Depth (TOC) 62.23	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 35	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0809	0	-	-	-	-	-	-	Begin Pumping
0814	5	7.50	11.26	432	59	1.27	2.6	Clear, colorless
0818	10	7.61	11.45	433	0	0.77	4.9	Clear, colorless
0823	15	7.66	11.48	433	-19	0.49	1.4	Clear, colorless
0828	20	7.68	11.47	434	-24	0.38	1.7	Clear, colorless
0833	25	7.69	11.52	434	-30	0.32	1.6	Clear, colorless
0838	30	7.70	11.52	435	-34	0.30	1.6	Clear, colorless
0843	35	7.70	11.52	436	-37	0.28	1.6	Clear, colorless
0844								Collect Samples

COMMENTS: Organic sample number - EDCG6; inorganic sample number - SO33. Duplicate organic sample number - EDCG7; duplicate inorganic sample number - SO34.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT113A

OPENED: DATE 4/26/00 TIME 0857		CLOSED: DATE 4/26/00 TIME	
Water Level (TOC) 16.88	ft	Water Level (TOC)	ft
Well Depth (TOC) 24.54	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 17	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1001	0	-	-	-	-	-	-	Begin Pumping
1008	5	7.55	11.72	394	136	10.58	95.8	
1010	7	7.60	11.31	407	133	9.73	14.3	
1012	9	7.62	11.24	412	132	9.47	5.0	
1014	11	7.63	11.18	415	132	9.24	1.2	
1017	13	7.63	11.18	416	132	9.12	0.4	
1019	15	7.63	11.20	417	133	9.03	0.4	
1020	17	7.64	11.21	418	133	8.93	0.1	
1025								Collect Samples

COMMENTS: Organic sample number - EDCG2; inorganic sample number - SO29.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT113B

OPENED: DATE 4/26/00 TIME 0850		CLOSED: DATE 4/26/00 TIME	
Water Level (TOC) 17.13	ft	Water Level (TOC)	ft
Well Depth (TOC) 70.14	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 38	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0858	0	-	-	-	-	-	-	Begin Pumping
0904	4	7.23	12.04	599	167	0.97	33.6	
0907	7	7.33	12.01	601	104	0.66	4.3	
0910	10	7.37	12.08	601	85	0.56	4.9	
0913	12	7.39	12.12	602	75	0.50	4.1	
0915	14	7.40	12.13	602	68	0.46	3.5	
0918	16	7.41	12.14	602	59	0.46	3.8	
0921	18	7.42	12.19	602	48	0.41	3.5	
0923	20	7.43	12.22	602	38	0.42	3.2	
0925	22	7.43	12.22	601	34	0.40	2.9	
0927	24	7.44	12.22	602	26	0.40	3.5	
0930	26	7.44	12.25	601	19	0.39	3.3	
0934	30	7.45	12.25	601	12	0.35	3.3	
0936	32	7.45	12.26	602	8	0.36	3.5	
0938	34	7.45	12.30	602	5	0.33	3.5	
0940	36	7.45	12.33	602	3	0.32	3.7	
0943	38	7.46	12.35	602	2	0.31	3.5	
0945								Collect Samples

COMMENTS: Organic sample number - EDCG0; inorganic sample number - SO28.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT114A

OPENED: DATE 5/3/00 TIME 1625		CLOSED: DATE 5/3/00 TIME	
Water Level (TOC) 16.00	ft	Water Level (TOC)	ft
Well Depth (TOC) 24.66	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 9	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1635	0	-	-	-	-	-	-	Begin Pumping
1642	1.5	6.76	14.78	1603	-100.5	-	>200	Water Level = 16.01 ft TOC
1644	2	6.77	15.30	1606	-100.6	-	125.1	
1646	2.5	6.77	15.41	1605	-101.5	-	77.7	
1650	3	6.78	15.11	1603	-101.3	-	65.2	
1653	3.5	6.78	15.05	1595	-103.0	-	44.8	
1656	4	6.78	15.08	1592	-103.9	-	35.3	Water Level = 16.01 ft TOC
1659	4.5	6.79	15.08	1591	-104.5	-	25.8	
1702	5	6.79	15.05	1592	-104.6	-	22.1	
1705	5.5	6.79	14.86	1590	-103.6	-	19.7	
1707	6	6.79	14.73	1593	-104.4	-	16.0	
1710	6.5	6.79	14.71	1590	-105.3	-	13.7	
1712	7	6.79	14.72	1591	-105.9	-	12.7	Water Level = 16.01 ft TOC
1714	7.5	6.80	14.72	1590	-106.4	-	13.4	
1716	8	6.80	14.86	1593	-107.0	-	10.5	
1719	8.5	6.80	14.84	1594	-107.8	-	9.4	
1721	9	6.80	14.83	1595	-108.2	-	8.5	
1722								Begin Sampling
1732								End Sampling

COMMENTS: Could not calibrate turbidity meter to standards. Turbidity meter is reading high. Organic sample number - EECFN10; inorganic sample number - SO56.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT114B

OPENED: DATE 5/3/00 TIME 1735		CLOSED: DATE 5/3/00 TIME	
Water Level (TOC) 16.04	ft	Water Level (TOC)	ft
Well Depth (TOC) 69.2	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 6.5	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1745	0	-	-	-	-	-	-	Begin Pumping
1748	1	7.02	13.62	732	-162.6	-	115.6	
1751	1.5	7.05	13.83	730	-165.7	-	70.5	
1754	2	7.07	13.97	730	-168.3	-	53.6	Water Level = 16.05 ft TOC
1756	2.5	7.08	14.00	729	-170.2	-	38.0	
1757	3	7.08	13.99	729	-171.0	-	32.0	
1759	3.5	7.09	14.00	729	-171.8	-	24.4	
1801	4	7.09	14.00	729	-172.4	-	20.1	Water Level = 16.04 ft TOC
1803	4.5	7.09	14.07	729	-173.5	-	13.0	
1806	5	7.09	14.07	729	-173.7	-	12.2	
1807	5.5	7.10	14.03	730	-174.0	-	10.4	
1809	6	7.10	14.03	729	-174.3	-	8.2	
1811	6.5	7.10	14.07	729	-174.5	-	8.2	
1812								Begin Sampling
1817								End Sampling

COMMENTS: Organic sample number - EECFN11; inorganic sample number - SO57.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT115A

OPENED: DATE 4/28/00 TIME 1325		CLOSED: DATE 5/1/00 TIME	
Water Level (TOC) 12.83	ft	Water Level (TOC)	ft
Well Depth (TOC) 19.79	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 8.5	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME **4/28/00**	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1335	0	-	-	-	-	-	-	Begin Pumping
1342	1	-	-	-	-	-	>200	Gray-brown colored
1348	2	-	-	-	-	-	>200	Gray-brown colored
1354				Pumping		Stopped		QED not working
5/1/00								Water Level = 12.80 ft TOC
1148	0	-	-	-	-	-	-	Begin Pumping
1152	1	6.58	10.64	1462	9.5	0.99	>200	Cloudy
1156	2	-	-	-	-	-	-	Stopped Pumping - Rain
1250	2	-	-	-	-	-	-	Resume Pumping
1251	3	6.62	11.18	1491	-31.7	3.41	>200	
1253	3.5	6.62	10.69	1365	-32.0	2.70	120.5	Water Level = 12.87 ft TOC
1255	4	6.61	10.89	1341	-31.6	2.86	113.4	
1257	4.5	6.61	11.01	1325	-33.3	3.15	149.7	
1259	5	6.61	11.14	1330	-34.9	3.15	148.6	Water Level = 12.87 ft TOC
1301	5.5	6.61	11.19	1340	-36.8	3.26	137.2	
1303	6	6.62	11.21	1348	-37.3	3.27	135.5	
1304	6.5	6.62	11.22	1357	-38.5	3.26	130.7	
1305	7	6.62	11.23	1361	-39.8	3.27	123.3	
1307	7.5	6.62	11.23	1361	-39.8	3.27	113.8	
1309	8	6.62	11.20	1374	-41.1	3.32	110.2	Water Level = 12.88 ft TOC
1311	8.5	6.62	11.21	1382	-41.8	3.28	106.3	
1313								Begin Sampling
1318								End Sampling

COMMENTS: Organic sample number - EOOFF; inorganic sample number - SO43. Trip blank sample number - EOOFL.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT116A

OPENED: DATE 5/3/00 TIME 1340		CLOSED: DATE 5/3/00 TIME	
Water Level (TOC) 10.25	ft	Water Level (TOC)	ft
Well Depth (TOC) 16.32	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 6.5	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1351	0	-	-	-	-	-	-	Begin Pumping
1359	2	6.59	12.45	3570	-158.8	-	50.3	Water Level = 10.50 ft TOC
1402	2.5	6.59	12.55	3573	-157.8	-	33.9	
1405	3	6.59	12.50	3565	-155.4	-	22.8	
1408	3.5	6.60	12.52	3565	-151.8	-	15.1	
1411	4	6.60	12.45	3564	-148.5	-	10.2	Water Level = 10.44 ft TOC
1414	4.5	6.60	12.62	3559	-144.8	-	8.3	
1417	5	6.61	13.10	3558	-139.4	-	7.5	
1420	5.5	6.61	12.53	3566	-138.7	-	6.8	
1422	6	6.61	12.50	3567	-139.8	-	6.6	
1424	6.5	6.61	12.45	3565	-139.8	-	6.2	
1425								Begin Sampling
1434								End Sampling

COMMENTS: Dissolved Oxygen probe not working. Organic sample number - EECFN5; inorganic sample number - SO53. Duplicate organic sample number - EECFN6; inorganic sample number SO54.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT116B

OPENED: DATE 5/3/00 TIME 1437		CLOSED: DATE 5/3/00 TIME	
Water Level (TOC) 10.12	ft	Water Level (TOC)	ft
Well Depth (TOC) 59.76	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 5	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1447	0	-	-	-	-	-	-	Begin Pumping
1454	3.5	6.78	13.66	1071	-99.6	-	5.4	Water Level = 10.12 ft TOC
1457	4	6.79	13.59	1087	-101.0	-	3.2	
1500	4.5	6.79	13.63	1088	-102.0	-	3 4	
1503	5	6.79	13.66	1075	-102.7	-	4.4	
1504								Begin Sampling
1509								End Sampling

COMMENTS: Organic sample number - EECFN8; inorganic sample number SO55.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT117A

OPENED: DATE 4/27/00 TIME 1503		CLOSED: DATE 4/27/00 TIME	
Water Level (TOC) 13.35	ft	Water Level (TOC)	ft
Well Depth (TOC) 18.28	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 25	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1515	0	-	-	-	-	-	-	Begin Pumping
1519	2.5	7.64	10.73	80	50	9.88	19.9	Water Level = 13.58 ft TOC
1522	5	7.52	10.59	119	52	8.62	15.1	Colorless
1525	7.5	7.41	10.51	159	53	7.36	14.2	Colorless
1528	10	7.37	10.46	188	51	6.35	14.1	Colorless
1532	12.5	7.36	10.48	211	46	5.24	13.6	
1536	15	7.37	10.47	238	48	4.49	13.2	
1539	17.5	7.37	10.44	258	49	4.03	13.0	
1542	20	7.38	10.45	270	50	3.62	12.7	
1546	22.5	7.38	10.47	284	50	3.28	12.3	
1548		7.38	10.45	290	51	3.12	12.0	
1549	25	7.38	10.47	290	51	3.10	12.0	
1550								Collect Samples

COMMENTS: Organic sample number - EOOF9; inorganic sample number - SO38.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT117B

OPENED: DATE 4/27/00 TIME		CLOSED: DATE 4/27/00 TIME	
Water Level (TOC) 12.76	ft	Water Level (TOC)	ft
Well Depth (TOC)	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 30	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
1606	0	-	-	-	-	-	-	Begin Pumping
1612	5	7.48	14.18	664	-59	1.31	1.4	
1618	10	7.51	13.51	711	-93	0.49	1.2	
1625	15	7.23	13.28	715	-102	0.38	1.0	
1630	20	7.54	13.17	716	-108	0.30	1.2	
1636	25	7.55	13.10	715	-113	0.27	1.1	
1638	28	7.56	13.09	715	-114	0.25	1.1	
1641	30	7.56	13.11	715	-115	0.23	1.0	
1642								Collect Samples

COMMENTS: Organic sample number - EOOFA; inorganic sample number - SO39.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT118B

OPENED: DATE 4/28/00 TIME		CLOSED: DATE 4/28/00 TIME	
Water Level (TOC) 12.99	ft	Water Level (TOC)	ft
Well Depth (TOC) 64.9	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 29	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0829	0	-	-	-	-	-	-	Begin Pumping
0832	5	7.00	11.91	972	9	1.19	1.5	Decrease flow rate
0837	10	7.07	12.26	973	-50	0.60	1.2	
0842	15	7.10	12.41	974	-67	0.40	1.2	
0847	20	7.11	12.52	974	-74	0.31	1.3	
0852	25	7.11	12.54	974	-80	0.27	1.3	
0855	27	7.11	12.53	973	-82	0.27	1.4	
0857	29	7.11	12.56	973	-84	0.26	1.4	
0858								Collect Samples

COMMENTS: Organic sample number - EOOFC; Inorganic sample number - SO41 & MS/MSD.

INSPECTOR: _____

WATER SAMPLING LOG

PROJECT NAME: Himco Dump Superfund Site, Elkhart, Indiana

WELL NUMBER: WT119A

OPENED: DATE 4/28/00 TIME 0830		CLOSED: DATE 4/28/00 TIME	
Water Level (TOC) 10.14	ft	Water Level (TOC)	ft
Well Depth (TOC) 20.30	ft	Well Depth (TOC)	ft
Design Depth (TOC)	ft	Design Depth (TOC)	ft
Est. Sed. In Well	ft	Est. Sed. In Well	ft
Depth to Floating Product (TOC)	ft	Depth to Floating Product (TOC)	ft
Floating Product Thickness	ft	Total Water Removed 4.5	gals

PURGE METHOD: Grundfos Redi-Flo 2 Submersible Pump

TIME	GAL. REM.	pH	TEMP. (°C)	SP. COND. (µS/cm)	Eh (mv)	D.O. (mg/L)	TURB. (NTU)	REMARKS
0931	0	-	-	-	-	-	-	Begin Pumping
0935	1	5.85	10.82	1592	51.1	1.70	3.3	Water Level = 10.2 ft TOC
0940	2	6.28	11.67	1595	-40.0	0.42	2.2	Yellowish Tinge
0943	2.5	6.37	11.88	1595	-49.8	0.37	2.0	Yellowish Tinge
0945	3	6.42	12.07	1592	-54.9	0.35	1.5	Yellowish Tinge
0948	3.5	6.45	12.06	1589	-57.4	0.32	1.6	Yellowish Tinge
0951	4	6.48	12.05	1587	-59.5	0.31	1.0	Yellowish Tinge
0954	4.5	6.49	12.09	1588	-60.7	0.30	1.0	Yellowish Tinge
0955								Begin Sampling
1000								End Sampling

COMMENTS: Organic sample number - EOOFE; inorganic sample number - SO42. Hydrogen Sulfide odor from purge water.

INSPECTOR: _____

PAGE·A·DAY® CALENDAR NOTES

Nov 14	R 111520A	41 42 19.5275 86 00 08.3698
Nov 15	R 111521A	41. 42 18.078 86 00 11.855
Nov 16	R 111620A	41 42 19.2177 86 00 28.766
Nov 18	R 111618 A	41 42 16.1112 86 00 17.5977

~~IBIGRP~~

~~FAMNAME~~
~~IBI~~
IBIGRP
NAMELIST
~~SPECIES~~

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No. 342

11/15/00 LRW / RTK, Tim Oden

54971 North Wood

Samples collected @ 1500

Sample Site 501

Spigot Open @ 1445

Hose on @ 1454

Trip Blank

VOA

SVOC Pest PCB

Metals

Cyanide

Cl Br

Temp	Orp	Tur	pH	Sc	Time
13.40	159	0.0	7.51	691	1459
13.40	137	0.0	7.51	691	1502
13.39	85	0.0	7.51	691	1505

K1115001A Rive file

No. 342

4/15/00 Apu RTK . Tim Coleman

54305 Westwood

Samples collected @ 1630

Sample site SO2

Sample site for "EC" 54305 Westwood

Spigot on @ 1618
Hlab on @ 1618

MS MSD
VOA
SVOC Pest PCB
Metals
Cyanide
Anions
ECs

Temp	Orp	Tur	pH	Sc	DO	Time
13.95	-119	0.08	7.29	712	.41	1624
13.99	-158	0.0	7.31	711	.25	1632
13.57	-148	0.0	7.24	711	.22	1637
Cover 111521A						
13.58	-150	0.0	7.24	711	.22	1640
13.63	-152	0.0	7.24	711	.22	1643

No. 342

11/16/00 LRW, RTK

RTK 11/16/00

EPA Himco ~~101A~~ 116A
Blank sample collected @ 1030
Samples Collected @ ~~1115~~ 1049
EPA Samples 1045 RTK
Sample site ~~S03~~ S03 11/16

Sample site for "EC" = Himco ~~101A~~ 116

DT
Pump On ~~1040~~ 1035 RTK 11/16/00
Pump off

Temp	Orp	Tur	pH	Sc	DO	Time
11.83	171	23.7	6.67	3379	.38	1041
12.57	23	7.5	6.65	3388	.47	1041
12.71	-35	2.0	6.68	3388	.48	1042
12.74	-67	1.1	6.69	3387	.43	1042
12.75	-101	.8	6.70	3386	.39	1043
12.79	-110	.6	6.70	3384	.35	1043
12.84	-120	.5	6.70	3386	.33	1044

Purge 5 gallons, 5 well volumes
take sample @ 1045

Rover File R0116 20A
Trip Blank 1000
TD 14.8'
W/C 11.35 DTW: ≈ W/C ≈ 5'

Stick-up 116B

≅ 1.8' above LSD

w/c 12.99 - 1.61 = 11.38

Stick-up 116A

≅ 1.9' above LSD

No. 342

1/16/00 LRW, RTK

EPA Himco ~~116A~~ 101A

Samples collected @ 1320

Sample site S04

Sample site for "EC" = Himco 116A

Pump On 1316
Pump Off

Temp	Orp	Tur	pH	Sc	DO	Time
12.25	-139	12.9	7.00	1230	.69	1320
12.75	-147	3.0	7.01	1224	.53	1323
12.90	-150	0.6	7.01	1222	.46	1326
13.04	-153	0.1	7.01	1221	.40	1329
13.06	-155	0.1	7.01	1220	.38	1332

Rover File R 1116BA
DTW 17.45' TIC
TD 19.8

Appendix E

1998 and 1999 Supplemental Site Investigation Soil Gas Survey Forms

1998 Supplemental Site Investigation Records

SOIL GAS SURVEY FORM

Client: U.S EPA Region 5 Date: 11/13/98

Site: Himco Dump Superfund Site Station Location: TT-11

Sampling Team: Rick Grabowski, Mark Anderson

Temperature: _____ (°F – 32)/1.8 = 12.3 °C (t_A)

Barometric Pressure : 763.9 mm Hg at 1412 AM/PM (P_A)

Weather: Partly cloudy, calm

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: — ~~ppm~~ % LEL Sensor not working.

PID Reading: 17.0 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bach M-5

Calibrator Readings (L/min): 1576 1773 1676 1777 1775 1673 1570

Ave. Cal. Reading (L/min): 1.69 (Q_A) Flow Readout (L/min): 1.94

Tenax Tube Number: 7124 A Tenax/Charcoal Tube Number: 7124 B

Start Time: 1416 Flow Readout (L/min): 1.94

Stop Time: 1428 Flow Readout (L/min): 1.94

Elapsed Time: 12 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.67 = 20.28 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.28 x 1.01 x 1.04 = 21.30 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/13/98

Site: Himco Dump Superfund Site Station Location: TT-12

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 10.4 °C (t_A)

Barometric Pressure : 765.3 mm Hg at 1305 AM/PM (P_A)

Weather: Partly cloudy, calm

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: — ~~ppm~~ % LEL Sensor not working

PID Reading: 18.7 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1531 1510 1453 1516 1519 1450 1509

Ave. Cal. Reading (L/min): 1.50 (Q_A) Flow Readout (L/min): 1.81

Tenax Tube Number: 7219 A Tenax/Charcoal Tube Number: 7219 B

Start Time: 1309 Flow Readout (L/min): 1.81

Stop Time: 1323 Flow Readout (L/min): 1.81

Elapsed Time: 14 Min. (T) % Difference Flow Readout: Ø

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.50 = 21 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21 x 1.01 x 1.05 = 22.77 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/13/98

Site: Himco Dump Superfund Site Station Location: TT-12

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 10.4 °C (t_A)

Barometric Pressure : 765.6 mm Hg at 1214 AM/PM (P_A)

Weather: Partly cloudy, calm

Sample Depth: 0 ~~ft~~ in (Ambient Air Blank)

H_2S Reading: - ppm CH_4 Reading: - ppm

PID Reading: - ppm FID Reading: - ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1426 1412 1347 1404
1408 1410 1407

Ave. Cal. Reading (L/min): 1.40 (Q_A) Flow Readout (L/min): 1.74

Tenax Tube Number: 7107A Tenax/Charcoal Tube Number: 7107B

Start Time: 1214 Flow Readout (L/min): 1.74

Stop Time: 1229 Flow Readout (L/min): 1.74

Elapsed Time: 15 Min. (T) % Difference Flow Readout: Ø

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 15 x 1.40 = 21.00 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.00 x 1.01 x 1.05 = 22.27 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/13/98

Site: Himco Dump Superfund Site Station Location: TT-12

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 10.3 °C (t_A)

Barometric Pressure : 765.5 mm Hg at 1233 AM/PM (P_A)

Weather: Partly cloudy, Calm

Sample Depth: 0 ~~ft~~/in (Rinsate Blank)

H_2S Reading: – ppm CH_4 Reading: – ppm

PID Reading: – ppm FID Reading: – ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bick M-5

Calibrator Readings (L/min): 1436 1414 1510 1417

1417 1421 1361

Ave. Cal. Reading (L/min): 1.43 (Q_A) Flow Readout (L/min): 1.77

Tenax Tube Number: 7120A Tenax/Charcoal Tube Number: 7120B

Start Time: 1234 Flow Readout (L/min): 1.77

Stop Time: 1248 Flow Readout (L/min): 1.78

Elapsed Time: 14 Min. (T) % Difference Flow Readout: <1

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.43 = 20.02 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.02 x 1.01 x 1.05 = 21.23 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/13/98

Site: Himco Dump Superfund Site Station Location: TT-13

Sampling Team: Rick Grabowski, Mark Anderson

Temperature: _____ (°F – 32)/1.8 = 8.7 °C (t_A)

Barometric Pressure : 766.7 mm Hg at 1057 AM/PM (P_A)

Weather: Partly cloudy, calm

Sample Depth: 4.3 (ft)/in

H_2S Reading: 101 ppm CH_4 Reading: — ~~ppm~~ % LEL Sensor not working.

PID Reading: 39.5 ppm FID Reading: — ~~ppm~~ % FID Flame out.

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bock M-5

Calibrator Readings (L/min): 1611 1667 1669 1664

1667 1692 1584

Ave. Cal. Reading (L/min): 1.65 (Q_A) Flow Readout (L/min): 1.85

Tenax Tube Number: 7209 A Tenax/Charcoal Tube Number: 7209B

Start Time: 1106 Flow Readout (L/min): 1.85

Stop Time: 1118 Flow Readout (L/min): 1.85

Elapsed Time: 12 Min. (T) % Difference Flow Readout: Ø

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.65 = 19.80 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.80 x 1.01 x 1.06 = 21.20 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/13/98

Site: Himco Dump Superfund Site Station Location: TT-4

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 5.9 °C (t_A)

Barometric Pressure : 767.4 mm Hg at 0928 AM/PM (P_A)

Weather: Cloudy, no breeze

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: - ~~ppm~~ % LEL Sensor not working

PID Reading: 10.6 ppm FID Reading: - ~~ppm~~ % FID flame out.

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bach M.5

Calibrator Readings (L/min): 1566 1560 1557 1555

1619 1633 1560

Ave. Cal. Reading (L/min): 1.58 (Q_A) Flow Readout (L/min): 1.84

Tenax Tube Number: 7102A Tenax/Charcoal Tube Number: 7102B

Start Time: 0934 Flow Readout (L/min): 1.84

Stop Time: 0947 Flow Readout (L/min): 1.84

Elapsed Time: 13 Min. (T) % Difference Flow Readout: Ø

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.58 = 20.54 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.54 x 1.01 x 1.06 = 21.79 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/13/98

Site: Himco Dump Superfund Site Station Location: TT-14 Duplicate

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 7.8 °C (t_A)

Barometric Pressure : 767.3 mm Hg at 0955 AM/PM (P_A)

Weather: Cloudy, no breeze

Sample Depth: 4.5 (ft)/in

H_2S Reading: – ppm CH_4 Reading: – ppm

PID Reading: – ppm FID Reading: – ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bios M-5

Calibrator Readings (L/min): 1519 1516 1593 1610

1612 1602 1596

Ave. Cal. Reading (L/min): 1.58 (Q_A) Flow Readout (L/min): 1.84

Tenax Tube Number: 7206 A Tenax/Charcoal Tube Number: 7206 B

Start Time: 0953 Flow Readout (L/min): 1.84

Stop Time: 1006 Flow Readout (L/min): 1.84

Elapsed Time: 13 Min. (T) % Difference Flow Readout: Ø

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.58 = 20.54 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.54 x 1.01 x 1.06 = 21.99 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/12/98

Site: Himco Dump Superfund Site Station Location: TT-15

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 8.7 °C (t_A)

Barometric Pressure : 764.5 mm Hg at 1600 AM/PM (P_A)

Weather: Cloudy, slightly breezy

Sample Depth: 3.5 (ft) in

H_2S Reading: 0 ppm CH_4 Reading: — ~~ppm~~ % LEL sensor not working

PID Reading: 32.9 ppm FID Reading: — ~~ppm~~ % FID Flame out

Air Sampling Pump Mfg./Model: Foxboro TVA 1000 (Air sampling pump inlet broken. Substituting pump in PID/FID to draw air out)

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 346.0 347.9 328.6 336.7 345.6 333.7 329.8

Ave. Cal. Reading (L/min): 0.39 (Q_A) Flow Readout (L/min): N/A

Tenax Tube Number: 7112A Tenax/Charcoal Tube Number: 7112B

Start Time: 1654 Flow Readout (L/min): N/A

Stop Time: 1745 Flow Readout (L/min): N/A

Elapsed Time: 51 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 51 x 0.39 = 19.89 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.89 x 1.01 x 1.06 = 21.29 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/17/98

Site: Himco Dump Superfund Site Station Location: TT-16

Sampling Team: Rick Grabowski

Temperature: _____ (°F – 32)/1.8 = 7.9 °C (t_A)

Barometric Pressure : 765.3 mm Hg at 1021 AM/PM (P_A)

Weather: Cloudy, sprinkles, calm

Sample Depth: 3.0 (ft)/in

H_2S Reading: 4 ppm CH_4 Reading: > 5 ~~ppm~~ %

PID Reading: 28.4 ppm FID Reading: — ~~ppm~~ % Flame out.

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1597 1516 1517 1523
1520 1516 1515

Ave. Cal. Reading (L/min): 1.53 (Q_A) Flow Readout (L/min): 1.75

Tenax Tube Number: 7213 A Tenax/Charcoal Tube Number: 7213 B

Start Time: 1042 Flow Readout (L/min): 1.75

Stop Time: 1055 Flow Readout (L/min): 1.76

Elapsed Time: 13 Min. (T) % Difference Flow Readout: Ø

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.53 = 19.89 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.89 x 1.01 x 1.06 = 21.29 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/12/98

Site: Himco Dump Superfund Site Station Location: TT-7

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 9.8 °C (t_A)

Barometric Pressure: 770.1 mm Hg at 1232 AM/PM (P_A)

Weather: Cloudy, slightly breezy

Sample Depth: 4.0 ft/in

H_2S Reading: 4 ppm CH_4 Reading: — ~~ppm~~ % LEL Sensor not working

PID Reading: 5.04 ppm FID Reading: — ~~ppm~~ % FID Flame out.

Air Sampling Pump Mfg./Model: Foxboro TVA 1000 (Air sampling pump inlet broken. Substituting pump on PID/FID to draw air out)

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 426.7 522.1 492.7 547.6 410.1 616.5 531.9

Ave. Cal. Reading (L/min): 0.51 (Q_A) Flow Readout (L/min): N/A

Tenax Tube Number: 7121A Tenax/Charcoal Tube Number: 7121B

Start Time: 1230 start ~~1237 stop~~ 1240 start Flow Readout (L/min): N/A

Stop Time: 1315 stop Flow Readout (L/min): N/A

Elapsed Time: 39 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 39 x 0.51 = 19.89 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.89 x 1.01 x 1.05 = 21.09 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/12/95

Site: Himco Dump Superfund Site Station Location: TT-18

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 9.9 °C (t_A)

Barometric Pressure : 770.7 mm Hg at 1049 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 4.5 ~~ft~~/in

H_2S Reading: — ppm CH_4 Reading: — ~~ppm~~ % Detected H_2O using nose. Will not put CGI on line.

PID Reading: 130 ppm FID Reading: 0.12 ~~ppm~~ %

Air Sampling Pump Mfg./Model: Foxboro TVA 1000 (for sampling pump inlet broken. Substituting pump on PID/FID to draw air out)

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 638.3 648.4 662.6 669.5 664.1 689.6 645.1

Ave. Cal. Reading (L/min): 0.66 (Q_A) Flow Readout (L/min): N/A

Tenax Tube Number: 7211A Tenax/Charcoal Tube Number: 7211B

Start Time: 1101 Flow Readout (L/min): N/A

Stop Time: 1132 Flow Readout (L/min): N/A

Elapsed Time: 31 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 31 x 0.66 = 20.46 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.46 x 1.01 x 1.05 = 21.70 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 4/12/18

Site: Hume Dump Superfund Site Station Location: TT-19

Sampling Team: Rick Grabowski, Uwe Anderson

Temperature: _____ (°F – 32)/1.8 = 5.4 °C (t_A)

Barometric Pressure : 771.4 mm Hg at 0848 AM/PM (P_A)

Weather: Partly cloudy, breezy

Sample Depth: 4.5 ft/in

H_2S Reading: 7999 ppm CH_4 Reading: 4.4 ~~ppm~~ %

PID Reading: 240 ppm FID Reading: 1 ~~ppm~~ % Note FID blowing out due to oxygen deficiency

Air Sampling Pump Mfg./Model: Forbes Tuff 1000 (Use sampling pump inlet bottom, substituting pump on FID/PID to draw air out)

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 597.3 604.0 600.0 595.6 603.4 623.8 591.0

Ave. Cal. Reading (L/min): 0.60 (Q_A) Flow Readout (L/min): N/A

Tenax Tube Number: 7125A Tenax/Charcoal Tube Number: 7125B

Start Time: 0905 Flow Readout (L/min): N/A

Stop Time: 0938 Flow Readout (L/min): N/A

Elapsed Time: 33 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 33 x 0.60 = 19.8 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.8 x 1.02 x 1.07 = 21.61 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/7/98

Site: Himco Dump Superfund Site Station Location: TT-20

Sampling Team: Rick Grabowski, Mark Anderson

Temperature: _____ (°F – 32)/1.8 = 7.3 °C (t_A)

Barometric Pressure : 30.21 ~~mm~~ in Hg at 1213 AM/PM (P_A)

Weather: Cloudy, slightly breezy, occasional sprinkles

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bock M-5

Calibrator Readings (L/min): 1.62 1.43 1.54 1.29 1.45 1.44 1.53

Ave. Cal. Reading (L/min): 1.47 (Q_A) Flow Readout (L/min): 1.96

Tenax Tube Number: 7110 A Tenax/Charcoal Tube Number: 7110 B

Start Time: 1215 Flow Readout (L/min): 2.00

Stop Time: 1225 Flow Readout (L/min): 2.00

Elapsed Time: 10 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 10 x 1.47 = 14.70 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 14.70 x 1.01 x 1.06 = 15.73 Liters

Trip Blank 7119A, 7119B 0700

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/9/98

Site: Himco Dump Superfund Site Station Location: TT-20

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 7.3 °C (t_A)

Barometric Pressure : 30.31 ~~mm~~ in Hg at 1213 AM/PM (P_A)

Weather: Cloudy, slightly breezy, occassional sprinkles

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): — — — —

— — —

Ave. Cal. Reading (L/min): 1.47 (Q_A) Flow Readout (L/min): 1.96

Tenax Tube Number: 7105 A Tenax/Charcoal Tube Number: 7105 B

Start Time: 1230 Flow Readout (L/min): 2.00

Stop Time: 1251 Flow Readout (L/min): 2.00

Elapsed Time: 21 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 21 x 1.47 = 30.87 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 30.87 x 1.01 x 1.06 = 33.05 Liters

Trip Blank 7119A, 7119B 0700

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/1/98

Site: Himco Dump Superfund Site Station Location: TT-20

Sampling Team: Rick Grabowski, Mark Anderson

Temperature: _____ (°F – 32)/1.8 = 8.1 °C (t_A)

Barometric Pressure : 30.19 ~~mm~~ in Hg at 1259 AM/PM (P_A)

Weather: Cloudy, slightly breezy, occasional sprinkles

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): – – – –

– – –

Ave. Cal. Reading (L/min): 1.47 (Q_A) Flow Readout (L/min): 1.96

Tenax Tube Number: 7115A Tenax/Charcoal Tube Number: 7115B

Start Time: 1259 Flow Readout (L/min): 2.00

Stop Time: 1329 Flow Readout (L/min): 2.00

Elapsed Time: 30 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 30 x 1.47 = 44.10 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 44.10 x 1.01 x 1.06 = 47.21 Liters

Trip Blank 7119A, 7119B 0700

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/4/98

Site: Himco Dump Superfund Site Station Location: TT-21

Sampling Team: Rick Grabowski, Mark Anderson

Temperature: _____ (°F – 32)/1.8 = 10.1 °C (t_A)

Barometric Pressure : 30.16 in Hg at 1544 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 4.5 ft/in

H_2S Reading: >999 ppm CH_4 Reading: 41 %

PID Reading: 302.0 ppm FID Reading: 0.68 %

Air Sampling Pump Mfg./Model: Fuhrer TVA100 (Air sampling pump inlet broken. Substituting pump on PID/FID to draw air out).

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 234.6 247.6 250.7 316.8 235.6 249.8 285.5

Ave. Cal. Reading (L/min): 0.26 (Q_A) Flow Readout (L/min): N/A

Tenax Tube Number: 7208A Tenax/Charcoal Tube Number: 7208B

Start Time: 1602 Flow Readout (L/min): N/A

Stop Time: 1805 Flow Readout (L/min): N/A

Elapsed Time: 123 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 123 x 0.26 = 31.98 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 31.98 x 1.01 x 1.05 = 33.91 Liters

Note: Tenax sorbent tube turned black - have a black condensate forming in tube and sorbent tube.

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/11/98

Site: Himco Dump Superfund Site Station Location: TT-22

Sampling Team: Rick Grabowski, Mark Anderson

Temperature: _____ (°F – 32)/1.8 = 9.1 °C (t_A)

Barometric Pressure : 30.12 ~~mm~~ in. Hg at 1408 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 17.02 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: Forbes TVA 1000 (Air sampling pump inlet broken. Substituting pump on PID/FID to draw air out).

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 741.1 715.8 711.1 720.3 738.8 711.6 731.6

Ave. Cal. Reading (L/min): 0.72 (Q_A) Flow Readout (L/min): N/A

Tenax Tube Number: 7206A Tenax/Charcoal Tube Number: 7206B

Start Time: 1418 Flow Readout (L/min): N/A

Stop Time: 1514 Flow Readout (L/min): N/A

Elapsed Time: 56 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 56 x 0.72 = 40.32 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 40.32 x 1.01 x 1.06 = 43.12 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/11/98

Site: Himco Dump Superfund Site Station Location: TT-23

Sampling Team: Rick Grabowski, Mary Anderson

Temperature: _____ (°F – 32)/1.8 = 8.9 °C (t_A)

Barometric Pressure : 30.68 ~~mm~~ in. Hg at 1218 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 2.01 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: Forbes TVA 1000 (Air Sampling Pump Inlet broken. Substituting pump on PID/FID to draw air out)

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 574.5 617.0 582.0 618.9 623.7 574.8 581.4

Ave. Cal. Reading (L/min): 0.60 (Q_A) Flow Readout (L/min): N/A

Tenax Tube Number: 7218A Tenax/Charcoal Tube Number: 7218B

Start Time: 1226 Flow Readout (L/min): N/A

Stop Time: 1343 Flow Readout (L/min): N/A

Elapsed Time: 67 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 67 x 0.60 = 40.20 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 40.20 x 1.01 x 1.06 = 43.04 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/1/98

Site: Himco Dump Superfund Site Station Location: TT-24

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 6.3 °C (t_A)

Barometric Pressure : 30.05 ~~mm~~ in. Hg at 1026 AM/PM (P_A)

Weather: Partly cloudy, breezy

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 30.05 ppm FID Reading: 0 ~~ppm~~ %

Possible moisture interference.

Air Sampling Pump Mfg./Model: Fabco TVA 1000 (Air sampling pump inlet broken. Substituting pump on PID/FID to draw air out).

Calibrator Mfg./Model: Bock M-5

Calibrator Readings (L/min): 709.7 709.7 704.4 743.7 714.0 724.9 721.0

Ave. Cal. Reading (L/min): 0.73 (Q_A) Flow Readout (L/min): N/A

Tenax Tube Number: 7220A Tenax/Charcoal Tube Number: 7220B

Start Time: 1056 Flow Readout (L/min): N/A

Stop Time: 1151 Flow Readout (L/min): N/A

Elapsed Time: 55 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 55 x 0.73 = 40.15 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 40.15 x 1.06 x 1.07 = 42.96 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/11/98

Site: Himco Dump Superfund Site Station Location: TT-25

Sampling Team: Rick Grabowski, Mark Anderson

Temperature: _____ (°F – 32)/1.8 = 2.4 °C (t_A)

Barometric Pressure : 29.98 ~~mm~~ in. Hg at 08:25 AM/PM (P_A)

Weather: Cloudy, occasional snow/rain showers, breezy

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 1.17 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: Fisher TVA1000 (Air sampling pump inlet broken. Substituted pump on PID/FID to draw air out).

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 580.2 573.9 603.4 572.4 669.4 579.0 562.5

Ave. Cal. Reading (L/min): 0.60 (Q_A) Flow Readout (L/min): N/A

Tenax Tube Number: 7212A Tenax/Charcoal Tube Number: 7212B

Start Time: 9:04 Flow Readout (L/min): N/A

Stop Time: 10:11 Flow Readout (L/min): N/A

Elapsed Time: ~~[illegible]~~ 67 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 67 x 0.60 = 40.20 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 40.20 x 1.00 x 1.09 = 43.42 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/16/98

Site: Himco Dump Superfund Site Station Location: TT-26

Sampling Team: Rich Grabowsky, Mark Anderson

Temperature: _____ (°F – 32)/1.8 = 4.9 °C (t_A)

Barometric Pressure : 756.6 mm Hg at 0833 AM/PM (P_A)

Weather: Partly cloudy, breezy

Sample Depth: 4.5 (ft/in

H_2S Reading: >999 ppm CH_4 Reading: – ~~ppm~~ % Not read due to high H_2S.

PID Reading: 124 ppm FID Reading: – ~~ppm~~ % Flame out.

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bios M-5

Calibrator Readings (L/min): 1641 1636 1623 1628
1628 1644 1643

Ave. Cal. Reading (L/min): 1.63 (Q_A) Flow Readout (L/min): 1.71

Tenax Tube Number: 7113 A Tenax/Charcoal Tube Number: 7113 B

Start Time: 0840 Flow Readout (L/min): 1.71

Stop Time: 0853 Flow Readout (L/min): 1.69

Elapsed Time: 13 Min. (T) % Difference Flow Readout: 1%

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.63 = 21.19 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.19 x 1.00 x 1.07 = 22.67 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/16/98

Site: Himco Dump Superfund Site Station Location: TT-26

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 4.7 °C (t_A)

Barometric Pressure : 76.5 mm Hg at 0850 AM/PM (P_A)

Weather: Partly cloudy, breezy

Sample Depth: 4.5 ~~ft~~/in

H_2S Reading: – ppm CH_4 Reading: – ppm

PID Reading: – ppm FID Reading: – ppm

} Duplicate sample. Field Screening not needed.

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bock U-5

Calibrator Readings (L/min): ~~[illegible]~~ 1.63 1.60 1.615 1.600

1.603 1.613 1.608

Ave. Cal. Reading (L/min): 1.61 (Q_A) Flow Readout (L/min): 1.68

Tenax Tube Number: 7116 A Tenax/Charcoal Tube Number: 7116 B

Start Time: 0857 Flow Readout (L/min): 1.68

Stop Time: 0910 Flow Readout (L/min): 1.68

Elapsed Time: 13 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.61 = 20.93 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.93 x 1.00 x 1.07 = 22.46 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/16/98

Site: Himco Dump Superfund Site Station Location: TT-27

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 9.7 °C (t_A)

Barometric Pressure : 754.9 mm Hg at 1030 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 4.5 (ft/in

H_2S Reading: 15 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 11.7 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bios M-5

Calibrator Readings (L/min): 1332 1256 1274 1255 1285 1278 1224

Ave. Cal. Reading (L/min): 1.27 (Q_A) Flow Readout (L/min): 1.65

Tenax Tube Number: 71044 Tenax/Charcoal Tube Number: 71043

Start Time: 1039 Flow Readout (L/min): 1.65

Stop Time: 1055 Flow Readout (L/min): 1.66

Elapsed Time: 16 Min. (T) % Difference Flow Readout: Ø

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 16 x 1.27 = 20.32 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.32 x 0.99 x 1.05 = 21.12 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/12/98

Site: Himco Dump Superfund Site Station Location: TT-27

Sampling Team: Rich Grabowski, Mark Anderson

Temperature: _____ (°F – 32)/1.8 = 8.3 °C (t_A)

Barometric Pressure : 755.7 mm Hg at 0940 AM/PM (P_A)

Weather: Partly cloudy, breezy

Sample Depth: 0 (ft/in (Ambient Air Blank)

H_2S Reading: – ppm CH_4 Reading: – ppm %

PID Reading: – ppm FID Reading: – ppm %

Air Sampling Pump Mfg./Model: USA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1358 1411 1404 1414
1353 1346 1407

Ave. Cal. Reading (L/min): 1.38 (Q_A) Flow Readout (L/min): 1.79

Tenax Tube Number: 7106 A Tenax/Charcoal Tube Number: 7106 B

Start Time: 0945 Flow Readout (L/min): 1.79

Stop Time: 1000 Flow Readout (L/min): 1.78

Elapsed Time: 15 Min. (T) % Difference Flow Readout: Ø

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 15 x 1.38 = 20.70 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.70 x 0.99 x 1.06 = 21.72 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/16/98

Site: Himco Dump Superfund Site Station Location: TT-27

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 9.5 °C (t_A)

Barometric Pressure : 756.1 mm Hg at 1007 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 0 (ft/in (Rinsate Blank)

H_2S Reading: – ppm CH_4 Reading: – ~~ppm~~ %

PID Reading: – ppm FID Reading: – ~~ppm~~ %

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bock M-5

Calibrator Readings (L/min): 1279 1217 1271 1276

1277 1261 1277

Ave. Cal. Reading (L/min): 1.27 (Q_A) Flow Readout (L/min): 1.66

Tenax Tube Number: 71224 Tenax/Charcoal Tube Number: 71223

Start Time: 1005 Flow Readout (L/min): 1.66

Stop Time: 1021 Flow Readout (L/min): 1.66

Elapsed Time: 16 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 16 x 1.27 = 20.32 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.32 x 0.99 x 1.05 = 21.12 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/16/98

Site: Himco Dump Superfund Site Station Location: TT-28

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 10.4 °C (t_A)

Barometric Pressure : 754.2 mm Hg at 1128 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 4.5 ~~ft~~ in

H_2S Reading: 4 ppm CH_4 Reading: 0.3 ~~ppm~~ %

PID Reading: 34.4 ppm FID Reading: — ~~ppm~~ % Flame out.

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1533 1613 1600 1596

1520 1525 1597

Ave. Cal. Reading (L/min): 1.57 (Q_A) Flow Readout (L/min): 1.81

Tenax Tube Number: 7123 A Tenax/Charcoal Tube Number: 7123 B

Start Time: 1131 Flow Readout (L/min): 1.81

Stop Time: 1144 Flow Readout (L/min): 1.81

Elapsed Time: 13 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.57 = 20.41 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.41 x 0.99 x 1.05 = 21.22 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/16/98

Site: Himco Dump Superfund Site Station Location: TT-29

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 16.5 °C (t_A)

Barometric Pressure : 752.1 mm Hg at 1409 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 4.5 (ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 45.9 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1728 1806 1816 1801 1807 1814 1720

Ave. Cal. Reading (L/min): 1.78 (Q_A) Flow Readout (L/min): 1.98

Tenax Tube Number: 7203A Tenax/Charcoal Tube Number: 7203B

Start Time: 1414 Flow Readout (L/min): 1.98

Stop Time: 1426 Flow Readout (L/min): 2.00

Elapsed Time: 12 Min. (T) % Difference Flow Readout: 1%

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.78 = 21.36 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.36 x 0.99 x 1.03 = 21.78 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/16/98

Site: Himco Dump Superfund Site Station Location: TT-30

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 13.4 °C (t_A)

Barometric Pressure : 7524 mm Hg at 1518 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 21.6 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1355 1291 1357 1362 1423 1363 1359

Ave. Cal. Reading (L/min): 1.36 (Q_A) Flow Readout (L/min): 1.6

Tenax Tube Number: 7215A Tenax/Charcoal Tube Number: 7215B

Start Time: 1521 Flow Readout (L/min): 1.68

Stop Time: 1536 Flow Readout (L/min): 1.68

Elapsed Time: 15 Min. (T) % Difference Flow Readout: ∅

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 15 x 1.36 = 20.40 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.40 x 0.99 x 1.04 = 21.00 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/16/98

Site: Himco Dump Superfund Site Station Location: TT-3.1

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 12.5 °C (t_A)

Barometric Pressure : 752.8 mm Hg at 1554 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 19.9 ppm FID Reading: 0 ~~ppm~~ %

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1736 1651 1661 1639

1668 1747 1661

Ave. Cal. Reading (L/min): 1.68 (Q_A) Flow Readout (L/min): 1.97

Tenax Tube Number: 7201 A Tenax/Charcoal Tube Number: 7201 B

Start Time: 1610 Flow Readout (L/min): 1.97

Stop Time: 1622 Flow Readout (L/min): 1.97

Elapsed Time: 12 Min. (T) % Difference Flow Readout: ∅

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.68 = 20.16 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.16 x 0.99 x 1.04 = 20.76 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/17/98

Site: Himco Dump Superfund Site Station Location: TT-32

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 5.5 °C (t_A)

Barometric Pressure : 763.5 mm Hg at 0810 AM/PM (P_A)

Weather: Cloudy, sprinkles, slight breeze

Sample Depth: 4.5 ft/in

H_2S Reading: 4 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 3.5 ppm FID Reading: 0 ppm % Flame out.

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck 14-5

Calibrator Readings (L/min): 1390 1386 1385 1452

1443 1441 1453

Ave. Cal. Reading (L/min): 1.42 (Q_A) Flow Readout (L/min): 1.72

Tenax Tube Number: 7207 A Tenax/Charcoal Tube Number: 7207 B

Start Time: 0819 Flow Readout (L/min): 1.72

Stop Time: 0833 Flow Readout (L/min): 1.72

Elapsed Time: 14 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.42 = 19.88 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.88 x 1.00 x 1.07 = 21.27 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/17/18

Site: Himco Dump Superfund Site Station Location: TT-33

Sampling Team: Rick Grabowski, Mark Anderson

Temperature: _____ (°F – 32)/1.8 = 5.6 °C (t_A)

Barometric Pressure : 764.5 mm Hg at 0855 AM/PM (P_A)

Weather: Cloudy, sprinkling, calm

Sample Depth: 4.5 (ft)/in

H_2S Reading: 17 ppm CH_4 Reading: 0.1 ~~ppm~~ %

PID Reading: 20.5 ppm FID Reading: – ~~ppm~~ % Flame out

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bub M-5

Calibrator Readings (L/min): 1577 1562 1570 1501

1553 1563 1498

Ave. Cal. Reading (L/min): 1.55 (Q_A) Flow Readout (L/min): 1.83

Tenax Tube Number: 7214 A Tenax/Charcoal Tube Number: 7214 B

Start Time: 0919 Flow Readout (L/min): 1.83

Stop Time: 0932 Flow Readout (L/min): 1.83

Elapsed Time: 13 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.55 = 20.15 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.15 x 1.01 x 1.07 = 21.74 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 11/17/98

Site: Himco Dump Superfund Site Station Location: TT-34

Sampling Team: Rick Grabowski, Marc Anderson

Temperature: _____ (°F – 32)/1.8 = 7.8 °C (t_A)

Barometric Pressure : 765.6 mm Hg at 1247 AM/PM (P_A)

Weather: Partly cloudy, slightly breezy

Sample Depth: 4.5 ft/in

H_2S Reading: 129 ppm CH_4 Reading: 0.7 ~~ppm~~ %

PID Reading: 45.9 ppm FID Reading: — ~~ppm~~ %; Flame out.

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bock M-5

Calibrator Readings (L/min): 1250 1245 1249 1256 1296 1238 1250

Ave. Cal. Reading (L/min): 1.25 (Q_A) Flow Readout (L/min): 1.64

Tenax Tube Number: 7114A Tenax/Charcoal Tube Number: 7114B

Start Time: 1256 Flow Readout (L/min): 1.64

Stop Time: 1312 Flow Readout (L/min): 1.64

Elapsed Time: 16 Min. (T) % Difference Flow Readout: Ø

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 16 x 1.25 = 20.00 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.00 x 1.01 x 1.05 = 21.21 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/9/98

Site: Himco Dump Superfund Site Station Location: TT-35

Sampling Team: Rick Grabowski, Janie Carroll

Temperature: _____ (°F – 32)/1.8 = 6.1 °C (t_A)

Barometric Pressure : 773.6 mm Hg at 1059 AM/PM (P_A)

Weather: Sunny, slightly breezy

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bubble M-5

Calibrator Readings (L/min): 1972 1967 1977 1974

2120 1964 2101

Ave. Cal. Reading (L/min): 1.87 (Q_A) Flow Readout (L/min): 2.00

Tenax Tube Number: 7706A Tenax/Charcoal Tube Number: 7706B

Start Time: 1145 Flow Readout (L/min): 2.00

Stop Time: 1156 Flow Readout (L/min): 2.00

Elapsed Time: 11 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 11 x 1.87 = 20.57 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.57 x 1.02 x 1.07 = 22.45 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/9/98

Site: Himco Dump Superfund Site Station Location: TT-36

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 9.6 °C (t_A)

Barometric Pressure : 772.5 mm Hg at 1320 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1797 1791 1696 1691

1787 1794 1696

Ave. Cal. Reading (L/min): 1.75 (Q_A) Flow Readout (L/min): 1.57

Tenax Tube Number: 7703A Tenax/Charcoal Tube Number: 77036

Start Time: 1332 Flow Readout (L/min): 1.57

Stop Time: 1344 Flow Readout (L/min): 1.60

Elapsed Time: 12 Min. (T) % Difference Flow Readout: 2

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.75 = 21.00 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.00 x 1.02 x 1.05 = 22.49 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/9/98

Site: Himco Dump Superfund Site Station Location: TT-37

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 11.0 °C (t_A)

Barometric Pressure : 772.4 mm Hg at 1415 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1755 1798 1756 1712 1785 1795 1754

Ave. Cal. Reading (L/min): 1.78 (Q_A) Flow Readout (L/min): 1.64

Tenax Tube Number: 7708 A Tenax/Charcoal Tube Number: 7708 B

Start Time: 1425 Flow Readout (L/min): 1.64

Stop Time: 1437 Flow Readout (L/min): 1.65

Elapsed Time: 12 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.78 = 21.36 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.36 x 1.02 x 1.05 = 22.88 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/9/98

Site: Himco Dump Superfund Site Station Location: TT-38

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 11.2 °C (t_A)

Barometric Pressure : 772.2 mm Hg at 1510 AM/PM (P_A)

Weather: Sunny, breezy.

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0.7 ppm FID Reading: – ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1533 1620 1576 1557 1616 1597 1619

Ave. Cal. Reading (L/min): 1.59 (Q_A) Flow Readout (L/min): 1.41

Tenax Tube Number: 7709 A Tenax/Charcoal Tube Number: 7707 B

Start Time: 1533 Flow Readout (L/min): 1.41

Stop Time: 1546 Flow Readout (L/min): 1.41

Elapsed Time: 13 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.59 = 20.67 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.67 x 1.02 x 1.05 = 22.14 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/10/98

Site: Himco Dump Superfund Site Station Location: TT-39

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 0.7 °C (t_A)

Barometric Pressure : 773.6 mm Hg at 0939 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1841 1748 1846 1975
1845 1835 1737

Ave. Cal. Reading (L/min): 1.83 (Q_A) Flow Readout (L/min): 1.56

Tenax Tube Number: 77214 Tenax/Charcoal Tube Number: 77213

Start Time: 0953 Flow Readout (L/min): 1.56

Stop Time: 1004 Flow Readout (L/min): 1.58

Elapsed Time: 11 Min. (T) % Difference Flow Readout: 1

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 11 x 1.83 = 20.13 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.13 x 1.02 x 1.09 = 22.34 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/10/98

Site: Himco Dump Superfund Site Station Location: TT-39

Sampling Team: Rick Grabowski, Janie Carney

Temperature: _____ (°F – 32)/1.8 = 3.5 °C (t_A)

Barometric Pressure : 773.2 mm Hg at 1010 AM/PM (P_A)

Weather: Sunny, slightly breezy

Sample Depth: 4.5 (ft) in

H_2S Reading: – ppm CH_4 Reading: – ppm Duplicate Sample

PID Reading: – ppm FID Reading: – ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1580 1611 1536 1611
1580 1534 1531

Ave. Cal. Reading (L/min): 1.57 (Q_A) Flow Readout (L/min): 1.33

Tenax Tube Number: 7724A Tenax/Charcoal Tube Number: 7724B

Start Time: 1008 Flow Readout (L/min): 1.33

Stop Time: 1021 Flow Readout (L/min): 1.35

Elapsed Time: 13 Min. (T) % Difference Flow Readout: 1

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.57 = 20.41 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.41 x 1.02 x 1.04 = 22.48 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/10/98

Site: Himco Dump Superfund Site Station Location: TT-40

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 5.7 °C (t_A)

Barometric Pressure : 772.7 mm Hg at 1103 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1888 1802 1916 1792

1797 1901 1807

Ave. Cal. Reading (L/min): 1.84 (Q_A) Flow Readout (L/min): 1.52

Tenax Tube Number: 7719 A Tenax/Charcoal Tube Number: 77193

Start Time: 1122 Flow Readout (L/min): 1.52

Stop Time: 1133 Flow Readout (L/min): 1.53

Elapsed Time: 11 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 11 x 1.84 = 20.24 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.24 x 1.02 x 1.07 = 22.09 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/10/98

Site: Hume Dump Superfund Site Station Location: TT-41

Sampling Team: Rick Grabowski, Jamie Carey

Temperature: _____ (°F – 32)/1.8 = -3.7 °C (t_A)

Barometric Pressure : 774.1 mm Hg at 0946 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0.1 ppm %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1755 1846 1851 1856
1762 1765 1753

Ave. Cal. Reading (L/min): 1.80 (Q_A) Flow Readout (L/min): 1.57

Tenax Tube Number: 77114 Tenax/Charcoal Tube Number: 77113

Start Time: 0855 Flow Readout (L/min): 1.57

Stop Time: 0907 Flow Readout (L/min): 1.56

Elapsed Time: 12 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.80 = 21.60 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.60 x 1.02 x 1.11 = 24.46 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/10/98

Site: Himco Dump Superfund Site Station Location: TT-42

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 6.8 °C (t_A)

Barometric Pressure : 771.5 mm Hg at 1211 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1666 1549 1617 1613 1612 1696 1616

Ave. Cal. Reading (L/min): 1.62 (Q_A) Flow Readout (L/min): 1.42

Tenax Tube Number: 77041 A Tenax/Charcoal Tube Number: 77041 B

Start Time: 1218 Flow Readout (L/min): 1.42

Stop Time: 1231 Flow Readout (L/min): 1.42

Elapsed Time: 13 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.62 = 21.06 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.06 x 1.02 x 1.07 = 22.98 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/10/98

Site: Himco Dump Superfund Site Station Location: TT-43

Sampling Team: Rich Grabowski, Jamie Carey

Temperature: _____ (°F – 32)/1.8 = 6.3 °C (t_A)

Barometric Pressure : 771.7 mm Hg at 1404 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1733 1729 1729 1791

1792 1722 1726

Ave. Cal. Reading (L/min): 1.75 (Q_A) Flow Readout (L/min): 1.55

Tenax Tube Number: 7701A Tenax/Charcoal Tube Number: 7701B

Start Time: 1410 Flow Readout (L/min): 1.55

Stop Time: 1422 Flow Readout (L/min): 1.59

Elapsed Time: 12 Min. (T) % Difference Flow Readout: 3

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.75 = 21.00 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.00 x 1.02 x 1.07 = 22.92 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/10/98

Site: Hime Dump Superfund Site Station Location: TT-44

Sampling Team: Rick Grabowski, Tanie Carey

Temperature: _____ (°F – 32)/1.8 = 5.4 °C (t_A)

Barometric Pressure : 772.0 mm Hg at 1457 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1601 1517 1515 1512

1517 1514 1514

Ave. Cal. Reading (L/min): 1.55 (Q_A) Flow Readout (L/min): 1.33

Tenax Tube Number: 77104 Tenax/Charcoal Tube Number: 77106

Start Time: 1503 Flow Readout (L/min): 1.33

Stop Time: 1516 Flow Readout (L/min): 1.35

Elapsed Time: 13 Min. (T) % Difference Flow Readout: 1

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.55 = 20.15 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.15 x 1.02 x 1.07 = 21.99 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/10/98

Site: Himco Dump Superfund Site Station Location: TT-45

Sampling Team: Rick Grabowski, Jane Carey

Temperature: _____ (°F – 32)/1.8 = 4.2 °C (t_A)

Barometric Pressure : 772.7 mm Hg at 1612 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 4.5 (ft) in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1704 1767 1767 1767

1712 1764 1678

Ave. Cal. Reading (L/min): 1.74 (Q_A) Flow Readout (L/min): 1.51

Tenax Tube Number: 7702A Tenax/Charcoal Tube Number: 7702B

Start Time: 1622 Flow Readout (L/min): 1.51

Stop Time: 1634 Flow Readout (L/min): 1.51

Elapsed Time: 12 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.74 = 20.88 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.88 x 1.02 x 1.04 = 23.00 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/14/98

Site: Himco Dump Superfund Site Station Location: TT-46

Sampling Team: Rick Grabowski

Temperature: _____ (°F – 32)/1.8 = 4.4 °C (t_A)

Barometric Pressure : 771.8 mm Hg at 1232 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 122 ppm FID Reading: _____ ppm

Air Sampling Pump Mfg./Model: Industrial Scientific SP400

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1156 1141 1088 1155
1143 1152 1089

Ave. Cal. Reading (L/min): 1.13 (Q_A) Flow Readout (L/min): —

Tenax Tube Number: 7903 A Tenax/Charcoal Tube Number: 7903 B

Start Time: 1238 Flow Readout (L/min): —

Stop Time: 1256 Flow Readout (L/min): —

Elapsed Time: 18 Min. (T) % Difference Flow Readout: —

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 18 x 1.13 = 20.34 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.34 x 1.02 x 1.07 = 22.20 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/14/98

Site: Himco Dump Superfund Site Station Location: TT-46

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 6.5 °C (t_A)

Barometric Pressure : 771.8 mm Hg at 1203 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 4.5 (ft)/in

H_2S Reading: — ppm CH_4 Reading: — ppm Duplicate sample

PID Reading: — ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: Industrial Scientific SP400

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1160 1134 1160 1136

1134 1109 1165

Ave. Cal. Reading (L/min): 1.14 (Q_A) Flow Readout (L/min): —

Tenax Tube Number: 7902A Tenax/Charcoal Tube Number: 7902B

Start Time: 1259 Flow Readout (L/min): —

Stop Time: 1317 Flow Readout (L/min): —

Elapsed Time: 18 Min. (T) % Difference Flow Readout: —

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 18 x 1.14 = 20.52 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.52 x 1.02 x 1.07 = 22.40 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/14/98

Site: Himco Dump Superfund Site Station Location: TT-47

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 2.4 °C (t_A)

Barometric Pressure: 772.5 mm Hg at 1143 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: Industrial Scientific SP400

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1178 1183 1187 1178 1183 1182 1189

Ave. Cal. Reading (L/min): 1.18 (Q_A) Flow Readout (L/min): —

Tenax Tube Number: 7901 A Tenax/Charcoal Tube Number: 7901 B

Start Time: 1136 Flow Readout (L/min): —

Stop Time: 1153 Flow Readout (L/min): —

Elapsed Time: 17 Min. (T) % Difference Flow Readout: —

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 17 x 1.18 = 20.06 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.06 x 1.02 x 1.08 = 22.10 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/12/98

Site: Himco Dump Superfund Site Station Location: TT-48

Sampling Team: Rick Grabowski, Jamie Carey

Temperature: _____ (°F – 32)/1.8 = -2.7 °C (t_A)

Barometric Pressure : 772.4 mm Hg at 0918 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 4.5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1796 1661 1735 1735
1726 1695 1729

Ave. Cal. Reading (L/min): 1.72 (Q_A) Flow Readout (L/min): 1.50

Tenax Tube Number: 7716A Tenax/Charcoal Tube Number: 7716B

Start Time: 0917 Flow Readout (L/min): 1.50

Stop Time: 0929 Flow Readout (L/min): 1.48

Elapsed Time: 12 Min. (T) % Difference Flow Readout: 1

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.72 = 20.64 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.64 x 1.02 x 1.10 = 23.16 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/11/98

Site: Himco Dump Superfund Site Station Location: TT-49

Sampling Team: Rick Grabowski, Jamie Carey

Temperature: _____ (°F – 32)/1.8 = 9.3 °C (t_A)

Barometric Pressure : 771.7 mm Hg at 1409 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 1 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1818 1776 1820 1775

1776 1814 1821

Ave. Cal. Reading (L/min): 1.80 (Q_A) Flow Readout (L/min): 1.58

Tenax Tube Number: 7714A Tenax/Charcoal Tube Number: 7714B

Start Time: 1629 Flow Readout (L/min): 1.58

Stop Time: 1641 Flow Readout (L/min): 1.59

Elapsed Time: 12 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.70 = 21.60 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.60 x 1.02 x 1.06 = 23.35 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/11/98

Site: Himco Dump Superfund Site Station Location: TT-50

Sampling Team: Rich Grabowski, Janice Carney

Temperature: _____ (°F – 32)/1.8 = 9.1 °C (t_A)

Barometric Pressure: 771.9 mm Hg at 1515 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 4.5 ft/m

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bock M-5

Calibrator Readings (L/min): 1803 1827 1755 1827

1831 1799 1827

Ave. Cal. Reading (L/min): 1.81 (Q_A) Flow Readout (L/min): 1.61

Tenax Tube Number: ~~7713A~~ 7717A Tenax/Charcoal Tube Number: ~~7713B~~ 7717B

Start Time: 1521 Flow Readout (L/min): 1.61

Stop Time: 1533 Flow Readout (L/min): 1.63

Elapsed Time: 12 Min. (T) % Difference Flow Readout: 1

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 12 x 1.81 = 21.72 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.72 x 1.02 x 1.06 = 23.46 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/11/98

Site: Hunter Dump Superfund Site Station Location: TT-S1

Sampling Team: Rick Grabowski, Jamie Cooney

Temperature: _____ (°F – 32)/1.8 = 3.2 °C (t_A)

Barometric Pressure : 774.4 mm Hg at 1105 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 4.5 (ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Bubble M-5

Calibrator Readings (L/min): 1793 1874 1875 1795
1834 1834 1821

Ave. Cal. Reading (L/min): 1.83 (Q_A) Flow Readout (L/min): 1.65

Tenax Tube Number: 7718 A Tenax/Charcoal Tube Number: 7718 B

Start Time: 1112 Flow Readout (L/min): 1.65

Stop Time: 1123 Flow Readout (L/min): 1.65

Elapsed Time: 11 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 11 x 1.83 = 20.13 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.13 x 1.02 x 1.08 = 22.18 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/11/98

Site: Himco Dump Superfund Site Station Location: TT-52

Sampling Team: Rich Grabowski, Janie Carey

Temperature: _____ (°F – 32)/1.8 = 0.2 °C (t_A)

Barometric Pressure : 774.7 mm Hg at 1017 AM/PM (P_A)

Weather: Sunny, Calm

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1779 1748 1834 1751

1830 1820 1825

Ave. Cal. Reading (L/min): 1.80 (Q_A) Flow Readout (L/min): 1.61

Tenax Tube Number: 7707 A Tenax/Charcoal Tube Number: 7707 B

Start Time: 1024 Flow Readout (L/min): 1.61

Stop Time: 1035 Flow Readout (L/min): 1.61

Elapsed Time: 11 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 11 x 1.80 = 19.80 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.80 x 1.02 x 1.09 = 22.01 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 12/9/98

Site: Himco Dump Superfund Site Station Location: TT-53

Sampling Team: Rick Grabowski, Tamer Carey

Temperature: _____ (°F – 32)/1.8 = -0.9 °C (t_A)

Barometric Pressure : 774.5 mm Hg at 0910 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 4.5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 ~~ppm~~ %

PID Reading: 0 ppm FID Reading: — ppm

Air Sampling Pump Mfg./Model: MSA Escort ELF

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1848 1752 1754 1746 1746 1758 1738

Ave. Cal. Reading (L/min): 1.81 (Q_A) Flow Readout (L/min): 1.58

Tenax Tube Number: 7720A Tenax/Charcoal Tube Number: 7720B

Start Time: 0926 Flow Readout (L/min): 1.58

Stop Time: 0937 Flow Readout (L/min): 1.57

Elapsed Time: 11 Min. (T) % Difference Flow Readout: 0

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 11 x 1.81 = 19.91 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.91 x 1.02 x 1.10 = 22.34 Liters

Table 1
Summary of Field Screening Results - November 1998
Supplemental Site Investigation/Site Characterization Report
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	PID (ppm)	FID (%)	Hydrogen Sulfide (ppm)	Methane (% LEL)
TT-11	17	0	0	NR
TT-12	18.7	0	0	NR
TT-13	39.5	NR	101	NR
TT-14	10.6	NR	0	NR
TT-15	32.9	NR	0	NR
TT-16	28.4	NR	4	>5
TT-17	5.84	NR	4	NR
TT-18	130	0.12	NR	NR
TT-19	240	1	>999	4.4
TT-20	0	0	0	0
TT-21	302	0.68	>999	4.1
TT-22	17.02	0	0	0
TT-23	2.01	0	0	0
TT-24	36.05	0	0	0
TT-25	1.17	0	0	0
TT-26	129	NR	>999	NR
TT-27	11.7	0	15	0
TT-28	34.4	NR	4	0.3
TT-29	45.9	0	0	0
TT-30	21.6	0	0	0
TT-31	19.9	0	0	0
TT-32	3.5	NR	4	0
TT-33	20.5	NR	17	0.1
TT-34	45.9	NR	129	0.7
TT-35	0	NR	0	0
TT-36	0	NR	0	0
TT-37	0	NR	0	0
TT-38	0.7	NR	0	0
TT-39	0	NR	0	0
TT-40	0	NR	0	0
TT-41	0	NR	0	0.1
TT-42	0	NR	0	0
TT-43	0	NR	0	0
TT-44	0	NR	0	0
TT-45	0	NR	0	0
TT-46	122	NR	0	0
TT-47	0	NR	0	0
TT-48	0	NR	0	0
TT-49	1	NR	0	0
TT-50	0	NR	0	0
TT-51	0	NR	0	0
TT-52	0	NR	0	0
TT-53	0	NR	0	0

NR = Not Read

1999 Supplemental Site Investigation Records

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/20/99

Site: Himco Dump Superfund Site Station Location: TT-54

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 11.6 °C (t_A)

Barometric Pressure : 769.8 mm Hg at 1031 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 5 6 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.5 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Bubl M-5

Calibrator Readings (L/min): 1506 1516 1506 1480 1510 1513 1573

Ave. Cal. Reading (L/min): 1.51 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 110096 Tenax/Charcoal Tube Number: 110096

Start Time: 1031 Flow Readout (L/min): N/A

Stop Time: 1044 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.51 = 19.63 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.63 x 1.01 x 1.05 = 20.82 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/21/99

Site: Himco Dump Superfund Site Station Location: TT-55

Sampling Team: Rick Grabowski, Janie Currie

Temperature: _____ (°F – 32)/1.8 = 2.3 °C (t_A)

Barometric Pressure : 7664 mm Hg at 0814 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 5 (ft) in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.4 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1478 1532 1468 1436 1470 1491 1437

Ave. Cal. Reading (L/min): 1.47 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump.

Tenax Tube Number: 11014a Tenax/Charcoal Tube Number: 11014b

Start Time: 0814 Flow Readout (L/min): N/A

Stop Time: 0828 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.47 = 20.58 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.58 x 1.01 x 1.08 = 22.45 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/20/99

Site: Himco Dump Superfund Site Station Location: TT-56

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 14.1 °C (t_A)

Barometric Pressure : 769.1 mm Hg at 1327 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 5 (ft/in)

H_2S Reading: >999 ppm CH_4 Reading: 3.5 %

O_2 Reading: 6.6 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1399 1422 1428 1494 1474 1504 1467

Ave. Cal. Reading (L/min): 1.46 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11003a Tenax/Charcoal Tube Number: 11003b

Start Time: 1327 Flow Readout (L/min): N/A

Stop Time: 1335 Flow Readout (L/min): N/A

Elapsed Time: 8 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 8 x 1.46 = 11.68 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 11.68 x 1.01 x 1.04 = 12.17 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/20/99

Site: Himco Dump Superfund Site Station Location: TT-56 (Duplicate)

Sampling Team: Rick Grabowski, Janie Carng

Temperature: _____ (°F – 32)/1.8 = 14.6 °C (t_A)

Barometric Pressure : 768.9 mm Hg at 1350 AM/PM (P_A)

Weather: Partly Sunny, Breezy

Sample Depth: 5 (ft/in)

H_2S Reading: – ppm CH_4 Reading: – %

O_2 Reading: – % Duplicate Sample - Field Screening Not Required

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Bck M-5

Calibrator Readings (L/min): 1612 1477 1512 1493 1508 1522 1519

Ave. Cal. Reading (L/min): 1.52 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11005a Tenax/Charcoal Tube Number: 11005b

Start Time: 1350 Flow Readout (L/min): N/A

Stop Time: 1357 Flow Readout (L/min): N/A

Elapsed Time: 7 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 7 x 1.57 = 10.64 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 10.64 x 1.01 x 1.04 = 11.18 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/20/99

Site: Himco Dump Superfund Site Station Location: TT-57

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 11.9 °C (t_A)

Barometric Pressure : 769.8 mm Hg at 1127 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.5 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1381 1371 1374 1371 1377 1367 1382

Ave. Cal. Reading (L/min): 1.37 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11108a Tenax/Charcoal Tube Number: 11108b

Start Time: 1127 Flow Readout (L/min): N/A

Stop Time: 1142 Flow Readout (L/min): N/A

Elapsed Time: 15 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 15 x 1.37 = 20.55 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.55 x 1.01 x 1.05 = 21.79 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/20/99

Site: Himco Dump Superfund Site Station Location: TT-58

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 10.1 °C (t_A)

Barometric Pressure : 769.9 mm Hg at 0936 AM/PM (P_A)

Weather: Partly cloudy, breezy

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.4 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1523 1536 1543 1555
1521 1559 1555

Ave. Cal. Reading (L/min): 1.54 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump.

Tenax Tube Number: 11019a Tenax/Charcoal Tube Number: 11019b

Start Time: 0941 Flow Readout (L/min): N/A

Stop Time: 0954 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.54 = 20.02 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.02 x 1.01 x 1.05 = 21.23 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/21/99

Site: Himco Dump Superfund Site Station Location: TT-59

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 10.6 °C (t_A)

Barometric Pressure : 764.5 mm Hg at 0951 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 19.7 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1571 1477 1544 1594 1493 1566 1493

Ave. Cal. Reading (L/min): 1.53 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11105a Tenax/Charcoal Tube Number: 11105b

Start Time: 0951 Flow Readout (L/min): N/A

Stop Time: 1004 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.53 = 19.89 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.89 x 1.01 x 1.05 = 21.09 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/20/99

Site: Himco Dump Superfund Site Station Location: TT-60

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 15.6 °C (t_A)

Barometric Pressure : 768.1 mm Hg at 1549 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 19.7 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1511 1524 1433 1547 1564 1452 1498

Ave. Cal. Reading (L/min): 1.50 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11022a Tenax/Charcoal Tube Number: 11022b

Start Time: 1549 Flow Readout (L/min): N/A

Stop Time: 1603 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.50 = 21.00 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.00 x 1.01 x 1.03 = 21.85 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/20/99

Site: Himco Dump Superfund Site Station Location: TT-61

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: [illegible] (°F – 32)/1.8 = 14.1 °C (t_A)

Barometric Pressure : 768.6 mm Hg at 1446 AM/PM (P_A)

Weather: Partly sunny, breezy

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.1 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1577 1561 1570 1573 1563 1571 1523

Ave. Cal. Reading (L/min): 1.56 (Q_A) Flow Readout (L/min): N/A - No Flow Reader on Pump

Tenax Tube Number: 11021a Tenax/Charcoal Tube Number: 11021b

Start Time: 1446 Flow Readout (L/min): N/A

Stop Time: 1459 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.56 = 20.28 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.28 x 1.01 x 1.04 = 21.30 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/21/99

Site: Himco Dump Superfund Site Station Location: TT-62

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 21.4 °C (t_A)

Barometric Pressure : 761.9 mm Hg at 1213 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 7.5 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1513 1507 1504 1467
1514 1466 1504

Ave. Cal. Reading (L/min): 1.50 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11107a Tenax/Charcoal Tube Number: 11107b

Start Time: 1213 Flow Readout (L/min): N/A

Stop Time: 1227 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 1.50 x 14 = 21.00 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.00 x 1.00 x 1.01 = 21.21 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/21/99

Site: Himco Dump Superfund Site Station Location: TT-63

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 17.9 °C (t_A)

Barometric Pressure : 760.4 mm Hg at 1335 AM/PM (P_A)

Weather: Partly sunny, breezy.

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 14.7 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1507 1502 1494 1551 1476 1538 1465

Ave. Cal. Reading (L/min): 1.50 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11104a Tenax/Charcoal Tube Number: 11104b

Start Time: 1335 Flow Readout (L/min): N/A

Stop Time: 1349 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.50 = 21.00 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.00 x 1.00 x 1.02 = 21.42 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/21/99

Site: Himco Dump Superfund Site Station Location: TT-64

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 19.2 °C (t_A)

Barometric Pressure : 759.4 mm Hg at 1433 AM/PM (P_A)

Weather: Partly Sunny, breezy.

Sample Depth: 5 (ft/in)

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 11.3 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1499 1479 1493 1518 1506 1492 1500

Ave. Cal. Reading (L/min): 1.50 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump.

Tenax Tube Number: 11015a Tenax/Charcoal Tube Number: 11015b

Start Time: 1426 Flow Readout (L/min): N/A

Stop Time: 1439 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.50 = 19.50 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.50 x 1.06 x 1.02 = 19.89 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/21/99

Site: Himco Dump Superfund Site Station Location: TT-65

Sampling Team: Rick Grabowski, Janie Cano

Temperature: _____ (°F – 32)/1.8 = 19.1 °C (t_A)

Barometric Pressure : 758.3 mm Hg at 1545 AM/PM (P_A)

Weather: Sunny, breezy.

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.4 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 730 779 737 720 729 731 727

Ave. Cal. Reading (L/min): 0.74 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11002a Tenax/Charcoal Tube Number: 11002b

Start Time: 1545 Flow Readout (L/min): N/A

Stop Time: 1612 Flow Readout (L/min): N/A

Elapsed Time: 27 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 27 x 0.74 = 19.98 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.98 x 1.00 x 1.02 = 20.38 Liters

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SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/22/99

Site: Himco Dump Superfund Site Station Location: TT-66

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 11.1 °C (t_A)

Barometric Pressure : 753.5 mm Hg at 0835 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.1 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1507 1513 1474 1584
1447 1588 1509

Ave. Cal. Reading (L/min): 1.52 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11024a Tenax/Charcoal Tube Number: 11024b

Start Time: 0835 Flow Readout (L/min): N/A

Stop Time: 0848 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.52 = 19.76 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.76 x 0.99 x 1.05 = 20.54 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/22/99

Site: Himco Dump Superfund Site Station Location: TT-67

Sampling Team: Rick Grabowski, Janie Carrig.

Temperature: _____ (°F – 32)/1.8 = 10.8 °C (t_A)

Barometric Pressure : 754.4 mm Hg at 1059 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 5 (ft)in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 18.7 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1413 1421 1425 1469
1406 1424 1523

Ave. Cal. Reading (L/min): 1.44 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11017 a Tenax/Charcoal Tube Number: 11017 b

Start Time: 1059 Flow Readout (L/min): N/A

Stop Time: 1113 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.44 = 20.16 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.16 x 0.99 x 1.05 = 20.96 Liters

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SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/22/99

Site: Hime Dump Superfund Site Station Location: T1-6R

Sampling Team: Rick Grabowski, Denise Carey

Temperature: _____ (°F – 32)/1.8 = 8.7 °C (t_A)

Barometric Pressure : 756.4 mm Hg at 1602 AM/PM (P_A)

Weather: Cloudy, breezy.

Sample Depth: 5 (ft/in)

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 19.7 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1521 1548 1523 1542
1493 1446 1468

Ave. Cal. Reading (L/min): 1.51 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 1110 a Tenax/Charcoal Tube Number: 1110 b

Start Time: 1602 Flow Readout (L/min): N/A

Stop Time: 1615 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.51 = 19.63 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.63 x 1.00 x 1.06 = 20.81 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/25/99

Site: Himco Dump Superfund Site Station Location: TT-69

Sampling Team: Rick Grabowski, Janie Carey

Temperature: _____ (°F – 32)/1.8 = 2.8 °C (t_A)

Barometric Pressure : 767.9 mm Hg at 0830 AM/PM (P_A)

Weather: Sunny, Calm.

Sample Depth: 5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 % CGI could not be calibrated.

O_2 Reading: 20.3 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Bubble M-5

Calibrator Readings (L/min): 1468 1462 1457 1396
1466 1462 1460

Ave. Cal. Reading (L/min): 1.45 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11214 a Tenax/Charcoal Tube Number: 11214 b

Start Time: 0830 Flow Readout (L/min): N/A

Stop Time: 0844 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.45 = 20.30 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.30 x 1.01 x 1.08 = 22.14 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/21/99

Site: Himco Dump Superfund Site Station Location: TT-70

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 17.9 °C (t_A)

Barometric Pressure : 758.0 mm Hg at 1639 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.4 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1466 1485 1483 1480
1469 1457 1480

Ave. Cal. Reading (L/min): 1.47 (Q_A) Flow Readout (L/min): N/A - No Flow Reading on Pump

Tenax Tube Number: 11006 a Tenax/Charcoal Tube Number: 11006 b

Start Time: 1639 Flow Readout (L/min): N/A

Stop Time: 1652 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.47 = 19.11 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.11 x 1.00 x 1.02 = 19.49 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/22/99

Site: Himco Dump Superfund Station Location: TT-71

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 11.7 °C (t_A)

Barometric Pressure : 754.0 mm Hg at 1010 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: 5 (ft)in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.4 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1267 1262 1290 1282
1290 1262 1272

Ave. Cal. Reading (L/min): 1.28 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11023a Tenax/Charcoal Tube Number: 11023b

Start Time: 1010 Flow Readout (L/min): N/A

Stop Time: 1026 Flow Readout (L/min): N/A

Elapsed Time: 16 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 16 x 1.28 = 20.48 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/750) \times ((298/(273 + t_A))$

= 20.48 x 0.99 x 1.05 = 21.29 Liters

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SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/22/99

Site: Himco Dump Superfund Site Station Location: TT-71 (Equipment Blank)

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 11.8 °C (t_A)

Barometric Pressure: 753.9 mm Hg at 0938 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: – ft/in

H_2S Reading: – ppm CH_4 Reading: – %

O_2 Reading: – %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1345 1307 1388 1385 1384 1378 1347

Ave. Cal. Reading (L/min): 1.36 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump.

Tenax Tube Number: 11109a Tenax/Charcoal Tube Number: 11109b

Start Time: 0942 Flow Readout (L/min): N/A

Stop Time: 0959 Flow Readout (L/min): N/A

Elapsed Time: 17 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 17 x 1.36 = 23.12 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 23.12 x 0.99 x 1.05 = 24.03 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/22/99

Site: Himco Dump Superfund Site Station Location: TT-71 (Ambient Air Blank)

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 11.3 °C (t_A)

Barometric Pressure : 753.9 mm Hg at 0919 AM/PM (P_A)

Weather: Cloudy, breezy

Sample Depth: — ft/in

H_2S Reading: — ppm CH_4 Reading: — %

O_2 Reading: — %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1491 1538 1494 1509 1466 1504 1493

Ave. Cal. Reading (L/min): 1.49 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11016 a Tenax/Charcoal Tube Number: 11016 b

Start Time: 0919 Flow Readout (L/min): N/A

Stop Time: 0934 Flow Readout (L/min): N/A

Elapsed Time: 15 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 15 x 1.49 = 22.35 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 22.35 x 0.99 x 1.05 = 23.23 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/22/99

Site: Himco Dump Superfund Site Station Location: TT-72

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 8.6 °C (t_A)

Barometric Pressure : 756.2 mm Hg at 1508 AM/PM (P_A)

Weather: Cloudy, breezy, sprinkles.

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.1 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1506 1510 1550 1511 1452 1526 1505

Ave. Cal. Reading (L/min): 1.51 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11013a Tenax/Charcoal Tube Number: 11013b

Start Time: 1508 Flow Readout (L/min): N/A

Stop Time: 1521 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.51 = 19.63 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.63 x 1.00 x 1.06 = 20.81 Liters

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SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/25/99

Site: Himco Dump Superfund Site Station Location: TT-73

Sampling Team: Rick Grabowski, Janie Curry

Temperature: _____ (°F – 32)/1.8 = 8.8 °C (t_A)

Barometric Pressure : 767.3 mm Hg at 0944 AM/PM (P_A)

Weather: Sunny, slightly breezy.

Sample Depth: 3.5 (ft) in

H_2S Reading: 0 ppm CH_4 Reading: 0 % CGI could not be calibrated.

O_2 Reading: 20.4 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Bock M-5

Calibrator Readings (L/min): 1551 1514 1552 1525 1562 1515 1512

Ave. Cal. Reading (L/min): 1.53 (Q_A) Flow Readout (L/min): N/A - No Flow Regulator on Pump.

Tenax Tube Number: 11008a Tenax/Charcoal Tube Number: 11008b

Start Time: 0944 Flow Readout (L/min): N/A

Stop Time: 0957 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.53 = 19.89 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.89 x 1.01 x 1.06 = 21.29 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/21/99

Site: Himco Dump Superfund Site Station Location: TT-14

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 13.7 °C (t_A)

Barometric Pressure : 763.8 mm Hg at 1027 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.1 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1495 1539 1530 1538 1499 1493 1506

Ave. Cal. Reading (L/min): 1.51 (Q_A) Flow Readout (L/min): N/A – No Flow Readout on Pump

Tenax Tube Number: 11106a Tenax/Charcoal Tube Number: 11106b

Start Time: 1029 Flow Readout (L/min): N/A

Stop Time: 1042 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.51 = 19.63 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.63 x 1.01 x 1.04 = 20.62 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/27/99

Site: Hunt Dump Superfund Site Station Location: IT-75

Sampling Team: Rick Grabowski, Jamie Carrig

Temperature: _____ (°F – 32)/1.8 = 3.0 °C (t_A)

Barometric Pressure : 771.3 mm Hg at 0828 AM/PM (P_A)

Weather: Sunny, Calm

Sample Depth: 5 ft/in

H_2S Reading: 4 ppm CH_4 Reading: 0 %

O_2 Reading: 18.9 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1542 1484 1414 1467
1512 1513 1412

Ave. Cal. Reading (L/min): 1.48 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump.

Tenax Tube Number: 11218a Tenax/Charcoal Tube Number: 11218b

Start Time: 0828 Flow Readout (L/min): N/A

Stop Time: 0842 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.48 = 20.72 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.72 x 1.01 x 1.08 = 22.60 Liters

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SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/27/99

Site: Himco Dump Superfund Site Station Location: TT-76

Sampling Team Rick Grabowski, Jamie Cassing

Temperature: _____ (°F – 32)/1.8 = 1.4 °C (t_A)

Barometric Pressure : 771.4 mm Hg at 0745 AM/PM (P_A)

Weather: Sunny, Calm

Sample Depth: 5 ft/in

H_2S Reading: 2 ppm CH_4 Reading: 0 %

O_2 Reading: 19.2 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1524 1512 1574 1567 1511 1523 1597

Ave. Cal. Reading (L/min): 1.54 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11206 a Tenax/Charcoal Tube Number: 11206 b

Start Time: 0745 Flow Readout (L/min): N/A

Stop Time: 0758 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.54 = 20.02 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.02 x 1.02 x 1.09 = 22.26 Liters

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SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/26/99

Site: Himco Dump Superfund Site Station Location: TT-77

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 17.4 °C (t_A)

Barometric Pressure : 764.0 mm Hg at 1434 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 (ft) in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.2 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1428 1418 1485 1441
1487 1421 1416

Ave. Cal. Reading (L/min): 1.44 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11211a Tenax/Charcoal Tube Number: 11211b

Start Time: 1434 Flow Readout (L/min): N/A

Stop Time: 1448 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.44 = 20.16 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.16 x 1.01 x 1.03 = 20.97 Liters

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SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/26/99

Site: Himco Dump Superfund Site Station Location: TT-78

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 17.8 °C (t_A)

Barometric Pressure : 764.2 mm Hg at 1246 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 0 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.3 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1481 1538 1543 1509
1477 1571 1535

Ave. Cal. Reading (L/min): 1.52 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump.

Tenax Tube Number: 11225 a Tenax/Charcoal Tube Number: 11225 b

Start Time: 1246 Flow Readout (L/min): N/A

Stop Time: 1259 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.52 = 19.76 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.76 x 1.01 x 1.02 = 20.36 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/26/99

Site: Himco Dump Superfund Site Station Location: TT-80

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 7.9 °C (t_A)

Barometric Pressure : 764.2 mm Hg at 0828 AM/PM (P_A)

Weather: Cloudy, slight breeze.

Sample Depth: 5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 % (GI could not be calibrated)

O_2 Reading: 20.2 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1496 1478 1486 1506 1506 1485 1526

Ave. Cal. Reading (L/min): 1.50 (Q_A) Flow Readout (L/min): N/A – No Flow Readout on Pump

Tenax Tube Number: 11223a Tenax/Charcoal Tube Number: 11223b

Start Time: 0828 Flow Readout (L/min): N/A

Stop Time: 0841 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.50 = 19.50 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.50 x 1.01 x 1.06 = 20.88 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/25/99

Site: Himco Dump Superfund Site Station Location: TT-81

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 16.7 °C (t_A)

Barometric Pressure : 762.8 mm Hg at 1547 AM/PM (P_A)

Weather: Sunny, breezy.

Sample Depth: 5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 % CGI could not be calibrated.

O_2 Reading: 20.1 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1447 1515 1469 1470
1452 1474 1450

Ave. Cal. Reading (L/min): 1.47 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11201 a Tenax/Charcoal Tube Number: 11201 b

Start Time: 1547 Flow Readout (L/min): N/A

Stop Time: 1601 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.47 = 20.58 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.58 x 1.00 x 1.03 = 21.20 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/25/99

Site: Hinco Dump Superfund Site Station Location: TT-82

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 17.8 °C (t_A)

Barometric Pressure : 763.1 mm Hg at 1458 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 (ft)in

H_2S Reading: 0 ppm CH_4 Reading: 0 % CGI could not be calibrated.

O_2 Reading: 19.8 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1480 1449 1465 1426 1471 1428 1427

Ave. Cal. Reading (L/min): 1.45 (Q_A) Flow Readout (L/min): N/A - No Flow Regulator on Pump

Tenax Tube Number: 11004a Tenax/Charcoal Tube Number: 11004b

Start Time: 1458 Flow Readout (L/min): N/A

Stop Time: 1512 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.45 = 20.30 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.30 x 1.00 x 1.02 = 20.71 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/25/99

Site: Himco Dump Superfund Site Station Location: TI-83

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 14.0 °C (t_A)

Barometric Pressure : 763.9 mm Hg at 1329 AM/PM (P_A)

Weather: Sunny, breezy.

Sample Depth: 5 (ft)in

H_2S Reading: 0 ppm CH_4 Reading: 0 % CGI could not be calibrate

O_2 Reading: 19.7 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1525 1459 1421 1410
1457 1455 1462

Ave. Cal. Reading (L/min): 1.46 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11111a Tenax/Charcoal Tube Number: 11111b

Start Time: 1329 Flow Readout (L/min): N/A

Stop Time: 1343 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.46 = 20.44 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.44 x 1.01 x 1.04 = 21.47 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/25/99

Site: Himco Dump Superfund Site Station Location: TT-84

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 12.8 °C (t_A)

Barometric Pressure : 765.1 mm Hg at 1239 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 (ft)/in

H_2S Reading: 0 ppm CH_4 Reading: 0 % CGI could not be calibrate

O_2 Reading: 20.4 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1217 1216 1218 1191
1218 1221 1185

Ave. Cal. Reading (L/min): 1.21 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11102a Tenax/Charcoal Tube Number: 11102b

Start Time: 1239 Flow Readout (L/min): N/A

Stop Time: 1256 Flow Readout (L/min): N/A

Elapsed Time: 17 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 17 x 1.21 = 20.57 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.57 x 1.01 x 1.04 = 21.61 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/25/99

Site: Himco Dump Superfund Site Station Location: T1-85

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 9.5 °C (t_A)

Barometric Pressure : 766.8 mm Hg at 1041 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 (ft/in)

H_2S Reading: 0 ppm CH_4 Reading: 0 % CGI could not be calibrate

O_2 Reading: 20.1 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1450 1499 1487 1448 1444 1474 1450

Ave. Cal. Reading (L/min): 1.46 (Q_A) Flow Readout (L/min): N/A - No Flow Reduction Pump.

Tenax Tube Number: 11020a Tenax/Charcoal Tube Number: 11020b

Start Time: 1041 Flow Readout (L/min): N/A

Stop Time: 1055 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.46 = 20.44 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.44 x 1.01 x 1.05 = 21.68 Liters

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SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/27/99

Site: Himco Dump Superfund Site Station Location: ~~T~~-86

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 11.6 °C (t_A)

Barometric Pressure : 770.8 mm Hg at 1107 AM/PM (P_A)

Weather: Sunny, Calm

Sample Depth: 5 ft/in

H_2S Reading: 4 ppm CH_4 Reading: 0 %

O_2 Reading: 15.8 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1534 1432 1521 1431 1428 1434 1425

Ave. Cal. Reading (L/min): 1.46 (Q_A) Flow Readout (L/min): N/A No Flow Readout on Pump

Tenax Tube Number: 11215a Tenax/Charcoal Tube Number: 11215b

Start Time: 1107 Flow Readout (L/min): N/A

Stop Time: 1121 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.46 = 20.44 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.44 x 1.01 x 1.05 = 21.68 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/27/99

Site: Himco Dump Superfund Site Station Location: TT-87

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 15.9 °C (t_A)

Barometric Pressure : 768.9 mm Hg at 1505 AM/PM (P_A)

Weather: Sunny, partly breezy

Sample Depth: 5 ft/in

H_2S Reading: 2 ppm CH_4 Reading: 0 %

O_2 Reading: 20.6 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1382 1374 1353 1319
1386 1403 1331

Ave. Cal. Reading (L/min): 1.36 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11224 a Tenax/Charcoal Tube Number: 11224 b

Start Time: 1505 Flow Readout (L/min): N/A

Stop Time: 1520 Flow Readout (L/min): N/A

Elapsed Time: 15 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 15 x 1.36 = 20.40 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.40 x 1.01 x 1.03 = 21.22 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/29/99

Site: Himco Dump Superfund Site Station Location: TT-89

Sampling Team: Rick Grabowski, Janie Carr

Temperature: _____ (°F – 32)/1.8 = 10.8 °C (t_A)

Barometric Pressure : 766.9 mm Hg at 0739 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 5 6 ft/in

H_2S Reading: 1 ppm CH_4 Reading: 0 %

O_2 Reading: 20.6 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1476 1421 1424 1483 1480 1418 1473

Ave. Cal. Reading (L/min): 1.45 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11313a Tenax/Charcoal Tube Number: 11313b

Start Time: 0739 Flow Readout (L/min): N/A

Stop Time: 0753 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.45 = 20.30 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.30 x 1.01 x 1.05 = 21.53 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/28/99

Site: Himco Dump Superfund Site Station Location: TT-90

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 22.6 °C (t_A)

Barometric Pressure : 764.4 mm Hg at 1455 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.5 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1424 1410 1400 1406 1402 1471 1389

Ave. Cal. Reading (L/min): 1.41 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11222a Tenax/Charcoal Tube Number: 11222b

Start Time: 1455 Flow Readout (L/min): N/A

Stop Time: 1509 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.41 = 19.74 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.74 x 1.01 x 1.01 = 20.14 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/29/99

Site: Himco Dump Superfund Site Station Location: TT-91

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 14.2 °C (t_A)

Barometric Pressure : 767.3 mm Hg at 0900 AM/PM (P_A)

Weather: Sunny, calm

Sample Depth: 5 (ft)/in

H_2S Reading: 2 ppm CH_4 Reading: 0 %

O_2 Reading: 20.1 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1469 1428 1424 1430
1371 1435 1500

Ave. Cal. Reading (L/min): 1.44 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11315a Tenax/Charcoal Tube Number: 11315a

Start Time: 0900 Flow Readout (L/min): N/A

Stop Time: 0914 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A =$ 14 x 1.44 = 20.16 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.16 x 1.01 x 1.04 = 21.18 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/29/99

Site: Himco Dump Superfund Site Station Location: TT-95

Sampling Team: Rick Grabowski, Janie Carr

Temperature: _____ (°F – 32)/1.8 = 16.1 °C (t_A)

Barometric Pressure : 767.0 mm Hg at 0953 AM/PM (P_A)

Weather: Sunny, slightly breezy

Sample Depth: 5 (ft)/in

H_2S Reading: 2 ppm CH_4 Reading: 0 %

O_2 Reading: 20.6 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1465 1502 1433 1440 1463 1482 1551

Ave. Cal. Reading (L/min): 1.48 (Q_A) Flow Readout (L/min): N/A - No Flow Reading on Pump.

Tenax Tube Number: 1317a Tenax/Charcoal Tube Number: 1317b

Start Time: 0953 Flow Readout (L/min): N/A

Stop Time: 1007 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.48 = 20.72 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.72 x 1.01 x 1.03 = 21.56 Liters

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SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/29/99

Site: Hinco Dump Superfund Site Station Location: TT-95 (Duplicate)

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 17.6 °C (t_A)

Barometric Pressure : 766.9 mm Hg at 1011 AM/PM (P_A)

Weather: Cloudy, calm

Sample Depth: 5 ft/in

H_2S Reading: — ppm CH_4 Reading: — %

O_2 Reading: — %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M5

Calibrator Readings (L/min): 1357 1375 1379 1374
1362 1341 1369

Ave. Cal. Reading (L/min): 1.37 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11304a Tenax/Charcoal Tube Number: 11304b

Start Time: 1012 Flow Readout (L/min): N/A

Stop Time: 1028 Flow Readout (L/min): N/A

Elapsed Time: 16 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 16 x 1.37 = 21.92 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 21.92 x 1.01 x 1.03 = 22.8 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/27/99

Site: Himco Dump Superfund Site Station Location: TT-96

Sampling Team: Rick Grabowski, Janie Carroll

Temperature: _____ (°F – 32)/1.8 = 12.8 °C (t_A)

Barometric Pressure : 769.5 mm Hg at 1410 AM/PM (P_A)

Weather: Sunny, slightly breezy

Sample Depth: 5 ~~ft~~ in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.7 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1373 1435 1341 1440
1411 1424 1436

Ave. Cal. Reading (L/min): 1.42 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11217a Tenax/Charcoal Tube Number: 11217b

Start Time: 1413 Flow Readout (L/min): N/A

Stop Time: 1427 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.42 = 19.88 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.88 x 1.01 x 1.04 = 20.88 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/27/99

Site: Himco Dump Superfund Site Station Location: TT-96 (Equipment Blank)

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: 3 (°F – 32)/1.8 = 13.7 °C (t_A)

Barometric Pressure : 769.5 mm Hg at 1343 AM/PM (P_A)

Weather: Sunny, slightly breezy.

Sample Depth: — ft/in

H_2S Reading: — ppm CH_4 Reading: — %

O_2 Reading: — %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1400 1410 1381 1480

1390 1471 1464

Ave. Cal. Reading (L/min): 1.43 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump.

Tenax Tube Number: 11213a Tenax/Charcoal Tube Number: 11213b

Start Time: 1345 Flow Readout (L/min): N/A

Stop Time: 1359 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.43 = 20.02 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.02 x 1.01 x 1.04 = 21.03 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/27/99

Site: Himco Dump Superfund Site Station Location: TT-96 (Ambient Air Blank)

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 12.6 °C (t_A)

Barometric Pressure : 769.8 mm Hg at 1313 AM/PM (P_A)

Weather: Sunny, Slightly Breezy

Sample Depth: – ft/in

H_2S Reading: – ppm CH_4 Reading: – %

O_2 Reading: – %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1392 1359 1400 1480

1385 1424 1408

Ave. Cal. Reading (L/min): 1.41 (Q_A) Flow Readout (L/min): N/A – No Flow Readout on Pump.

Tenax Tube Number: 11219a Tenax/Charcoal Tube Number: 11219b

Start Time: 1313 Flow Readout (L/min): N/A

Stop Time: 1327 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.41 = 19.74 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.74 x 1.01 x 1.04 = 20.73 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/28/99

Site: Himco Dump Superfund Site Station Location: TT-97

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 19.4 °C (t_A)

Barometric Pressure : 765.3 mm Hg at 1253 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 (ft) in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.6 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1431 1497 1410 1419 1413 1420 1489

Ave. Cal. Reading (L/min): 1.44 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11310 a Tenax/Charcoal Tube Number: 11310 b

Start Time: 1253 Flow Readout (L/min): N/A

Stop Time: 1307 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.44 = 20.16 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.16 x 1.01 x 1.02 = 20.77 Liters

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SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/28/99

Site: Himco Dump Superfund Site Station Location: TT-97 (Duplicate)

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 18.9 °C (t_A)

Barometric Pressure : 765.2 mm Hg at 1312 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 ft/in

H_2S Reading: — ppm CH_4 Reading: — %

O_2 Reading: — %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1366 1439 1352 1326

1446 1424 1413

Ave. Cal. Reading (L/min): 1.40 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11205a Tenax/Charcoal Tube Number: 11205b

Start Time: 1312 Flow Readout (L/min): N/A

Stop Time: 1326 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.40 = 19.60 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.60 x 1.01 x 1.02 = 20.19 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/28/99

Site: Himco Dump Superfund Site Station Location: TT-98

Sampling Team: Rick Grabowski, Janie Carvig

Temperature: _____ (°F – 32)/1.8 = 20.9 °C (t_A)

Barometric Pressure : 764.8 mm Hg at 1353 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 ft/in

H_2S Reading: 0 ppm CH_4 Reading: 0 %

O_2 Reading: 20.7 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1443 1349 1458 1409 1408 1441 1376

Ave. Cal. Reading (L/min): 1.41 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump.

Tenax Tube Number: 11203a Tenax/Charcoal Tube Number: 11203b

Start Time: 1353 Flow Readout (L/min): N/A

Stop Time: 1407 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.41 = 19.74 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.74 x 1.01 x 1.01 = 20.14 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/29/99

Site: Himco Dump Superfund Site Station Location: TT-100

Sampling Team: Rick Grabowski, Janice Carey

Temperature: _____ (°F – 32)/1.8 = 10.1 °C (t_A)

Barometric Pressure : 767.2 mm Hg at 0816 AM/PM (P_A)

Weather: Sunny, calm.

Sample Depth: 5 (ft)/in

H_2S Reading: 1 ppm CH_4 Reading: 0 %

O_2 Reading: 20.5 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1516 1550 1472 1504 1520 1571 1459

Ave. Cal. Reading (L/min): 151 (Q_A) Flow Readout (L/min): N/A - No Flow Regulator Pump.

Tenax Tube Number: 11311a Tenax/Charcoal Tube Number: 11311b

Start Time: 0816 Flow Readout (L/min): N/A

Stop Time: 0829 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 151 = 19.63 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 19.63 x 1.01 x 1.05 = 20.82 Liters

B.

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/28/99

Site: Himco Dump Superfund Site Station Location: TT-101

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 24.1 °C (t_A)

Barometric Pressure : 764.3 mm Hg at 1540 AM/PM (P_A)

Weather: Sunny, breezy

Sample Depth: 5 (ft)/in

H_2S Reading: 2 ppm CH_4 Reading: 0 %

O_2 Reading: 9.6 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M5

Calibrator Readings (L/min): 1442 1496 1462 1383 1449 1469 1422

Ave. Cal. Reading (L/min): 1.45 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11212a Tenax/Charcoal Tube Number: 11212b

Start Time: 1540 Flow Readout (L/min): N/A

Stop Time: 1554 Flow Readout (L/min): N/A

Elapsed Time: 14 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 14 x 1.45 = 20.30 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.30 x 1.01 x 1.00 = 20.50 Liters

SOIL GAS SURVEY FORM

Client: U.S. EPA Region 5 Date: 10/27/99

Site: Himco Dump Superfund Site Station Location: TT-102

Sampling Team: Rick Grabowski, Janie Carrig

Temperature: _____ (°F – 32)/1.8 = 8.1 °C (t_A)

Barometric Pressure : 771.2 mm Hg at 0933 AM/PM (P_A)

Weather: Sunny, slightly breezy

Sample Depth: 5 (ft)/in

H_2S Reading: 3 ppm CH_4 Reading: 0 %

O_2 Reading: 17.9 %

Air Sampling Pump Mfg./Model: Ametek Alpha-1

Calibrator Mfg./Model: Buck M-5

Calibrator Readings (L/min): 1529 1587 1578 1542 1579 1582 1580

Ave. Cal. Reading (L/min): 1.57 (Q_A) Flow Readout (L/min): N/A - No Flow Readout on Pump

Tenax Tube Number: 11216 a Tenax/Charcoal Tube Number: 11216 b

Start Time: 0933 Flow Readout (L/min): N/A

Stop Time: 0946 Flow Readout (L/min): N/A

Elapsed Time: 13 Min. (T) % Difference Flow Readout: N/A

Volumetric Flow Calculation: $V_m = T \times Q_A$ = 13 x 1.57 = 20.41 Liters

Standardized Volume (@ 25° C and 760 mm Hg): $V_s = V_m \times (P_A/760) \times ((298/(273 + t_A))$

= 20.41 x 1.01 x 1.06 = 21.85 Liters

Table 2
Summary of Field Screening Results - October 1999
Supplemental Site Investigation/Site Characterization Report
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	Hydrogen Sulfide (ppm)	Methane (% LEL)	Oxygen (%)
TT-54	0	0	20.5
TT-55	0	0	20.4
TT-56	>999	3.5	6.6
TT-57	0	0	20.5
TT-58	0	0	20.4
TT-59	0	0	19.7
TT-60	0	0	19.7
TT-61	0	0	20.1
TT-62	0	0	7.5
TT-63	0	0	14.7
TT-64	0	0	11.3
TT-65	0	0	20.4
TT-66	0	0	20.1
TT-67	0	0	18.7
TT-68	0	0	19.7
TT-69	0	0	20.3
TT-70	0	0	20.4
TT-71	0	0	20.4
TT-72	0	0	20.1
TT-73	0	0	20.4
TT-74	0	0	20.1
TT-75	4	0	18.9
TT-76	2	0	19.2
TT-77	0	0	20.2
TT-78	0	0	20.3
TT-79	1	0	20
TT-80	0	0	20.2
TT-81	0	0	20.1
TT-82	0	0	19.8
TT-83	0	0	19.7
TT-84	0	0	20.4
TT-85	0	0	20.1
TT-86	4	0	15.8
TT-87	2	0	20.6
TT-88	ND	ND	ND
TT-89	1	0	20.6
TT-90	0	0	20.5
TT-91	2	0	20.1
TT-92	0	0	20.1
TT-93	ND	ND	ND
TT-94	ND	ND	ND
TT-95	2	0	20.6
TT-96	0	0	20.7

Table 2
Summary of Field Screening Results - October 1999
Supplemental Site Investigation/Site Characterization Report
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	Hydrogen Sulfide (ppm)	Methane (% LEL)	Oxygen (%)
TT-97	0	0	20.6
TT-98	0	0	20.7
TT-99	ND	ND	ND
TT-100	1	0	20.5
TT-101	2	0	9.6
TT-102	3	0	17.9

ND = No Data Sheet

Appendix F

2000 Supplemental Site Investigation Geophysical Logs

Region 5

Field Services Section

Chicago, Illinois

B1

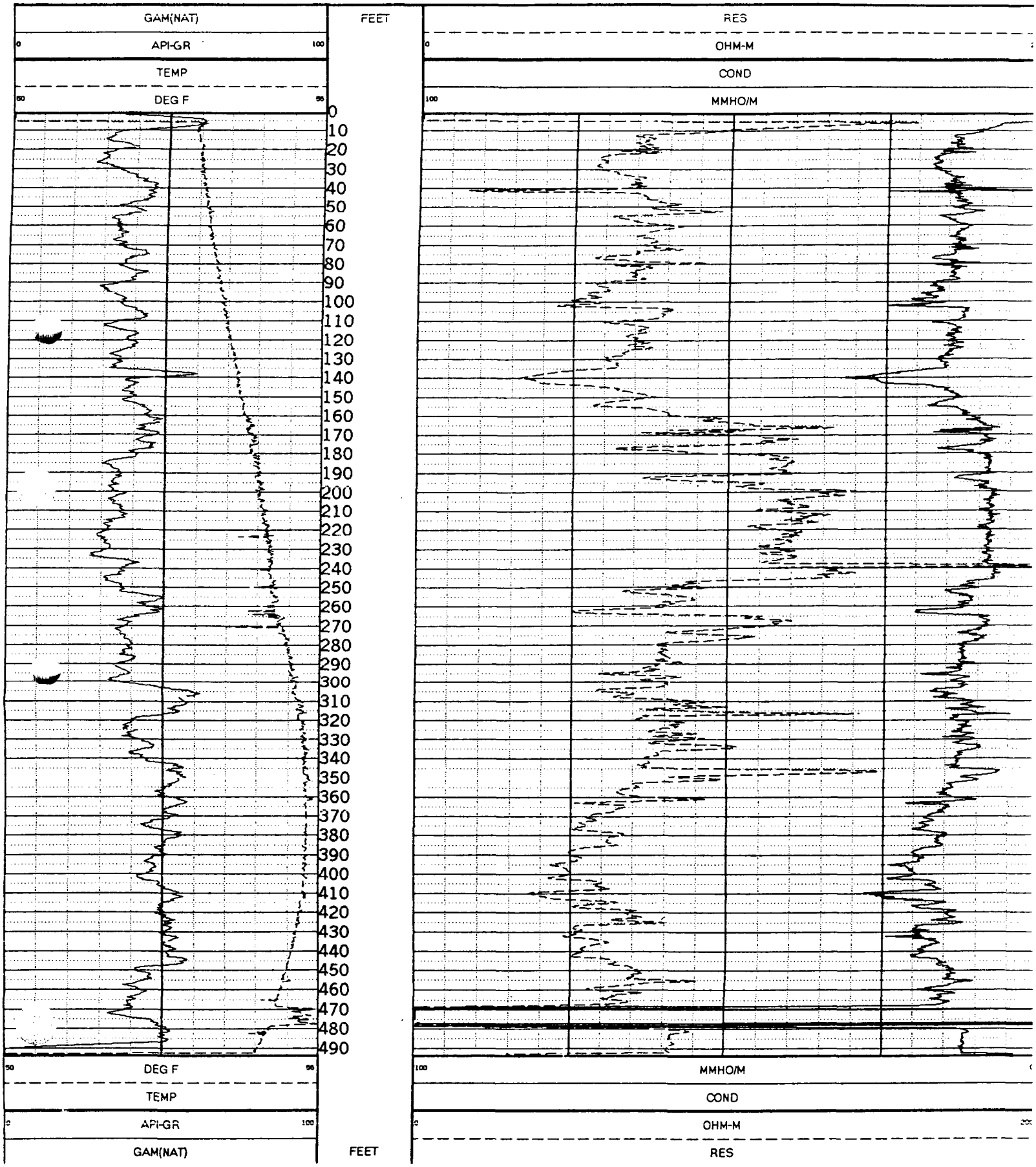
COMPANY	: USEPA				
WELL	: B1				
LOCATION/FIELD	: HIMCO				
COUNTY	: ELKHART				
STATE	: IN				
SECTION	: None	TOWNSHIP	: None	RANGE	: None
DATE	: 03/15/00	PERMANENT DATUM	: None		
DEPTH DRILLER	: ~~473~~			KB	: None
LOG BOTTOM	: 493.20	LOG MEASURED FROM:	TiC	DF	: None
LOG TOP	: 0.90	DRL MEASURED FROM:	None	GL	: None
CASING DIAMETER	: ~~5"~~	LOGGING UNIT	: 1		
CASING TYPE	: PVC	FIELD OFFICE	: None		
CASING THICKNESS:	0	RECORDED BY	: JRU		
BIT SIZE	: 6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 0	RM	: 0	TYPE	: 9511A
MATRIX DENSITY	: 2.71	RM TEMPERATURE	: 0		
NEUTRON MATRIX	: Dolomite	MATRIX DELTA T	: 54		
				THRESH:	0

OTHER SERVICES:
None
None
None

~~GW ELEV. 12.89'~~
None

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

B1 03/15/00 748



Region 5

Field Services Section

Chicago, Illinois

E3

COMPANY	: USEPA				
WELL	: E3				
LOCATION/FIELD	: HIMCO				
COUNTY	: ELKHART				
STATE	: IN				
SECTION	: None	TOWNSHIP	: None	RANGE	: None
DATE	: 03/14/00	PERMANENT DATUM	: None		
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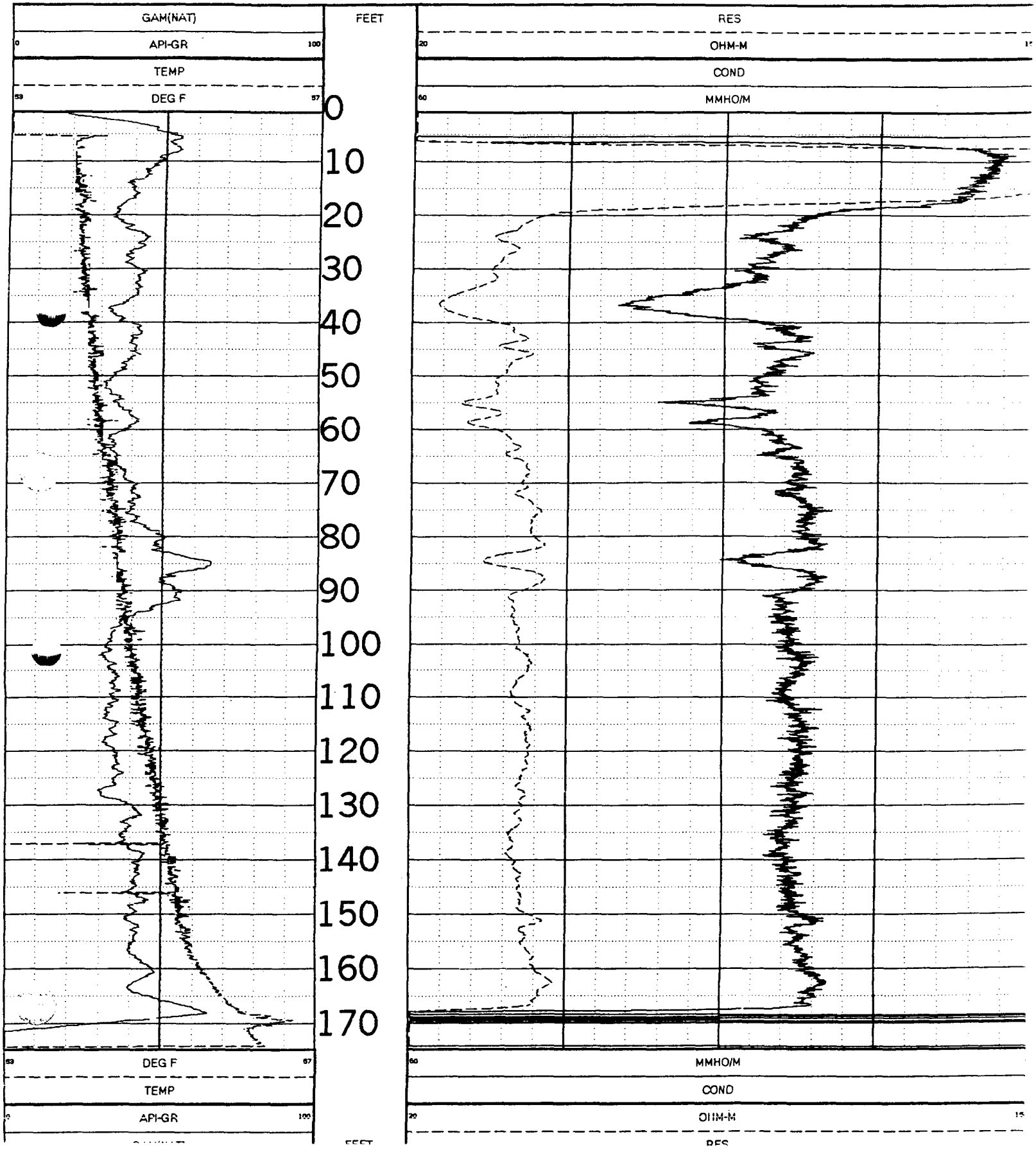
LOG BOTTOM	: 174.40	LOG MEASURED FROM:	TOC	DF	: None
LOG TOP	: 0.80	DRL MEASURED FROM:	None	GL	: None
CASING DIAMETER	: 5"	LOGGING UNIT	: 1		
CASING TYPE	: PVC	FIELD OFFICE	: None		
CASING THICKNESS:	0	RECORDED BY	: JRU		
BIT SIZE	: 6	BOREHOLE FLUID	: WATER	FILE	: PROCESSED
MAGNETIC DECL.	: 0	RM	: 0	TYPE	: 9511A
MATRIX DENSITY	: 2.71	RM TEMPERATURE	: 0		
NEUTRON MATRIX	: Dolomite	MATRIX DELTA T	: 54		
				THRESH:	0

OTHER SERVICES:
None
None
None

None

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

E3 03/14/00 748



Region 5

Field Services Section

Chicago, Illinois

G3

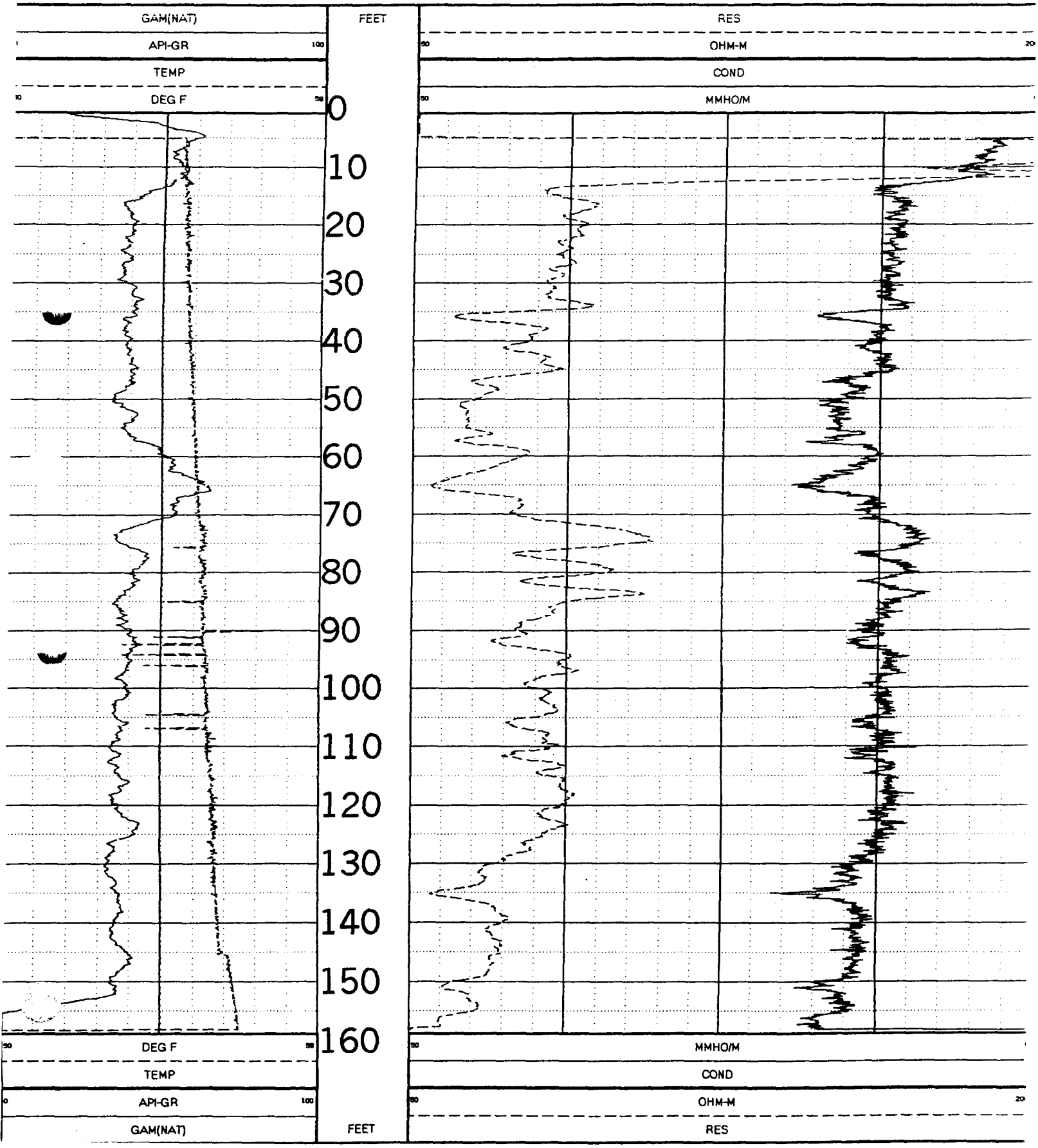
COMPANY	: USEPA				
WELL	: G3				
LOCATION/FIELD	: HIMCO				
COUNTY	: ELKHART				
STATE	: IN				
SECTION	: None	TOWNSHIP	: None	RANGE	: None
DATE	: 03/14/00	PERMANENT DATUM	: None		
DEPTH DRILLER	: 169			KB	: None
LOG BOTTOM	: 158.50	LOG MEASURED FROM:	TOC	DF	: None
LOG TOP	: 0.70	DRL MEASURED FROM:	None	GL	: None
CASING DIAMETER	: 5"	LOGGING UNIT	: 1		
CASING TYPE	: PVC	FIELD OFFICE	: None		
CASING THICKNESS:	0	RECORDED BY	: JRU		
BIT SIZE	: 6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 0	RM	: 0	TYPE	: 9511A
MATRIX DENSITY	: 2.71	RM TEMPERATURE	: 0		
NEUTRON MATRIX	: Dolomite	MATRIX DELTA T	: 54		
				THRESH:	0

OTHER SERVICES:
None
None
None

None

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

G3 03/14/00 748



Region 5

Field Services Section

Chicago, Illinois

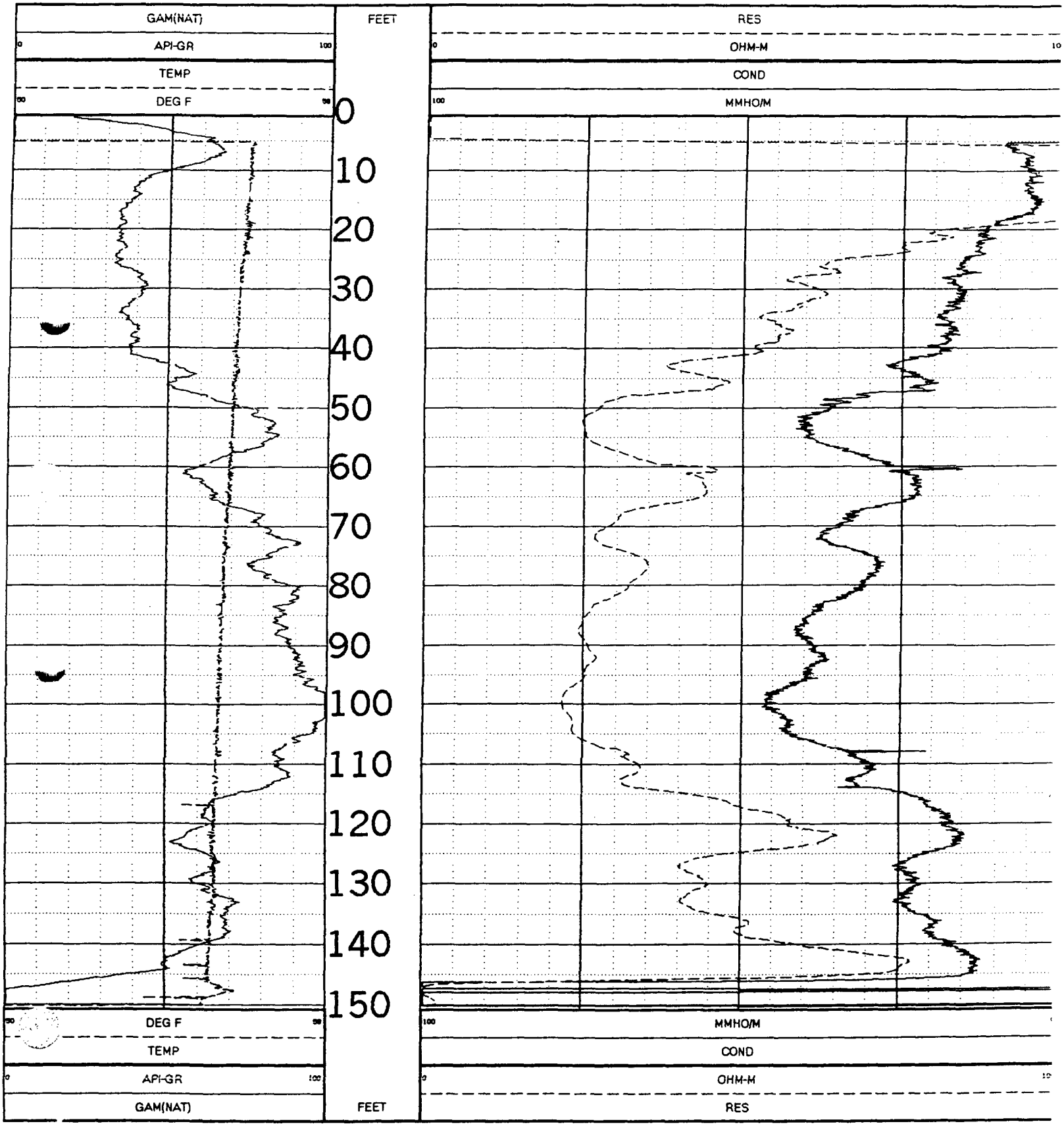
J3

COMPANY	: USEPA			OTHER SERVICES:			
WELL	: J3			None			
LOCATION/FIELD	: HIMCO			None			
COUNTY	: ELKHART			None			
STATE	: IN						
SECTION	: None	TOWNSHIP	: None		RANGE	: None	
DATE	: 03/15/00	PERMANENT DATUM	: None				
DEPTH DRILLER	: 175				KB	: None	
LOG BOTTOM	: 150.50	LOG MEASURED FROM	: TOC		DF	: None	
LOG TOP	: 0.80	DRL MEASURED FROM	: None		GL	: None	
CASING DIAMETER	: 5"	LOGGING UNIT	: 1				
CASING TYPE	: PVC	FIELD OFFICE	: None				
CASING THICKNESS	: 0	RECORDED BY	: JRU				
BIT SIZE	: 6	BOREHOLE FLUID	: WATER		FILE	: ORIGINAL	
MAGNETIC DECL.	: 0	RM	: 0		TYPE	: 9511A	
MATRIX DENSITY	: 2.71	RM TEMPERATURE	: 0				
NEUTRON MATRIX	: Dolomite	MATRIX DELTA T	: 54				
					THRESH:	0	

None

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

J3 03/15/00 748



Region 5

Field Services Section

Chicago, Illinois

114B

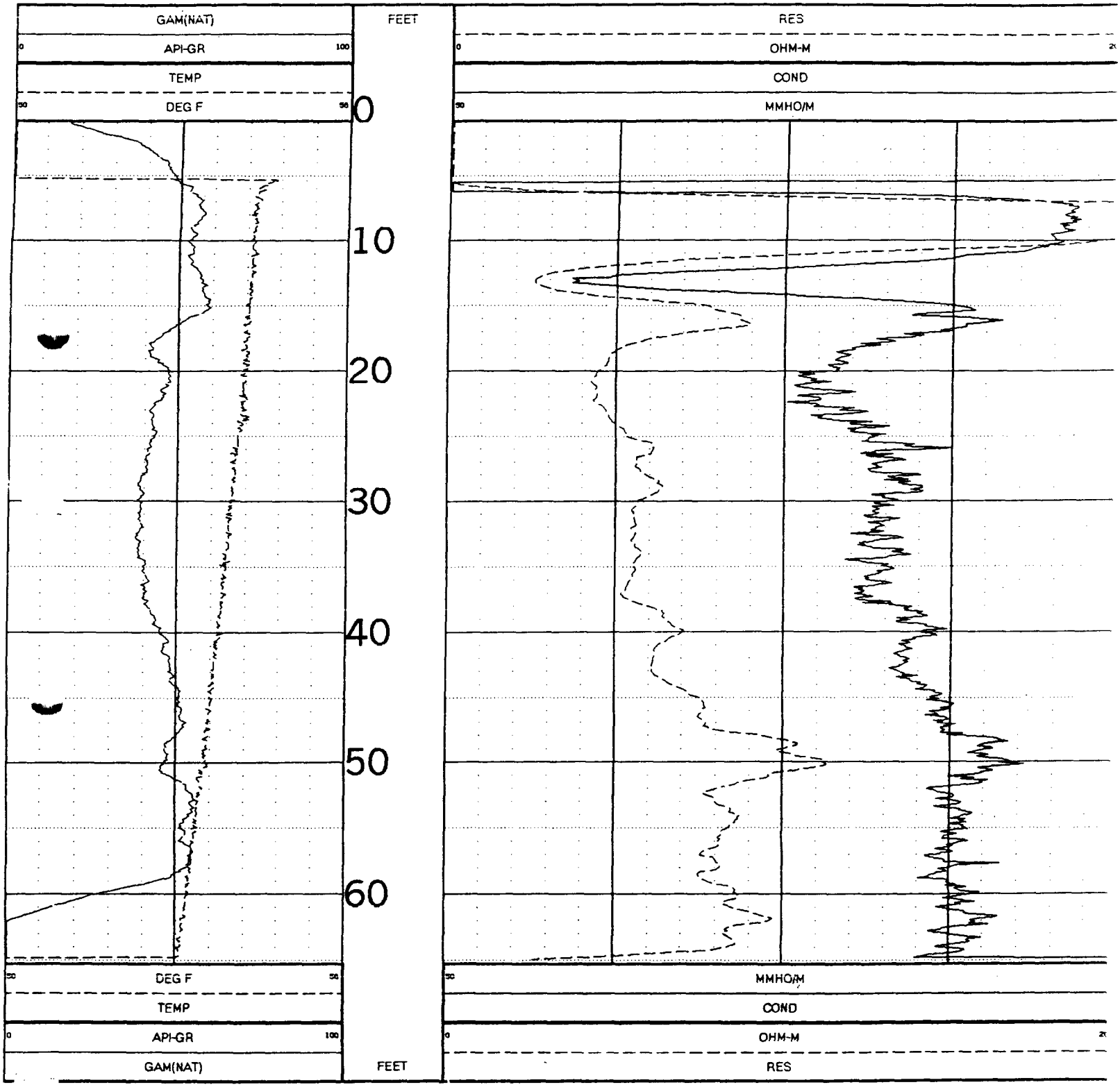
COMPANY	: USEPA				
WELL	: 114B				
LOCATION/FIELD	: HIMCO				
COUNTY	: ELKHART				
STATE	: IN				
SECTION	: None	TOWNSHIP	: None	RANGE	: None
DATE	: 03/15/00	PERMANENT DATUM	: None		
DEPTH DRILLER	: 66			KB	: None
LOG BOTTOM	: 65.10	LOG MEASURED FROM:	TiC	DF	: None
LOG TOP	: 0.80	DRL MEASURED FROM:	None	GL	: None
CASING DIAMETER	: 2"	LOGGING UNIT	: 1		
CASING TYPE	: PVC	FIELD OFFICE	: None		
CASING THICKNESS:	0	RECORDED BY	: JRU		
BIT SIZE	: 6	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 0	RM	: 0	TYPE	: 9511A
MATRIX DENSITY	: 2.71	RM TEMPERATURE	: 0		
NEUTRON MATRIX	: Dolomite	MATRIX DELTA T	: 54		
				THRESH:	0

OTHER SERVICES:
None
None
None

~~GW ELEV. 12.89'~~
None

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

114B 03/15/00 748



Appendix G

2000 Supplemental Site Investigation
Well Gauging Forms

WELL GAUGING FORM

Inspector(s): Janie Carrig and Mary Johansen **Equipment Used:** Electronic water level indicator.

Date: 19-Apr-00

Well ID No.	Time	Depth to Water[1]	TOC Elev.[2]	Water Elev.[2]	Depth to Bottom[1]	Comments
WT104A	1146	13.44	765.29	751.85	18.73	Well secured. Reading from mark on casing.
WT105A	1432	11.10	762.58	751.48	18.62	Well secured.
WT106A	1505	9.98	761.50	751.52	18.56	Well secured.
WTG1	1635	13.37	763.23	749.86	52.8	Measured from notch on north side. Red paint on outside of casing is peeling & flaking with potential to enter well. Has atypical marks on the inside of the casing at ground surface. No protective outer casing, bollards or concrete pad.
WTG3	1647	18.09	763.37	745.28	167-172	Red paint on outside of casing is peeling and flaking with potential to enter well. No protective outer casing, bollards or concrete pad.

[1]Feet from Top of Casing (TOC) [2]Measured in feet Mean Sea Level (MSL) N/A - Not Available

WELL GAUGING FORM

Inspector(s): Janie Carrig and Mary Johansen **Equipment Used:** Electronic water level indicator.

Date: 20-Apr-00

Well ID No.	Time	Depth to Water[1]	TOC Elev.[2]	Water Elev.[2]	Depth to Bottom[1]	Comments
WT102A	0800	12.20	769.09	756.89	18.22	
WT102B	0800	12.04	768.82	756.78	67.62	Inner casing spun when removing cap.
WT102C	0800	12.41	769.20	756.79	161.96	Muck at 158'.
WT112A	0920	10.67	765.90	755.23	17.86	Measurements from the north.
WT112B	0920	10.87	766.09	755.22	62.23	Measurements from the north.
WT113A	0941	17.21	771.85	754.64	24.54	Well in good shape.
WT113B	0944	17.43	772.06	754.63	70.14	Well in good shape.
WT104A	1009	13.34	765.29	751.95	Not Measured	Rechecked after ~2" rain.

[1]Feet from Top of Casing (TOC) [2]Measured in feet Mean Sea Level (MSL) N/A - Not Available

WELL GAUGING FORM

Inspector(s): Janie Carrig and Mary Johansen **Equipment Used:** Electronic water level indicator.

Date: 20-Apr-00

Well ID No.	Time	Depth to Water[1]	TOC Elev.[2]	Water Elev.[2]	Depth to Bottom[1]	Comments
WTB1	1302	8.03	763.65	755.62	Not Encountered	All health and safety monitoring is zero except 21% O_2.
WTB2	1305	dry	763.18	N/A	7.62	All health and safety monitoring is zero except 21% O_2. No lock or steel casing. PVC has holes from gunshots. Some water at bottom.
WTB3	1324	7.72	763.28	755.56	129-130	All health and safety monitoring is zero except 21% O_2. Measured from metal casing. Soft bottom.
WTB4	N/A	N/A	762.33	N/A	N/A	Lock damaged and cannot open.
WT103A	1354	7.0	762.61	755.61	18.52	All health and safety monitoring is zero except 20.9% O_2. Well in good condition. One protective post removed and on ground.
WT117A	1426	14.20	767.19	752.99	18.28	All health and safety monitoring is zero except 20.9% O_2. Measurement taken from TOC (metal) on north side.
WT117B	1430	13.48	766.60	753.12	63.55	All health and safety monitoring is zero except 20.9% O_2.
WT111A	1509	13.59	766.45	752.86	21.71	All health and safety monitoring is zero except 20.9% O_2.

[1]Feet from Top of Casing (TOC) [2]Measured in feet Mean Sea Level (MSL) N/A - Not Available

WELL GAUGING FORM

Inspector(s): Janie Carrig and Mary Johansen **Equipment Used:** Electronic water level indicator.

Date: 20-Apr-00

Well ID No.	Time	Depth to Water[1]	TOC Elev.[2]	Water Elev.[2]	Depth to Bottom[1]	Comments
WT118B	1515	13.57	766.49	752.92	65.1	All health and safety monitoring is zero except 20.9% O_2. Measurement taken from PVC casing on north side.
WT116A	1530	10.27	763.86	753.59	16.32	All health and safety monitoring is zero except 20.7% O_2. Well in good condition.
WT116B	1530	10.70	763.89	753.19	59.76	All health and safety monitoring is zero except 20.7% O_2. Well in good condition.
WT114A	1700	16.63	769.19	752.56	24.66	Measurement taken from PVC riser.
WT114B	1700	16.66	769.37	752.71	69.2	Measurement taken from PVC riser.
WT101A	1743	11.89	764.34	752.45	18.76	All health and safety monitoring is zero. Well in good condition.
WT101B	1743	11.65	764.23	752.58	100.8	All health and safety monitoring is zero. Well in good condition.
WT101C	1743	11.44	764.11	752.67	167.5	All health and safety monitoring is zero. Well in good condition. Bottom is soft.

[1]Feet from Top of Casing (TOC) [2]Measured in feet Mean Sea Level (MSL) N/A - Not Available

WELL GAUGING FORM

Inspector(s): Janie Carrig and Mary Johansen **Equipment Used:** Electronic water level indicator.

Date: 20-Apr-00

Well ID No.	Time	Depth to Water[1]	TOC Elev.[2]	Water Elev.[2]	Depth to Bottom[1]	Comments
WT115A	1806	13.39	765.87	752.48	19.79	All health and safety monitoring is zero. Well in good condition.
WTE1	1816	13.26	765.75	752.49	85.5-86.0	All health and safety monitoring is zero. Cap is not present. Soft @ 81.20'.
WTE3	1826	12.83	765.47	752.64	187	All health and safety monitoring is zero. Cap is not present. Soft @ 178'.
WT119A	1858	10.68	763.26	752.58	20.30	All health and safety monitoring is zero. Well in good condition.
WT01	N/A	N/A	762.83	N/A	N/A	Could not find well.

[1]Feet from Top of Casing (TOC) [2]Measured in feet Mean Sea Level (MSL) N/A - Not Available

Appendix H

Summary of 1984 - 2000 Ground Water, Soil and Soil Gas Analytical Data

Ground water data detections presented by monitoring well for the years 1990-2000 and residential locations for the years 1990-2000

followed by a summary of :
ground water, soil, and soil gas data by sampling episode for the years:

1984
1995
1996
1998
1999
2000

1990-2000
Monitoring Well Detections

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTB1			
Well Depth	473 '			
Date sampled	12/4/1990		4/26/2000	
TOTAL METALS (µg/L)				
Aluminum	347		118	U
Barium	116	B	122	
Calcium	51700		52500	
Chromium	6.0	U	2.4	J
Copper	11.2	B	9.3	U
Iron	903	J	527	
Lead	10.2	J	2	U
Magnesium	20900		20900	
Manganese	51.0		40.1	
Nickel	25.0	U	8.3	J
Potassium	1950	B	2100	
Sodium	51200		55100	
Zinc	71.4	J	36.9	JB
MISC INORGANICS				
Bromide (µg Br^-/L)	200	U	180	J
Sulfate (mg SO_4/L)	44	UJ	60	J
VOLATILE ORGANICS (µg/L)	ND		ND	
SEMIVOLATILE ORGANICS (µg/L)	ND		ND	
PESTICIDES/PCB (µg/L)	ND		NS	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTB2			
Well Depth	13.9'			
Date sampled	12/4/1990		9/26/1991	
TOTAL METALS				
Aluminum	695		6930	
Arsenic	3.0	U	5.30	BJ
Barium	22.5	B	124.0	B
Calcium	71100		138000	
Chromium	20.9		24.60	
Cobalt	12.5	U	25.40	B
Copper	8.7	B	31.0	
Iron	1240	J	17200	
Lead	20.0	UJ	91.20	
Magnesium	11000		32900	
Manganese	99.9		1870	
Nickel	25.0	U	47.50	
Potassium	942	U	1730	B
Selenium	2.4	BJ	4.00	U
Sodium	4040	B	5490	
Vanadium	8.5	U	26.8	B
Zinc	13.9	BJ	79.0	
MISC INORGANICS				
Bromide (µg Br^-/L)	100	U	100	U
Sulfate (mg SO_4/L)	94	J	160	J
VOLATILE ORGANICS (µg/L)	ND		ND	
SEMIVOLATILE ORGANICS (µg/L)				
Naphthalene	10	U	2	J
bis(2-Ethylhexyl)phthalate	10	U	6	J
PESTICIDES/PCB (µg/L)	ND		ND	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTB3					
Well Depth	135'					
Date Sampled	12/5/1990		9/26/1991		4/26/2000	
TOTAL METALS (µg/L)						
Aluminum	47.9	B	120	B	118	U
Antimony	48.7	B	13.0	U	2.0	U
Arsenic	5.8	B	4.0	B	5.0	J
Barium	63.6	B	57.2	B	60.2	
Calcium	131000		127000		96800	
Copper	4.8	B	6.0	U	9.3	U
Iron	707	J	594		426	
Lead	20.0	UR	3.5	J	2	U
Magnesium	41400		38000		27900	
Manganese	445	J	383		356	
Potassium	1370	B	755	BJ	1290	
Selenium	3.1	B	4.0	U	2.0	U
Silver	7.7	BJ	2.0	U	11.1	U
Sodium	11600		13400		20300	
Vanadium	14.1	BJ	2.0	U	5.1	U
Zinc	19.2	BJ	7.4	B	34.1	U
MISC INORGANICS						
Bromide (µg Br^-/L)	100	U	100		80	J
Sulfate (mg SO_4/L)	300	R	281	J	132	
VOLATILE ORGANICS (µg/L)						
Chloromethane	10	U	5	J	1	U
Acetone	10	UJ	27		5	U
Chloroform	5	U	26		1	U
Bromodichloromethane	5	U	7	J	1	U
Dibromochloromethane	5	U	2	J	1	U
SEMIVOLATILE ORGANICS (µg/L)						
bis(2-Ethylhexyl)phthalate	2	JBU	2	JBU	6	
PESTICIDES/PCB (µg/L)	ND		ND		NS	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTB4					
Well Depth	174.2'					
Date sampled	12/11/1990		9/26/1991		4/26/2000	
TOTAL METALS (µg/L)						
Aluminum	126	B	145	B	118	U
Antimony	36.0	B	13.0	U	2	U
Barium	40.4	B	35	B	37	
Calcium	55500		59900		69400	
Copper	32.1		6.0	U	9.3	U
Iron	802	J	356		415	B
Lead	58.0	J	6.5		2	U
Magnesium	18500		18000		21200	
Manganese	251	J	154		206	
Potassium	1190	B	787	BJ	759	
Silver	9.0	BJ	2.0	U	11.1	U
Sodium	4210	B	4920	B	4600	
Vanadium	8.5	BJ	2.0	U	5.1	U
Zinc	35.4	J	8.8	B	34.1	U
MISC INORGANICS						
Bromide (µg Br^-/L)	100	U	100	U	110	J
Sulfate (mg SO_4/L)	38	J	49.0	J	38	
VOLATILE ORGANICS (µg/L)						
Chloroform	4	J	23		1	U
Bromodichloromethane	2	J	7	J	1	U
Dibromochloromethane	5	U	2	J	1	U
SEMIVOLATILE ORGANICS (µg/L)						
bis(2-Ethylhexyl)phthalate	32		3	J	5	U
PESTICIDES/PCB (µg/L)	ND		ND		NS	

U: Analyte was not detected.
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B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTCP1	
Well Depth	20.2'	
Date sampled	12/3/1990	
TOTAL METALS (µg/L)		
Barium	27.8	B
Calcium	111000	
Iron	284	J
Magnesium	13700	
Manganese	8.5	B
Mercury	1.0	J
Sodium	12000	
Vanadium	5.2	B
Zinc	219	J
MISC INORGANICS		
Bromide (µg Br^-/L)	100	U
Sulfate (mg SO_4/L)	190	
VOLATILE ORGANICS (µg/L)	ND	
SEMIVOLATILE ORGANICS (µg/L)	ND	
PESTICIDES/PCB (µg/L)	ND	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTE1			
Well Depth	81'			
Date sampled	1995		5/2/2000	
TOTAL METALS (µg/L)				
Barium	NR		43.5	
Calcium	NR		174000	
Iron	NR		5150	
Lead	NR		3	J
Magnesium	NR		35500	
Manganese	NR		204	J
Potassium	NR		4120	
Sodium	NR		19100	
Cyanide	NR		NS	
MISC INORGANICS				
Bromide (µg Br^-/L)	NR		120	J
Sulfate (mg SO_4/L)	NR		347	
VOLATILE ORGANICS (µg/L)				
Methylene Chloride	2	J	2	U
SEMIVOLATILE ORGANICS (µg/L)				
Diethylphthalate	10	U	3	J
bis(2-Ethylhexyl)phthalate	0 2	JBU	19	
PESTICIDES/PCB (µg/L)				
	ND		NS	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTE2			
Well Depth	17.4'			
Date sampled	12/12/1990		9/25/1991	
TOTAL METALS (µg/L)				
Aluminum	113000		25500	
Antimony	36.2	B	13.0	U
Arsenic	54.5		4.3	B
Barium	250		116	B
Beryllium	5.4		1.3	B
Calcium	28200		33700	
Chromium	133		45	
Cobalt	28.6	B	9.6	B
Copper	139		80	
Iron	39300	J	5490	
Lead	106	J	105	
Magnesium	16300		9380	
Manganese	265	J	115	
Mercury	0.40		0.20	U
Nickel	111		37	B
Potassium	5110		3160	B
Selenium	33.0		4.0	UJ
Silver	18.4	J	2.0	U
Sodium	2400	B	3520	B
Vanadium	106		36	B
Zinc	399	J	162	
MISC INORGANICS				
Bromide (µg Br^-/L)	200		4100	
Sulfate (mg SO_4/L)	13	J	15.3	J
VOLATILE ORGANICS (µg/L)				
Chloroform	5	U	2	J
2-Hexanone	0.7	J	10	UJ
SEMIVOLATILE ORGANICS (µg/L)				
bis(2-Ethylhexyl)phthalate	11	UJ	16	
PESTICIDES/PCB (µg/L)	ND		ND	

U: Analyte was not detected.
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B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTE3			
Well Depth	176'			
Date sampled	12/12/1990		5/2/2000	
TOTAL METALS (µg/L)				
Aluminum	138	B	118	U
Antimony	47.9	B	7.0	U
Arsenic	4.7	B	5.0	J
Barium	222		51.3	
Calcium	97100		58300	
Iron	3140	J	2240	
Lead	2.0	UR	3.0	J
Magnesium	38200		23800	
Manganese	21.7	J	21.1	J
Potassium	1790	B	1810	
Selenium	2.5	B	7.0	U
Silver	11.2	J	11.1	U
Sodium	90700		12400	
Vanadium	12.0	BJ	5.1	U
Zinc	17.2	BJ	34.1	U
MISC INORGANICS				
Bromide (µg Br^-/L)	1900		130	J
Sulfate (mg SO_4/L)	110	J	57	
VOLATILE ORGANICS (µg/L)				
Chloroform	10	U	3	
Bromodichloromethane	10	U	2	
Dibromochloromethane	10	U	2	
Bromoform	10	U	1	
2-Hexanone	0.7	J	5	U
SEMIVOLATILE ORGANICS (µg/L)				
Diethylphthalate	10	U	2	J
bis(2-Ethylhexyl)phthalate	10	U	35	
PESTICIDES/PCB (µg/L)				
	ND		NS	

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B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTF1	
Well Depth	31.5'	
Date Sampled	12/13/1990	
TOTAL METALS (µg/L)		
Aluminum	66.1	B
Barium	26.0	B
Calcium	26900	
Copper	5.0	B
Iron	374	J
Lead	10.2	J
Magnesium	6100	
Manganese	86.7	J
Potassium	1240	B
Silver	9.3	BJ
Sodium	5740	
Vanadium	6.1	BJ
Zinc	81.0	J
MISC INORGANICS		
Bromide (µg Br^-/L)	200	
Sulfate (mg SO_4/L)	15	J
VOLATILE ORGANICS (µg/L)	ND	
SEMIVOLATILE ORGANICS (µg/L)	ND	
PESTICIDES/PCB (µg/L)	ND	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTF2	
Well Depth	155'	
Date sampled	12/11/1990	
TOTAL METALS (µg/L)		
Aluminum	140	B
Antimony	32.2	B
Arsenic	8.0	B
Barium	56.3	B
Calcium	53900	
Iron	2500	J
Lead	2.0	R
Magnesium	17900	
Manganese	34.2	J
Potassium	901	B
Selenium	2.0	B
Silver	7.2	BJ
Sodium	4110	B
Thallium	3.0	UJ
Vanadium	8.7	BJ
MISC INORGANICS		
Bromide (µg Br^-/L)	300	
Sulfate (mg SO_4/L)	18	J
VOLATILE ORGANICS (µg/L)		
Trichloroethene	0.6	J
SEMIVOLATILE ORGANICS (µg/L)	ND	
PESTICIDES/PCB (µg/L)	ND	

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J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTF5	
Well Depth	198'	
Date sampled	12/13/1990	
TOTAL METALS (µg/L)		
Aluminum	267	
Antimony	34.6	B
Arsenic	11.7	
Barium	84.2	B
Calcium	50800	
Iron	555	J
Lead	3.5	J
Magnesium	20700	
Manganese	32.0	J
Potassium	1360	B
Silver	10.6	J
Sodium	15500	
Vanadium	8.2	BJ
MISC INORGANICS		
Bromide (µg Br^-/L)	200	
Sulfate (mg SO_4/L)	45.0	UJ
VOLATILE ORGANICS (µg/L)	ND	
SEMIVOLATILE ORGANICS (µg/L)	ND	
PESTICIDES/PCB (µg/L)	ND	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTG1			
Well Depth	43'			
Date sampled	12/4/1990		4/27/2000	
TOTAL METALS (µg/L)				
Aluminum	92.6	B	118	U
Arsenic	4.1	B	2	U
Barium	59.0	B	79.1	
Calcium	71000		94300	
Copper	10.4	B	9.3	U
Iron	1130	J	1010	
Lead	24.0	BJ	2	U
Magnesium	20500		24300	
Manganese	50.2	J	52.7	
Nickel	25.0	U	7	J
Potassium	2460	B	1430	
Sodium	6120		13800	
Vanadium	8.0	BJ	5.1	U
Zinc	25.9	J	34.1	U
MISC INORGANICS				
Bromide (µg Br^-/L)	100	U	50	J
Sulfate (mg SO_4/L)	64	J	59	
VOLATILE ORGANICS (µg/L)				
Acetone	39	BJ	5	U
SEMIVOLATILE ORGANICS (µg/L)				
bis(2-Ethylhexyl)phthalate	10	U	4	J
PESTICIDES/PCB (µg/L)	ND		NS	

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J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTG3			
Well Depth	172'			
Date sampled	12/13/1990		4/27/2000	
TOTAL METALS (µg/L)				
Aluminum	NR		36.7	J
Arsenic	NR		10	
Barium	NR		79.4	
Calcium	NR		76400	
Iron	NR		1150	
Magnesium	NR		23500	
Manganese	NR		21.8	
Nickel	NR		8.1	J
Potassium	NR		1260	
Selenium	NR		4.0	J
Sodium	NR		18400	
Cyanide	NR		NS	
MISC INORGANICS				
Bromide (µg Br^-/L)	100		60	M
Sulfate (mg SO_4/L)	NR		32	
VOLATILE ORGANICS (µg/L)				
Chloroform	3	J	1	U
Bromodichloromethane	2	J	1	U
Dibromochloromethane	1	J	1	U
4-Methyl-2-pentanone	1	J	5	U
2-Hexanone	1	J	5	U
Tetrachloroethene	0.6	J	1	U
Toluene	0.6	J	1	U
SEMIVOLATILE ORGANICS (µg/L)				
Dimethylphthalate	9	J	5	U
Diethylphthalate	38	J	5	U
bis(2-Ethylhexyl)phthalate	3	J	19	
PESTICIDES/PCB (µg/L)	ND		NS	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTM1			
Well Depth	103.6'			
Date sampled	12/5/1990		9/26/1991	
TOTAL METALS (µg/L)				
Antimony	46.8	B	13.0	UJ
Arsenic	5.1	B	2.00	UJ
Barium	75	B	82	B
Cadmium	5.0	U	2.40	BJ
Calcium	145000		163000	
Iron	6300	J	7280	
Lead	2.0	UR	4.00	J
Magnesium	30600		32800	
Manganese	82.2	J	106.00	
Potassium	5750		6520	
Selenium	3.4	B	4.0	UJ
Silver	11.6	J	2.0	U
Sodium	24200		26400	
Vanadium	12.1	BJ	3.5	B
Zinc	538	J	1240	
MISC INORGANICS				
Bromide (µg Br^-/L)	200		200	
Sulfate (mg SO_4/L)	240	R	285	J
VOLATILE ORGANICS (µg/L)				
Chloroform	5	U	2	J
SEMIVOLATILE ORGANICS (µg/L)				
bis(2-Ethylhexyl)phthalate	11	UJ	3	J
PESTICIDES/PCB (µg/L)				
	ND		ND	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTM2			
Well Depth	25.2'			
Date sampled	12/3/1990		9/25/1991	
TOTAL METALS (µg/L)				
Aluminum	61.7	B	489	
Arsenic	3.0	U	8.5	B
Barium	164	B	209	
Cadmium	5.0	UJ	3.0	BJ
Calcium	116000		165000	
Chromium	6.0	U	8.8	B
Copper	5.0	B	49	
Iron	8830	J	78500	
Lead	20.0	UJ	96.10	
Magnesium	7230		7930	
Manganese	404		403	
Mercury	0.20	J	0.20	U
Nickel	25.0	U	25.60	B
Potassium	4850	B	5510	
Sodium	44500		53800	
Vanadium	12.2	U	20.20	B
Zinc	25.7	J	148	
MISC INORGANICS				
Bromide (µg Br^-/L)	3500		100	U
Sulfate (mg SO_4/L)	6	J	37.6	J
VOLATILE ORGANICS (µg/L)				
Chloromethane	10	UJ	10	R
Bromomethane	10	U	10	R
Vinyl Chloride	10	U	10	R
SEMIVOLATILE ORGANICS (µg/L)				
Phenol	10	U	2	J
bis(2-Ethylhexyl)phthalate	10	U	110	
PESTICIDES/PCB (µg/L)				
	ND		ND	

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B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTN1	
Well Depth	30'	
Date sampled	11/29/1990	
TOTAL METALS		
Aluminum	63	BJ
Barium	65	B
Calcium	43000	
Copper	3.7	BJ
Iron	165	J
Lead	3.5	
Magnesium	12900	
Manganese	126	
Potassium	3950	B
Sodium	11400	
Thallium	2.0	UJ
Cyanide	10	UR
MISC INORGANICS		
Bromide (µg Br^-/L)	100	U
Sulfate (mg SO_4/L)	25	
VOLATILE ORGANICS		
Methylene Chloride	3	BJ
Acetone	9	J
SEMIVOLATILE ORGANICS	ND	
PESTICIDES/PCB	ND	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT01				
Well Depth	29.8'				
Date sampled	12/3/1990		1995		4/26/2000
TOTAL METALS (µg/L)					
Aluminum	36.0	U	115	J	NS
Antimony	48.5	B	12.8	U	NS
Barium	54.0	B	74.3	J	NS
Calcium	88000		104000		NS
Iron	122	J	21.6	J	NS
Magnesium	24300		26100		NS
Manganese	147		205		NS
Potassium	1170	U	1950	J	NS
Selenium	2.3	BJ	3.6	U	NS
Sodium	8680		12500	J	NS
Vanadium	6.4	U	6.9	J	NS
Zinc	10.0	UJ	2.1	J	NS
MISC INORGANICS					
Bromide (µg Br^-/L)	100	U	NR		NS
Sulfate (mg SO_4/L)	140	J	NR		NS
VOLATILE ORGANICS (µg/L)					
Methylene Chloride	5	U	5	J	NS
SEMIVOLATILE ORGANICS (µg/L)					
bis(2-Ethylhexyl)phthalate	10	U	13		NS
PESTICIDES/PCB (µg/L)	ND		ND		NS

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTP1			
Well Depth	25'			
Date sampled	9/23/1991		9/26/1991	
TOTAL METALS (µg/L)				
Aluminum	3130.00	J	362	J
Arsenic	24.20		2.00	U
Barium	113.00	B	41.20	B
Cadmium	1.00	U	2.20	BJ
Calcium	213000.00		182000	
Chromium	10.30		3.5	B
Cobalt	5.00	B	3.00	U
Copper	6.00	U	46.50	
Iron	13100.00		1910	
Lead	32.10		210.00	J
Magnesium	16700.00		17500	
Manganese	447.00		39.70	
Potassium	8640.00		2530	B
Sodium	52300.00	J	13900	
Thallium	3.00	U	5.00	UJ
Vanadium	11.00	B	5.50	B
Zinc	24.70		13600	
MISC INORGANICS				
Bromide (µg Br^-/L)	870		210	
Sulfate (mg SO_4/L)	214	J	284	J
VOLATILE ORGANICS (µg/L)				
Chloromethane	10	R	10	U
Bromomethane	10	R	10	U
Vinyl Chloride	10	R	10	U
1,1-Dichloroethane	3	J	10	U
Chloroform	10	U	6	J
Benzene	1	J	10	U
SEMIVOLATILE ORGANICS (µg/L)				
bis(2-Ethylhexyl)phthalate	3	J	29	
PESTICIDES/PCB (µg/L)	ND		ND	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WTQ1	
Well Depth	25'	
Date sampled	11/29/1990	
TOTAL METALS (µg/L)		
Aluminum	1630	J
Arsenic	1.0	B
Barium	510	
Beryllium	1.2	B
Calcium	106000	
Copper	14.50	BJ
Iron	6250	J
Lead	8.8	
Magnesium	41400	
Manganese	173	
Potassium	12800	
Silver	5.0	U
Sodium	76000	
Vanadium	4.7	B
Zinc	28.4	J
Cyanide	10	R
MISC INORGANICS		
Bromide (µg Br^-/L)	1100	
Sulfate (mg SO_4/L)	160	
VOLATILE ORGANICS (µg/L)		
Acetone	17	B
SEMIVOLATILE ORGANICS (µg/L)	ND	
PESTICIDES/PCB (µg/L)	ND	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT101A													
	18.5'													
Well Depth / Date sampled	11/28/1990		09/23/91		1995		10/21/1998		5/3/2000		5/3/2000 Dup		11/15/2000	
TOTAL METALS (µg/L)			Total											
Aluminum	29	BJ	2190	J	321		26	U	118	U	118	U	112	
Arsenic	9.0	B	11.2		7.8	J	4	J	5.0	J	14	UD	6.4	
Beryllium	1.0	U	1.0	U	0.4	U	0.6	U	2.0	U	2.0	U	0.6	J
Barium	49	B	71	J	116	J	91	J	83		82		79	
Cadmium	3.00	U	1.3	J	1.10	J	4.60	U	0.30	U	0.30	U	0.6	U
Calcium	202000		242000		249000		377000		258000		242000		227000	
Chromium	5.0	U	8.4	J	4.0	U	13.1		6.7	U	6.7	U	3	U
Cobalt	7.0	U	11	J	11	J	7.8	U	13		4.0	J	1	U
Copper	4.0	BJ	6.0	U	1.7	U	4.1	U	9.3	U	9.3	U	2	U
Iron	24600	J	33000		12700		28100		16300		16100		9490	
Lead	2	U	33		1.7	U	1	U	7	U	7	U	2	U
Magnesium	7440		23300		25200		14700		27300		27500		20200	
Manganese	1950		3590		1060		3080		1610	J	1540	J	929	
Nickel	6.0	U	24	J	23.8	J	28	U	21	U	21	U	2.3	BJ
Potassium	5000	B	4920	J	8060		3630	J	6730		6810		10100	
Selenium	2.0	UJ	4.0	UJ	3.6	U	3.0	R	7.0	U	7.0	U	4	U
Sodium	35400		21400	J	44100	J	35800		66800		65200		36700	
Vanadium	3.0	U	11.9	J	21	J	12	U	4.0	U	5.1	U	5	JB
Zinc	9.0	J	81		1.8	J	3.2	U	4.0	U	34.1	U	14.9	JB
Cyanide	10	UR	10.0	U	10	U	17.9	J	NS		NS		8	u
MISC INORGANICS														
Bromide (µg Br^-/L)	1000		NS		NR		NR		520	J	530	J	320	M
Sulfate (mg SO_4/L)	150		NS		NR		NR		218	D	215	D	177	D
Chloride (mg Cl^-/L)	NS		NS		NS		NS		NS		NS		27	D
VOLATILE ORGANICS (µg/L)														
Ethyl ether	NA		6	JN	NA		NA		NA		NA		49	
Dichlorofluoromethane	NA		NA		NA		NA		NA		NA		6	
Chloroethane	10	U	10	UJ	10	U	10	U	1	U	2		1	U
Methylene Chloride	2	BJ	10	UJ	0.7	J	10	U	2	U	2	U	1	U
1,1-Dichloroethane	3	J	3	J	5	J	10	U	8		8		14	
Benzene	3	J	3	J	10	U	10	U	2		2		2	
SEMIVOLATILE ORGANICS (µg/L)														
Di-n-butylphthalate	10	U	10	U	10	U	10	U	10	U	10	U	4	BJ
Dimethylphthalate	10	U	10	U	10	U	7	J	5	U	5	U	5	U
Diethylphthalate	2	J	20		11	U	19	J	3	J	4	J	5	U
bis(2-Ethylhexyl)phthalate	10	U	4	J	5	JB	10	UJ	8		4	J	5	U
PESTICIDES/PCB (µg/L)	ND		ND		ND		ND		NS		NS		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT101B							
Well Depth	100.5'							
Date Sampled	1/9/1991		9/23/1991		1995		5/3/2000	
TOTAL METALS (µg/L)								
Aluminum	516		168	BJ	206		118	U
Arsenic	7.1	B	3.8	B	3.8	U	7.0	U
Barium	192	B	218		184	J	72.3	
Beryllium	2.8	BJ	1.00	U	1.1	J	2.0	U
Calcium	88100		83500		126000		137000	
Chromium	4.0	U	2.8	B	20.6		6.7	U
Cobalt	5.0	U	3.0	U	9.6	J	13.2	U
Copper	8.8	BJ	6.00	BJ	16.0	J	9.3	U
Iron	592		1400		3080		2850	
Lead	1.1	BJ	1.0	UJ	1.7	U	7.0	U
Magnesium	31000		33000		47300		52800	
Manganese	87.4		76.4		49.3		36	J
Nickel	20.0	U	7.0	U	14.4	J	21	U
Potassium	28900		13900		5110		6280	
Selenium	4.0	UJ	4.0	UJ	3.6	U	7.0	U
Silver	5.0	UJ	2.0	UJ	18.2		11.1	U
Sodium	76100		43100	J	47400	J	43100	
Vanadium	11.2	B	2.0	U	17.8	J	5.1	U
Zinc	13.4	BJ	6.0	U	2.6	J	34.1	U
MISC INORGANICS								
Bromide (µg Br^-/L)	400		480		NR		340	J
Sulfate (mg SO_4/L)	140	J	124	J	NR		211	
VOLATILE ORGANICS (µg/L)								
Chloroethane	12		16	J	6	J	2	
Methylene Chloride	10	U	10	U	1	J	2	U
SEMIVOLATILE ORGANICS (µg/L)								
Dimethylphthalate	10	U	NR		10	U	5	U
Diethylphthalate	10	U	NR		10	U	2	J
bis(2-Ethylhexyl)phthalate	10	U	NR		0.6	JBU	5	U
PESTICIDES/PCB (µg/L)	ND		ND		ND		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT101C							
Well Depth	167.5'							
Date sampled	1/9/1991		9/23/1991		1/1/1995	5/3/2000		
TOTAL METALS (µg/L)								
Aluminum	6980		758	J	NS	152		
Arsenic	3.0	U	9.1	BJ	NS	10		
Barium	170	B	116	B	NS	77.6		
Beryllium	2.1	BJ	1.0	U	NS	2	U	
Calcium	121000		101000		NS	47900		
Chromium	14.0	J	7.7	B	NS	7.7	J	
Cobalt	5.2	B	3.0	U	NS	4	J	
Copper	10.7	BJ	6.0	U	NS	9.3	U	
Iron	7890		3200		NS	1380		
Lead	4.5	J	2.9	B	NS	7	U	
Magnesium	50400		41500.0		NS	20100		
Manganese	279		193		NS	20.5	J	
Nickel	21.1	B	7.0	U	NS	7	J	
Potassium	4300	B	1640	B	NS	4130		
Sodium	33100		36200	J	NS	36100		
Vanadium	8.4	B	3.0	B	NS	5.1	U	
Zinc	70.3		32.8	U	NS	34.1	U	
Cyanide	10.0	U	10.0	U	NS			
MISC INORGANICS								
Bromide (µg Br^-/L)	900		940		NS	880	J	
Sulfate (mg SO_4/L)	810	J	10.0	UJ	NS	0.42	J	
VOLATILE ORGANICS (µg/L)								
Chloroethane	10	U	10	UJ	NS	1	U	
Methylene Chloride	10	U	10	U	NS	2	U	
SEMIVOLATILE ORGANICS (µg/L)								
Dimethylphthalate	10	U	NR		NS	5	U	
Diethylphthalate	10	U	NR		NS	5	U	
bis(2-Ethylhexyl)phthalate	10	U	NR		NS	2	J	
PESTICIDES/PCB (µg/L)	ND		ND		NS	NS		

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT102A											
Well Depth	18.4'											
Date sampled	11/28/1990		1/7/1991		9/24/1991		1995		10/19/1998		4/25/2000	
TOTAL METALS (µg/L)												
Aluminum	32.7	BJ	81.8	B	165	BJ	268		27.6	J	118	U
Antimony	30.0	U	37.0	U	13.00	U	21.7	J	42.2	UJ	2	U
Barium	66	B	60.3	B	57	B	53.3	J	47.3	J	46.7	
Beryllium	1.20	B	3.1	BJ	1.00	U	1.3	J	0.60	UJ	2	U
Calcium	211000		181000		165000		157000		17100	J	173000	
Chromium	5.0	U	6.5	BJ	2.80	B	23.9		20.3	J	17.8	J
Cobalt	7.0	U	5.0	U	3.00	U	13.1	J	7.8	UJ	4.1	J
Copper	6.9	BJ	16.7	BJ	6.00	U	17.9	J	4.1	UJ	9.3	U
Iron	57	BJ	123		60.80	B	39.0	J	96.8	J	115	B
Lead	2.2	BJ	1.0	UJ	1.00	U	1.7	U	0.50	UJ	2	U
Magnesium	25100		22500		20300		15900		16600	J	18800	J
Manganese	38.1		23.0		9.20	B	30.2		61.5	J	86.7	
Nickel	6.0	U	20.0	U	7.00	U	40.6		73.0	J	45.4	J
Potassium	2110.0	B	2000	B	2120	B	2070	J	1610	J	2060	
Silver	5.0	U	5.0	UJ	2.00	UJ	19.5		6.1	J	11.1	U
Sodium	48600		41900		50700	J	52300	J	48000	J	100000	
Vanadium	3.0	U	4.0	U	2.00	U	26.5	J	12.3	UJ	5.1	U
Zinc	9.0	U	24.1	J	6.00	U	4.1	J	3.2	UJ	34.1	U
Cyanide	10.0	R	10.0	U	10.00	U	10.0	U	8.5	J	NS	
MISC INORGANICS												
Bromide (µg Br^-/L)	100	U	100		100	U	NS		NS		60	J
Sulfate (mg SO_4/L)	430		360	J	338	J	NS		NS		202	
VOLATILE ORGANICS (µg/L)												
Methylene Chloride	1	BJ	19	J	10	U	10	U	10	U	2	U
Acetone	2	BJ	10	UJ	10	UJ	10	U	10	U	5	U
SEMIVOLATILE ORGANICS (µg/L)												
bis(2-Ethylhexyl)phthalate	NS		NS		NS		0.4	JBU	3	J	5	U
PESTICIDES/PCB (µg/L)												
	ND		ND		ND		ND		NS		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT102B							
Well Depth	67.9'							
Date sampled	1/7/1991		9/24/1991		1995		4/25/2000	
TOTAL METALS (µg/L)								
Aluminum	25.0	U	139	BJ	161	J	118	U
Antimony	37.0	U	13.0	U	29.7	J	2	U
Arsenic	3.0	U	2.0	UJ	4.8	J	6	J
Barium	103	B	85	B	91.0	J	103	
Calcium	68700		62400		61200		75800	
Chromium	4.0	U	2.0	U	4.0	U	24.2	J
Cobalt	5.0	U	3.0	U	12.4	J	13.2	U
Copper	4.9	BJ	6.00	U	1.7	U	9.3	U
Iron	15.0	U	71	B	490		1580	
Lead	1.2	BJ	1.0	UJ	1.7	U	2	U
Magnesium	21300		19400		20400		22300	
Manganese	124		118		87.3		91.9	
Nickel	20.0	U	7.0	U	9.5	U	8.1	J
Potassium	1420	B	1690	B	1870	J	1840	
Silver	5.0	UJ	2.0	UJ	2.5	U	3.4	J
Sodium	26100		26900	J	27800	J	25900	
Thallium	3.0	U	3.0	U	5.7	J	1	U
Vanadium	4.0	U	2.0	U	13.2	J	1.9	J
Zinc	12.1	BJ	6.0	U	3.5	J	34.1	U
MISC INORGANICS								
Bromide (µg Br^-/L)	200		100	U	NS		80	J
Sulfate (mg SO_4/L)	64	J	430		NS		58	
VOLATILE ORGANICS (µg/L)								
Methylene Chloride	16	J	1	BJ	10	U	2	U
Acetone	10	U	2	BJ	10	U	5	U
SEMIVOLATILE ORGANICS (µg/L)								
bis(2-Ethylhexyl)phthalate	3	J	NR		0.4	JBU	5	U
PESTICIDES/PCB (µg/L)	ND		ND		ND		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT102C					
Well Depth	162'					
Date sampled	1/9/1991		9/24/1991		4/25/2000	
TOTAL METALS (µg/L)						
Aluminum	1130		171	BJ	500	
Arsenic	3.0	U	2.0	UJ	3	J
Barium	100	B	63	B	104	
Beryllium	4.5	BJ	1.0	U	2	U
Calcium	71400		50700		129000	
Chromium	23.8	J	2.0	U	26.8	J
Cobalt	7.3	B	3.0	U	13.2	U
Copper	8.8	BJ	6.0	U	4	JB
Iron	1680		89	B	2210	
Lead	1.8	BJ	1.0	UJ	2	J
Magnesium	24800		16200		45600	
Manganese	231		170		288	
Nickel	20.0	U	7.0	U	23.7	J
Potassium	1290	B	902	B	1970	
Sodium	3180	B	7230	J	6060	
Vanadium	7.5	B	2.0	U	3.2	J
Zinc	24.7	J	6.0	U	13.5	JB
MISC INORGANICS						
Bromide (µg Br^-/L)	100		110		140	J
Sulfate (mg SO_4/L)	35	J	50.0	J	36	
VOLATILE ORGANICS (µg/L)	ND		ND		ND	
SEMIVOLATILE ORGANICS (µg/L)	NS		NS		2	J
PESTICIDES/PCB (µg/L)	ND		ND		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT103A			
Well Depth	18.4'			
Date sampled	11/28/1990		9/24/1991	
TOTAL METALS (µg/L)				
Aluminum	56	BJ	1710	J
Arsenic	2.2	B	3.9	B
Barium	33	B	80	B
Calcium	86400		361000	
Chromium	5.0	U	7.9	B
Cobalt	7.0	U	9.5	B
Copper	10.7	BJ	16.6	B
Iron	126	J	6890	
Lead	2.0	U	28.1	
Magnesium	21300		78000	
Manganese	95		759	
Nickel	6.0	U	9.9	B
Potassium	1380	B	2100	B
Silver	6.9	B	2.0	UJ
Sodium	12000		12900	J
Vanadium	3.0	U	12.5	B
Zinc	9.0	U	60	
MISC INORGANICS				
Bromide (µg Br^-/L)	100	U	210	
Sulfate (mg SO_4/L)	170		199	J
VOLATILE ORGANICS (µg/L)				
Chloromethane	10	U	10	R
Bromomethane	10	U	10	R
Vinyl Chloride	10	U	10	R
Methylene Chloride	1	BJ	10	U
SEMIVOLATILE ORGANICS (µg/L)	ND		NS	
PESTICIDES/PCB (µg/L)	ND		ND	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT104A			
Well Depth	18.7'			
Date sampled	11/28/1990		9/24/1991	
TOTAL METALS (µg/L)				
Aluminum	669	J	1460	J
Barium	14	B	24	B
Calcium	17100		30600	
Chromium	5.0	U	3.4	B
Cobalt	7.0	U	3.1	B
Iron	664	J	2100	
Lead	2.0	U	6.8	J
Magnesium	3550	B	6720	
Manganese	15		66	
Nickel	6.0	U	7.1	B
Potassium	639	B	1090	B
Sodium	1970	B	3380	BJ
Vanadium	3.0	U	3.8	B
Zinc	9.0	U	2[illegible].6	
MISC INORGANICS				
Bromide (µg Br^-/L)	100	U	110	
Sulfate (mg SO_4/L)	5.9		11.7	J
VOLATILE ORGANICS (µg/L)				
Chloromethane	10	U	10	R
Bromomethane	10	U	10	R
Vinyl Chloride	10	U	10	R
Methylene Chloride	2.0	BJ	10	U
SEMIVOLATILE ORGANICS (µg/L)				
bis(2-Ethylhexyl)phthalate	10	U	10	
PESTICIDES/PCB (µg/L)	ND		ND	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT105A									
Well Depth	18.5'									
Date sampled	11/29/1990		1/8/1991		9/25/1991		11/26/1996		5/2/2000	
TOTAL METALS (µg/L)										
Aluminum	81	BJ	224		114	B	17.0	U	112	J
Barium	18.2	B	22.0	U	8.2	B	5.4		8.1	
Beryllium	1.0	U	3.1	BJ	1.0	U	1.00	U	2	U
Calcium	39900		37200		32800		38000		57400	
Chromium	5.0	U	13.0	J	2.0	U	1.0	U	23.9	J
Cobalt	7.0	U	5.7	B	3.0	U	1.0	U	4.1	J
Copper	8.0	BJ	9.8	BJ	6.0	U	0	U	9.3	U
Iron	196	J	555		29.4	BJ	13.1		407	
Lead	2.0	U	1.1	BJ	1.3	B	1.00	U	7	U
Magnesium	11900		10700		8650		10200		16500	J
Manganese	63.8		50.4		26.5		5.0		160	J
Nickel	6.0	U	20.0	U	7.0	U	1	U	73.3	
Potassium	2860	B	2490	B	1580	B	1760		1360	
Sodium	10300		8010		3930	B	4460	J	7720	
Zinc	9.5	BJ	23.6	J	6.0	U	3.6	J	34.1	U
MISC INORGANICS										
Bromide (µg Br^-/L)	200		100	U	480		NS		110	J
Sulfate (mg SO_4/L)	30		22	J	26.7	J	NS		36	
VOLATILE ORGANICS (µg/L)										
Methylene Chloride	1	BJ	7	U	10	U	10	U	2	U
SEMIVOLATILE ORGANICS (µg/L)										
Diethylphthalate	10	U	10	U	10	U	10	U	3	J
bis(2-Ethylhexyl)phthalate	10	U	10	U	10	U	10	U	17	
PESTICIDES/PCB (µg/L)	ND		ND		ND		NR		NS	

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ND: Not detected
NS: Not sampled
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT106A											
Well Depth	18.6'											
Date sampled	11/27/1990		1/8/1991		9/23/1991		9/25/1991		11/13/1996		5/2/2000	
TOTAL METALS (µg/L)												
Aluminum	31.0	BJ	256		2190	J	132	B	51		3090	
Arsenic	4.5	B	3.0	U	11.2		3.9	B	5.6		46.0	D
Barium	128	B	118	B	71	B	110	B	101		160	
Beryllium	1.0	U	4.2	BJ	1.0	U	1.0	U	1.0	U	2.0	U
Cadmium	3.0	U	4.0	U	1.3	B	1.0	U	1.0	U	0.1	J
Calcium	111000		112000		242000		102000		146000		175000	
Chromium	5.0	U	5.4	BJ	8.4	B	2.0	U	1.0	U	21.6	J
Cobalt	7.0	U	6.3	B	11.4	B	3.0	U	1.0	U	13.2	U
Copper	4.7	BJ	9.8	BJ	6.0	U	6.0	U	1.0	U	11.0	
Iron	4070	J	3820		33000		3610		6080		27600	
Lead	2.0	U	6.5	J	33.0		1.0	UJ	1.0	U	6.0	J
Magnesium	19200		20000		23300		17800		18100		26800	
Manganese	238.0		220		3590.0		247.0		394		559	J
Nickel	6.0	U	20.0	U	24.2	B	7.0	U	1.8		11.7	J
Potassium	4810	B	3620	B	4920	B	4540		4280		4200	
Selenium	2.6	BJ	4.0	UJ	4.0	UJ	4.0	U	4.0	U	7.0	U
Sodium	37200		32800		21400	J	27700		25800	J	29300	
Thallium	10.0	UJ	3.0	U	3.0	U	5.0	UJ	2.9		4.0	U
Vanadium	3.0	U	4.0	U	11.9	B	2.0	U	1.0	U	5.1	U
Zinc	9.0	U	28.9	J	81.4		6.0	J	2.9	J	31.7	JB
MISC INORGANICS												
Bromide (µg Br^-/L)	800		600		790		120.0		NR		420	J
Sulfate (mg SO_4/L)	56		54	J	225	J	108	J	NR		146	
VOLATILE ORGANICS (µg/L)												
Chloroethane	2	J	10	U	10	UJ	10	UJ	10	U	0.6	J
Methylene Chloride	3	BJ	7	U	10	U	10	U	10	U	2	U
1,1-Dichloroethane	5	U	5	U	3	J	10	U	10	U	0.9	J
cis-1,2-Dichloroethene	NR		NR		NR		NR		NR		1	
total 1,2-Dichloroethene	6		5	J	10	UJ	5	J	3	J	NR	
Trichloroethene	5	U	5	U	10	U	10	U	10	U	0.6	J
Benzene	5	U	5	U	3	J	10	U	10	U	1	U
SEMIVOLATILE ORGANICS (µg/L)												
Diethylphthalate	10	U	10	U	20		10	U	10	U	3	J
bis(2-Ethylhexyl)phthalate	10	U	10	U	10	U	10	U	10	U	47	
PESTICIDES/PCB (µg/L)	ND		ND		ND		ND		NS		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT111A							
Well Depth	21.9'							
Date sampled	9/25/1991		1995		11/13/1996		4/28/2000	
TOTAL METALS (µg/L)								
Aluminum	421		450		280.0		463	
Arsenic	4.0	BJ	3.8	U	3.7		7	U
Barium	109	B	103	J	105		256	
Cadmium	1.0	U	1.1	U	1	U	0.2	J
Calcium	15400		6170		8160		113000	
Chromium	2.0	U	4.0	U	1.8		2.3	J
Cobalt	3.9	B	11.9	J	6.4		12.2	J
Copper	6.0	U	1.7	U	3.3		9.3	U
Iron	3650		1760		4470		12600	
Lead	1.5	BJ	1.7	U	1.00	U	7	U
Magnesium	6350		2520	J	2980		19100	J
Manganese	498		201		335		1440	J
Nickel	12.1	B	16.0	J	7.2		8.7	J
Potassium	3210	B	1690	J	1600		8380	
Sodium	19600		2560	J	3200		39400	
Thallium	5.0	UJ	4.7	U	3.0		4	U
Vanadium	5.3	BJ	11.9	J	2.4		5.1	U
Zinc	17.0	B	17.5	J	22.2	J	18	JB
MISC INORGANICS								
Bromide (µg Br^-/L)	100	U	NS		NS		400	J
Sulfate (mg SO_4/L)	91	J	NS		NS		264	
VOLATILE ORGANICS (µg/L)								
Methylene Chloride	10	R	5	J	ND		2	U
1,1-Dichloroethane	10	R	10	U	10	U	1	
Benzene	1	J	10	U	10	U	1	U
SEMIVOLATILE ORGANICS (µg/L)								
bis(2-Ethylhexyl)phthalate	10	U	0.3	J	10	U	5	U
PESTICIDES/PCB (µg/L)								
alpha-BHC	ND		0.012	JP	NS		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT112A					
Well Depth			17.7'			
Date sampled	1995		10/20/1998		4/27/2000	
TOTAL METALS(µg/L)						
Aluminum	169	J	26	UJ	118	U
Barium	35.1	J	36.6	J	28.6	
Calcium	179000.0		19000	J	247000	
Chromium	4.0	U	7.5	J	6.7	U
Iron	15.0	J	11.7	UJ	23.3	JB
Magnesium	15200		14000	J	17000	J
Manganese	4.0	J	6.7	J	0.7	J
Nickel	10	J	23.8	UJ	21	U
Potassium	2000.0	J	1330	J	1700	
Sodium	12300.0	J	13300	J	13800	
Thallium	4.7	J	0.4	UJ	1	U
Vanadium	9.6	J	12.3	UJ	2.3	J
Zinc	7.7	J	3.2	UJ	34.1	U
Cyanide	10.0	U	7.3	J	NS	
MISC INORGANICS						
Bromide (µg Br^-/L)	NS		NR		40	J
Sulfate (mg SO_4/L)	NS		NR		434	
VOLATILE ORGANICS (µg/L)	ND		ND		ND	
SEMIVOLATILE ORGANICS (µg/L)						
Diethylphthalate	0.4	JBU	10	U	5	U
bis(2-Ethylhexyl)phthalate	0.8	JBU	10	U	39	
PESTICIDES/PCB (µg/L)	ND		NR		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT112B					
Well Depth			62.1'			
Date sampled	1995		4/27/2000		4/27/2000 Dup	
TOTAL METALS (µg/L)						
Aluminum	169	J	118	U	118	U
Arsenic	3.8	U	5	J	4	J
Barium	35.1	J	86.7		86	
Calcium	179000		81800		79900	
Iron	15.0	J	1180		1220	
Magnesium	15200		21000		20900	
Manganese	4.0	J	93.1		94.5	
Nickel	10	J	21	U	21	U
Potassium	2000	J	1320		1380	
Sodium	12300	J	22800		23300	
Vanadium	9.6	J	5.1	U	5.1	U
Zinc	7.7	J	34.1	U	34.1	U
MISC INORGANICS						
Bromide (µg Br^-/L)	NS		70	J	70	J
Sulfate (mg SO_4/L)	NS		56		56	
VOLATILE ORGANICS (µg/L)	ND		ND		ND	
SEMIVOLATILE ORGANICS (µg/L)						
bis(2-Ethylhexyl)phthalate	2	JBU	5	U	5	U
PESTICIDES/PCB (µg/L)	ND		NS		NS	

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ND: Not detected
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT113A			
Well Depth	24.4'			
Date sampled	1995		4/26/2000	
TOTAL METALS (µg/L)				
Aluminum	161	J	118	U
Barium	14.3	J	13.8	
Cadmium	1.1	U	0.1	J
Calcium	45700		64300	
Cobalt	6.9	J	13.2	U
Copper	1.7	U	4.2	JB
Iron	4.7	J	59.8	B
Magnesium	11400		16500	J
Manganese	2.3	J	3.1	
Potassium	1200	J	1210	
Sodium	6340	J	14200	
Vanadium	11.1	J	5.1	U
Zinc	5.0	J	34.1	U
MISC INORGANICS				
Bromide (µg Br^-/L)	NS		14	U
Sulfate (mg SO_4/L)	NS		24	
VOLATILE ORGANICS (µg/L)	ND		ND	
SEMIVOLATILE ORGANICS (µg/L)				
Diethylphthalate	0.6	JBU	5	U
bis(2-Ethylhexyl)phthalate	0.3	JBU	5	U
PESTICIDES/PCB (µg/L)	ND		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT113B			
Well Depth	70.0'			
Date sampled	1995		4/26/2000	
TOTAL METALS (µg/L)				
Aluminum	80.5	J	118	U
Arsenic	3.8	U	3	J
Barium	78.1	J	68.4	
Calcium	93300		101000	
Chromium	5.6	J	6.7	U
Copper	3.7	J	9.3	U
Iron	703		1210	
Magnesium	23000		21400	
Manganese	148		97.6	
Potassium	1900	J	2040	
Silver	4.9	J	11.1	U
Sodium	13300	J	15300	
Thallium	5.0	J	1	U
Zinc	3.5	J	34.1	U
MISC INORGANICS				
Bromide (µg Br^-/L)	NS		60	J
Sulfate (mg SO_4/L)	NS		131	
VOLATILE ORGANICS (µg/L)	ND		ND	
SEMIVOLATILE ORGANICS (µg/L)				
Diethylphthalate	0.4	JBU	5	U
bis(2-Ethylhexyl)phthalate	0.2	JBU	5	U
PESTICIDES/PCB (µg/L)	ND		NS	

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NS: Not sampled
NR: Not reported
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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT114A							
Well Depth	24.5'							
Date sampled	*1/1/1995*		*10/20/1998*		*5/3/2000*		*5/3/2000 - Split*	
TOTAL METALS (µg/L)								
Aluminum	145	J	26.0	UJ	118	U	44.0	J
Arsenic	23.3		24.3	J	9		10.0	J
Barium	237		238	J	101		115	
Beryllium	0.40	U	0.60	J	2	U	2.00	U
Cadmium	1.7	J	4.6	UJ	0.3	U	2.5	U
Calcium	243000		27000	J	192000		203000	
Chromium	4.0	U	12.0	J	6.7	U	10.0	U
Cobalt	13.8	J	11.9	J	5.9	J	5.8	J
Iron	19000		17900	J	6510		6290	
Magnesium	23400		24800	J	18600	J	21000	
Manganese	393		306	J	276	J	288	
Nickel	19.0	J	23.8	UJ	21	U	4.8	J
Potassium	5110		6640	J	3390		3750	
Sodium	122000	J	47100	J	123000		125000	
Thallium	6.7	J	0.40	UJ	4	U	30.00	U
Vanadium	10.4	J	12.3	UJ	5.1	U	20	U
Zinc	7.6	J	3.2	J	34.1	U	10	U
Cyanide	10.0	U	7.8	J	NS		NS	
MISC INORGANICS								
Bromide (µg Br^-/L)	NS		NS		170	J	NS	
Sulfate (mg SO_4/L)	NS		NS		177		NS	
VOLATILE ORGANICS (µg/L)								
Carbon Disulfide	0.7	J	10	U	1	U	2	U
1,1-Dichloroethane	5	J	4	J	3		2.6	
Benzene	2	J	10	UJ	1	U	0.9	J
SEMIVOLATILE ORGANICS (µg/L)								
Diethylphthalate	2	JBU	2	J	1	J	NS	
bis(2-Ethylhexyl)phthalate	0.9	JBU	10	U	2	J	NS	
PESTICIDES/PCB (µg/L)	ND		NS		NS		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT114B			
Well Depth	67.8'			
Date sampled	1995		5/3/2000	
TOTAL METALS				
Aluminum	230		118	U
Arsenic	18.5		9	
Barium	194	J	69.4	
Calcium	219000		108000	
Chromium	4.0	U	3	J
Cobalt	11.1	J	13.2	U
Iron	13300		6320	
Magnesium	30500		17500	J
Manganese	182		92.5	J
Nickel	19.7	J	21	U
Potassium	5110		2700	
Sodium	30100	J	14100	
Vanadium	23.2	J	5.1	U
Zinc	4.5	J	34.1	U
Cyanide	11.4		NS	
MISC INORGANICS				
Bromide (µg Br^-/L)	NS		70	J
Sulfate (mg SO_4/L)	NS		156	
VOLATILE ORGANICS				
Carbon Disulfide	2	J	1	U
1,1-Dichloroethane	1	J	1	U
cis-1,2-Dichloroethene	NR		1	U
total 1,2-Dichloroethene	1	J	NR	
SEMIVOLATILE ORGANICS				
Butylbenzylphthalate	0.2	J	5	U
bis(2-Ethylhexyl)phthalate	0.6	JBU	1	J
PESTICIDES/PCB				
alpha-BHC	0.012	J	NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT115A							
Well Depth	19.7'							
Date sampled	1/1/1995		11/13/1996		10/21/1998		5/1/2000	
TOTAL METALS (µg/L)								
Aluminum	132	J	32.0		94.1	J	8860	
Barium	50.1	J	33.3		33.5	J	105	
Cadmium	1.1	U	1	U	4.6	U	0.1	J
Calcium	197000		215000		293000		241000	
Chromium	4.0	U	2.9		10.4		12.8	J
Cobalt	5.9	U	1.6		7.8	U	13.2	U
Copper	1.7	U	1.8		4.1	U	19.7	
Iron	1360		2220		4590		6500	
Lead	1.7	U	1.00	U	0.50	U	11	
Magnesium	27200		36000		20300		12400	J
Manganese	413		276		513		380	J
Nickel	9.5	U	3.8		28.3	U	11.5	J
Potassium	5580		6520		3580	J	4440	
Sodium	43600	J	33600	J	12100		24600	
Thallium	5.3	J	2.20		0.40	U	4	U
Vanadium	4.5	U	7.6		12.3	U	14.5	
Zinc	31.1	B	4.1	J	3.7	J	37.7	JB
Cyanide	10.0	U	NR		12.4	J	NS	
MISC INORGANICS								
Bromide (µg Br^-/L)	NS		NS		NS		600	J
Sulfate (mg SO_4/L)	NS		NS		NS		254	
VOLATILE ORGANICS								
Methylene Chloride	1	J	10	U	10	U	2	U
cis-1,2-Dichloroethene	NR		NR		NR		0.5	J
total 1,2-Dichloroethene	10	U	10	U	10	U	NR	
Trichloroethene	10	U	10	U	10	U	0.6	J
Benzene	1	J	2	J	10	U	1	
Tetrachloroethene	10	U	10	U	10	U	0.8	J
SEMIVOLATILE ORGANICS								
Diethylphthalate							2	J
bis(2-Ethylhexyl)phthalate	0.4	J	10	U	10	UJ	18	
PESTICIDES/PCB (µg/L)	ND		NS		NS		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT116A													
Well Depth	14.8'													
Date sampled	9/21/1995		9/21/1995		11/13/1996		10/21/1998		5/3/2000		5/3/2000		11/15/2000	
TOTAL METALS (µg/L)														
Aluminum	393		259		NS		58.0	J	118	U	118	U	335	
Antimony	12.8	U	20.4	J	NS		42.2	UJ	7	U	7	U	16	UD
Arsenic	3.8	U	3.8	U	NS		1.0	J	7	U	7	U	10	UD
Barium	136	J	148	J	NS		192	J	79.9		79.6		133	
Beryllium	0.40		0.40	U	NS		0.60	UJ	2	U	2	U	1	BJ
Cadmium	1.1		1.1	U	NS		4.6	UJ	0.1	J	0.1	J	0.9	UD
Calcium	518000		546000		NS		60900	J	666000		685000		745000	
Chromium	7.1	J	4.0	U	NS		7.0	UJ	6.7	U	6.7	U	3	U
Cobalt	5.9	U	5.9	U	NS		7.8	UJ	11.2	J	11.5	J	1.1	
Copper	1.7	U	1.7	U	NS		4.1	UJ	15.8		15.5		2.1	U
Iron	5710		6130		NS		4490	J	31900		32400		8200	
Lead	1.7	U	1.7	U	NS		0.50	UJ	6	J	13	JD	2.00	MJ
Magnesium	53500		55400		NS		52700	J	66900		66100		60000	
Manganese	670		696		NS		662	NS	1810	J	1800	J	1240	
Mercury	0.20	U	0.20	U	NS		0.10	J	0.1	UJ	0.1	UJ	0.5	U
Nickel	9.5	U	9.7	J	NS		28.3	UJ	13.3	J	12.2	J	4.2	BJ
Potassium	36000		38000		NS		25200	J	19600		18900		30800	
Selenium	3.6	U	3.6	U	NS		6.0	R	14	DU	14	UD	40	UD
Sodium	195000	J	201000	J	NS		179000	J	161000		160000		214000	
Thallium	4.7	J	5.5	I	NS		0.40	UJ	4	U	4	U	20	UD
Vanadium	4.5	U	11.5	J	NS		12.30	UJ	5.1	U	5.1	U	9	JB
Zinc	45.4		4.3	J	NS		3.2	UJ	178	J	194	J	85.5	J
MISC INORGANICS														
Bromide (µg Br^-/L)	NS		NS		NS		NS		2380	D	2420	D	3750	J
Sulfate (mg SO_4/L)	NS		NS		NS		NS		1260	D	1250	D	1020	D
Chloride (mg Cl^-/L)	NS		NS		NS		NS		NS		NS		26.0	D
VOLATILE ORGANICS (µg/L)														
Ethyl ether	NA		NA		NA		NA		NA		NA		100	D
Dichlorofluoromethane	NA		NA		NA		NA		NA		NA		10	
Vinyl Chloride	10	U	10	U	10	U	10	U	1		1		1	U
1,1-Dichloroethane	7	J	7	J	5	J	5	J	8		7		9	
cis-1,2-Dichloroethene	NR		NR		NR		NR		1		1		1	U
total 1,2-Dichloroethene	1	J	1	J	0.4	J	10	U	NR		NR		NR	
1,2-Dichloropropane	4	J	4	J	2	J	10	U	1		1		2	
Trichloroethene	0.9		0.8	J	0.5	J	10	U	1	U	1	U	1	U
Benzene	15		14		7	J	10	U	1	U	1	U	8	
Ethylbenzene	0.7	J	0.7	J	10	U	10	U	1	U	1	U	1	U
SEMIVOLATILE ORGANICS (µg/L)														
Naphthalene	0.4	J	10	U	NS		10	U	5	U	5	U	5	U
2-Methylnaphthalene	10	U	0.5	J	NS		10	U	5	U	5	U	5	U
Acenaphthene	10	U	3	J	NS		10	U	5	U	5	U	5	U
Acenaphthylene	3	J	10	U	NS		10	U	5	U	5	U	5	U
Dibenzofuran	2	J	2	J	NS		10	U	5	U	5	U	5	U
Di-n-butylphthalate	10	U	10	U	NS		10	U	10	U	10	U	4	BJ
Diethylphthalate	10	U	0.2	JBU	NS		10	U	5	U	4	J	5	U
Fluorene	3	J	3	J	NS		10	U	5	U	5	U	5	U
Anthracene	0.3	J	10	U	NS		10	U	5	U	5	U	5	U
phenanthrene	10	U	0.2	J	NS		10	U	5	U	5	U	5	U
bis(2-Ethylhexyl)phthalate	15	B	1	JBU	NS		2	J	7		2	J	5	U
2-Hydroxybenzothiazole	NS		NS		NS		NS		NS		NS		23	J
Carbazole	6	J	6	1	NS		10	U	5	U	5	U	5	U
PESTICIDES/PCB (µg/L)														
	ND				NS		NS		NS		NS		NS	

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Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT116B			
Well Depth	60.4'			
Date sampled	1995		5/3/2000	
TOTAL METALS (µg/L)				
Aluminum	40.4	J	118	U
Barium	174	J	135	
Calcium	184000		203000	
Iron	2740		3710	
Magnesium	35200		22900	
Manganese	203		206	J
Potassium	7080	J	5780	
Silver	2.5		11.1	U
Sodium	43200	J	23500	
Vanadium	4.5	J	5.1	U
MISC INORGANICS				
Bromide (µg Br^-/L)	NR		320	J
Sulfate (mg SO_4/L)	NR		143	
VOLATILE ORGANICS (µg/L)				
Carbon Disulfide	2	J	1	U
SEMIVOLATILE ORGANICS (µg/L)				
Diethylphthalate			2	J
bis(2-Ethylhexyl)phthalate	2	JBU	2	J
PESTICIDES/PCB (µg/L)	ND		NS	

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NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT117A			
Well Depth	17.9'			
Date sampled	1995		4/27/2000	
TOTAL METALS (µg/L)				
Aluminum	NR		827	
Barium	NR		41.3	
Calcium	NR		70900	
Chromium	NR		9.3	J
Copper	NR		3.2	JB
Iron	NR		508	
Magnesium	NR		12000	J
Manganese	NR		206	
Nickel	NR		7.5	J
Potassium	NR		2180	
Selenium	NR		4	U
Sodium	NR		5110	
Vanadium	NR		3.1	J
Cyanide	NR		NS	
MISC INORGANICS				
Bromide (µg Br^-/L)	NR		60	J
Sulfate (mg SO_4/L)	NR		169	
VOLATILE ORGANICS (µg/L)				
Methylene Chloride	1	J	2	U
SEMIVOLATILE ORGANICS (µg/L)				
bis(2-Ethylhexyl)phthalate	0.3	JBU	7	
PESTICIDES/PCB (µg/L)				
	ND		NS	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT117B			
Well Depth	63.5'			
Date sampled	1995		4/27/2000	
TOTAL METALS (µg/L)				
Barium	NR		35.9	
Calcium	NR		179000	
Iron	NR		2280	
Magnesium	NR		24200	
Manganese	NR		71.7	
Potassium	NR		1790	
Sodium	NR		17100	
Cyanide	NR		NS	
MISC INORGANICS				
Bromide (µg Br^-/L)	NR		70	J
Sulfate (mg SO_4/L)	NR		318	
VOLATILE ORGANICS (µg/L)				
Methylene Chloride	1	J	2	U
SEMIVOLATILE ORGANICS (µg/L)				
bis(2-Ethylhexyl)phthalate	0.8	JBU	5	U
PESTICIDES/PCB (µg/L)				
	ND		NS	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT118B			
Well Depth	64.9'			
Date sampled	1995		4/28/2000	
TOTAL METALS (µg/L)				
Aluminum	229		118	U
Barium	347		93.4	
Beryllium	0.92	J	2	U
Calcium	306000		193000	
Chromium	14.4		6.7	U
Cobalt	12.9	J	13.2	U
Copper	7.9	J	9.3	U
Iron	8680		5790	
Magnesium	29600		20000	
Manganese	76.9		126	J
Nickel	20.2	J	21	U
Potassium	16300		7800	
Silver	10.9		11.1	U
Sodium	69900	J	18700	
Thallium	8.0	J	4	U
Vanadium	18.8	J	5.1	U
Zinc	6.3	J	34.1	U
MISC INORGANICS				
Bromide (µg Br^-/L)	NR		200	J
Sulfate (mg SO_4/L)	NR		351	
VOLATILE ORGANICS (µg/L)				
Methylene Chloride	0.9	J	2	U
1,1-Dichloroethane	10	U	2	
SEMIVOLATILE ORGANICS (µg/L)				
bis(2-Ethylhexyl)phthalate	3	J	5	U
PESTICIDES/PCB (µg/L)				
	ND		NS	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Monitoring Well Ground Water Detections
1990-2000
Himco Dump Superfund Site
Elkhart, Indiana

	WT119A			
Well Depth	20.4'			
Date sampled	10/22/1998		4/28/2000	
TOTAL METALS (µg/L)				
Aluminum	258	J	38.3	J
Antimony	43.2	BJ	7	U
Arsenic	5.8	J	6	J
Barium	78.3		94	
Calcium	143000		215000	
Chromium	7.8		2	J
Copper	5.4		9.3	U
Iron	1690		2650	
Lead	3.4	J	7	U
Magnesium	44800		70800	
Manganese	279		318	J
Potassium	11500	J	22200	
Selenium	6.0	J	14	U
Sodium	69100		61100	
Cyanide	12	J	NS	
MISC INORGANICS				
Bromide (µg Br^-/L)	NR		460	J
Sulfate (mg SO_4/L)	NR		420	
VOLATILE ORGANICS (µg/L)				
1,1-Dichloroethane	10	U	3	
SEMIVOLATILE ORGANICS (µg/L)	ND		ND	
PESTICIDES/PCB (µg/L)	NR		NS	

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

2000
Residential Well Detections

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW12			
Date sampled	3/16/2000		4/18/2000	
TOTAL METALS (µg/L)				
Arsenic	2	J	3	J
Barium	108		109	
Calcium	100000	JB	99000	
Chromium	3.6	JB	6.7	U
Cobalt	10.1	UJ	9.3	UJ
Copper	5.8	JB	1130	J
Iron	885		2.0	U
Magnesium	21500		21500	
Manganese	284		299	
Nickel	19.4	U	9.8	J
Potassium	1790		1760	
Sodium	17600		19000	J
Zinc	10.3	U	12.5	JB
MISC INORGANICS				
Bromide (µg Br^-/L)	NS		70	J
Sulfate (mg SO_4/L)	NS		132	U
VOLATILE ORGANICS (µg/L)				
No volatile compounds detected	1	U	1	U
SEMIVOLATILE ORGANICS (µg/L)				
No semivolatile compounds detected	5	U	5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW13			
Date sampled	3/15/2000		4/17/2000	
TOTAL METALS (µg/L)				
Arsenic	4	U	2	J
Barium	32.8		29.1	
Calcium	91800	JB	83000	
Chromium	3.4	UJ	6.7	U
Cobalt	10.1	UJ	13.3	J
Copper	14.2	J	45.3	JB
Iron	22.4	U	2.0	U
Magnesium	19800		19400	
Manganese	3.2	U	0.6	J
Nickel	21.4	J	21	U
Potassium	4650		4000	
Sodium	126000		116000	J
Zinc	95.6	J	128	B
MISC INORGANICS				
Bromide (µg Br^-/L)	NS		60	J
Sulfate (mg SO_4/L)	NS		127	
VOLATILE ORGANICS (µg/L)				
No volatile compounds detected	1	U	1	U
SEMIVOLATILE ORGANICS (µg/L)				
No semivolatile compounds detected	5	U	5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW14			
Date sampled	3/15/2000		4/17/2000	
TOTAL METALS (µg/L)				
Arsenic	2	U	2	U
Barium	43.5		43.9	
Calcium	115000	JB	106000	
Chromium	3.4	UJ	6.7	U
Cobalt	14	J	7.9	J
Copper	66.1	J	27.8	JB
Iron	25.3	JB	2.0	U
Magnesium	20800		21600	
Manganese	3.2	U	1.9	U
Nickel	19.4	U	21	U
Potassium	4300		3850	
Sodium	82500		84700	J
Zinc	160	J	173	B
MISC INORGANICS				
Bromide (µg Br^-/L)	NS		60	J
Sulfate (mg SO_4/L)	NS		134	
VOLATILE ORGANICS (µg/L)				
No Volatile Compounds Detected	1	U	1	U
SEMIVOLATILE ORGANICS (µg/L)				
No semivolatile compounds detected	5	U	5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW15			
Date sampled	3/15/2000		4/17/2000	
TOTAL METALS (µg/L)				
Arsenic	5	J	5	J
Barium	128		131	
Calcium	91500	JB	90000	
Chromium	3.4	UJ	2	J
Cobalt	10.1	UJ	34.8	J
Copper	7.3	J	1710	J
Iron	1670		2.0	U
Magnesium	26500		27600	
Manganese	213		223	
Nickel	19.4	U	21	U
Potassium	1330		1280	
Sodium	14500		15200	J
Zinc	44.3	J	28.3	JB
MISC INORGANICS				
Bromide (µg Br^-/L)	60	J	60	J
Sulfate (mg SO_4/L)	154		153	
VOLATILE ORGANICS (µg/L)				
1,2-Dichloroethane	0.6	J	1	U
SEMIVOLATILE ORGANICS (µg/L)				
No semivolatile compounds detected	5	U	5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW16			
Date sampled	3/15/2000		4/17/2000	
TOTAL METALS (µg/L)				
Arsenic	2	U	2	U
Barium	50.4		57.6	
Calcium	101000	JB	110000	
Chromium	3.4	UJ	6.7	U
Cobalt	10.1	UJ	14.7	J
Copper	7.3	J	86	JB
Iron	104	BJ	2.0	U
Magnesium	21700		24000	
Manganese	359		380	
Nickel	19.4	U	21	U
Potassium	1790		1880	
Sodium	22600	J	30300	J
Zinc	17.4	J	13.1	JB
MISC INORGANICS				
Bromide (µg Br^-/L)	50	J	60	J
Sulfate (µg SO_4^{2-}/L)	138		130	
VOLATILE ORGANICS (µg/L)				
1,1-Dichloroethane	0.6	J	0.8	U
SEMIVOLATILE ORGANICS (µg/L)				
No semivolatile compounds detected	5	U	5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW17			
Date sampled	3/15/2000		4/19/2000	
TOTAL METALS (µg/L)				
Arsenic	6	J	7	J
Barium	113		106	
Calcium	113000	JB	112000	
Chromium	3.4	UJ	6.7	U
Cobalt	10.1	UJ	9.3	UJ
Copper	11.9	J	5870	J
Iron	5860		2.0	U
Magnesium	16100	J	15700	
Manganese	73		72	
Nickel	19.4	U	21	U
Potassium	2610		2340	
Sodium	13500	J	14800	J
Zinc	19	J	12	JB
MISC INORGANICS				
Bromide (µg Br^-/L)	NS		60	J
Sulfate (mg SO_4/L)	NS		148	
VOLATILE ORGANICS (µg/L)				
1,1-Dichloroethane	2		3	
cis-1,2-Dichloroethene	0.8	J	1	
SEMIVOLATILE ORGANICS (µg/L)				
No semivolatile compounds detected	5	U	5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW18			
Date sampled	3/15/2000		4/19/2000	
TOTAL METALS (µg/L)				
Arsenic	7		8	
Barium	102		92.3	
Calcium	122000	JB	97500	
Chromium	3.5	J	6.7	U
Cobalt	10.1	UJ	62.1	J
Copper	4.1	J	5530	J
Iron	6120		2.0	U
Magnesium	16000	J	13600	
Manganese	72.3		65.2	
Nickel	19.4	U	21	U
Potassium	2870		2590	
Sodium	33200		35100	J
Zinc	30.1	J	31.1	JB
MISC INORGANICS				
Bromide (µg Br^-/L)	60	J	60	J
Sulfate (mg SO_4/L)	146		142	
VOLATILE ORGANICS (µg/L)				
1,1-Dichloroethane	2		2	
cis-1,2-Dichloroethene	1		1	
SEMIVOLATILE ORGANICS (µg/L)				
No semivolatile compounds detected	5		5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW19			
Date sampled	3/15/2000		4/17/2000	
TOTAL METALS (µg/L)				
Arsenic	2	U	2	U
Barium	72.8		70.4	
Calcium	105000	JB	102000	
Chromium	3.4	UJ	6.7	U
Cobalt	10.1	UJ	11.4	J
Copper	26.1	J	19.6	JB
Iron	22.4	U	2.0	U
Magnesium	20200		20000	
Manganese	355		325	
Nickel	19.4	U	21	U
Potassium	2580		2430	
Sodium	65400		63200	J
Zinc	31.5	J	20.5	JB
MISC INORGANICS				
Bromide (µg Br^-/L)	60	J	60	J
Sulfate (mg SO_4/L)	133		130	
VOLATILE ORGANICS (µg/L)				
No volatile compounds detected	1	U	1	U
SEMIVOLATILE ORGANICS (µg/L)				
No semivolatile compounds detected	5		5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW20			
Date sampled	3/15/2000		4/18/2000	
TOTAL METALS (µg/L)				
Arsenic	2	U	2	U
Barium	28.1		39.3	
Calcium	103000	JB	132000	
Chromium	3.4	UJ	2.1	J
Cobalt	10.1	UJ	13.3	J
Copper	9	J	100	JB
Iron	51.1	JB	2.0	U
Magnesium	19000	J	24900	
Manganese	146		202	
Nickel	19.4	U	21	U
Potassium	3660		4140	
Sodium	56700	J	81000	J
Zinc	20.5	J	26.5	JB
MISC INORGANICS				
Bromide (µg Br^-/L)	60	J	60	J
Sulfate (mg SO_4/L)	132		109	
VOLATILE ORGANICS (µg/L)				
1,1-Dichloroethane	0.5	J	0.8	J
cis-1,2-Dichloroethene	0.6	J	0.7	J
chloroform	0.4	J	1	U
SEMIVOLATILE ORGANICS (µg/L)				
No semivolatile compounds detected	5	U	5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW21			
Date sampled	3/16/2000		4/17/2000	
TOTAL METALS (µg/L)				
Arsenic	7.0		7.0	
Barium	64		67	
Calcium	93300	JB	881000	
Chromium	3.4	UJ	6.7	U
Cobalt	10.5	J		U
Copper	7.3	J	31.3	J
Iron	5050		5780	J
Magnesium	21500		20600	
Manganese	63.1		59	
Nickel	19.4	U	21.0	U
Potassium	1150		1100	
Sodium	14900		15400	J
Zinc	18.9	J	34.0	JB
MISC INORGANICS				
Bromide (µg Br^-/L)	NS		60	J
Sulfate (mg SO_4/L)	NS		142	
VOLATILE ORGANICS (µg/L)				
methylene chloride	1	U	6	
1,1-Dichloroethane	7		12	
cis-1,2-Dichloroethene	0.5	J	0.8	J
chloroform	1	U	5	J
1,2-Dichloroethane	0.7	J	1	U
1,2-Dichloropropane	1	U	1	U
Benzene	0.4	J	1	U
SEMIVOLATILE ORGANICS (µg/L)				
No semivolatile compounds detected	10	U	10	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW22					
Date sampled	3/16/2000		4/18/2000		11/15-11/16/2000	
TOTAL METALS (µg/L)						
Aluminum	1/26/1900	U	4/27/1900		58.2	
Arsenic	4	U	2	U	4	U
Barium	60.4		76.6		46.9	
Calcium	177000	JB	205000		129000	
Chromium	3.4	UJ	6.7	U		
Cobalt	10.1	UJ	15.2	J	0.8	J
Copper	4	U	2790	J	1	J
Iron	2170		2.0	J	1840	
Magnesium	18200	J	21700		24800	
Manganese	1560		1880		103	
Nickel	19.4	U	21	U	2.9	JB
Potassium	5270		6920		2790	
Sodium	44400		92200	J	53100	
Zinc	17.4	J	39.1	B	21.7	J
MISC INORGANICS						
Bromide (µg Br^-/L)	70	J	70	J	14	U
Sulfate (mg SO_4/L)	171		152		105	
Chloride (mg Cl^-/L)	NS		NS		99.9	
VOLATILE ORGANICS (µg/L)						
ethyl ether	NA		NA		26	
vinyl chloride	0.9	J	1	U	1	U
1,1-Dichloroethane	3		3		4	
cis-1,2-Dichloroethene	2		2		2	
1,2-Dichloroethane	0.6	J	1	U	1	
1,2-Dichloropropane	10		8		8	
Benzene	0.4	J	1	U	1	U
SEMIVOLATILE ORGANICS (µg/L)						
No semivolatile compounds detected	5	U	5	U	5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW23	
Date sampled	4/18/2000	
TOTAL METALS (µg/L)		
Arsenic	2	U
Barium	35.8	
Calcium	99800	
Chromium	6.7	U
Cobalt	10.7	J
Copper	46.5	UJ
Iron	2.0	U
Magnesium	21500	
Manganese	30	
Nickel	21	U
Potassium	3700	
Sodium	91800	J
Zinc	87.3	B
MISC INORGANICS		
Bromide (µg Br^-/L)	60	J
Sulfate (mg SO_4/L)	105	
VOLATILE ORGANICS (µg/L)		
No volatile compounds detected	1	U
SEMIVOLATILE ORGANICS (µg/L)		
No semivolatile compounds detected	10	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

Historical Summary of Residential Well Ground Water Detections
Himco Dump Superfund Site
Elkhart, Indiana

	RW24	
Date sampled	11/15-11/16/2000	
TOTAL METALS (μg/L)		
Aluminum	35.9	J
Arsenic	2	U
Barium	48.1	
Calcium	102000	
Chromium	1	U
Cobalt	2.3	
Copper	60.2	
Iron	2	U
Magnesium	24800	
Manganese	103	
Nickel	2.9	JB
Potassium	2790	
Sodium	53100	
Zinc	21.7	J
MISC INORGANICS		
Bromide (μg Br^-/L)	40	J
Sulfate (mg SO_4/L)	79.3	
Chloride (mg Cl^-/L)	96.5	
VOLATILE ORGANICS (μg/L)		
No volatile compounds detected	1	U
SEMIVOLATILE ORGANICS (μg/L)		
No semivolatile compounds detected	5	U

U: Analyte was not detected.
J: The reported value is estimated.
B: Analyte also present in blank sample.
ND: Not detected
NS: Not sampled
NR: Not reported
NA: Not analyzed
R: Rejected. The value is unusable.

1984

Monitoring Well Ground Water Analytical Results - August 1984
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	M2		E3		E2		I3		I1		M2(DUP)		D2	
Sample number	ME3203		ME3204		ME3205		ME3207		ME3209		ME3206		ME2487	
Date sampled	8/2/1984		8/2/1984		8/2/1984		8/2/1984		8/2/1984		8/31/1984		8/1/1984	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
TOTAL METALS														
Aluminum	296		200	U	350000		1890		200	U	269		200	U
Antimony	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Arsenic	10	U	10	U	200		10	U	10	U	10	U	10	U
Barium	172		165		803		414		66		175		100	U
Beryllium	5	U	5	U	11		5	U	5	U	5	U	5	U
Cadmium	1	U	1	U	10		1	U	2	U	1	U	1	U
Calcium	NR		NR		NR		NR		NR		NR		NR	
Chromium	16		10	U	461		10	U	10	U	12		10	U
Cobalt	50	U	50	U	132		50	U	50	U	50	U	50	U
Copper	50	U	50	U	555		50	U	50	U	50	U	50	U
Iron	12300		1580		146000		5520		507		14800		1230	
Lead	7.7		5	U	401		5	U	5	U	9		5	U
Magnesium	NR		NR		NR		NR		NR		NR		NR	
Manganese	331		41		2150		133		24		320		158	
Mercury	0.2	U	0.2	U	1.4		0.2	U	0.2	U	0.2	U	0.2	U
Nickel	40	U	40	U	422		40	U	40	U	40	U	40	U
Potassium	NR		NR		NR		NR		NR		NR		NR	
Selenium	2	U	2	U	14		2	U	2	U	2	U	2	
Silver	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Sodium	NR		NR		NR		NR		NR		NR		NR	
Thallium	10	U	10		10	U	10	U	10	U	10	U	10	U
Tin	20	UB	32	C	20	U	20	UB	55	C	20	UB	20	U
Vanadium	200	U	200	U	326		200	U	200	U	200	U	200	U
Zinc	224		44		1630		18		55		309		38	
Cyanide	10	U	10	U	10	U	10	U	10	U	10	U	10	U

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Monitoring Well Ground Water Analytical Results - August 1984
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	D1		P	
Sample number	ME3201		ME3202	
Date sampled	8/1/1984		8/1/1984	
Units	ug/L		ug/L	
	Result	Qual	Result	Qual
TOTAL METALS				
Aluminum	12500		175	
Antimony	20	U	20	U
Arsenic	26		26	
Barium	121		97	
Beryllium	5	U	5	U
Cadmium	1	U	1	U
Calcium	NR		NR	
Chromium	370		10	U
Cobalt	50	U	50	U
Copper	73		50	U
Iron	67400		11400	
Lead	73		6.7	
Magnesium	NR		NR	
Manganese	*1630*		*182*	
Mercury	0.21		0.2	U
Nickel	103		40	U
Potassium	NR		NR	
Selenium	2	U	4.7	
Silver	10	U	10	U
Sodium	NR		NR	
Thallium	10	U	10	U
Tin	20	U	20	U
Vanadium	200	U	200	U
Zinc	164		58	
Cyanide	10	U	10	U

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Monitoring Well Ground Water Analytical Results - August 1984
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	M2		E3		E2		I3		I1		M2(DUP)		D2	
Sample number	ME3203		ME3204		ME3205		ME3207		ME3209		ME3206		ME2487	
Date sampled	8/2/1984		8/2/1984		8/2/1984		8/2/1984		8/2/1984		8/31/1984		8/1/1984	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
VOLATILE ORGANICS														
Sample number	E4790		E4791		E4792		E4794		E4796		E4793		E4771	
Acrolein	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Acrylonitrile	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Benzene	5	K	5	K	5	U	5	K	5	U	5	K	5	K
Carbon Tetrachloride	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-chloroethylvinyl ether	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chloroform	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethene	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	9		8		5	U	5	U	5	U	7		5	U
1,2-Dichloropropane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
trans-1,3-Dichloropropene	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Ethylbenzene	5	U	5	U	5	U	5	K	5	U	5	U	5	U
Methylene Chloride	NDB		5	K	5	K	5	K	NDB		NDB		NDB	
Chloromethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Bromomethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Bromoform	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U
fluorotrichloromethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	5	U	5	U	5	U	5	U	5	U	5	U	5	u
Tetrachloroethene	5	U	5	U	5	U	5	U	5	U	5	U	5	U

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Monitoring Well Ground Water Analytical Results - August 1984
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	D1		P	
Sample number	ME3201		ME3202	
Date sampled	8/1/1984		8/1/1984	
Units	ug/L		ug/L	
	Result	Qual	Result	Qual
VOLATILE ORGANICS				
Sample number	E4788		E4789	
Acrolein	100	U	100	U
Acrylonitrile	100	U	100	U
Benzene	5	K	4	
Carbon Tetrachloride	5	U	5	U
Chlorobenzene	5	U	5	U
1,2-Dichloroethane	1	U	1	U
1,1,1-Trichloroethane	5	U	5	U
1,1-Dichloroethane	5	U	15	U
1,1,2-Trichloroethane	5	U	5	U
1,1,2,2-Tetrachloroethane	10	U	10	U
Chloroethane	10	U	13	
2-chloroethylvinyl ether	10	U	10	U
Chloroform	5	U	5	U
1,1-Dichloroethene	5	U	5	U
trans-1,2-Dichloroethene	5	U	5	U
1,2-Dichloropropane	10	U	10	U
trans-1,3-Dichloropropene	5	U	5	U
cis-1,3-Dichloropropene	5	U	5	U
Ethylbenzene	5	U	5	U
Methylene Chloride	NDB		NDB	
Chloromethane	10	U	10	U
Bromomethane	10	U	10	U
Bromoform	10	U	10	U
Bromodichloromethane	5	U	5	U
fluorotrichloromethane	5	U	5	U
Dibromochloromethane	5	U	5	U
Tetrachloroethene	5	U	5	U

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Monitoring Well Ground Water Analytical Results - August 1984
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	M2		E3		E2		I3		I1		M2(DUP)		D2	
Sample number	ME3203		ME3204		ME3205		ME3207		ME3209		ME3206		ME2487	
Date sampled	8/2/1984		8/2/1984		8/2/1984		8/2/1984		8/2/1984		8/31/1984		8/1/1984	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Toluene	3		5	K	5	K	5	K	5	K	5	K	NDB	
Trichloroethene	5	U	5	K	5	U	5	U	5	U	5	K	5	U
Vinyl Chloride	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetone	60		164		5	U	5	U	5	U	100		39	
2-Butanone	5	U	106		5	U	5	U	5	U	79		5	U
Carbon Disulfide	1	U	1	U	1	U	NA		1	U	NDB		1	U
2-Hexanone	5	U	5	U	5	U	5	K	5	U	5	U	5	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	5	U	5	U	5	U	5	U	5	U	5	U	NA	
vinyl acetate	5	U	NA		NA		5	U	5	U	5	U	NA	
total xylenes	NA		NA		NA		NA		NA		NA		NA	
SEMIVOLATILE ORGANICS														
Sample number	E4790		E4791?		E4792		E4794		E4796		E4793		E4771	
2,4,6-Trichlorophenol	10	U	10	U	10	U	10	U	10	U	10	U	10	U
p-chloro-m-cresol	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chlorophenol	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,4-Dichlorophenol	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2,4-Dimethylphenol	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Nitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U
4-Nitrophenol	50	U	50	U	50	U	50	U	50	U	50	U	50	U
2,4-Dinitrophenol	50	U	50	U	50	U	50	U	50	U	50	U	50	U
4,6-Dinitro-2-methylphenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Pentachlorophenol	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Phenol	62		10	U	10	U	10	U	10	U	76		10	U
benzoic acid	100	U	100	U	100	U	100	U	100	U	100	U	100	U
2-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methylphenol	197		5	U	5	U	5	U	5	U	235		5	U
2,4,5-Trichlorophenol	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Acenaphthene	10	U	25	K	10	U	10	U	10	U	10	U	10	U

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Monitoring Well Ground Water Analytical Results - August 1984
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	D1		P	
Sample number	ME3201		ME3202	
Date sampled	8/1/1984		8/1/1984	
Units	ug/L		ug/L	
	Result	Qual	Result	Qual
Toluene	NDB		5	K
Trichloroethene	5	U	5	K
Vinyl Chloride	10	U	10	U
Acetone	39		230	
2-Butanone	5	U	5	U
Carbon Disulfide	1	U	1	U
2-Hexanone	5	U	5	U
4-Methyl-2-pentanone	5	U	5	?
Styrene	5	U	NA	
vinyl acetate	NA		NA	
total xylenes	NA		NA	
SEMIVOLATILE ORGANICS				
Sample number	E4788		E4789	
2,4,6-Trichlorophenol	10	U	10	U
p-chloro-m-cresol	10	U	10	U
2-Chlorophenol	10	U	10	U
2,4-Dichlorophenol	10	U	10	U
2,4-Dimethylphenol	10	U	10	U
2-Nitrophenol	20	U	20	U
4-Nitrophenol	50	U	50	U
2,4-Dinitrophenol	50	U	50	U
4,6-Dinitro-2-methylphenol	20	U	20	U
Pentachlorophenol	10	U	10	U
Phenol	10	U	10	U
benzoic acid	100	U	100	U
2-Methylphenol	5	U	5	U
4-Methylphenol	5	U	5	U
2,4,5-Trichlorophenol	100	U	100	U
Acenaphthene	10	U	10	U

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Monitoring Well Ground Water Analytical Results - August 1984
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	M2		E3		E2		I3		I1		M2(DUP)		D2	
Sample number	ME3203		ME3204		ME3205		ME3207		ME3209		ME3206		ME2487	
Date sampled	8/2/1984		8/2/1984		8/2/1984		8/2/1984		8/2/1984		8/31/1984		8/1/1984	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
benzidine	40	U	40	U	40	U	40	U	40	U	40	U	40	U
1,2-4-Trichlorobenzene	10	U	10	K	10	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Hexachloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U
bis(2-Chloroethyl)ether	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloronaphthalene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,3-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,4-Dichlorobenzene	10	U	7		10	U	10	U	10	U	10	U	10	U
3,3'-Dichlorobenzidine	20	U	20	U	20	U	20	U	20	U	20	U	20	U
2,4-Dinitrotoluene	20	U	20	K	20	U	20	U	20	U	20	U	20	U
2,6-Dinitrotoluene	20	U	20	U	20	U	20	U	20	U	20	U	20	U
1,2-diphenylhydrazine	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Fluoranthene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Chlorophenyl-phenyl ether	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Bromophenyl-phenyl ether	10	U	10	U	10	U	10	U	10	U	10	U	10	U
bis(2-chloroisopropyl) ether	20	U	20	U	20	U	20	U	20	U	20	U	20	U
bis(2-Chloroethoxy)methane	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Hexachlorobutadiene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Hexachlorocyclopentadiene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Isophorone	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Naphthalene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Nitrobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
N-Nitrosodimethylamine	10	U	10	U	10	U	10	U	10	U	10	U	10	U
N-Nitrosodiphenylamine	10	U	10	U	10	U	10	U	10	U	10	U	10	U
N-Nitrosodipropylamine	10	U	9		10	U	10	U	10	U	10	U	10	U
bis(2-Ethylhexyl)phthalate	10	K	10	U	10	U	10	U	10	U	266	?	10	U
Butylbenzylphthalate	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Di-n-butylphthalate	10	K	15		10	K	10	K	10	K	10	U	10	K

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Monitoring Well Ground Water Analytical Results - August 1984
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	D1		P	
Sample number	ME3201		ME3202	
Date sampled	8/1/1984		8/1/1984	
Units	ug/L		ug/L	
	Result	Qual	Result	Qual
benzidine	40	U	40	U
1,2-4-Trichlorobenzene	10	U	10	U
Hexachlorobenzene	10	U	10	U
Hexachloroethane	10	U	10	U
bis(2-Chloroethyl)ether	10	U	10	U
2-Chloronaphthalene	10	U	10	U
1,2-Dichlorobenzene	10	U	10	U
1,3-Dichlorobenzene	10	U	10	U
1,4-Dichlorobenzene	10	U	10	U
3,3'-Dichlorobenzidine	20	U	20	U
2,4-Dinitrotoluene	20	U	20	U
2,6-Dinitrotoluene	20	U	20	U
1,2-diphenylhydrazine	20	U	20	U
Fluoranthene	10	U	10	U
4-Chlorophenyl-phenyl ether	10	U	10	U
4-Bromophenyl-phenyl ether	10	U	10	U
bis(2-chloroisopropyl) ether	20	U	20	U
bis(2-Chloroethoxy)methane	NA		20	U
Hexachlorobutadiene	10	U	10	U
Hexachlorocyclopentadiene	10	U	10	U
Isophorone	10	U	10	U
Naphthalene	10	U	10	U
Nitrobenzene	10	U	10	U
N-Nitrosodimethylamine	10	U	10	U
N-Nitrosodiphenylamine	10	U	10	U
N-Nitrosodipropylamine	10	U	10	U
bis(2-Ethylhexyl)phthalate	10	U	20	
Butylbenzylphthalate	10	U	10	U
Di-n-butylphthalate	10	K	10	K

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Monitoring Well Ground Water Analytical Results - August 1984
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	M2		E3		E2		I3		I1		M2(DUP)		D2	
Sample number	ME3203		ME3204		ME3205		ME3207		ME3209		ME3206		ME2487	
Date sampled	8/2/1984		8/2/1984		8/2/1984		8/2/1984		8/2/1984		8/31/1984		8/1/1984	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Di-n-octylphthalate	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Diethylphthalate	10	U	10	U	10	K	10	K	10	U	10	U	10	U
Dimethylphthalate	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(a)anthracene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(a)pyrene	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Benzo(b)fluoranthene	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Benzo(k)fluoranthene	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Chrysene	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Acenaphthylene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Anthracene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(g,h,i)perylene	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Fluorene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Phenanthrene	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Dibenzo(a,h)anthracene	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Indeno(1,2,3-cd)pyrene	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Pyrene	10	U	13		10	U	10	U	10	U	10	U	10	U
aniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U
benzyl alcohol	20	U	20	U	20	U	20	U	20	U	20	U	20	U
4-Chloroaniline	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Dibenzofuran	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Methylnaphthalene	20	U	20	U	20	U	20	U	20	U	20	U	20	U
2-Nitroaniline	100	U	100	U	100	U	100	U	100	U	100	U	100	U
3-Nitroaniline	100	U	100	U	100	U	100	U	100	U	100	U	100	U
4-Nitroaniline	NA		NA		100	U	100	U	100	U	100	U	NA	
Pesticides	All samples nondetect													

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Monitoring Well Ground Water Analytical Results - August 1984
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	D1		P	
Sample number	ME3201		ME3202	
Date sampled	8/1/1984		8/1/1984	
Units	ug/L		ug/L	
	Result	Qual	Result	Qual
Di-n-octylphthalate	10	U	10	U
Diethylphthalate	10	U	10	U
Dimethylphthalate	10	U	10	U
Benzo(a)anthracene	10	U	10	U
Benzo(a)pyrene	20	U	20	U
Benzo(b)fluoranthene	20	U	20	U
Benzo(k)fluoranthene	20	U	20	U
Chrysene	20	U	20	U
Acenaphthylene	10	U	10	U
Anthracene	10	U	10	U
Benzo(g,h,i)perylene	20	U	20	U
Fluorene	10	U	10	U
Phenanthrene	10	U	10	U
Dibenzo(a,h)anthracene	20	U	20	U
Indeno(1,2,3-cd)pyrene	20	U	20	U
Pyrene	10	U	10	U
aniline	5	U	5	U
benzyl alcohol	20	U	20	U
4-Chloroaniline	50	U	50	U
Dibenzofuran	10	U	10	U
2-Methylnaphthalene	20	U	20	U
2-Nitroaniline	100	U	100	U
3-Nitroaniline	NA		100	U
4-Nitroaniline	NA		100	U
Pesticides	All samples nondetect			

U: Not detected
B: Analyte detected in blank
C: Blank corrected
NDB: Not detected due to blank
NR: Not reported
NA: Not available

1995

Monitoring Well Ground Water Analytical Results - September 1995
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WTE1			WT01			WT101A			WT101B			WT101B-dup			WT102B		
Date Sampled	9/26/1995			9/22/1995			9/25/1995			9/25/1995			9/25/1995			9/20/1995		
Units	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.
TOTAL METALS																		
Aluminum	NR			115		J	321			206			236			161		J
Antimony	NR			<	12.8		<	12.8		<	12.8		45.5		J	29.7		J
Arsenic	NR			<	3.8		7.8		J	<	3.8		<	3.8	U	4.8		J
Barium	NR			74.3		J	116		J	184		J	187		J	91.0		J
Beryllium	NR			<	0.40		<	0.40	U	1.1		J	0.63		J	<	0.40	
Cadmium	NR			<	1.1		1.1		J	<	1.1		<	1.1		<	1.1	
Calcium	NR			104000			249000			126000			127000			61200		
Chromium	NR			<	4.0		<	4.0		20.6			8.9		J	<	4.0	
Cobalt	NR			<	5.9		10.9		J	9.6		J	11.4		J	12.4		J
Copper	NR			<	1.7		<	1.7		16.0		J	4.2		J	<	1.7	
Iron	NR			21.6		J	12700			3080			3090			490		
Lead	NR			<	1.7		<	1.7		<	1.7		<	1.7		<	1.7	
Magnesium	NR			26100			25200			47300			47500			20400		
Manganese	NR			205			1060			49.3			51.0			87.3		
Mercury	NR			<	0.20		<	0.20		<	0.20		<	0.20		<	0.20	
Nickel	NR			<	9.5		23.8		J	14.4		J	23.8		J	<	9.5	
Potassium	NR			1950		J	8060			5110			5220			1870		J
Silver	NR			<	2.5		<	2.5		18.2			7.2		J	<	2.5	
Sodium	NR			12500		J	44100		J	47400		J	47100		J	27800		J
Thallium	NR			<	4.7		<	4.7		<	4.7		<	4.7		5.7		J
Vanadium	NR			6.9		J	20.9		J	17.8		J	22.3		J	13.2		J
Zinc	NR			2.1		J	1.8		J	2.6		J	5.7		J	3.5		J
Cyanide	NR			<	10.0		<	10.0		<	10.0		<	10.0		<	10.0	

J: Estimated value
RL: Reporting Limit
B: Analyte also detected in method blank
U: Analyte not detected
NR: Not reported

Monitoring Well Ground Water Analytical Results - September 1995
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT102A			WT111A			WT112A			WT112B			WT113A			WT113B		
Date Sampled	9/20/1995			9/22/1995			9/19/1995			9/19/1995			9/18/1995			9/18/1995		
Units	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.
TOTAL METALS																		
Aluminum	268			450			169		J	65.2		J	161		J	80.5		J
Antimony	21.7		J	<	12.8		<	12.8		<	12.8		<	12.8		<	12.8	
Arsenic	<	3.8		<	3.8		<	3.8		<	3.8		<	3.8		<	3.8	
Barium	53.3		J	103		J	35.1		J	92.5		J	14.3		J	78.1		J
Beryllium	1.3		J	<	0.40		<	0.40		<	0.40		<	0.4		0.50		J
Cadmium	<	1.1		<	1.1		<	1.1		<	1.1		<	1.1		<	1.1	
Calcium	157000			6170			179000			65800			45700			93300		
Chromium	23.9			<	4.0		<	4.0		<	4.0		<	4.0		5.6		J
Cobalt	13.1		J	11.9		J	<	5.9		<	5.9		6.9		J	<	5.9	
Copper	17.9		J	<	1.7		<	1.7		<	1.7		<	1.7		3.7		J
Iron	39.0		J	1760			15.0			774			4.7		J	703		
Lead	<	1.7		<	1.7		<	1.7		<	1.7		<	1.7		<	1.7	
Magnesium	15900			2520			15200			21100			11400			23000		
Manganese	30.2			201			4.0		J	119			2.3		J	148		
Mercury	<	0.20		<	0.20		<	0.20		<	0.20		<	0.20		<	0.20	
Nickel	40.6			16.0		J	10		J	<	9.5		<	9.5		<	9.5	
Potassium	2070		J	1690		J	2000		J	1330		J	1200		J	1900		J
Silver	19.5			<	2.5		<	2.5		<	2.5		<	2.5		4.9		
Sodium	52300		J	2560		J	12300		J	21200		J	6340		J	13300		J
Thallium	4.7			<	4.7		4.7			4.7			4.7			5.0		J
Vanadium	26.5		J	11.9		J	9.6		J	<	4.5		11.1		J	<	4.5	
Zinc	4.1		J	17.5		J	7.7		J	2.1		J	5.0		J	3.5		J
Cyanide	<	10.0		<	10.0		<	10.0		<	10.0		<	10.0		<	10.0	

J: Estimated value
RL: Reporting Limit
B: Analyte also detected in method blank
U: Analyte not detected
NR: Not reported

Monitoring Well Ground Water Analytical Results - September 1995
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT114B			WT114A			WT115A			WT116A			WT116A-dup			WT116B		
Date Sampled	9/21/1995			9/21/1995			9/25/1995			9/21/1995			9/21/1995			9/21/1995		
Units	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.
TOTAL METALS																		
Aluminum	230			145		J	132		J	393			259			40.4		J
Antimony	<	12.8		<	12.8		<	12.8		<	12.8		20.4		J	<	12.8	
Arsenic	18.5			23.3			<	3.8		<	3.8		<	3.8		<	3.8	
Barium	194		J	237			50.1		J	136		J	148		J	174		J
Beryllium	<	0.40		<	0.40		<	0.40		0.40			<	0.40		<	0.40	
Cadmium	<	1.1		1.7		J	<	1.1		1.1			<	1.1		<	1.1	
Calcium	219000			243000			197000			518000			546000			184000		
Chromium	<	4.0		<	4.0		<	4.0		7.1		J	<	4.0		<	4.0	
Cobalt	11.1		J	13.8		J	<	5.9		<	5.9		<	5.9		<	5.9	
Copper	<	1.7		<	1.7		<	1.7		1.7			<	1.7		<	1.7	
Iron	13300			19000			1360			5710			6130			2740		
Lead	<	1.7		<	1.7		<	1.7		<	1.7		<	1.7		<	1.7	
Magnesium	30500			23400			27200			53500			55400			35200		
Manganese	182			393			413			670			696			203		
Mercury	<	0.20		<	0.20		<	0.20		<	0.20		<	0.20		<	0.20	
Nickel	19.7		J	<	19.0	J	<	9.5		<	9.5		9.7		J	<	9.5	
Potassium	5110			5110			5580			36000			38000			7080		
Silver	<	2.5		<	2.5		<	2.5		2.5			<	2.5		<	2.5	
Sodium	30100		J	122000		J	43600		J	195000		J	201000		J	43200		J
Thallium	<	4.7		6.7		J	5.3		J	<	4.7		5.5		J	<	4.7	
Vanadium	23.2		J	10.4		J	<	4.5		<	4.5		11.5		J	<	4.5	
Zinc	4.5		J	7.6		J	31.1			45.4			4.3		J	<	0.90	
Cyanide	11.4			<	10.0		<	10.0		<	10.0		<	10.0		<	10.0	

J: Estimated value
RL: Reporting Limit
B: Analyte also detected in method blank
U: Analyte not detected
NR: Not reported

Monitoring Well Ground Water Analytical Results - September 1995
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT117A			WT117B			WT118B		
Date Sampled	9/26/1995			9/26/1995			9/25/1995		
Units	µg/L			µg/L			µg/L		
	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.
TOTAL METALS									
Aluminum	NR			NR			229		
Antimony	NR			NR			<	12.8	
Arsenic	NR			NR			<	3.8	
Barium	NR			NR			347		
Beryllium	NR			NR			0.92		J
Cadmium	NR			NR			<	1.1	
Calcium	NR			NR			306000		
Chromium	NR			NR			14.4		
Cobalt	NR			NR			12.9		J
Copper	NR			NR			7.9		J
Iron	NR			NR			8680		
Lead	NR			NR			<	1.7	
Magnesium	NR			NR			29600		
Manganese	NR			NR			76.9		
Mercury	NR			NR			<	0.20	
Nickel	NR			NR			20.2		J
Potassium	NR			NR			16300		
Silver	NR			NR			10.9		
Sodium	NR			NR			69900		J
Thallium	NR			NR			8.0		J
Vanadium	NR			NR			18.8		J
Zinc	NR			NR			6.3		J
Cyanide	NR			NR			<	10.0	

J: Estimated value
RL: Reporting Limit
B: Analyte also detected in method blank
U: Analyte not detected
NR: Not reported

Monitoring Well Ground Water Analytical Results - September 1995
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WTE1			WT01			WT101A			WT101B			WT101B-dup			WT102B		
Date Sampled	9/26/1995			9/22/1995			9/25/1995			9/25/1995			9/25/1995			9/20/1995		
Units	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.
VOLATILE ORGANICS																		
Chloroethane	<	10		<	10		<	10		6		J	7		J	<	10	
Methylene Chloride	2		J	8		J	0.7		J	1		J	2		J	<	10	
Carbon Disulfide	<	10		<	10		<	10		<	10	U	<	10		<	10	
1,1-Dichloroethane	<	10		<	10		5		J	<	10	U	<	10		<	10	
total 1,2-Dichloroethene	<	10		<	10		<	10		<	10	U	<	10		<	10	
1,2-Dichloropropane	<	10		<	10		<	10		<	10	U	<	10		<	10	
Trichloroethene	<	10		<	10		<	10		<	10	U	<	10		<	10	
Benzene	<	10		<	10		<	10		<	10	U	<	10		<	10	
Ethylbenzene	<	10		<	10		<	10		<	10	U	<	10		<	10	
SEMIVOLATILE ORGANICS																		
Naphthalene	<	10		<	10		<	10		<	10		<	10		<	10	
2-Methylnaphthalene	<	10		<	10		<	10		<	10		<	10		<	10	
Acenaphthene	<	10		<	10		<	10		<	10		<	10		<	10	
Dibenzofuran	<	10		<	10		<	10		<	10		<	10		<	10	
2,4-Dinitrotoluene	<	10		<	10		<	10		<	10		<	10		<	10	
Diethylphthalate	<	10		<	10		<	11		<	10		<	10		<	10	
Fluorene	<	10		<	10		<	10		<	10		<	10		<	10	
Phenanthrene	<	10		<	10		<	10		<	10		<	10		<	10	
Anthracene	<	10		<	10		<	10		<	10		<	10		<	10	
Carbazole	<	10		<	10		<	10		<	10		<	10		<	10	
Butylbenzylphthalate	<	10		<	10		<	10		<	10		<	10		<	10	
bis(2-Ethylhexyl)phthalate	<	0.2	UJB	13			5		JB	<	0.6	UJB	<	0.6	UJB	<	0.4	UJB
PESTICIDES/PCBS																		
No pesticides or PCBs detected																		

J: Estimated value
RL: Reporting Limit
B: Analyte also detected in method blank
U: Analyte not detected
NR: Not reported

Monitoring Well Ground Water Analytical Results - September 1995
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT102A			WT111A			WT112A			WT112B			WT113A			WT113B		
Date Sampled	9/20/1995			9/22/1995			9/19/1995			9/19/1995			9/18/1995			9/18/1995		
Units	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.
VOLATILE ORGANICS																		
Chloroethane	<	10		<	10		<	10		<	10		<	10		<	10	
Methylene Chloride	<	10		5		J	<	10		<	10		<	10		<	10	
Carbon Disulfide	<	10		<	10		<	10		<	10		<	10		<	10	
1,1-Dichloroethane	<	10		<	10		<	10		<	10		<	10		<	10	
total 1,2-Dichloroethene	<	10		<	10		<	10		<	10		<	10		<	10	
1,2-Dichloropropane	<	10		<	10		<	10		<	10		<	10		<	10	
Trichloroethene	<	10		<	10		<	10		<	10		<	10		<	10	
Benzene	<	10		<	10		<	10		<	10		<	10		<	10	
Ethylbenzene	<	10		<	10		<	10		<	10		<	10		<	10	
SEMIVOLATILE ORGANICS																		
Naphthalene	<	10		<	10		<	10		<	10		<	10		<	10	
2-Methylnaphthalene	<	10		<	10		<	10		<	10		<	10		<	10	
Acenaphthene	<	10		<	10		<	10		<	10		<	10		<	10	
Dibenzofuran	<	10		<	10		<	10		<	10		<	10		<	10	
2,4-Dinitrotoluene	<	10		<	10		<	10		<	10		<	10		<	10	
Diethylphthalate	<	10		<	10		<	0.4	UJB	<	10		<	0.6	UJB	<	0.4	UJB
Fluorene	<	10		<	10		<	10		<	10		<	10		<	10	
Phenanthrene	<	10		<	10		<	10		<	10		<	10		<	10	
Anthracene	<	10		<	10		<	10		<	10		<	10		<	10	
Carbazole	<	10		<	10		<	10		<	10		<	10		<	10	
Butylbenzylphthalate	<	10		<	10		<	10		<	10		<	10		<	10	
bis(2-Ethylhexyl)phthalate	<	0.4	UJB	0.3		J	<	0.8	UJB	<	2	UJB	<	0.3	UJB	<	0.2	UJB
PESTICIDES/PCBS																		
No pesticides or PCBs detected																		

J: Estimated value
RL: Reporting Limit
B: Analyte also detected in method blank
U: Analyte not detected
NR: Not reported

Monitoring Well Ground Water Analytical Results - September 1995
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT114B			WT114A			WT115A			WT116A			WT116A-dup			WT116B		
Date Sampled	9/21/1995			9/21/1995			9/25/1995			9/21/1995			9/21/1995			9/21/1995		
Units	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.
VOLATILE ORGANICS																		
Chloroethane	<	10		<	10		<	10		<	10		<	10		<	10	
Methylene Chloride	<	10		<	10		1		J	<	10		<	10		<	10	
Carbon Disulfide	2		J	0.7		J	<	10		<	10		<	10		2		J
1,1-Dichloroethane	1		J	5		J	<	10		7		J	7		J	<	10	
total 1,2-Dichloroethene	1		J	<	10		<	10		1		J	1		J	<	10	
1,2-Dichloropropane	<	10		<	10		<	10		4		J	4		J	<	10	
Trichloroethene	<	10		<	10		<	10		0.9		J	0.8		J	<	10	
Benzene	<	10		2		J	1		J	15			14			<	10	
Ethylbenzene	<	10		<	10		<	10		0.7		J	0.7		J	<	10	
SEMIVOLATILE ORGANICS																		
Naphthalene	<	10		<	10		<	10		0.4		J	<	10		<	10	
2-Methylnaphthalene	<	10		<	10		<	10		<	10		0.5		J	<	10	
Acenaphthene	<	10		<	10		<	10		3		J	3		J	<	10	
Dibenzofuran	<	10		<	10		<	10		2		J	2		J	<	10	
2,4-Dinitrotoluene	<	10		<	10		<	10		<	10		<	10		<	10	
Diethylphthalate	<	10		<	2	UJB	<	10		<	10		<	0.2	UJB	<	10	
Fluorene	<	10		<	10		<	10		3		J	3		J	<	10	
Phenanthrene	<	10		<	10		<	10		<	10		0.2		J	<	10	
Anthracene	<	10		<	10		<	10		0.3		J	<	10		<	10	
Carbazole	<	10		<	10		<	10		6		J	6		J	<	10	
Butylbenzylphthalate	0.2		J	<	10		<	10		<	10		<	10		<	10	
bis(2-Ethylhexyl)phthalate	<	0.6	UJB	<	0.9	UJB	0.4		J	15		B	<	1.0	UJB	<	2	UJB
PESTICIDES/PCBS																		
No pesticides or PCBs detected																		

J: Estimated value
RL: Reporting Limit
B: Analyte also detected in method blank
U: Analyte not detected
NR: Not reported

Monitoring Well Ground Water Analytical Results - September 1995
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT117A			WT117B			WT118B		
Date Sampled	9/26/1995			9/26/1995			9/25/1995		
Units	µg/L			µg/L			µg/L		
	Results	RL	Qual.	Results	RL	Qual.	Results	RL	Qual.
VOLATILE ORGANICS									
Chloroethane	<	10		<	10		<	10	
Methylene Chloride	1		J	1		J	0.9		J
Carbon Disulfide	<	10		<	10		<	10	
1,1-Dichloroethane	<	10		<	10		<	10	
total 1,2-Dichloroethene	<	10		<	10		<	10	
1,2-Dichloropropane	<	10		<	10		<	10	
Trichloroethene	<	10		<	10		<	10	
Benzene	<	10		<	10		<	10	
Ethylbenzene	<	10		<	10		<	10	
SEMIVOLATILE ORGANICS									
Naphthalene	<	10		<	10		<	10	
2-Methylnaphthalene	<	10		<	10		<	10	
Acenaphthene	<	10		<	10		<	10	
Dibenzofuran	<	10		<	10		<	10	
2,4-Dinitrotoluene	<	10		<	10		<	10	
Diethylphthalate	<	10		<	10		<	10	
Fluorene	<	10		<	10		<	10	
Phenanthrene	<	10		<	10		<	10	
Anthracene	<	10		<	10		<	10	
Carbazole	<	10		<	10		<	10	
Butylbenzylphthalate	<	10		<	10		<	10	
bis(2-Ethylhexyl)phthalate	<	0.3	UJB	<	10		3		J
PESTICIDES/PCBS									
No pesticides or PCBs detected									

J: Estimated value
RL: Reporting Limit
B: Analyte also detected in method blank
U: Analyte not detected
NR: Not reported

1996

Monitoring Well Ground Water Analytical Results - November 1996
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT105A		WT111A		WT111A Dup		WT106A		WT115A		WT116A	
Sample number	MEAKN2		MEAKN3		MEAKN4		MEAKN5		MEAKN7			
Date sampled	11/13/1996		11/13/1996		11/13/1996		11/13/1996		11/13/1996		11/13/1996	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
TOTAL METALS												
Aluminum	17.0	U	280.0		267		50.8		32.0		NS	
Antimony	3.0	U	3.0	U	3.0	U	3.0	U	3.0	UJ	NS	
Arsenic	3.0	U	3.7		3.10		5.60		3.0	U	NS	
Barium	5.4		105		107		101		33.3		NS	
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	NS	
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	NS	
Calcium	38000		8160		8220		146000		215000		NS	
Chromium	1.0	U	1.8		1.5		1.0	U	2.9		NS	
Cobalt	1.0	U	6.4		6.5		1.0	U	1.6		NS	
Copper	1.0	U	3.3		3.0		1.0	U	1.8		NS	
Iron	13.1		4470		4360		6080		2220		NS	
Lead	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	NS	
Magnesium	10200		2980		2980		18100		36000		NS	
Manganese	5.0		335		333		394		276		NS	
Mercury	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	NS	
Nickel	1.0	U	7.2		7.2		1.8		3.8		NS	
Potassium	1760		1600		1620		4280		6520		NS	
Selenium	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	NS	
Silver	1.0	U	1	U	1.0	U	1.0	U	1.0	U	NS	
Sodium	4460	J	3200		3270	J	25800	J	33600	J	NS	
Thallium	20.00	U	3.00		2.60		2.90		2.20		NS	
Vanadium	1.0	U	2.4		2.4		1	U	7.6		NS	
Zinc	3.6	J	22.2	J	21.2	J	2.9	J	4.1	J	NS	
Cyanide	NS		NS		NS		NS		NS		NS	
VOLATILE ORGANICS												
Sample number	EAXX9		EAXY0		EAXY1		EAXY2		EAXY4		EAXY5	
Chloromethane	10	U	10	U	10	U	10	U	10	U	10	U
Bromomethane	10	U	10	U	10	U	10	U	10	U	10	U
Vinyl Chloride	10	U	10	U	10	U	10	U	10	U	10	U
Chloroethane	10	U	10	U	10	U	10	U	10	U	10	U
Methylene Chloride	10	U	10	U	10	U	10	U	10	U	10	U
Acetone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Carbon Disulfide	10	U	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethene	10	U	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethane	10	U	10	U	10	U	10	U	10	U	5	J
total 1,2-Dichloroethene	10	U	10	U	10	U	3	J	10	U	0.4	J
Chloroform	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethane	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
2-Butanone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
1,1,1-Trichloroethane	10	U	10	U	10	U	10	U	10	U	10	U
Carbon Tetrachloride	10	U	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloropropane	10	U	10	U	10	U	10	U	10	U	2	J
cis-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U
Trichloroethene	10	U	10	U	10	U	10	U	10	U	0.5	J
Dibromochloromethane	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloroethane	10	U	10	U	10	U	10	U	10	U	10	U
Benzene	10	U	10	U	10	U	10	U	2	J	7	J
trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U
Bromoform	10	U	10	U	10	U	10	U	10	U	10	U
4-Methyl-2-pentanone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
2-Hexanone	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Tetrachloroethene	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U	10	U
Toluene	10	U	10	U	10	U	10	U	10	U	10	U
Chlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U
Ethylbenzene	10	U	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U	10	U
Xylene (total)	10	U	10	U	10	U	10	U	10	U	10	U

U: Analyte not detected
J: Value is estimated
NS: Not sampled

Monitoring Well Ground Water Analytical Results - November 1996
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT105A		WT111A		WT111A Dup		WT106A		WT115A		WT116A
SEMIVOLATILE ORGANICS											
Sample number	EAXX9		EAXY0		EAXY1		EAXY2		EAXY4		EAXY5
Phenol	10	U	10	U	10	U	10	U	10	U	NS
bis(2-Chloroethyl)ether	10	U	10	U	10	U	10	U	10	U	NS
2-Chlorophenol	10	U	10	U	10	U	10	U	10	U	NS
1,3-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	NS
1,4-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	NS
1,2-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	NS
2-Methylphenol	10	U	10	U	10	U	10	U	10	U	NS
2,2'-Oxybis(1-chloropropane)	10	U	10	U	10	U	10	U	10	U	NS
4-Methylphenol	10	U	10	U	10	U	10	U	10	U	NS
N-Nitroso-di-n-propylamine	10	U	10	U	10	U	10	U	10	U	NS
Hexachloroethane	10	U	10	U	10	U	10	U	10	U	NS
Nitrobenzene	10	U	10	U	10	U	10	U	10	U	NS
Isophorone	10	U	10	U	10	U	10	U	10	U	NS
2-Nitrophenol	10	U	10	U	10	U	10	U	10	U	NS
2,4-Dimethylphenol	10	U	10	U	10	U	10	U	10	U	NS
bis(2-Chloroethoxy)methane	10	U	10	U	10	U	10	U	10	U	NS
2,4-Dichlorophenol	10	U	10	U	10	U	10	U	10	U	NS
1,2-4-Trichlorobenzene	10	U	10	U	10	U	10	U	10	U	NS
Naphthalene	10	U	10	U	10	U	10	U	10	U	NS
4-Chloroaniline	10	U	10	U	10	U	10	U	10	U	NS
Hexachlorobutadiene	10	U	10	U	10	U	10	U	10	U	NS
4-Chloro-3-methylphenol	10	U	10	U	10	U	10	U	10	U	NS
2-Methylnaphthalene	10	U	10	U	10	U	10	U	10	U	NS
Hexachlorocyclopentadiene	10	U	10	U	10	U	10	U	10	U	NS
2,4,6-Trichlorophenol	10	U	10	U	10	U	10	U	10	U	NS
2,4,5-Trichlorophenol	25	U	25	U	25	U	25	U	25	U	NS
2-Chlornaphthalene	10	U	10	U	10	U	10	U	10	U	NS
2-Nitroaniline	25	U	25	U	25	U	25	U	25	U	NS
Dimethylphthalate	10	U	10	U	10	U	10	U	10	U	NS
Acenaphthylene	10	U	10	U	10	U	10	U	10	U	NS
2,6-Dinitrotolune	10	U	10	U	10	U	10	U	10	U	NS
3-Nitroaniline	25	U	25	U	25	U	25	U	25	U	NS
Acenaphthene	10	U	10	U	10	U	10	U	10	U	NS
2,4-Dinitrophenol	25	U	25	U	25	U	25	U	25	U	NS
4-Nitrophenol	25	U	25	U	25	U	25	U	25	U	NS
Dibenzofuran	10	U	10	U	10	U	10	U	25	U	NS
2,4-Dinitrotoluene	10	U	10	U	10	U	10	U	10	U	NS
Diethylphthalate	10	U	10	U	10	U	10	U	10	U	NS
4-Chlorophenyl-phenyether	10	U	10	U	10	U	10	U	10	U	NS
Fluorene	10	U	10	U	10	U	10	U	10	U	NS
4-Nitroaniline	25	U	25	U	25	U	25	U	25	U	NS
4,6-Dinitro-2-methylphenol	25	U	25	U	25	U	25	U	25	U	NS
N-Nitrosodiphenylamine	10	U	10	U	10	U	10	U	10	U	NS
4-Bromophenyl-phenylether	10	U	10	U	10	U	10	U	10	U	NS
Hexachlorobenzene	10	U	10	U	10	U	10	U	10	U	NS
Pentachlorophenol	25	UJ	25	UJ	25	UJ	25	UJ	25	UJ	NS
Phenanthrene	10	U	10	U	10	U	10	U	10	U	NS
Anthracene	10	U	10	U	10	U	10	U	10	U	NS
Carbazole	10	U	10	U	10	U	10	U	10	U	NS
Di-n-butylphthalate	10	U	10	U	10	U	10	U	10	U	NS
Fluoranthene	10	U	10	U	10	U	10	U	10	U	NS
Pyrene	10	U	10	U	10	U	10	U	10	U	NS
Butylbenzylphthalate	10	U	10	U	10	U	10	U	10	U	NS
3,3'-Dichlorobenzidine	10	U	10	U	10	U	10	U	10	U	NS
Benzo(a)anthracene	10	U	10	U	10	U	10	U	10	U	NS
Chrysene	10	U	10	U	10	U	10	U	10	U	NS
bis(2-Ethylhexyl)phthalate	10	U	10	U	10	J	10	U	10	U	NS
Di-n-octylphthalate	10	U	10	U	10	U	10	U	10	U	NS
Benzo(b)fluoranthene	10	U	10	U	10	U	10	U	10	U	NS
Benzo(k)fluoranthene	10	U	10	U	10	U	10	U	10	U	NS
Benzo(a)pyrene	10	U	10	U	10	U	10	U	10	U	NS
Indeno(1,2,3-cd)pyrene	10	U	10	U	10	U	10	U	10	U	NS
Dibenz(a,h)anthracene	10	U	10	U	10	U	10	U	10	U	NS
Benzo(g,h,i)perylene	10	U	10	U	10	U	10	U	10	U	NS

U: Analyte not detected
J: Value is estimated
NS: Not sampled

1998

Monitoring Well Ground Water Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT101A	WT101A dup	WT102A	WT112A	WT114A	WT115A	WT118A	WT119A	WT119A dup
Sample number	MEBQF2	MEBQF1	MEBQE8	MEBQE9	MEBQF0	MEBQF3	MEBQJ2	MEBQJ3	MEBQJ4
Date sampled	10/21/1998	10/21/1998	10/19/1998	10/20/1998	10/20/1998	10/21/1998	10/21/1998	10/22/1998	10/22/1998
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
TOTAL METALS									
Aluminum	26.0 U	26.0 U	27.6 J	26.0 UJ	26.0 UJ	94.1 J	58.0 J	258 J	249 J
Antimony	42.2 U	42.2 U	42.2 UJ	42.2 UJ	42.2 UJ	42.2 U	42.2 UJ	43.2 UB	42.2 U
Arsenic	3.6 J	3.3 J	0.90 UJ	0.90 UJ	24.3 J	0.90 U	1.0 J	5.8 J	5.3
Barium	91.2 J	85.5 J	47.3 J	36.6 J	238 J	33.5 J	192 J	78.3	76.0
Beryllium	0.60 U	0.60 U	0.60 UJ	0.60 UJ	0.60 J	0.60 U	0.60 UJ	0.60 UJ	0.60 UJ
Cadmium	4.6 U	4.6 U	4.6 UJ	4.6 UJ	4.6 UJ	4.6 U	4.6 UJ	4.6 U	4.6 U
Calcium	377000	361000	17100 J	19000 J	27000 J	293000	60900 J	143000	142000
Chromium	13.1	11.3	20.3 J	7.5 J	12.0 J	10.4	7.0 UJ	7.8	7.0 U
Cobalt	7.8 U	7.8 U	7.8 UJ	7.8 UJ	11.9 J	7.8 U	7.8 UJ	7.8 U	7.8 U
Copper	4.1 U	4.1 U	4.1 UJ	4.1 UJ	4.1 UJ	4.1 U	4.1 UJ	5.4	4.9
Iron	28100	26900	96.8 J	11.7 UJ	17900 J	4590	4490 J	1690	1690
Lead	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ	3.4 J	2.4 J
Magnesium	14700	13900	16600 J	14000 J	24800 J	20300	52700 J	44800	44500
Manganese	3080	2940	61.5 J	6.7 J	306 J	513	662 J	279	278
Mercury	0.10 U	0.10 U	0.10 J	0.10 UJ	0.10 UJ	0.10 U	0.10 J	0.10 U	0.10 U
Nickel	28.3 U	28.3 U	73.0 J	23.8 UJ	23.8 UJ	28.3 U	28.3 UJ	28.3 U	28.3 U
Potassium	3630 J	3630 J	1610 J	1330 J	6640 J	3580 J	25200 J	11500 J	11200 J
Selenium	3.0 R	3.0 R	6.0 UJ	6.0 UJ	6.0 UJ	3.0 R	6.0 R	6.0 J	6.0 J
Silver	5.3 U	5.3 U	6.1 J	5.3 UJ	5.3 UJ	5.3 U	5.3 UJ	5.3 U	5.3 U
Sodium	35800	33100	48000 J	13300 J	47100 J	12100	179000 J	69100	68200
Thallium	0.40 U	0.40 U	0.40 UJ	0.40 UJ	0.40 UJ	0.40 U	0.40 UJ	0.40 U	0.40 U
Vanadium	12.3 U	12.3 U	12.3 UJ	12.3 UJ	12.3 UJ	12.3 U	12.3 UJ	12.3 U	12.3 U
Zinc	3.2 U	3.2 U	3.2 UJ	3.2 UJ	3.2 J	3.7 J	3.2 UJ	4.9 U	4.9 U
Cyanide	17.9 J	14.4 J	8.5 J	7.3 J	7.8 J	12.4 UB	31.9	12 J	15.2
VOLATILE ORGANICS									
Sample number	ECMM5	ECMQ0	ECMM0	ECMM2	ECMM4	ECMQ2	ECMQ4	ECMQ5	ECMQ9
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 J	10 U	10 U
Bromomethane	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	4 J	10 U	5 J	10 U	10 U
total 1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 UJ	10 UJ	10 UJ	10 U	10 U	10 UJ	10 UJ	10 U	10 U
Toluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Monitoring Well Ground Water Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT101A	WT101A dup	WT102A	WT112A	WT114A	WT115A	WT116A	WT119A	WT119A dup
SEMIVOLATILE ORGANICS									
Sample number	ECMM5	ECMQ0	ECMM0	ECMM2	ECMM4	ECMQ2	ECMQ4	ECMQ5	ECMQ9
Phenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-Oxybis(1-chloropropane)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 U
Hexachlorobutadiene	10 U	10 U	10 UJ	10 U	10 UJ	10 UJ	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 UJ	26 U	25 U	26 U	26 U	26 UJ	26 U	25 U	26 U
2-Chloronaphthalene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
2-Nitroaniline	25 UJ	26 U	25 U	26 U	26 U	26 UJ	26 U	25 U	26 U
Dimethylphthalate	7 J	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Acenaphthylene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
2,6-Dinitrotoluene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
3-Nitroaniline	25 UJ	26 U	25 U	26 U	26 U	26 UJ	26 U	25 U	26 U
Acenaphthene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
2,4-Dinitrophenol	25 UJ	26 U	25 U	26 U	26 U	26 UJ	26 U	25 U	26 U
4-Nitrophenol	25 UJ	26 U	25 U	26 U	26 U	26 UJ	26 U	25 U	26 U
Dibenzofuran	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
2,4-Dinitrotoluene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Diethylphthalate	19 J	9 J	10 U	10 U	2 J	10 UJ	10 U	10 U	10 U
4-Chlorophenyl-phenyether	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Fluorene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
4-Nitroaniline	25 UJ	26 U	25 U	26 U	26 U	26 UJ	26 U	25 U	26 U
4,6-Dinitro-2-methylphenol	25 U	26 U	25 U	26 U	26 U	26 U	26 U	25 U	26 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	25 U	26 U	25 U	26 U	26 U	26 U	26 U	25 U	26 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 UJ	10 UJ	10 U	10 UJ	10 U	10 UJ	10 UJ	10 UJ	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Butylbenzylphthalate	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Benzo(a)anthracene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Chrysene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	10 UJ	10 U	3 J	10 U	10 U	10 UJ	2 J	10 U	10 U
Di-n-octylphthalate	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Benzo(b)fluoranthene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Benzo(k)fluoranthene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Benzo(a)pyrene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U

Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB03-0.5			SB03-2			SB04-0.5			SB04-2			SB04-6			SB05-0.5			SB05-2		
Date sampled	10/12/1998			10/12/1998			10/19/1998			10/19/1998			10/19/1998			10/19/1998			10/19/1998		
Sample Number	MEBQC1			MEBQC2			MEBQE3			MEBQE4			MEBQE5			MEBQE1			MEBQE2		
Units	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS																					
Aluminum	**4080**			**3960**			**3340**			**5130**			**3340**			**2580**			**3070**		
Antimony	<	11.5	J	<	11.3	J	<	9.0		<	9.0		<	10.3		<	8.9		<	8.8	
Arsenic	**1.6**			**1.3**			**1.00**		J	**1.1**		J	**0.60**		J	**1.2**		J	**0.60**		J
Barium	**27.9**			**21.9**			**21.2**			**39.5**			**18.7**			**44.7**			**34.5**		
Beryllium	<	0.20		<	0.20		**0.10**		J	**0.20**		J	<	0.10		**0.20**		J	**0.30**		J
Cadmium	<	1.0		**1.0**			<	1.0		<	1.0		<	1.1		**1.1**			<	1.0	
Calcium	**1670**		J	**480**		J	**1020**			**1530**			**2070**			**5460**			**4180**		
Chromium	**5.2**		J	**5.3**		J	**4.8**			**6.4**			**5.1**			**7.0**			**8.3**		
Cobalt	<	3.4		<	3.4		<	1.7		<	1.7		<	1.9		**3.2**		J	**3.1**		J
Copper	**15.9**		J	**4.3**			**3.8**		J	**3.3**		J	**3.1**		J	**16.4**			**17.1**		
Iron	**3450**			**2530**			**4120**			**5070**			**2570**			**4590**			**4360**		
Lead	**9.8**			**11.7**			**8.1**		J	**7.8**		J	**6.2**		J	**56.9**			**22.3**		
Magnesium	**697**		J	**333**		J	**724**			**833**			**346**			**2390**			**2050**		
Manganese	**58.7**			**14.8**			**69.9**			**86.2**			**58.1**			**109**			**66.4**		
Mercury	<	0.06		<	0.06		**0.05**		J	**0.05**		J	<	0.06		**0.08**		J	**0.06**		J
Nickel	<	8.4		<	8.2		<	6.1		<	6.0		<	6.9		**6.2**		J	**12.3**		J
Potassium	**253**		J	<	127		<	198		**288**		J	<	227		<	195		**419**		J
Selenium	**0.80**		J	**0.90**		J	<	0.10		<	0.10		<	0.10		<	0.10		<	0.10	
Silver	<	0.90		<	0.90		<	1.1		<	1.1		<	1.3		<	1.1		<	1.1	
Sodium	**20.4**		J	**39.0**		J	**34.5**		J	**525**			**110**		J	**50.2**		J	**50.6**		J
Thallium	<	0.40		<	0.40		<	0.08		<	0.08		<	0.1		<	0.08		<	0.08	
Vanadium	**7.8**			**5.7**		J	**7.0**		J	**9.4**		J	**3.7**		J	**8.3**		J	**9.2**		J
Zinc	**26.0**			**14.4**			**15.6**			**17.3**			**10.0**			**72.9**			**52.4**		
Cyanide	**0.05**		J	**0.2**		J	<	0.10		**0.10**		J	**0.20**		J	**0.30**		J	**0.20**		J
VOLATILE ORGANICS																					
Sample Number	ECMK2			ECMK3			ECML6			ECML7			ECML8			ECML4			ECML5		
Units	µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg		
Methylene Chloride	**34**			<	18		<	11		<	11		<	13		<	11		<	10	
Acetone	**2**		J	**2**		J	<	11		<	11		<	13		<	11		<	10	
Carbon Disulfide	<	11		<	11		<	11		<	11		<	13		<	11		<	10	
1,1-Dichloroethane	<	11		<	11		<	11		<	11		<	13		<	11		<	10	
Benzene	<	11		<	11		<	11		<	11		<	13		<	11		<	10	
Ethylbenzene	<	11		<	11		<	11		<	11		<	13		<	11		<	10	
Xylene (total)	<	11		<	11		<	11		<	11		<	13		<	11		<	10	

RL = Reporting Limit (For this data set the Reporting Limit is the Contract Required Quantitation Limit)
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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB06-0.5			SB06-0.5 Dup			SB06-2			SB07-0.5			SB07-2			SB08-0.5			SB08-2		
Date sampled	10/19/1998			10/19/1998			10/19/1998			10/21/1998			10/21/1998			10/20/1998			10/20/1998		
Sample Number	MEBQE6			MEBQE7			MEBQF4			MEBQH6			MEBQH7			MEBQF5			MEBQF6		
Units	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS																					
Aluminum	4220			3000			2770			3100			1730			3150			1900		
Antimony	<	9.4		<	9.4		<	9.0		13.1		J	<	8.7	J	<	8.7		<	8.6	
Arsenic	2.1		J	1.4		J	1.1		J	2.3		J	0.70		J	1.1		J	0.55		J
Barium	51.8			47.7			40.4			13.0			7.8			14.8		J	126		
Beryllium	<	0.10		<	0.10		0.30		J	0.20		J	0.10		J	<	0.12		<	0.12	
Cadmium	<	1.0		<	1.0		<	1.0		<	1.0		<	0.90		<	0.95		<	0.94	
Calcium	1750			1660			728			1320			2140			953		J	<	6060	
Chromium	4.5			5.5			4.6			6.0			5.1			5.3			5.3		
Cobalt	3.3		J	1.9		J	2.8		J	4.0			1.9			3.3		J	1.9		J
Copper	20.4			19.9			22.6			7.4			6.4			5.3			5.1		J
Iron	6200			4800			3660			5240			4390			4680			2590		
Lead	13.4		J	17.2		J	9.4		J	5.2			6.5		S*	5.4			6.9		J
Magnesium	746			598			470			1140			1160			919		J	1040		
Manganese	337			296			227			133			44.7			105			35.8		
Mercury	<	0.06		<	0.06		<	0.05		<	0.05		<	0.05		0.05		J	<	0.05	
Nickel	9.6		J	7.0		J	<	6.0		6.0			<	5.8		<	5.9		6.7		J
Potassium	219		J	<	205		227		J	234			226			<	192		<	190	
Selenium	<	0.10		<	0.10		<	0.10		<	0.10	J	<	0.10	J	<	0.12		<	0.12	
Silver	<	1.2		<	1.2		<	1.1		<	1.1		<	1.1		<	1.1		<	1.1	
Sodium	24.8		J	<	18.1		32.6		J	41.6			<	16.8		29.9		J	32.7		J
Thallium	<	0.09		<	0.09		<	0.08		0.10		J	<	0.08	J	<	0.08		<	0.08	
Vanadium	8.5		J	7.0		J	5.2		J	8.1			4.7			10.0		J	5.7		J
Zinc	52.3			45.0			41.0			20.2			40.0			15.5			14.9		
Cyanide	0.30		J	<	0.10		<	0.10		0.20		J	<	0.10	J	0.92		J	0.40		J
VOLATILE ORGANICS																					
Sample Number	ECML9			ECMM6			ECMM7			ECMP9			ECMQ6			ECMM8			ECMM9		
Units	µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg		
Methylene Chloride	<	11		<	11		<	11		<	10		<	10		<	10		<	10	
Acetone	<	11		<	11		<	11		<	10		<	10		<	10		<	10	
Carbon Disulfide	<	11		<	11		<	11		<	10		<	10		<	10		<	10	
1,1-Dichloroethane	<	11		<	11		<	11		<	10		<	10		<	10		<	10	
Benzene	<	11		<	11		<	11		<	10		<	10		<	10		<	10	
Ethylbenzene	<	11		<	11		<	11		<	10		<	10		<	10		<	10	
Xylene (total)	<	11		<	11		<	11		<	10		<	10		<	10		<	10	

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB09-0.5			SB09-0.5 Dup			SB09			SB10-0.5			SB10-0.5 Dup			SB10-2			SB10-6		
Date sampled	10/21/1998			10/21/1998			10/21/1998			10/20/1998			10/20/1998			10/20/1998			10/20/1998		
Sample Number	MEBQH3			MEBQH4			MEBQH5			MEBQF7			MEBQF8			MEBQF9			MEBQG0		
Units	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS																					
Aluminum	**2480**			**2500**			**2120**			**4230**			**5670**			**3610**			**3320**		
Antimony	<	9.0		<	8.9		<	8.8		<	9.1		<	9.2		<	8.9		<	9.0	
Arsenic	**1.1**		J	**1.7**		J	**0.80**		J	**1.5**		J	**1.4**		J	**1.2**		J	**0.64**		J
Barium	**14.1**		J	**13.4**		J	**12.1**		J	**51.7**			**55.1**			**48.7**			**24.7**		J
Beryllium	<	0.13		<	0.13		<	0.13		<	0.13		<	0.13		<	0.13		<	0.13	
Cadmium	<	0.98		<	0.97		<	0.96		<	0.99		**1.2**			<	0.97		<	0.99	
Calcium	**19600**			**2650**			**12600**			**586**		J	**710**		J	**361**		J	**535**		J
Chromium	**5.7**			**5.4**			**5.2**			**5.5**			**7.0**			**5.5**			**7.6**		
Cobalt	**3.1**		J	**2.8**		J	**2.8**		J	**3.4**		J	**3.3**		J	**3.1**		J	<	1.7	
Copper	**9.2**			**9.1**			**8.0**			**35.1**			**37.2**			**38.1**			**12.7**		
Iron	**4750**			**4610**			**3620**			**4780**			**5330**			**4290**			**1330**		
Lead	**6.7**			**6.7**			**6.0**			**21.1**		J	**28.9**		J	**16.3**		J	**8.0**		S
Magnesium	**2380**			**1410**			**3500**			**559**		J	**766**		J	**503**		J	**678**		J
Manganese	**172**			**144**			**62.6**			**317**			**319**			**169**			**86.6**		
Mercury	<	0.05		**0.06**		J	<	0.05		<	0.05		**0.07**		J	<	0.05		<	0.05	
Nickel	**7.0**		J	**9.5**			<	5.9		**8.1**		J	**8.1**		J	<	6.0		<	6.1	
Potassium	**264**		J	<	196		<	194		<	200		**297**		J	**238**		J	<	198	
Selenium	<	0.13		<	0.13	J	<	0.13	J	<	0.13		<	0.13		<	0.13		<	0.13	
Silver	<	1.1		<	1.1		<	1.1		<	1.1		<	1.1		<	1.1		<	1.1	
Sodium	**36.2**		J	**37.6**		J	**32.6**		J	**34.3**		J	**45.5**		J	**39.3**		J	**29.8**		J
Thallium	<	0.09		<	0.08		<	0.08		<	0.09		<	0.09		<	0.08		**0.09**		
Vanadium	**7.2**		J	**8.8**		J	**7.6**		J	**10.1**		J	**10.4**		J	**9.5**		J	<	10.9	
Zinc	**26.2**			**22.2**			**24.1**			**58.3**			**68.9**			**50.1**			**24.9**		
Cyanide	**0.56**		J	**0.37**		J	**0.58**		J	**4.2**			**0.58**		J	**4.9**			**0.16**		J
VOLATILE ORGANICS																					
Sample Number	ECMP6			ECMP7			ECMP8			ECMN0			ECMN1			ECMN2			ECMN3		
Units	µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg		
Methylene Chloride	<	11		<	10		<	10		<	11		<	11		<	10		<	11	
Acetone	<	11		<	10		<	10		<	11		<	11		<	10		<	11	
Carbon Disulfide	<	11		<	10		<	10		<	11		<	11		<	10		<	11	
1,1-Dichloroethane	<	11		<	10		<	10		<	11		<	11		<	10		<	11	
Benzene	<	11		<	10		<	10		<	11		<	11		<	10		<	11	
Ethylbenzene	<	11		<	10		<	10		<	11		<	11		<	10		<	11	
Xylene (total)	<	11		<	10		<	10		<	11		<	11		<	10		<	11	

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB11-0.5			SB11-2			SB11-6			SB12-0.5			SB12-2			SB12-6			SB13-0.5		
Date sampled	10/21/1998			10/21/1998			10/21/1998			10/20/1998			10/20/1998			10/20/1998			10/20/1998		
Sample Number	MEBQH0			MEBQH1			MEBQH2			MEBQG7			MEBQG8			MEBQG9			MEBQG4		
Units	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS																					
Aluminum	**4740**			**3360**			**4270**			**2260**			**1360**			**2280**			**3900**		
Antimony	<	8.9	J	**9.2**		J	<	8.8	J	<	8.8		<	8.7		<	8.8		<	9.4	
Arsenic	**12.5**		J	**4.7**		J	**2.8**		J	**1.1**		J	**0.70**		J	**0.9**		J	**2.1**		J
Barium	**102**			**57.0**			**55.8**			**13.8**		J	**8.0**		J	**14.2**		J	**65.8**		
Beryllium	**0.50**		J	**0.20**		J	**0.20**		J	**0.25**		J	<	0.12		<	0.13		**0.30**		J
Cadmium	**1.1**			<	1.0		<	1.0		<	0.96		<	0.95		<	0.96		**1.2**		
Calcium	**21900**			**26400**			**7620**			**1060**			**2990**			**1510**			**9970**		
Chromium	**12.6**			**9.2**			**17.2**			**5.1**			**3.3**			**6.3**			**8.5**		
Cobalt	**3.2**			**3.4**			**6.8**			**2.8**		J	**3.5**		J	**3.4**		J	**3.2**		J
Copper	**149**			**46.1**			**45.9**			**6.2**			**4.6**		J	**12.5**			**18.9**		
Iron	**11100**			**8820**			**21200**			**4080**			**2470**			**4570**			**5970**		
Lead	**160**		J	**92.9**		J	**186**		J	**6.1**		J	**5.4**			**7.1**		J	**167**		
Magnesium	**5950**			**11400**			**2580**			**853**		J	**1920**			**1140**			**1550**		
Manganese	**492**			**278**			**398**			**128**			**47.4**			**52.9**			**326**		
Mercury	**0.20**			**0.20**			**0.20**			<	0.05		<	0.05		<	0.05		**0.10**		J
Nickel	**12.0**			<	5.9		**10.0**			<	5.9		<	5.9		<	5.9		**8.8**		J
Potassium	**462**			**287**			**377**			<	193		<	192		<	194		**423**		J
Selenium	<	0.10	J	<	0.10	J	<	0.10	J	<	0.12		<	0.12		**0.13**			<	0.10	
Silver	<	1.1		<	1.1		<	1.1		<	1.1		<	1.1		<	1.1		<	1.2	
Sodium	**127**			**54.7**			**49.1**			**38.2**		J	**30.5**		J	**61.5**		J	**48.6**		J
Thallium	**0.10**			<	0.08		<	0.08		<	0.08		<	0.08		<	0.08		<	0.09	
Vanadium	**11.3**			**8.9**			**11.3**			**6.5**		J	**5.6**		J	**9.2**		J	**8.5**		J
Zinc	**294**			**136**			**109**			**22.8**			**15.1**			**38.9**			**109**		
Cyanide	**0.40**		J	<	0.10	J	**0.30**		J	**0.17**		J	**0.18**		J	**0.25**		J	**0.50**		J
VOLATILE ORGANICS																					
Sample Number	ECMP3			ECMP4			ECMP5			ECMP0			ECMP1			ECMP2			ECMN7		
Units	µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg		
Methylene Chloride	<	11		<	10		<	10		<	10		<	10		<	10		<	11	J
Acetone	<	11		<	10		<	10		<	10		<	10		<	10		<	11	J
Carbon Disulfide	<	11		<	10		<	10		<	10		<	10		<	10		<	11	J
1,1-Dichloroethane	<	11		<	10		<	10		<	10		<	10		<	10		<	11	J
Benzene	<	11		<	10		<	10		<	10		<	10		<	10		<	11	J
Ethylbenzene	<	11		<	10		<	10		<	10		<	10		<	10			11	R
Xylene (total)	<	11		<	10		<	10		<	10		<	10		<	10			11	R

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB13-2			SB13-6			SB14-0.5			SB14-2			SB14-6			SB15-0.5			SB15-2		
Date sampled	10/20/1998			10/20/1998			10/20/1998			10/20/1998			10/20/1998			10/19/1998			10/19/1998		
Sample Number	MEBQG5			MEBQG6																	
Units		mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg	
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS																					
Aluminum	3980			3220			4120			4500			2630			3470			2860		
Antimony	<	9.2		<	9.1		<	11.2		<	8.8		<	9.5		<	9.8		<	9.1	
Arsenic	0.90		J	0.90		J	0.83		J	1.1		J	0.60		J	6.0		J	4.4		J
Barium	35.7			33.6			115			36.2		J	43.7		J	102			133		
Beryllium	0.20		J	0.30		J	0.33		J	<	71.3		<	0.14		0.60		J	0.50		J
Cadmium	1.3			<	1.0		<	1.2		<	106.4		<	1.0		1.1			1.2		
Calcium	9300			12000			32700			2840			9350			16400			26800		
Chromium	14.2			12.9			14.6			6.7			15.5			12.9			14.0		
Cobalt	3.9		J	3.3		J	4.3		J	3.0		J	3.0		J	5.1		J	5		J
Copper	14.4			17.0			2110			18.7			25.3			113			283		
Iron	9180			11300			9410			4680			3920			26000			19400		
Lead	58.7			45.6		J	191		J	19.6		J	127		J	695		J	287		
Magnesium	3060			3000			3880			1180			1650			4810			5420		
Manganese	203			220			539			170			184			514			399		
Mercury	0.08		J	0.10		J	0.25		J	0.06		J	0.11		J	0.40			0.50		
Nickel	12.0		J	15.4		J	8.0		J	<	5.9		9.8			21.0		J	23.7		J
Potassium	310		J	279		J	278		J	277		J	210		J	363		J	385		J
Selenium	<	0.10	J	0.10			<	0.16	J	<	0.13		<	0.14		<	0.10		<	0.10	
Silver	<	1.1		<	1.1		<	1.4		<	1.1		<	1.2		1.2			2.0		
Sodium	54.7		J	74.3		J	83.7		J	40.5		J	43.0		J	<	65.0	J	60.9		J
Thallium	<	0.09		<	0.09		<	0.11		<	0.08		<	0.09		0.10			<	0.08	
Vanadium	9.8		J	6.0		J	11.3		J	9.9		J	8.0		J	11.1		J	10.2		J
Zinc	175			90.9			161			49.8			249			427			465		
Cyanide	0.30		J	0.90		J	0.14		J	0.12		J	<	0.11		1.1		J	0.90		J
VOLATILE ORGANICS																					
Sample Number		ECMN8			ECMN9																
Units		µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	10		<	11		<	12		<	10		<	11		<	11		<	11	
Acetone	<	10		<	11		<	12		<	10		<	11		<	11		22		
Carbon Disulfide	<	10		<	11		<	12		<	10		<	11		<	11		<	11	
1,1-Dichloroethane	<	10		<	11		<	12		<	10		<	11		<	11		<	11	
Benzene	<	10		<	11		<	12		<	10		<	11		<	11		<	11	
Ethylbenzene	<	10		<	11		<	12		<	10		<	11		<	11		<	11	
Xylene (total)	<	10		<	11		<	12		<	10		<	11		<	11		<	11	

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB15-6			SB16-05			SB16-2			SB16-6			SB16-6 Dup			SB17-0.5			SB17-2		
Date sampled	10/19/1998			10/15/1998			10/15/1998			10/15/1998			10/15/1998			10/15/1998			10/15/1998		
Sample Number																					
Units		mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg	
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS																					
Aluminum	8750			3340			4600			4820			8860			3230			5110		
Antimony	<	9.4		<	10.7	J	<	10.7	J	<	12.8	J	<	13.3	J	<	11.0	J	<	10.9	J
Arsenic	7.0		J	3.9			3.8			4.7			5.5			1.5			2.7		
Barium	112			32.5			55.5			54.3			95.7			29.7			37.4		
Beryllium	0.80		J	<	0.20		<	0.20		0.80		J	0.90		J	<	0.20		<	0.20	
Cadmium	2.0			<	0.90		<	0.90		<	1.10		<	1.10		1.0			<	0.90	
Calcium	31700			14000		J	14800		J	41200			85900		J	6220		J	<	18900	J
Chromium	17.9			7.9		J	9.6			13.1		J	11.3			6.3		J	9.5		
Cobalt	10.8			4.8		J	4.3		J	3.8		J	<	4.0		<	3.3		4.3		J
Copper	2220			16.4			49.0			18.3			18.9			63.9			11.9		
Iron	13500			8530			7460			10800			16600			3760			6680		
Lead	231		J	17.6			32.2			28.2			26.6			19.9			10.9		
Magnesium	22600			4860		J	3530		J	5460		J	7860		J	1440		J	4450		J
Manganese	1410			298			294			228			588			73.3			192		
Mercury	0.10		J	<	0.05		<	0.05		<	0.06		<	0.06		<	0.05		<	0.05	
Nickel	298			10.8			8.8			11.8			12.1			<	8.1		8.0		
Potassium	566		J	289		J	318		J	283		J	450		J	<	125		283		J
Selenium	<	0.10	J	0.60		J	0.70		J	1.4		J	1.3		J	0.80		J	0.80		J
Silver	<	1.2		<	0.80		<	0.80		<	1.0		<	1.1		<	0.90		<	0.90	
Sodium	184		J	29.8		J	78.0			219			378			27.4		J	65.4		
Thallium	<	0.09		<	0.40		0.50			0.50			<	0.50		<	0.40		<	0.40	
Vanadium	17.1			9.9			11.9			<	14.4		15.1			6.9			10.4		
Zinc	1120			66.5			109			78.0			78.6			54.0			26.6		
Cyanide	4.7			0.10		J	0.08		J	1.0			0.50			0.06		J	0.60		
VOLATILE ORGANICS																					
Sample Number																					
Units		µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	10		<	18		<	24		<	13		<	25		<	20		<	10	
Acetone	<	10		2		J	<	10	J	<	12	J	<	14		3		J	<	10	J
Carbon Disulfide	<	10		<	11		<	10		<	12		2		J	<	11		<	10	
1,1-Dichloroethane	<	10		<	11		<	10		1		J	2		J	<	11		<	10	
Benzene	<	10		<	11		<	10		3		J	4		J	<	11		<	10	
Ethylbenzene	<	10		<	11		<	10		12			14			<	11		<	10	
Xylene (total)	<	10		<	11		<	10		7		J	9		J	<	11		<	10	

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB18-0.5			SB18-2			SB18-6			SB19-0.5			SB19-2			SB19-6			SB20-0.5		
Date sampled	10/19/1998			10/19/1998			10/19/1998			10/15/1998			10/15/1998			10/15/1998			10/15/1998		
Sample Number																					
Units		mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg	
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS																					
Aluminum	**4320**			**6200**			**5540**			**4120**			**4090**			**5210**			**3950**		
Antimony	<	9.5		<	9.2		<	10.6		<	11.2	J	<	11.4	J	<	13.8	J	<	11.1	J
Arsenic	**1.5**		J	**4.8**		J	**3.4**		J	**3.4**			**6.1**			**4.6**			**5.8**		
Barium	**81.1**			**89.8**			**130**			**53.5**			**444**			**168**			**172**		
Beryllium	**0.40**		J	**0.20**		J	**0.30**		J	<	0.20		<	0.20		<	0.20		<	0.20	
Cadmium	**1.0**			**1.2**			<	1.2		<	1.0		<	1.0		<	1.2		<	1.0	
Calcium	**4230**			**13000**			**14300**			**5070**		J	**21700**		J	**70500**		J	**69200**		J
Chromium	**10.5**			**19.8**			**11.1**			**6.9**		J	**13.1**			**14.3**			**25.1**		
Cobalt	**4.5**		J	**5.9**		J	**5.7**		J	**5.0**		J	**4.9**		J	**5.4**		J	**4.9**		J
Copper	**41.7**			**25.6**			**36.0**			**50.6**			**113**			**48.8**			**242**		
Iron	**8960**			**15000**			**7950**			**6700**			**9130**			**11200**			**8700**		
Lead	**67.4**			**83.4**			**88.9**			**49.8**			**172**			**131**			**161**		
Magnesium	**1810**			**4440**			**3470**			**2050**		J	**5220**		J	**12600**		J	**9940**		J
Manganese	**474**			**513**			**312**			**373**			**286**			**250**			**592**		
Mercury	**0.30**			**0.10**		J	**0.09**		J	**0.06**			**0.20**			**0.10**			**27.9**		
Nickel	<	6.4		**15.0**		J	**9.4**		J	**13.5**			**14.7**			**11.3**			<	16.5	
Potassium	**539**		J	**210**		J	**328**		J	**210**		J	**370**		J	**586**		J	**404**		J
Selenium	<	0.10		<	0.10		<	0.20		**1.0**		J	**1.6**		J	<	0.60		**0.60**		J
Silver	<	1.2		<	1.2		<	1.3		<	0.90		**1.0**			<	1.1		**1.9**		
Sodium	**75.7**		J	**78.2**		J	**87.1**		J	**36.2**		J	**86.3**			**344**			**105**		
Thallium	<	0.09		<	0.09		<	0.10		<	0.40		<	0.40		<	0.50		<	0.40	
Vanadium	**11.2**		J	**18.0**			**16.1**			<	10.1		**12.7**			**12.7**			**12.8**		
Zinc	**103**			**160**			**182**			**81.6**			**434**			**307**			**324**		
Cyanide	**0.50**		J	**1.5**		J	**0.40**		J	**0.10**		J	**0.90**			**0.60**			**3.3**		
VOLATILE ORGANICS																					
Sample Number																					
Units		µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg	
Methylene Chloride	<	11		<	11		<	11		<	19		**75**			**57**			<	13	
Acetone	<	11		<	11		<	11		**2**		J	**4**		J	**7**		J	<	11	J
Carbon Disulfide	<	11		<	11		<	11		<	11		<	11		<	15		<	11	
1,1-Dichloroethane	<	11		<	11		<	11		<	11		<	11		<	15		<	11	
Benzene	<	11		<	11		<	11		<	11		<	11		<	15		<	11	
Ethylbenzene	<	11		<	11		<	11		<	11		<	11		<	15		<	11	
Xylene (total)	<	11		<	11		<	11		<	11		<	11		<	15		<	11	

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB20-2			SB20-6		
Date sampled	10/15/1998			10/16/1998		
Sample Number						
Units		mg/kg			mg/kg	
	Result	RL	Qual.	Result	RL	Qual.
TOTAL METALS						
Aluminum	**4870**			**3420**		
Antimony	<	11.1	J	<	10.9	J
Arsenic	**10.8**			**8.1**		
Barium	**201**			**72.2**		
Beryllium	<	0.70		**0.7**		J
Cadmium	**1.1**			<	0.9	
Calcium	**24900**		J	**28700**		J
Chromium	**14.0**			**11.1**		
Cobalt	**5.4**		J	**6**		J
Copper	**664**			**54.4**		
Iron	**20600**			**11500**		
Lead	**238**			**105**		
Magnesium	**7730**		J	**8990**		J
Manganese	**454**			**200**		
Mercury	**4.5**			**1.2**		
Nickel	**22.3**			**11**		
Potassium	**483**		J	**339**		J
Selenium	**1.3**		J	**0.7**		J
Silver	**3.1**			**1.1**		
Sodium	**184**			**92.5**		
Thallium	**0.50**			<	0.4	
Vanadium	**15.8**			**12.9**		
Zinc	**537**			**121**		
Cyanide	**4.3**			**1.2**		
VOLATILE ORGANICS						
Sample Number						
Units		µg/kg			µg/kg	
Methylene Chloride	<	17		<	11	
Acetone	**2**		J	**2**		J
Carbon Disulfide	<	11		<	11	
1,1-Dichloroethane	<	11		<	11	
Benzene	<	11		<	11	
Ethylbenzene	<	11		<	11	
Xylene (total)	<	11		<	11	

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB03-0.5			SB03-2			SB04-0.5			SB04-2			SB04-6			SB05-0.5			SB05-2		
Date sampled	10/12/1998			10/12/1998			10/19/1998			10/19/1998			10/19/1998			10/19/1998			10/19/1998		
Sample Number	ECMK2			ECMK3			ECML6			ECML7			ECML8			ECML4			ECML5		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS																					
Units		µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
4-Methylphenol	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
Naphthalene	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
2-Methylnaphthalene	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
Acenaphthylene	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
Acenaphthene	<	360		<	360		<	350		<	350		<	420		<	350	J	<	340	
Dibenzofuran	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
Diethylphthalate	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
Fluorene	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
Phenanthrene	<	360		<	360		<	350		<	350		<	420		**46**		J	**140**		J
Anthracene	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
Carbazole	<	360	J	<	360	J	<	350		<	350		<	420		<	350		<	340	
Di-n-butylphthalate	<	360		<	360		<	350		<	350		<	420	J	<	350		<	340	
Fluoranthene	<	360		<	360		<	350		<	350		<	420		**130**		J	**210**		J
Pyrene	<	360		<	360		<	350		<	350		<	420		**140**		J	**210**		J
Butylbenzylphthalate	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
Benzo(a)anthracene	<	360		<	360		<	350		<	350		<	420		**75**	75	J	**120**		J
Chrysene	<	360		<	360		<	350		<	350		<	420		**84**	84	J	**110**		J
bis(2-Ethylhexyl)phthalate	**140**		J	<	360	J	<	350		<	350		<	420		<	350		**420**		
Di-n-octylphthalate	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
Benzo(b)fluoranthene	<	360		<	360		<	350		<	350		<	420		**110**		J	**140**		J
Benzo(k)fluoranthene	<	360		<	360		<	350		<	350		<	420		<	350		**38**		J
Benzo(a)pyrene	<	360		<	360		<	350		<	350		<	420		**89**	89	J	**110**		J
Indeno(1,2,3-cd)pyrene	<	360		<	360		<	350		<	350		<	420		**79**		J	**62**		J
Dibenz(a,h)anthracene	<	360		<	360		<	350		<	350		<	420		<	350		<	340	
Benzo(g,h,i)perylene	<	360		<	360		**61**		J	**50**		J	**74**		J	**110**		J	**78**		J

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB06-0.5			SB06-0.5 Dup			SB06-2			SB07-0.5			SB07-2			SB08-0.5			SB08-2		
Date sampled	10/19/1998			10/19/1998			10/19/1998			10/21/1998			10/21/1998			10/20/1998			10/20/1998		
Sample Number	ECML9			ECMM6			ECMM7			ECMP9			ECMQ6			ECMM8			ECMM9		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS																					
Units		µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
4-Methylphenol	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Naphthalene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
2-Methylnaphthalene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Acenaphthylene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Acenaphthene	<	360		<	370		<	350		<	340	J	<	340		<	350		<	340	
Dibenzofuran	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Diethylphthalate	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Fluorene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Phenanthrene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Anthracene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Carbazole	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Di-n-butylphthalate	<	360	J	<	370	J	<	350	J	<	340	J	<	340	J	<	350		<	340	
Fluoranthene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Pyrene	<	360		<	370		<	350		<	340	J	<	340		<	350		<	340	
Butylbenzylphthalate	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Benzo(a)anthracene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Chrysene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
bis(2-Ethylhexyl)phthalate	<	360		<	370		**460**			**690**		J	**700**		J	<	360		<	1500	
Di-n-octylphthalate	<	360		<	370		<	350		<	340	J	<	340	J	<	350		<	340	
Benzo(b)fluoranthene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Benzo(k)fluoranthene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Benzo(a)pyrene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Indeno(1,2,3-cd)pyrene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Dibenz(a,h)anthracene	<	360		<	370		<	350		<	340		<	340		<	350		<	340	
Benzo(g,h,i)perylene	<	360		**250**		J	<	350		<	340		<	340		<	350		<	340	

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB09-0.5			SB09-0.5 Dup			SB09			SB10-0.5			SB10-0.5 Dup			SB10-2			SB10-6		
Date sampled	10/21/1998			10/21/1998			10/21/1998			10/20/1998			10/20/1998			10/20/1998			10/20/1998		
Sample Number	ECMP6			ECMP7			ECMP8			ECMN0			ECMN1			ECMN2			ECMN3		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS																					
Units		µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
4-Methylphenol	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Naphthalene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
2-Methylnaphthalene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Acenaphthylene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Acenaphthene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Dibenzofuran	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Diethylphthalate	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Fluorene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Phenanthrene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Anthracene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Carbazole	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Di-n-butylphthalate	<	350	J	<	350	J	<	350	J	<	360		<	360		<	340		<	350	
Fluoranthene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Pyrene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Butylbenzylphthalate	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Benzo(a)anthracene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Chrysene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
bis(2-Ethylhexyl)phthalate	**440**		J	**470**		J	**2600**		J	**140**		J	**150**		J	**71**		J	<	350	
Di-n-octylphthalate	<	350	J	<	350	J	<	350	J	**56**		J	**70**		J	<	340		<	350	
Benzo(b)fluoranthene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Benzo(k)fluoranthene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Benzo(a)pyrene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Indeno(1,2,3-cd)pyrene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Dibenz(a,h)anthracene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	
Benzo(g,h,i)perylene	<	350		<	350		<	350		<	360		<	360		<	340		<	350	

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB11-0.5			SB11-2			SB11-6			SB12-0.5			SB12-2			SB12-6			SB13-0.5		
Date sampled	10/21/1998			10/21/1998			10/21/1998			10/20/1998			10/20/1998			10/20/1998			10/20/1998		
Sample Number	ECMP3			ECMP4			ECMP5			ECMP0			ECMP1			ECMP2			ECMN7		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS																					
Units		µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	360		<	340		<	340		<	350		<	340		<	690		<	370	
4-Methylphenol	<	360		<	340		<	340		<	350		<	340		<	690		<	370	
Naphthalene	<	360		<	340		<	340		<	350		<	340		<	690		<	370	
2-Methylnaphthalene	<	360		<	340		<	340		<	350		<	340		<	690		<	370	
Acenaphthylene	<	360		<	340		<	340		<	350		<	340		<	690		<	370	
Acenaphthene	<	360		**160**		J	<	340		<	350		<	340		<	690		<	370	
Dibenzofuran	<	360		**78**		J	<	340		<	350		<	340		<	690		<	370	
Diethylphthalate	<	360		<	340		<	340		<	350		<	340		<	690		<	370	
Fluorene	<	360		**160**		J	<	340		<	350		<	340		<	690		<	370	
Phenanthrene	<	200	J	**3300**			<	340		<	350		<	340		<	690		<	370	
Anthracene	<	360		**460**			<	340		<	350		<	340		<	690		<	370	
Carbazole	<	360		**210**		J	<	340		<	350		<	340		<	690		<	370	
Di-n-butylphthalate	<	360	J	<	340		<	340	J	<	350		<	340		<	690		<	370	
Fluoranthene	**400**			**4600**			**51**		J	<	350		<	340		<	690		**100**		J
Pyrene	**470**			**3800**			<	340		<	350		<	340		<	690		**110**		J
Butylbenzylphthalate	<	360		<	340		<	340		<	350		<	340		<	690		<	370	
Benzo(a)anthracene	**280**		J	**1500**			**42**		J	<	350		<	340		<	690		**64**		J
Chrysene	**320**		J	**1400**			**51**		J	<	350		<	340		<	690		**72**		J
bis(2-Ethylhexyl)phthalate	**42**		J	**74**		J	**39**		J	**440**			**290**		J	**3400**			**160**		J
Di-n-octylphthalate	<	360	J	<	340	J	<	340	J	<	350		<	340		<	690		<	370	
Benzo(b)fluoranthene	**560**			**1900**			**75**		J	<	350		<	340		<	690		**93**		J
Benzo(k)fluoranthene	**150**		J	**560**			<	340		<	350		<	340		<	690		**370**		
Benzo(a)pyrene	**430**			**1500**			**57**		J	<	350		<	340		<	690		**66**		J
Indeno(1,2,3-cd)pyrene	**540**			**490**			**48**		J	<	350		<	340		<	690		**57**		J
Dibenz(a,h)anthracene	**140**		J	**130**		J	<	340		<	350		<	340		<	690		**370**		
Benzo(g,h,i)perylene	**710**			**470**			**63**		J	<	350		<	340		<	690		**81**		J

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	SB13-2			SB13-6			SB14-0.5			SB14-2			SB14-6			SB15-0.5			SB15-2		
Date sampled	10/20/1998			10/20/1998			10/20/1998			10/20/1998			10/20/1998			10/19/1998			10/19/1998		
Sample Number	ECMN8			ECMN9																	
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS																					
Units		µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	350		<	360		<	400		<	340		<	370		<	370		<	350	
4-Methylphenol	<	350		<	360		<	400		<	340		<	370		<	370		<	350	
Naphthalene	<	350		<	360		<	400		<	340		**120**		J	<	370		<	350	
2-Methylnaphthalene	<	350		<	360		<	400		<	340		<	370		<	370		<	350	
Acenaphthylene	<	350		<	360		<	400		<	340		<	370		<	370		<	350	
Acenaphthene	<	350		<	360		<	400		<	340		<	370		**73**		J	<	350	
Dibenzofuran	<	350		<	360		<	400		<	340		<	370		<	370		<	350	
Diethylphthalate	<	350		<	360		<	400		<	340		<	370		<	370		<	350	
Fluorene	<	350		<	360		<	400		<	340		<	370		<	370		<	350	
Phenanthrene	<	350		<	360		<	400		<	340		<	370		**360**		J	**280**		J
Anthracene	<	350		<	360		<	400		<	340		<	370		**63**		J	**53**		J
Carbazole	<	350		<	360		<	400		<	340		<	370		**37**		J	<	350	
Di-n-butylphthalate	<	350		<	360		<	400		<	340		<	370		<	370	J	<	350	J
Fluoranthene	<	350		**43**		J	**59**		J	<	340		**44**		J	**730**			**450**		
Pyrene	<	350		**44**		J	**64**		J	**40**		J		53	J	**900**			**540**		
Butylbenzylphthalate	<	350		<	360		**54**		J	<	340		<	370		<	370		<	350	
Benzo(a)anthracene	<	350		<	360		**41**		J	<	340		<	370		**620**			**260**		J
Chrysene	<	350		<	360		**59**		J	<	340		<	370		**760**			**270**		J
bis(2-Ethylhexyl)phthalate	**150**		J	**960**			**190**		J	**2900**			**30000**			<	370		<	350	
Di-n-octylphthalate	<	350		<	360		<	400		<	340		<	370		<	370		<	350	
Benzo(b)fluoranthene	<	350		**38**		J	**82**		J	<	340		**52**		J	**1600**			**390**		
Benzo(k)fluoranthene	<	350		<	360		**400**			<	340		<	370		**400**			**140**		J
Benzo(a)pyrene	<	350		<	360		**53**		J	<	340		<	370		**1000**			**290**		J
Indeno(1,2,3-cd)pyrene	<	350		<	360		**48**		J	<	340		<	370		**1200**			**230**		J
Dibenz(a,h)anthracene	<	350		<	360		**400**			<	340		<	370		**320**		J	**57**		J
Benzo(g,h,i)perylene	<	350		<	360		**86**		J	<	340		**38**		J	**1500**			**310**		J

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Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location / Date sampled / Sample Number	SB15-6 10/19/1998			SB16-05 10/15/1998			SB16-2 10/15/1998			SB16-6 10/15/1998			SB16-6 Dup 10/15/1998			SB17-0.5 10/15/1998			SB17-2 10/15/1998		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS																					
Units		µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	330		<	350		<	350		98		J	63		J	<	360		<	350	
4-Methylphenol	<	330		<	350		<	350		<	410		<	390		<	360		<	350	
Naphthalene	38		J	<	350		<	350		120		J	130		J	<	360		<	350	
2-Methylnaphthalene	<	330		<	350		<	350		<	410		<	390		<	360		<	350	
Acenaphthylene	67		J	<	350		<	350		<	410		<	390		<	360		<	350	
Acenaphthene	<	330		<	350		<	350		<	410		<	390		<	360	J	<	350	
Dibenzofuran	<	330		<	350		<	350		<	410		<	390		<	360		<	350	
Diethylphthalate	<	330		<	350		<	350		64		J	46		J	<	360		<	350	
Fluorene	<	330		<	350		<	350		<	410		<	390		<	360		<	350	
Phenanthrene	170		J	37		J	100		J	270		J	250		J	380			83		J
Anthracene	41		J	<	350		<	350		53		J	57		J	59		J	<	350	
Carbazole	<	330		<	350		<	350		<	410		<	390		64		J	<	350	
Di-n-butylphthalate	<	330		<	350		<	350		<	410		390			<	360		<	350	
Fluoranthene	360			91		J	210		J	710			<	660		760			150		J
Pyrene	430			76		J	190		J	670			610			510		J	120		J
Butylbenzylphthalate	<	330		<	350	J	<	350	J	60		J	<	390	J	<	360	J	<	350	J
Benzo(a)anthracene	250		J	39		J	100		J	400		J	350		J	260		J	66		J
Chrysene	260		J	47		J	110		J	450			400			330		J	76		J
bis(2-Ethylhexyl)phthalate	<	330		410		J	160		J	270		J	120		J	51		J	36		J
Di-n-octylphthalate	<	330		<	350	J	<	350	J	<	410	J	<	390	J	<	360	J	<	350	J
Benzo(b)fluoranthene	490			44		J	120		J	750			430			280		J	55		J
Benzo(k)fluoranthene	140		J	50		J	120		J	900			440			340		J	77		J
Benzo(a)pyrene	430			53		J	120		J	530			450			280		J	62		J
Indeno(1,2,3-cd)pyrene	400			41		J	82		J	380		J	360		J	270		J	58		J
Dibenz(a,h)anthracene	99		J	350			43		J	160		J	150		J	120		J	350		
Benzo(g,h,i)perylene	550			39		J	89		J	280		J	250		J	220		J	47		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 is unusable.)

Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location Date sampled Sample Number	SB18-0.5 10/19/1998			SB18-2 10/19/1998			SB18-6 10/19/1998			SB19-0.5 10/15/1998			SB19-2 10/15/1998			SB19-6 10/15/1998			SB20-0.5 10/15/1998		
	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS																					
Units		µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg			µg/kg	
1,2-Dichlorobenzene	<	370		<	360		<	370		<	360		<	370		<	490		<	360	
4-Methylphenol	<	370		<	360		<	370		<	360		<	370		<	490		<	360	
Naphthalene	<	370		50		J	<	370		<	360		<	370		<	490		<	360	
2-Methylnaphthalene	<	370		48		J	<	370		<	360		<	370		<	490		<	360	
Acenaphthylene	<	370		83		J	<	370		96		J	290		J	<	490		<	360	
Acenaphthene	<	370		37		J	<	370		<	360		<	370		<	490		180		J
Dibenzofuran	<	370		<	360		<	370		<	360		<	370		<	490		<	360	
Diethylphthalate	<	370		<	360		<	370		<	360		<	370		<	490		<	360	
Fluorene	<	370		44		J	<	370		<	360		71		J	<	490		<	360	
Phenanthrene	320		J	590			86		J	160		J	450			190		J	460		
Anthracene	67		J	130		J	<	370		76		J	170		J	<	490		110		J
Carbazole	46		J	49		J	<	370		<	360		49		J	<	490		58		J
Di-n-butylphthalate	<	370		<	360		<	370		95		J	37		J	<	490		<	360	
Fluoranthene	510			1200			130		J	490			1700			490			1200		
Pyrene	470			1500			170		J	530			1900			420		J	1200		
Butylbenzylphthalate	<	370		<	360		<	370		<	360	J	<	370	J	<	490	J	<	360	J
Benzo(a)anthracene	<	270		770			77		J	310		J	1100			330		J	780		
Chrysene	<	270		780			100		J	300		J	970			380		J	880		
bis(2-Ethylhexyl)phthalate	<	370		<	360		<	370		73		J	160		J	170		J	90		J
Di-n-octylphthalate	<	370		<	360		<	370		<	360	J	<	370	J	130		J	120		J
Benzo(b)fluoranthene	410			1000			100		J	380			1700			690			1200		
Benzo(k)fluoranthene	89		J	340		J	370			360			2100			830			1200		
Benzo(a)pyrene	280		J	900			89		J	430			1400			480		J	1300		
Indeno(1,2,3-cd)pyrene	200		J	720			54		J	370			1100			410		J	1200		
Dibenz(a,h)anthracene	58		J	200		J	370			130		J	360		J	140		J	450		
Benzo(g,h,i)perylene	240		J	820			93		J	340		J	940			400		J	1000		

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

Construction Debris Area Soil Analytical Results - October 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample location **Date sampled** **Sample Number**	SB20-2 10/15/1998			SB20-6 10/16/1998		
	Result	RL	Qual.	Result	RL	Qual.
SEMIVOLATILE ORGANICS						
Units		µg/kg			µg/kg	
1,2-Dichlorobenzene	<	360		<	350	
4-Methylphenol	**50**		J	<	350	
Naphthalene	**290**		J	**2200**		
2-Methylnaphthalene	**160**		J	**1000**		
Acenaphthylene	**140**		J	**2300**		
Acenaphthene	**220**		J	**890**		
Dibenzofuran	**170**		J	**1500**		
Diethylphthalate	<	360		<	350	
Fluorene	**250**		J	**2500**		
Phenanthrene	**1900**			**18000**		
Anthracene	**450**			**4900**		J
Carbazole	**280**		J	**1500**		
Di-n-butylphthalate	<	360		<	350	
Fluoranthene	**2100**			**29000**		
Pyrene	**2500**			**21000**		
Butylbenzylphthalate	<	360	J	<	350	J
Benzo(a)anthracene	**1700**			**9700**		
Chrysene	**1400**			**9700**		
bis(2-Ethylhexyl)phthalate	**62**		J	**81**		J
Di-n-octylphthalate	<	360		<	350	J
Benzo(b)fluoranthene	**2800**			**9700**		
Benzo(k)fluoranthene	**1200**			**10000**		
Benzo(a)pyrene	**1700**			**11000**		
Indeno(1,2,3-cd)pyrene	**1200**			**6400**		
Dibenz(a,h)anthracene	**450**			**2000**		
Benzo(g,h,i)perylene	**1100**			**7100**		

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Soil Gas Analytical Results - November 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-11		TT-12		TT-13		TT-14			TT-14 Duplicate		TT-15	
Units	µg/m³		ug/m³		ug/m³		ug/m³			ug/m³		ug/m³	
	Result	RL	Result	RL	Result	RL	Result	RL	Qual	Result	RL	Result	RL
Analyte													
Vinyl Chloride	<	0.26	<	0.24	<	33	**77**		J	**100**		<	0.47
Bromomethane	<	0.52	<	0.48	<	66	**1.0**			<	64	<	0.94
Chloroethane	<	0.26	<	0.24	**200**		**36**			<	32	<	0.47
1,1-Dichloroethene	<	0.26	<	0.24	<	33	**6.8**			<	32	<	0.47
Carbon Disulfide	**1.2**		<	0.24	<	33	**86**		J	**130**		<	2.8
Acetone	<	2.6	<	2.4	<	330	<	2.30		<	320	<	4.70
Methylene Chloride	<	0.26	<	0.24	<	33	**6.8**		J	<	32	<	0.47
trans-1,2-Dichloroethene	<	0.26	<	0.24	<	33	**12**			<	32	<	0.47
1,1-Dichloroethane	<	0.26	<	0.24	**470**		**500**		J	**2400**		<	0.47
2-Butanone	<	2.6	<	2.4	<	330	<	2.30		<	320	<	4.70
Chloroform	<	0.26	<	0.24	<	33	<	0.23		<	32	<	0.47
1,1,1-Trichloroethane	<	0.26	<	0.24	<	33	**250**		J	**300**		<	0.47
Carbon Tetrachloride	<	0.26	<	0.24	<	33	**40**			<	32	<	0.47
Benzene	**1.8**		**1.4**		**470**		**180**		J	**200**		<	2.07
1,2-Dichloroethane	<	0.26	<	0.24	<	33	<	0.23		<	32	<	0.47
Trichloroethene	<	0.26	<	0.24	<	33	**270**		J	**270**		<	0.47
1,2-Dichloropropane	<	0.26	<	0.24	<	33	**25**			<	32	<	0.47
trans-1,3-Dichloropropene	<	0.26	<	0.24	<	33	<	0.23		<	32	<	0.47
Toluene	<	0.26	<	0.24	**230**		**95**		J	**91**		**0.89**	
cis-1,3-Dichloropropene	<	0.26	<	0.24	<	33	<	0.23		<	32	<	0.47
Tetrachloroethene	<	0.26	<	0.24	<	33	**230**		J	**260**		<	0.47
2-Hexanone	<	0.26	<	0.24	<	33	<	0.23		<	32	<	0.47
Chlorobenzene	<	0.26	<	0.24	<	33	**11**			<	32	<	0.47
Ethyl Benzene	<	0.26	**0.54**		**3100**		**420**		J	**340**		**1.1**	
m,p-Xylene	<	0.26	**1.3**		**7100**		**730**		J	**400**		**1.4**	
o-Xylene	<	0.26	<	0.24	**220**		**390**		J	**320**		**0.52**	
Styrene	<	0.26	<	0.24	<	33	**13**			<	32	<	0.47
cis-1,2-Dichloroethene	<	0.26	<	0.24	<	33	**290**		J	**250**		<	0.47

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Soil Gas Analytical Results - November 1998
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Sample Location	TT-16			TT-17		TT-18		TT-19			TT-20		TT-21	
Units	ug/m^3			ug/m^3		ug/m^3		ug/m^3			ug/m^3		ug/m^3	
	Result	RL	Qual	Result	RL	Result	RL	Result	RL	Qual	Result	RL	Result	RL
Analyte														
Vinyl Chloride	**61**			**20**		**180**		**18000**		J	<	0.15	NR	
Bromomethane	<	1.8		<	16	<	60	<	160		<	0.3	NR	
Chloroethane	<	3.6		<	8.1	<	30	<	79		<	0.15	NR	
1,1-Dichloroethene	<	1.8		<	8.1	**69**		**130**			<	0.15	NR	
Carbon Disulfide	**4.7**			**19**		**920**		**2800**			<	0.15	NR	
Acetone	<	18		<	81	<	300	<	790		**1.5**		NR	
Methylene Chloride	<	1.8		<	8.1	<	30	**790**			**0.57**		NR	
trans-1,2-Dichloroethene	**4.6**			<	8.1	<	30	<	79		<	0.15	NR	
1,1-Dichloroethane	**89**			**57**		<	30	<	79		<	0.15	NR	
2-Butanone	<	18		<	81	<	300	<	790		<	1.5	NR	
Chloroform	<	1.8		<	8.1	<	30	<	79		<	0.15	NR	
1,1,1-Trichloroethane	<	1.8		**40**	8.1	<	30	<	79		<	0.15	NR	
Carbon Tetrachloride	<	1.8		<	8.1	<	30	<	79		<	0.15	NR	
Benzene	**190**			**37**	8.1	**200**	30	<	79		**0.36**	0.15	NR	
1,2-Dichloroethane	<	1.8		<	8.1	<	30	<	79		<	0.15	NR	
Trichloroethene	**14**			**9.5**	8.1	**340**	30	<	79		<	0.15	NR	
1,2-Dichloropropane	**18**			**14**		<	30	<	79		<	0.15	NR	
trans-1,3-Dichloropropene	<	1.8		<	8.1	<	30	<	79		<	0.15	NR	
Toluene	**5.6**			**35**		**240**		<	79		**1.3**		NR	
cis-1,3-Dichloropropene	<	1.8		<	8.1	<	30	<	79		<	0.15	NR	
Tetrachloroethene	<	1.8		NR		**460**		<	79		<	0.15	NR	
2-Hexanone	<	1.8		NR		<	30	<	79		<	0.15	NR	
Chlorobenzene	<	1.8		NR		**51**		<	79		<	0.15	NR	
Ethyl Benzene	<	1.8		NR		**3200**		**150**			**0.16**		NR	
m,p-Xylene	**2.4**		B	NR		**1700**		**93**			**0.54**		NR	
o-Xylene	<	1.8		NR		**600**		<	79		**0.18**		NR	
Styrene	<	1.8		NR		<	30	<	79		**0.54**		NR	
cis-1,2-Dichloroethene	**17**			<	8.1	**65**		**560**			<	0.15	NR	

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Soil Gas Analytical Results - November 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-22			TT-23		TT-24		TT-25		TT-26			TT-26 (Duplicate)	
Units	ug/m³			ug/m³		ug/m³		ug/m³		ug/m³			ug/m³	
	Result	RL	Qual	Result	RL	Result	RL	Result	RL	Result	RL	Qual	Result	RL
Analyte														
Vinyl Chloride	**0.15**			<	0.12	<	0.12	<	0.12	**22000**		J	**23000**	
Bromomethane	<	0.26		<	0.24	<	0.24	<	0.23	<	150		<	850
Chloroethane	**0.56**			<	0.12	<	0.12	<	0.12	<	75		<	420
1,1-Dichloroethene	<	0.13		<	0.12	<	0.12	<	0.12	**310**			<	420
Carbon Disulfide	**0.30**			<	0.12	<	0.12	**0.12**		**3000**			**6200**	
Acetone	**3.7**			**1.5**		**1.2**		**2.5**		<	750		<	4200
Methylene Chloride	<	0.13		<	0.12	<	0.12	<	0.12	<	75		<	420
trans-1,2-Dichloroethene	**0.39**			<	0.12	<	0.12	<	0.12	<	75		<	420
1,1-Dichloroethane	**46**		J	<	0.12	<	0.12	<	0.12	**440**			<	420
2-Butanone	<	1.3		<	1.17	<	1.16	<	1.15	<	750		<	4200
Chloroform	**1.5**	0.13		**0.30**	0.12	**0.61**	0.12	<	0.12	**280**			<	420
1,1,1-Trichloroethane	**4.9**	0.13		**0.28**	0.12	**0.22**	0.12	**0.25**	0.12	<	75		<	420
Carbon Tetrachloride	**0.13**	0.13		**0.12**	0.12	<	0.12	<	0.12	<	75		<	420
Benzene	**0.93**	0.13		<	0.12	<	0.12	<	0.12	**220**	75		<	420
1,2-Dichloroethane	<	0.13		<	0.12	<	0.12	<	0.12	<	75		<	420
Trichloroethene	**3.5**	0.13		<	0.12	<	0.12	<	0.12	**15000**	75	J	**21000**	420
1,2-Dichloropropane	<	0.13		<	0.12	<	0.12	<	0.12	<	75		<	420
trans-1,3-Dichloropropene	**0.18**	0.13		<	0.12	<	0.12	<	0.12	<	75		<	420
Toluene	**0.28**			<	0.12	<	0.12	<	0.12	**11000**			**13000**	
cis-1,3-Dichloropropene	**0.14**			<	0.12	<	0.12	<	0.12	<	75		<	420
Tetrachloroethene	**300**		J	**12**		**0.20**		**1.1**		**44000**		J	**80000**	
2-Hexanone	<	0.13		<	0.12	<	0.12	<	0.12	<	75		<	420
Chlorobenzene	<	0.13		<	0.12	<	0.12	<	0.12	<	75		<	420
Ethyl Benzene	<	0.13		<	0.12	<	0.12	<	0.12	**10000**			**15000**	
m,p-Xylene	**0.30**			<	0.12	<	0.12	<	0.12	**5700**			**8500**	
o-Xylene	<	0.13		<	0.12	<	0.12	<	0.12	**1400**			**2000**	
Styrene	**0.67**			<	0.12	<	0.12	<	0.12	**360.0**			<	420
cis-1,2-Dichloroethene	<	0.13		<	0.12	<	0.12	<	0.12	**1900**			**1700**	

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Soil Gas Analytical Results - November 1998
Himco Dump Superfund Site
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Sample Location	TT-27		TT-28		TT-29		TT-30		TT-31		TT-32		
Units	ug/m³		ug/m³		ug/m³		ug/m³		ug/m³		ug/m³		
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Qual
Analyte													
Vinyl Chloride	<	31	<	2.4	<	0.30	<	0.31	<	0.31	**18**		
Bromomethane	**66**		<	4.7	<	0.60	<	0.62	<	0.62	<	1.9	
Chloroethane	<	31	<	2.4	<	0.30	<	0.31	<	0.31	**2.7**		
1,1-Dichloroethene	<	31	<	2.4	<	0.30	**0.45**		**0.31**		**1.8**		
Carbon Disulfide	<	31	**7.1**	2.4	<	1.5	<	0.95	<	1.1	**9.9**		
Acetone	<	310	<	23.6	<	3.0	<	3.1	<	3.1	<	9.4	
Methylene Chloride	<	31	<	2.4	<	0.30	<	0.31	<	0.3	<	0.94	
trans-1,2-Dichloroethene	<	31	<	2.4	<	0.30	**0.52**		**0.45**		**4.0**		
1,1-Dichloroethane	<	31	<	2.4	<	0.30	<	0.31	<	0.3	**360**		J
2-Butanone	<	310	<	23.6	<	2.98	<	3.1	<	3.1	<	9.4	
Chloroform	<	31	<	2.4	<	0.30	<	0.31	<	0.31	<	0.94	
1,1,1-Trichloroethane	<	31	<	2.4	**7.3**	0.30	<	0.31	<	0.31	<	0.94	
Carbon Tetrachloride	<	31	<	2.4	<	0.30	<	0.31	<	0.31	<	0.94	
Benzene	<	31	**100**		**1.5**		**1.9**		**2.0**		**41**		
1,2-Dichloroethane	<	31	<	2.4	<	0.30	<	0.31	<	0.31	**1.7**		R
Trichloroethene	**90**	31	**14**		<	0.30	<	0.31	<	0.31	**16**		
1,2-Dichloropropane	<	31	<	2.4	<	0.30	<	0.31	<	0.31	**9.9**		
trans-1,3-Dichloropropene	<	31	<	2.4	<	0.30	<	0.31	<	0.31	<	0.94	
Toluene	<	31	**6.6**		**0.33**		**0.67**		**0.67**		**4.0**		
cis-1,3-Dichloropropene	<	31	<	2.4	<	0.30	<	0.31	<	0.31	<	0.94	
Tetrachloroethene	**4000**		**61**		**230**		<	0.31	<	0.31	**1.7**		B
2-Hexanone	<	31	<	2.4	<	0.30	<	0.31	<	0.31	<	0.94	
Chlorobenzene	<	31	<	2.4	<	0.30	<	0.31	<	0.31	**11**		
Ethyl Benzene	<	31	**52**		<	0.30	**0.81**		**0.63**		**1.8**	0.94	
m,p-Xylene	<	31	**52**		**0.51**	0.30	**1.5**		**1.3**		**4.5**	0.94	
o-Xylene	<	31	**31**		<	0.30	**0.76**		**0.53**		**4.7**	0.94	
Styrene	<	31	**2.6**		<	0.30	<	0.31	<	0.31	<	0.94	
cis-1,2-Dichloroethene	<	31	**5.7**		<	0.30	**0.44**		**0.33**		**8.9**	0.94	

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Soil Gas Analytical Results - November 1998
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Sample Location	TT-33		TT-34			TT-35		TT-36		TT-37			TT-38	
Units	ug/m³		ug/m³			ug/m³		ug/m³		ug/m³			ug/m³	
	Result	RL	Result	RL	Qual	Result	RL	Result	RL	Result	RL	Qual	Result	RL
Analyte														
Vinyl Chloride	<	3.4	**220**			<	0.22	<	0.22	<	0.22		<	0.23
Bromomethane	<	6.9	<	9.0		<	0.44	<	0.44	<	0.44		<	0.45
Chloroethane	**3.8**		**5.7**			<	0.22	<	0.22	<	0.22		<	0.23
1,1-Dichloroethene	<	3.4	<	4.5		<	0.22	<	0.22	<	0.22		<	0.23
Carbon Disulfide	**7.3**		**29**			**1.2**		<	0.22	**0.61**			**0.63**	
Acetone	<	34.0	<	45		<	2.2	<	2.2	<	2.2		<	2.3
Methylene Chloride	<	3.4	<	4.5		<	0.22	<	0.22	<	0.22		<	0.23
trans-1,2-Dichloroethene	**6.9**		**21**			<	0.22	<	0.22	<	0.22		<	0.23
1,1-Dichloroethane	**9.2**		**47**			<	0.22	<	0.22	<	0.22		<	0.23
2-Butanone	<	34	<	45		<	2.2	<	2.2	<	2.2		<	2.3
Chloroform	<	3.4	<	4.5		<	0.22	<	0.22	<	0.22		<	0.23
1,1,1-Trichloroethane	<	3.4	<	4.5		<	0.22	**0.32**		**0.83**			**0.68**	
Carbon Tetrachloride	<	3.4	<	4.5		<	0.22	<	0.22	<	0.22		<	0.23
Benzene	**210**		**750**			<	0.22	<	0.22	<	0.22		<	0.23
1,2-Dichloroethane	<	3.4	<	4.5		<	0.22	<	0.22	<	0.22		<	0.23
Trichloroethene	**8.7**		**43**			<	0.22	<	0.22	<	0.22		<	0.23
1,2-Dichloropropane	<	3.4	<	4.5		<	0.22	<	0.22	<	0.22		<	0.23
trans-1,3-Dichloropropene	<	3.4	<	4.5		<	0.22	<	0.22	<	0.22		<	0.23
Toluene	**20**		**190**			<	0.45	<	0.23	<	0.41		<	0.35
cis-1,3-Dichloropropene	<	3.4	<	4.5		<	0.22	<	0.22	<	0.22		<	0.23
Tetrachloroethene	<	3.4	**380**			**0.76**		**2.7**		**130**		J	**14**	
2-Hexanone	<	3.4	<	4.5		**1.8**		<	0.22	<	0.22		<	0.23
Chlorobenzene	**18**		<	4.5		<	0.22	<	0.22	<	0.22		<	0.23
Ethyl Benzene	**22**		**1000**		J	<	0.22	<	0.22	<	0.22		<	0.23
m,p-Xylene	**64**		**900**			<	0.22	<	0.22	<	0.22		<	0.23
o-Xylene	**4.6**		**340**			<	0.22	<	0.22	<	0.22		<	0.23
Styrene	<	3.4	<	4.5		<	0.22	<	0.22	<	0.22		<	0.23
cis-1,2-Dichloroethene	**9.2**		**38**			<	0.22	<	0.22	<	0.22		<	0.23

J= Estimated Value
NR= Not measured
R= Rejected Value (The data is unusable.)

Soil Gas Analytical Results - November 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-39			TT-39 (Dup)			TT-40			TT-41		TT-42		TT-43	
Units		ug/m³			ug/m³			ug/m³			ug/m³		ug/m³		ug/m³
	Result	RL	Qual	Result	RL	Qual	Result	RL	Qual	Result	RL	Result	RL	Result	RL
Analyte															
Vinyl Chloride	<	0.22		<	0.22		<	0.23		<	0.2	<	0.22	<	0.22
Bromomethane	<	0.44		<	0.44		<	0.45		<	0.41	**0.61**		<	0.44
Chloroethane	<	0.22		<	0.22		<	0.23		<	0.2	<	0.22	<	0.22
1,1-Dichloroethene	<	0.22		<	0.22		**0.50**			<	0.2	<	0.22	<	0.22
Carbon Disulfide	**0.45**			**0.26**			**0.72**			**1.3**		**0.23**		**0.61**	
Acetone	<	2.2		<	2.2		<	2.3		<	2.0	<	2.2	<	2.2
Methylene Chloride	<	0.22		<	0.22		**1.4**			<	0.2	<	0.22	<	0.22
trans-1,2-Dichloroethene	<	0.22		<	0.22		**2.5**			<	0.2	<	0.22	<	0.22
1,1-Dichloroethane	<	0.22		<	0.22		**4.2**			<	0.2	<	0.22	<	0.22
2-Butanone	<	2.2		<	2.2		<	2.3		<	2.0	<	2.2	<	2.2
Chloroform	<	0.22		<	0.22		**2.9**			<	0.2	**1.6**		<	0.22
1,1,1-Trichloroethane	**0.76**			**0.67**			**9.1**			**0.26**		**0.25**		**0.22**	
Carbon Tetrachloride	<	0.22		<	0.22		<	0.23		<	0.2	<	0.22	<	0.22
Benzene	<	0.22		<	0.22		**1.1**			<	0.2	<	0.22	<	0.22
1,2-Dichloroethane	<	0.22		<	0.22		<	0.23		<	0.2	<	0.22	<	0.22
Trichloroethene	<	0.22		<	0.22		**77**		J	<	0.2	<	0.22	<	0.22
1,2-Dichloropropane	<	0.22		<	0.22		<	0.23		<	0.2	<	0.22	<	0.22
trans-1,3-Dichloropropene	<	0.22		<	0.22		<	0.23		<	0.2	<	0.22	<	0.22
Toluene	**2.4**			**0.71**			**2.5**			**0.36**		**0.87**		**0.70**	
cis-1,3-Dichloropropene	<	0.22		<	0.22		<	0.23		<	0.2	<	0.22	<	0.22
Tetrachloroethene	**110**		J	**89**		J	**1100**		J	<	0.2	**1.0**		**10**	
2-Hexanone	<	0.22		<	0.22		<	0.23		<	0.2	<	0.22	<	0.22
Chlorobenzene	<	0.22		<	0.22		<	0.23		<	0.2	<	0.22	<	0.22
Ethyl Benzene	<	0.22		<	0.22		**0.63**			<	0.2	<	0.22	<	0.22
m,p-Xylene	<	0.22		<	0.22		**0.91**			<	0.2	<	0.22	<	0.22
o-Xylene	<	0.22		<	0.22		**0.38**			<	0.2	<	0.22	<	0.22
Styrene	<	0.22		<	0.22		<	0.23		<	0.2	<	0.22	<	0.22
cis-1,2-Dichloroethene	<	0.22		<	0.22		**7.7**			<	0.2	<	0.22	<	0.22

J= Estimated Value
NR= Not measured
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Soil Gas Analytical Results - November 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-44		TT-45			TT-46		TT-46 (Duplicate)		TT-47			TT-48	
Units	ug/m³		ug/m³			ug/m³		ug/m³		ug/m³			ug/m³	
	Result	RL	Result	RL	Qual	Result	RL	Result	RL	Result	RL	Qual	Result	RL
Analyte														
Vinyl Chloride	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
Bromomethane	<	0.45	<	0.43		<	0.45	<	0.45	**0.63**			<	0.43
Chloroethane	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
1,1-Dichloroethene	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
Carbon Disulfide	**0.28**		**0.57**			**1.4**		**0.63**		**1.2**			**1.1**	
Acetone	<	2.3	<	2.2		**2.3**		<	2.2	<	2.3		<	2.2
Methylene Chloride	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
trans-1,2-Dichloroethene	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
1,1-Dichloroethane	<	0.23	**2.6**			**1.5**		**0.94**		**6.8**			**4.7**	
2-Butanone	<	2.3	<	2.2		<	2.25	<	2.2	<	2.3		<	2.2
Chloroform	<	0.23	**1.0**			**1.7**		**1.0**		**2.4**			**0.22**	
1,1,1-Trichloroethane	<	0.23	**100**		J	**5.9**		**3.4**		**68**		J	**6.0**	
Carbon Tetrachloride	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
Benzene	<	0.23	<	0.22		**0.27**		<	0.22	<	0.23		**0.99**	
1,2-Dichloroethane	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
Trichloroethene	<	0.23	**1.6**			**0.28**		<	0.22	<	0.23		**2.8**	
1,2-Dichloropropane	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
trans-1,3-Dichloropropene	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
Toluene	**0.73**		**0.42**			**3.6**		**0.80**		**1.2**			**6.9**	
cis-1,3-Dichloropropene	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
Tetrachloroethene	**1.4**		**1.2**			**7.2**		**5.4**		**2.0**			**4.7**	
2-Hexanone	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
Chlorobenzene	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
Ethyl Benzene	<	0.23	<	0.22		**0.30**		<	0.22	<	0.23		**0.37**	
m,p-Xylene	<	0.23	<	0.22		**0.54**		<	0.22	<	0.23		<	0.22
o-Xylene	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
Styrene	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22
cis-1,2-Dichloroethene	<	0.23	<	0.22		<	0.22	<	0.22	<	0.23		<	0.22

J= Estimated Value
NR= Not measured
R= Rejected Value (The data is unusable.)

Soil Gas Analytical Results - November 1998
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-49			TT-50		TT-51		TT-52		TT-53	
Units	ug/m³			ug/m³		ug/m³		ug/m³		ug/m³	
	Result	RL	Qual	Result	RL	Result	RL	Result	RL	Result	RL
Analyte											
Vinyl Chloride	<	0.21		<	0.21	<	0.23	<	0.23	<	0.22
Bromomethane	**0.81**			<	0.43	<	0.45	<	0.45	<	0.45
Chloroethane	**4.3**			<	0.21	<	0.23	<	0.45	<	0.22
1,1-Dichloroethene	**0.56**			<	0.21	<	0.23	<	0.23	<	0.22
Carbon Disulfide	**1.2**			**0.25**		**0.44**		**0.50**		<	0.22
Acetone	<	2.1		<	2.1	<	2.3	<	2.3	<	2.2
Methylene Chloride	<	0.21		<	0.21	<	0.23	<	0.23	<	0.22
trans-1,2-Dichloroethene	**0.51**			<	0.21	<	0.23	<	0.23	<	0.22
1,1-Dichloroethane	**280**		J	**0.32**		**9.0**		<	0.23	<	0.22
2-Butanone	<	2.1		<	2.1	<	2.3	<	2.3	<	2.2
Chloroform	<	0.21		<	0.21	<	0.23	<	0.23	<	0.22
1,1,1-Trichloroethane	**7.3**			**0.27**		**0.37**		<	0.23	<	0.22
Carbon Tetrachloride	<	0.21		<	0.21	<	0.23	<	0.23	<	0.22
Benzene	**6.0**			**0.22**		**0.45**		<	0.23	<	0.22
1,2-Dichloroethane	**0.38**			<	0.21	<	0.23	<	0.23	<	0.22
Trichloroethene	**40**			**1.0**		<	0.23	<	0.23	<	0.22
1,2-Dichloropropane	**4.7**			<	0.21	<	0.23	<	0.23	<	0.22
trans-1,3-Dichloropropene	<	0.21		<	0.21	<	0.23	<	0.23	<	0.22
Toluene	**1.2**			**0.40**		**0.45**		<	0.23	<	0.22
cis-1,3-Dichloropropene	<	0.21		<	0.21	<	0.23	<	0.23	<	0.22
Tetrachloroethene	**39**			**2.1**		**1.8**		<	0.23	<	0.22
2-Hexanone	<	0.21		<	0.21	<	0.23	<	0.23	<	0.22
Chlorobenzene	<	0.21		<	0.21	<	0.23	<	0.23	<	0.22
Ethyl Benzene	**6.0**			<	0.21	<	0.23	<	0.23	<	0.22
m,p-Xylene	**9.4**			<	0.21	<	0.23	<	0.23	<	0.22
o-Xylene	**3.6**			<	0.21	<	0.23	<	0.23	<	0.22
Styrene	<	0.21		<	0.21	<	0.23	<	0.23	<	0.22
cis-1,2-Dichloroethene	**2.8**			<	0.21	<	0.23	<	0.23	<	0.22

J= Estimated Value
NR= Not measured
R= Rejected Value (The data is unusable.)

1999

Soil Gas Analytical Results - October 1999
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-54			TT-61/TT-54			TT-55			TT-56			TT-56 Duplicate			TT-57		
Sample Tube Numbers	11009A			11021A&11009B			11014A&B			11003A&B			11005A&B			11108A&B		
Compound - Units	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual
Chloromethane	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
Vinyl Chloride	<	0.48		<	0.47		<	0.44		20000	0.81		16000	0.89		<	0.46	
Bromomethane	<	0.48		<	0.47		<	0.44		11	0.81		<	0.89		<	0.46	
Chloroethane	<	0.48		<	0.47		<	0.44		530	0.81		<	0.89		<	0.46	
Freon 11	<	0.48		3.8	0.47	J	0.85	0.44		370	0.81		<	0.89		1.1	0.46	
1,1-Dichloroethene	<	0.48		<	0.47		<	0.44		1900	0.81		<	0.89		<	0.46	
Carbon Disulfide	1.1	0.48	J	0.71	0.47	J	0.71	0.44		19000	0.81		9800	0.89		<	0.46	
Acetone	<	2.4		3.3	2.4	J	<	2.2		<	4.1		<	4.5		4.6	2.3	
Methylene Chloride	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
trans-1,2-Dichloroethene	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
1,1-Dichloroethane	<	0.48		<	0.47		<	0.44		1500	0.81		<	0.89		<	0.46	
Vinyl Acetate	<	0.48		<	0.5		<	0.44		<	0.81		<	0.89		<	0.46	
2-Butanone	<	2.4		<	2.4		<	0.44		<	4.1		<	4.5		2.7	2.3	
Chloroform	<	0.48		<	0.47		<	0.44		110	0.81		<	0.89		<	0.46	
1,1,1-Trichloroethane	<	0.48		0.57	0.47	J	<	0.44		<	0.81		<	0.89		<	0.46	
Carbon Tetrachloride	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
Benzene	<	0.48		<	0.47		<	0.44		380	0.81		<	0.89		<	0.46	
1,2-Dichloroethane	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
Trichloroethene	<	0.48		<	0.47		<	0.44		6600	0.81		14000	0.89		<	0.46	
1,2-Dichloropropane	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
Bromodichloromethane	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
trans-1,3-Dichloropropene	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
4-Methyl-2-pentanone	<	2.4		<	2.4		<	2.2		<	4.1		<	4.5		<	2.3	
Toluene	0.58	0.48	J	0.57	0.47	J	<	0.44		2800	0.81		6800	0.89		<	0.46	
cis-1,3-Dichloropropene	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
1,1,2-Trichloroethane	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
Tetrachloroethene	<	0.48		76	0.47	JE	<	0.44		6000	0.81		34884	0.89		<	0.46	
2-Hexanone	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
Dibromochloromethane	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
Chlorobenzene	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
Ethyl Benzene	<	0.48		<	0.47		<	0.44		1400	0.81		6400	0.89		<	0.46	
m,p-Xylene	<	0.48		<	0.47		<	0.44		900	0.81		4500	0.89		<	0.46	
o-Xylene	<	0.48		<	0.47		<	0.44		270	0.81		980	0.89		<	0.46	
Styrene	<	0.48		<	0.47		<	0.44		90	0.81		<	0.89		<	0.46	
Bromoform	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
1,1,2,2-Tetrachloroethane	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
1,3-Dichlorobenzene	<	0.48		<	0.47		<	0.44		<	0.81		<	0.89		<	0.46	
1,4-Dichlorobenzene	<	0.48		<	0.47		<	0.44		50	0.81		<	0.89		<	0.46	
1,2-Dichlorobenzene	<	0.48		<	0.47		<	0.44		3.4	0.81		<	0.89		<	0.46	
cis-1,2-Dichloroethene	<	0.48		<	0.47		<	0.44		4200	0.81		2200	0.89		<	0.46	

E: Exceeds instrument calibration
S: Peak Saturation
RL: Reporting Limit
NS: Not Sampled
NR: Not Reported
NA: Not Applicable
<: Not detected.

Soil Gas Analytical Results - October 1999
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-58			TT-59			TT-60			TT-61			TT-62			TT-63		
Sample Tube Numbers	11019A&B			11105A&B			11022A&B			11021B			11107 A&B			11104A&B		
Compound - Units	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual
Chloromethane	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Vinyl Chloride	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Bromomethane	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Chloroethane	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Freon 11	3.1	0.47		0.76	0.47		0.78	0.46		1.1	0.47	J	90	0.47		190	0.47	
1,1-Dichloroethene	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Carbon Disulfide	0.66	0.47		4.7	0.47		0.96	0.46		<	0.47		1.2	0.47		0.84	0.47	
Acetone	2.9	2.4		4.4	2.4		4.3	2.3		<	2.3		7.1	2.4		<	2.3	
Methylene Chloride	<	0.47		<	0.47		0.59	0.46		<	0.47		4.7	0.47		<	0.47	
trans-1,2-Dichloroethene	<	0.47		<	0.47		<	0.46		<	0.47		7.1	0.47		<	0.47	
1,1-Dichloroethane	<	0.47		<	0.47		<	0.46		<	0.47		5.7	0.47		3.4	0.47	
Vinyl Acetate	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
2-Butanone	<	2.4		2.8	2.4		2.5	2.3		<	2.3		6.1	2.4		<	2.3	
Chloroform	<	0.47		<	0.47		<	0.46		<	0.47		3.1	0.47		1.4	0.47	
1,1,1-Trichloroethane	<	0.47		<	0.47		<	0.46		<	0.47		12	0.47		2.2	0.47	
Carbon Tetrachloride	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Benzene	<	0.47		0.62	0.47		<	0.46		<	0.47		1.8	0.47		<	0.47	
1,2-Dichloroethane	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Trichloroethene	<	0.47		<	0.47		<	0.46		<	0.47		40	0.47		0.75	0.47	
1,2-Dichloropropane	<	0.47		<	0.47		<	0.46		<	0.47		1.2	0.47		<	0.47	
Bromodichloromethane	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
trans-1,3-Dichloropropene	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
4-Methyl-2-pentanone	<	2.4		<	2.4		<	2.3		<	2.3		3.1	2.4		<	2.3	
Toluene	<	0.47		0.85	0.47		<	0.46		<	0.47		20	0.47		5.1	0.47	
cis-1,3-Dichloropropene	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
1,1,2-Trichloroethane	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Tetrachloroethene	<	0.47		<	0.47		0.50	0.46		1.6	0.47	J	990	0.47		120	0.47	
2-Hexanone	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Dibromochloromethane	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Chlorobenzene	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
Ethyl Benzene	<	0.47		0.52	0.47		<	0.46		<	0.47		14	0.47		<	0.47	
m,p-Xylene	<	0.47		<	0.47		<	0.46		<	0.47		3.9	0.47		<	0.47	
o-Xylene	<	0.47		<	0.47		<	0.46		<	0.47		1.3	0.47		<	0.47	
Styrene	<	0.47		0.57	0.47		<	0.46		<	0.47		57	0.47		<	0.47	
Bromoform	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
1,1,2,2-Tetrachloroethane	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
1,3-Dichlorobenzene	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
1,4-Dichlorobenzene	<	0.47		<	0.47		<	0.46		<	0.47		2.7	0.47		<	0.47	
1,2-Dichlorobenzene	<	0.47		<	0.47		<	0.46		<	0.47		<	0.47		<	0.47	
cis-1,2-Dichloroethene	<	0.47		<	0.47		<	0.46		<	0.47		24	0.47		<	0.47	

E: Exceeds instrument calibration
S: Peak Saturation
RL: Reporting Limit
NS: Not Sampled
NR: Not Reported
NA: Not Applicable
<: Not detected.

Soil Gas Analytical Results - October 1999
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-64			TT-65			TT-66			TT-67			TT-68			TT-69		
Sample Tube Numbers	11015A&B			11002A&B			11024A&B			11017A&B			11110A&B			11214A&B		
Compound - Units	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual
Chloromethane	<	0.50		<	0.49		<	0.49		<	0.48		3.0	0.48		<	0.45	
Vinyl Chloride	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Bromomethane	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Chloroethane	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Freon 11	110	0.50		0.59	0.49		0.68	0.49		1.3	0.48		1.1	0.48		0.77	0.45	
1,1-Dichloroethene	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Carbon Disulfide	1.7	0.50		1.4	0.49		<	0.49		<	0.48		0.53	0.48		0.45	0.45	
Acetone	9.0	2.5		<	2.4		<	2.4		4.5	2.4		6.2	2.4		<	2.3	
Methylene Chloride	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
trans-1,2-Dichloroethene	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
1,1-Dichloroethane	22	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Vinyl Acetate	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
2-Butanone	3.0	2.5		<	2.4		1.7	2.4		2.7	2.4		3.0	2.4		<	2.3	
Chloroform	7.5	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
1,1,1-Trichloroethane	0.65	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Carbon Tetrachloride	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Benzene	0.50	0.50		0.64	0.49		<	0.49		<	0.48		1.06	0.48		<	0.45	
1,2-Dichloroethane	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Trichloroethene	29	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
1,2-Dichloropropane	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Bromodichloromethane	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
trans-1,3-Dichloropropene	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
4-Methyl-2-pentanone	<	2.5		<	2.4		<	2.4		<	2.4		<	2.4		<	2.3	
Toluene	6.5	0.50		4.9	0.49		<	0.49		<	0.48		0.86	0.48		<	0.45	
cis-1,3-Dichloropropene	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
1,1,2-Trichloroethane	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Tetrachloroethene	140	0.50		<	0.49		<	0.49		0.57	0.48		0.48	0.48		0.45	0.45	
2-Hexanone	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Dibromochloromethane	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Chlorobenzene	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Ethyl Benzene	1.4	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
m,p-Xylene	1.6	0.50		1.7	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
o-Xylene	1.1	0.50		0.54	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Styrene	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
Bromoform	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
1,1,2,2-Tetrachloroethane	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
1,3-Dichlorobenzene	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
1,4-Dichlorobenzene	16	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
1,2-Dichlorobenzene	<	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	
cis-1,2-Dichloroethene	0.75	0.50		<	0.49		<	0.49		<	0.48		<	0.48		<	0.45	

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Soil Gas Analytical Results - October 1999
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-70			TT-71			TT-72			TT-73			TT-74			TT-75		
Sample Tube Numbers	11006A&B			11023A&B			11013A&B			11008A&B			11106A&B			11218A&B		
Compound - Units	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual
Chloromethane	<	0.51		<	0.47		<	0.48			0.47		<	0.48		<	0.44	
Vinyl Chloride	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Bromomethane	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Chloroethane	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Freon 11	0.62	0.51		0.85	0.47		0.86	0.48		0.61	0.47		0.68	0.48		0.71	0.44	
1,1-Dichloroethene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Carbon Disulfide	0.82	0.51		1.1	0.47		1.2	0.48		<	0.47		<	0.48		0.49	0.44	
Acetone	3.0	2.6		4.7	2.3		<	2.4		<	2.3		<	2.4		5.3	2.2	
Methylene Chloride	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
trans-1,2-Dichloroethene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
1,1-Dichloroethane	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Vinyl Acetate	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
2-Butanone	<	2.6		<	2.3		<	2.4		<	2.3		<	2.4		<	2.2	
Chloroform	<	0.51		<	0.47		<	0.48		0.66	0.47		<	0.48		1.4	0.44	
1,1,1-Trichloroethane	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		0.80	0.44	
Carbon Tetrachloride	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Benzene	<	0.51		0.47	0.47		<	0.48		2.2	0.47		<	0.48		<	0.44	
1,2-Dichloroethane	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Trichloroethene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
1,2-Dichloropropane	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Bromodichloromethane	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
trans-1,3-Dichloropropene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
4-Methyl-2-pentanone	<	2.6		<	2.3		<	2.4		<	2.3		<	2.4		<	2.2	
Toluene	<	0.51		0.89	0.47		0.77	0.48		4.6	0.47		<	0.48		<	0.44	
cis-1,3-Dichloropropene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
1,1,2-Trichloroethane	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Tetrachloroethene	<	0.51		32	0.47		25	0.48		<	0.47		<	0.48		<	0.44	
2-Hexanone	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Dibromochloromethane	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Chlorobenzene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Ethyl Benzene	<	0.51		0.66	0.47		<	0.48		1.5	0.47		<	0.48		<	0.44	
m,p-Xylene	0.62	0.51		<	0.47		<	0.48		2.3	0.47		<	0.48		<	0.44	
o-Xylene	<	0.51		<	0.47		<	0.48		0.85	0.47		<	0.48		<	0.44	
Styrene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
Bromoform	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
1,1,2,2-Tetrachloroethane	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
1,3-Dichlorobenzene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
1,4-Dichlorobenzene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
1,2-Dichlorobenzene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	
cis-1,2-Dichloroethene	<	0.51		<	0.47		<	0.48		<	0.47		<	0.48		<	0.44	

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Soil Gas Analytical Results - October 1999
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-76			TT-77			TT-78			TT-79			TT-80			TT-81		
Sample Tube Numbers	11206A&B			11211A&B			11225A&B			11210A&B			11223A&B			11201A&B		
Compound - Units	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual
Chloromethane	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Vinyl Chloride	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Bromomethane	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Chloroethane	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Freon 11	0.90	0.45		1.6	0.48		1.4	0.49		5.6	0.47		1.7	0.48		0.75	0.47	
1,1-Dichloroethene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Carbon Disulfide	0.99	0.45		0.86	0.48		1.6	0.49		<	0.47		0.53	0.48		1.2	0.47	
Acetone	<	2.4		<	2.4		4.0	2.5		<	2.3		<	2.4		<	2.4	
Methylene Chloride	<	0.45		<	0.48		0.64	0.49		<	0.47		0.53	0.48		0.47	0.47	
trans-1,2-Dichloroethene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
1,1-Dichloroethane	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Vinyl Acetate	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
2-Butanone	<	2.4		<	2.4		<	2.5		<	2.3		<	2.4		<	2.4	
Chloroform	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
1,1,1-Trichloroethane	<	0.45		<	0.48		<	0.49		0.51	0.47		<	0.48		<	0.47	
Carbon Tetrachloride	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Benzene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
1,2-Dichloroethane	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Trichloroethene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
1,2-Dichloropropane	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Bromodichloromethane	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
trans-1,3-Dichloropropene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
4-Methyl-2-pentanone	<	2.4		<	2.4		<	2.5		<	2.3		<	2.4		<	2.4	
Toluene	<	0.45		<	0.48		8.8	0.49		<	0.47		<	0.48		<	0.47	
cis-1,3-Dichloropropene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
1,1,2-Trichloroethane	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Tetrachloroethene	<	0.45		5.7	0.48		30	0.49		19	0.47		1.2	0.48		0.52	0.47	
2-Hexanone	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Dibromochloromethane	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Chlorobenzene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Ethyl Benzene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
m,p-Xylene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
o-Xylene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Styrene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
Bromoform	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
1,1,2,2-Tetrachloroethane	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
1,3-Dichlorobenzene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
1,4-Dichlorobenzene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
1,2-Dichlorobenzene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	
cis-1,2-Dichloroethene	<	0.45		<	0.48		<	0.49		<	0.47		<	0.48		<	0.47	

E: Exceeds instrument calibration
S: Peak Saturation
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<: Not detected.

Soil Gas Analytical Results - October 1999
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-82			TT-83			TT-84			TT-85		TT-86			TT-87		
Sample Tube Numbers	11004A&B			11111A&B			11102A&B					11215A&B			11224A&B		
Compound - Units	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	µg/m³	RL	Qual	µg/m³	RL	Qual
Chloromethane	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Vinyl Chloride	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Bromomethane	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Chloroethane	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Freon 11	0.72	0.48		0.51	0.47		0.65	0.46		NR	NA	3.3	0.46		1.2	0.47	
1,1-Dichloroethene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Carbon Disulfide	2.2	0.48		2.7	0.47		1.8	0.46		NR	NA	3.7	0.46		0.94	0.47	
Acetone	<	2.4		<	2.3		<	2.3		NR	NA	4.3	2.3		<	2.4	
Methylene Chloride	0.53	0.48		0.51	0.47		1.8	0.46		NR	NA	<	0.46		<	0.47	
trans-1,2-Dichloroethene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
1,1-Dichloroethane	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Vinyl Acetate	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
2-Butanone	<	2.4		<	2.3		<	2.3		NR	NA	<	2.3		<	2.4	
Chloroform	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
1,1,1-Trichloroethane	<	0.48		<	0.47		<	0.46		NR	NA	2.4	0.46		<	0.47	
Carbon Tetrachloride	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Benzene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
1,2-Dichloroethane	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Trichloroethene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
1,2-Dichloropropane	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Bromodichloromethane	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
trans-1,3-Dichloropropene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
4-Methyl-2-pentanone	<	2.4		<	2.3		<	2.3		NR	NA	<	2.3		<	2.4	
Toluene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
cis-1,3-Dichloropropene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
1,1,2-Trichloroethane	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Tetrachloroethene	<	0.48		<	0.47		<	0.46		NR	NA	0.69	0.46		0.61	0.47	
2-Hexanone	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Dibromochloromethane	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Chlorobenzene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Ethyl Benzene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
m,p-Xylene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
o-Xylene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Styrene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
Bromoform	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
1,1,2,2-Tetrachloroethane	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
1,3-Dichlorobenzene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
1,4-Dichlorobenzene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
1,2-Dichlorobenzene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	
cis-1,2-Dichloroethene	<	0.48		<	0.47		<	0.46		NR	NA	<	0.46		<	0.47	

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Soil Gas Analytical Results - October 1999
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-88		TT-89			TT-90			TT-91			TT-92			TT-93		TT-94	
Sample Tube Numbers	NS		11313A&B			11222A&B			11315A&B			11207A&B			NS		NS	
Compound - Units	µg/m³	RL	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	µg/m³	RL
Chloromethane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Vinyl Chloride	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Bromomethane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Chloroethane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Freon 11	NS	NA	1.5	0.46		1.7	0.50		1.0	0.47		2.1	0.47		NS	NA	NS	NA
1,1-Dichloroethene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Carbon Disulfide	NS	NA	<	0.46		1.9	0.50		<	0.47		1.4	0.47		NS	NA	NS	NA
Acetone	NS	NA	<	2.3		2.8	2.5		<	2.4		<	2.4		NS	NA	NS	NA
Methylene Chloride	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
trans-1,2-Dichloroethene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
1,1-Dichloroethane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Vinyl Acetate	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
2-Butanone	NS	NA	<	2.3		<	2.5		<	2.4		<	2.4		NS	NA	NS	NA
Chloroform	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
1,1,1-Trichloroethane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Carbon Tetrachloride	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Benzene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
1,2-Dichloroethane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Trichloroethene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
1,2-Dichloropropane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Bromodichloromethane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
trans-1,3-Dichloropropene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
4-Methyl-2-pentanone	NS	NA	<	2.3		<	2.5		<	2.4		<	2.4		NS	NA	NS	NA
Toluene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
cis-1,3-Dichloropropene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
1,1,2-Trichloroethane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Tetrachloroethene	NS	NA	<	0.46		0.65	0.50		0.90	0.47		<	0.47		NS	NA	NS	NA
2-Hexanone	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Dibromochloromethane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Chlorobenzene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Ethyl Benzene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
m,p-Xylene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
o-Xylene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Styrene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
Bromoform	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
1,1,2,2-Tetrachloroethane	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
1,3-Dichlorobenzene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
1,4-Dichlorobenzene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
1,2-Dichlorobenzene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA
cis-1,2-Dichloroethene	NS	NA	<	0.46		<	0.50		<	0.47		<	0.47		NS	NA	NS	NA

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Soil Gas Analytical Results - October 1999
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-95			TT-95 Duplicate			TT-96			TT-97			TT-97 Duplicate			TT-98		
Sample Tube Numbers	11317A&B			11304A&B			11217A&B			11310A&B			11205A&B			11203A&B		
Compound - Units	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual
Chloromethane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Vinyl Chloride	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Bromomethane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Chloroethane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Freon 11	0.70	0.46		0.61	0.44		1.5	0.48		1.3	0.48		2.0	0.49		0.99	0.50	
1,1-Dichloroethene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Carbon Disulfide	<	0.46		1.4	0.44		1.1	0.48		4.4	0.48		2.7	0.49		3.3	0.50	
Acetone	<	2.2		<	2.3		2.7	2.4		<	2.4		3.2	2.5		<	2.5	
Methylene Chloride	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
trans-1,2-Dichloroethene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
1,1-Dichloroethane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Vinyl Acetate	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
2-Butanone	<	2.2		<	2.3		<	2.4		<	2.4		<	2.5		<	2.5	
Chloroform	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
1,1,1-Trichloroethane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Carbon Tetrachloride	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Benzene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
1,2-Dichloroethane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Trichloroethene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
1,2-Dichloropropane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Bromodichloromethane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
trans-1,3-Dichloropropene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
4-Methyl-2-pentanone	<	2.2		<	2.3		<	2.4		<	2.4		<	2.5		<	2.5	
Toluene	0.83	0.46		0.48	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
cis-1,3-Dichloropropene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
1,1,2-Trichloroethane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Tetrachloroethene	1.3	0.46		1.6	0.44		<	0.48		0.82	0.48		0.69	0.49		<	0.50	
2-Hexanone	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Dibromochloromethane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Chlorobenzene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Ethyl Benzene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
m,p-Xylene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
o-Xylene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Styrene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
Bromoform	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
1,1,2,2-Tetrachloroethane	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
1,3-Dichlorobenzene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
1,4-Dichlorobenzene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
1,2-Dichlorobenzene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	
cis-1,2-Dichloroethene	<	0.46		<	0.44		<	0.48		<	0.48		<	0.49		<	0.50	

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Soil Gas Analytical Results - October 1999
Himco Dump Superfund Site
Elkhart, Indiana

Sample Location	TT-99		TT-100			TT-101			TT-102		
Sample Tube Numbers	NS		11311A&B			11212A&B			11216A&B		
Compound - Units	µg/m³	RL	µg/m³	RL	Qual	µg/m³	RL	Qual	µg/m³	RL	Qual
Chloromethane	NS	NA	<	0.48		<	0.49		<	0.46	
Vinyl Chloride	<		<	0.48		<	0.49		<	0.46	
Bromomethane	<		<	0.48		<	0.49		<	0.46	
Chloroethane	<		<	0.48		<	0.49		<	0.46	
Freon 11	<		0.72	0.48		0.98	0.49		1.1	0.46	
1,1-Dichloroethene	<		<	0.48		<	0.49		<	0.46	
Carbon Disulfide	<		<	0.48		1.1	0.49		0.87	0.46	
Acetone	<		<	2.4		6.8	2.4		<	2.3	
Methylene Chloride	<		<	0.48		<	0.49		<	0.46	
trans-1,2-Dichloroethene	<		<	0.48		<	0.49		<	0.46	
1,1-Dichloroethane	<		<	0.48		<	0.49		<	0.46	
Vinyl Acetate	<		<	0.48		<	0.49		<	0.46	
2-Butanone	<		<	2.4		[illegible]	2.4		<	2.3	
Chloroform	<		<	0.48		<	0.49		<	0.46	
1,1,1-Trichloroethane	<		<	0.48		<	0.49		0.82	0.46	
Carbon Tetrachloride	<		<	0.48		<	0.49		<	0.46	
Benzene	<		<	0.48		<	0.49		<	0.46	
1,2-Dichloroethane	<		<	0.48		<	0.49		<	0.46	
Trichloroethene	<		<	0.48		<	0.49		<	0.46	
1,2-Dichloropropane	<		<	0.48		<	0.49		<	0.46	
Bromodichloromethane	<		<	0.48		<	0.49		<	0.46	
trans-1,3-Dichloropropene	<		<	0.48		<	0.49		<	0.46	
4-Methyl-2-pentanone	<		<	2.4		<	2.4		<	2.3	
Toluene	<		<	0.48		<	0.49		<	0.46	
cis-1,3-Dichloropropene	<		<	0.48		<	0.49		<	0.46	
1,1,2-Trichloroethane	<		<	0.48		<	0.49		<	0.46	
Tetrachloroethene	<		<	0.48		<	0.49		<	0.46	
2-Hexanone	<		<	0.48		<	0.49		<	0.46	
Dibromochloromethane	<		<	0.48		<	0.49		<	0.46	
Chlorobenzene	<		<	0.48		<	0.49		<	0.46	
Ethyl Benzene	<		<	0.48		<	0.49		<	0.46	
m,p-Xylene	<		<	0.48		<	0.49		<	0.46	
o-Xylene	<		<	0.48		<	0.49		<	0.46	
Styrene	<		<	0.48		<	0.49		<	0.46	
Bromoform	<		<	0.48		<	0.49		<	0.46	
1,1,2,2-Tetrachloroethane	<		<	0.48		<	0.49		<	0.46	
1,3-Dichlorobenzene	<		<	0.48		<	0.49		<	0.46	
1,4-Dichlorobenzene	<		<	0.48		<	0.49		<	0.46	
1,2-Dichlorobenzene	<		<	0.48		<	0.49		<	0.46	
cis-1,2-Dichloroethene	<		<	0.48		<	0.49		<	0.46	

E: Exceeds instrument calibration
S: Peak Saturation
RL: Reporting Limit
NS: Not Sampled
NR: Not Reported
NA: Not Applicable
<: Not detected.

2000

Residential Well Ground Water Analytical Results - March 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54287 Westwood		54287 Westwood		54280 Westwood		54271 Westwood		54215 Westwood		54253 Westwood		54231 Westwood		54125 Westwood	
Sample number	S12		R12		S09		S04		S05		S03		S10		S13	
Date sampled	3/16/2000		3/16/2000		3/15/2000		3/15/2000		3/15/2000		3/15/2000		3/15/2000		3/16/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
TOTAL METALS																
Dilution factor																
Aluminum	26	U	26	U	26	U	26	U	26	U	26	U	26	U	26	U
Antimony	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Arsenic	7		8	DM	2	U	2	U	4	UD	5	M	2	U	2	M
Barium	63.8		64.5		72.8		50.4		32.8		128		43.5		108	
Beryllium	1.6	UJ	1.6	UJ	1.6	UJ	1.6	UJ	1.6	UJ	1.6	UJ	1.6	UJ	1.6	UJ
Cadmium	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Calcium	93300	UJ	92300	UJ	105000	UJ	101000	UJ	91800	UJ	91500	UJ	115000	UJ	100000	UJ
Chromium	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.4	UJ	3.6	MJ
Cobalt	10.5	MJ	10.1	UJ	10.1	UJ	10.1	UJ	10.1	UJ	10.1	UJ	14	MJ	10.1	UJ
Copper	7.3	M	4	U	26.1	M	7.3	M	14.2	M	7.3	M	66.1	M	5.8	M
Iron	5050		5030		22.4	U	104	BJ	22.4	U	1670		25.3	MBJ	885	
Lead	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Magnesium	21500		22000		20200		21700		19800		26500		20800		21500	
Manganese	63.1		59.6		355		359		3.2	U	213		3.2	U	284	
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	19.4	U	19.4	U	19.4	U	19.4	U	21.4	M	19.4	U	19.4	U	19.4	U
Potassium	1150		1160		2580		1790		4650		1330		4300		1790	
Selenium	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Silver	6.8	U	6.8	U	6.8	U	11.1	U	6.8	U	6.8	U	6.8	U	6.8	U
Sodium	14900		14700		65400		22600	J	126000		14500		82500		17600	
Thallium	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vanadium	3.9	U	3.9	U	3.9	U	3.9	U	3.9	U	3.9	U	3.9	U	3.9	U
Zinc	18.9	MJ	14.2	MJ	31.5	MJ	17.4	MJ	95.6	J	44.3	MJ	160	J	10.3	U
MISC. INORGANICS																
Bromide (µg Br^-/L)	NS		NS		60	J	50	J	NS		60	J	NS		NS	
Sulfate (mg SO_4/L)	NS		NS		133	D	138	D	NS		154	D	NS		NS	

U: Not detected
M (Inorganic), J (Organic): Estimated above method detection limit and below reporting limit
B: Analyte also present in blank
J (Inorganic): Estimated due to quality control limits being exceeded.
NS: Not Sampled

R[illegible]ential Well Ground Wate[illegible]ytical Results - Mar[illegible]00
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54305 Westwood		27919 Westwood		27964 Westwood		27948 Westwood	
Sample number	S11		S08		S06		S07	
Date sampled	3/16/2000		3/15/2000		3/15/2000		3/15/2000	
Units	µg/L		µg/L		µg/L		µg/L	
TOTAL METALS								
Dilution factor								
Aluminum	26	U	26	U	26	U	26	U
Antimony	2	U	2	U	2	U	2	U
Arsenic	4	UD	2	U	6	DM	7	
Barium	60.4		28.1		113		102	
Beryllium	1.6	UJ	1.6	UJ	1.6	U	1.6	UJ
Cadmium	0.1	U	0.1	U	0.1	U	0.1	U
Calcium	177000	UJ	103000	UJ	113000	UJ	122000	UJ
Chromium	3.4	UJ	3.4	UJ	3.4	UJ	3.5	MJ
Cobalt	10.1	UJ	10.1	UJ	10.1	UJ	10.1	UJ
Copper	4	U	9	M	11.9	M	4.1	M
Iron	2170		51.1	MBJ	5860		6120	
Lead	2	U	2	U	2	U	2	U
Magnesium	18200	J	19000	J	16100	J	16000	J
Manganese	1560		146		73		72.3	
Mercury	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	19.4	U	19.4	U	19.4	U	19.4	U
Potassium	5270		3660		2610		2870	
Selenium	2	U	2	U	2	U	2	U
Silver	6.8	U	6.8	U	6.8	U	6.8	U
Sodium	44400		56700	J	13500	J	33200	
Thallium	1	U	1	U	1	U	1	U
Vanadium	3.9	U	3.9	U	3.9	U	3.9	U
Zinc	17.4	MJ	20.5	MJ	19	MJ	30.1	MJ
MISC. INORGANICS								
Bromide (µg Br^-/L)	70	J	60	J	NS		60	J
Sulfate (mg SO_4/L)	171	D	132	D	NS		146	D

U: Not detected
M (Inorganic), J (Organic): Estimated above method detection limit and below reporting limit
B: Analyte also present in blank
J (Inorganic): Estimated due to quality control limits being exceeded.
NS: Not Sampled

R[illegible]ential Well Ground Wat[illegible]ytical Results - Mar[illegible]000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54287 Westwood		54287 Westwood		54280 Westwood		54271 Westwood		54215 Westwood		54253 Westwood		54231 Westwood		54125 Westwood	
VOLATILE ORGANICS																
Sample number	EDCJ5		EDCJ9		EDCK3		EDCK0		EDCK6		EDCK1		EDCJ8		EDCJ4	
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Acetone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon Disulfide	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	7		7		1	U	0.6	J	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	0.5	J	0.5	J	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	0.7	J	1	U	1	U	1	U	1	U	0.6	J	1	U	1	U
2-Butanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzene	0.4	J	0.4	J	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Styrene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U

U: Not detected
M (Inorganic), J (Organic): Estimated above method detection limit and below reporting limit
B: Analyte also present in blank
J (Inorganic): Estimated due to quality control limits being exceeded.
NS: Not Sampled

Residential Well Ground Water Analytical Results - March 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54305 Westwood		27919 Westwood		27964 Westwood		27948 Westwood	
VOLATILE ORGANICS								
Sample number	EDCK8		EDCK4		EDCK5		EDCK2	
Chloromethane	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U
Vinyl Chloride	0.9	J	1	U	1	U	0.7	J
Chloroethane	1	U	1	U	1	U	1	U
Methylene Chloride	2	U	2	U	2	U	2	U
Acetone	5	U	5	U	5	U	5	U
Carbon Disulfide	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U
1,1-Dichloroethane	3		0.5	J	2		2	
cis-1,2-Dichloroethene	2		0.6	J	0.8	J	1	
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
Chloroform	1	U	0.4	J	1	U	1	U
1,2-Dichloroethane	0.6	J	1	U	1	U	1	U
2-Butanone	5	U	5	U	5	U	5	U
Bromochloromethane	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	U	1	U	1	U	1	U
Bromodichloromethane	1	U	1	U	1	U	1	U
1,2-Dichloropropane	10		1	U	1	U	1	U
cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
Trichloroethene	1	U	1	U	1	U	1	U
Dibromochloromethane	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
Benzene	0.4	J	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
Bromoform	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U
2-Hexanone	5	U	5	U	5	U	5	U
Tetrachloroethene	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
Toluene	1	U	1	U	1	U	1	U
Chlorobenzene	1	U	1	U	1	U	1	U
Ethylbenzene	1	U	1	U	1	U	1	U
Styrene	1	U	1	U	1	U	1	U
Xylene (total)	1	U	1	U	1	U	1	U

U: Not detected
M (Inorganic), J (Organic): Estimated above method detection limit and below reporting limit
B: Analyte also present in blank
J (Inorganic): Estimated due to quality control limits being exceeded.
NS: Not Sampled

Re[illegible] ntial Well Ground Wate[illegible] ,tical Results - Marc[illegible] 00
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54287 Westwood		54287 Westwood		54280 Westwood		54271 Westwood		54215 Westwood		54253 Westwood		54231 Westwood		54125 Westwood	
1,3-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SEMIVOLATILE ORGANICS																
Sample number	EDCJ5		EDCJ9		EDCK3		EDCK0		EDCK6		EDCK1		EDCJ8		EDCJ4	
Phenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethyl)ether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Chlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,2'-Oxybis(1-chloropropane)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Nitroso-di-n-propylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Nitrobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isophorone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Nitrophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethoxy)methane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Naphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chloroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobutadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chloro-3-methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Methylnaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4,5-Trichlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
2-Chlornaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Dimethylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acenaphthylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,6-Dinitrotolune	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
3-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Acenaphthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U

U: Not detected
M (Inorganic), J (Organic): Estimated above method detection limit and below reporting limit
B: Analyte also present in blank
J (Inorganic): Estimated due to quality control limits being exceeded.
NS: Not Sampled

Re[ntial Well Ground Wate tical Results - Marc[00
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54305 Westwood		27919 Westwood		27964 Westwood		27948 Westwood	
1,3-Dichlorobenzene	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U
SEMIVOLATILE ORGANICS								
Sample number	EDCK8		EDCK4		EDCK5		EDCK2	
Phenol	5	U	5	U	5	U	5	U
bis(2-Chloroethyl)ether	5	U	5	U	5	U	5	U
2-Chlorophenol	5	U	5	U	5	U	5	U
2-Methylphenol	5	U	5	U	5	U	5	U
2,2'-Oxybis(1-chloropropane)	5	U	5	U	5	U	5	U
4-Methylphenol	5	U	5	U	5	U	5	U
N-Nitroso-di-n-propylamine	5	U	5	U	5	U	5	U
Hexachloroethane	5	U	5	U	5	U	5	U
Nitrobenzene	5	U	5	U	5	U	5	U
Isophorone	5	U	5	U	5	U	5	U
2-Nitrophenol	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	5	U	5	U	5	U	5	U
bis(2-Chloroethoxy)methane	5	U	5	U	5	U	5	U
2,4-Dichlorophenol	5	U	5	U	5	U	5	U
Naphthalene	5	U	5	U	5	U	5	U
4-Chloroaniline	5	U	5	U	5	U	5	U
Hexachlorobutadiene	5	U	5	U	5	U	5	U
4-Chloro-3-methylphenol	5	U	5	U	5	U	5	U
2-Methylnaphthalene	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	5	U	5	U	5	U	5	U
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U
2,4,5-Trichlorophenol	20	U	20	U	20	U	20	U
2-Chlornaphthalene	5	U	5	U	5	U	5	U
2-Nitroaniline	20	U	20	U	20	U	20	U
Dimethylphthalate	5	U	5	U	5	U	5	U
Acenaphthylene	5	U	5	U	5	U	5	U
2,6-Dinitrotolune	5	U	5	U	5	U	5	U
3-Nitroaniline	20	U	20	U	20	U	20	U
Acenaphthene	5	U	5	U	5	U	5	U
2,4-Dinitrophenol	20	U	20	U	20	U	20	U

U: Not detected
M (Inorganic), J (Organic): Estimated above method detection limit and below reporting limit
B: Analyte also present in blank
J (Inorganic): Estimated due to quality control limits being exceeded.
NS: Not Sampled

Res ntial Well Ground Wate ical Results - Marc 00
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54287 Westwood		54287 Westwood		54280 Westwood		54271 Westwood		54215 Westwood		54253 Westwood		54231 Westwood		54125 Westwood	
4-Nitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Dibenzofuran	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Diethylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chlorophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Fluorene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
4,6-Dinitro-2-methylphenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
N-Nitrosodiphenylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Bromophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Pentachlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Phenanthrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbazole	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Di-n-butylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Butylbenzylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
3,3'-Dichlorobenzidine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(a)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chrysene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Ethylhexyl)phthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Di-n-octylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(b)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(k)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(a)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Indeno(1,2,3-cd)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibenz(a,h)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(g,h,i)perylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

U: Not detected
M (Inorganic), J (Organic): Estimated above method detection limit and below reporting limit
B: Analyte also present in blank
J (Inorganic): Estimated due to quality control limits being exceeded.
NS: Not Sampled

Re[illegible]ntial Well Ground Wate[illegible]ical Results - Marc[illegible]00
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54305 Westwood		27919 Westwood		27964 Westwood		27948 Westwood	
4-Nitrophenol	20	U	20	U	20	U	20	U
Dibenzofuran	5	U	5	U	5	U	5	U
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U
Diethylphthalate	5	U	5	U	5	U	5	U
4-Chlorophenyl-phenylether	5	U	5	U	5	U	5	U
Fluorene	5	U	5	U	5	U	5	U
4-Nitroaniline	20	U	20	U	20	U	20	U
4,6-Dinitro-2-methylphenol	20	U	20	U	20	U	20	U
N-Nitrosodiphenylamine	5	U	5	U	5	U	5	U
4-Bromophenyl-phenylether	5	U	5	U	5	U	5	U
Hexachlorobenzene	5	U	5	U	5	U	5	U
Pentachlorophenol	20	U	20	U	20	U	20	U
Phenanthrene	5	U	5	U	5	U	5	U
Anthracene	5	U	5	U	5	U	5	U
Carbazole	5	U	5	U	5	U	5	U
Di-n-butylphthalate	5	U	5	U	5	U	5	U
Fluoranthene	5	U	5	U	5	U	5	U
Pyrene	5	U	5	U	5	U	5	U
Butylbenzylphthalate	5	U	5	U	5	U	5	U
3,3'-Dichlorobenzidine	5	U	5	U	5	U	5	U
Benzo(a)anthracene	5	U	5	U	5	U	5	U
Chrysene	5	U	5	U	5	U	5	U
bis(2-Ethylhexyl)phthalate	5	U	5	U	5	U	5	U
Di-n-octylphthalate	5	U	5	U	5	U	5	U
Benzo(b)fluoranthene	5	U	5	U	5	U	5	U
Benzo(k)fluoranthene	5	U	5	U	5	U	5	U
Benzo(a)pyrene	5	U	5	U	5	U	5	U
Indeno(1,2,3-cd)pyrene	5	U	5	U	5	U	5	U
Dibenz(a,h)anthracene	5	U	5	U	5	U	5	U
Benzo(g,h,i)perylene	5	U	5	U	5	U	5	U

U: Not detected
M (Inorganic), J (Organic): Estimated above method detection limit and below reporting limit
B: Analyte also present in blank
J (Inorganic): Estimated due to quality control limits being exceeded.
NS: Not Sampled

Residential Well Ground Water Analytical Results - April 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54287 Westwood		54280 Westwood		54271 Westwood		54215 Westwood		54253 Westwood		54231 Westwood		54125 Westwood		54305 Westwood	
Sample number	SO1		SO2		SO3		SO6		SO4		SO5		SO7		SO10	
Date sampled	4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/18/2000		4/18/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
TOTAL METALS																
Dilution factor																
Aluminum	118	U	118	U	118	U	118	U	118	U	118	U	118	U	118	U
Antimony	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Arsenic	7		2	U	2	U	2	M	5	M	2	U	3	M	2	U
Barium	66.6		70.4		57.6		29.1		131		43.9		109		76.6	
Beryllium	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Calcium	88100		102000		110000		83000		90000		106000		99000		205000	
Chromium	6.7	U	6.7	U	6.7	U	6.7	U	2	M	6.7	U	6.7	U	6.7	U
Cobalt	13.2	UJ	13.2	UJ	13.2	UJ	13.2	UJ	13.2	UJ	13.2	UJ	13.2	UJ	13.2	UJ
Copper	31.3	J	11.4	J	14.7	J	13.3	J	34.8	J	7.9	MJ	9.3	UJ	15.2	J
Iron	5780	J	19.6	MJB	86	JB	45.3	MJB	1710	J	27.8	MJB	1130	J	2790	J
Lead	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	M
Magnesium	20600		20000		24000		19400		27600		21600		21500		21700	
Manganese	58.7		325		380		0.6	M	223		1.9	U	299		1880	
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	21	U	21	U	21	U	21	U	21	U	21	U	9.8	M	21	U
Potassium	1100		2430		1880		4000		1280		3850		1760		6920	
Selenium	2	U	2	U	2	U	2	U	2	U	4	UD	2	U	2	U
Silver	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U
Sodium	15400	J	63200	J	30300	J	116000	J	15200	J	84700	J	19000	J	92200	J
Thallium	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vanadium	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U
Zinc	34	MB	20.5	MB	13.1	MB	128	B	28.3	MB	173	B	12.5	MB	39.1	B
MISC. INORGANICS																
Bromide (µg Br^-/L)	60	M	60	M	60	M	60	M	60	M	60	M	70	M	70	M
Sulfate (mg SO_4/L)	142	D	130	D	130	D	127	D	153	D	134	D	132	U	152	D

U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: *Analyte also present in blank*
D: Dilution required

Residential Well Ground Water Analytical Results - April 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54305 Westwood Dup		27919 Westwood		27883 Westwood		27964 Westwood		27948 Westwood	
Sample number	SO11		SO8		SO9		SO12		SO13	
Date sampled	4/18/2000		4/18/2000		4/18/2000		4/19/2000		4/19/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L	
TOTAL METALS										
Dilution factor										
Aluminum	118	U	118	U	118	U	118	U	118	U
Antimony	2	U	2	U	2	U	2	U	2	U
Arsenic	2	U	2	U	2	U	7	M	8	
Barium	63.2		39.3		35.8		106		92.3	
Beryllium	2	U	2	U	2	U	2	U	2	U
Cadmium	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Calcium	173000		132000		99800		112000		97500	
Chromium	6.7	U	2.1	M	6.7	U	6.7	U	6.7	U
Cobalt	13.2	UJ	13.2	UJ	13.2	UJ	13.2	UJ	13.2	UJ
Copper	10.7	J	13.3	J	10.7	J	9.3	UJ	62.1	J
Iron	2270	J	100	JB	46.5	UJ	5870	J	5530	J
Lead	2	U	2	U	2	U	2	U	2	U
Magnesium	18200		24900		21500		15700		13600	
Manganese	1560		202		30		72		65.2	
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	21	U	21	U	21	U	21	U	21	U
Potassium	5170		4140		3700		2340		2590	
Selenium	4	UD	2	U	2	U	4	UD	2	U
Silver	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U
Sodium	73400	J	81000	J	91800	J	14800	J	35100	J
Thallium	1	U	1	U	1	U	1	U	1	U
Vanadium	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U
Zinc	26.9	MB	26.5	MB	87.3	B	12	MB	31.1	MB
MISC. INORGANICS										
Bromide (µg Br^-/L)	70	M	60	M	60	M	60	M	60	M
Sulfate (mg SO_4/L)	152	D	109	D	105	D	148	D	142	D

U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Residential Well Ground Water Analytical Results - April 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54287 Westwood		54280 Westwood		54271 Westwood		54215 Westwood		54253 Westwood		54231 Westwood		54125 Westwood		54305 Westwood	
Sample number	SO1		SO2		SO3		SO6		SO4		SO5		SO7		SO10	
Date sampled	4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/18/2000		4/18/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANICS																
Sample number	EDPK9		EDPL0		EDPL1		EDPL4		EDPL2		EDPL3		EDPL5		EDPL8	
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	6		2	U	2	U	2	U	2	U	2	U	2	U	2	U
Acetone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon Disulfide	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	12		1	U	0.8	J	1	U	1	U	1	U	1	U	3	
cis-1,2-Dichloroethene	0.8	J	1	U	1	U	1	U	1	U	1	U	1	U	2	
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	8	
cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U

U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Residential Well Ground Water Analytical Results - April 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54305 Westwood Dup		27919 Westwood		27883 Westwood		27964 Westwood		27948 Westwood	
Sample number	SO11		SO8		SO9		SO12		SO13	
Date sampled	4/18/2000		4/18/2000		4/18/2000		4/19/2000		4/19/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANICS										
Sample number	EDPM0		EDPL6		EDPL7		EDPM1		EDPM2	
Chloromethane	1	U'	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	2	U	2	U	2	U	UJ	U	2	U
Acetone	5	U	5	U	5	U	5	U	5	U
Carbon Disulfide	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	4		0.8	J	1	U	3		2	
cis-1,2-Dichloroethene	2		0.7	J	1	U	1		1	
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U
Chloroform	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U
2-Butanone	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	9		1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U
Benzene	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U
Bromoform	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U
Toluene	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U

U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Residential Well Ground Water Analytical Results - April 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54287 Westwood		54280 Westwood		54271 Westwood		54215 Westwood		54253 Westwood		54231 Westwood		54125 Westwood		54305 Westwood	
Sample number	SO1		SO2		SO3		SO6		SO4		SO5		SO7		SO10	
Date sampled	4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/18/2000		4/18/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Styrene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SEMIVOLATILE ORGANICS																
Sample number	EDPK9		EDPL0		EDPL1		EDPL4		EDPL2		EDPL3		EDPL5		EDPL8	
Phenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethyl)ether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Chlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,2'-Oxybis(1-chloropropane)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Nitroso-di-n-propylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Nitrobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isophorone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Nitrophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethoxy)methane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Naphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chloroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobutadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chloro-3-methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Methylnaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4,5-Trichlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
2-Chlornaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Dimethylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acenaphthylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,6-Dinitrotolune	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
3-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U

U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Residential Well Ground Water Analytical Results - April 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54305 Westwood Dup		27919 Westwood		27883 Westwood		27964 Westwood		27948 Westwood	
Sample number	SO11		SO8		SO9		SO12		SO13	
Date sampled	4/18/2000		4/18/2000		4/18/2000		4/19/2000		4/19/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L	
Styrene	1	U	1	U	1	U	1	U	1	U
Xylene (total)	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U
SEMIVOLATILE ORGANICS										
Sample number	EDPM0		EDPL6		EDPL7		EDPM1		EDPM2	
Phenol	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethyl)ether	5	U	5	U	5	U	5	U	5	U
2-Chlorophenol	5	U	5	U	5	U	5	U	5	U
2-Methylphenol	5	U	5	U	5	U	5	U	5	U
2,2'-Oxybis(1-chloropropane)	5	U	5	U	5	U	5	U	5	U
4-Methylphenol	5	U	5	U	5	U	5	U	5	U
N-Nitroso-di-n-propylamine	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	5	U	5	U	5	U	5	U	5	U
Nitrobenzene	5	U	5	U	5	U	5	U	5	U
Isophorone	5	U	5	U	5	U	5	U	5	U
2-Nitrophenol	5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethoxy)methane	5	U	5	U	5	U	5	U	5	U
2,4-Dichlorophenol	5	U	5	U	5	U	5	U	5	U
Naphthalene	5	U	5	U	5	U	5	U	5	U
4-Chloroaniline	5	U	5	U	5	U	5	U	5	U
Hexachlorobutadiene	5	U	5	U	5	U	5	U	5	U
4-Chloro-3-methylphenol	5	U	5	U	5	U	5	U	5	U
2-Methylnaphthalene	5	U	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	5	U	5	U	5	U	5	U	5	U
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U	5	U
2,4,5-Trichlorophenol	20	U	20	U	20	U	20	U	20	U
2-Chlornaphthalene	5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	20	U	20	U	20	U	20	U	20	U
Dimethylphthalate	5	U	5	U	5	U	5	U	5	U
Acenaphthylene	5	U	5	U	5	U	5	U	5	U
2,6-Dinitrotolune	5	U	5	U	5	U	5	U	5	U
3-Nitroaniline	20	U	20	U	20	U	20	U	20	U

U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Residential Well Ground Water Analytical Results - April 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54287 Westwood		54280 Westwood		54271 Westwood		54215 Westwood		54253 Westwood		54231 Westwood		54125 Westwood		54305 Westwood	
Sample number	SO1		SO2		SO3		SO6		SO4		SO5		SO7		SO10	
Date sampled	4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/17/2000		4/18/2000		4/18/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Acenaphthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
4-Nitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Dibenzofuran	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Diethylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chlorophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Fluorene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
4,6-Dinitro-2-methylphenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
N-Nitrosodiphenylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Bromophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Pentachlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Phenanthrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbazole	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Di-n-butylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Butylbenzylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
3,3'-Dichlorobenzidine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(a)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chrysene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Ethylhexyl)phthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Di-n-octylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(b)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(k)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(a)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Indeno(1,2,3-cd)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibenz(a,h)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(g,h,i)perylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Residential Well Ground Water Analytical Results - April 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54305 Westwood Dup		27919 Westwood		27883 Westwood		27964 Westwood		27948 Westwood	
Sample number	SO11		SO8		SO9		SO12		SO13	
Date sampled	4/18/2000		4/18/2000		4/18/2000		4/19/2000		4/19/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L	
Acenaphthene	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrophenol	20	U	20	U	20	U	20	U	20	U
4-Nitrophenol	20	U	20	U	20	U	20	U	20	U
Dibenzofuran	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U
Diethylphthalate	5	U	5	U	5	U	5	U	5	U
4-Chlorophenyl-phenylether	5	U	5	U	5	U	5	U	5	U
Fluorene	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	20	U	20	U	20	U	20	U	20	U
4,6-Dinitro-2-methylphenol	20	U	20	U	20	U	20	U	20	U
N-Nitrosodiphenylamine	5	U	5	U	5	U	5	U	5	U
4-Bromophenyl-phenylether	5	U	5	U	5	U	5	U	5	U
Hexachlorobenzene	5	U	5	U	5	U	5	U	5	U
Pentachlorophenol	20	U	20	U	20	U	20	U	20	U
Phenanthrene	5	U	5	U	5	U	5	U	5	U
Anthracene	5	U	5	U	5	U	5	U	5	U
Carbazole	5	U	5	U	5	U	5	U	5	U
Di-n-butylphthalate	5	U	5	U	5	U	5	U	5	U
Fluoranthene	5	U	5	U	5	U	5	U	5	U
Pyrene	5	U	5	U	5	U	5	U	5	U
Butylbenzylphthalate	5	U	5	U	5	U	5	U	5	U
3,3'-Dichlorobenzidine	5	U	5	U	5	U	5	U	5	U
Benzo(a)anthracene	5	U	5	U	5	U	5	U	5	U
Chrysene	5	U	5	U	5	U	5	U	5	U
bis(2-Ethylhexyl)phthalate	5	U	5	U	5	U	5	U	5	U
Di-n-octylphthalate	5	U	5	U	5	U	5	U	5	U
Benzo(b)fluoranthene	5	U	5	U	5	U	5	U	5	U
Benzo(k)fluoranthene	5	U	5	U	5	U	5	U	5	U
Benzo(a)pyrene	5	U	5	U	5	U	5	U	5	U
Indeno(1,2,3-cd)pyrene	5	U	5	U	5	U	5	U	5	U
Dibenz(a,h)anthracene	5	U	5	U	5	U	5	U	5	U
Benzo(g,h,i)perylene	5	U	5	U	5	U	5	U	5	U

U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WTB1		WTB3		WTB4		WTE1		WTE3		WTG1		WTG3		WT101A		WT101A Dup		WT101B		WT101C		WT102A	
Sample number	S030		S031		S032		S045		S046		S037		S036		S050		S051		S052		S049		S020	
Date sampled	4/26/2000		4/26/2000		4/26/2000		5/2/2000		5/2/2000		4/27/2000		4/27/2000		5/3/2000		5/3/2000		5/3/2000		5/3/2000		4/25/2000	
Screened Interval (Feet BGS)	468.9-474.9		127.2-137.2		169.2-174.2		73.9-83.9		173.9-178.9		38.0-43.0		162-172		8.5-18.5		8.5-18.5		95.5-100.5		162.5-167.5		8.4-18.4	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
TOTAL METALS																								
Dilution factor																								
Aluminum	118	U	118	U	118	U	118	U	118	U	118	U	36.7	M	118	U	118	U	118	U	152		118	U
Antimony	2	U	2	U	2	U	7	U	7	U	2	U	2	U	7	U	7	U	7	U	7	U	2	U
Arsenic	2	U	5	M	2	U	7	U	5	M	2	U	10		5	M	14	UD	7	U	10		2	U
Barium	122		60.2		37		43.5		51.3		79.1		79.4		83.1		82.4		72.3		77.6		46.7	
Beryllium	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	0.1	U	0.1	U	0.1	U	0.3	U	0.3	U	0.1	U	0.1	U	0.3	U	0.3	U	0.3	U	0.3	U	0.1	U
Calcium	52500		96800		69400		174000		58300		94300		76400		258000		242000		137000		47900		173000	
Chromium	2.4	MJ	6.7	U	6.7	U	6.7	U	6.7	U	6.7	U	6.7	U	6.7	U	6.7	U	6.7	U	7.7	J	17.8	J
Cobalt	13.2	U	13.2	U	13.2	U	13.2	U	13.2	U	13.2	U	13.2	U	13.2	U	4	M	13.2	U	4	M	4.1	MJ
Copper	9.3	U	9.3	U	9.3	U	9.3	U	9.3	U	9.3	U	9.3	U	9.3	U	9.3	U	9.3	U	9.3	U	9.3	U
Iron	527	BJ	426	BJ	415	BJ	5150		2240		1010	BJ	1150	BJ	16300		16100		2850		1380		115	BJ
Lead	2	U	2	U	2	U	3	M	3	M	2	U	2	U	7	U	7	U	7	U	7	U	2	U
Magnesium	20900		27900	J	21200	J	35500		23800		24300	J	23500	J	27300		27500		52800		20100		18800	J
Manganese	40.1		356		206		204	J	21.1	J	52.7		21.8		1610	J	1540	J	36	J	20.5	J	86.7	
Mercury	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	UJ	0.1	U	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U
Nickel	8.3	MJ	21	UJ	21	UJ	21	U	21	U	7	MJ	8.1	MJ	21	U	21	U	21	U	7	M	45.4	J
Potassium	2100		1290		759		4120		1810		1430		1260		6730		6810		6280		4130		2060	
Selenium	2	U	2	U	2	U	14	UD	7	U	2	U	4	JM	7	U	7	U	7	U	7	U	2	U
Silver	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U
Sodium	55100		20300		4600		19100		12400		13800		18400		66800		65200		43100		36100		100000	
Thallium	1	U	1	U	1	U	4	U	4	U	1	U	1	U	4	U	4	U	4	U	4	U	1	U
Vanadium	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U
Zinc	36.9	JB	34.1	U	34.1	U	34.1	U	34.1	U	34.1	U	34.1	U	34.1	U	34.1	U	34.1	U	34.1	U	34.1	U
MISC. INORGANICS																								
Bromide (µg Br^-/L)	180	M	80	M	110	M	120	M	130	M	50	M	60	M	520	M	530	M	340	M	880	M	60	M
Sulfate (mg SO_4/L)	60	M	132	JD	38	JD	347	D	57	D	59	JD	32	J	218	D	215	D	211	D	0.42	MJ	202	JD

BGS: Below Ground Surface
NS: Not sampled
U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT102B		WT102C		WT105A		WT106A		WT111A		WT112A		WT112B		WT112B Dup		WT113A		WT113B		WT114A		WT114A - Split	
Sample number	S019		S018		S047		S048		S040		S035		S033		S034		S029		S028		S056		S056	
Date sampled	4/25/2000		4/25/2000		5/2/2000		5/2/2000		4/28/2000		4/27/2000		4/27/2000		4/27/2000		4/26/2000		4/26/2000		5/3/2000		5/3/2000	
Screened interval (Feet BGS)	62.9-67.9		157-162		8.5-18.5		8.6-18.6		11.9-21.9		7.7-17.7		57.1-62.1		57.1-62.1		14.4-24.4		65.0-70.0		14.5-24.5		14.5-24.5	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
TOTAL METALS																								
Dilution factor																								
Aluminum	118	U	500		112	M	3090		463		118	U	118	U	118	U	118	U	118	U	118	U	44	J
Antimony	2	U	2	U	7	U	7	U	7	U	6	UD	2	U	2	U	2	U	2	U	7	U	20	U
Arsenic	6	M	3	M	7	U	46	D	7	U	2	U	5	M	4	M	2	U	3	M	9		10	J
Barium	103		104		8.1		160		256		28.6		86.7		86		13.8		68.4		101	B	115	
Beryllium	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	0.1	U	0.1	U	0.3	U	0.1	M	0.2	M	0.1	U	0.1	U	0.1	U	0.1	M	0.1	U	0.3	U	2.5	U
Calcium	75800		129000	B	57400		175000		113000		247000		81800		79900		64300		101000		192000	B	203000	
Chromium	24.2	J	26.8	J	23.9	J	21.6	J	2.3	MJ	6.7	U	6.7	U	6.7	U	6.7	U	6.7	U	6.7	U	10	U
Cobalt	13.2	U	13.2	U	4.1	M	13.2	U	12.2	M	13.2	U	13.2	U	13.2	U	13.2	U	13.2	U	5.9	M	5.8	J
Copper	9.3	U	4	UB	9.3	U	11		9.3	U	9.3	U	9.3	U	9.3	U	4.2	MB	9.3	U	9.3	U	10	U
Iron	1580	BJ	2210	BJ	407		27600		12600		23.3	MJB	1180	BJ	1220	BJ	59.8	BJ	1210	BJ	6510	B	6290	
Lead	2	U	2	M	7	U	6	M	7	U	2	U	2	U	2	U	2	U	2	U	7	U	10	U
Magnesium	22300		45600	B	16500	J	26800		19100	J	17000	J	21000	J	20900	J	16500	J	21400		18600	BJ	21000	
Manganese	91.9		288	B	160	J	559	J	1440	J	0.7	M	93.1		94.5		3.1		97.6		276	BJ	288	
Mercury	0.1	U	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.011	J
Nickel	8.1	MJ	23.7	J	73.3		11.7	M	8.7	M	21	UJ	21	UJ	21	UJ	21	UJ	21	UJ	21	U	4.8	J
Potassium	1840		1970		1360		4200		8380		1700		1320		1380		1210		2040		3390	B	3750	
Selenium	2	U	2	U	7	U	7	U	7	U	2	U	2	U	2	U	2	U	2	U	21	UD	20	U
Silver	3.4	M	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	5	U
Sodium	25900		6060	UB	7720		29300		39400		13800		22800		23300		14200		15300		123000	B	125000	
Thallium	1	U	1	U	4	U	4	U	4	U	1	U	1	U	1	U	1	U	1	U	4	U	30	U
Vanadium	1.9	M	3.2	M	5.1	U	5.1	U	5.1	U	2.3	M	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	20	U
Zinc	34.1	U	13.5	MJ	34.1	U	31.7	MJ	18	MJ	34.1	U	34.1	U	34.1	U	34.1	U	34.1	U	34.1	U	10	U
MISC. INORGANICS																								
Bromide (µg Br^-/L)	80	M	140	M	110	M	420	M	430	M	40	M	70	M	70	M	14	U	60	M	170	M	NS	
Sulfate (mg SO_4/L)	58	JD	36	J	36	D	146	D	264	D	434	JD	56	J	56	J	24	J	131	JD	177	D	NS	

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Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT114B		WT115A		WT116A		WT116A Dup		WT116B		WT117A		WT117B		WT118B		WT119A	
Sample number	S057		S043		S053		S054		S055		S038		S039		S041		S042	
Date sampled	5/3/2000		5/1/2000		5/3/2000		5/3/2000		5/3/2000		4/27/2000		4/27/2000		4/28/2000		4/28/2000	
Screened interval (Feet BGS)	62.8-67.8		9.7-19.7		4.8-14.8		4.8-14.8		55.4-60.4		7.9-17.9		58.5-63.5		59.9-64.9		7.5-17.5	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
TOTAL METALS																		
Dilution factor																		
Aluminum	118	U	8860		118	U	118	U	118	U	827		118	U	118	U	38.3	M
Antimony	7	U	7	U	7	U	7	U	7	U	2	U	2	U	7	U	7	U
Arsenic	9		7	U	7	U	7	U	7	U	2	U	2	U	7	U	6	M
Barium	69.4		105		79.9		79.6		135		41.3		35.9		93.4		94	
Beryllium	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	0.3	U	0.1	M	0.1	M	0.1	M	0.3	U	0.1	U	0.1	U	0.3	U	0.3	U
Calcium	108000		241000		666000		685000		203000		70900		179000		193000		215000	
Chromium	3	MJ	12.8	J	6.7	U	6.7	U	6.7	U	9.3	J	6.7	U	6.7	U	2	MJ
Cobalt	13.2	U	13.2	U	11.2	M	11.5	M	13.2	U	13.2	U	13.2	U	13.2	U	13.2	U
Copper	9.3	U	19.7		15.8		15.5		9.3	U	3.2	MB	9.3	U	9.3	U	9.3	U
Iron	6320		6500		31900		32400		3710		508	BJ	2280	BJ	5790		2650	
Lead	7	U	11		6	M	13	DM	7	U	2	U	2	U	7	U	7	U
Magnesium	17500	J	12400	J	66900		66100		22900		12000	J	24200	J	20000		70800	
Manganese	92.5	J	380	J	1810	J	1800	J	206	J	206		71.7		126	J	318	J
Mercury	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U	0.1	U	0.1	UJ	0.1	UJ
Nickel	21	U	11.5	M	13.3	M	12.2	M	21	U	7.5	MJ	21	UJ	21	U	21	U
Potassium	2700		4440		19600		18900		5780		2180		1790		7800		22200	
Selenium	7	U	7	U	14	DU	14	UJD	14	UD	4	UD	4	UD	14	UD	14	UD
Silver	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U
Sodium	14100		24600		161000		160000		23500		5110		17100		18700		61100	
Thallium	4	U	4	U	4	U	4	U	4	U	1	U	1	U	4	U	4	U
Vanadium	5.1	U	14.5		5.1	U	5.1	U	5.1	U	3.1	M	5.1	U	5.1	U	5.1	U
Zinc	34.1	U	37.7	JB	178	J	194	J	34.1	U	34.1	U	34.1	U	34.1	U	34.1	U
MISC. INORGANICS																		
Bromide (µg Br^-/L)	70	MJ	620		2380	D	2420	D	320	M	60	M	70	M	200	M	460	M
Sulfate (mg SO_4/L)	156	D	254	D	1260	D	1250	D	143	D	169	JD	318	JD	351	D	420	D

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Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WTB1		WTB3		WTB4		WTE1		WTE3		WTG1		WTG3		WT101A		WT101A Dup		WT101B		WT101C		WT102A	
Sample number	S030		S031		S032		S045		S046		S037		S036		S050		S051		S052		S049		S020	
Date sampled	4/26/2000		4/26/2000		4/26/2000		5/2/2000		5/2/2000		4/27/2000		4/27/2000		5/3/2000		5/3/2000		5/3/2000		5/3/2000		4/25/2000	
Screened Interval (Feet BGS)	468.9-474.9		127.2-137.2		169.2-174.2		73.9-83.9		173.9-178.9		38.0-43.0		162-172		8.5-18.5		8.5-18.5		95.5-100.5		162.5-167.5		8.4-18.4	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANICS																								
Sample number	EDCG3		EDCG4		EDCG5		EOOFH		EOOFJ		EOOF8		EDCG9		ECFN2		ECFN3		ECFN4		EOOF5		EDPN4	
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2		2		1	U	1	U
Methylene Chloride	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Acetone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon Disulfide	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	8		8		1	U	1	U	1	U
cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	1	U	1	U	1	U	1	U	3		1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	U	1	U	1	U	1	U	2		1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	1	U	1	U	1	U	1	U	2		1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2		2		1	U	1	U	1	U
trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	1	U	1	U	1	U	1	U	1		1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Styrene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U

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Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT102B		WT102C		WT105A		WT106A		WT111A		WT112A		WT112B		WT112B Dup		WT113A		WT113B		WT114A		WT114A - Split	
Sample number	S019		S018		S047		S048		S040		S035		S033		S034		S029		S028		S056		S056	
Date sampled	4/25/2000		4/25/2000		5/2/2000		5/2/2000		4/28/2000		4/27/2000		4/27/2000		4/27/2000		4/26/2000		4/26/2000		5/3/2000		5/3/2000	
Screened Interval (Feet BGS)	62.9-67.9		157-162		8.5-18.5		8.6-18.6		11.9-21.9		7.7-17.7		57.1-62.1		57.1-62.1		14.4-24.4		65.0-70.0		14.5-24.5		14.5-24.5	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANICS																								
Sample number	EDPN2		EDPN1		EOOFK		EOOF4		EOOFB		EDCG8		EDCG6		EDCG7		EDCG2		EDCG0		E01TP		EECFN10	
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Vinyl Chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Chloroethane	1	U	1	U	1	U	0.6	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Methylene Chloride	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Acetone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
Carbon Disulfide	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
1,1-Dichloroethane	1	U	1	U	1	U	0.9	J	1		1	U	1	U	1	U	1	U	1	U	3		2.6	
cis-1,2-Dichloroethene	1	U	1	U	1	U	1		1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Chloroform	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
2-Butanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
Bromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Carbon Tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Bromodichloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
1,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Trichloroethene	1	U	1	U	1	U	0.6	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Dibromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Benzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.9	J
trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Bromoform	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	25	U
Tetrachloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Toluene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Chlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Styrene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
Xylene (total)	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	U
1,3-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
1,4-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
1,2-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
1,2-Dibromo-3-chloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	10	U
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	25	U

BGS: Below Ground Surface
NS: Not sampled
U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT114B		WT115A		WT116A		WT116A Dup		WT116B		WT117A		WT117B		WT118B		WT119A	
Sample number	S057		S043		S053		S054		S055		S038		S039		S041		S042	
Date sampled	5/3/2000		5/1/2000		5/3/2000		5/3/2000		5/3/2000		4/27/2000		4/27/2000		4/28/2000		4/28/2000	
Screened Interval (Feet BGS)	62.8-67.8		9.7-19.7		4.8-14.8		4.8-14.8		55.4-60.4		7.9-17.9		58.5-63.5		59.9-64.9		7.5-17.5	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANICS																		
Sample number	E01TQ		EOOFF		ECFN5		ECFN6		ECFN8		EOOF9		EOOFA		EOOFC		EOOFE	
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	1	U	1	U	1		1		1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Acetone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon Disulfide	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	1	U	1	U	8		7		1	U	1	U	1	U	2		3	
cis-1,2-Dichloroethene	1	U	0.5	J	1		1		1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	U	1	U	1		1		1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	U	0.6	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzene	1	U	1		1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	1	U	0.8	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Styrene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U

BGS: Below Ground Surface
NS: Not sampled
U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WTB1		WTB3		WTB4		WTE1		WTE3		WTG1		WTG3		WT101A		WT101A Dup		WT101B		WT101C		WT102A	
Sample number	S030		S031		S032		S045		S046		S037		S036		S050		S051		S052		S049		S020	
Date sampled	4/26/2000		4/26/2000		4/26/2000		5/2/2000		5/2/2000		4/27/2000		4/27/2000		5/3/2000		5/3/2000		5/3/2000		5/3/2000		4/25/2000	
Screened Interval (Feet BGS)	468.9-474.9		127.2-137.2		169.2-174.2		73.9-83.9		173.9-178.9		38.0-43.0		162-172		8.5-18.5		8.5-18.5		95.5-100.5		162.5-167.5		8.4-18.4	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
SEMIVOLATILE ORGANICS																								
Sample number	EDCG3		EDCG4		EDCG5		EOOFH		EOOFJ		EOOF8		EDCG9		ECFN2		ECFN3		ECFN4		EOOF5		EDPN4	
Phenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethyl)ether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Chlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,2'-Oxybis(1-chloropropane)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Nitroso-di-n-propylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Nitrobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isophorone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Nitrophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethoxy)methane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Naphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chloroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobutadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chloro-3-methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Methylnaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4,5-Trichlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
2-Chlornaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Dimethylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acenaphthylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,6-Dinitrotolune	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
3-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Acenaphthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U

BGS: Below Ground Surface
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U: Not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT102B		WT102C		WT105A		WT106A		WT111A		WT112A		WT112B		WT112B Dup		WT113A		WT113B		WT114A		WT114A - Split
Sample number	S019		S018		S047		S048		S040		S035		S033		S034		S029		S028		S056		S056
Date sampled	4/25/2000		4/25/2000		5/2/2000		5/2/2000		4/28/2000		4/27/2000		4/27/2000		4/27/2000		4/26/2000		4/26/2000		5/3/2000		5/3/2000
Screened interval (Feet BGS)	62.9-67.9		157-162		8.5-18.5		8.6-18.6		11.9-21.9		7.7-17.7		57.1-62.1		57.1-62.1		14.4-24.4		65.0-70.0		14.5-24.5		14.5-24.5
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L
SEMIVOLATILE ORGANICS																							
Sample number	EDPN2		EDPN1		EOOFK		EOOF4		EOOFB		EDCG8		EDCG6		EDCG7		EDCG2		EDCG0		E01TP		EECFN10
Phenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
bis(2-Chloroethyl)ether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2-Chlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2,2'-Oxybis(1-chloropropane)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
4-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
N-Nitroso-di-n-propylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Hexachloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Nitrobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Isophorone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2-Nitrophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2,4-Dimethylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
bis(2-Chloroethoxy)methane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2,4-Dichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Naphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
4-Chloroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Hexachlorobutadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
4-Chloro-3-methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2-Methylnaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Hexachlorocyclopentadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2,4,5-Trichlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	NS
2-Chlornaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	NS
Dimethylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Acenaphthylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2,6-Dinitrotolune	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
3-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	NS
Acenaphthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2,4-Dinitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	NS

BGS: Below Ground Surface
NS: Not sampled
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M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required

Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT114B		WT115A		WT116A		WT116A Dup		WT116B		WT117A		WT117B		WT118B		WT119A	
Sample number	S057		S043		S053		S054		S055		S038		S039		S041		S042	
Date sampled	5/3/2000		5/1/2000		5/3/2000		5/3/2000		5/3/2000		4/27/2000		4/27/2000		4/28/2000		4/28/2000	
Screened Interval (Feet BGS)	62.8-67.8		9.7-19.7		4.8-14.8		4.8-14.8		55.4-60.4		7.9-17.9		58.5-63.5		59.9-64.9		7.5-17.5	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
SEMIVOLATILE ORGANICS																		
Sample number	E01TQ		EOOFF		ECFN5		ECFN6		ECFN8		EOOF9		EOOFA		EOOFC		EOOFE	
Phenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethyl)ether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Chlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,2'-Oxybis(1-chloropropane)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Nitroso-di-n-propylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Nitrobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isophorone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Nitrophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethoxy)methane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Naphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chloroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobutadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chloro-3-methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Methylnaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4,5-Trichlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
2-Chlornaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Dimethylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acenaphthylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,6-Dinitrotolune	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
3-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Acenaphthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U

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NS: Not sampled
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Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WTB1		WTB3		WTB4		WTE1		WTE3		WTG1		WTG3		WT101A		WT101A Dup		WT101B		WT101C		WT102A	
Sample number	S030		S031		S032		S045		S046		S037		S036		S050		S051		S052		S049		S020	
Date sampled	4/26/2000		4/26/2000		4/26/2000		5/2/2000		5/2/2000		4/27/2000		4/27/2000		5/3/2000		5/3/2000		5/3/2000		5/3/2000		4/25/2000	
Screened interval (Feet BGS)	468.9-474.9		127.2-137.2		169.2-174.2		73.9-83.9		173.9-178.9		38.0-43.0		162-172		8.5-18.5		8.5-18.5		95.5-100.5		162.5-167.5		8.4-18.4	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
4-Nitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Dibenzofuran	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Diethylphthalate	5	U	5	U	5	U	3	J	2	J	5	U	5	U	3	J	4	J	2	J	5	U	5	U
4-Chlorophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Fluorene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
4,6-Dinitro-2-methylphenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
N-Nitrosodiphenylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Bromophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Pentachlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Phenanthrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbazole	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Di-n-butylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Butylbenzylphthalate	5	U	5	U	5	U	4	J	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
3,3'-Dichlorobenzidine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(a)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chrysene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Ethylhexyl)phthalate	5	U	6		5	U	19		35		4	J	19		8		4	J	2	J	2	J	5	U
Di-n-octylphthalate	5	U	5	U	5	U	4	J	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(b)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(k)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(a)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Indeno(1,2,3-cd)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibenz(a,h)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(g,h,i)perylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

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Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT102B		WT102C		WT105A		WT106A		WT111A		WT112A		WT112B		WT112B Dup		WT113A		WT113B		WT114A		WT114A - Split
Sample number	S019		S018		S047		S048		S040		S035		S033		S034		S029		S028		S056		S056
Date sampled	4/25/2000		4/25/2000		5/2/2000		5/2/2000		4/28/2000		4/27/2000		4/27/2000		4/27/2000		4/26/2000		4/26/2000		5/3/2000		5/3/2000
Screened interval (Feet BGS)	62.9-67.9		157-162		8.5-18.5		8.6-18.6		11.9-21.9		7.7-17.7		57.1-62.1		57.1-62.1		14.4-24.4		65.0-70.0		14.5-24.5		14.5-24.5
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L
4-Nitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	NS
Dibenzofuran	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Diethylphthalate	5	U	5	U	3	J	3	J	5	U	5	U	5	U	5	U	5	U	5	U	1	J	NS
4-Chlorophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Fluorene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
4-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	NS
4,6-Dinitro-2-methylphenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	NS
N-Nitrosodiphenylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
4-Bromophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Hexachlorobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Pentachlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	NS
Phenanthrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Carbazole	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Di-n-butylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Butylbenzylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
3,3'-Dichlorobenzidine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Benzo(a)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Chrysene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
bis(2-Ethylhexyl)phthalate	5	U	2	J	17		47		5	U	39		5	U	5	U	5	U	5	U	2	J	NS
Di-n-octylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Benzo(b)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Benzo(k)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Benzo(a)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Indeno(1,2,3-cd)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Dibenz(a,h)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS
Benzo(g,h,i)perylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	NS

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Monitoring Well Ground Water Analytical Results - April/May 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	WT114B		WT115A		WT116A		WT116A Dup		WT116B		WT117A		WT117B		WT118B		WT119A	
Sample number	S057		S043		S053		S054		S055		S038		S039		S041		S042	
Date sampled	5/3/2000		5/1/2000		5/3/2000		5/3/2000		5/3/2000		4/27/2000		4/27/2000		4/28/2000		4/28/2000	
Screened Interval (Feet BGS)	62.8-67.8		9.7-19.7		4.8-14.8		4.8-14.8		55.4-60.4		7.9-17.9		58.5-63.5		59.9-64.9		7.5-17.5	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
4-Nitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Dibenzofuran	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Diethylphthalate	5	U	2	J	5	U	4	J	2	J	5	U	5	U	5	U	5	U
4-Chlorophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Fluorene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
4,6-Dinitro-2-methylphenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
N-Nitrosodiphenylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Bromophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Pentachlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Phenanthrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbazole	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Di-n-butylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Butylbenzylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
3,3'-Dichlorobenzidine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(a)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chrysene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Ethylhexyl)phthalate	1	J	18		7		2	J	2	J	7		5	U	5	U	5	U
Di-n-octylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(b)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(k)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(a)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Indeno(1,2,3-cd)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibenz(a,h)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(g,h,i)perylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

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B: Analyte also present in blank
D: Dilution required

:t-Push Ground Water Ana Results - April/May
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	GPE-1		GPE-2		GPE-3		GP114-1		GP114-2		GP114-3		GP16-1		GP16-2		GP101-1		GP101-2	
Sample number	SO14		SO15		SO16		SO21		SO22		SO23		S024		S025		S026		SO27	
Date sampled	4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000	
Depth (Feet BGS)	30-32		35-37		41-43		14.5-16.5		35-37		55-57		37-39		55-57		35-37		58-60	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
TOTAL METALS																				
Dilution factor																				
Aluminum	2640		3960		3190		118	U	1180		6420		2160		11900		3410		455	
Antimony	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Arsenic	5	M	13		5	M	2	U	39		38		7	M	74	D	17		3	M
Barium	99		170		120		80.6		48.4		95.6		45.7		164		118		128	
Beryllium	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.7	MB	2	U	2	U
Cadmium	0.1	M	0.2	DM	0.1	M	0.1	U	0.1	U	0.3	DM	0.1	M	0.6	DM	0.2	M	0.1	U
Calcium	351000		471000		211000		179000		245000		315000		176000		505000		281000		210000	
Chromium	46.5	J	154	J	90.3	J	6.7	U	19.1	J	173	J	38.1	J	124	J	64.4	J	12.6	J
Cobalt	5.3	MJ	9.3	MJ	8.2	MJ	13.2	U	13.2	U	14.9	J	7.7	MJ	20.8	J	10.2	MJ	13.2	U
Copper	23.5	B	55.1		27.9	B	9.3	U	11.5	B	76.3	U	18.4	B	105	U	31.1	B	7.3	MB
Iron	19100	BJ	38400	BJ	17800	BJ	337	BJ	13400	BJ	56300	BJ	12800	BJ	71400	BJ	26400	BJ	12000	BJ
Lead	15		27		12		2	U	9		35		10		47	D	27		4	M
Magnesium	47000		58800		31100		23200		34500		57300		34100		116000		42600		33800	
Manganese	751		957		490		500		309		881		563		1820	J	634		356	
Mercury	0.1	U	0.2	M	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	M	0.1	U	0.1	U
Nickel	26.2	J	38.2	J	22.4	J	21	U	7	MJ	57.8	J	18.4	MJ	64.6	J	29.9	J	10.2	MJ
Potassium	8490		12500		9000		3020		2760		4650		3060		4330		6080		6190	
Selenium	6	UD	6	UD	6	UD	2	U	6	UD	8	UD	2	U	8	UD	6	UD	2	U
Silver	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U	11.1	U
Sodium	62200		86300		31500		178000		15300		17300		21600		16300		22800		25200	
Thallium	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vanadium	8.2		7.3		2.5	M	5.1	U	5.1	U	8.8		3.9	M	29.9		6		5.1	U
Zinc	94.1	JB	149	JB	86.1	JB	34.1	U	40.7	JB	156	J	43	JB	172	J	82.3	JB	34.3	JB
MISC. INORGANICS																				
Bromide (µg Br^-/L)	860	M	1330	M	260	M	170	M	60	M	70	M	40	M	60	M	290	M	170	M
Sulfate (mg SO_4/L)	389	JD	654	JD	288	JD	167	JD	178	JD	162	JD	72	JD	134	JD	76	JD	97	JD

BGS: Below Ground Surface
U: not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required
Shading: Value not verified.

.t-Push Ground Water An. Results - April/May
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	GPE-1		GPE-2		GPE-3		GP114-1		GP114-2		GP114-3		GP16-1		GP16-2		GP101-1		GP101-2	
Sample number	SO14		SO15		SO16		SO21		SO22		SO23		S024		S025		S026		SO27	
Date sampled	4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000	
Depth (Feet BGS)	30-32		35-37		41-43		14.5-16.5		35-37		55-57		37-39		55-57		35-37		58-60	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
VOLATILE ORGANICS																				
Sample number	EDPM3		EDPM6		EDPM7		EDPN5		EDPN6		EDPN7		EDCF6		EDCF7		EDCF8		EDCF9	
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl Chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	2		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2	
Methylene Chloride	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Acetone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon Disulfide	1	U	0.5	J	0.6	J	1	U	1	U	0.5	J	1	U	1	U	0.6	J	1	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	0.8	J	1	U	1	U	1		4		1		1	U	1		5		0.8	J
cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1		0.7	J	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	0.5	J	1	U	1	U	1	U	2		1	U	2		1	U	1	U	1	U
cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	U	1	U	1	U	1	U	1	U	1	U	0.5	J	1	U	1	U	1	U
Dibromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzene	1		2		1	U	1	U	1		0.9	J	1	U	1	U	1		1	U
trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U

BGS: Below Ground Surface
U: not detected
M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required
Shading: Value not verified.

Himco Dump Superfund Site
Elkhart, Indiana

Sample location	GPE-1		GPE-2		GPE-3		GP114-1		GP114-2		GP114-3		GP16-1		GP16-2		GP101-1		GP101-2	
Sample number	SO14		SO15		SO16		SO21		SO22		SO23		S024		S025		S026		SO27	
Date sampled	4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000	
Depth (Feet BGS)	30-32		35-37		41-43		14.5-16.5		35-37		55-57		37-39		55-57		35-37		58-60	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Chlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Styrene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SEMIVOLATILE ORGANICS																				
Sample number	EDPM3		EDPM6		EDPM7		EDPN5		EDPN6		EDPN7		EDCF6		EDCF7		EDCF8		EDCF9	
Phenol	5	U	5	U	5		5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethyl)ether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Chlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,2'-Oxybis(1-chloropropane)	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Nitroso-di-n-propylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Nitrobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isophorone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Nitrophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroethoxy)methane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Naphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chloroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobutadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chloro-3-methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Methylnaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4,5-Trichlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
2-Chlornaphthalene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U

BGS: Below Ground Surface
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M (Inorganic), J (Organic): Estimated value between the reporting limit and method detection limit
B: Analyte also present in blank
D: Dilution required
Shading: Value not verified.

D[illegible]-Push Ground Water Anal[illegible] [illegible]esults - April/May 2[illegible]
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	GPE-1		GPE-2		GPE-3		GP114-1		GP114-2		GP114-3		GP16-1		GP16-2		GP101-1		GP101-2	
Sample number	SO14		SO15		SO16		SO21		SO22		SO23		S024		S025		S026		SO27	
Date sampled	4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000		4/25/2000	
Depth (Feet BGS)	30-32		35-37		41-43		14.5-16.5		35-37		55-57		37-39		55-57		35-37		58-60	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Dimethylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acenaphthylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,6-Dinitrotolune	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
3-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Acenaphthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
4-Nitrophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Dibenzofuran	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Diethylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Chlorophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Fluorene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
4,6-Dinitro-2-methylphenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
N-Nitrosodiphenylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Bromophenyl-phenylether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobenzene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Pentachlorophenol	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Phenanthrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbazole	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Di-n-butylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Butylbenzylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
3,3'-Dichlorobenzidine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(a)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chrysene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Ethylhexyl)phthalate	5		5	U	4	J	5	U	5	U	2	J	5	U	5	U	5	U	4	J
Di-n-octylphthalate	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(b)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(k)fluoranthene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(a)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Indeno(1,2,3-cd)pyrene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibenz(a,h)anthracene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzo(g,h,i)perylene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

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B: Analyte also present in blank
D: Dilution required
Shading: Value not verified.

Residential and Monitoring Well Ground Water Analytical Results - November 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54271 Northwood		54305 Westwood		54305 Westwood Dup		WT116A		WT101A	
Sample number	S01		S02		D02		S03		S04	
Date sampled	11/15-16/2000		11/15-16/2000		11/15-16/2000		11/15-16/2000		11/15-16/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L	
TOTAL METALS										
Aluminum	35.9	M	58.2		53.7		335		112	
Antimony	4	U	4	U	4	U	16	UD	8	UD
Arsenic	2	U	4	UD	2	U	10	UD	6.4	J
Barium	48.1		46.9		47.4		133		79.3	
Beryllium	0.2	MB	0.3	MB	0.1	MB	1	BJ	0.6	BJ
Cadmium	0.3	U	0.6	UD	0.6	UD	0.9	UD	0.6	UD
Calcium	102000	BJ	129000	BJ	129000	BJ	745000	BJ	227000	BJ
Chromium	3	U	3	U	3	U	3	U	3	U
Cobalt	1	U	0.8	M	0.9	M	1.1		1	U
Copper	2.3	UB	1	UB	1.4	UB	2.1	UB	2	U
Iron	60.2	BJ	1840	BJ	1720	BJ	8200	BJ	9490	BJ
Lead	2	U	2	U	2	U	2	MJ	2	U
Magnesium	24800	BJ	14200	BJ	14200	BJ	60000	BJ	20200	BJ
Manganese	103		1250		1250		1240		929	
Mercury	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Nickel	2.9	UB	3.4	UB	3.6	UB	4.2	UB	2.3	UB
Potassium	2790	BJ	4400	BJ	4670	BJ	30800	BJ	10100	BJ
Selenium	4	U	8	UD	8	UD	40	UD	4	U
Silver	1	U	1	U	1	U	1	U	1	U
Sodium	53100	BJ	42300	BJ	42700	BJ	214000	BJ	36700	BJ
Thallium	4	UD	6	UD	4	UD	20	UD	20	UD
Vanadium	5.5	MB	4.9	MJB	3.4	MJB	9.1	JB	5	MB
Zinc	21.7	M	14.3	MJ	20.3	MJ	85.5	M	14.9	M
MISC. INORGANICS										
Bromide (mg Br⁻/L)	0.04	MB	0.014	U	0.03	MB	3.75	BJ	0.32	MB
Sulfate (mg SO_4^{2-}/L)	79.3	DUB	105	DUB	104	DUB	1020	DB	177	DUB
Chloride (mg Cl^-/L)	96.5	DUB	99.9	DUB	98.4	DUB	26	DUB	27.2	DUB
Cyanide	8	U	8	U	8	U	8	UJ	8	U
VOLATILE ORGANICS										
Vinyl Chloride	1	U	1	U	1	U	1	U	1	U
Chloromethane	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	
Acrolein	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U
Ethyl ether	1	U	26	D	31	D	100	D	49	
Dichlorofluoromethane	1	U	5		6		10		5	
Acetone	10	U	10	U	10	U	10	U	10	U
Carbon Disulfide	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	1	U	1	U	1	U	1	U	1	U
Acrylonitrile	10	U	10	U	10	U	10	U	10	U
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	1	U	4		4		9		14	
2-Butanone	10	U	10	U	10	U	10	U	10	U
cis-1,2-Dichloroethene	1	U	2		3		1	U	1	U
2,2-Dichloropropane	1	U	2	U	2	U	2	U	2	U
Bromochloromethane	1	U	1	U	1	U	1	U	1	U
Chloroform	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	1	U	1	U	1	U	1	U	1	U
1,1-Dichloropropene	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	1	U	1	UB	1	UB	1	U	1	U
Benzene	1	U	1	U	1	U	8		2	
Trichloroethene	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	1	U	8		8		2		1	U
Bromodichloromethane	1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U
2-Chloroethyl vinyl ether	5	R	5	R	5	R	5	R	5	R
1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U
1,3-Dichloropropane	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	1	U	1	U	1	U	1	U	1	U
2-Hexanone	2	U	2	U	2	U	2	U	2	U
Dibromochloromethane	1	U	1	U	1	U	1	U	1	U
1,2-Dibromoethane	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	1	U	1	U	1	U	1	U	1	U

U: Not detected
M: Estimated above method detection limit and below reporting limit
J: Estimated due to QC limit exceedance.
B: Analyte also present in blank
R: Rejected. Value is unusable
NS: Not Sampled

Residential and Monitoring Well Ground Water Analytical Results - November 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	54271 Northwood		54305 Westwood		54305 Westwood Dup		WT116A		WT101A	
Sample number	S01		S02		D02		S03		S04	
Date sampled	11/15-16/2000		11/15-16/2000		11/15-16/2000		11/15-16/2000		11/15-16/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L	
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	1	U	1	U	1	U	1	U	1	U
m-&or p-Xylene	1	U	1	U	1	U	1	U	1	U
o-Xylene	1	U	1	U	1	U	1	U	1	U
Styrene	1	U	1	U	1	U	1	U	1	U
Bromoform	1	U	1	U	1	U	1	U	1	U
Isopropylbenzene	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichloropropane	1	U	1	U	1	U	1	U	1	U
Bromobenzene	1	U	1	U	1	U	1	U	1	U
n-Propylbenzene	1	U	1	U	1	U	1	U	1	U
2-Chlorotoluene	1	U	1	U	1	U	1	U	1	U
4-Chlorotoluene	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	1	U	1	U	1	U	1	U	1	U
tert-Butylbenzene	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	1	U	1	U	1	U	1	U	1	U
sec-Butylbenzene	1	U	1	U	1	U	1	U	1	U
p-Isopropyltoluene	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U
n-Butylbenzene	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U
Hexachlorobutadiene	1	U	1	U	1	U	1	U	1	U
Naphthalene	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ
1,2,3-Trichlorobenzene	1	U	1	U	1	U	1	U	1	U
SEMIVOLATILE ORGANICS										
bis(2-Chloroethyl)ether	5	U	5	U	5	U	5	U	5	U
Phenol	5	U	5	U	5	U	5	U	5	U
2-Chlorophenol	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ
1,3-Dichlorobenzene	5	U	5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	5	U	5	U	5	U	5	U	5	U
1,2-Dichlorobenzene	5	U	5	U	5	U	5	U	5	U
Benzyl alcohol	5	U	5	U	5	U	5	U	5	U
2-Methylphenol	5	U	5	U	5	U	5	U	5	U
4-Methylphenol	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroisopropyl)ether	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	5	U	5	U	5	U	5	U	5	U
N-Nitroso-di-n-propylamine	5	U	5	U	5	U	5	U	5	U
Nitrobenzene	5	U	5	U	5	U	5	U	5	U
Isophorone	5	U	5	U	5	U	5	U	5	U
2-Nitrophenol	5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	5	U	5	U	5	U	5	U	5	U
Benzoic acid	24	UJ	25	UJ	24	UJ	24	UJ	24	UJ
bis(2-Chloroethoxy)methane	5	U	5	U	5	U	5	U	5	U
2,4-Dichlorophenol	5	U	5	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	5	U	5	U	5	U	5	U	5	U
Naphthalene	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ
4-Chloroaniline	5	U	5	U	5	U	5	U	5	U
Hexachlorobutadiene	5	U	5	U	5	U	5	U	5	U
4-Chloro-3-methylphenol	5	U	5	U	5	U	5	U	5	U
2-Methylnaphthalene	5	U	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	24	UJ	25	UJ	24	UJ	24	UJ	24	UJ
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U	5	U
2,4,5-Trichlorophenol	5	U	5	U	5	U	5	U	5	U
2-Chloronaphthalene	5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	5	U	5	U	5	U	5	U	5	U
Acenaphthylene	5	U	5	U	5	U	5	U	5	U
Dimethylphthalate	5	U	5	U	5	U	5	U	5	U
2,6-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U
Acenaphthene	5	U	5	U	5	U	5	U	5	U
3-Nitroaniline	24	UJ	25	UJ	24	UJ	24	UJ	24	UJ
2,4-Dinitrophenol	24	UJ	25	UJ	24	UJ	24	UJ	24	UJ
Dibenzofuran	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U
4-Nitrophenol	24	UJ	25	UJ	24	UJ	24	UJ	24	UJ
Fluorene	5	U	5	U	5	U	5	U	5	U
4-Chlorophenyl-phenylether	5	U	5	U	5	U	5	U	5	U

U: Not detected
M: Estimated above method detection limit and below reporting limit
J: Estimated due to QC limit exceedance.
B: Analyte also present in blank
R: Rejected. Value is unusable
NS: Not Sampled

Residential and Monitoring Well Ground Water Analytical Results - November 2000
Himco Dump Superfund Site
Elkhart, Indiana

Sample location	5427.1 Northwood		54305 Westwood		54305 Westwood Dup		WT116A		WT101A	
Sample number	S01		S02		D02		S03		S04	
Date sampled	11/15-16/2000		11/15-16/2000		11/15-16/2000		11/15-16/2000		11/15-16/2000	
Units	µg/L		µg/L		µg/L		µg/L		µg/L	
Diethylphthalate	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	24	U	25	U	24	U	24	U	24	U
4,6-Dinitro-2-methylphenol	24	U	25	U	24	U	24	U	24	U
N-Nitrosodiphenylamine	5	U	5	U	5	U	5	U	5	U
4-Bromophenyl-phenylether	5	U	5	U	5	U	5	U	5	U
Hexachlorobenzene	5	U	5	U	5	U	5	U	5	U
Pentachlorophenol	24	UJ	25	UJ	24	UJ	24	UJ	24	UJ
Phenanthrene	5	U	5	U	5	U	5	U	5	U
Anthracene	5	U	5	U	5	U	5	U	5	U
Carbazole	5	U	5	U	5	U	5	U	5	U
Di-n-butylphthalate	4	BM	5	U	14	B	4	BM	4	BM
Fluoranthene	5	U	5	U	5	U	5	U	5	U
Pyrene	5	U	5	U	5	U	5	U	5	U
Butylbenzylphthalate	5	U	5	U	5	U	5	U	5	U
3,3'-Dichlorobenzidine	24	UJ	25	UJ	24	UJ	24	UJ	24	UJ
Benzo(a)anthracene	5	U	5	U	5	U	5	U	5	U
Chrysene	5	U	5	U	5	U	5	U	5	U
bis(2-Ethylhexyl)phthalate	5	U	3	M	3	BM	5	U	5	U
Di-n-octylphthalate	5	U	5	U	5	U	5	U	5	U
Benzo(b)fluoranthene	5	U	5	U	5	U	5	U	5	U
Benzo(k)fluoranthene	5	U	5	U	5	U	5	U	5	U
Benzo(a)pyrene	5	U	5	U	5	U	5	U	5	U
Indeno(1,2,3-cd)pyrene	5	U	5	U	5	U	5	U	5	U
Dibenz(a,h)anthracene	5	U	5	U	5	U	5	U	5	U
Benzo(g,h,i)perylene	5	U	5	U	5	U	5	U	5	U
2-Hydroxybenzothiazole	10	UJ	10	UJ	10	UJ	23	J	30	UJ
PESTICIDES/PCBs										
alpha-BHC	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ
Lindane	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ
beta-BHC	0.0200	UJ	0.0200	U	0.0200	U	0.0200	UJ	0.0200	UJ
Heptachlor	0.0200	UJ	0.0200	U	0.0200	U	0.0200	UJ	0.0200	UJ
delta-BHC	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ
Aldrin	0.0200	UJ	0.0200	U	0.0200	U	0.0200	UJ	0.0200	UJ
Hept Epoxide	0.0200	UJ	0.0200	U	0.0200	U	0.0200	UJ	0.0200	UJ
gamma-chlordane	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ
alpha-Chlordane	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ
Endosulfan I	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ	0.0200	UJ
p,p'-DDE	0.0500	UJ	0.0500	UJ	0.0500	UJ	0.0500	UJ	0.0500	UJ
Dieldrin	0.0500	UJ	0.0500	UJ	0.0500	UJ	0.0500	UJ	0.0500	UJ
Endrin	0.0500	UJ	0.0500	UJ	0.0500	UJ	0.0500	UJ	0.0500	UJ
p,p'-DDD	0.0500	UJ	0.0500	UJ	0.0500	UJ	0.0500	UJ	0.0500	UJ
Endosulfan II	0.0500	UJ	0.0500	UJ	0.0500	UJ	0.0500	UJ	0.0500	UJ
p,p'-DDT	0.0500	UJ	0.0500	U	0.0500	U	0.0500	UJ	0.0500	UJ
Endrin Aldehyde	0.0500	UJ	0.0500	U	0.0500	U	0.0500	UJ	0.0500	UJ
Endosulfan Sulfate	0.0500	UJ	0.0500	U	0.0500	U	0.0500	UJ	0.0500	UJ
Methoxychlor	0.2500	UJ	0.2500	U	0.2500	U	0.2500	UJ	0.2500	UJ
Endrin ketone	0.0500	UJ	0.0500	U	0.0500	U	0.0500	UJ	0.0500	UJ
Arochor 1242	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U
Arochor 1016	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U
Arochor 1232	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U
Arochor 1248	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U
Arochor 1254	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U
Arochor 1260	0.1000	U	0.1000	U	0.1000	U	0.1000	U	0.1000	U

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J: Estimated due to QC limit exceedance
B: Analyte also present in blank
R: Rejected. Value is unusable
NS: Not Sampled

Residential and Monitoring Well Ground Water Analytical Results - November 2000
Emerging Contaminants
Himco Dump Superfund site
Elkhart, Indiana

Lab ID	3210030		3210031		3220190	
Sample Location	*54305 Westwood*		*54305 Westwood*		*WT116A*	
Date	11/15/2000		11/15/2000		11/16/2000	
Units	mg/L		mg/L		mg/L	
	Result	Qual	Result	Qual	Result	Qual
tetrachloroethylene	0.030	U	0.030	U	0.030	U
phenol	0.450	U	0.314	E	0.450	U
1,4-dichlorobenzene	0.040	U	0.040	U	0.040	U
para-cresol	0.060	U	0.060	U	0.060	U
acetophenone	0.220	U	0.220	U	0.220	U
naphthalene	0.025	U	0.025	U	0.025	U
phthalic anhydride	0.350	U	0.350	U	0.350	U
2,6-di-t-butylphenol	0.150	U	0.150	U	0.150	U
2,6-di-t-p-benzoquinone	0.500	U	0.500	U	0.500	U
BHA	0.120	U	0.120	U	0.120	U
BHT	0.110	U	0.110	U	0.110	U
5-methyl-1H-benzotriazle	0.150	U	0.150	U	0.150	U
N,N-diethyltoluamide	0.080	U	0.080	U	0.080	U
diethylphthalate	0.350	U	0.350	U	0.350	U
para-nonylphenol-total	0.700	U	0.700	U	0.700	U
cotinine	0.080	U	0.080	U	0.080	U
tri(2-chloroethyl)phosphate	0.649		0.741		0.040	U
diazinon	0.030	U	0.030	U	0.030	U
lindane	0.050	U	0.050	U	0.050	U
phenanthrene	0.050	U	0.050	U	0.050	U
anthracene	0.060	U	0.060	U	0.060	U
caffeine	0.080	U	0.080	U	0.080	U
OPEO1	0.120	U	0.120	U	0.120	U
methyl parathion	0.060	U	0.060	U	0.060	U
carbaryl	0.060	U	0.060	U	0.060	U
NPEO1-total	1.000	U	1.000	U	1.000	U
chlorpyrifos	0.020	U	0.020	U	0.020	U
fluoranthene	0.030	U	0.030	U	0.030	U
triclosan	0.040	E	0.041	E	0.051	
OPEO2	0.200	U	0.200	U	0.200	U
cis-chlordane	0.040	U	0.040	U	0.040	U
pyrene	0.030	U	0.030	U	0.030	U
bisphenol A	0.090	U	0.090	U	0.090	U
dieldrin	0.080	U	0.080	U	0.080	U
NPEO2-total	1.100	U	1.100	U	1.100	U
tri(dichlorisopropyl)phosphate	0.100	U	0.100	U	0.100	U
bis(2-ethyl hexyl) adipate	2.000	U	2.000	U	2.000	U
ethanol,2-butoxy-,phosphate	0.200	U	0.200	U	0.200	U
triphenyl phosphate	0.100	U	0.100	U	0.100	U
codeine	0.200	U	0.200	U	0.200	U
bis(2-ethylhexyl) phthalate	3.620	E	2.500	U	2.500	U
17B-estradiol	0.500	U	0.500	U	0.500	U
benzo(a)pyrene	0.070	U	0.070	U	0.070	U
3B-coprostanol	0.600	U	0.600	U	0.600	U
cholesterol	1.500	U	1.500	U	1.500	U
stigmastanol	2.000	U	2.000	U	2.000	U

U - Analyte not detected
E- Value is estimated due
to v riable compound performance