1. GIVEN A COPY OF TABLES 4.1, 4.2, 4.3 TO HEALTH AND SAFETY?
2. FINISHED YOUR DRINKING WATER MEMOS?

EPA Region 5 Records Ctr.
282874 936621

AUDITOR REVIEW SHEET

Page ____ of ____

CERCLIS Site Name: North Manchester Foundry LF
City: North Manchester State: IN
U.S. EPA I.D.: IND981952831 SSID: —
TDD: F05-8901-025 PAN: FIN0681SB

Meeting Date: 4/9/90 Time Slot: (am) midday pm ~~[illegible]~~ 10:30 Fit Con

Author: Lundberg
Supervisor: Kolb

Audit Team Members
Chairperson: Maley
Chemist: Kennedy/Zak
Geologist: J. Cohn
Other:

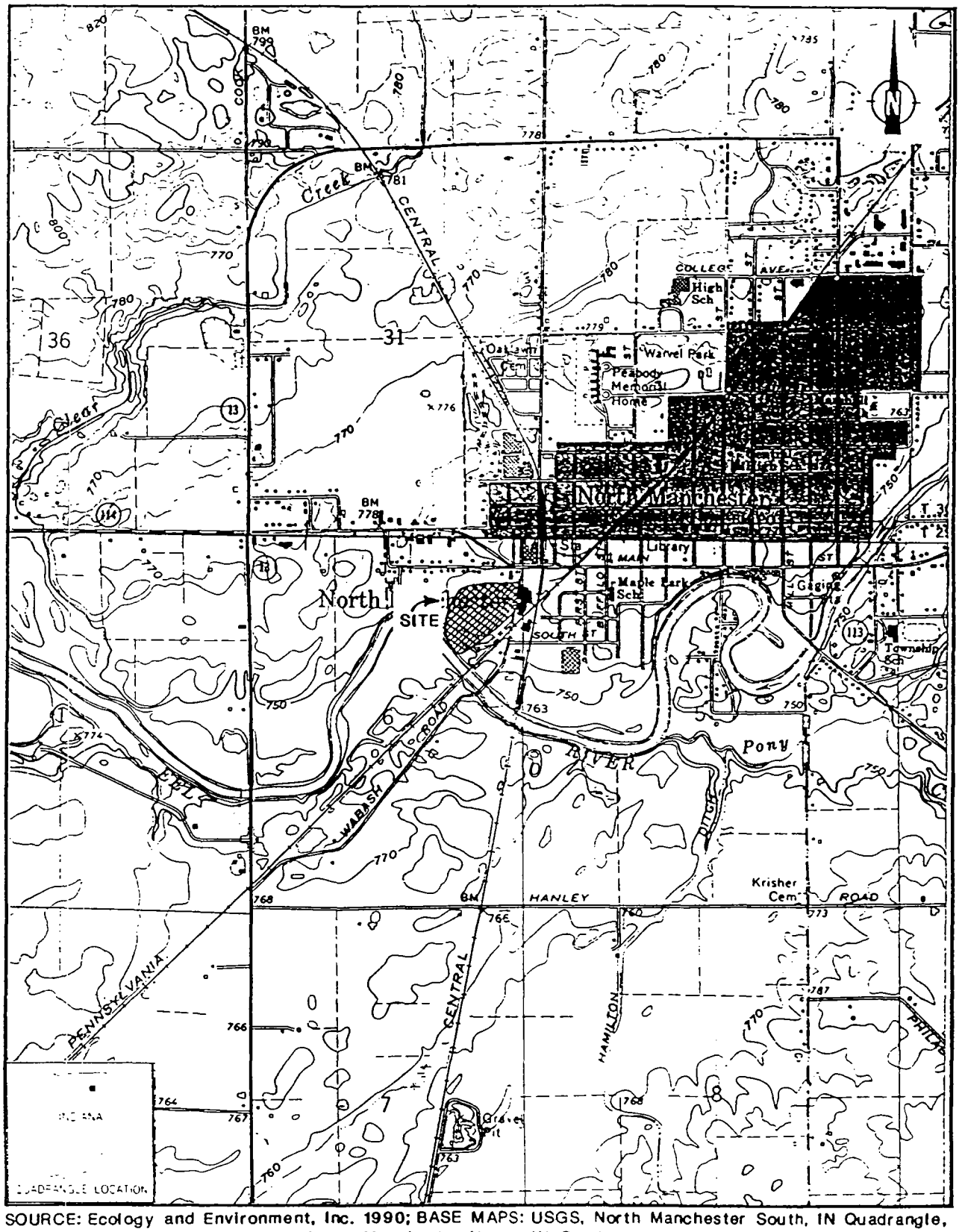
Audit Review

Page/Paragragh/Line (Part/Section/Number)	Comments:
2-3 line 2	[illegible]
2-3 line 13-14	[illegible]
2-4 13	what type of [illegible]
14	room color flow?
2-6 00	[illegible]
Table 3-1	incomplete address
[illegible]	[illegible]
Fig.	
5-2	No No No! what [illegible]
5-6 line 15	

Mel Kennedy
Auditor

Date

QA005(3/29/89)

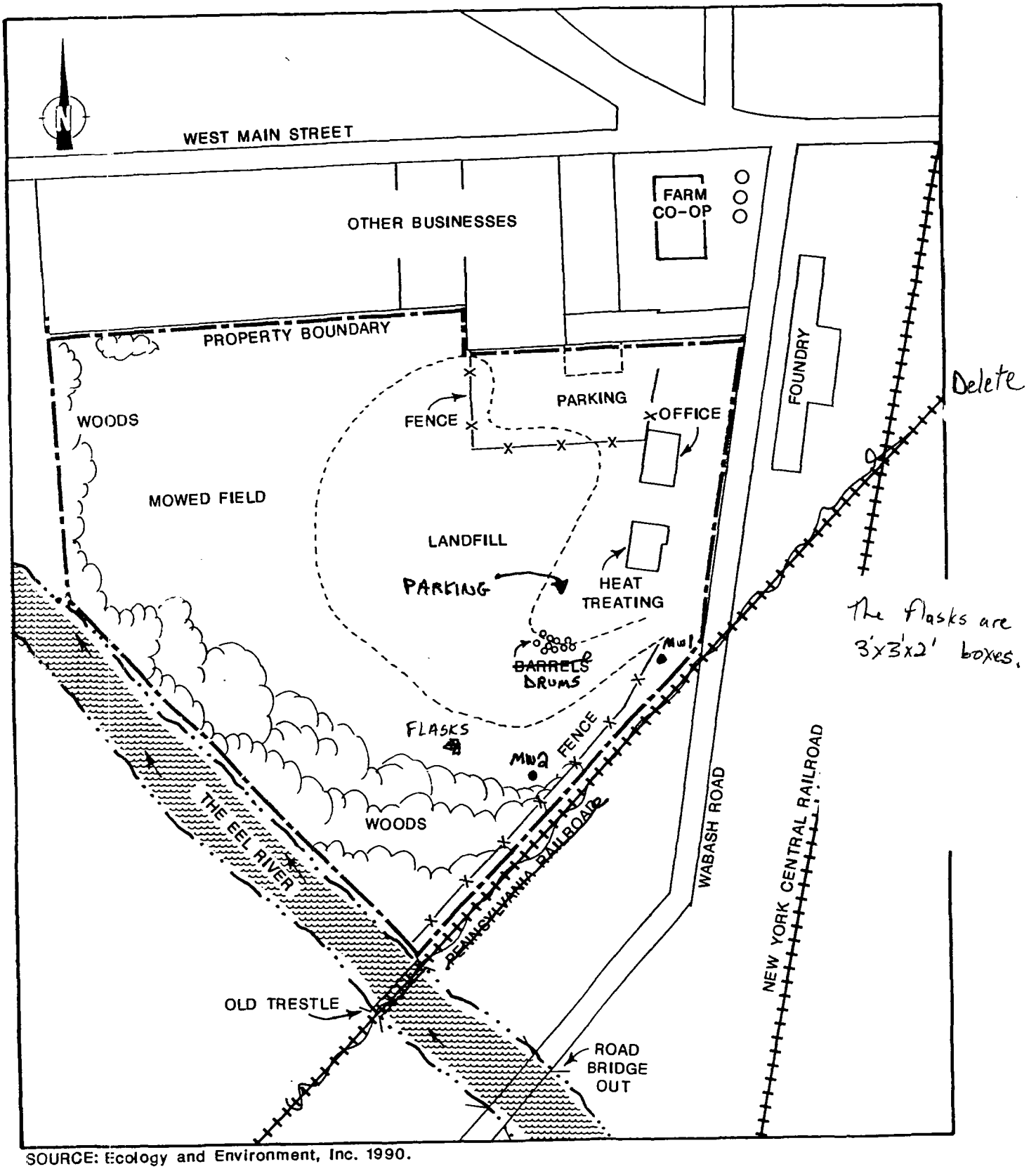


SOURCE: Ecology and Environment, Inc. 1990; BASE MAPS: USGS, North Manchester South, IN Quadrangle, 7.5 Minute Series, 1961; North Manchester North, IN Quadrangle, 7.5 Minute Series, 1962.

SCALE

0 ½ 1 MILE

FIGURE 2-1 SITE LOCATION



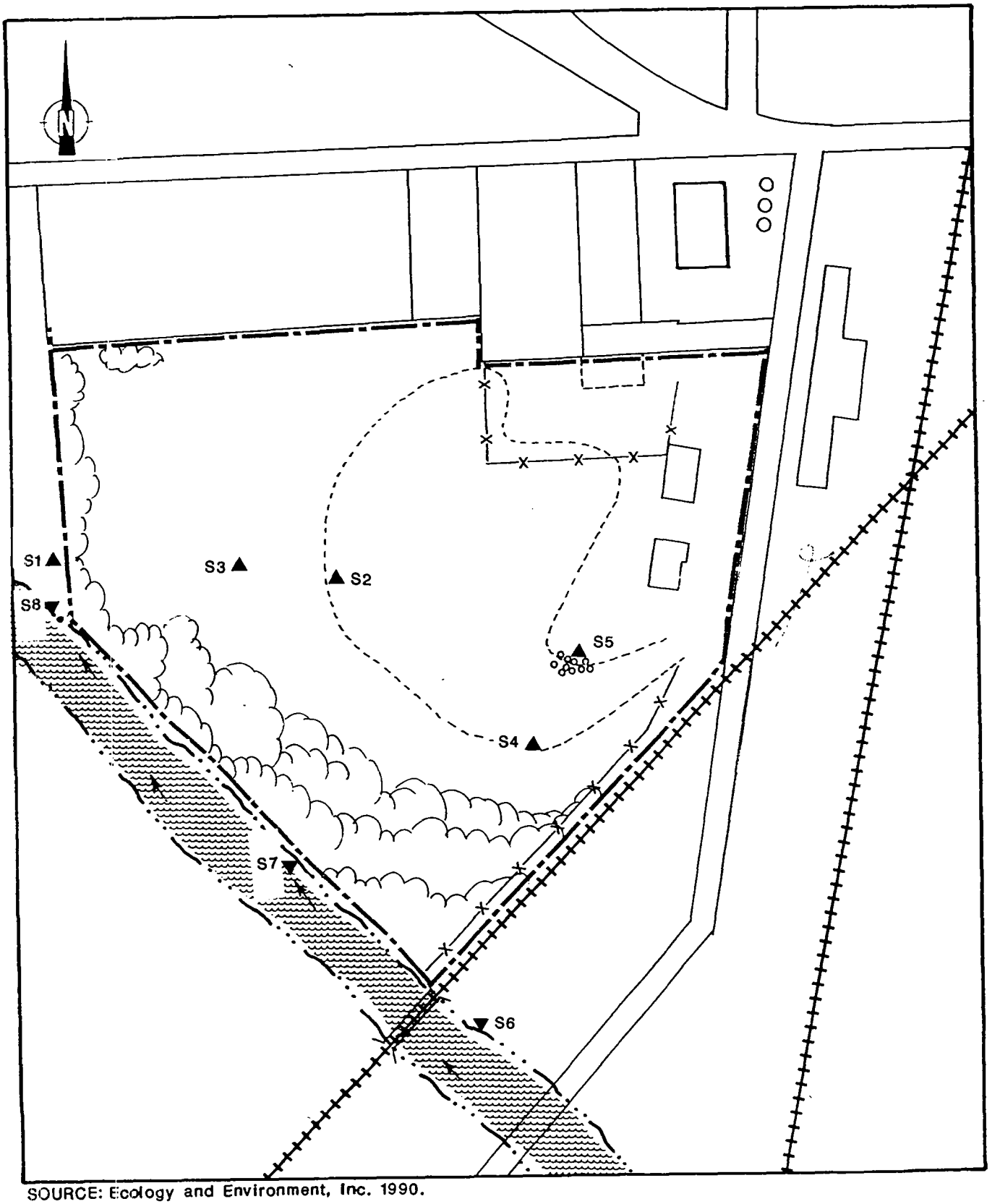
SOURCE: Ecology and Environment, Inc. 1990.

SCALE

0 100 200 300 400 500 FEET

• Monitoring well

FIGURE 3-1 SITE FEATURES



SOURCE: Ecology and Environment, Inc. 1990.

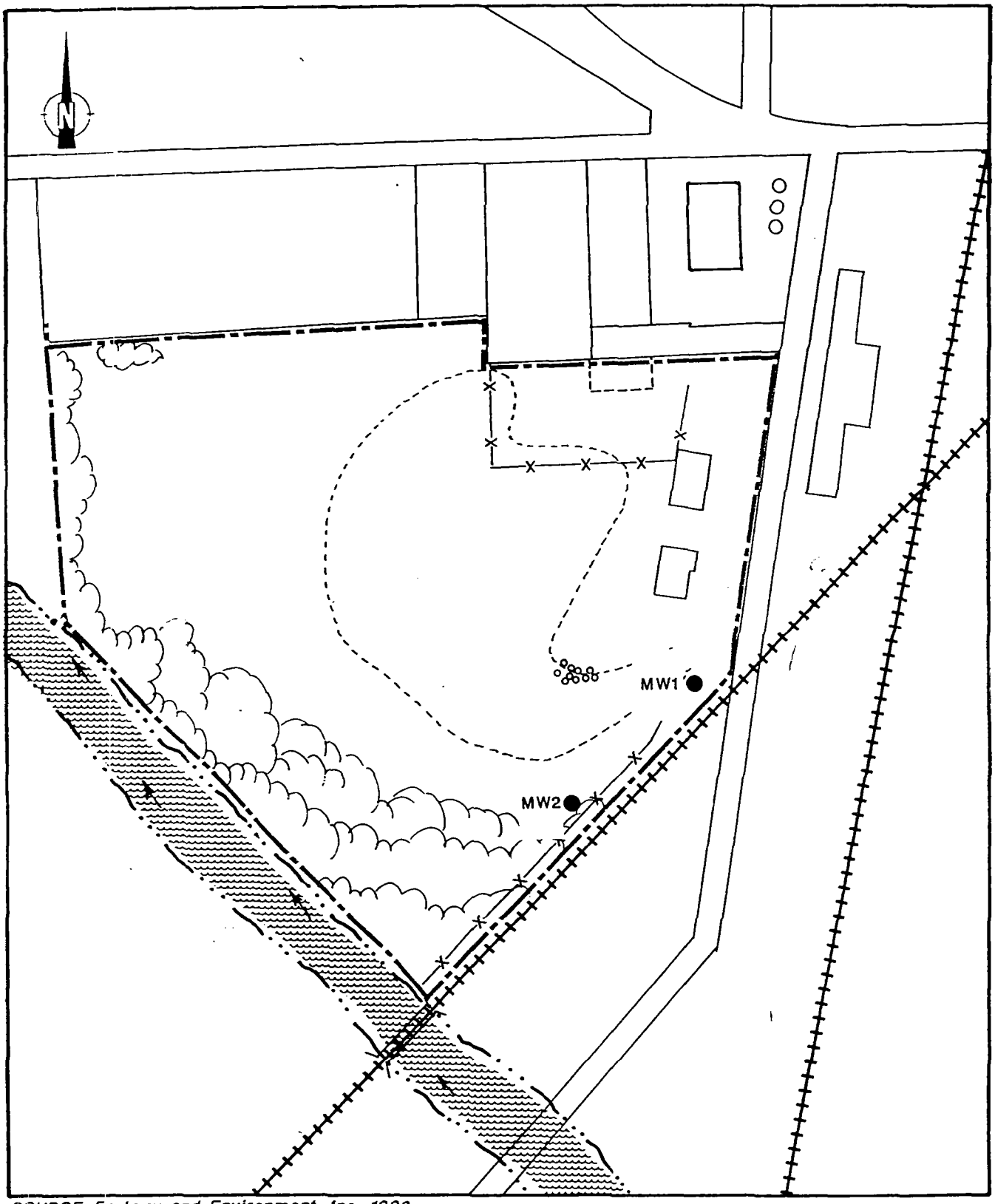
SCALE

0 100 200 300 400 500 FEET

LEGEND

▲ SOIL ▼ SEDIMENT

FIGURE 3-2 SOIL/SEDIMENT SAMPLING LOCATIONS



SOURCE: Ecology and Environment, Inc. 1990.

SCALE

0 100 200 300 400 500 FEET

FIGURE 3-3 MONITORING WELL SAMPLING LOCATIONS

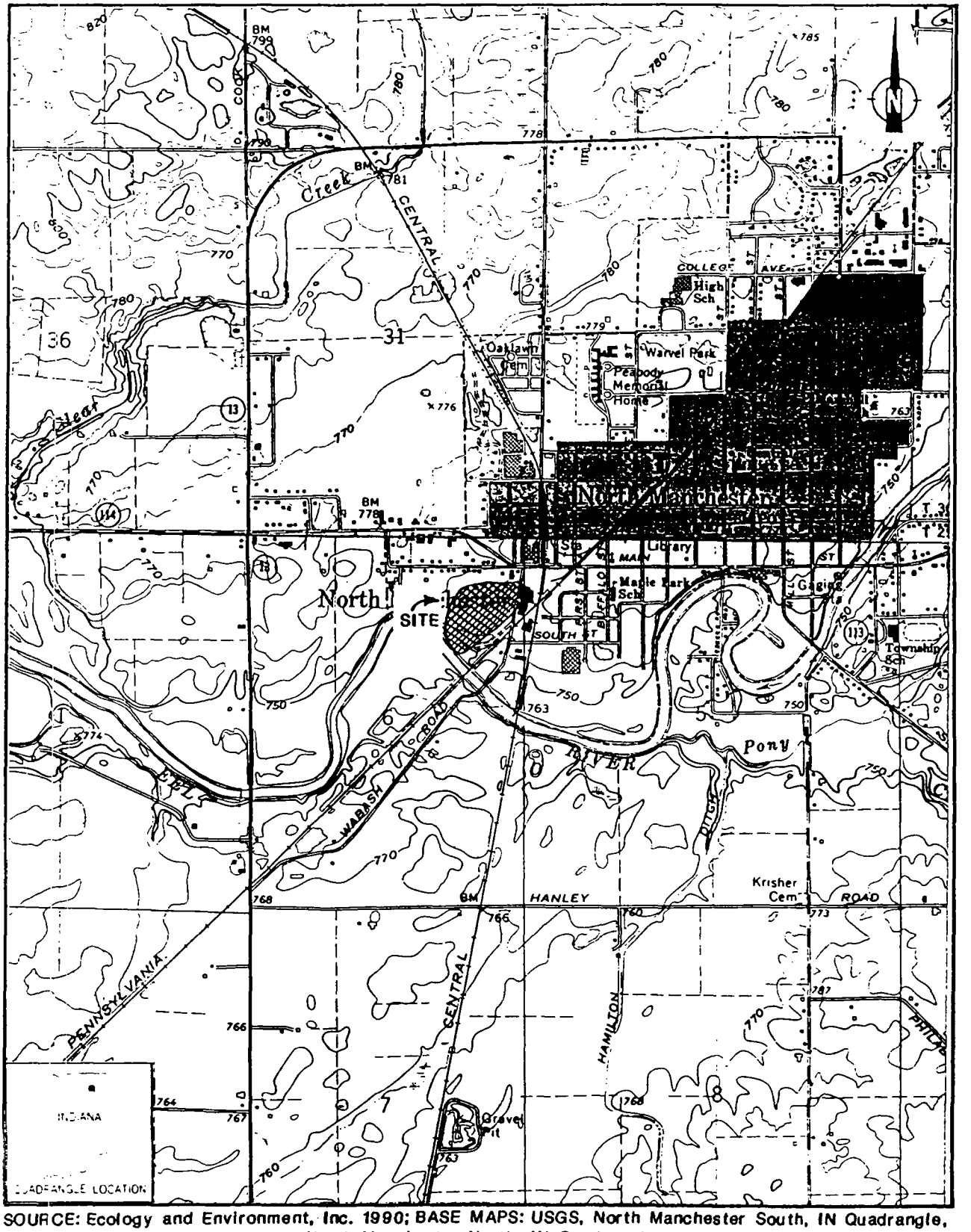
NON RESPONSIVE

SOURCE: Ecology and Environment, Inc. 1990; BASE MAPS: USGS, North Manchester South, IN Quadrangle, 7.5 Minute Series, 1961; North Manchester North, IN Quadrangle, 7.5 Minute Series, 1962.

SCALE

0 ½ 1 MILE

FIGURE 3-4 RESIDENTIAL WELL SAMPLING LOCATIONS

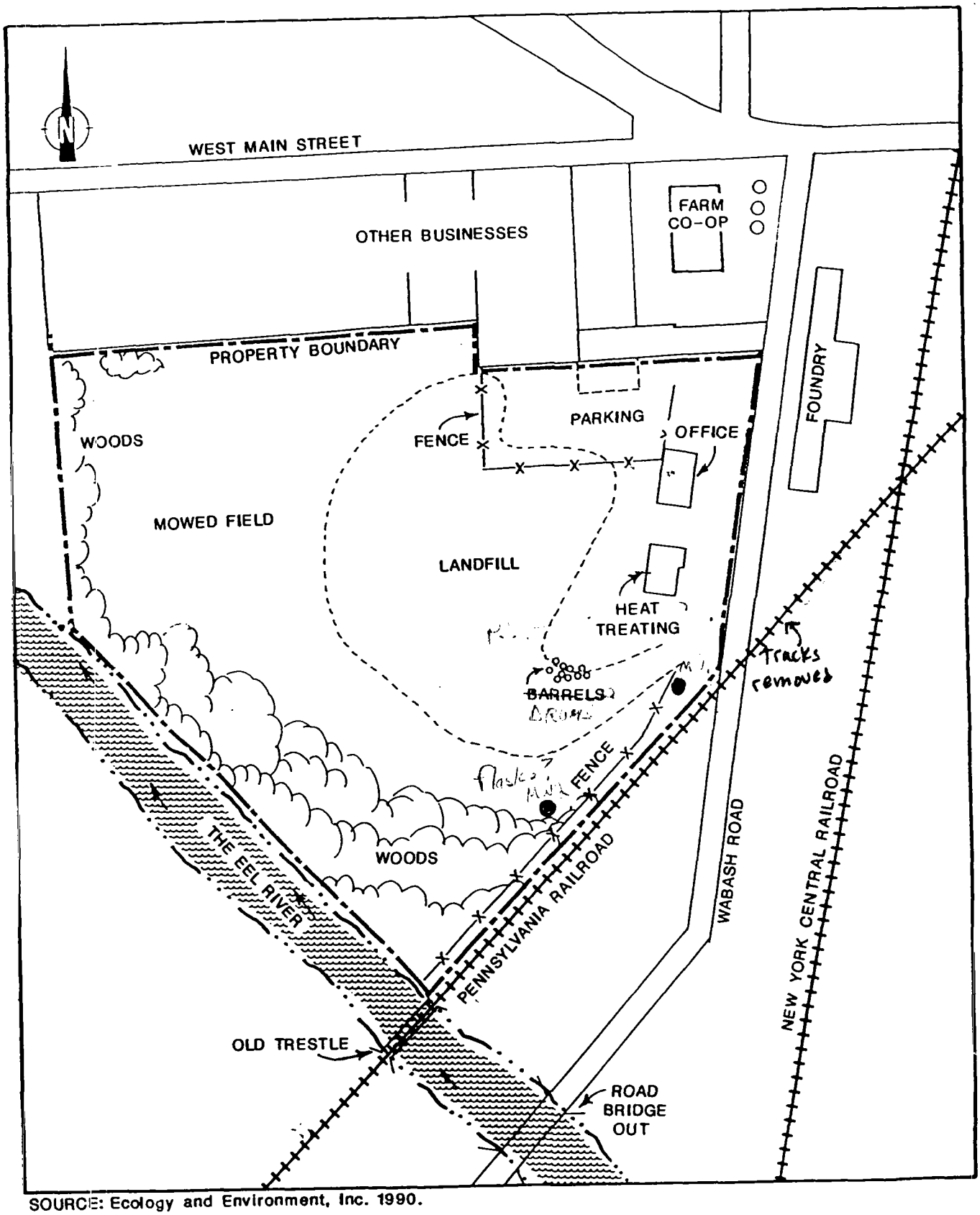


SOURCE: Ecology and Environment, Inc. 1990; BASE MAPS: USGS, North Manchester South, IN Quadrangle, 7.5 Minute Series, 1961; North Manchester North, IN Quadrangle, 7.5 Minute Series, 1962.

SCALE

0 ½ 1 MILE

FIGURE 2-1 SITE LOCATION



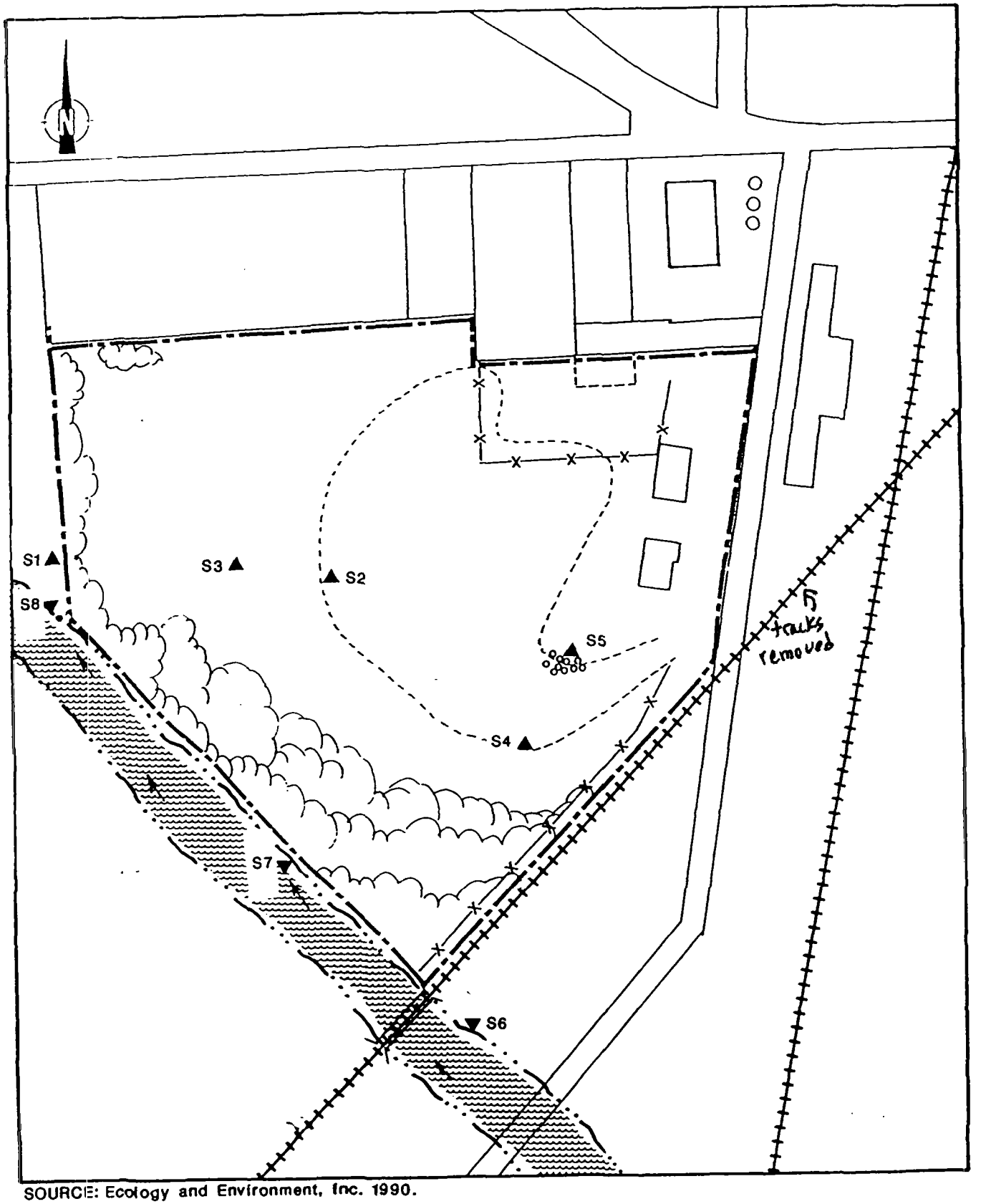
SOURCE: Ecology and Environment, Inc. 1990.

SCALE

monitoring wells

0 100 200 300 400 500 FEET

FIGURE 3-1 SITE FEATURES



SOURCE: Ecology and Environment, Inc. 1990.

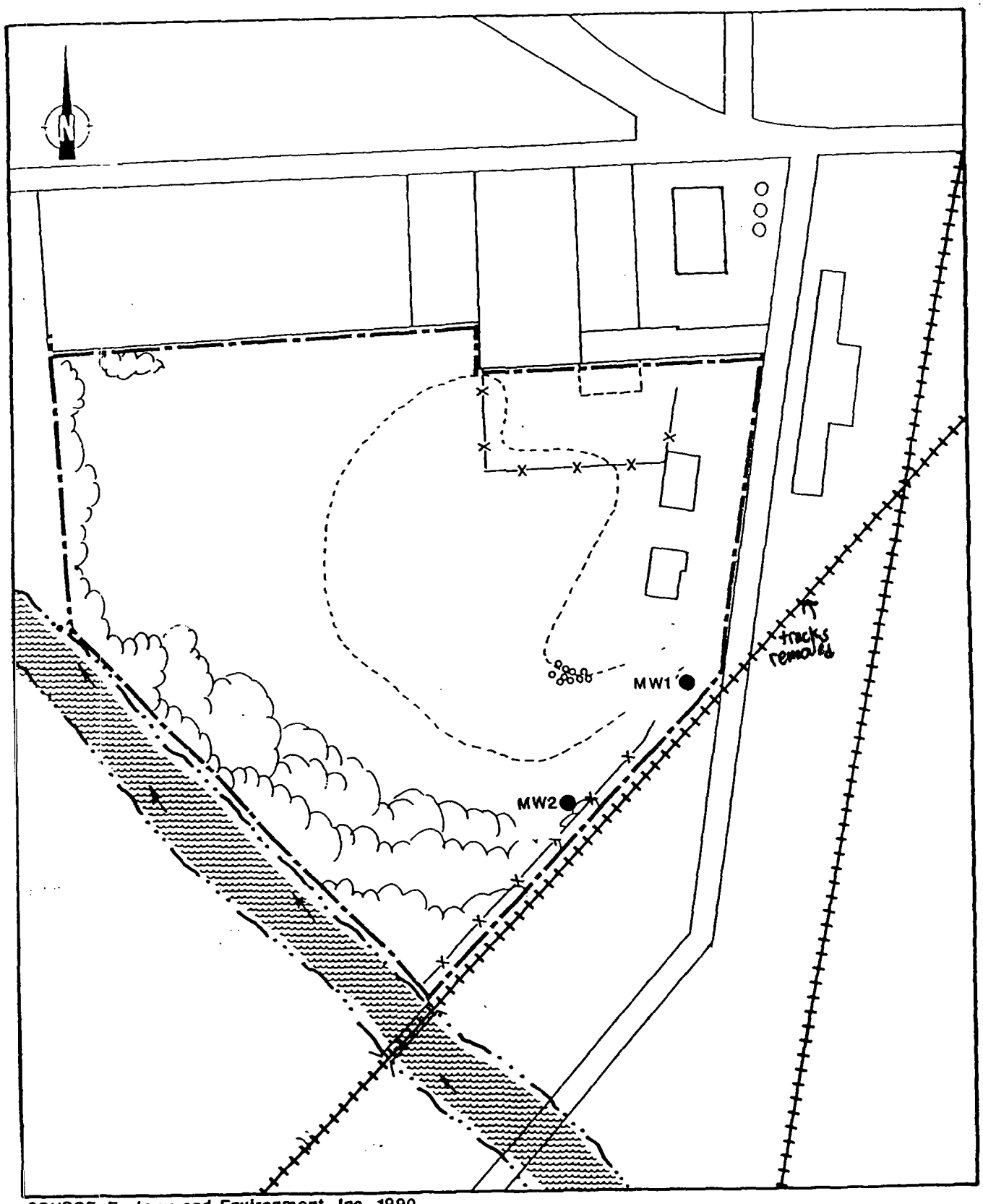
SCALE

0 100 200 300 400 500 FEET

LEGEND

▲ SOIL ▼ SEDIMENT

FIGURE 3-2 SOIL/SEDIMENT SAMPLING LOCATIONS



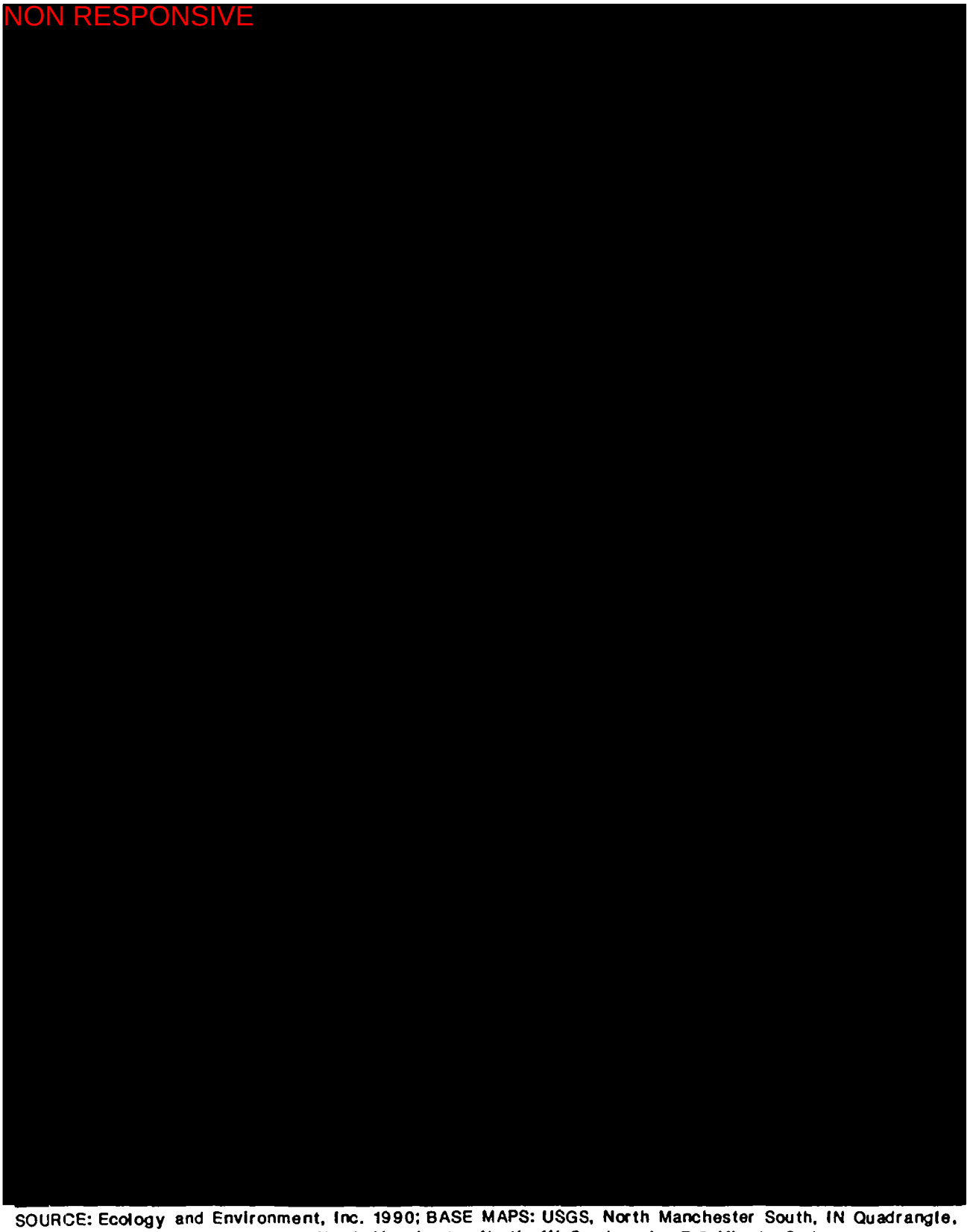
SOURCE: Ecology and Environment, Inc. 1990.

SCALE

0 100 200 300 400 500 FEET

FIGURE 3-3 MONITORING WELL SAMPLING LOCATIONS

NON RESPONSIVE

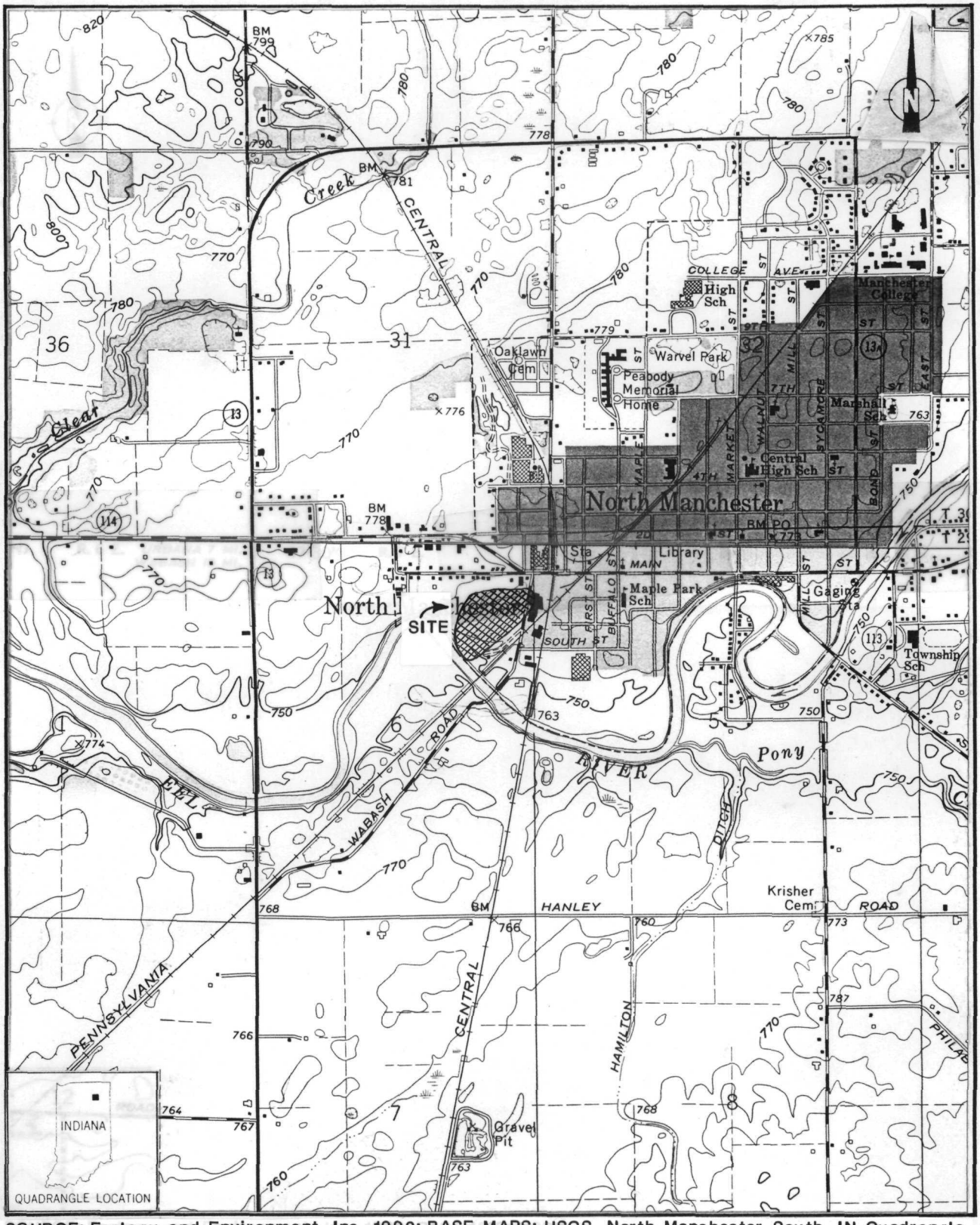


SOURCE: Ecology and Environment, Inc. 1990; BASE MAPS: USGS, North Manchester South, IN Quadrangle, 7.5 Minute Series, 1961; North Manchester North, IN Quadrangle, 7.5 Minute Series, 1962.

SCALE

0 ½ 1 MILE

FIGURE 3-4 RESIDENTIAL WELL SAMPLING LOCATIONS

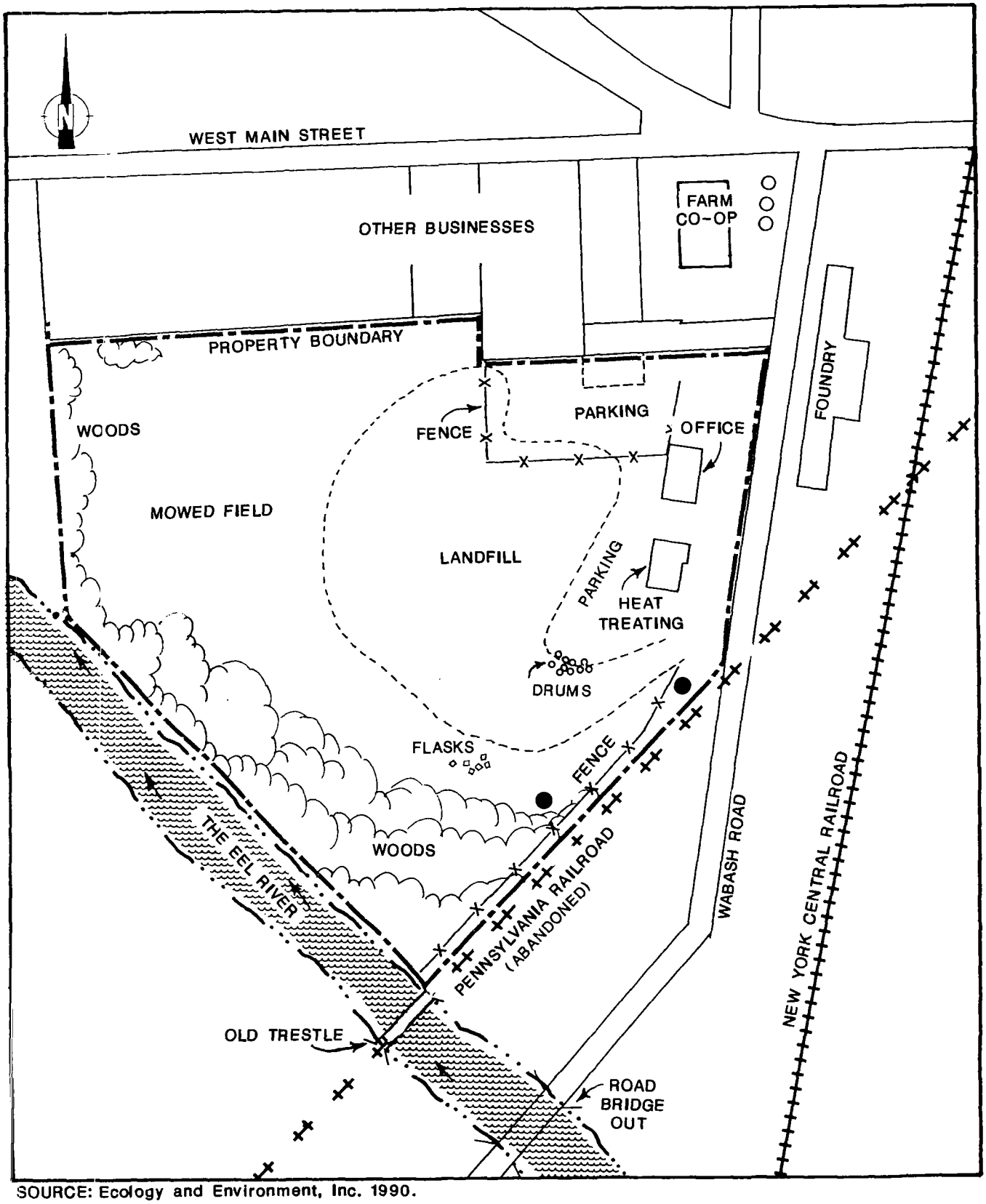


SOURCE: Ecology and Environment, Inc. 1990; BASE MAPS: USGS, North Manchester South, IN Quadrangle, 7.5 Minute Series, 1961; North Manchester North, IN Quadrangle, 7.5 Minute Series, 1962.

SCALE

0 ½ 1 MILE

FIGURE 2-1 SITE LOCATION



SOURCE: Ecology and Environment, Inc. 1990.

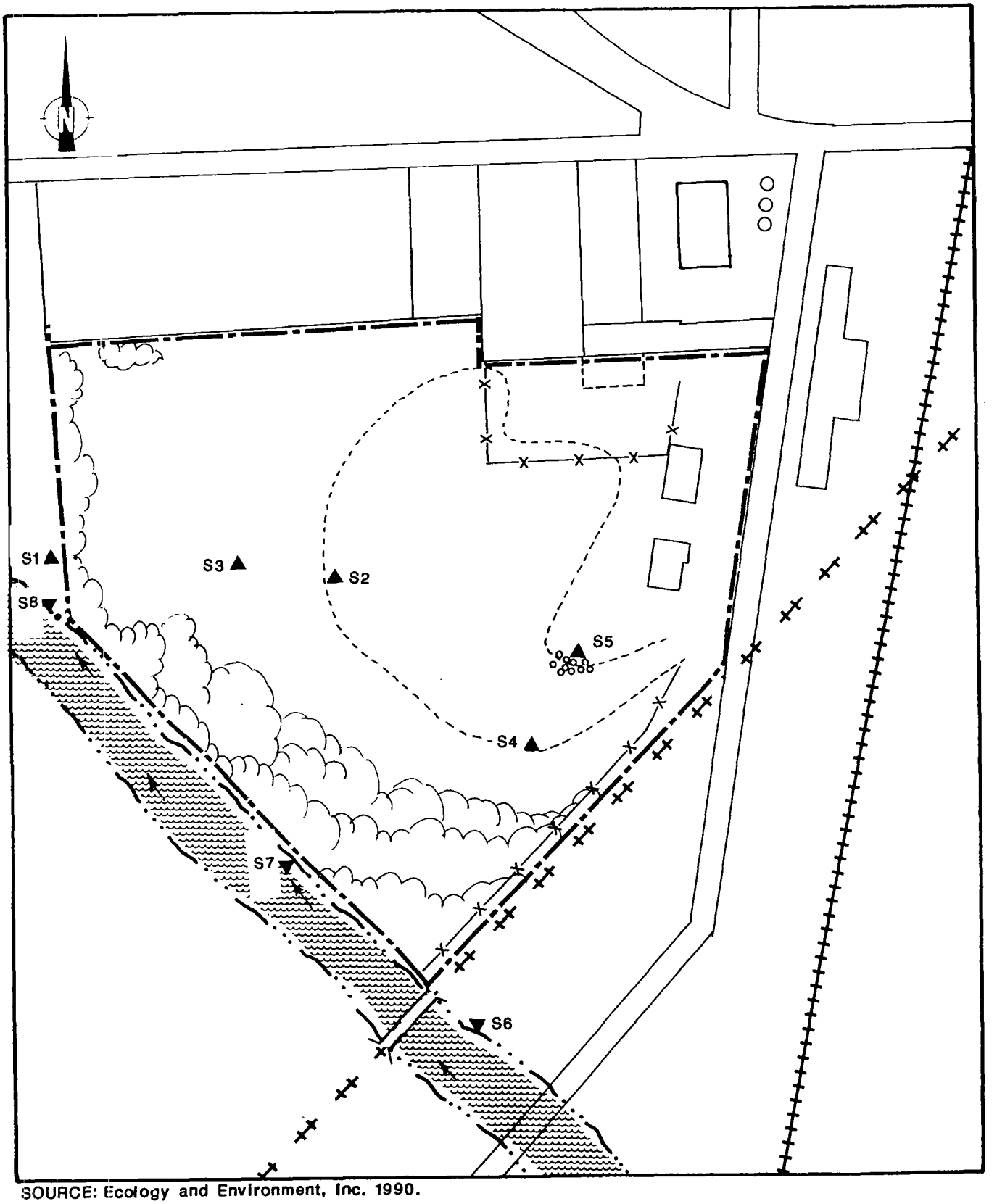
SCALE

0 100 200 300 400 500 FEET

LEGEND

● MONITORING WELL

FIGURE 3-1 SITE FEATURES



SOURCE: Ecology and Environment, Inc. 1990.

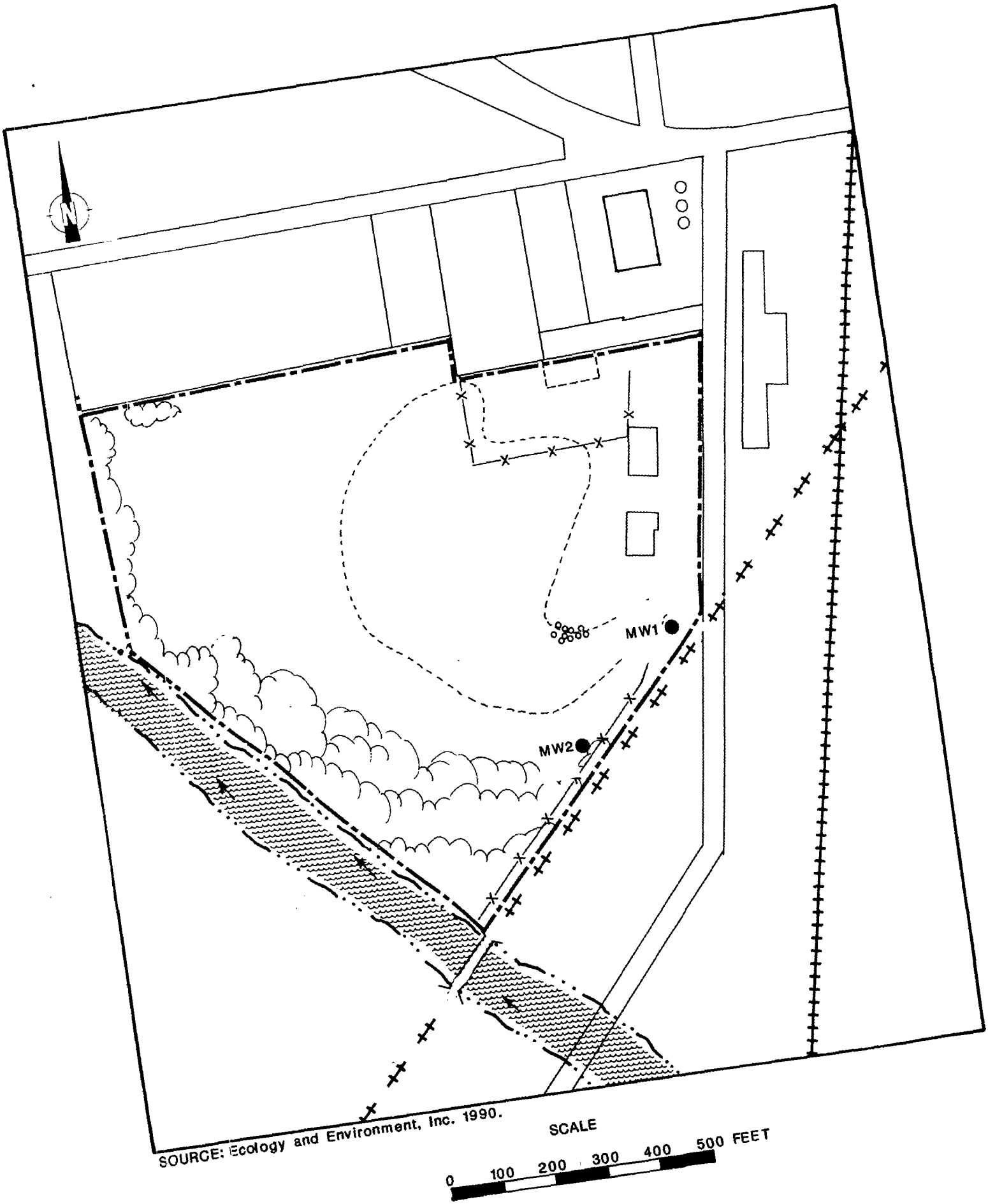
SCALE

0 100 200 300 400 500 FEET

LEGEND

▲ SOIL ▼ SEDIMENT

FIGURE 3-2 SOIL/SEDIMENT SAMPLING LOCATIONS



SOURCE: Ecology and Environment, Inc. 1990.

FIGURE 3-3 MONITORING WELL SAMPLING LOCATIONS

NON RESPONSIVE

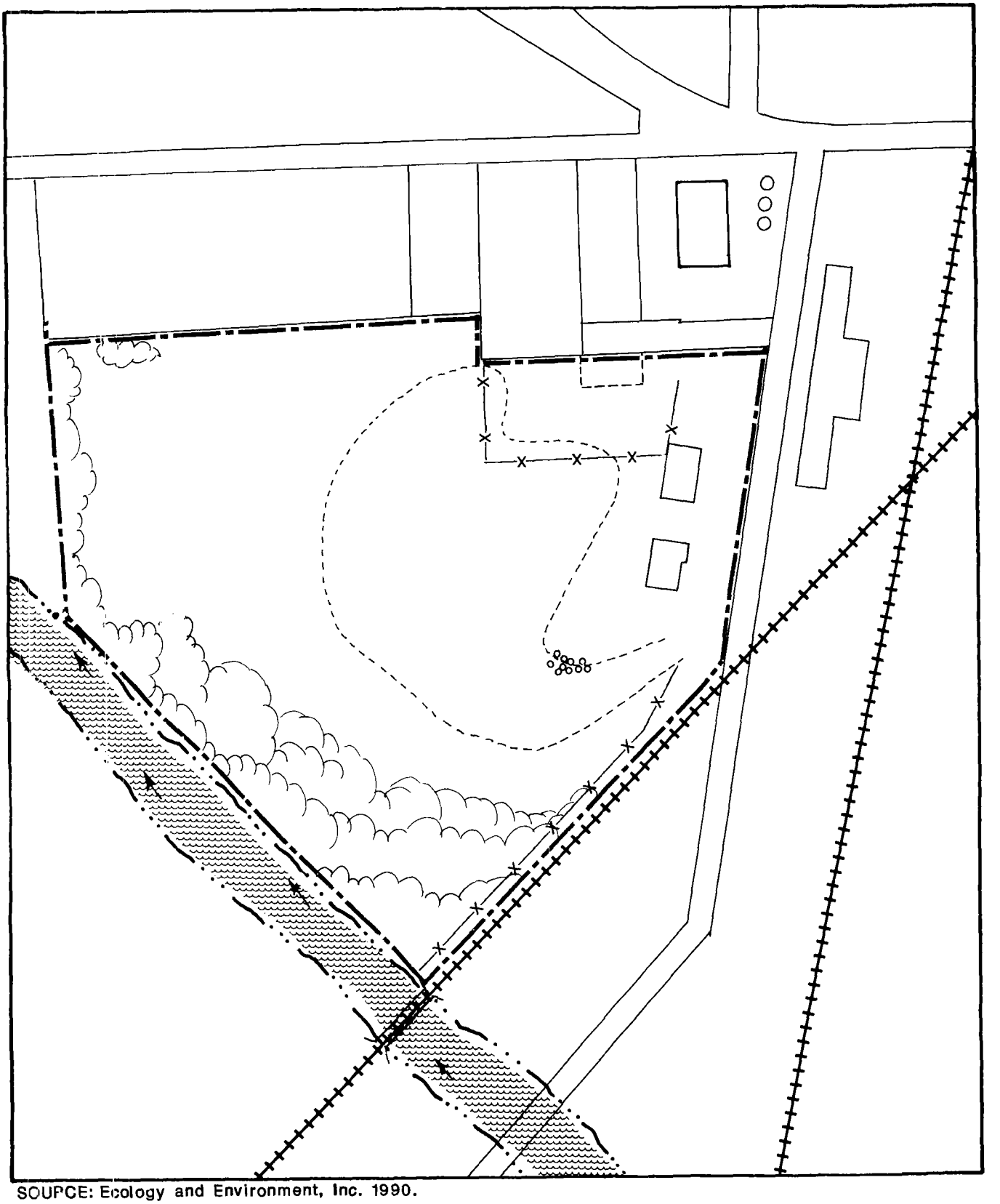
[redacted]

SOURCE: Ecology and Environment, Inc. 1990; BASE MAPS: USGS, North Manchester South, IN Quadrangle, 7.5 Minute Series, 1961; North Manchester North, IN Quadrangle, 7.5 Minute Series, 1962.

SCALE

0 ½ 1 MILE

FIGURE 3-4 RESIDENTIAL WELL SAMPLING LOCATIONS



SOURCE: Ecology and Environment, Inc. 1990.

SCALE

0 100 200 300 400 500 FEET

1. GIVEN A COPY OF TABLES 4.1, 4.2, 4.3 TO HEALTH AND SAFETY?
2. FINISHED YOUR DRINKING WATER MEMOS?

AUDITOR REVIEW SHEET

CERCLIS Site Name: North Manchester Foundry LF
City: North Manchester State: IN
U.S. EPA I.D.: IND981952831 SSID: —
TDD: F05-8901-025 PAN: FIN0681SB

Meeting Date: 4/9/90 Time Slot: am midday pm ~~9:00~~ 10:30

Author: Lundberg
Supervisor: Kolb

Audit Team Members
Chairperson: Maley
Chemist: Kennedy/Zak
Geologist: [redacted] Nordine
Other:

FIT

Audit Review

Page/Paragragh/Line (Part/Section/Number)	Comments:
Signature pg.	reviewed by needed, and title.
pg. 2-1 line 13	Need a call-out for figure 2-1.
pg. 25 line 15	write-out Cr, Ni.
pg 3-5 line 10	change "around" to approximately.
pg 6-1	number references in alphabetical order.
4-mi. radius map	Mark Township & Range(s) if needed.

Maley
Auditor

4/4/90
Date

QA005(3/29/89)

AUDITOR REVIEW SHEET

CERCLIS Site Name: N. Manchester Fdry LF
City: N. Manchester State: IN
U.S. EPA I.D.: IND 981 952 837 SSID: —
TDD: F05 8901-025 PAN: FIN0681 SRB

Audit Review Meeting Date: 4/9/90

Page/Paragragh/Line (Part/Section/Number)	Comments:
2070-13 Pt. 2	Feedstocks — you mention feedstocks in narrative — may want to refer to this instead of N/A.
Pt. 3 p. 2	total pop. affected needed
Pt. 5 pg. 1	community/non-comm. wells endangered?

Maley
Auditor

4/4/90
Date

Table 4
RESULTS OF CHEMICAL ANALYSIS OF
EPI COLLECTED [illegible] SAMPLES

Physical State*	Waste Characteristics*	Category***	SI Hemo	Sample Collection Information and Parameters / Compound Detected (values in µg/L or µg/kg)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	BLK	8	9	10	11	12
				Date	10-10-89	10-10-89	10-10-89	10-10-89	10-10-89	10-10-89	10-10-89					
				Time	1435	1445	1445	1500	[illegible]	1535	1415					
				Well Depth (feet)	unknown	unknown	unknown	unknown	unknown	unknown						
				CRL Log Number												
				CLP Organic Traffic Report Number	EGL08	EGL09	EGL10	EGL11	EGN12	EGN13	EGN14					
				CLP Inorganic Traffic Report Number	MEF254	MEF255	MEF256	MEF257	MEF2	MEF259	MEF260					
				Temperature (°C)	13°C	17°C	17°C	16°C	12°C	14°C	17°C					
				Specific Conductivity (µmhos/cm)	630	1000	1000	540	610	550	2					
				pH	7.27	7.32	7.32	7.68	7.13	7.53	6.42					
				Volatile Organics												
Gas	A,D,G,I	OCC	HH	chloromethane												
Gas	A,D,G,I	OCC	HH	bromomethane												
Gas	A,D,G,I	OCC	HH	vinyl chloride												
Gas	A,D,G,I	OCC	HH	chloroethane												
Liquid	A,D,H,I	SOL	HH,CLA	methylene chloride	0.6 J	3	3	0.9 J	4	—	0.9 J					
Liquid	E,H,I,A	SOL	K,CLA	acetone	—	—	—	—	—	—	6					
Liquid	A,H,I	SOL	SH	carbon disulfide												
Liquid	A,D,G,I	SOL	HH	1,1-dichloroethene												
Liquid	A,D,H,G	SOL	HH	1,1-dichloroethane												
Liquid	A,D,G	SOL	HH	1,2-dichloroethene (total)												
Liquid	A,D	SOL	HH	chloroform												
Liquid	A,D,G	SOL	HH	1,2-dichloroethane												
Liquid	A,E,G	SOL	K,CLA	2-butanone (MEK)												
Liquid	A,D	SOL	HH	1,1,1-trichloroethane												
Liquid	A,D	SOL	HH	carbon tetrachloride												
Liquid	A,D,G	SOL	HYD	vinyl acetate												
Liquid	A,D	OCC	HH	bromodichloromethane												
Liquid	A,D,G	SOL	HH	1,2-dichloropropane												
Liquid	A,D,G	SOL	HH	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	HH	trichloroethene												
Liquid	A,D	OCC	HH	dibromochloromethane												
Liquid	A,D	SOL	HH	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene												
Liquid	A,D,G	SOL	HH	trans-1,3-dichloropropene												
Liquid	A,D	SOL	HH,CLA	bromoform												
Liquid	A,E,G	SOL	K,CLA	4-methyl-2-pentanone												
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	HH	tetrachloroethene												
Liquid	A,G,E	SOL	A,CLA	toluene	—	—	—	—	0.9 J	—	—					
Liquid	A,D,E	SOL	HH	1,1,2,2-tetrachloroethane												
Liquid	A,D,G	SOL	HA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene												
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)												

Table 4 (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Homo	Sample Collection Information and Parameters	Sample Number: Rio 1	Rio 2	Rio 3	Rio 4	Rio 5	Rio 6	RIK	8	9	10	11	12
				Semivolatile Organics												
S, thick L	A,B,E	OCC	P	phenol												
Liquid	A,D,B	OCC	HH	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol												
Liquid	A,D,H	SOL	HA	1,3-dichlorobenzene												
Solid	A,D,H	OCC	HA	1,4-dichlorobenzene												
Liquid	A,D,H	SOL	A	benzyl alcohol												
Liquid	A,D,H	OCC	HA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol												
	A,D	OCC	HH	bis(2-chloroisopropyl)ether												
Liquid	A,B	OCC	P	4-methylphenol												
	A	OCC	N-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	PH	hexachloroethane												
Liquid	A,D	OCC	HA	nitrobenzene												
Liquid	A,D	OCC	H	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	HH	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	HA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene	—	—	—	—	—	—	2					
Solid	A,D	OCC	HH	4-chloroaniline												
Liquid	A,D,B	OCC	HH	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene												
Liquid	A,D,B	OCC	HH	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	HH	2-nitroaniline												
Liquid	A,D	OCC	PH,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	HA	2,6-dinitrotoluene												
Solid	A,D	OCC	HH	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene												
Solid	A,D,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran												
Solid	A,D	OCC	HA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PH	diethylphthalate												
	A,D	OCC	HH	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene												
Solid	A,D,E	OCC	HH	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	HH	n-nitrosodiphenylamine												
Liquid	A,D	OCC	HH	4-bromophenyl-phenylether												
Solid	A,D	OCC	HA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene												

Table 4 (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number							8	9	10	11	12
				Analyte Detected (values in mg/kg or µg/L)												
Solid	A,D	MES	csc/cwc	aluminum	59.2 B					67.1 B	34 B					
Solid	A,D	MES	MM	antimony												
Solid	A,D	MES	MM	arsenic	8.4					7.9						
Solid	A,D	MES	csc/cwc	barium	190			93.6	195	120						
Solid	A,D	MES	M	beryllium				6.7 JN	7.7 JN	7.7 JN						
Solid	A,D	MES	MM	cadmium												
Solid	D	MES	csc/cwc	calcium	103000	362 B	242 B	49700	104000	55800	25.1 B					
Solid	A,D	MES	MM	chromium												
Solid	A,D	MES	MM	cobalt												
Solid	A,D	MES	MM	copper	-	35.2 JAN	40.2 JAN	18.4 JAN		15.9 JAN	38.5 JAN					
Solid	A,D	MES	MM,csc;cwc	iron	2490	61.3 B	55.5 B	981	3920	951						
Solid	A,D	MES	MM	lead	-	2.1	-	-		-						
Solid	A,D	MES	csc/cwc	magnesium	25700	99.9 B	84.3 B	23100	25500	25200	11.7 B					
Solid	A,D	MES	MM	manganese	62.5	-	-	51.5	59.2	20.7						
Liquid	A,D	MES	MM	mercury												
Solid	A,D	MES	MM	nickel												
Solid	D	MES	csc,cwc	potassium	1490 B	1360 B	1300 B	2280	1160 B	1960 B	-					
Solid	A,D	MES	M	selenium												
Solid	A,D	MES	MM	silver												
Solid	D	MES	csc,cwc	sodium	8280	251000	245000	36200	5440	30900	240 B					
Solid	A,D	MES	MM	thallium												
Solid	A,D	MES	MM	vanadium												
Solid	A,D	MES	CWL,csc,MM	zinc	-	16 B	16 B	57.1	6.7 B	10.6 B	6.7 B					
Solid	A	IOC	IOC	cyanide												

— Not detected.

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected at or above the CRQL.
J	Indicates an estimated value.	Compound value may be semiquantitative
UJ	Quantitation limit is estimated due to a quality control (QC) protocol.	Compound was not detected if value is at CRQL, e.g., 10U UJ. If a value is reported with a UJ above CRQL and it is <5x blank concentration (10x for common laboratory artifacts), the compound is detected but may be a laboratory artifact and not attributable to the sample.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µL in the final extract shall be confirmed by GC/MS.	Compound was confirmed by GC/MS and is quantitative. Use pesticide/PCB listed value.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a laboratory artifact in the TICs only.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS		DEFINITION	INTERPRETATION
E	E	Estimated or not reported due to interference. See laboratory narrative.	Analyte or element was not detected, or value may be semiquantitative.
S	S	Analysis by Method of Standard Additions.	Value is quantitative.
R	N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
+	+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ		DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J		Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
U	U	Compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
	M	Duplicate injection precision not met.	Value may be semiquantitative.
	W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
	R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

Source: Ecology and Environment, Inc. 1989.

Table 4-[illegible]
RESULTS OF CHEMICAL ANALYSIS OF
FIT COLLECTED [illegible] BASELINE

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters / Compound Detected (values in µg/L or µg/kg)	[illegible]	[illegible]	[illegible]	5 [illegible]	5	6	7	8	9	10	11	12
				Date	10-12-89	10-12-89	10-12-89	10-12-89								
				Time	1300	1500	1500	1130								
				Well Depth (feet)	35 ft	23 ft	23 ft	N/A								
				CLL Log Number												
				CLP Organic Traffic Report Number	EGL 23	EGL 24	EGL 25	EGL 28								
				CLP Inorganic Traffic Report Number	MEFE 69	MEFE 70	MEFE 71	MEFE 74								
				Temperature (°C)	20°C	16°C	16°C	20°C								
				Specific Conductivity (µmhos/cm)	700	1100	1100	1.5								
				pH	7.24	7.06	7.06	6.74								
				Volatile Organics												
Gas	A,D,G,I	OCC	HH	chloromethane												
Gas	A,D,G,I	OCC	HH	bromomethane												
Gas	A,D,G,I	OCC	HH	vinyl chloride												
Gas	A,D,G,I	OCC	HH	chloroethane												
Liquid	A,D,H,I	SOL	HH,CLA	methylene chloride												
Liquid	E,H,I,A	SOL	K,CLA	acetone	16	16	5 J	4 J								
Liquid	A,H,I	SOL	SH	carbon disulfide												
Liquid	A,D,G,I	SOL	HH	1,1-dichloroethene												
Liquid	A,D,H,G	SOL	HH	1,1-dichloroethane												
Liquid	A,D,G	SOL	HH	1,2-dichloroethene (total)												
Liquid	A,D	SOL	HH	chloroform												
Liquid	A,D,G	SOL	HH	1,2-dichloroethane												
Liquid	A,E,G	SOL	K,CLA	2-butanone (MEK)												
Liquid	A,D	SOL	HH	1,1,1-trichloroethane												
Liquid	A,D	SOL	HH	carbon tetrachloride												
Liquid	A,D,G	SOL	HTD	vinyl acetate												
Liquid	A,D	OCC	HH	bromodichloromethane												
Liquid	A,D,G	SOL	HH	1,2-dichloropropane												
Liquid	A,D,G	SOL	HH	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	HH	trichloroethene												
Liquid	A,D	OCC	HH	dibromochloromethane												
Liquid	A,D	SOL	HH	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene												
Liquid	A,D,G	SOL	HH	trans-1,3-dichloropropene												
Liquid	A,D	SOL	HH,CLA	bromoform												
Liquid	A,E,G	SOL	K,CLA	4-methyl-2-pentanone												
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	HH	tetrachloroethene												
Liquid	A,G,E	SOL	A,CLA	toluene												
Liquid	A,D,E	SOL	HH	1,1,2,2-tetrachloroethane												
Liquid	A,D,G	SOL	HA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene												
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)												

Table 4 (Sheet 1)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	MW1 1 EGL23	MW2 2 24	Dup 3 25	BK 4 28	5	6	7	8	9	10	11	12
				Semivolatile Organics												
S, thick l	A,B,E	OCC	P	phenol												
Liquid	A,D,B	OCC	NH	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol												
Liquid	A,D,N	SOL	NA	1,3-dichlorobenzene												
Solid	A,D,N	OCC	NA	1,4-dichlorobenzene												
Liquid	A,D,N	SOL	A	benzyl alcohol												
Liquid	A,D,N	OCC	NA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol												
	A,D	OCC	NH	bis(2-chloroisopropyl)ether												
Liquid	A,B	OCC	P	4-methylphenol												
	A	OCC	N-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	NH	hexachloroethane												
Liquid	A,D	OCC	NA	nitrobenzene												
Liquid	A,D	OCC	N	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	NH	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	NA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene												
Solid	A,D	OCC	NH	4-chloroaniline												
Liquid	A,D,B	OCC	NH	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene												
Liquid	A,D,B	OCC	NH	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	NH	2-nitroaniline												
Liquid	A,D	OCC	PN,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	NA	2,6-dinitrotoluene												
Solid	A,D	OCC	NH	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene												
Solid	A,D,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran												
Solid	A,D	OCC	NA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PN	diethylphthalate												
	A,D	OCC	NH	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene												
Solid	A,D,E	OCC	NH	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	NH	n-nitrosodiphenylamine												
Liquid	A,D	OCC	NH	4-bromophenyl-phenylether												
Solid	A,D	OCC	NA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene												

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number S 1	S 2	S 3	S 4	S 5	S 6	S 7	S 8				
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene												
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate												
Solid	A,D	OCC	PAH	fluoranthene												
Solid	A,D	OCC	PAH	pyrene												
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate												
	A,D	OCC	NA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo[a]anthracene												
Solid	A,D	OCC	PAH	chrysene												
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate		1	J									
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo[b]fluoranthene												
Solid	A,D	OCC	PAH	benzo[k]fluoranthene												
Solid	A,D,E,L	OCC	PAH	benzo[a]pyrene												
Solid	A,D	OCC	PAH	indeno[1,2,3-cd]pyrene												
Solid	A,D	OCC	PAH	dibenzo[a,h]anthracene												
Solid	A,D	OCC	PAH	benzo[g,h,i]perylene												
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Mariate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242												
Liquid	A,D	OCC	PCB	Aroclor 1248												
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260												

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected at or above the CRQL.
J	Indicates an estimated value.	Compound value may be semiquantitative.
UJ	Quantitation limit is estimated due to a quality control (QC) protocol.	Compound was not detected if value is at CRQL, e.g., 10U UJ. If a value is reported with a UJ above CRQL and it is <5x blank concentration (10x for common laboratory artifacts), the compound is detected but may be a laboratory artifact and not attributable to the sample.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides >10 ng/µl in the final extract shall be confirmed by GC/MS.	Compound was confirmed by GC/MS and is quantitative. Use pesticide/PCB listed value.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a laboratory artifact in the TICs only.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS		DEFINITION	INTERPRETATION
E	E	Estimated or not reported due to interference. See laboratory narrative.	Analyte or element was not detected, or value may be semiquantitative.
S	S	Analysis by Method of Standard Additions.	Value is quantitative.
R	N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
+	+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ		DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J		Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
U	U	Compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
	M	Duplicate injection precision not met.	Value may be semiquantitative.
	W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
	R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

Source: Ecology and Environment, Inc. 1989.

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number 1 MEF2 69	2 70	3 71	4 74	5	6	7	8	9	10	11	12
				Analyte Detected (values in mg/kg or µg/L)												
Solid	A,D	MES	CSC/CWC	aluminum	--	-	33.1 B									
Solid	A,D	MES	RM	antimony												
Solid	A,D	MES	RM	arsenic	2.2 B	2.3 B	2.2 B									
Solid	A,D	MES	CSC/CWC	barium	98 B	239	246									
Solid	A,D	MES	M	beryllium												
Solid	A,D	MES	RM	cadmium												
Solid	D	MES	CSC/CWC	calcium	95200	104000	107000	618 B								
Solid	A,D	MES	RM	chromium												
Solid	A,D	MES	RM	cobalt												
Solid	A,D	MES	RM	copper	6.8 JB	-	-	-								
Solid	A,D	MES	RM,CSC,CWC	iron	1240	1470	1880	-								
Solid	A,D	MES	RM	lead	-	1.7 B	6.4	-								
Solid	A,D	MES	CSC/CWC	magnesium	25800	29800	31360	119 B								
Solid	A,D	MES	RM	manganese	29.1	22.8	26.6	-								
Liquid	A,D	MES	RM	mercury												
Solid	A,D	MES	RM	nickel												
Solid	D	MES	CSC,CWC	potassium	1090 JB	3740 B	3680 B	-								
Solid	A,D	MES	M	selenium												
Solid	A,D	MES	RM	silver												
Solid	D	MES	CSC,CWC	sodium	21600	21700	22500	458 JB								
Solid	A,D	MES	RM	thallium												
Solid	A,D	MES	RM	vanadium												
Solid	A,D	MES	CWL,CSC,RM	zinc	45.7	1080	1500	8.8 B								
Solid	A	TOC	TOC	cyanide												

-- Not detected.

Table 4
RESULTS OF CHEMICAL ANALYSIS OF
FIT COLLECTED [illegible] SAMPLES

Sample Collection Information and Parameters	Sample Number 1	2	3	4	5	6	7	8	9	10	11	12
Date	10 12 89	10 12 89	10 12 89	10 12 89	10 12 89	10 12 89	10 12 89	10 12 89				
Time	1220	1300	1315	1300	1330	1145	1155	1210				
Well Depth (feet)												
CRL Log Number												
CLP Organic Traffic Report Number	EGN 15	EGN 16	EGN 17	EGN 18	EGN 19	EGN 20	EGN 21	EGN 22				
CLP Inorganic Traffic Report Number	MEFZ 61	MEFZ 62	MEFZ 63	MEFZ 64	MEFZ 65	MEFZ 66	MEFZ 67	MEFZ 68				
Temperature (°C)												
Specific Conductivity (µmhos/cm)												
pH												

Physical State*	Waste Characteristics**	Category***	SI Memo	Compound Detected (values in µg/L for µg/kg)	1	2	3	4	5	6	7	8	9	10	11	12
				Volatile Organics												
Gas	A,D,G,I	OCC	NN	chloromethane												
Gas	A,D,G,I	OCC	NN	bromomethane												
Gas	A,D,G,I	OCC	NN	vinyl chloride												
Gas	A,D,G,I	OCC	NN	chloroethane												
Liquid	A,D,N,I	SOL	NN,CLA	methylene chloride	—	7	4 J	10 J	8	—	—	—				
Liquid	E,N,I,A	SOL	K,CLA	acetone												
Liquid	A,N,I	SOL	SN	carbon disulfide												
Liquid	A,D,G,I	SOL	NN	1,1-dichloroethene												
Liquid	A,D,N,G	SOL	NN	1,1-dichloroethane												
Liquid	A,D,G	SOL	NN	1,2-dichloroethene (total)												
Liquid	A,D	SOL	NN	chloroform												
Liquid	A,D,G	SOL	NN	1,2-dichloroethane												
Liquid	A,E,G	SOL	K,CLA	2-butanone (MEK)												
Liquid	A,D	SOL	NN	1,1,1-trichloroethane												
Liquid	A,D	SOL	NN	carbon tetrachloride												
Liquid	A,D,G	SOL	NTD	vinyl acetate												
Liquid	A,D	OCC	NN	bromodichloromethane												
Liquid	A,D,G	SOL	NN	1,2-dichloropropane												
Liquid	A,D,G	SOL	NN	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	NN	trichloroethene												
Liquid	A,D	OCC	NN	dibromochloromethane												
Liquid	A,D	SOL	NN	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene												
Liquid	A,D,G	SOL	NN	trans-1,3-dichloropropene												
Liquid	A,D	SOL	NN,CLA	bromoform												
Liquid	A,E,G	SOL	K,CLA	4-methyl-2-pentanone												
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	NN	tetrachloroethene												
Liquid	A,G,E	SOL	A,CLA	toluene	—	—	—	5 J	—		15					
Liquid	A,D,E	SOL	NN	1,1,2,2-tetrachloroethane												
Liquid	A,D,G	SOL	NA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene												
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)												

Table 4 (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number S1 ECN15	S2 16	S3 17	S4 ECL 18	S5 19	S6 20	S7 21	S8 22	9	10	11	12
				Semivolatile Organics												
S, thick L	A,B,E	OCC	P	phenol					460							
Liquid	A,D,B	OCC	NH	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol												
Liquid	A,D,H	SOL	NA	1,3-dichlorobenzene												
Solid	A,D,H	OCC	NA	1,4-dichlorobenzene												
Liquid	A,D,H	SOL	A	benzyl alcohol												
Liquid	A,D,H	OCC	NA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol												
	A,D	OCC	NH	bis(2-chloroisopropyl)ether												
Liquid	A,B	OCC	P	4-methylphenol												
	A	OCC	N-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	NH	hexachloroethane												
Liquid	A,D	OCC	NA	nitrobenzene												
Liquid	A,D	OCC	N	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	NH	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	NA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene		80 J		230 J	150 J							
Solid	A,D	OCC	NH	4-chloroaniline												
Liquid	A,D,B	OCC	NH	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene				220 J	140 J							
Liquid	A,D,B	OCC	NH	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	NH	2-nitroaniline												
Liquid	A,D	OCC	PH,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	NA	2,6-dinitrotoluene												
Solid	A,D	OCC	NH	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene												
Solid	A,D,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran		10 J		36 J	22 J							
Solid	A,D	OCC	NA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PH	diethylphthalate												
	A,D	OCC	NH	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene												
Solid	A,D,E	OCC	NH	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	NH	n-nitrosodiphenylamine												
Liquid	A,D	OCC	NH	4-bromophenyl-phenylether												
Solid	A,D	OCC	NA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene		48 J		170 J								

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7	S8	9	10	11	12
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene												
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate												
Solid	A,D	OCC	PAH	fluoranthene				80 J		28 J		20 J				
Solid	A,D	OCC	PAH	pyrene						24 J						
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate												
	A,D	OCC	NA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo[a]anthracene				33 J								
Solid	A,D	OCC	PAH	chrysene				41 J								
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate		39 J		36 J	450	33 J		31 J				
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo(b)fluoranthene				47 J								
Solid	A,D	OCC	PAH	benzo(k)fluoranthene												
Solid	A,D,K,L	OCC	PAH	benzo[a]pyrene												
Solid	A,D	OCC	PAH	indeno[1,2,3-cd]pyrene												
Solid	A,D	OCC	PAH	dibenzo[a,h]anthracene												
Solid	A,D	OCC	PAH	benzo[g,h,i]perylene												
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Marlate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242		12000 J										
Liquid	A,D	OCC	PCB	Aroclor 1248												
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260												

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected at or above the CRQL.
J	Indicates an estimated value.	Compound value may be semiquantitative.
UJ	Quantitation limit is estimated due to a quality control (QC) protocol.	Compound was not detected if value is at CRQL, e.g., 10U UJ. If a value is reported with a UJ above CRQL and it is <5x blank concentration (10x for common laboratory artifacts), the compound is detected but may be a laboratory artifact and not attributable to the sample.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µL in the final extract shall be confirmed by GC/MS.	Compound was confirmed by GC/MS and is quantitative. Use pesticide/PCB listed value.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a laboratory artifact in the TICs only.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
E	Estimated or not reported due to interference. See laboratory narrative.	Analyte or element was not detected, or value may be semiquantitative.
S	Analysis by Method of Standard Additions.	Value is quantitative.
R	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semiquantitative.
A	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semiquantitative.
UJ	DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
U	Compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
M	Duplicate injection precision not met.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

Source: Ecology and Environment, Inc. 1989.

Table 5 (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Background					Upstream Sediment		Downstream Sediment					
					Sample Number												
					SI MEFE 61	S2 62	S3 63	S4 64	S5 65	S6 66	S7 67	S8 68	9	10	11	12
				Analyte Detected (values in mg/kg or µg/L)												
Solid	A,D	MES	CSC/CWC	aluminum	16200	1960	5430	2010	1980	1260	4610	4[illegible]				
Solid	A,D	MES	NM	antimony												
Solid	A,D	MES	NM	arsenic	10 JN	2.1 JNB	2.6 JN	1.2 JNB	2.9 JN	1.6 JNB	4.4 JN	1.8 JNB				
Solid	A,D	MES	CSC/CWC	barium	168	23.9 B	52	77.6	28 B	19.4 B	55.2 B	42 B				
Solid	A,D	MES	M	beryllium	0.74 B	—	—	—								
Solid	A,D	MES	NM	cadmium	—	—	—	—	1.2	0.78 B	—	—				
Solid	D	MES	CSC/CWC	calcium	3550	1460	578 B	1950	6420	48300	30900	2810				
Solid	A,D	MES	NM	chromium	26.2	6.8	6.1	4.2	13.8	9.4	10.3	8.7				
Solid	A,D	MES	NM	cobalt	15.3	1.4 B	6.3 B	1.7 B	2.6 B	1.9 B	5.0 B	4.1 B				
Solid	A,D	MES	NM	copper	32.3	11.7	6.8	5.9	11.7	9.2	14.2	9.5				
Solid	A,D	MES	NM,CSC,CWC	iron	41800	6600	8990	5340	14600	4140	10800	8520				
Solid	A,D	MES	NM	lead	19.5	5.5	14.6	6.9	17.7	32.4	10.4	11.4				
Solid	A,D	MES	CSC/CWC	magnesium	5280	504 B	1110 B	747 B	3350	2260	10100	9110				
Solid	A,D	MES	NM	manganese	679	79.6	560	72.8	206	179	794	169				
Liquid	A,D	MES	NM	mercury												
Solid	A,D	MES	NM	nickel	55.2	6.2 B	8.4 B	3.4 B	8.3 B	2.5 B	12.4	7.8 B				
Solid	D	MES	CSC,CWC	potassium	1970	231 JB	738 JB	279 JB	193 JB	62.1 JB	625 JB	478 JB				
Solid	A,E	MES	M	selenium												
Solid	A,E	MES	NM	silver	—	—	—	—	—	1.3 B	—	—				
Solid	D	MES	CSC,CWC	sodium	44.3 B	90.1 B	20 B	362 B	129 B	69.7 B	72.5 B	76.2 B				
Solid	A,D	MES	NM	thallium	1.3 B		0.40 B	0.32 B	0.47 B	0.38 B	0.47 B	0.43 B				
Solid	A,E	MES	NM	vanadium	35.4	2.4 B	14.8	3.0 B	4.2 B	6.4 B	11.4 B	11.8 B				
Solid	A,D	MES	CWL,CSC,NM	zinc	96.5	44.9	31	55	51.1	26.7	52.8	43.4				
Solid	A	IOC	IOC	cyanide	—	9.9	1.3	—	—	—	6.9	—				

-- Not detected.

1. GIVEN A COPY OF TABLES 4.1, 4.2, 4.3 TO HEALTH AND SAFETY?
2. FINISHED YOUR DRINKING WATER MEMOS?

AUDITOR REVIEW SHEET Page ___ of ___

CERCLIS Site Name: North Manchester Foundry LF
City: North Manchester State: IN
U.S. EPA I.D.: IND981952831 SSID: —
TDD: F05-8901-025 PAN: FIN0681SB

Meeting Date: 4/9/90 Time Slot: am midday pm

Author: Lundberg
Supervisor: Kolb

Audit Team Members
Chairperson: Maley
Chemist: Kennedy/Zak
Geologist: J. Cohns
Other:

9am
RIT

Audit Review

Page/Paragragh/Line (Part/Section/Number)	Comments:
page 2.3	line 1 who is Rolf Westman.
page 2-4	line 14 is "montonite" correct - what is the resin made of?
page 2-9	line 12 should state previous to this time that the dumping was illegal and why.
Section 2.3	Those section must be referenced with proper sources and dates.
page 3-6	line 3 - this is a monitoring well?
page 3-11	line 9 1/2 surface water
page 3-14	line 19 based upon what criteria are these wells downgradient from the site?
page 3-18	line 5 this is not good justification
page 3-20	line 8 based upon what was RW2 the potential downgradient sample?
page 3-16, 3-20	depths of monitoring wells depth to water and depths of residential wells need to be presented in a table.

Joseph D. Cohns
Auditor

4/6/90
Date

QA005(3/29/89)

AUDITOR REVIEW SHEET

CERCLIS Site Name: _____

City: _____ State: _____

U.S. EPA I.D.: _____ SSID: _____

TDD: _____ PAN: _____

Audit Review Meeting Date: _____

Page/Paragragh/Line (Part/Section/Number)	Comments:
page 5-1	I don't think that the res wells can be used as upgradient wells to the monitoring wells unless you can show that they are at similar depths in the same aquifer.
page 5-3	line 4 the day layer is continuous over what distance? can you be more descriptive of the geology
	line 11 - see text

Joseph D. Corns
Auditor

4/6/90
Date

QA005(3/29/89)

AUDIT TEAM RECOMMENDATIONS

CERCLIS Site Name: _____

City: _____ State: _____

U.S. EPA I.D.: _____ SSID: _____

TDD: _____ PAN: _____

Audit Team Recommendations Date: _____

Page/Paragragh/Line (Part/Section/Number)	Recommendations:
Fig 2 2-1 1,3	You need to be ~~more~~ precise on locating the site. NE1/4 is to big. S1/2, NW1/4 NE1/2,
~~2-5 8~~	~~ref~~
2-7 8	Who are the other parties?
2-8 19	ref
3-8	Were NW samples split?
3-14	N MFL? spell out
5-2 10	farm practices? not mention before
5-3 9	is the bedrock used as a drinking water source?
5-4 15	add TCL + TAL soil sample results detected
5-1	is the site ~~[illegible]~~ lined or leachate ~~[illegible]~~ collection system

John Moodlene

Author

4-9-90

Date