75443

GROUNDWATER DATA

SUMMARY OF GROUNDWATER SAMPLING FIELD PARAMETERS
Saegertown Industrial Area Site
Remedial Investigation
Saegertown, Pennsylvania

Sample	Date Sampled	Time Sampled	pH	Temp	Sp Cond	DO	Red/Ox
LO-GW-W7S	1/31/91	1030	7.22	10.5	540	2.0	241
LO-GW-W7D	1/31/91	1130	8.22	12.5	340	3.2	198
LO-GW-W8S	1/30/91	1120	6.82	9.5	370	4.2	253
LO-GW-W8d	1/30/91	1030	6.84	11.0	470	9.2	213

Notes:
pH recorded in standard units
Temperature in Degrees C
Sp Cond = Specific Conductivity (umhos) at 25 Degrees C
DO = Dissolved Oxygen (mg/l)
Red/Ox = Reduction/Oxidation Potential (mV)

SG_GWPH/TJM/lam

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: IND MTL Site Area: LO
Generated by: CAW
Date Issued: 05-APR-91

Parameter	LO-GWW07D-01 01/30/91		LO-GWW07D-01T 01/30/91		LO-GWW07S-01 01/30/91		LO-GWW07S-01T 01/30/91		LO-GWW08D-01 01/30/91	
Aluminum (UG/L)	129.	B/	98400.	/	50.	U/	54000.	/	50.	U/
Antimony (UG/L)	5.1	BN/K	5.	UN/R	5.	UN/	5.	UN/R	50.	U/
Arsenic (UG/L)	5.5	B/	164.	N/L	2.	U/	20.9	NS/L	3.6	B/
Barium (UG/L)	93.	B/	684.	/	15.	B/	380.	/	266.	/
Beryllium (UG/L)	5.	U/	6.	/	5.	U/	5.	U/	5.	U/
Cadmium (UG/L)	5.	U/	5.	UN/	5.	U/	5.	UN/	5.	U/
Calcium (UG/L)	9680.	/	126000.	/	50500.	/	79500.	/	46300.	/
Chromium, total (UG/L)	10.	U/	247.	/J	10.	U/	73.	/J	10.	U/
Cobalt (UG/L)	10.	U/	105.	/	10.	U/	39.	B/B	10.	U/
Copper (UG/L)	10.	U/	169.	N/L	10.	U/	210.	N/L	10.	U/
Iron (UG/L)	65.	B/B	292000.	/	20.	U/	153000.	/	20.	U/
Lead (UG/L)	3.	U/	75.5	NS*/JL	3.	U/	96.8	N*/JL	3.	U/
Magnesium (UG/L)	2320.	B/	71200.	/	7650.	/	31800.	/	10900.	/
Manganese (UG/L)	28.	/	4810.	/	10.	U/	7720.	/	138.	/
Mercury (UG/L)	0.29	/	0.2	UN/	0.2	U/	0.4	N/K	0.2	U/
Nickel (UG/L)	20.	U/	248.	/	20.	U/	91.	/	20.	U/
Potassium (UG/L)	3350.	B/	20400.	N*/L	1190.	B/	6850.	N*/L	5940.	/
Selenium (UG/L)	2.	US/	2.	UNS/R	2.	U/	2.	UNS/R	2.	U/
Silver (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Sodium (UG/L)	57200.	/	59400.	N/K	11100.	/B	12300.	N/K	37900.	/
Thallium (UG/L)	3.	U/	3.	UN/UL	3.	U/	3.	UN/UL	3.	U/
Vanadium (UG/L)	50.	U/	117.	/	50.	U/	67.	/	50.	U/
Zinc (UG/L)	10.	U/	671.	/L	10.	U/	483.	/L	10.	U/
Cyanide (UG/L)	10.	U/			10.	U/			10.	U/
Alkalinity, Total (MG/L)	157.	/			152.	/			164.	/
Chloride (MG/L)	6.	/			18.	/			29.	/
Nitrate+Nitrite Nitrogen (MG/L)	0.02	/			0.66	/			0.02	U/
Nitrogen, Ammonia (MG/L)	0.4	/			0.1	U/			0.29	/
Sulfate (MG/L)	29.	/			26.	/			52.	/
Total Dissolved Solids (MG/L)	216.	/			230.	/			296.	/
Total Organic Carbon (MG/L)	1.	U/UL			2.	/L			1.	U/UL
Total Suspended Solids (MG/L)	20900.	/			15500.	/			4250.	/
Phenolics, Total (MG/L)	0.005	N/L			0.005	UN/UL			0.005	UN/UL

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: IND MTL Site Area: LO

Parameter	LO-GWW08D-01T 01/30/91		LO-GWW08S-01 01/30/91		LO-GWW08S-01T 01/30/91	
Aluminum (UG/L)	46400.	/	50.	U/	286000.	/
Antimony (UG/L)	5.	UNS/R	50.	U/	0.5	UNS/R
Arsenic (UG/L)	89.6	N/L	2.	U/	29.9	N/L
Barium (UG/L)	551.	/	27.	B/	1860.	/
Beryllium (UG/L)	5.	U/	5.	U/	14.	/
Cadmium (UG/L)	5.	UN/	5.	U/	7.1	N/
Calcium (UG/L)	75100.	/	47300.	/	108000.	/
Chromium, total (UG/L)	129.	/J	10.	U/	314.	/J
Cobalt (UG/L)	57.	/B	10.	U/	263.	/
Copper (UG/L)	57.	N/L	10.	U/	1140.	N/L
Iron (UG/L)	126000.	/	20.	U/	747000.	/
Lead (UG/L)	27.6	NS*/JL	3.	U/	1160.	N*/JL
Magnesium (UG/L)	36100.	/	7670.	/	80100.	/
Manganese (UG/L)	1590.	/	390.	/	44000.	/
Mercury (UG/L)	0.2	UN/	0.2	U/	1.2	N/K
Nickel (UG/L)	133.	/	20.	U/	513.	/
Potassium (UG/L)	15600.	N*/L	1100.	B/	25100.	N*/L
Selenium (UG/L)	2.	UNS/R	2.	U/	2.	UNS/R
Silver (UG/L)	10.	U/	10.	U/	10.	U/
Sodium (UG/L)	41400.	N/K	15700.	/	20600.	N/K
Thallium (UG/L)	3.	UN/UL	3.	U/	3.	UN/UL
Vanadium (UG/L)	70.	/	50.	U/	269.	/
Zinc (UG/L)	317.	/L	10.	U/	2320.	/L
Cyanide (UG/L)			10.	U/		
Alkalinity, Total (MG/L)			153.	/		
Chloride (MG/L)			3.	/		
Nitrate+Nitrite Nitrogen (MG/L)			0.18	/		
Nitrogen, Ammonia (MG/L)			0.2	/		
Sulfate (MG/L)			26.	/		
Total Dissolved Solids (MG/L)			202.	/		
Total Organic Carbon (MG/L)			15.2	/L		
Total Suspended Solids (MG/L)			18200.	/		
Phenolics, Total (MG/L)			0.005	N/L		

AR302124

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: VOC Site Area: LO
Generated by: CAW
Date Issued: 09-APR-91

Parameter	LO-GWTB04-01 01/30/91		LO-GWW07D-01 01/30/91		LO-GWW07S-01 01/30/91		LO-GWW08D-01 01/30/91		LO-GWW08S-01 01/30/91	
Chloromethane (UG/L)	10.	U/	10.	U/	50.	U/	10.	U/	10.	U/
Bromomethane (UG/L)	10.	U/	10.	U/	50.	U/	10.	U/	10.	U/
Vinyl chloride (UG/L)	10.	U/	10.	U/	50.	U/	10.	U/	10.	U/
Chloroethane (UG/L)	10.	U/	10.	U/	50.	U/	10.	U/	10.	U/
Methylene chloride (UG/L)	9.	B/B	3.	BJ/B	11.	BJ/B	3.	BJ/B	3.	BJ/B
Acetone (UG/L)	10.	B/B	5.	J/B	50.	U/	10.	U/	7.	BJ/B
Carbon disulfide (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
1,1-Dichloroethene (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
1,1-Dichloroethane (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
1,2-Dichloroethene (total) (UG/L)	5.	U/	5.	U/	270.	/	5.	U/	1.	J/B
Chloroform (UG/L)	1.	J/B	5.	U/	25.	U/	5.	U/	5.	U/
1,2-Dichloroethane (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
2-Butanone (UG/L)	10.	U/	10.	U/	50.	U/	10.	U/	10.	U/
1,1,1-Trichloroethane (UG/L)	5.	U/	5.	U/	11.	J/J	5.	U/	5.	U/
Carbon tetrachloride (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
Vinyl acetate (UG/L)	10.	U/	10.	U/	50.	U/	10.	U/	10.	U/
Bromodichloromethane (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
1,2-Dichloropropane (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
cis-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
Trichloroethene (UG/L)	5.	U/	5.	U/	220.	/	5.	U/	5.	U/
Dibromochloromethane (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
1,1,2-Trichloroethane (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
Benzene (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
trans-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
Bromoform (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
4-Methyl-2-pentanone (UG/L)	10.	U/	10.	U/	50.	U/	10.	U/	10.	U/
2-Hexanone (UG/L)	10.	U/	10.	U/	50.	U/	10.	U/	10.	U/
Tetrachloroethene (UG/L)	5.	U/	5.	U/	860.	/	5.	U/	5.	U/
1,1,2,2-Tetrachloroethane (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
Toluene (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
Chlorobenzene (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
Ethylbenzene (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
Styrene (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/
Xylenes (total) (UG/L)	5.	U/	5.	U/	25.	U/	5.	U/	5.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302125

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: SVOC Site Area: LO
Generated by: CAW
Date Issued: 05-APR-91

Parameter	LO-GWW07D-01 01/30/91		LO-GWW07S-01 01/30/91		LO-GWW08D-01 01/30/91		LO-GWW08S-01 01/30/91	
Phenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-Chloroethyl) ether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2-Chlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
1,3-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
1,4-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzyl Alcohol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
1,2-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2-Methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-Chloroisopropyl)ether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
N-Nitroso-di-n-dipropylamine (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Hexachloroethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Nitrobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Isophorone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2-Nitrophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dimethylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzoic Acid (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
bis(2-Chloroethoxy)methane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dichlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
1,2,4-Trichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Naphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Chloroaniline (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorobutadiene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Chloro-3-methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2-Methylnaphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorocyclopentadiene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4,6-Trichlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4,5-Trichlorophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
2-Chloronaphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
Dimethylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Acenaphthylene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,6-Dinitrotoluene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
3-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
Acenaphthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dinitrophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
4-Nitrophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/

Note: (1) [illegible]lts are reported with qualifiers (Laboratory Qualifier/Data Valida[illegible] Qualifier) to the right of the value.

AR302126

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: SVOC Site Area: LO

Parameter	LO-GWW07D-01 01/30/91		LO-GWW07S-01 01/30/91		LO-GWW08D-01 01/30/91		LO-GWW08S-01 01/30/91	
Dibenzofuran (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dinitrotoluene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Diethylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Chlorophenyl-phenylether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Fluorene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
4,6-Dinitro-2-methylphenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
N-nitrosodiphenylamine (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Bromophenyl-phenylether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Pentachlorophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
Phenanthrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Di-n-butylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Butylbenzylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
3,3'-Dichlorobenzidine (UG/L)	20.	U/	20.	U/	20.	U/	20.	U/
Benzo(a)anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Chrysene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-ethylhexyl)phthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Di-n-octyl Phthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(b)fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(k)fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(a)pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Ideno(1,2,3-cd)pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Dibenz(a,h)anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(g,h,i)perylene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/

AR302127

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: PPCB Site Area: LO
Generated by: CAW
Date Issued: 05-APR-91

Parameter	LO-GWW07D-01 01/30/91		LO-GWW07S-01 01/30/91		LO-GWW08D-01 01/30/91		LO-GWW08S-01 01/30/91	
alpha-BHC (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
beta-BHC (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
delta-BHC (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
gamma-BHC (Lindane) (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Heptachlor (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Aldrin (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Heptachlor epoxide (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Endosulfan I (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Dieldrin (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
4,4'-DDE (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Endrin (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Endosulfan II (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
4,4'-DDD (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Endosulfan sulfate (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
4,4'-DDT (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Methoxychlor (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Endrin ketone (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
alpha-Chlordane (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
gamma-Chlordane (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Toxaphene (UG/L)	1.	U/	1.	U/	1.	U/	1.	U/
Aroclor-1016 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1221 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1232 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1242 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1248 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1254 (UG/L)	1.	U/	1.	U/	1.	U/	1.	U/
Aroclor-1260 (UG/L)	1.	U/	1.	U/	1.	U/	1.	U/

AR302128

Note: (1) [illegible]lts are reported with qualifiers (Laboratory Qualifier/Data Valida[illegible] Qualifier) to the right of the value.

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
Saegertown RI/FS
Saegertown, PA

Matrix: GW Site Area: LO
Generated by: VLR
Date Issued: 05-APR-91

LO-GWW07S-01 01/30/91

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	8.	J/

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Chlorinated hydrocarbon (UG/L)	40.	J/

APPENDIX H

ANALYTICAL LABORATORY RESULTS - OFF-SITE

SHALLOW SOIL BORING DATA

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SB Type: SLIND MTL Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-SSB11-04 12/09/90		SA-SSB11-04DUP 12/09/90		SA-SSB11-10 12/09/90		SA-SSB17-04 12/09/90		SA-SSB17-10 12/09/90	
Total Solids (%)	88.5	/	81.3	/	84.6	/	85.9	/	88.	/
pH (S.U.)	5.53	/	5.08	/	6.02	/	5.16	/	5.21	/
Total Organic Carbon (MG/KG)	2100.	/J	6300.	/J	1200.	/	4000.	/	1100.	/
Aluminum (MG/KG)	7390.	/	11200.	/	7350.	/	8360.	/	6180.	/
Antimony (MG/KG)	11.3	UN/R	12.3	UN/R	11.8	UN/R	11.6	UN/R	11.4	UN/R
Arsenic (MG/KG)	13.5	N/K	12.9	N/K	14.5	N/K	6.9	N/K	8.2	N/K
Barium (MG/KG)	60.6	/	84.9	/	39.	B/	40.6	B/	28.3	B/
Beryllium (MG/KG)	1.13	U/	1.23	U/	1.18	U/	1.16	U/	1.14	U/
Cadmium (MG/KG)	1.13	U/	1.23	U/	1.18	U/	1.16	U/	1.14	U/
Calcium (MG/KG)	947.	B/J	1810.	/J	1570.	/	570.	B/	816.	B/
Chromium, total (MG/KG)	7.6	/J	12.9	/J	7.7	/	6.5	/	5.5	/
Cobalt (MG/KG)	11.7	/B	10.3	B/B	10.4	B/B	9.3	B/B	8.3	B/B
Copper (MG/KG)	12.6	*/J	12.2	*/J	12.9	*/J	7.9	*/J	11.9	*/J
Iron (MG/KG)	21700.	/	21500.	/	17700.	/	13400.	/	12600.	/
Lead (MG/KG)	14.	/	15.5	/	10.1	/	10.	/	9.9	/
Magnesium (MG/KG)	1850.	/	2420.	/	2250.	/	1760.	/	1640.	/
Manganese (MG/KG)	741.	*/J	669.	*/J	260.	*/J	566.	*/J	432.	*/J
Mercury (MG/KG)	0.113	U/	0.123	U/	0.118	U/	0.116	U/	0.114	U/
Nickel (MG/KG)	17.1	/	18.7	/	14.	/	11.5	/	14.9	/
Potassium (MG/KG)	697.	B/	995.	B/	957.	B/	431.	B/	472.	/
Selenium (MG/KG)	0.452	U/	0.492	U/	0.472	U/	0.464	U/	0.42	U/
Silver (MG/KG)	2.26	U/	2.46	U/	2.36	U/	2.32	U/	2.28	U/
Sodium (MG/KG)	452.	U/	479.	U/	472.	U/	464.	U/	456.	U/
Thallium (MG/KG)	0.74	B/	0.83	B/	0.78	B/	0.65	U/	0.64	U/
Vanadium (MG/KG)	11.3	U/	13.3	/	11.8	U/	11.6	U/	11.4	U/
Zinc (MG/KG)	46.9	/	57.5	/	43.3	/	32.5	/	35.7	/
Cyanide (MG/KG)	2.825	U/	3.075	U/	2.95	U/	2.9	U/	2.85	U/

AR302132

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SB Type: VOC Site Area: SA
Generated by: CAW
Date Issued: 05-APR-91

Parameter	SA-SSB11-04 12/09/90		SA-SSB11-04DUP 12/09/90		SA-SSB11-10 12/09/90		SA-SSB17-04 12/09/90		SA-SSB17-10 12/09/90	
Chloromethane (UG/KG)	12.	U/	12.	U/	12.	U/	11.	U/	11.	U/
Bromomethane (UG/KG)	12.	U/	12.	U/	12.	U/	11.	U/	11.	U/
Vinyl chloride (UG/KG)	12.	U/	12.	U/	12.	U/	11.	U/	11.	U/
Chloroethane (UG/KG)	12.	U/	12.	U/	12.	U/	11.	U/	11.	U/
Methylene chloride (UG/KG)	27.	B/B	26.	B/B	25.	B/B	45.	B/B	28.	B/B
Acetone (UG/KG)	29.	B/B	20.	B/B	26.	B/B	36.	B/B	30.	B/B
Carbon disulfide (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
1,1-Dichloroethene (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
1,1-Dichloroethane (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
1,2-Dichloroethene (total) (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
Chloroform (UG/KG)	6.	U/	6.	U/	6.	U/	1.	J/	5.5	U/
1,2-Dichloroethane (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
2-Butanone (UG/KG)	12.	U/	12.	U/	12.	U/	11.	U/	11.	U/
1,1,1-Trichloroethane (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
Carbon tetrachloride (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
Vinyl acetate (UG/KG)	12.	U/	12.	U/	12.	U/	11.	U/	11.	U/
Bromodichloromethane (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
1,2-Dichloropropane (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
cis-1,3-Dichloropropene (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
Trichloroethene (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
Dibromochloromethane (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
1,1,2-Trichloroethane (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
Benzene (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
trans-1,3-Dichloropropene (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
Bromoform (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
4-Methyl-2-pentanone (UG/KG)	12.	U/	12.	U/	12.	U/	11.	U/	11.	U/
2-Hexanone (UG/KG)	12.	U/	12.	U/	12.	U/	11.	U/	11.	U/
Tetrachloroethene (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
1,1,2,2-Tetrachloroethane (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
Toluene (UG/KG)	17.	/	2.	J/	7.	/	11.	/	2.	J/
Chlorobenzene (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
Ethylbenzene (UG/KG)	3.	J/	6.	U/	6.	U/	5.5	U/	5.5	U/
Styrene (UG/KG)	6.	U/	6.	U/	6.	U/	5.5	U/	5.5	U/
Xylenes (total) (UG/KG)	3.	J/	2.	J/	6.	U/	5.5	U/	5.5	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302133

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SB Type: SVOC Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-SSB11-04 12/09/90		SA-SSB11-04DUP 12/09/90		SA-SSB11-10 12/09/90		SA-SSB17-04 12/09/90		SA-SSB17-10 12/09/90	
Phenol (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
bis(2-Chloroethyl) ether (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2-Chlorophenol (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
1,3-Dichlorobenzene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
1,4-Dichlorobenzene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Benzyl Alcohol (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
1,2-Dichlorobenzene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2-Methylphenol (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
bis(2-Chloroisopropyl)ether (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
4-Methylphenol (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
N-Nitroso-di-n-dipropylamine (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Hexachloroethane (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Nitrobenzene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Isophorone (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2-Nitrophenol (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2,4-Dimethylphenol (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Benzoic Acid (UG/KG)	1900.	U/	1920.	U/	1939.2	U/	1840.	U/	1760.	U/
bis(2-Chloroethoxy)methane (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2,4-Dichlorophenol (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
1,2,4-Trichlorobenzene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Naphthalene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
4-Chloroaniline (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Hexachlorobutadiene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
4-Chloro-3-methylphenol (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2-Methylnaphthalene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Hexachlorocyclopentadiene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2,4,6-Trichlorophenol (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2,4,5-Trichlorophenol (UG/KG)	1900.	U/	1920.	U/	1939.2	U/	1840.	U/	1760.	U/
2-Chloronaphthalene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2-Nitroaniline (UG/KG)	1900.	U/	1920.	U/	1939.2	U/	1840.	U/	1760.	U/
Dimethylphthalate (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Acenaphthylene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2,6-Dinitrotoluene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
3-Nitroaniline (UG/KG)	1900.	U/	1920.	U/	1939.2	U/	1840.	U/	1760.	U/
Acenaphthene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2,4-Dinitrophenol (UG/KG)	1900.	U/	1920.	U/	1939.2	U/	1840.	U/	1760.	U/
4-Nitrophenol (UG/KG)	1900.	U/	1920.	U/	1939.2	U/	1840.	U/	1760.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302134

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SB Type: SVOC Site Area: SA

Parameter	SA-SSB11-04 12/09/90		SA-SSB11-04DUP 12/09/90		SA-SSB11-10 12/09/90		SA-SSB17-04 12/09/90		SA-SSB17-10 12/09/90	
Dibenzofuran (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
2,4-Dinitrotoluene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Diethylphthalate (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
4-Chlorophenyl-phenylether (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Fluorene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
4-Nitroaniline (UG/KG)	1900.	U/	1920.	U/	1939.2	U/	1840.	U/	1760.	U/
4,6-Dinitro-2-methylphenol (UG/KG)	1900.	U/	1920.	U/	1939.2	U/	1840.	U/	1760.	U/
N-nitrosodiphenylamine (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
4-Bromophenyl-phenylether (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Hexachlorobenzene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Pentachlorophenol (UG/KG)	1900.	U/	1920.	U/	1939.2	U/	1840.	U/	1760.	U/
Phenanthrene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Anthracene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Di-n-butylphthalate (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Fluoranthene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Pyrene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Butylbenzylphthalate (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
3,3'-Dichlorobenzidine (UG/KG)	770.	U/	800.	U/	818.1	U/	760.	U/	740.	U/
Benzo(a)anthracene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Chrysene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
bis(2-ethylhexyl)phthalate (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Di-n-octyl Phthalate (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Benzo(b)fluoranthene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Benzo(k)fluoranthene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Benzo(a)pyrene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Ideno(1,2,3-cd)pyrene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Dibenz(a,h)anthracene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/
Benzo(g,h,i)perylene (UG/KG)	379.5	U/	396.	U/	399.96	U/	379.5	U/	363.	U/

AR302135

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SB Type: PPCB Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-SSB11-04 12/09/90		SA-SSB11-04DUP 12/09/90		SA-SSB11-10 12/09/90		SA-SSB17-04 12/09/90		SA-SSB17-10 12/09/90	
alpha-BHC (UG/KG)	8.96	U/	9.44	U/	9.6	U/	9.12	U/	8.8	U/
beta-BHC (UG/KG)	8.96	U/	9.44	U/	9.6	U/	9.12	U/	8.8	U/
delta-BHC (UG/KG)	8.96	U/	9.44	U/	9.6	U/	9.12	U/	8.8	U/
gamma-BHC (Lindane) (UG/KG)	8.96	U/	9.44	U/	9.6	U/	9.12	U/	8.8	U/
Heptachlor (UG/KG)	8.96	U/	9.44	U/	9.6	U/	9.12	U/	8.8	U/
Aldrin (UG/KG)	8.96	U/	9.44	U/	9.6	U/	9.12	U/	8.8	U/
Heptachlor epoxide (UG/KG)	8.96	U/	9.44	U/	9.6	U/	9.12	U/	8.8	U/
Endosulfan I (UG/KG)	8.96	U/	9.44	U/	9.6	U/	9.12	U/	8.8	U/
Dieldrin (UG/KG)	17.92	U/	18.88	U/	19.2	U/	18.24	U/	17.6	U/
4,4'-DDE (UG/KG)	17.92	U/	18.88	U/	19.2	U/	18.24	U/	17.6	U/
Endrin (UG/KG)	17.92	U/	18.88	U/	19.2	U/	18.24	U/	17.6	U/
Endosulfan II (UG/KG)	17.92	U/	18.88	U/	19.2	U/	18.24	U/	17.6	U/
4,4'-DDD (UG/KG)	17.92	U/	18.88	U/	19.2	U/	18.24	U/	17.6	U/
Endosulfan sulfate (UG/KG)	17.92	U/	18.88	U/	19.2	U/	18.24	U/	17.6	U/
4,4'-DDT (UG/KG)	17.92	U/	18.88	U/	19.2	U/	18.24	U/	17.6	U/
Methoxychlor (UG/KG)	89.6	U/	94.4	U/	96.	U/	91.2	U/	88.	U/
Endrin ketone (UG/KG)	17.92	U/	18.88	U/	19.2	U/	18.24	U/	17.6	U/
alpha-Chlordane (UG/KG)	89.6	U/	94.4	U/	96.	U/	91.2	U/	88.	U/
gamma-Chlordane (UG/KG)	89.6	U/	94.4	U/	96.	U/	91.2	U/	88.	U/
Toxaphene (UG/KG)	179.2	U/	188.8	U/	192.	U/	182.4	U/	176.	U/
Aroclor-1016 (UG/KG)	89.6	U/	94.4	U/	96.	U/	91.2	U/	88.	U/
Aroclor-1221 (UG/KG)	89.6	U/	94.4	U/	96.	U/	91.2	U/	88.	U/
Aroclor-1232 (UG/KG)	89.6	U/	94.4	U/	96.	U/	91.2	U/	88.	U/
Aroclor-1242 (UG/KG)	89.6	U/	94.4	U/	96.	U/	91.2	U/	88.	U/
Aroclor-1248 (UG/KG)	89.6	U/	94.4	U/	96.	U/	91.2	U/	88.	U/
Aroclor-1254 (UG/KG)	179.2	U/	188.8	U/	192.	U/	182.4	U/	176.	U/
Aroclor-1260 (UG/KG)	179.2	U/	188.8	U/	192.	U/	182.4	U/	176.	U/

AR302136

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

SURFACE WATER DATA

SUMMARY OF SURFACE WATER SAMPLING FIELD PARAMETERS
Saergertown Industrial Area Site
Remedial Investigation
Saegertown, Pennsylvania

Sample #	Location	Date	Time	pH	Temp	Sp Cond	DO	Red/Ox
SA-SW01-01	Upgradient French Creek	1/23/91	1200	7.34	0.4	207	11.2	246
SA-SW02-01	French Creek	1/23/91	820	7.80	1.7	206	11.8	220
SA-SW03-01	French Creek	1/23/91	1035	7.37	1.2	223	10.4	271
SA-SW04-01	Downgradient French Creek	1/23/91	1450	7.29	0.4	217	10.8	278

Notes:
Temp = Temperature in Degrees C
Sp Cond = Specific Conductivity (umhos) at 25 Degrees C
DO = Dissolved Oxygen (mg/l)
Red/Ox = Reduction/Oxidation Potential (mV)

SG_SWPH/TJM/lam

AR302138

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SW Type: MTL IND Site Area: SA
Generated by: CAW
Date Issued: 09-APR-91

Parameter	SA-SW01-01 01/23/91		SA-SW02-01 01/24/91		SA-SW02-91 01/24/91		SA-SW03-01 01/23/91		SA-SW04-01 01/23/91	
Aluminum (UG/L)	83.	B/B	75.	B/B	104.	B/B	109.	B/B	86.	B/B
Antimony (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	101.	/
Arsenic (UG/L)	2.	U/	2.	U/	2.	U/	2.	U/	2.	U/
Barium (UG/L)	25.	B/	25.	B/	26.	B/	26.	B/	31.	B/
Beryllium (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Cadmium (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Calcium (UG/L)	24900.	/	27000.	/	26300.	/	24900.	/	25200.	/
Chromium, total (UG/L)	10.	U/	11.	/	10.	U/	10.	U/	10.	/
Cobalt (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Copper (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Iron (UG/L)	229.	*/B	249.	*/B	238.	*/B	828.	*/J	258.	*/B
Lead (UG/L)	3.	U/	3.	U/	3.	U/	3.	U/	3.	U/
Magnesium (UG/L)	4660.	B/	4940.	B/	4850.	B/	4630.	B/	4600.	B/
Manganese (UG/L)	34.	/	34.	/	34.	/	39.	/	40.	/
Mercury (UG/L)	0.2	U/	0.2	U/	0.2	U/	0.2	U/	0.2	U/
Nickel (UG/L)	20.	U/	20.	U/	20.	U/	20.	U/	20.	U/
Potassium (UG/L)	1120.	B/	1150.	B/	1160.	B/	1160.	B/	1150.	B/
Selenium (UG/L)	2.	U/	2.	U/	2.	U/	2.	U/	2.	U/
Silver (UG/L)	10.	U/	10.	U/	10.	U/	10.	/	14.	/
Sodium (UG/L)	5220.	/	5380.	/	6290.	/	5660.	/	5860.	/
Thallium (UG/L)	3.	U/	3.	U/	3.	U/	3.	U/	3.	U/
Vanadium (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Zinc (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Cyanide (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Alkalinity, Total (MG/L)	63.	/	71.	/	69.	/	64.	/	68.	/
Chemical Oxygen Demand (MG/L)	20.	U/	20.	U/	20.	U/	30.	/	20.	U/
Total Dissolved Solids (MG/L)	110.	/	110.	/	122.	/	116.	/	98.	/
Total Organic Carbon (MG/L)	1.5	/J	1.7	/J	2.5	/J	2.2	/J	2.2	/J
Biochemical Oxygen Demand (MG/L)	1.	/	1.	/	2.	/	1.	/	1.	U/
Hardness (MG/L)	88.	/	92.	/	90.	/	86.	/	86.	/
Total Suspended Solids (MG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SW Type: VOC Site Area: SA
Generated by: CAW
Date Issued: 05-APR-91

Parameter	SA-SW01-01 01/23/91		SA-SW02-01 01/24/91		SA-SW02-91 01/24/91		SA-SW03-01 01/23/91		SA-SW04-01 01/23/91	
Chloromethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Bromomethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Vinyl chloride (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Chloroethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Methylene chloride (UG/L)	2.	BJ/B	5.	U/	5.	U/	4.	BJ/B	5.	U/
Acetone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Carbon disulfide (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1-Dichloroethene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1-Dichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,2-Dichloroethene (total) (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Chloroform (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,2-Dichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
2-Butanone (UG/L)	10.	U/	10.	U/R	10.	U/R	10.	U/	10.	U/
1,1,1-Trichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Carbon tetrachloride (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Vinyl acetate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Bromodichloromethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,2-Dichloropropane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
cis-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Trichloroethene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Dibromochloromethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1,2-Trichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Benzene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
trans-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Bromoform (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
4-Methyl-2-pentanone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Hexanone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Tetrachloroethene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1,2,2-Tetrachloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Toluene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Chlorobenzene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Ethylbenzene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Styrene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Xylenes (total) (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SW Type: VOC Site Area: SA

Parameter	SA-SWTB01-01 01/23/91		SA-SWTB02-01 01/24/91	
Chloromethane (UG/L)	10.	U/	10.	U/
Bromomethane (UG/L)	10.	U/	10.	U/
Vinyl chloride (UG/L)	10.	U/	10.	U/
Chloroethane (UG/L)	10.	U/	10.	U/
Methylene chloride (UG/L)	1.	BJ/B	1.	BJ/B
Acetone (UG/L)	10.	U/	10.	U/
Carbon disulfide (UG/L)	5.	U/	5.	U/
1,1-Dichloroethene (UG/L)	5.	U/	5.	U/
1,1-Dichloroethane (UG/L)	5.	U/	5.	U/
1,2-Dichloroethene (total) (UG/L)	5.	U/	5.	U/
Chloroform (UG/L)	1.	J/	5.	U/
1,2-Dichloroethane (UG/L)	5.	U/	5.	U/
2-Butanone (UG/L)	10.	U/	10.	U/
1,1,1-Trichloroethane (UG/L)	5.	U/	5.	U/
Carbon tetrachloride (UG/L)	5.	U/	5.	U/
Vinyl acetate (UG/L)	10.	U/	10.	U/
Bromodichloromethane (UG/L)	5.	U/	5.	U/
1,2-Dichloropropane (UG/L)	5.	U/	5.	U/
cis-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/
Trichloroethene (UG/L)	5.	U/	5.	U/
Dibromochloromethane (UG/L)	5.	U/	5.	U/
1,1,2-Trichloroethane (UG/L)	5.	U/	5.	U/
Benzene (UG/L)	5.	U/	5.	U/
trans-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/
Bromoform (UG/L)	5.	U/	5.	U/
4-Methyl-2-pentanone (UG/L)	10.	U/	10.	U/
2-Hexanone (UG/L)	10.	U/	10.	U/
Tetrachloroethene (UG/L)	5.	U/	5.	U/
1,1,2,2-Tetrachloroethane (UG/L)	5.	U/	5.	U/
Toluene (UG/L)	5.	U/	5.	U/
Chlorobenzene (UG/L)	5.	U/	5.	U/
Ethylbenzene (UG/L)	5.	U/	5.	U/
Styrene (UG/L)	5.	U/	5.	U/
Xylenes (total) (UG/L)	5.	U/	5.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SW Type: SVOC Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-SW01-01 01/23/91		SA-SW02-01 01/24/91		SA-SW02-91 01/24/91		SA-SW03-01 01/23/91		SA-SW04-01 01/23/91	
Phenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-Chloroethyl) ether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Chlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
1,3-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
1,4-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzyl Alcohol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
1,2-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-Chloroisopropyl)ether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
N-Nitroso-di-n-dipropylamine (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Hexachloroethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Nitrobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Isophorone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Nitrophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dimethylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzoic Acid (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
bis(2-Chloroethoxy)methane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dichlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
1,2,4-Trichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Naphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Chloroaniline (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorobutadiene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Chloro-3-methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Methylnaphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorocyclopentadiene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4,6-Trichlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4,5-Trichlorophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
2-Chloronaphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Dimethylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Acenaphthylene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,6-Dinitrotoluene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
3-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Acenaphthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dinitrophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
4-Nitrophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302142

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SW Type: SVOC Site Area: SA

Parameter	SA-SW01-01 01/23/91		SA-SW02-01 01/24/91		SA-SW02-91 01/24/91		SA-SW03-01 01/23/91		SA-SW04-01 01/23/91	
Dibenzofuran (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dinitrotoluene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Diethylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Chlorophenyl-phenylether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Fluorene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
4,6-Dinitro-2-methylphenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
N-nitrosodiphenylamine (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Bromophenyl-phenylether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Pentachlorophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Phenanthrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Di-n-butylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Butylbenzylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
3,3'-Dichlorobenzidine (UG/L)	20.	U/	20.	U/	20.	U/	20.	U/	20.	U/
Benzo(a)anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Chrysene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-ethylhexyl)phthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Di-n-octyl Phthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(b)fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(k)fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(a)pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Ideno(1,2,3-cd)pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Dibenz(a,h)anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(g,h,i)perylene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/

AR302143

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SW Type: PPCB Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-SW01-01 01/23/91		SA-SW02-01 01/24/91		SA-SW02-91 01/24/91		SA-SW03-01 01/23/91		SA-SW04-01 01/23/91	
alpha-BHC (UG/L)	0.05	U/	0.056	U/	0.053	U/	0.05	U/	0.05	U/
beta-BHC (UG/L)	0.05	U/	0.056	U/	0.053	U/	0.05	U/	0.05	U/
delta-BHC (UG/L)	0.05	U/	0.056	U/	0.053	U/	0.05	U/	0.05	U/
gamma-BHC (Lindane) (UG/L)	0.05	U/	0.056	U/	0.053	U/	0.05	U/	0.05	U/
Heptachlor (UG/L)	0.05	U/	0.056	U/	0.053	U/	0.05	U/	0.05	U/
Aldrin (UG/L)	0.05	U/	0.056	U/	0.053	U/	0.05	U/	0.05	U/
Heptachlor epoxide (UG/L)	0.05	U/	0.056	U/	0.053	U/	0.05	U/	0.05	U/
Endosulfan I (UG/L)	0.05	U/	0.056	U/	0.053	U/	0.05	U/	0.05	U/
Dieldrin (UG/L)	0.1	U/	0.112	U/	0.106	U/	0.1	U/	0.1	U/
4,4'-DDE (UG/L)	0.1	U/	0.112	U/	0.106	U/	0.1	U/	0.1	U/
Endrin (UG/L)	0.1	U/	0.112	U/	0.106	U/	0.1	U/	0.1	U/
Endosulfan II (UG/L)	0.1	U/	0.112	U/	0.106	U/	0.1	U/	0.1	U/
4,4'-DDD (UG/L)	0.1	U/	0.112	U/	0.106	U/	0.1	U/	0.1	U/
Endosulfan sulfate (UG/L)	0.1	U/	0.112	U/	0.106	U/	0.1	U/	0.1	U/
4,4'-DDT (UG/L)	0.1	U/	0.112	U/	0.106	U/	0.1	U/	0.1	U/
Methoxychlor (UG/L)	0.5	U/	0.56	U/	0.53	U/	0.5	U/	0.5	U/
Endrin ketone (UG/L)	0.1	U/	0.112	U/	0.106	U/	0.1	U/	0.1	U/
alpha-Chlordane (UG/L)	0.5	U/	0.56	U/	0.53	U/	0.5	U/	0.5	U/
gamma-Chlordane (UG/L)	0.5	U/	0.56	U/	0.53	U/	0.5	U/	0.5	U/
Toxaphene (UG/L)	1.	U/	1.12	U/	1.06	U/	1.	U/	1.	U/
Aroclor-1016 (UG/L)	0.5	U/	0.56	U/	0.53	U/	0.5	U/	0.5	U/
Aroclor-1221 (UG/L)	0.5	U/	0.56	U/	0.53	U/	0.5	U/	0.5	U/
Aroclor-1232 (UG/L)	0.5	U/	0.56	U/	0.53	U/	0.5	U/	0.5	U/
Aroclor-1242 (UG/L)	0.5	U/	0.56	U/	0.53	U/	0.5	U/	0.5	U/
Aroclor-1248 (UG/L)	0.5	U/	0.56	U/	0.53	U/	0.5	U/	0.5	U/
Aroclor-1254 (UG/L)	1.	U/	1.12	U/	1.06	U/	1.	U/	1.	U/
Aroclor-1260 (UG/L)	1.	U/	1.12	U/	1.06	U/	1.	U/	1.	U/

AR302144

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
Saegertown RI/FS
Saegertown, PA

Matrix: SW Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

SA-SW01-01 01/23/91

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Hexanedioic acid (UG/L)	5.	J/

SEDIMENT DATA

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SD Type: SLIND MTL Site Area: SA
Generated by: CAW
Date Issued: 05-APR-91

Parameter	Up SA-SD01-01 01/24/91		Adjacent SA-SD02-01 01/24/91		SA-SD02-91 01/24/91		SA-SD03-01 01/24/91		Down SA-SD04-01 01/24/91	
Total Solids (%)	39.5	/	65.5	/	72.5	/	73.9	/	81.	/
Total Organic Carbon (MG/KG)	16000.	>/J	3800.	/	16000.	>/J	16000.	>/J	1100.	/
Aluminum (MG/KG)	5570.	/	4280.	/	4220.	/	6040.	/	3970.	/
Antimony (MG/KG)	22.9	N/UL	14.4	UN/UL	12.8	UN/UL	11.4	UN/UL	11.3	UN/UL
Arsenic (MG/KG)	5.9	N/	5.9	N/J	4.8	N/J	17.4	N/J	6.6	N/J
Barium (MG/KG)	42.1	B/	23.7	B/	23.8	B/	33.3	B/	31.8	B/
Beryllium (MG/KG)	2.29	U/	1.44	U/	1.28	U/	1.14	U/	1.13	U/
Cadmium (MG/KG)	2.29	U/	1.44	U/	1.28	U/	1.14	U/	1.13	U/
Calcium (MG/KG)	1960.	B/	2730.	/	1980.	/	11500.	/	14600.	/
Chromium, total (MG/KG)	7.8	/	5.2	/	4.6	/	6.6	/	4.7	/
Cobalt (MG/KG)	4.58	U/	2.88	U/	2.56	U/	2.28	U/	2.26	U/
Copper (MG/KG)	9.6	B/	9.2	/	6.4	/	12.3	/	7.2	/
Iron (MG/KG)	11900.	/	9530.	/	9650.	/	16800.	/	13400.	/
Lead (MG/KG)	10.5	/	9.7	/	8.6	/	10.8	/	50.9	/
Magnesium (MG/KG)	1480.	B/	1350.	B/	1400.	/	2990.	/	1700.	/
Manganese (MG/KG)	577.	/	265.	/	309.	/	325.	/	271.	/
Mercury (MG/KG)	0.1	U/	0.6	U/	0.6	U/	0.05	U/	0.05	U/
Nickel (MG/KG)	9.16	U/	7.5	B/	5.12	U/	8.7	B/	4.52	U/
Potassium (MG/KG)	892.	BN/	398.	BN/J	463.	BN/J	538.	BN/J	356.	BN/J
Selenium (MG/KG)	0.96	U/	0.576	US/	0.512	U/	0.456	U/	0.452	U/
Silver (MG/KG)	4.58	U/	2.88	U/	2.56	U/	2.28	U/	2.26	U/
Sodium (MG/KG)	916.	U/	576.	U/	512.	U/	456.	U/	452.	U/
Thallium (MG/KG)	1.374	U/	0.864	U/	0.768	U/	0.83	B/	0.678	U/
Vanadium (MG/KG)	22.9	U/	14.4	U/	12.8	U/	11.4	U/	11.3	U/
Zinc (MG/KG)	40.3	/	43.	/	30.7	/	49.1	/	52.6	/
Cyanide (MG/KG)	6.3	U/	3.8	U/	3.4	U/	3.4	U/	3.1	U/

AR302147

Note: (Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SD Type: SLIND MTL Site Area: SA

Parameter	SA-SD09-01 01/24/91	
Total Solids (%)	67.1	/
Total Organic Carbon (MG/KG)	13000.	U/
Aluminum (MG/KG)	8760.	/
Antimony (MG/KG)	12.8	UN/UL
Arsenic (MG/KG)	6.6	N/J
Barium (MG/KG)	55.9	/
Beryllium (MG/KG)	1.28	U/
Cadmium (MG/KG)	1.28	U/
Calcium (MG/KG)	1160.	B/
Chromium, total (MG/KG)	9.	/
Cobalt (MG/KG)	3.8	B/
Copper (MG/KG)	7.9	/
Iron (MG/KG)	14200.	/
Lead (MG/KG)	10.4	/
Magnesium (MG/KG)	1610.	/
Manganese (MG/KG)	302.	/
Mercury (MG/KG)	0.06	U/
Nickel (MG/KG)	7.4	B/
Potassium (MG/KG)	446.	BN/J
Selenium (MG/KG)	0.46	U/
Silver (MG/KG)	2.56	U/
Sodium (MG/KG)	512.	U/
Thallium (MG/KG)	0.69	U/
Vanadium (MG/KG)	15.4	/
Zinc (MG/KG)	42.6	/
Cyanide (MG/KG)	3.7	U/

AR302148

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SD Type: VOC Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-SD01-01 01/24/91		SA-SD02-01 01/24/91		SA-SD02-91 01/24/91		SA-SD03-01 01/24/91		SA-SD04-01 01/24/91	
Chloromethane (UG/KG)	16.	U/	13.	U/	14.	U/	13.	U/	15.	U/
Bromomethane (UG/KG)	16.	U/	13.	U/	14.	U/	13.	U/	15.	U/
Vinyl chloride (UG/KG)	16.	U/	13.	U/	14.	U/	13.	U/	15.	U/
Chloroethane (UG/KG)	16.	U/	13.	U/	14.	U/	13.	U/	15.	U/
Methylene chloride (UG/KG)	53.	B/B	39.	B/B	55.	B/B	34.	B/B	51.	B/B
Acetone (UG/KG)	43.	B/B	15.	B/B	48.	B/B	20.	B/B	18.	B/B
Carbon disulfide (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
1,1-Dichloroethene (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
1,1-Dichloroethane (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
1,2-Dichloroethene (total) (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Chloroform (UG/KG)	4.	BJ/B	3.	J/B	5.	BJ/B	80.	/	3.	BJ/B
1,2-Dichloroethane (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
2-Butanone (UG/KG)	16.	U/	13.	U/	14.	U/	13.	U/	15.	U/
1,1,1-Trichloroethane (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Carbon tetrachloride (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Vinyl acetate (UG/KG)	16.	U/	13.	U/	14.	U/	13.	U/	15.	U/
Bromodichloromethane (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
1,2-Dichloropropane (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
cis-1,3-Dichloropropene (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Trichloroethene (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Dibromochloromethane (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
1,1,2-Trichloroethane (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Benzene (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
trans-1,3-Dichloropropene (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Bromoform (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
4-Methyl-2-pentanone (UG/KG)	16.	U/	13.	U/	14.	U/	13.	U/	15.	U/
2-Hexanone (UG/KG)	16.	U/	13.	U/	14.	U/	13.	U/	15.	U/
Tetrachloroethene (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
1,1,2,2-Tetrachloroethane (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Toluene (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Chlorobenzene (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Ethylbenzene (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Styrene (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/
Xylenes (total) (UG/KG)	8.	U/	6.5	U/	7.	U/	6.5	U/	7.5	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302149

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SD Type: VOC Site Area: SA

Parameter	SA-SD09-01 01/24/91	
Chloromethane (UG/KG)	16.	U/
Bromomethane (UG/KG)	16.	U/
Vinyl chloride (UG/KG)	16.	U/
Chloroethane (UG/KG)	16.	U/
Methylene chloride (UG/KG)	44.	B/B
Acetone (UG/KG)	22.	B/B
Carbon disulfide (UG/KG)	8.	U/
1,1-Dichloroethene (UG/KG)	8.	U/
1,1-Dichloroethane (UG/KG)	8.	U/
1,2-Dichloroethene (total) (UG/KG)	8.	U/
Chloroform (UG/KG)	3.	BJ/B
1,2-Dichloroethane (UG/KG)	8.	U/
2-Butanone (UG/KG)	16.	U/
1,1,1-Trichloroethane (UG/KG)	8.	U/
Carbon tetrachloride (UG/KG)	8.	U/
Vinyl acetate (UG/KG)	16.	U/
Bromodichloromethane (UG/KG)	8.	U/
1,2-Dichloropropane (UG/KG)	8.	U/
cis-1,3-Dichloropropene (UG/KG)	8.	U/
Trichloroethene (UG/KG)	8.	U/
Dibromochloromethane (UG/KG)	8.	U/
1,1,2-Trichloroethane (UG/KG)	8.	U/
Benzene (UG/KG)	8.	U/
trans-1,3-Dichloropropene (UG/KG)	8.	U/
Bromoform (UG/KG)	8.	U/
4-Methyl-2-pentanone (UG/KG)	16.	U/
2-Hexanone (UG/KG)	16.	U/
Tetrachloroethene (UG/KG)	8.	U/
1,1,2,2-Tetrachloroethane (UG/KG)	8.	U/
Toluene (UG/KG)	8.	U/
Chlorobenzene (UG/KG)	8.	U/
Ethylbenzene (UG/KG)	8.	U/
Styrene (UG/KG)	8.	U/
Xylenes (total) (UG/KG)	8.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302150

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SD Type: SVOC Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-SD01-01 01/24/91		SA-SD02-01 01/24/91		SA-SD02-91 01/24/91		SA-SD03-01 01/24/91		SA-SD04-01 01/24/91	
Phenol (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
bis(2-Chloroethyl) ether (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2-Chlorophenol (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
1,3-Dichlorobenzene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
1,4-Dichlorobenzene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Benzyl Alcohol (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
1,2-Dichlorobenzene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2-Methylphenol (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
bis(2-Chloroisopropyl)ether (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
4-Methylphenol (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	130.	J/	480.15	U/
N-Nitroso-di-n-dipropylamine (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Hexachloroethane (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Nitrobenzene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Isophorone (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2-Nitrophenol (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2,4-Dimethylphenol (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Benzoic Acid (UG/KG)	2569.6	U/	2036.8	U/UJ	2230.4	U/	53.	J/N	2328.	U/
bis(2-Chloroethoxy)methane (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2,4-Dichlorophenol (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
1,2,4-Trichlorobenzene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Naphthalene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
4-Chloroaniline (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Hexachlorobutadiene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
4-Chloro-3-methylphenol (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2-Methylnaphthalene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Hexachlorocyclopentadiene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2,4,6-Trichlorophenol (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2,4,5-Trichlorophenol (UG/KG)	2569.6	U/	2036.8	U/UJ	2230.4	U/	2084.8	U/	2328.	U/
2-Chloronaphthalene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2-Nitroaniline (UG/KG)	2569.6	U/	2036.8	U/UJ	2230.4	U/	2084.8	U/	2328.	U/
Dimethylphthalate (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Acenaphthylene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2,6-Dinitrotoluene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
3-Nitroaniline (UG/KG)	2569.6	U/	2036.8	U/UJ	2230.4	U/	2084.8	U/	2328.	U/
Acenaphthene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2,4-Dinitrophenol (UG/KG)	2569.6	U/	2036.8	U/UJ	2230.4	U/	2084.8	U/	2328.	U/
4-Nitrophenol (UG/KG)	2569.6	U/	2036.8	U/UJ	2230.4	U/	2084.8	U/	2328.	U/

Note: (Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302151

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SD Type: SVOC Site Area: SA

Parameter	SA-SD09-01 01/24/91	
Phenol (UG/KG)	539.88	U/
bis(2-Chloroethyl) ether (UG/KG)	539.88	U/
2-Chlorophenol (UG/KG)	539.88	U/
1,3-Dichlorobenzene (UG/KG)	539.88	U/
1,4-Dichlorobenzene (UG/KG)	539.88	U/
Benzyl Alcohol (UG/KG)	539.88	U/
1,2-Dichlorobenzene (UG/KG)	539.88	U/
2-Methylphenol (UG/KG)	539.88	U/
bis(2-Chloroisopropyl)ether (UG/KG)	539.88	U/
4-Methylphenol (UG/KG)	539.88	U/
N-Nitroso-di-n-dipropylamine (UG/KG)	539.88	U/
Hexachloroethane (UG/KG)	539.88	U/
Nitrobenzene (UG/KG)	539.88	U/
Isophorone (UG/KG)	539.88	U/
2-Nitrophenol (UG/KG)	539.88	U/
2,4-Dimethylphenol (UG/KG)	539.88	U/
Benzoic Acid (UG/KG)	130.	J/
bis(2-Chloroethoxy)methane (UG/KG)	539.88	U/
2,4-Dichlorophenol (UG/KG)	539.88	U/
1,2,4-Trichlorobenzene (UG/KG)	539.88	U/
Naphthalene (UG/KG)	539.88	U/
4-Chloroaniline (UG/KG)	539.88	U/
Hexachlorobutadiene (UG/KG)	539.88	U/
4-Chloro-3-methylphenol (UG/KG)	539.88	U/
2-Methylnaphthalene (UG/KG)	539.88	U/
Hexachlorocyclopentadiene (UG/KG)	539.88	U/
2,4,6-Trichlorophenol (UG/KG)	539.88	U/
2,4,5-Trichlorophenol (UG/KG)	2617.6	U/
2-Chloronaphthalene (UG/KG)	539.88	U/
2-Nitroaniline (UG/KG)	2617.6	U/
Dimethylphthalate (UG/KG)	539.88	U/
Acenaphthylene (UG/KG)	539.88	U/
2,6-Dinitrotoluene (UG/KG)	539.88	U/
3-Nitroaniline (UG/KG)	2617.6	U/
Acenaphthene (UG/KG)	539.88	U/
2,4-Dinitrophenol (UG/KG)	2617.6	U/
4-Nitrophenol (UG/KG)	2617.6	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302152

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SD Type: SVOC Site Area: SA

Parameter	Upstream SA-SD01-01 01/24/91		Adjacent SA-SD02-01 01/24/91		SA-SD02-91 01/24/91		SA-SD03-01 01/24/91		Downstream SA-SD04-01 01/24/91	
Dibenzofuran (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
2,4-Dinitrotoluene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Diethylphthalate (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
4-Chlorophenyl-phenylether (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Fluorene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
4-Nitroaniline (UG/KG)	2569.6	U/	2036.8	U/UJ	2230.4	U/	2084.8	U/	2328.	U/
4,6-Dinitro-2-methylphenol (UG/KG)	2569.6	U/	2036.8	U/UJ	2230.4	U/	2084.8	U/	2328.	U/
N-nitrosodiphenylamine (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
4-Bromophenyl-phenylether (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Hexachlorobenzene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Pentachlorophenol (UG/KG)	2569.6	U/	2036.8	U/UJ	2230.4	U/	2084.8	U/	2328.	U/
Phenanthrene (UG/KG)	58.	J/	420.09	U/UJ	460.02	U/	75.	J/	480.15	U/
Anthracene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	61.	J/	480.15	U/
Di-n-butylphthalate (UG/KG)	62.	J/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
Fluoranthene (UG/KG)	99.	J/	82.	J/J	52.	J/	170.	J/	480.15	U/
Pyrene (UG/KG)	90.	J/N	70.	J/J	460.02	U/	150.	J/	56.	J/N
Butylbenzylphthalate (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/	480.15	U/
3,3'-Dichlorobenzidine (UG/KG)	1100.	U/	830.	U/UJ	920.	U/	860.	U/	950.	U/
Benzo(a)anthracene (UG/KG)	54.	J/N	420.09	U/UJ	460.02	U/	91.	J/	480.15	U/
Chrysene (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	82.	J/	480.15	U/
bis(2-ethylhexyl)phthalate (UG/KG)	82.	J/	420.09	U/UJ	76.	J/	65.	J/N	51.	J/
Di-n-octyl Phthalate (UG/KG)	529.98	U/	420.09	U/UJ	460.02	U/	429.99	U/N	480.15	U/
Benzo(b)fluoranthene (UG/KG)	73.	JX/N	420.09	U/UJ	460.02	U/	110.	J/	480.15	U/
Benzo(k)fluoranthene (UG/KG)	73.	JX/N	420.09	U/	460.02	U/	429.99	U/	480.15	U/
Benzo(a)pyrene (UG/KG)	529.98	U/	420.09	U/	460.02	U/	71.	J/	480.15	U/
Ideno(1,2,3-cd)pyrene (UG/KG)	529.98	U/	420.09	U/	460.02	U/	429.99	U/	480.15	U/
Dibenz(a,h)anthracene (UG/KG)	529.98	U/	420.09	U/	460.02	U/	429.99	U/	480.15	U/
Benzo(g,h,i)perylene (UG/KG)	529.98	U/	420.09	U/	460.02	U/	429.99	U/	480.15	U/

AR302153

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SD Type: SVOC Site Area: SA

Parameter	SA-SD09-01 01/24/91	
Dibenzofuran (UG/KG)	539.88	U/
2,4-Dinitrotoluene (UG/KG)	539.88	U/
Diethylphthalate (UG/KG)	539.88	U/
4-Chlorophenyl-phenylether (UG/KG)	539.88	U/
Fluorene (UG/KG)	539.88	U/
4-Nitroaniline (UG/KG)	2617.6	U/
4,6-Dinitro-2-methylphenol (UG/KG)	2617.6	U/
N-nitrosodiphenylamine (UG/KG)	539.88	U/
4-Bromophenyl-phenylether (UG/KG)	539.88	U/
Hexachlorobenzene (UG/KG)	539.88	U/
Pentachlorophenol (UG/KG)	2617.6	U/
Phenanthrene (UG/KG)	539.88	U/
Anthracene (UG/KG)	539.88	U/
Di-n-butylphthalate (UG/KG)	539.88	U/
Fluoranthene (UG/KG)	539.88	U/
Pyrene (UG/KG)	539.88	U/
Butylbenzylphthalate (UG/KG)	539.88	U/
3,3'-Dichlorobenzidine (UG/KG)	1100.	U/
Benzo(a)anthracene (UG/KG)	539.88	U/
Chrysene (UG/KG)	539.88	U/
bis(2-ethylhexyl)phthalate (UG/KG)	65.	J/N
Di-n-octyl Phthalate (UG/KG)	539.88	U/
Benzo(b)fluoranthene (UG/KG)	539.88	U/
Benzo(k)fluoranthene (UG/KG)	539.88	U/
Benzo(a)pyrene (UG/KG)	539.88	U/
Ideno(1,2,3-cd)pyrene (UG/KG)	539.88	U/
Dibenz(a,h)anthracene (UG/KG)	539.88	U/
Benzo(g,h,i)perylene (UG/KG)	539.88	U/

AR302154

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SD Type: PPCB Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-SD01-01 01/24/91		SA-SD02-01 01/24/91		SA-SD02-91 01/24/91		SA-SD03-01 01/24/91		SA-SD04-01 01/24/91	
alpha-BHC (UG/KG)	13.	U/	10.	U/UJ	11.	U/	10.	U/	12.	U/
beta-BHC (UG/KG)	13.	U/	10.	U/UJ	11.	U/	10.	U/	12.	U/
delta-BHC (UG/KG)	13.	U/	10.	U/UJ	11.	U/	10.	U/	12.	U/
gamma-BHC (Lindane) (UG/KG)	13.	U/	10.	U/UJ	11.	U/	10.	U/	12.	U/
Heptachlor (UG/KG)	13.	U/	10.	U/UJ	11.	U/	10.	U/	12.	U/
Aldrin (UG/KG)	13.	U/	10.	U/UJ	11.	U/	10.	U/	12.	U/
Heptachlor epoxide (UG/KG)	13.	U/	10.	U/UJ	11.	U/	10.	U/	12.	U/
Endosulfan I (UG/KG)	13.	U/	10.	U/UJ	11.	U/	10.	U/	12.	U/
Dieldrin (UG/KG)	26.	U/	20.	U/UJ	22.	U/	20.	U/	24.	U/
4,4'-DDE (UG/KG)	26.	U/	20.	U/UJ	22.	U/	20.	U/	24.	U/
Endrin (UG/KG)	26.	U/	20.	U/UJ	22.	U/	20.	U/	24.	U/
Endosulfan II (UG/KG)	26.	U/	20.	U/UJ	22.	U/	20.	U/	24.	U/
4,4'-DDD (UG/KG)	26.	U/	20.	U/UJ	22.	U/	20.	U/	24.	U/
Endosulfan sulfate (UG/KG)	26.	U/	20.	U/UJ	22.	U/	20.	U/	24.	U/
4,4'-DDT (UG/KG)	26.	U/	20.	U/UJ	22.	U/	20.	U/	24.	U/
Methoxychlor (UG/KG)	130.	U/	100.	U/UJ	110.	U/	100.	U/	120.	U/
Endrin ketone (UG/KG)	26.	U/	20.	U/UJ	22.	U/	20.	U/	24.	U/
alpha-Chlordane (UG/KG)	130.	U/	100.	U/UJ	110.	U/	100.	U/	120.	U/
gamma-Chlordane (UG/KG)	130.	U/	100.	U/UJ	110.	U/	100.	U/	120.	U/
Toxaphene (UG/KG)	260.	U/	200.	U/UJ	220.	U/	200.	U/	240.	U/
Aroclor-1016 (UG/KG)	130.	U/	100.	U/UJ	110.	U/	100.	U/	120.	U/
Aroclor-1221 (UG/KG)	130.	U/	100.	U/UJ	110.	U/	100.	U/	120.	U/
Aroclor-1232 (UG/KG)	130.	U/	100.	U/UJ	110.	U/	100.	U/	120.	U/
Aroclor-1242 (UG/KG)	130.	U/	100.	U/UJ	110.	U/	100.	U/	120.	U/
Aroclor-1248 (UG/KG)	130.	U/	100.	U/UJ	110.	U/	100.	U/	120.	U/
Aroclor-1254 (UG/KG)	260.	U/	200.	U/UJ	220.	U/	200.	U/	240.	U/
Aroclor-1260 (UG/KG)	260.	U/	200.	U/UJ	220.	U/	200.	U/	240.	U/

AR302155

Note: (Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: SD Type: PPCB Site Area: SA

Parameter	SA-SD09-01 01/24/91	
alpha-BHC (UG/KG)	13.	U/
beta-BHC (UG/KG)	13.	U/
delta-BHC (UG/KG)	13.	U/
gamma-BHC (Lindane) (UG/KG)	13.	U/
Heptachlor (UG/KG)	13.	U/
Aldrin (UG/KG)	13.	U/
Heptachlor epoxide (UG/KG)	13.	U/
Endosulfan I (UG/KG)	13.	U/
Dieldrin (UG/KG)	26.	U/
4,4'-DDE (UG/KG)	26.	U/
Endrin (UG/KG)	26.	U/
Endosulfan II (UG/KG)	26.	U/
4,4'-DDD (UG/KG)	26.	U/
Endosulfan sulfate (UG/KG)	26.	U/
4,4'-DDT (UG/KG)	26.	U/
Methoxychlor (UG/KG)	130.	U/
Endrin ketone (UG/KG)	26.	U/
alpha-Chlordane (UG/KG)	130.	U/
gamma-Chlordane (UG/KG)	130.	U/
Toxaphene (UG/KG)	260.	U/
Aroclor-1016 (UG/KG)	130.	U/
Aroclor-1221 (UG/KG)	130.	U/
Aroclor-1232 (UG/KG)	130.	U/
Aroclor-1242 (UG/KG)	130.	U/
Aroclor-1248 (UG/KG)	130.	U/
Aroclor-1254 (UG/KG)	260.	/
Aroclor-1260 (UG/KG)	260.	U/

AR302156

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
Saegertown RI/FS
Saegertown, PA

Matrix: SD Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

SA-SD01-01 01/24/91

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown Hydrocarbon (UG/KG)	380.	J/
Unknown (UG/KG)	1200.	J/
Aldol (UG/KG)	2200.	AJ/
Aldol (UG/KG)	590.	AJ/
Unknown (UG/KG)	490.	J/
Aldol (UG/KG)	860.	AJ/
Unknown (UG/KG)	1300.	J/
Unknown (UG/KG)	860.	J/
Unknown Hydrocarbon (UG/KG)	220.	J/
Unknown (UG/KG)	380.	J/
Unknown Hydrocarbon (UG/KG)	270.	J/
Unknown (UG/KG)	430.	J/
Unknown (UG/KG)	540.	J/
Unknown Hydrocarbon (UG/KG)	760.	J/
Unknown (UG/KG)	380.	J/
Unknown Hydrocarbon (UG/KG)	430.	J/

SA-SD02-01 01/24/91

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Aldol (UG/KG)	760.	AJ/
Aldol (UG/KG)	500.	AJ/
Unknown (UG/KG)	380.	J/
Aldol (UG/KG)	1300.	AJ/
Unknown (UG/KG)	380.	J/
Siloxane (UG/KG)	340.	J/
Siloxane (UG/KG)	500.	J/
Tribromophenol (UG/KG)	290.	J/
Siloxane (UG/KG)	420.	J/
Unknown Hydrocarbon (UG/KG)	250.	J/
Unknown (UG/KG)	290.	J/
Unknown Hydrocarbon (UG/KG)	250.	J/
Unknown (UG/KG)	840.	J/
Unknown Hydrocarbon (UG/KG)	710.	J/
Unknown (UG/KG)	800.	J/
Unknown (UG/KG)	340.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
Saegertown RI/FS
Saegertown, PA

Matrix: SD Site Area: SA

SA-SD02-91 01/24/91

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/KG)	1000.	J/
Aldol (UG/KG)	930.	AJ/
Aldol (UG/KG)	1200.	AJ/
Unknown (UG/KG)	510.	J/
Aldol (UG/KG)	230.	AJ/
Aldol (UG/KG)	650.	AJ/
Unknown (UG/KG)	1300.	J/
Unknown (UG/KG)	230.	J/
Unknown Hydrocarbon (UG/KG)	280.	J/
Unknown Hydrocarbon (UG/KG)	420.	J/
Unknown Hydrocarbon (UG/KG)	460.	J/
Unknown Hydrocarbon (UG/KG)	740.	J/
Unknown Hydrocarbon (UG/KG)	740.	J/
Unknown (UG/KG)	510.	J/
Unknown Hydrocarbon (UG/KG)	560.	J/

SA-SD03-01 01/24/91

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Aldol (UG/KG)	310.	AJ/
Aldol (UG/KG)	1500.	AJ/
Aldol (UG/KG)	440.	AJ/
Unknown (UG/KG)	1200.	J/
Unknown (UG/KG)	520.	J/
Unknown (UG/KG)	350.	J/
Unknown (UG/KG)	3600.	J/
Unknown (UG/KG)	1000.	J/
Unknown (UG/KG)	920.	J/
Unknown Hydrocarbon (UG/KG)	570.	J/
Unknown Hydrocarbon (UG/KG)	1200.	J/
Unknown Hydrocarbon (UG/KG)	2700.	J/
Unknown Hydrocarbon (UG/KG)	2500.	J/
Unknown (UG/KG)-	1300.	J/
Unknown (UG/KG)	3100.	J/
Unknown (UG/KG)	4800.	J/
Unknown Hydrocarbon (UG/KG)	15000.	J/
Unknown Hydrocarbon (UG/KG)	3100.	J/
Unknown Hydrocarbon (UG/KG)	4100.	J/
Unknown (UG/KG)	1400.	J/
Unknown Hydrocarbon (UG/KG)	4300.	J/
Unknown (UG/KG)	1100.	J/
Unknown (UG/KG)	1500.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
Saegertown RI/FS
Saegertown, PA

Matrix: SD Site Area: SA

SA-SD04-01 01/24/91

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown Hydrocarbon (UG/KG)	340.	J/
Unknown (UG/KG)	910.	J/
Aldol (UG/KG)	2100.	AJ/
Aldol (UG/KG)	380.	AJ/
Aldol (UG/KG)	1200.	AJ/
Aldol (UG/KG)	430.	AJ/
Aldol (UG/KG)	380.	AJ/
Unknown Hydrocarbon (UG/KG)	380.	J/
Unknown (UG/KG)	240.	J/
Unknown Hydrocarbon (UG/KG)	480.	J/
Unknown (UG/KG)	190.	J/

SA-SD09-01 01/24/91

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/KG)	970.	J/
Aldol (UG/KG)	2800.	AJ/
Aldol (UG/KG)	540.	AJ/
Unknown (UG/KG)	1600.	J/
Unknown (UG/KG)	270.	J/
Unknown Subst. Hydrocarbon (UG/KG)	380.	J/
Unknown Hydrocarbon (UG/KG)	270.	J/
Unknown (UG/KG)	540.	J/
Unknown Hydrocarbon (UG/KG)	320.	J/
Unknown Siloxane (UG/KG)	760.	J/
Unknown Hydrocarbon (UG/KG)	320.	J/
Unknown Hydrocarbon (UG/KG)	490.	J/
Unknown (UG/KG)	650.	J/
Unknown Hydrocarbon (UG/KG)	540.	J/
Unknown Hydrocarbon (UG/KG)	970.	J/
Octadecene (UG/KG)	970.	J/
Unknown Hydrocarbon (UG/KG)	810.	J/
Unknown Hydrocarbon (UG/KG)	700.	J/
Unknown Hydrocarbon (UG/KG)	1300.	J/
Unknown (UG/KG)	970.	J/
Unknown (UG/KG)	380.	J/

GROUNDWATER DATA

SUMMARY OF GROUNDWATER SAMPLING FIELD PARAMETERS
Saegertown Industrial Area Site
Remedial Investigation
Saegertown, Pennsylvania

Sample	Date Sampled	Time Sampled	pH	Temp	Sp Cond	DO	Red/Ox
SA-GW-W1S	1/29/91	910	7.04	9.0	235	6.5	179
SA-GW-W1D	1/29/91	940	7.96	9.0	340	2.2	157
SA-GW-FB1	1/29/91	1530	7.56	12.0	<10	8.9	267

Notes:
pH recorded in standard units
Temperature in Degrees C
Sp Cond = Specific Conductivity (umhos) at 25 Degrees C
DO = Dissolved Oxygen (mg/l)
Red/Ox = Reduction/Oxidation Potential (mV)

SG_GWPH/TJM/lam

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: IND MTL Site Area: SA
Generated by: CAW
Date Issued: 05-APR-91

Parameter	SA-GWFB01-01 01/29/91		SA-GWFB01-01T 01/29/91		SA-GWW01D-01 01/29/91		SA-GWW01D-01T 01/29/91		SA-GWW01S-01 01/29/91	
Aluminum (UG/L)	50.	U/	50.	U/	50.	U/	30400.	/	50.	U/
Antimony (UG/L)	50.	U/	5.	UN/R	50.	U/	5.	UN/R	50.	U/
Arsenic (UG/L)	2.	U/	2.	UN/UL	2.	U/	38.2	N/L	2.	U/
Barium (UG/L)	10.	U/	10.	U/	86.	B/	545.	/	16.	B/
Beryllium (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Cadmium (UG/L)	5.	U/	5.	UN/	5.	U/	5.	UN/	5.	U/
Calcium (UG/L)	1000.	U/	1000.	U/	14200.	/	40500.	/	35000.	/
Chromium, total (UG/L)	10.	U/	10.	U/	10.	U/	67.	/J	10.	U/
Cobalt (UG/L)	10.	U/	10.	U/	10.	U/	23.	B/B	10.	B/B
Copper (UG/L)	10.	U/	10.	UN/UL	10.	U/	48.	N/L	10.	U/
Iron (UG/L)	20.	U/	24.	B/	20.	U/	76000.	/	20.	U/
Lead (UG/L)	3.	U/	3.	UN*/UL	3.	U/	21.4	N*/JL	3.	U/
Magnesium (UG/L)	1000.	U/	1000.	U/	3770.	B/	19800.	/	5600.	/
Manganese (UG/L)	10.	U/	15.	U/	31.	/	1170.	/	387.	/
Mercury (UG/L)	0.2	U/	0.2	UN/	0.2	U/	0.2	UN/	0.2	U/
Nickel (UG/L)	20.	U/	20.	U/	20.	U/	76.	/	20.	U/
Potassium (UG/L)	140.	B/	100.	UN*/UL	1930.	B/	7310.	N*/L	960.	B/
Selenium (UG/L)	2.	U/	2.	UNS/R	2.	U/	2.	UNS/R	2.	U/
Silver (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Sodium (UG/L)	2320.	B/B	1000.	UN/	56200.	/	56000.	N/K	10000.	/B
Thallium (UG/L)	3.	U/	3.	UN/UL	3.	U/	3.	UN/UL	3.	U/
Vanadium (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Zinc (UG/L)	10.	U/	10.	U/UL	10.	U/	226.	/L	10.	U/
Cyanide (UG/L)	10.	U/			10.	U/			10.	U/
Alkalinity, Total (MG/L)	5.	U/			197.	/			85.	/
Chloride (MG/L)	1.	U/			4.	/			22.	/
Nitrate+Nitrite Nitrogen (MG/L)	0.02	U/			0.13	/			0.14	/
Nitrogen, Ammonia (MG/L)	0.1	U/			0.62	/			0.17	/
Sulfate (MG/L)	5.	U/			26.	/			27.	/
Total Dissolved Solids (MG/L)	20.	U/			272.	/			162.	/
Total Organic Carbon (MG/L)	1.	U/UL			1.1	/L			5.4	/L
Total Suspended Solids (MG/L)	2.	U/			5410.	/			15000.	/
Phenolics, Total (MG/L)	0.005	U/UL			0.005	U/UL			0.005	U/UL

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: IND MTL Site Area: SA

Parameter	SA-GWW01S-01T 01/29/91		SA-GWW01S-91 01/29/91		SA-GWW01S-91T 01/29/91	
Aluminum (UG/L)	177000.	/	50.	U/	36100.	/
Antimony (UG/L)	5.	UN/R	50.	U/	5.	UN/R
Arsenic (UG/L)	43.8	N/L	2.	U/	22.5	N/L
Barium (UG/L)	971.	/	17.	B/	211.	/
Beryllium (UG/L)	7.	/	5.	U/	5.	U/
Cadmium (UG/L)	6.7	N/	5.	U/	5.	UN/
Calcium (UG/L)	278000.	/	35700.	/	56300.	/
Chromium, total (UG/L)	256.	/J	10.	U/	69.	/J
Cobalt (UG/L)	164.	/	10.	U/	33.	B/B
Copper (UG/L)	486.	N/L	10.	U/	105.	N/L
Iron (UG/L)	485000.	/	20.	U/	98500.	/
Lead (UG/L)	254.	N*/JL	3.	U/	72.1	N*/JL
Magnesium (UG/L)	112000.	/	5610.	/	23800.	/
Manganese (UG/L)	12900.	/	381.	/	2680.	/
Mercury (UG/L)	0.46	N/K	0.2	U/	0.2	UN/
Nickel (UG/L)	313.	/	20.	U/	68.	/
Potassium (UG/L)	14400.	N*/L	1010.	B/	5390.	N*/L
Selenium (UG/L)	2.	UNS/R	2.	U/	2.	UNS/R
Silver (UG/L)	10.	U/	10.	U/	10.	U/
Sodium (UG/L)	10000.	N/K	9920.	/B	4500.	BN/K
Thallium (UG/L)	4.2	BNS/L	3.	U/	3.	UNS/UL
Vanadium (UG/L)	167.	/	50.	U/	53.	/
Zinc (UG/L)	1240.	/L	10.	U/	302.	/L
Cyanide (UG/L)			10.	U/		
Alkalinity, Total (MG/L)			84.	/		
Chloride (MG/L)			17.	/		
Nitrate+Nitrite Nitrogen (MG/L)			0.18	/		
Nitrogen, Ammonia (MG/L)			0.1	U/		
Sulfate (MG/L)			26.	/		
Total Dissolved Solids (MG/L)			172.	/		
Total Organic Carbon (MG/L)			3.	/L		
Total Suspended Solids (MG/L)			10200.	/		
Phenolics, Total (MG/L)			0.005	U/UL		

AR302163

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: VOC Site Area: SA
Generated by: CAW
Date Issued: 09-APR-91

Parameter	SA-GWFB01-01 01/29/91		SA-GWTB01-01 01/29/91		SA-GWTB03-01 01/29/91		SA-GWW01D-01 01/29/91		SA-GWW01S-01 01/29/91	
Chloromethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Bromomethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Vinyl chloride (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Chloroethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Methylene chloride (UG/L)	3.	BJ/B	22.	B/B	4.	BJ/B	10.	B/B	21.	B/B
Acetone (UG/L)	9.	BJ/B	10.	B/B	8.	BJ/B	10.	U/	5.	BJ/B
Carbon disulfide (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1-Dichloroethene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1-Dichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,2-Dichloroethene (total) (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Chloroform (UG/L)	2.	J/B	2.	J/B	1.	J/B	5.	U/	5.	U/
1,2-Dichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
2-Butanone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
1,1,1-Trichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Carbon tetrachloride (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Vinyl acetate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Bromodichloromethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,2-Dichloropropane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
cis-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Trichloroethene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Dibromochloromethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1,2-Trichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Benzene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
trans-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Bromoform (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
4-Methyl-2-pentanone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Hexanone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Tetrachloroethene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1,2,2-Tetrachloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Toluene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Chlorobenzene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Ethylbenzene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Styrene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Xylenes (total) (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302164

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: VOC Site Area: SA

Parameter	SA-GWW01S-91 01/29/91	
Chloromethane (UG/L)	10.	U/
Bromomethane (UG/L)	10.	U/
Vinyl chloride (UG/L)	10.	U/
Chloroethane (UG/L)	10.	U/
Methylene chloride (UG/L)	2.	BJ/B
Acetone (UG/L)	5.	BJ/B
Carbon disulfide (UG/L)	5.	U/
1,1-Dichloroethene (UG/L)	5.	U/
1,1-Dichloroethane (UG/L)	5.	U/
1,2-Dichloroethene (total) (UG/L)	5.	U/
Chloroform (UG/L)	5.	U/
1,2-Dichloroethane (UG/L)	5.	U/
2-Butanone (UG/L)	10.	U/
1,1,1-Trichloroethane (UG/L)	5.	U/
Carbon tetrachloride (UG/L)	5.	U/
Vinyl acetate (UG/L)	10.	U/
Bromodichloromethane (UG/L)	5.	U/
1,2-Dichloropropane (UG/L)	5.	U/
cis-1,3-Dichloropropene (UG/L)	5.	U/
Trichloroethene (UG/L)	5.	U/
Dibromochloromethane (UG/L)	5.	U/
1,1,2-Trichloroethane (UG/L)	5.	U/
Benzene (UG/L)	5.	U/
trans-1,3-Dichloropropene (UG/L)	5.	U/
Bromoform (UG/L)	5.	U/
4-Methyl-2-pentanone (UG/L)	10.	U/
2-Hexanone (UG/L)	10.	U/
Tetrachloroethene (UG/L)	5.	U/
1,1,2,2-Tetrachloroethane (UG/L)	5.	U/
Toluene (UG/L)	5.	U/
Chlorobenzene (UG/L)	5.	U/
Ethylbenzene (UG/L)	5.	U/
Styrene (UG/L)	5.	U/
Xylenes (total) (UG/L)	5.	U/

AR302165

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: SVOC Site Area: SA
Generated by: CAW
Date Issued: 05-APR-91

Parameter	SA-GWFB01-01 01/29/91		SA-GWW01D-01 01/29/91		SA-GWW01S-01 01/29/91		SA-GWW01S-91 01/29/91	
Phenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-Chloroethyl) ether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2-Chlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
1,3-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
1,4-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzyl Alcohol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
1,2-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2-Methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-Chloroisopropyl)ether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
N-Nitroso-di-n-dipropylamine (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Hexachloroethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Nitrobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Isophorone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2-Nitrophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dimethylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzoic Acid (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
bis(2-Chloroethoxy)methane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dichlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
1,2,4-Trichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Naphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Chloroaniline (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorobutadiene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Chloro-3-methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2-Methylnaphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorocyclopentadiene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4,6-Trichlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4,5-Trichlorophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
2-Chloronaphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
Dimethylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Acenaphthylene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,6-Dinitrotoluene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
3-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
Acenaphthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dinitrophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
4-Nitrophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302166

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: SVOC Site Area: SA

Parameter	SA-GWFB01-01 01/29/91		SA-GWW01D-01 01/29/91		SA-GWW01S-01 01/29/91		SA-GWW01S-91 01/29/91	
Dibenzofuran (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dinitrotoluene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Diethylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Chlorophenyl-phenylether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Fluorene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
4,6-Dinitro-2-methylphenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
N-nitrosodiphenylamine (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
4-Bromophenyl-phenylether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Pentachlorophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/
Phenanthrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Di-n-butylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Butylbenzylphthalate (UG/L)	10.	U/	5.	J/	10.	U/	10.	U/
3,3'-Dichlorobenzidine (UG/L)	20.	U/	20.	U/	20.	U/	20.	U/
Benzo(a)anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Chrysene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-ethylhexyl)phthalate (UG/L)	10.	U/	4.	J/	10.	U/	10.	U/
Di-n-octyl Phthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(b)fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(k)fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(a)pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Ideno(1,2,3-cd)pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Dibenz(a,h)anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(g,h,i)perylene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/

AR302167

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: GW Type: PPCB Site Area: SA
Generated by: CAW
Date Issued: 05-APR-91

Parameter	SA-GWFB01-01 01/29/91		SA-GWW01D-01 01/29/91		SA-GWW01S-01 01/29/91		SA-GWW01S-91 01/29/91	
alpha-BHC (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
beta-BHC (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
delta-BHC (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
gamma-BHC (Lindane) (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Heptachlor (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Aldrin (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Heptachlor epoxide (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Endosulfan I (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Dieldrin (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
4,4'-DDE (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Endrin (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Endosulfan II (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
4,4'-DDD (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Endosulfan sulfate (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
4,4'-DDT (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Methoxychlor (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Endrin ketone (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/
alpha-Chlordane (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
gamma-Chlordane (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Toxaphene (UG/L)	1.	U/	1.	U/	1.	U/	1.	U/
Aroclor-1016 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1221 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1232 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1242 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1248 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1254 (UG/L)	1.	U/	1.	U/	1.	U/	1.	U/
Aroclor-1260 (UG/L)	1.	U/	1.	U/	1.	U/	1.	U/

AR302168

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

BOROUGH/PRIVATE WELL DATA

SUMMARY OF MUNICIPAL/PRIVATE WATER SUPPLY WELL SAMPLING FIELD PARAMETERS
Saegertown Industrial Area Site
Remedial Investigation
Saegertown, Pennsylvania

Sample #	Well Owner	Date Sampled	Time Sampled	pH	Temp	Sp Cond	Flow Rate	Volume Purged
SA-BW01-01	Boro #1	1/22/91	1018	7.62	12.4	501	350 gpm	2100 gallons
SA-BW02-01	Boro #2	1/22/91	1458	7.11	9.9	302	525 gpm	7875 gallons
SA-BW03-01	Boro #3	1/22/91	1212	7.68	9.6	380	218 gpm	2834 gallons
SA-PW06-01	Saegertown Beverage Co.	1/23/91	1231	7.63	11.0	554	4.6 gpm	83 gallons

Notes:
Boro = Borough of Saegertown Water Supply Well
Temp = Temperature in Degrees C
Sp Cond = Specific Conductivity (umhos) at 25 Degrees C
gpm = Gallons per minute
Flow Rates and Volumes Flushed are approximate and are based on field notes

SEAG_PWP/TJM/lam

AR302170

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: PW Type: IND MTL Site Area: SA
Generated by: CAW
Date Issued: 05-APR-91

Parameter	SA-BW01-01 01/22/91		SA-BW02-01 01/22/91		SA-BW03-01 01/22/91		SA-BW03-91 01/22/91		SA-PW06-01 01/23/91	
Aluminum (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Antimony (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Arsenic (UG/L)	2.	U/	2.	U/	4.	B/	4.7	BS/	2.	U/
Barium (UG/L)	31.	B/	15.	B/	193.	B/	193.	B/	30.	B/
Beryllium (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Cadmium (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Calcium (UG/L)	63200.	/	45000.	/	52800.	/	53400.	/	64200.	/
Chromium, total (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Cobalt (UG/L)	10.	B/UL	10.	B/UL	10.	U/	10.	U/	10.	U/
Copper (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Iron (UG/L)	20.	U/	20.	U/	66.	B/	72.	B/	20.	U/
Lead (UG/L)	3.	U/	3.	U/	3.	U/	3.	U/	3.	U/
Magnesium (UG/L)	10100.	/	6760.	/	10300.	/	10200.	/	11100.	/
Manganese (UG/L)	10.	U/	10.	U/	94.	/	96.	/	10.	U/
Mercury (UG/L)	0.2	U/	0.2	U/	0.2	U/	0.2	U/	0.2	U/
Nickel (UG/L)	20.	U/	20.	U/	20.	U/	20.	U/	20.	U/
Potassium (UG/L)	2230.	B/	920.	B/	1030.	B/	1140.	B/	1090.	B/
Selenium (UG/L)	2.	U/	2.	U/	2.	U/	2.	U/	2.	U/
Silver (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	/
Sodium (UG/L)	14200.	/J	6280.	/J	9200.	/J	8660.	/J	31100.	/J
Thallium (UG/L)	3.	U/	3.	U/	3.	U/	3.	U/	3.	U/
Vanadium (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Zinc (UG/L)	10.	U/	14.	B/	10.	U/	10.	U/	11.	B/
Cyanide (UG/L)	10.	UN/UJ	10.	UN/UJ	10.	UN/UJ	10.	UN/UJ	10.	UN/UJ
Alkalinity, Total (MG/L)	172.	/	117.	/	146.	/	146.	/	169.	/
Chloride (MG/L)	22.	/	8.	/	18.	/	18.	/	59.	/
Nitrate+Nitrite Nitrogen (MG/L)	1.62	/	1.04	/	0.04	/	0.07	/	1.4	/
Nitrogen, Ammonia (MG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Sulfate (MG/L)	29.	/	25.	/	33.	/	33.	/	27.	/
Total Dissolved Solids (MG/L)	254.	/	164.	/	220.	/	220.	/	306.	/
Total Organic Carbon (MG/L)	1.	U/	1.	U/	1.	U/	1.	U/	1.	U/
Phenolics, Total (MG/L)	0.005	U/	0.005	U/	0.005	U/	0.005	U/	0.005	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: PW Type: VOC Site Area: SA
Generated by: CAW
Date Issued: 05-APR-91

Parameter	SA-BW01-01 01/22/91		SA-BW02-01 01/22/91		SA-BW03-01 01/22/91		SA-BW03-91 01/22/91		SA-PW06-01 01/23/91	
Chloromethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Bromomethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Vinyl chloride (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Chloroethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Methylene chloride (UG/L)	22.	B/B	8.	B/B	4.	BJ/B	5.	U/	5.	B/B
Acetone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Carbon disulfide (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1-Dichloroethene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1-Dichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,2-Dichloroethene (total) (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Chloroform (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,2-Dichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
2-Butanone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
1,1,1-Trichloroethane (UG/L)	1.	J/	5.	U/	3.	J/	3.	J/	5.	U/
Carbon tetrachloride (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Vinyl acetate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Bromodichloromethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,2-Dichloropropane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
cis-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Trichloroethene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Dibromochloromethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1,2-Trichloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Benzene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
trans-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Bromoform (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
4-Methyl-2-pentanone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Hexanone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Tetrachloroethene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
1,1,2,2-Tetrachloroethane (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Toluene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Chlorobenzene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Ethylbenzene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Styrene (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/
Xylenes (total) (UG/L)	5.	U/	5.	U/	5.	U/	5.	U/	5.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: PW Type: VOC Site Area: SA

Parameter	SA-PWTB01-01 01/22/91		SA-PWTB02-01 01/23/91	
Chloromethane (UG/L)	10.	U/	10.	U/
Bromomethane (UG/L)	10.	U/	10.	U/
Vinyl chloride (UG/L)	10.	U/	10.	U/
Chloroethane (UG/L)	10.	U/	10.	U/
Methylene chloride (UG/L)	17.	B/B	6.	B/B
Acetone (UG/L)	10.	U/	10.	U/
Carbon disulfide (UG/L)	5.	U/	5.	U/
1,1-Dichloroethene (UG/L)	5.	U/	5.	U/
1,1-Dichloroethane (UG/L)	5.	U/	5.	U/
1,2-Dichloroethene (total) (UG/L)	5.	U/	5.	U/
Chloroform (UG/L)	1.	J/	5.	U/
1,2-Dichloroethane (UG/L)	5.	U/	5.	U/
2-Butanone (UG/L)	10.	U/	10.	U/
1,1,1-Trichloroethane (UG/L)	5.	U/	5.	U/
Carbon tetrachloride (UG/L)	5.	U/	5.	U/
Vinyl acetate (UG/L)	10.	U/	10.	U/
Bromodichloromethane (UG/L)	5.	U/	5.	U/
1,2-Dichloropropane (UG/L)	5.	U/	5.	U/
cis-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/
Trichloroethene (UG/L)	5.	U/	5.	U/
Dibromochloromethane (UG/L)	5.	U/	5.	U/
1,1,2-Trichloroethane (UG/L)	5.	U/	5.	U/
Benzene (UG/L)	5.	U/	5.	U/
trans-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/
Bromoform (UG/L)	5.	U/	5.	U/
4-Methyl-2-pentanone (UG/L)	10.	U/	10.	U/
2-Hexanone (UG/L)	10.	U/	10.	U/
Tetrachloroethene (UG/L)	5.	U/	5.	U/
1,1,2,2-Tetrachloroethane (UG/L)	5.	U/	5.	U/
Toluene (UG/L)	5.	U/	5.	U/
Chlorobenzene (UG/L)	5.	U/	5.	U/
Ethylbenzene (UG/L)	5.	U/	5.	U/
Styrene (UG/L)	5.	U/	5.	U/
Xylenes (total) (UG/L)	5.	U/	5.	U/

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Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: PW Type: SVOC Site Area: SA
Generated by: CAW
Date Issued: 05-APR-91

Parameter	SA-BW01-01 01/22/91		SA-BW02-01 01/22/91		SA-BW03-01 01/22/91		SA-BW03-91 01/22/91		SA-PW06-01 01/23/91	
Phenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-Chloroethyl) ether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Chlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
1,3-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
1,4-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzyl Alcohol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
1,2-Dichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-Chloroisopropyl)ether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
N-Nitroso-di-n-dipropylamine (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Hexachloroethane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Nitrobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Isophorone (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Nitrophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dimethylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzoic Acid (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
bis(2-Chloroethoxy)methane (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dichlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
1,2,4-Trichlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Naphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Chloroaniline (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorobutadiene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Chloro-3-methylphenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Methylnaphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorocyclopentadiene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4,6-Trichlorophenol (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4,5-Trichlorophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
2-Chloronaphthalene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Dimethylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Acenaphthylene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,6-Dinitrotoluene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
3-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Acenaphthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dinitrophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
4-Nitrophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

AR302174

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: PW Type: SVOC Site Area: SA

Parameter	SA-BW01-01 01/22/91		SA-BW02-01 01/22/91		SA-BW03-01 01/22/91		SA-BW03-91 01/22/91		SA-PW06-01 01/23/91	
Dibenzofuran (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
2,4-Dinitrotoluene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Diethylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Chlorophenyl-phenylether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Fluorene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Nitroaniline (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
4,6-Dinitro-2-methylphenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
N-nitrosodiphenylamine (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
4-Bromophenyl-phenylether (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Hexachlorobenzene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Pentachlorophenol (UG/L)	50.	U/	50.	U/	50.	U/	50.	U/	50.	U/
Phenanthrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Di-n-butylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Butylbenzylphthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
3,3'-Dichlorobenzidine (UG/L)	20.	U/	20.	U/	20.	U/	20.	U/	20.	U/
Benzo(a)anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Chrysene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
bis(2-ethylhexyl)phthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Di-n-octyl Phthalate (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(b)fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(k)fluoranthene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(a)pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Ideno(1,2,3-cd)pyrene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Dibenz(a,h)anthracene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/
Benzo(g,h,i)perylene (UG/L)	10.	U/	10.	U/	10.	U/	10.	U/	10.	U/

AR302175

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: PW Type: PPCB Site Area: SA
Generated by: CAW
Date Issued: 05-APR-91

Parameter	SA-BW01-01 01/22/91		SA-BW02-01 01/22/91		SA-BW03-01 01/22/91		SA-BW03-91 01/22/91		SA-PW06-01 01/23/91	
alpha-BHC (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/	0.05	U/
beta-BHC (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/	0.05	U/
delta-BHC (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/	0.05	U/
gamma-BHC (Lindane) (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Heptachlor (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Aldrin (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Heptachlor epoxide (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Endosulfan I (UG/L)	0.05	U/	0.05	U/	0.05	U/	0.05	U/	0.05	U/
Dieldrin (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/	0.1	U/
4,4'-DDE (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Endrin (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Endosulfan II (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/	0.1	U/
4,4'-DDD (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Endosulfan sulfate (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/	0.1	U/
4,4'-DDT (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/	0.1	U/
Methoxychlor (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Endrin ketone (UG/L)	0.1	U/	0.1	U/	0.1	U/	0.1	U/	0.1	U/
alpha-Chlordane (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/	0.5	U/
gamma-Chlordane (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Toxaphene (UG/L)	1.	U/	1.	U/	1.	U/	1.	U/	1.	U/
Aroclor-1016 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1221 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1232 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1242 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1248 (UG/L)	0.5	U/	0.5	U/	0.5	U/	0.5	U/	0.5	U/
Aroclor-1254 (UG/L)	1.	U/	1.	U/	1.	U/	1.	U/	1.	U/
Aroclor-1260 (UG/L)	1.	U/	1.	U/	1.	U/	1.	U/	1.	U/

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Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

DRILLING WATER DATA

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: DW Type: IND MTL Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-DW02-01 12/20/90	
Aluminum (UG/L)	53.	B/
Antimony (UG/L)	50.	U/
Arsenic (UG/L)	2.	U/
Barium (UG/L)	39.	B/
Beryllium (UG/L)	5.	U/
Cadmium (UG/L)	5.	U/
Calcium (UG/L)	50300.	/
Chromium, total (UG/L)	10.	U/
Cobalt (UG/L)	10.	U/
Copper (UG/L)	10.	U/
Iron (UG/L)	68.	B/
Lead (UG/L)	3.	U/
Magnesium (UG/L)	8460.	/
Manganese (UG/L)	13.	B*/J
Mercury (UG/L)	0.2	U/
Nickel (UG/L)	20.	U/
Potassium (UG/L)	990.	B/
Selenium (UG/L)	2.	U/
Silver (UG/L)	10.	U/
Sodium (UG/L)	8360.	/
Thallium (UG/L)	3.	U/
Vanadium (UG/L)	50.	U/
Zinc (UG/L)	13.	B/
Cyanide (UG/L)	10.	U/
Alkalinity, Total (MG/L)	123.	/
Chloride (MG/L)	15.	/
Nitrate+Nitrite Nitrogen (MG/L)	0.93	/
Nitrogen, Ammonia (MG/L)	0.1	U/
Sulfate (MG/L)	30.	/
Total Dissolved Solids (MG/L)	222.	/
Total Organic Carbon (MG/L)	1.	U/
Phenolics, total (MG/L)	0.005	U/

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Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: DW Type: VOC Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-DW01-01 12/11/90		SA-DW02-01 12/20/90	
Chloromethane (UG/L)	10.	U/	10.	U/
Bromomethane (UG/L)	5.	U/	10.	U/
Vinyl chloride (UG/L)	10.	U/	10.	U/
Chloroethane (UG/L)	10.	U/	10.	U/
Methylene chloride (UG/L)	3.	J/	5.	U/
Acetone (UG/L)	10.	U/	10.	U/
Carbon disulfide (UG/L)	5.	U/	5.	U/
1,1-Dichloroethene (UG/L)	5.	U/	5.	U/
1,1-Dichloroethane (UG/L)	5.	U/	5.	U/
1,2-Dichloroethene (total) (UG/L)	5.	U/	5.	U/
Chloroform (UG/L)	5.	U/	5.	U/
1,2-Dichloroethane (UG/L)	5.	U/	5.	U/
2-Butanone (UG/L)	10.	U/	10.	U/
1,1,1-Trichloroethane (UG/L)	5.	U/	5.	U/
Carbon tetrachloride (UG/L)	5.	U/	5.	U/
Vinyl acetate (UG/L)	10.	U/	10.	U/
Bromodichloromethane (UG/L)	5.	U/	5.	U/
1,2-Dichloropropane (UG/L)	5.	U/	5.	U/
cis-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/
Trichloroethene (UG/L)	5.	U/	5.	U/
Dibromochloromethane (UG/L)	5.	U/	5.	U/
1,1,2-Trichloroethane (UG/L)	5.	U/	5.	U/
Benzene (UG/L)	5.	U/	5.	U/
trans-1,3-Dichloropropene (UG/L)	5.	U/	5.	U/
Bromoform (UG/L)	1.	J/	5.	U/
4-Methyl-2-pentanone (UG/L)	15.	U/	10.	U/
2-Hexanone (UG/L)	15.	U/	10.	U/
Tetrachloroethene (UG/L)	5.	U/	5.	U/
1,1,2,2-Tetrachloroethane (UG/L)	10.	U/	5.	U/
Toluene (UG/L)	5.	U/	5.	U/
Chlorobenzene (UG/L)	5.	U/	5.	U/
Ethylbenzene (UG/L)	5.	U/	5.	U/
Styrene (UG/L)	5.	U/	5.	U/
Xylenes (total) (UG/L)	5.	U/	5.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

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ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: DW Type: SVOC Site Area: SA
Generated by: VLR
Date Issued: 05-APR-91

Parameter	SA-DW02-01 12/20/90	
Phenol (UG/L)	10.	U/
bis(2-Chloroethyl) ether (UG/L)	10.	U/
2-Chlorophenol (UG/L)	10.	U/
1,3-Dichlorobenzene (UG/L)	10.	U/
1,4-Dichlorobenzene (UG/L)	10.	U/
Benzyl Alcohol (UG/L)	10.	U/
1,2-Dichlorobenzene (UG/L)	10.	U/
2-Methylphenol (UG/L)	10.	U/
bis(2-Chloroisopropyl)ether (UG/L)	10.	U/
4-Methylphenol (UG/L)	10.	U/
N-Nitroso-di-n-dipropylamine (UG/L)	10.	U/
Hexachloroethane (UG/L)	10.	U/
Nitrobenzene (UG/L)	10.	U/
Isophorone (UG/L)	10.	U/
2-Nitrophenol (UG/L)	10.	U/
2,4-Dimethylphenol (UG/L)	10.	U/
Benzoic Acid (UG/L)	50.	U/
bis(2-Chloroethoxy)methane (UG/L)	10.	U/
2,4-Dichlorophenol (UG/L)	10.	U/
1,2,4-Trichlorobenzene (UG/L)	10.	U/
Naphthalene (UG/L)	10.	U/
4-Chloroaniline (UG/L)	10.	U/
Hexachlorobutadiene (UG/L)	10.	U/
4-Chloro-3-methylphenol (UG/L)	10.	U/
2-Methylnaphthalene (UG/L)	10.	U/
Hexachlorocyclopentadiene (UG/L)	10.	U/
2,4,6-Trichlorophenol (UG/L)	10.	U/
2,4,5-Trichlorophenol (UG/L)	50.	U/
2-Chloronaphthalene (UG/L)	10.	U/
2-Nitroaniline (UG/L)	50.	U/
Dimethylphthalate (UG/L)	10.	U/
Acenaphthylene (UG/L)	10.	U/
2,6-Dinitrotoluene (UG/L)	10.	U/
3-Nitroaniline (UG/L)	50.	U/
Acenaphthene (UG/L)	10.	U/
2,4-Dinitrophenol (UG/L)	50.	U/
4-Nitrophenol (UG/L)	50.	U/

Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

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ANALYTICAL DATA REPORT
Saegertown RI/FS
Saegertown, PA

Matrix: DW Type: SVOC Site Area: SA

Parameter	SA-DW02-01 12/20/90	
Dibenzofuran (UG/L)	10.	U/
2,4-Dinitrotoluene (UG/L)	10.	U/
Diethylphthalate (UG/L)	10.	U/
4-Chlorophenyl-phenylether (UG/L)	10.	U/
Fluorene (UG/L)	10.	U/
4-Nitroaniline (UG/L)	50.	U/
4,6-Dinitro-2-methylphenol (UG/L)	50.	U/
N-nitrosodiphenylamine (UG/L)	10.	U/
4-Bromophenyl-phenylether (UG/L)	10.	U/
Hexachlorobenzene (UG/L)	10.	U/
Pentachlorophenol (UG/L)	50.	U/
Phenanthrene (UG/L)	10.	U/
Anthracene (UG/L)	10.	U/
Di-n-butylphthalate (UG/L)	10.	U/
Fluoranthene (UG/L)	10.	U/
Pyrene (UG/L)	10.	U/
Butylbenzylphthalate (UG/L)	10.	U/
3,3'-Dichlorobenzidine (UG/L)	20.	U/
Benzo(a)anthracene (UG/L)	10.	U/
Chrysene (UG/L)	10.	U/
bis(2-ethylhexyl)phthalate (UG/L)	10.	U/
Di-n-octyl Phthalate (UG/L)	10.	U/
Benzo(b)fluoranthene (UG/L)	10.	U/
Benzo(k)fluoranthene (UG/L)	10.	U/
Benzo(a)pyrene (UG/L)	10.	U/
Ideno(1,2;3-cd)pyrene (UG/L)	10.	U/
Dibenz(a,h)anthracene (UG/L)	10.	U/
Benzo(g,h,i)perylene (UG/L)	10.	U/

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Note: (1) Results are reported with qualifiers (Laboratory Qualifier/Data Validation Qualifier) to the right of the value.

APPENDIX I

MAGNETOMETER/EM GEOPHYSICAL SURVEY REPORT

Report on the Magnetic and Electromagnetic Surveys Conducted

at the

Saegertown Industrial Area Site
Saegertown, Pennsylvania

for

Warzyn Engineering, Inc.
Addison, Illinois

by

Fromm Applied Technology
Mequon, Wisconsin

October 30, 1990

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Abstract

A magnetic survey was conducted over a major portion of the Saegertown Industrial Area Site, Saegertown, Pennsylvania to detect the presence of buried metal within the survey area. To supplement the magnetic survey an electromagnetic survey was conducted over a smaller portion of the site. The magnetic and electromagnetic surveys both detected the presence of buried metal along a curvilinear zone approximately 500 feet in length. This zone appeared to follow the edge of a pond originally associated with the site. In addition, various minor anomalies which may result from small amounts of buried metal were detected at apparently random locations scattered throughout the site.

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Introduction

From September 12 through September 14, 1990, electromagnetic (EM) and total field magnetic, geophysical surveys were conducted over a major portion of the Saegertown Industrial Area (SIA) Site, Saegertown, Pennsylvania (approximately one half mile east of Highway 19 on State Road 198). The primary objective of the surveys, as understood by Fromm Applied Technology, was to attempt to map anomalies in areas where the U.S. Environmental Protection Agency (EPA) suspected disposal of buried ferrous containers.

A two phase approach was utilized for this project. The first phase of the geophysical survey was to obtain total field magnetic readings and to map out anomalous areas of the site which could be associated with buried ferrous metal. If time allowed, the second phase of the survey would be implemented. The second phase was designed to more accurately delineate magnetic anomalies using electromagnetic techniques. The work plan divided the site into two areas, Area A and Area B. The magnetometer survey was contiguous over these two areas, whereas, weather and time constraints only allowed Area A to be electromagnetically surveyed. **Figure 1: SIA Site Map**

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indicates the orientation and placement of the Cartesian coordinate system used for ground control. Further information and site history may be obtained from work plan 60953.01, written by Warzyn Engineering, Inc., Addison, Illinois.

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Overview of Geophysical Theory

A brief tutorial in geophysical methods and theory is provided here for those who are unfamiliar with Electromagnetic and Magnetic Surveys. In electromagnetic surveys, a transmitter produces an electromagnetic field which induces a current into the ground. This induced current generates its own electromagnetic field which is a reflection of the soils' bulk conductance. This synthesized field is detected by a receiver that translates the amplitude and phase of the electromagnetic field into a numerical value of conductance. Electrical conductors, generally iron, less than ten feet deep will result in field distortion and yield "zero" or negative values of conductance. Hence, shallow metallic objects are easily identified by their negative or "zero" value of conductance. If the metallic object(s) is/are too deep for field distortion then the EM system may yield an **abnormally high** value of conductance.

Electromagnetic methods effectively map out variations in soil conductivities. However, they do not absolutely determine depths of burial or the type of metallic object that is buried. This means that these surveys generally do not distinguish between a couple of barrels, buried concrete with steel reinforcing rod, or a small engine block. The source of the anomalies must be independently determined. Furthermore, these methods cannot define the actual form of

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metallic objects but they can provide an excellent approximation of the horizontal extent of the metallic object(s), whatever the form. Penetration of the electromagnetic (EM) gear can range from the surface (near surface metallic objects can inhibit deeper penetrations) to approximately fifteen feet.

Magnetic surveys use a magnetometer to measure the earth's magnetic field. In this study, a proton magnetometer was used to measure the intensity of the earth's total field. Other magnetometers may measure a horizontal or vertical component of the earth's magnetic field. Readings were taken at an elevation of about 6 feet above ground level. The earth's local magnetic field is easily distorted by the presence of **ferrous** materials, thus creating mappable variations or anomalies that locate **only** the presence of buried ferrous objects. The magnetic's depth of investigation can theoretically be as deep as sixty feet for a 1000 pounds of iron.

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Methodology

A grid system was established with traverses spaced 20 feet apart and a station spacing of 10 feet along each traverse. The coordinate system that was used at the site for the geophysics was clearly marked in the field. Wooden stakes were placed in the ground by Fromm Applied Technology, approximately every 200 feet. The southeast corner of the Hammer Tool and Die building, shown in Figure 1, is approximately station 99 North 25 East with the X axis being approximately 100 feet north of State Road 198's center line.

A Geonics EM 31D Electromagnetic Terrain Conductivity Meter was used to take conductivity measurements. Some of the readings were taken at or near ground level, for greater penetration in an attempt to acquire a "zero" conductivity reading. "Zero" conductivity readings are caused by the presence of metallic objects at depth. If a "zero" conductivity value was not obtained then a standard EM reading was taken at waist height. Inphase readings were also obtained because the inphase component of the EM equipment can often be more sensitive to buried metal then the normally obtained conductivity measurements. Variances of the inphase component from background is often caused by buried metal. All electromagnetic data was recorded on a OMNIDATA

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data logger with a Geonic's DL55 interface and later up loaded to a mainframe system.

Total field magnetic measurements were taken with an EG&G 856 proton magnetometer at an approximate height of six feet. The magnetic data was stored on its internal memory and later up loaded to a mainframe system. A base station was occupied at station 400 North 460 East. The contoured magnetic data is the difference between field readings and linearly interpolated time dependent base station readings.

It is worth noting that computer generated contour maps normally yield simple computer extrapolated contour lines that extend into unsurveyed areas, areas that contain few or no geophysical readings. Areas of this type have questionable validity and are not addressed in this report. Computer extrapolated areas were blanked out to the extent possible and any remaining non-blanked areas can be found by determining where contour lines may have extended past surveyed areas. The easiest way to locate unblanked areas is to compare the maps showing the station locations with their contour maps and determine which contour lines extend beyond geophysically surveyed areas. The actual source area of anomalies created from contouring the data should be located by referencing the data set, see appendices.

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Conclusions

Total Field Magnetic Survey of Areas A and B

The magnetometer survey area and station locations can be seen in **Figure 2: SIA Site-Magnetometer Station Locations.** This figure indicates how Areas A and B were combined into one continuous survey area. The unsurveyed area located at 250 North 260 East represents the immediate pond area, which was considered unsafe to investigate. The other two unsurveyed areas, 850 North 400 East and 50 North 100 East, were not part of the geophysical investigation area.

Figure 3: SIA Site-Map of Mag. Data(-1200 to 2000 gammas) clearly delineates two anomalous areas indicating the presence of buried ferrous metal and many smaller anomalies that are associated with much smaller volumes of buried ferrous metal. The anomalies that are connected by the heavy black arrow are not contiguous but do appear to be related to a continuous fill area located along the edge of the pond. The intense anomaly seen at 50 North 460 East is probably due to two manhole covers, which were observed at this location. Even though many of the smaller hatched negative trending magnetic anomalies are not as intense as the two discussed above, the source for these anomalies may be significant and should be independently identified. The

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greatest number of these smaller anomalies are located north of the 440 North line.

Electromagnetic Survey of Area A

The electromagnetic survey was phase two of the project. As previously mentioned, the EM data was obtained from only Area A because of time and weather restrictions. **Figure 4: SIA Site-EM Station Locations** indicates where EM readings were obtained. Again, the unsurveyed area outlined in the center of Figure 4 represents the immediate pond area.

Figure 5: SIA Site-EM Cond. Contour Map(-50 to 20 mmhos/m) and **Figure 6: SIA Site-EM Inphase Contour Map(-30 to 14 ppt)** are almost identical in appearance, which is not always the case, and delineate the same noncontiguous zone of buried metal that was defined by the magnetometer survey. EM techniques are spatially more sensitive to buried ferrous metal than magnetic methods. Thus, magnetic anomalies are spatially larger than EM anomalies and do not usually provide the spatial resolution associated with EM measurements. It is believed that because Figures 5 and 6 closely resemble the magnetic anomalies seen in Figure 3, the source of these anomalies should be less than 20 feet in depth. In addition to this large anomalous zone, Figure 5 shows some relatively minor activity at 80 North 180 East and 80 North 220 East and Figure 6 indicates minor activity along 340 North 180 East to 200 North 180 East and 80 North

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340 East. The source of these relatively low amplitude anomalies is most likely small amounts of buried metal. As previously mentioned in the magnetometer interpretation, the source of all these anomalies should be independently determined.

Summary

Figure 7: SIA Site - EM Encoded Stations indicates stations that appear to be strongly influenced by the presence of buried metal. The "O's" are stations where conductivities are less than 0.0 millimhos per meter and the "X's" are stations that deviate more than 2.5 ppt from a background reading of 0.0 ppt. Deflections of the inphase response from background are often due to buried metal. Of all the figures, Figure 7 most accurately places the source of the geophysically detectable anomalies for Area A. The area of greatest concern is the northern extent of the large non-contiguous anomaly, which was marked with a black arrow in previous figures. The surface area of this northern most anomaly is approximately 4000 square feet. Several magnetic anomalies were delineated in Area B, but they are not equivalent to the large amplitude anomalies seen in Area B. A

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Quality Assurance / Quality Control

In order to maintain a high level of certainty that equipment was operating as expected, base station readings were obtained. The EM base station was located at station 400 North 460 East and was able to consistently sustain a base station reading of 0.75 millimhos per meter. The purpose of the magnetometer base station, also located at station 400 North 460 East, is not to show repeatability. On the contrary, magnetometer base station readings are taken to correct field readings for naturally occurring fluctuations in the earth's magnetic field. In this survey, the base station only varied by +/- 25 gammas from 56182 gammas. The magnetic data has been corrected for these fluctuations, but, for all practical purposes this correction was not required.

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STANDARD DISCLAIMER

The objective of any geophysical survey is to define the existence and configuration of features at depth. However, these features may bear a highly complex relationship to the geophysical measurements recorded. Therefore, conclusions drawn, no matter how logically deduced, should not be misconstrued as fact. We shall not and will not, except in the case of gross or willful negligence on our part, be liable or responsible for any losses, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, employees and agents or by anyone else not related to Fromm Applied Technology who might base interpretations and opinions on our geophysical surveys.

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Geophysical Figures

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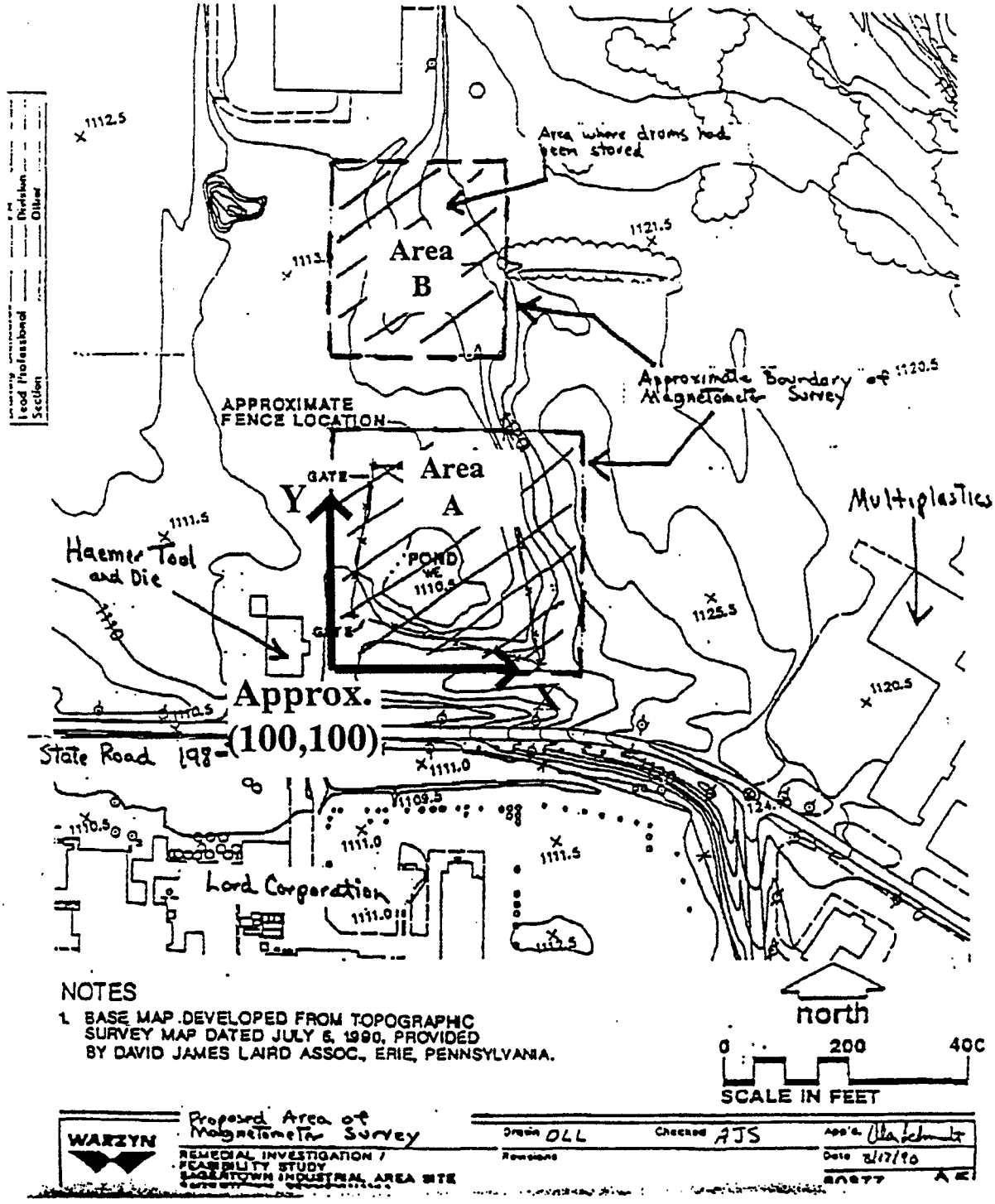

Figure 1: SIA Site Map

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Obtained from Warzyn and Altered by Fromm Applied Technology

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Figure 2: SIA Site-Magnetometer Station Locations

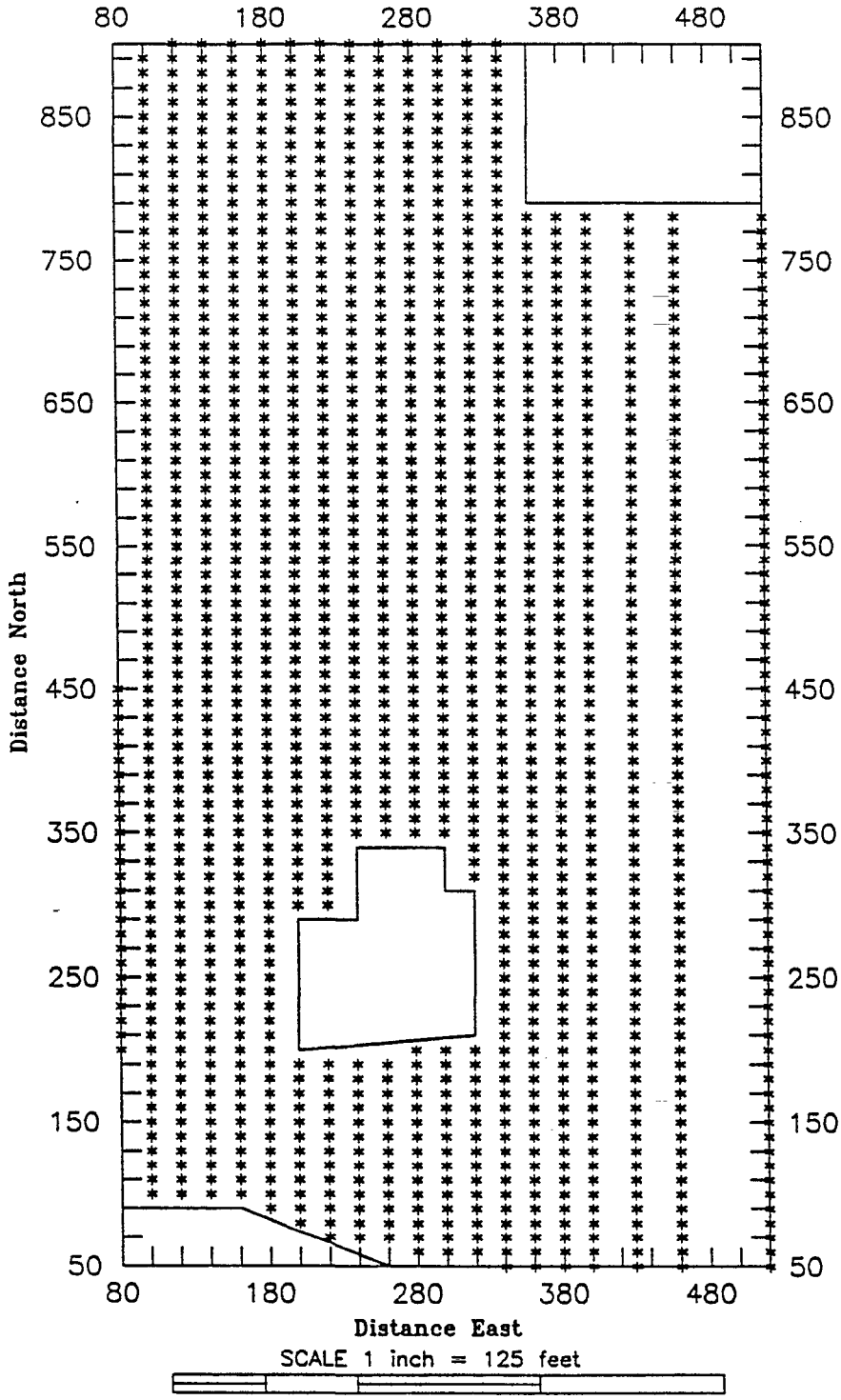

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Figure 3: SIA Site-Map of Mag. Data (-1200 to 2000 gammas)

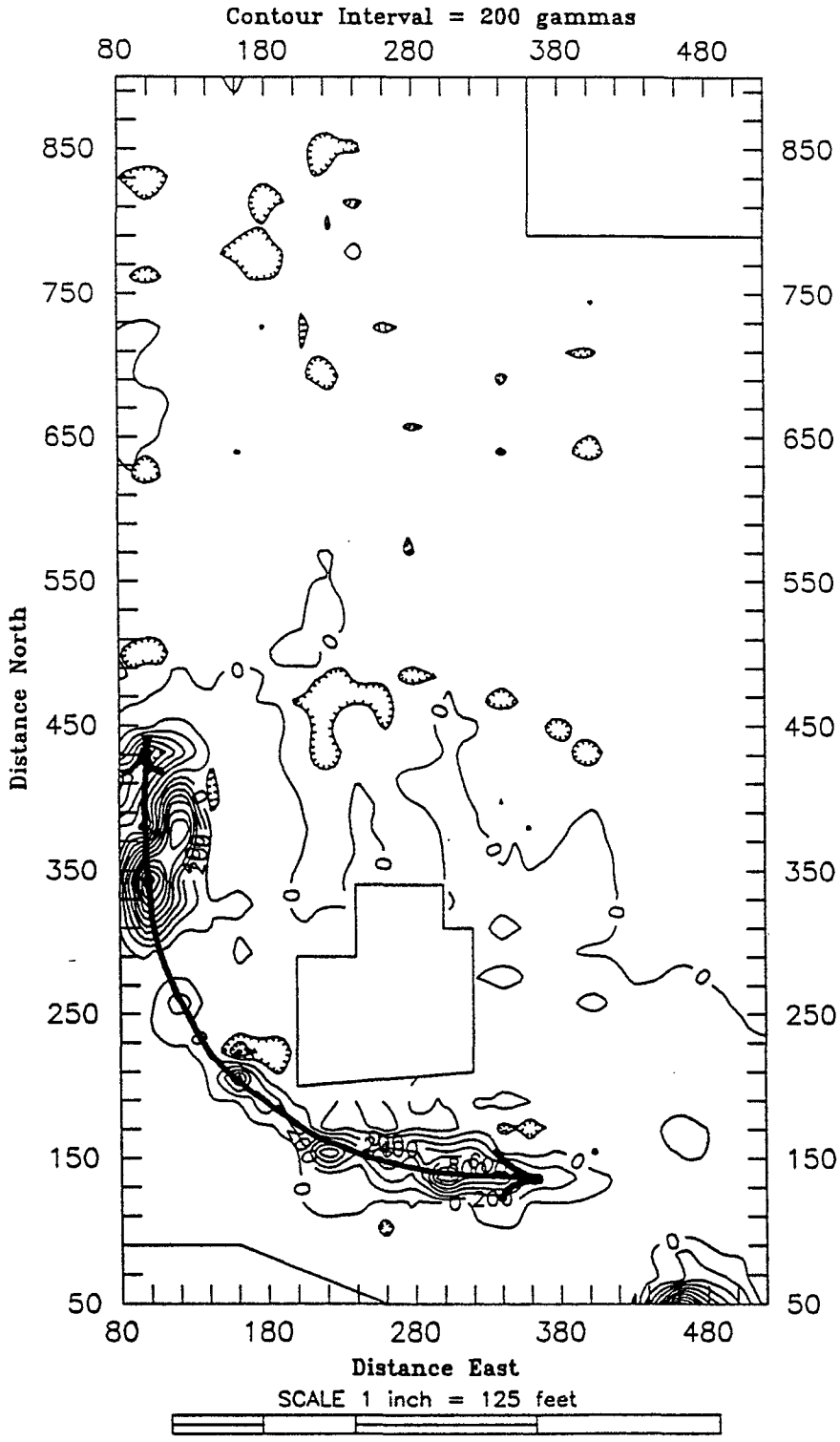

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Figure 4: SIA Site-EM Station Locations

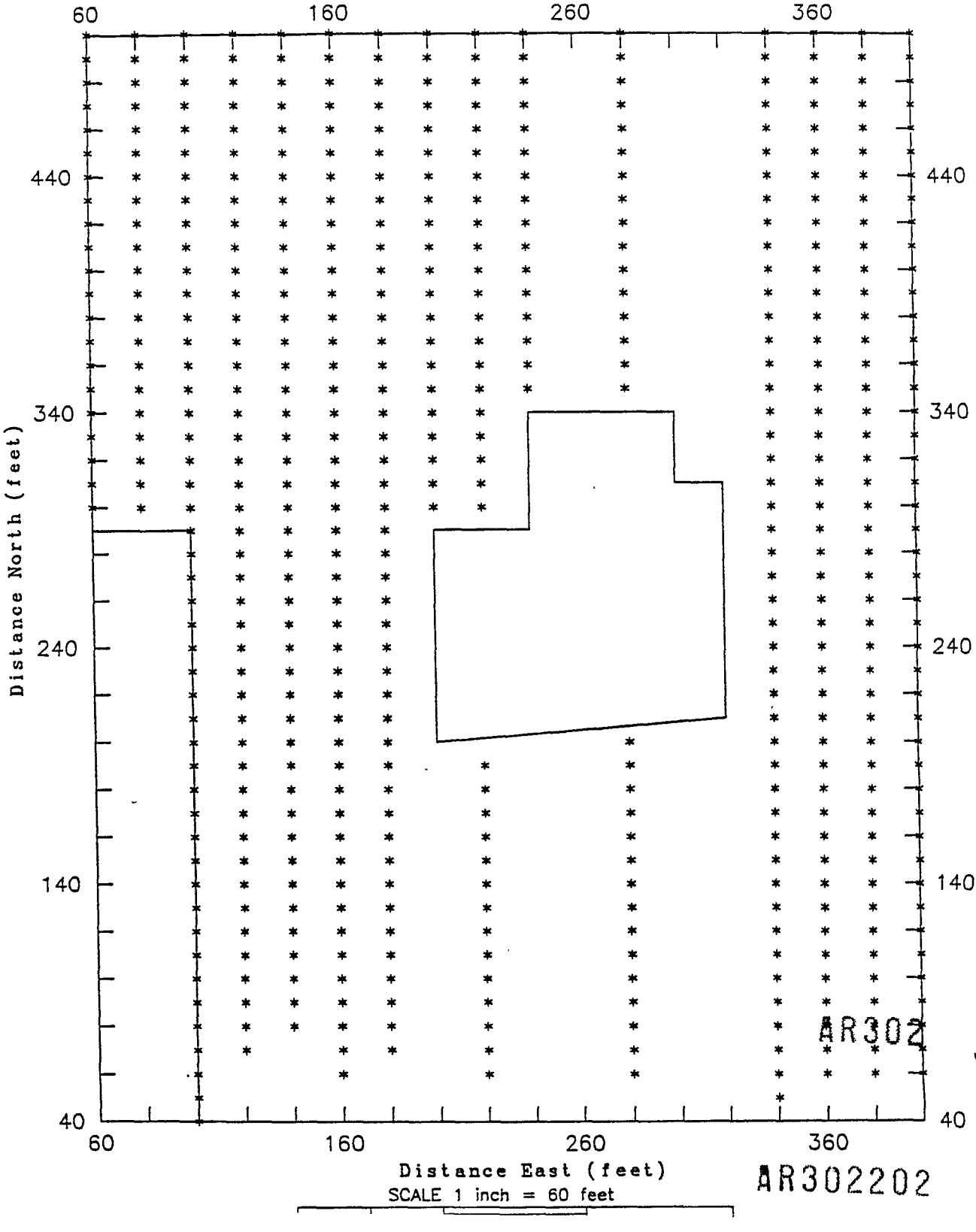

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Figure 5: SIA Site-EM Cond. Contour Map(-50 to 20 mmhos/m)

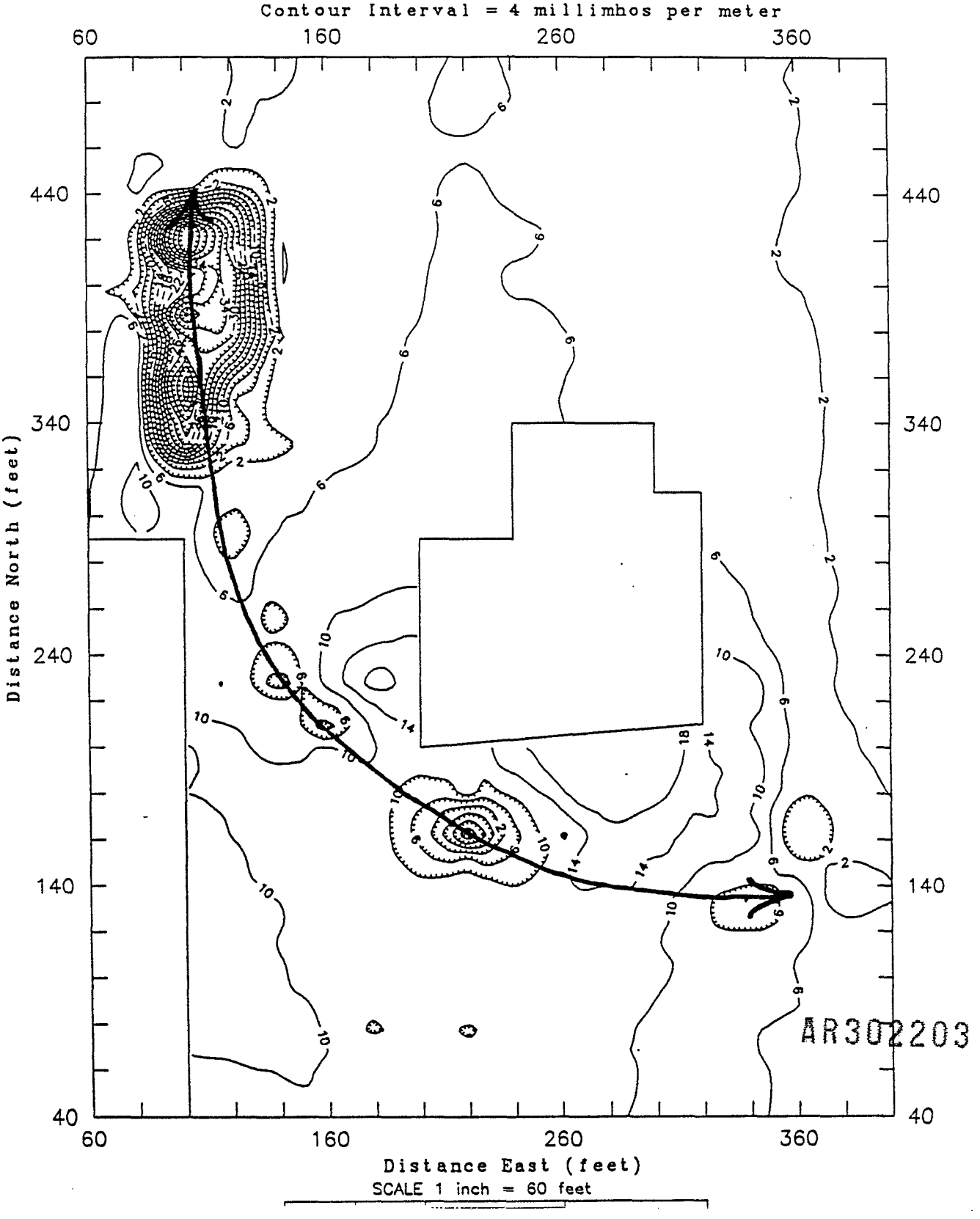

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Figure 6: SIA Site-EM Inphase Contour Map(-30 to 14 ppt)

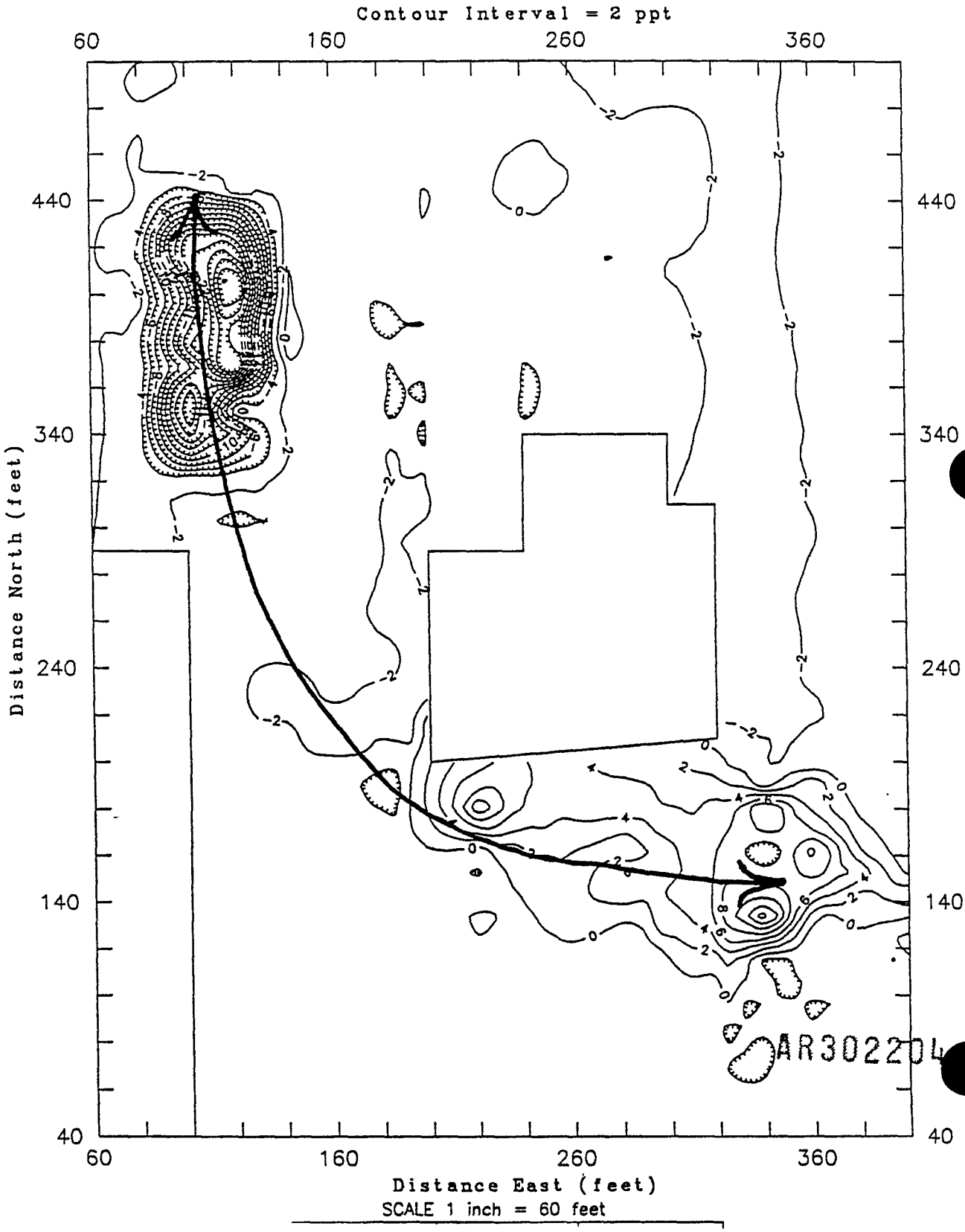

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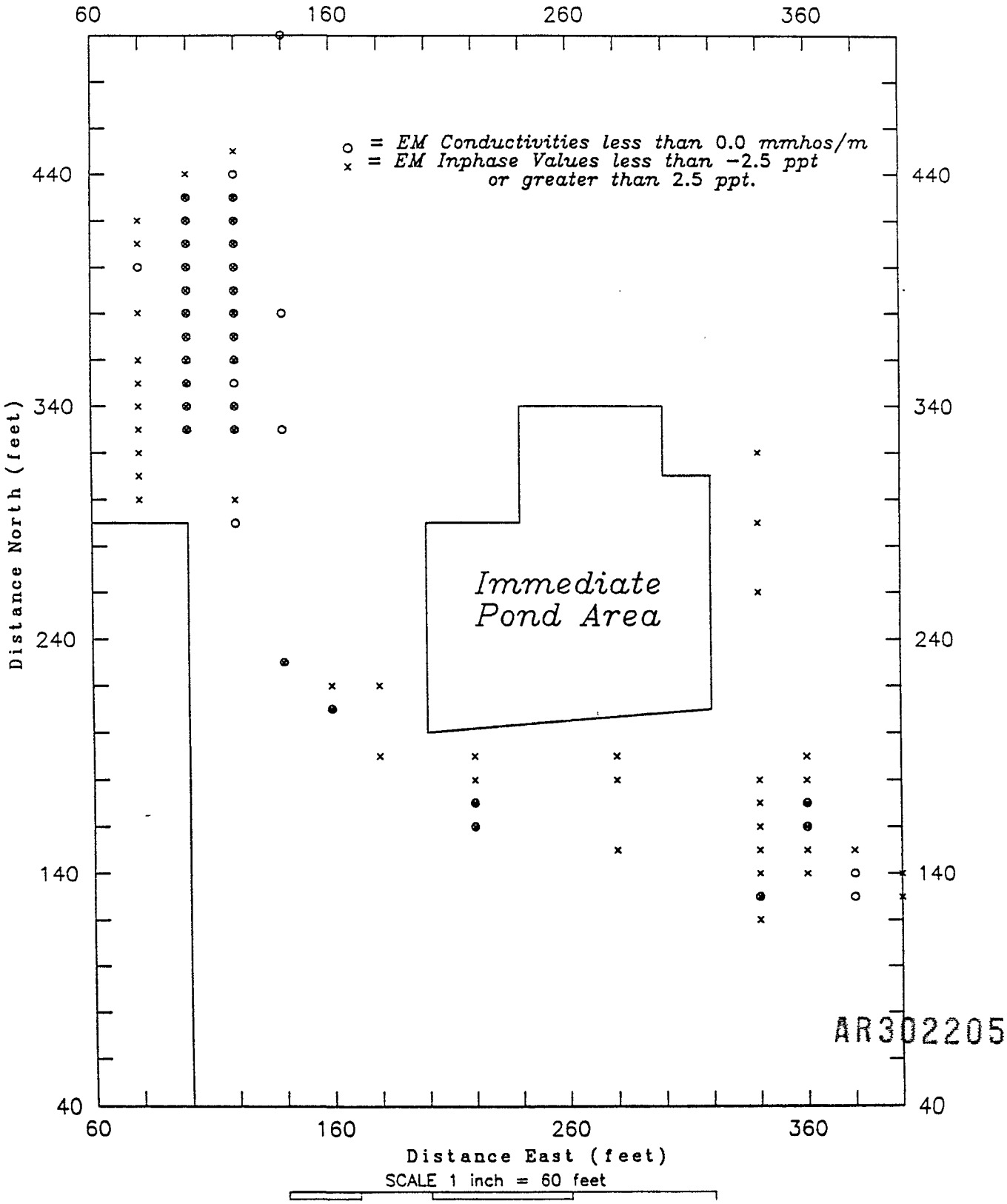
Figure 7: SIA Site - EM Encoded stations



AR302205

Appendix A: Magnetic Data for Areas A and B

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
80	200	-99.66
80	210	-88.32
80	220	-77.15
80	230	-64.38
80	240	-54.60
80	250	-46.63
80	260	-40.06
80	270	-33.38
80	280	-25.51
80	290	-17.13
80	300	-6.16
80	310	0.01
80	320	-1.81
80	330	-24.03
80	340	-72.26
80	350	-157.80
80	360	-440.45
80	370	-602.98
80	380	-555.33
80	390	-626.06
80	400	-1366.84
80	410	-1751.19
80	420	-643.87
80	430	-299.00
80	440	-147.63
80	450	-49.37
100	100	-156.47
100	110	-55.00
100	120	-115.13
100	130	-132.16
100	140	-142.99
100	150	-56.23
100	160	-60.87
100	170	-83.60
100	180	-24.63
100	190	-46.06
100	200	-63.39
100	210	-70.83
100	220	-2.85
100	230	-57.79
100	240	2.28
100	250	-30.45
100	260	-65.28
100	270	-41.72
100	280	-55.17
100	290	-38.01
100	300	158.55
100	310	827.12

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Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
100	320	1341.99
100	330	1736.06
100	340	1894.33
100	350	2462.29
100	360	802.75
100	370	629.62
100	380	-723.71
100	390	-1058.44
100	400	5.61
100	410	-555.13
100	420	-1024.06
100	430	-1511.49
100	440	-826.02
100	450	-83.55
100	460	11.81
100	470	-31.23
100	480	49.53
100	490	5.20
100	500	-24.54
100	510	-35.83
100	520	27.40
100	530	84.26
100	540	-10.88
100	550	-1.13
100	560	86.60
100	570	23.46
100	580	-3.48
100	590	23.28
100	600	48.85
100	610	57.21
100	620	-21.42
100	630	-5.56
100	640	6.41
100	650	-21.02
100	660	-2.45
100	670	-2.99
100	680	-36.92
100	690	23.85
100	700	-13.58
100	710	5.99
100	720	-14.54
100	730	-9.28
100	740	51.99
100	750	0.86
100	760	-12.98
100	770	1.49
100	780	16.25
100	790	33.02

AR302208

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
100	800	53.49
100	810	-3.65
100	820	11.12
100	830	-27.41
100	840	-13.35
100	850	52.82
100	860	-6.21
100	870	75.26
100	880	34.33
100	890	27.09
120	100	-112.26
120	110	-84.32
120	120	-74.09
120	130	-77.76
120	140	-91.32
120	150	-95.18
120	160	-77.45
120	170	-37.72
120	180	-14.78
120	190	-11.24
120	200	-23.80
120	210	-33.17
120	220	-28.64
120	230	-4.31
120	240	61.93
120	250	263.06
120	260	422.00
120	270	-115.65
120	280	113.30
120	290	-269.33
120	300	-110.35
120	310	53.00
120	320	276.36
120	330	669.75
120	340	752.90
120	350	246.94
120	360	1034.11
120	370	1684.76
120	380	1439.00
120	390	2346.73
120	400	390.46
120	410	-144.51
120	420	255.93
120	430	-814.34
120	440	-845.10
120	450	-174.75
120	460	-31.12
120	470	-17.29

AR302209

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
120	480	-10.10
120	490	-6.16
120	500	17.21
120	510	7.45
120	520	0.09
120	530	15.53
120	540	32.97
120	550	12.61
120	560	16.48
120	570	8.31
120	580	9.45
120	590	5.38
120	600	-5.38
120	610	13.96
120	620	20.40
120	630	7.83
120	640	7.36
120	650	11.20
120	660	10.63
120	670	6.57
120	680	6.40
120	690	6.43
120	700	23.21
120	710	9.59
120	720	10.81
120	730	9.85
120	740	9.57
120	750	9.31
120	760	9.84
120	770	9.97
120	780	7.90
120	790	6.34
120	800	3.09
120	810	7.23
120	820	7.61
120	830	7.26
120	840	11.56
120	850	13.80
120	860	14.37
120	870	16.15
120	880	16.31
120	890	22.46
120	900	73.24
140	100	-34.06
140	110	-77.27
140	120	-62.17
140	130	-54.18
140	140	-78.58

AR302210

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
140	150	-65.49
140	160	-47.89
140	170	-27.30
140	180	-28.20
140	190	-16.51
140	200	-7.41
140	210	-5.61
140	220	16.78
140	230	5.07
140	240	-181.14
140	250	-140.65
140	260	-86.05
140	270	-74.95
140	280	-140.66
140	290	-118.17
140	300	-27.77
140	310	3.42
140	320	18.72
140	330	29.42
140	340	-93.19
140	350	-57.19
140	360	-46.30
140	370	-56.40
140	380	27.60
140	390	-280.81
140	400	-221.81
140	410	-242.12
140	420	-217.02
140	430	-200.82
140	440	-179.63
140	450	-41.93
140	460	-36.83
140	470	5.86
140	480	1.76
140	490	30.96
140	500	3.05
140	510	-11.05
140	520	6.04
140	530	7.94
140	540	6.84
140	550	3.83
140	560	13.43
140	570	12.82
140	580	11.82
140	590	17.02
140	600	20.81
140	610	15.61
140	620	24.50

AR302211

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
140	630	23.20
140	640	31.10
140	650	31.09
140	660	11.69
140	670	13.78
140	680	3.08
140	690	13.18
140	700	10.17
140	710	10.26
140	720	12.46
140	730	13.36
140	740	15.25
140	750	14.85
140	760	12.43
140	770	13.73
140	780	14.93
140	790	16.02
140	800	18.72
140	810	19.82
140	820	22.31
140	830	25.71
140	840	24.51
140	850	22.40
140	860	23.60
140	870	24.19
140	880	25.69
140	890	27.69
140	900	69.88
160	100	-28.14
160	110	-20.24
160	120	-78.63
160	130	-71.13
160	140	-64.93
160	150	-59.52
160	160	-58.82
160	170	-64.41
160	180	-22.91
160	190	0.19
160	200	209.80
160	210	1360.00
160	220	-892.89
160	230	-209.59
160	240	-48.88
160	250	-11.18
160	260	-160.28
160	270	12.26
160	280	-56.47
160	290	30.04

AR302212

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
160	300	-2.56
160	310	-11.65
160	320	-19.55
160	330	35.15
160	340	-21.14
160	350	-23.84
160	360	-8.13
160	370	-1.13
160	380	-13.62
160	390	-67.12
160	400	-77.92
160	410	-51.01
160	420	-136.71
160	430	-89.70
160	440	-64.50
160	450	-49.00
160	460	12.11
160	470	-27.29
160	480	-23.29
160	490	-15.98
160	500	52.82
160	510	43.13
160	520	56.04
160	530	-14.76
160	540	58.34
160	550	11.15
160	560	-9.25
160	570	50.45
160	580	46.16
160	590	3.36
160	600	62.76
160	610	-18.23
160	620	48.87
160	630	47.38
160	640	-8.02
160	650	51.68
160	660	70.19
160	670	-14.11
160	680	52.10
160	690	43.00
160	700	33.40
160	710	21.91
160	720	6.61
160	730	2.61
160	740	11.42
160	750	6.12
160	760	39.43
160	770	-33.77

AR302213

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
160	780	-13.87
160	790	46.74
160	800	6.14
160	810	47.74
160	820	58.95
160	830	57.55
160	840	58.65
160	850	-3.05
160	860	70.16
160	870	-9.34
160	880	25.56
160	890	0.47
160	900	-41.13
180	90	-52.37
180	100	7.73
180	110	-35.68
180	120	-23.58
180	130	3.81
180	140	-60.90
180	150	-68.50
180	160	-41.90
180	170	-43.31
180	180	8.19
180	190	509.88
180	200	350.77
180	210	-370.44
180	220	-403.14
180	230	-264.85
180	240	-59.75
180	250	-18.36
180	260	-21.27
180	270	-16.47
180	280	-14.58
180	290	-8.78
180	300	-6.59
180	310	-7.69
180	320	-7.49
180	330	-9.60
180	340	-14.00
180	350	-16.71
180	360	-22.21
180	370	-29.22
180	380	-32.82
180	390	-37.22
180	400	-39.93
180	410	-18.03
180	420	-23.74
180	430	-22.24

AR302214

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
180	440	-23.24
180	450	-55.45
180	460	1.76
180	470	3.67
180	480	15.01
180	490	-20.94
180	500	5.20
180	510	9.72
180	520	17.26
180	530	29.51
180	540	12.95
180	550	14.49
180	560	15.33
180	570	13.46
180	580	14.81
180	590	9.64
180	600	16.94
180	610	15.77
180	620	18.40
180	630	-29.16
180	640	37.59
180	650	-19.47
180	660	39.77
180	670	34.12
180	680	5.05
180	690	30.79
180	700	48.51
180	710	46.42
180	720	94.73
180	730	286.43
180	740	93.76
180	750	53.86
180	760	9.29
180	770	-122.77
180	780	-91.76
180	790	23.78
180	800	-13.77
180	810	-79.03
180	820	-5.80
180	830	17.33
180	840	19.27
180	850	23.71
180	860	21.73
180	870	26.86
180	880	23.69
180	890	26.42
180	900	82.53
200	80	-35.16

AR302215

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
200	90	-30.99
200	100	-4.52
200	110	-40.74
200	120	-15.77
200	130	74.10
200	140	-65.12
200	150	-56.85
200	160	-86.78
200	170	314.07
200	180	-98.72
200	190	-54.45
200	300	-3.58
200	310	1.03
200	320	-0.51
200	330	2.17
200	340	2.83
200	350	2.39
200	360	-6.02
200	370	-13.04
200	380	-16.94
200	390	-17.97
200	400	-7.41
200	410	6.46
200	420	10.82
200	430	32.87
200	440	16.43
200	450	28.29
200	460	-6.56
200	470	1.49
200	480	32.14
200	490	12.19
200	500	-41.35
200	510	1.03
200	520	5.58
200	530	7.34
200	540	9.59
200	550	8.94
200	560	7.70
200	570	6.15
200	580	9.71
200	590	9.68
200	600	9.24
200	610	14.01
200	620	10.11
200	630	12.27
200	640	14.72
200	650	14.78
200	660	18.64

AR302216

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
200	670	52.52
200	680	106.63
200	690	6.29
200	700	-9.34
200	710	6.62
200	720	-10.18
200	730	23.16
200	740	-41.67
200	750	78.82
200	760	1.19
200	770	52.75
200	780	34.31
200	790	133.87
200	800	258.34
200	810	10.42
200	820	12.84
200	830	22.68
200	840	20.94
200	850	74.94
200	860	14.47
200	870	38.56
200	880	13.16
200	890	13.34
200	900	59.23
220	70	-34.88
220	80	-28.95
220	90	-39.83
220	100	-30.60
220	110	-14.77
220	120	40.36
220	130	71.28
220	140	-9.58
220	150	571.76
220	160	1735.49
220	170	-697.49
220	180	129.24
220	190	-84.61
220	300	1.27
220	310	-28.28
220	320	36.37
220	330	-10.60
220	340	11.85
220	350	17.81
220	360	23.14
220	370	27.99
220	380	1.02
220	390	107.11
220	400	-1.29

AR302217

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
220	410	27.65
220	420	-1.21
220	430	-39.46
220	440	-12.32
220	450	-17.19
220	460	3.06
220	470	-45.50
220	480	8.24
220	490	-15.12
220	500	11.62
220	510	-13.29
220	520	-14.35
220	530	-6.91
220	540	-14.77
220	550	-12.44
220	560	21.47
220	570	-4.28
220	580	-8.73
220	590	32.12
220	600	78.54
220	610	-2.92
220	620	35.12
220	630	-7.73
220	640	50.32
220	650	18.36
220	660	21.80
220	670	12.34
220	680	5.79
220	690	-18.56
220	700	-9.02
220	710	8.43
220	720	2.88
220	730	13.62
220	740	-3.53
220	750	27.22
220	760	21.17
220	770	34.71
220	780	-12.35
220	790	25.79
220	800	-21.54
220	810	-9.20
220	820	46.93
220	830	0.57
220	840	-76.29
220	850	-60.96
220	860	50.85
220	870	-5.86
220	880	23.26

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
220	890	-1.12
220	900	5.22
240	70	-37.69
240	80	-31.03
240	90	-31.86
240	100	-50.99
240	110	-24.92
240	120	56.55
240	130	14.12
240	140	22.99
240	150	380.96
240	160	220.64
240	170	-255.19
240	180	-671.23
240	190	-368.02
240	350	-10.48
240	360	-3.10
240	370	1.48
240	380	-8.63
240	390	-13.64
240	400	-7.37
240	410	2.26
240	420	2.34
240	430	18.22
240	440	53.38
240	450	71.35
240	460	-2.20
240	470	-6.05
240	480	0.70
240	490	3.35
240	500	5.71
240	510	8.58
240	520	6.63
240	530	9.48
240	540	6.94
240	550	6.39
240	560	8.85
240	570	9.01
240	580	10.56
240	590	13.81
240	600	11.36
240	610	19.84
240	620	23.09
240	630	26.33
240	640	22.48
240	650	25.53
240	660	23.08
240	670	26.83

AR302219

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
240	680	27.38
240	690	16.52
240	700	7.07
240	710	22.46
240	720	20.96
240	730	29.31
240	740	39.67
240	750	80.33
240	760	-14.61
240	770	214.75
240	780	319.41
240	790	-72.59
240	800	133.58
240	810	-65.22
240	820	70.63
240	830	191.49
240	840	229.75
240	850	-83.26
240	860	11.39
240	870	27.04
240	880	43.70
240	890	20.07
240	900	4.75
260	70	-34.44
260	80	-35.92
260	90	-34.39
260	100	-356.65
260	110	-22.42
260	120	-26.99
260	130	43.84
260	140	686.36
260	150	1204.99
260	160	370.02
260	170	-603.65
260	180	-538.72
260	190	-362.87
260	350	-1.24
260	360	-2.29
260	370	1.72
260	380	6.74
260	390	5.66
260	400	6.27
260	410	4.39
260	420	28.62
260	430	61.17
260	440	60.68
260	450	-15.39
260	460	-15.88

AR302220

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
260	470	-8.46
260	480	2.05
260	490	10.56
260	500	13.68
260	510	13.89
260	520	16.31
260	530	23.62
260	540	17.83
260	550	16.15
260	560	12.76
260	570	12.28
260	580	17.51
260	590	15.32
260	600	22.85
260	610	18.07
260	620	16.19
260	630	17.31
260	640	16.43
260	650	11.45
260	660	15.16
260	670	19.68
260	680	21.59
260	690	22.61
260	700	50.62
260	710	32.24
260	720	53.36
260	730	-41.41
260	740	-19.50
260	750	162.63
260	760	23.55
260	770	11.87
260	780	11.08
260	790	11.70
260	800	91.33
260	810	18.85
260	820	26.26
260	830	25.38
260	840	22.79
260	850	19.40
260	860	21.72
260	870	34.63
260	880	64.24
260	890	12.36
260	900	14.67
280	60	-16.94
280	70	0.61
280	80	-67.92
280	90	-63.25

AR302221

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
280	100	8.62
280	110	-58.30
280	120	28.57
280	130	23.04
280	140	502.42
280	150	1062.09
280	160	-35.15
280	170	-213.68
280	180	-174.64
280	190	-150.40
280	200	-189.96
280	350	27.82
280	360	32.21
280	370	32.59
280	380	28.67
280	390	-22.24
280	400	14.04
280	410	-28.38
280	420	-15.80
280	430	30.98
280	440	65.17
280	450	18.74
280	460	12.13
280	470	49.91
280	480	-39.91
280	490	31.88
280	500	19.57
280	510	-14.15
280	520	43.74
280	530	39.72
280	540	38.01
280	550	30.19
280	560	48.37
280	570	-19.54
280	580	52.54
280	590	-17.98
280	600	68.51
280	610	3.08
280	620	27.16
280	630	-2.36
280	640	33.13
280	650	-11.29
280	660	-2.20
280	670	22.98
280	680	26.87
280	690	4.55
280	700	11.04
280	710	11.13

AR302222

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
280	720	15.91
280	730	5.39
280	740	13.48
280	750	20.05
280	760	16.83
280	770	-5.09
280	780	10.29
280	790	13.67
280	800	39.25
280	810	51.54
280	820	2.72
280	830	56.91
280	840	-50.31
280	850	61.38
280	860	-6.83
280	870	45.05
280	880	60.24
280	890	60.43
280	900	37.50
300	60	-54.57
300	70	-49.03
300	80	-41.50
300	90	-41.77
300	100	-16.74
300	110	-12.41
300	120	27.82
300	130	7.96
300	140	2343.77
300	150	728.10
300	160	-133.25
300	170	-347.81
300	180	-226.49
300	190	-204.06
300	200	-162.58
300	350	-3.45
300	360	-2.70
300	370	-1.38
300	380	-3.97
300	390	-4.43
300	400	-4.02
300	410	-4.60
300	420	-6.24
300	430	-4.08
300	440	-2.61
300	450	-11.87
300	460	-5.62
300	470	-1.57
300	480	-0.71

AR302223

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
300	490	3.64
300	500	3.39
300	510	5.14
300	520	6.39
300	530	7.54
300	540	8.14
300	550	10.58
300	560	4.43
300	570	8.57
300	580	9.35
300	590	10.00
300	600	8.81
300	610	10.15
300	620	11.00
300	630	5.36
300	640	6.99
300	650	10.43
300	660	9.37
300	670	16.12
300	680	10.66
300	690	10.71
300	700	56.86
300	710	2.73
300	720	9.47
300	730	14.43
300	740	21.99
300	750	19.15
300	760	9.34
300	770	-3.04
300	780	11.11
300	790	18.99
300	800	13.26
300	810	13.32
300	820	19.98
300	830	17.66
300	840	18.72
300	850	13.78
300	860	11.22
300	870	11.77
300	880	15.31
300	890	12.66
300	900	29.31
320	60	-78.49
320	70	-47.66
320	80	-42.79
320	90	-35.93
320	100	-5.45
320	110	-58.48

AR302224

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
320	120	14.00
320	130	384.86
320	140	1285.71
320	150	767.31
320	160	195.68
320	170	-107.46
320	180	10.01
320	190	28.08
320	200	-142.06
320	320	-5.75
320	330	-3.80
320	340	-3.14
320	350	-5.16
320	360	-4.31
320	370	-3.66
320	380	-2.41
320	390	-1.16
320	400	0.59
320	410	2.14
320	420	3.10
320	430	4.26
320	440	7.21
320	450	-9.53
320	460	21.12
320	470	1.18
320	480	3.44
320	490	4.37
320	500	5.03
320	510	7.49
320	520	8.34
320	530	8.99
320	540	9.44
320	550	22.20
320	560	21.25
320	570	19.02
320	580	23.57
320	590	27.22
320	600	25.48
320	610	24.83
320	620	26.49
320	630	20.23
320	640	19.67
320	650	16.10
320	660	10.66
320	670	26.00
320	680	24.86
320	690	18.41
320	700	30.27

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Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
320	710	27.11
320	720	27.77
320	730	18.91
320	740	21.66
320	750	29.71
320	760	12.26
320	770	16.91
320	780	10.66
320	790	8.99
320	800	10.50
320	810	8.38
320	820	10.81
320	830	9.31
320	840	16.13
320	850	17.18
320	860	14.03
320	870	16.49
320	880	15.54
320	890	19.86
320	900	12.38
340	50	-61.40
340	60	-66.65
340	70	-71.31
340	80	-71.58
340	90	-71.35
340	100	3.47
340	110	-12.50
340	120	94.74
340	130	1045.62
340	140	1016.25
340	150	-3.32
340	160	-93.89
340	170	-290.86
340	180	-21.93
340	190	99.21
340	200	-159.75
340	210	-77.22
340	220	-79.58
340	230	-30.54
340	240	-22.40
340	250	-48.97
340	260	-19.24
340	270	18.49
340	280	14.42
340	290	-16.75
340	300	-18.63
340	310	15.51
340	320	-7.26

X	Y	Gammas
340	330	-15.22
340	340	33.22
340	350	-49.25
340	360	14.57
340	370	-22.50
340	380	13.13
340	390	21.66
340	400	-9.41
340	410	9.52
340	420	7.15
340	430	18.67
340	440	30.40
340	450	24.54
340	460	-5.62
340	470	-10.79
340	480	-6.97
340	490	31.67
340	500	7.40
340	510	40.83
340	520	40.26
340	530	26.79
340	540	43.92
340	550	46.76
340	560	-19.21
340	570	47.54
340	580	13.71
340	590	28.37
340	600	30.33
340	610	-3.51
340	620	31.43
340	630	3.27
340	640	-3.10
340	650	0.85
340	660	18.79
340	670	7.83
340	680	6.08
340	690	-3.08
340	700	-5.62
340	710	20.84
340	720	-25.62
340	730	32.74
340	740	30.47
340	750	28.61
340	760	32.05
340	770	33.48
340	780	25.42
340	790	28.26
340	800	12.14

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Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
340	810	23.87
340	820	7.00
340	830	16.44
340	840	0.57
340	850	31.60
340	860	1.33
340	870	7.96
340	880	17.23
340	890	1.16
340	900	32.55
340	50	-61.67
360	60	-48.88
360	70	-50.09
360	80	-52.10
360	90	-48.81
360	100	-7.12
360	110	-58.92
360	120	-27.83
360	130	245.95
360	140	459.94
360	150	45.93
360	160	-259.08
360	170	-402.29
360	180	202.59
360	190	-41.93
360	200	-52.54
360	210	-64.85
360	220	-43.55
360	230	-32.06
360	240	-23.67
360	250	-16.58
360	260	-12.49
360	270	-8.20
360	280	-4.21
360	290	-3.22
360	300	-5.64
360	310	-1.66
360	320	-3.97
360	330	-4.28
360	340	-2.99
360	350	0.89
360	360	5.19
360	370	-0.92
360	380	-0.54
360	390	0.75
360	400	1.84
360	410	-0.27
360	420	5.59

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Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
360	430	4.28
360	440	5.86
360	450	2.85
360	460	9.52
360	470	6.08
360	480	4.45
360	490	10.02
360	500	9.59
360	510	11.76
360	520	7.93
360	530	6.20
360	540	12.24
360	550	12.30
360	560	14.35
360	570	6.21
360	580	5.67
360	590	9.71
360	600	12.03
360	610	10.59
360	620	13.76
360	630	12.33
360	640	10.40
360	650	8.73
360	660	7.59
360	670	13.36
360	680	14.82
360	690	14.79
360	700	-2.58
360	710	12.55
360	720	7.43
360	730	9.28
360	740	8.12
360	750	10.78
360	760	9.02
360	770	7.78
360	780	9.92
380	50	-55.68
380	60	-45.85
380	70	-39.24
380	80	-49.54
380	90	-57.33
380	100	-4.92
380	110	-27.50
380	120	-20.59
380	130	134.03
380	140	471.94
380	150	-45.25
380	160	87.36

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Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
380	170	-167.82
380	180	-255.21
380	190	-131.60
380	200	-66.09
380	210	-42.48
380	220	-34.67
380	230	-27.26
380	240	-20.65
380	250	-14.94
380	260	-12.93
380	270	-7.12
380	280	-4.80
380	290	-2.19
380	300	-3.08
380	310	-4.07
380	320	-4.56
380	330	-4.65
380	340	-4.14
380	350	-6.93
380	360	-2.02
380	370	2.09
380	380	-0.30
380	390	8.81
380	400	5.43
380	410	0.84
380	420	4.14
380	430	3.05
380	440	9.76
380	450	-10.73
380	460	11.19
380	470	10.19
380	480	8.10
380	490	11.21
380	500	4.02
380	510	1.83
380	520	5.94
380	530	9.65
380	540	10.46
380	550	10.96
380	560	9.47
380	570	9.08
380	580	9.49
380	590	6.20
380	600	6.41
380	610	11.92
380	620	13.02
380	630	10.73
380	640	10.24

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Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
380	650	8.75
380	660	9.56
380	670	10.27
380	680	10.27
380	690	12.69
380	700	-24.50
380	710	6.61
380	720	10.91
380	730	9.92
380	740	9.73
380	750	10.44
380	760	12.85
380	770	14.26
380	780	15.67
400	50	-70.69
400	60	-55.58
400	70	-67.55
400	80	-33.23
400	90	-28.90
400	100	-33.19
400	110	3.83
400	120	-69.14
400	130	149.29
400	140	90.01
400	150	-240.67
400	160	-189.60
400	170	-101.48
400	180	-66.46
400	190	-67.96
400	200	-26.05
400	210	-6.22
400	220	-35.90
400	230	-30.47
400	240	-22.44
400	250	-23.61
400	260	26.82
400	270	-15.55
400	280	-29.03
400	290	-2.20
400	300	15.53
400	310	-6.85
400	320	-18.43
400	330	-9.40
400	340	-26.98
400	350	-10.27
400	360	-11.96
400	370	-8.96
400	380	-20.82

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Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
400	390	49.71
400	400	-19.66
400	410	8.08
400	420	11.40
400	430	-12.77
400	440	-0.68
400	450	17.59
400	460	-31.52
400	470	35.47
400	480	-21.94
400	490	29.05
400	500	47.74
400	510	19.42
400	520	45.32
400	530	-25.50
400	540	41.79
400	550	-8.93
400	560	37.36
400	570	26.15
400	580	0.54
400	590	40.52
400	600	69.71
400	610	44.09
400	620	41.59
400	630	4.18
400	640	-26.03
400	650	41.96
400	660	-7.75
400	670	-28.96
400	680	44.03
400	690	26.42
400	700	18.81
400	710	-17.70
400	720	32.19
400	730	44.29
400	740	-23.92
400	750	26.67
400	760	41.46
400	770	-41.55
400	780	36.21
430	50	-225.03
430	60	-224.43
430	70	-169.56
430	80	-118.28
430	90	-90.76
430	100	-56.51
430	110	-58.33
430	120	-54.25

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Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
430	130	-30.78
430	140	-75.81
430	150	-67.61
430	160	-64.65
430	170	-57.97
430	180	-50.20
430	190	-38.82
430	200	-31.35
430	210	-18.99
430	220	-11.11
430	230	-6.74
430	240	-5.17
430	250	-7.20
430	260	-5.23
430	270	-0.56
430	280	3.72
430	290	6.69
430	300	2.94
430	310	1.81
430	320	4.09
430	330	7.36
430	340	10.13
430	350	12.20
430	360	12.37
430	370	4.05
430	380	8.12
430	390	9.39
430	400	9.17
430	410	9.74
430	420	13.93
430	430	15.40
430	440	14.57
430	450	14.15
430	460	9.52
430	470	7.49
430	480	5.68
430	490	7.94
430	500	8.62
430	510	11.10
430	520	12.88
430	530	12.76
430	540	11.55
430	550	11.33
430	560	11.01
430	570	11.27
430	580	13.65
430	590	13.11
430	600	14.58

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X	Y	Gammas
430	610	14.56
430	620	15.32
430	630	13.40
430	640	8.57
430	650	11.24
430	660	23.02
430	670	17.81
430	680	16.49
430	690	24.48
430	700	27.07
430	710	22.85
430	720	16.24
430	730	9.52
430	740	6.29
430	750	14.87
430	760	17.05
430	770	17.44
430	780	15.94
460	50	2317.67
460	60	-318.12
460	70	249.37
460	80	421.34
460	90	-5.53
460	100	-249.81
460	110	-79.80
460	120	-9.94
460	130	44.51
460	140	-75.24
460	150	-24.60
460	160	43.96
460	170	84.30
460	180	-61.73
460	190	-62.16
460	200	-37.30
460	210	-21.44
460	220	-15.87
460	230	-12.72
460	240	-11.55
460	250	-4.57
460	260	-0.10
460	270	-1.33
460	280	-1.46
460	290	0.49
460	300	3.16
460	310	7.63
460	320	9.50
460	330	8.37
460	340	8.71

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
460	350	9.86
460	360	11.63
460	370	11.41
460	380	13.78
460	390	16.82
460	400	13.13
460	410	9.50
460	420	10.28
460	430	9.81
460	440	10.04
460	450	15.47
460	460	20.40
460	470	19.72
460	480	16.25
460	490	15.38
460	500	13.41
460	510	12.94
460	520	14.07
460	530	14.97
460	540	18.09
460	550	15.02
460	560	11.85
460	570	16.18
460	580	12.81
460	590	11.95
460	600	11.77
460	610	13.90
460	620	16.83
460	630	16.06
460	640	12.79
460	650	11.13
460	660	10.45
460	670	11.08
460	680	14.32
460	690	17.25
460	700	14.27
460	710	14.30
460	720	13.53
460	730	11.04
460	740	13.77
460	750	19.00
460	760	19.22
460	770	14.64
460	780	12.27
520	50	-117.23
520	60	-115.15
520	70	-110.02
520	80	-121.48

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Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
520	90	-100.44
520	100	-65.19
520	110	-76.56
520	120	-58.33
520	130	-48.40
520	140	-39.07
520	150	-32.15
520	160	-27.02
520	170	-22.09
520	180	-20.86
520	190	-19.03
520	200	-16.39
520	210	-12.33
520	220	-7.30
520	230	-2.55
520	240	2.27
520	250	3.81
520	260	4.34
520	270	1.59
520	280	0.31
520	290	3.24
520	300	3.60
520	310	6.76
520	320	7.09
520	330	8.32
520	340	10.15
520	350	8.20
520	360	10.43
520	370	12.58
520	380	11.84
520	390	10.78
520	400	20.93
520	410	16.65
520	420	12.54
520	430	14.26
520	440	15.49
520	450	15.03
520	460	17.15
520	470	16.50
520	480	16.24
520	490	14.39
520	500	14.55
520	510	12.79
520	520	12.53
520	530	15.87
520	540	17.39
520	550	16.31
520	560	13.15

Saegertown Industrial Area Site Magnetic Data

X	Y	Gammas
520	570	11.69
520	580	11.14
520	590	9.47
520	600	11.60
520	610	12.55
520	620	12.09
520	630	17.97
520	640	19.24
520	650	15.59
520	660	17.54
520	670	17.28
520	680	15.14
520	690	14.19
520	700	13.43
520	710	17.88
520	720	15.53
520	730	15.07
520	740	14.35
520	750	17.41
520	760	15.45
520	770	15.51
520	780	14.48

AR302237

Appendix B: Electromagnetic Data for Area A

Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
60	300	5.50
60	310	5.82
60	320	5.04
60	330	4.70
60	340	4.48
60	350	4.02
60	360	4.10
60	370	3.50
60	380	3.62
60	390	3.66
60	400	3.40
60	410	3.26
60	420	3.14
60	430	2.88
60	440	3.08
60	450	2.96
60	460	2.66
60	470	2.70
60	480	2.60
60	490	2.46
60	500	2.44
80	300	11.58
80	310	10.98
80	320	10.98
80	330	10.68
80	340	10.26
80	350	9.90
80	360	10.02
80	370	10.20
80	380	10.20
80	390	0.66
80	400	-2.58
80	410	5.52
80	420	2.34
80	430	6.42
80	440	6.54
80	450	6.18
80	460	5.94
80	470	5.82
80	480	5.58
80	490	5.52
80	500	5.16
100	40	13.26
100	50	13.86
100	60	9.78
100	70	10.08
100	80	9.54
100	90	9.60

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Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
100	100	9.48
100	110	9.66
100	120	9.36
100	130	8.76
100	140	8.64
100	150	9.24
100	160	8.94
100	170	9.72
100	180	10.02
100	190	9.84
100	200	9.90
100	210	10.44
100	220	9.66
100	230	9.78
100	240	9.84
100	250	9.54
100	260	8.94
100	270	8.52
100	280	7.86
100	290	7.86
100	300	8.28
100	310	7.86
100	320	1.56
100	330	-29.34
100	340	-33.24
100	350	-45.24
100	360	-44.52
100	370	-32.58
100	380	-27.78
100	390	-48.54
100	400	-15.36
100	410	-27.90
100	420	-73.86
100	430	-33.48
100	440	5.46
100	450	4.68
100	460	5.34
100	470	5.04
100	480	4.74
100	490	4.98
100	500	5.04
120	70	9.52
120	80	7.48
120	90	8.26
120	100	8.50
120	110	8.22
120	120	8.14
120	130	8.64

Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
120	140	9.06
120	150	9.34
120	160	10.04
120	170	10.18
120	180	10.16
120	190	10.44
120	200	10.44
120	210	10.02
120	220	9.24
120	230	9.54
120	240	9.10
120	250	8.18
120	260	7.34
120	270	4.02
120	280	3.14
120	290	-2.08
120	300	0.26
120	310	5.08
120	320	5.24
120	330	-4.02
120	340	-6.46
120	350	-2.84
120	360	-10.68
120	370	-25.16
120	380	-34.98
120	390	-34.98
120	400	-34.98
120	410	-34.98
120	420	-25.08
120	430	-34.44
120	440	-6.66
120	450	3.86
120	460	1.26
120	470	1.70
120	480	1.60
120	490	2.22
120	500	1.98
140	80	7.74
140	90	9.54
140	100	9.90
140	110	9.84
140	120	10.62
140	130	8.94
140	140	11.76
140	150	11.28
140	160	11.34
140	170	11.46
140	180	11.28

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Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
140	190	10.44
140	200	9.06
140	210	9.16
140	220	8.88
140	230	-3.64
140	240	5.68
140	250	6.22
140	260	4.46
140	270	8.10
140	280	9.34
140	290	6.76
140	300	5.42
140	310	4.74
140	320	5.04
140	330	-1.88
140	340	4.26
140	350	3.66
140	360	3.76
140	370	3.98
140	380	-1.62
140	390	4.34
140	400	4.38
140	410	4.86
140	420	4.70
140	430	4.04
140	440	3.46
140	450	2.80
140	460	2.84
140	470	2.30
140	480	2.72
140	490	0.40
140	500	-0.20
160	60	10.38
160	70	10.02
160	80	10.50
160	90	10.62
160	100	11.16
160	110	11.58
160	120	12.12
160	130	11.94
160	140	12.12
160	150	12.36
160	160	11.82
160	170	11.22
160	180	9.84
160	190	10.74
160	200	11.76
160	210	-2.76

AR302242

Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
160	220	7.20
160	230	11.94
160	240	10.86
160	250	10.02
160	260	9.60
160	270	8.40
160	280	8.10
160	290	7.08
160	300	6.78
160	310	6.30
160	320	5.76
160	330	5.52
160	340	5.28
160	350	5.16
160	360	5.10
160	370	4.98
160	380	5.10
160	390	5.22
160	400	5.28
160	410	5.28
160	420	5.34
160	430	4.98
160	440	5.28
160	450	4.86
160	460	5.40
160	470	4.98
160	480	5.22
160	490	4.38
160	500	4.56
180	70	10.74
180	80	9.54
180	90	10.44
180	100	12.00
180	110	10.74
180	120	11.70
180	130	11.58
180	140	12.54
180	150	12.42
180	160	10.74
180	170	10.86
180	180	10.68
180	190	10.32
180	200	9.36
180	210	10.98
180	220	14.94
180	230	21.06
180	240	15.96
180	250	11.46

AR302243

Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
180	260	10.74
180	270	9.12
180	280	8.58
180	290	7.62
180	300	6.90
180	310	6.66
180	320	6.24
180	330	5.88
180	340	5.94
180	350	5.34
180	360	5.22
180	370	4.86
180	380	5.22
180	390	5.04
180	400	4.98
180	410	4.92
180	420	4.98
180	430	4.32
180	440	5.04
180	450	5.10
180	460	4.56
180	470	4.86
180	480	4.86
180	490	4.02
180	500	5.58
200	300	7.68
200	310	7.14
200	320	6.84
200	330	6.66
200	340	6.78
200	350	6.54
200	360	6.66
200	370	6.36
200	380	6.24
200	390	5.64
200	400	5.70
200	410	5.58
200	420	5.58
200	430	5.46
200	440	5.52
200	450	5.28
200	460	5.88
200	470	5.64
200	480	5.58
200	490	5.52
200	500	3.30
220	60	11.22
220	70	10.02

AR302244

Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
220	80	9.84
220	90	10.68
220	100	10.68
220	110	11.34
220	120	11.70
220	130	12.36
220	140	11.16
220	150	13.02
220	160	-15.90
220	170	-4.62
220	180	12.24
220	190	11.88
220	300	7.68
220	310	7.26
220	320	7.38
220	330	7.20
220	340	7.08
220	350	7.44
220	360	7.32
220	370	7.38
220	380	7.80
220	390	7.80
220	400	7.56
220	410	6.96
220	420	6.48
220	430	6.72
220	440	6.66
220	450	6.48
220	460	5.22
220	470	6.84
220	480	7.02
220	490	7.08
220	500	6.96
240	350	6.72
240	360	6.42
240	370	7.02
240	380	7.20
240	390	6.54
240	400	5.40
240	410	5.94
240	420	6.72
240	430	6.18
240	440	5.46
240	450	5.34
240	460	5.10
240	470	5.10
240	480	6.00
240	490	5.88

AR302245

Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
240	500	5.58
280	60	11.04
280	70	10.08
280	80	10.50
280	90	10.92
280	100	11.34
280	110	12.00
280	120	11.70
280	130	12.54
280	140	14.46
280	150	14.64
280	160	15.96
280	170	19.02
280	180	21.24
280	190	28.20
280	200	27.18
280	350	5.40
280	360	5.16
280	370	6.06
280	380	5.28
280	390	5.28
280	400	4.98
280	410	5.22
280	420	5.46
280	430	5.22
280	440	5.76
280	450	5.04
280	460	4.32
280	470	5.34
280	480	5.46
280	490	5.46
280	500	5.58
340	50	6.44
340	60	6.70
340	70	6.16
340	80	6.28
340	90	8.10
340	100	8.60
340	110	8.50
340	120	9.70
340	130	-3.42
340	140	8.82
340	150	6.60
340	160	14.46
340	170	9.42
340	180	12.24
340	190	12.84
340	200	11.52

AR302246

Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
340	210	9.42
340	220	12.78
340	230	12.06
340	240	8.40
340	250	6.72
340	260	6.18
340	270	5.88
340	280	5.04
340	290	4.92
340	300	4.86
340	310	4.86
340	320	4.32
340	330	4.02
340	340	3.72
340	350	3.84
340	360	3.66
340	370	3.48
340	380	3.42
340	390	3.18
340	400	2.94
340	410	2.70
340	420	2.70
340	430	2.64
340	440	2.76
340	450	2.82
340	460	2.76
340	470	2.76
340	480	2.76
340	490	2.64
340	500	2.70
360	60	5.06
360	70	4.06
360	80	4.92
360	90	6.42
360	100	5.64
360	110	5.70
360	120	6.72
360	130	8.46
360	140	7.62
360	150	3.00
360	160	-3.06
360	170	-1.62
360	180	3.54
360	190	2.34
360	200	5.16
360	210	4.92
360	220	3.54
360	230	3.78

AR302247

Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
360	240	3.78
360	250	2.88
360	260	3.06
360	270	2.52
360	280	2.82
360	290	2.58
360	300	2.64
360	310	2.52
360	320	2.52
360	330	2.52
360	340	2.40
360	350	2.22
360	360	2.40
360	370	2.16
360	380	2.22
360	390	2.34
360	400	2.04
360	410	1.38
360	420	1.74
360	430	1.74
360	440	2.04
360	450	2.22
360	460	2.04
360	470	2.22
360	480	2.10
360	490	1.74
360	500	2.04
380	60	3.96
380	70	3.94
380	80	3.18
380	90	4.72
380	100	4.16
380	110	4.30
380	120	6.74
380	130	-2.32
380	140	-2.16
380	150	2.76
380	160	3.40
380	170	2.90
380	180	3.86
380	190	2.72
380	200	2.26
380	210	2.14
380	220	1.82
380	230	1.50
380	240	1.86
380	250	1.52
380	260	1.66

AR302248

Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
380	270	2.10
380	280	1.64
380	290	1.74
380	300	1.60
380	310	1.46
380	320	1.62
380	330	1.72
380	340	1.72
380	350	1.90
380	360	1.70
380	370	1.86
380	380	1.84
380	390	1.32
380	400	1.48
380	410	1.68
380	420	1.22
380	430	1.00
380	440	1.32
380	450	1.24
380	460	0.66
380	470	0.96
380	480	1.10
380	490	1.04
380	500	0.80
400	60	3.80
400	70	3.26
400	80	3.20
400	90	3.96
400	100	3.44
400	110	3.70
400	120	5.38
400	130	2.54
400	140	1.24
400	150	3.98
400	160	3.34
400	170	2.60
400	180	1.86
400	190	1.62
400	200	1.30
400	210	1.54
400	220	1.24
400	230	1.48
400	240	1.42
400	250	1.80
400	260	1.36
400	270	1.36
400	280	1.46
400	290	1.82

AR302249

Saegertown Industrial Area Site EM Conductivity Data

X	Y	mmhos/meter
400	300	1.56
400	310	1.38
400	320	1.30
400	330	1.16
400	340	1.22
400	350	1.30
400	360	1.30
400	370	1.36
400	380	1.24
400	390	1.14
400	400	1.26
400	410	1.14
400	420	0.86
400	430	1.04
400	440	0.98
400	450	0.82
400	460	0.72
400	470	0.84
400	480	0.96
400	490	0.54
400	500	0.54

AR302250

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
60	300	-1.88
60	310	-1.87
60	320	-1.82
60	330	-1.79
60	340	-1.71
60	350	-1.70
60	360	-1.83
60	370	-1.78
60	380	-1.79
60	390	-1.87
60	400	-1.83
60	410	-1.84
60	420	-1.75
60	430	-1.84
60	440	-1.78
60	450	-1.70
60	460	-1.75
60	470	-1.75
60	480	-1.76
60	490	-1.73
60	500	-1.69
80	300	-3.20
80	310	-3.03
80	320	-2.96
80	330	-2.90
80	340	-2.79
80	350	-2.78
80	360	-2.58
80	370	-2.41
80	380	-3.17
80	390	-2.00
80	400	-0.19
80	410	-3.06
80	420	-3.78
80	430	-2.18
80	440	-1.97
80	450	-2.02
80	460	-2.08
80	470	-1.97
80	480	-1.96
80	490	-2.11
80	500	-1.99
100	40	-0.63
100	50	-0.78
100	60	-0.69
100	70	-0.98
100	80	-1.11
100	90	-1.13

AR302251

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
100	100	-1.36
100	110	-1.26
100	120	-1.55
100	130	-1.49
100	140	-1.38
100	150	-1.48
100	160	-1.52
100	170	-1.48
100	180	-1.49
100	190	-1.58
100	200	-1.58
100	210	-1.38
100	220	-1.59
100	230	-1.58
100	240	-1.63
100	250	-1.60
100	260	-1.63
100	270	-1.64
100	280	-1.67
100	290	-1.77
100	300	-1.72
100	310	-1.67
100	320	-1.35
100	330	-11.20
100	340	-19.22
100	350	-23.01
100	360	-20.22
100	370	-11.49
100	380	-21.37
100	390	-15.10
100	400	-12.51
100	410	-17.53
100	420	-24.43
100	430	-15.92
100	440	-6.97
100	450	-1.29
100	460	-1.83
100	470	-1.88
100	480	-1.87
100	490	-1.99
100	500	-1.99
120	70	-1.42
120	80	-1.54
120	90	-1.55
120	100	-1.73
120	110	-1.73
120	120	-1.64
120	130	-1.40

AR302252

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
120	140	-1.14
120	150	-1.65
120	160	-1.59
120	170	-1.69
120	180	-1.70
120	190	-1.90
120	200	-1.69
120	210	-1.71
120	220	-1.82
120	230	-1.67
120	240	-1.79
120	250	-1.72
120	260	-2.18
120	270	-1.88
120	280	-1.40
120	290	0.05
120	300	-2.78
120	310	-1.53
120	320	-1.73
120	330	-6.65
120	340	-13.96
120	350	0.25
120	360	-10.60
120	370	-32.40
120	380	-22.96
120	390	-26.67
120	400	-32.42
120	410	-32.42
120	420	-20.10
120	430	-20.24
120	440	-0.52
120	450	-2.53
120	460	-1.17
120	470	-1.59
120	480	-1.76
120	490	-1.64
120	500	-1.49
140	80	-1.19
140	90	-1.43
140	100	-1.59
140	110	-1.73
140	120	-1.57
140	130	-0.84
140	140	-1.57
140	150	-1.67
140	160	-0.99
140	170	-1.38
140	180	-1.51

AR302253

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
140	190	-1.89
140	200	-1.76
140	210	-1.48
140	220	-1.99
140	230	-4.42
140	240	-1.53
140	250	-1.70
140	260	-1.41
140	270	-1.85
140	280	0.18
140	290	-1.55
140	300	-1.97
140	310	-1.85
140	320	-1.65
140	330	-2.30
140	340	-2.02
140	350	-1.70
140	360	-1.76
140	370	-1.93
140	380	1.96
140	390	-0.20
140	400	-0.64
140	410	-0.99
140	420	-1.30
140	430	-1.53
140	440	-1.66
140	450	-1.75
140	460	-1.66
140	470	-1.77
140	480	-2.07
140	490	-0.33
140	500	-0.51
160	60	-1.13
160	70	-1.22
160	80	-1.22
160	90	-1.23
160	100	-1.35
160	110	-1.23
160	120	-1.01
160	130	-0.73
160	140	-0.83
160	150	-1.08
160	160	-1.19
160	170	-1.12
160	180	-1.29
160	190	-1.24
160	200	-0.94
160	210	-4.08

AR302254

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
160	220	-2.96
160	230	-1.07
160	240	-1.26
160	250	-1.25
160	260	-1.51
160	270	-1.47
160	280	-1.41
160	290	-1.52
160	300	-1.52
160	310	-1.54
160	320	-1.54
160	330	-1.55
160	340	-1.46
160	350	-1.46
160	360	-1.54
160	370	-1.46
160	380	-1.49
160	390	-1.48
160	400	-1.51
160	410	-1.45
160	420	-1.43
160	430	-1.40
160	440	-1.37
160	450	-1.47
160	460	-1.49
160	470	-1.51
160	480	-1.41
160	490	-1.29
160	500	-1.32
180	70	-1.60
180	80	-1.66
180	90	-1.63
180	100	-1.58
180	110	-1.24
180	120	-1.65
180	130	-0.55
180	140	-1.19
180	150	-1.66
180	160	-1.45
180	170	-1.36
180	180	-1.88
180	190	-3.71
180	200	-0.79
180	210	-1.91
180	220	-4.00
180	230	-2.31
180	240	-1.54
180	250	-1.73

AR302255

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
180	260	-2.30
180	270	-2.12
180	280	-2.02
180	290	-2.01
180	300	-2.02
180	310	-2.04
180	320	-1.95
180	330	-2.04
180	340	-1.89
180	350	-2.02
180	360	-1.97
180	370	-2.01
180	380	-1.94
180	390	-2.11
180	400	-2.02
180	410	-1.61
180	420	-1.51
180	430	-1.54
180	440	-1.58
180	450	-2.12
180	460	-1.77
180	470	-1.71
180	480	-1.42
180	490	-0.84
180	500	-2.02
200	300	-1.95
200	310	-2.07
200	320	-2.00
200	330	-1.97
200	340	-2.01
200	350	-1.97
200	360	-2.01
200	370	-1.95
200	380	-1.83
200	390	-2.05
200	400	-1.59
200	410	-0.83
200	420	-0.33
200	430	0.25
200	440	-0.02
200	450	0.39
200	460	-1.19
200	470	-1.52
200	480	-0.76
200	490	-1.84
200	500	-1.22
220	60	-0.82
220	70	-0.63

AR302256

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
220	80	-0.92
220	90	-0.94
220	100	-0.73
220	110	-0.72
220	120	-0.59
220	130	0.64
220	140	-0.42
220	150	-1.91
220	160	-2.66
220	170	4.50
220	180	12.04
220	190	6.94
220	300	-1.34
220	310	-1.40
220	320	-1.37
220	330	-1.36
220	340	-1.36
220	350	-1.38
220	360	-1.37
220	370	-1.37
220	380	-1.38
220	390	-1.35
220	400	-1.30
220	410	-1.14
220	420	-1.07
220	430	-1.46
220	440	-0.82
220	450	-0.99
220	460	-1.38
220	470	-1.16
220	480	-1.18
220	490	-1.13
220	500	-1.01
240	350	-2.06
240	360	-2.02
240	370	-2.01
240	380	-1.94
240	390	-1.60
240	400	-1.65
240	410	-1.71
240	420	-1.83
240	430	-1.22
240	440	1.55
240	450	1.20
240	460	0.45
240	470	-0.71
240	480	-1.60
240	490	-1.55

AR302257

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
240	500	-1.81
280	60	-0.69
280	70	-0.94
280	80	-0.89
280	90	-0.87
280	100	-0.78
280	110	-0.66
280	120	-0.42
280	130	-0.89
280	140	1.85
280	150	6.25
280	160	-0.76
280	170	1.87
280	180	5.54
280	190	5.13
280	200	1.94
280	350	-1.37
280	360	-1.35
280	370	-1.41
280	380	-1.46
280	390	-1.83
280	400	-1.93
280	410	-1.99
280	420	-2.02
280	430	-1.89
280	440	-1.17
280	450	-0.25
280	460	-0.61
280	470	-1.84
280	480	-2.23
280	490	-2.16
280	500	-2.31
340	50	-1.83
340	60	-1.94
340	70	-2.05
340	80	-2.04
340	90	-1.93
340	100	-1.96
340	110	-1.38
340	120	-4.15
340	130	18.74
340	140	9.60
340	150	7.57
340	160	3.23
340	170	7.90
340	180	12.33
340	190	-1.93
340	200	-2.16

AR302258

X	Y	ppt
340	210	-1.96
340	220	-2.42
340	230	-2.43
340	240	-2.43
340	250	-2.46
340	260	-2.52
340	270	-2.47
340	280	-2.49
340	290	-2.53
340	300	-2.49
340	310	-2.34
340	320	-2.52
340	330	-2.48
340	340	-2.37
340	350	-2.43
340	360	-2.29
340	370	-2.38
340	380	-2.35
340	390	-2.22
340	400	-2.16
340	410	-2.17
340	420	-2.17
340	430	-2.26
340	440	-2.24
340	450	-2.19
340	460	-2.14
340	470	-2.20
340	480	-2.11
340	490	-2.23
340	500	-2.18
360	60	-1.53
360	70	-1.73
360	80	-1.70
360	90	-2.10
360	100	-2.01
360	110	-1.53
360	120	-1.31
360	130	-2.44
360	140	4.54
360	150	7.50
360	160	11.87
360	170	6.20
360	180	3.14
360	190	4.31
360	200	-2.16
360	210	-1.48
360	220	-2.25
360	230	-1.93

AR302259

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
360	240	-1.82
360	250	-1.90
360	260	-1.82
360	270	-1.70
360	280	-1.91
360	290	-1.97
360	300	-2.05
360	310	-1.93
360	320	-1.97
360	330	-1.87
360	340	-1.95
360	350	-1.90
360	360	-1.85
360	370	-1.90
360	380	-1.78
360	390	-1.90
360	400	-1.69
360	410	-1.79
360	420	-1.52
360	430	-1.59
360	440	-1.67
360	450	-1.78
360	460	-1.78
360	470	-1.71
360	480	-1.77
360	490	-1.72
360	500	-1.79
380	60	-1.48
380	70	-1.35
380	80	-1.53
380	90	-1.85
380	100	-2.01
380	110	-1.53
380	120	-2.22
380	130	1.77
380	140	-1.23
380	150	6.51
380	160	2.00
380	170	0.88
380	180	-0.79
380	190	-1.78
380	200	-1.79
380	210	-1.91
380	220	-1.83
380	230	-1.85
380	240	-1.79
380	250	-1.73
380	260	-1.83

AR302260

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
380	270	-1.79
380	280	-1.93
380	290	-1.88
380	300	-1.83
380	310	-1.84
380	320	-1.81
380	330	-1.84
380	340	-1.75
380	350	-1.81
380	360	-1.82
380	370	-1.71
380	380	-1.66
380	390	-1.70
380	400	-1.72
380	410	-1.64
380	420	-1.65
380	430	-1.72
380	440	-1.67
380	450	-1.67
380	460	-1.77
380	470	-1.71
380	480	-1.75
380	490	-1.77
380	500	-1.71
400	60	-1.47
400	70	-1.81
400	80	-1.61
400	90	-1.89
400	100	-1.83
400	110	-1.57
400	120	-2.05
400	130	-3.40
400	140	5.76
400	150	-0.26
400	160	-1.59
400	170	-1.77
400	180	-1.90
400	190	-1.87
400	200	-1.79
400	210	-1.94
400	220	-1.95
400	230	-1.90
400	240	-1.81
400	250	-2.00
400	260	-1.79
400	270	-1.91
400	280	-1.85
400	290	-1.71

AR302261

Saegertown Industrial Area Site EM Inphase Data

X	Y	ppt
400	300	-1.84
400	310	-1.88
400	320	-1.97
400	330	-1.84
400	340	-1.72
400	350	-1.77
400	360	-1.79
400	370	-1.85
400	380	-1.85
400	390	-1.85
400	400	-1.78
400	410	-1.54
400	420	-1.82
400	430	-1.65
400	440	-1.65
400	450	-1.85
400	460	-1.90
400	470	-1.69
400	480	-1.81
400	490	-1.79
400	500	-1.85

AR302262

APPENDIX J

TEST PIT LOGS

LOG OF SOIL TEST PIT

WARZYN

Project: Saegertown Industrial Area Site Remedial Investigation
Location: Saegertown, Pennsylvania

Pit No. TP1
Surface Elevation 1117.1
Job No. 60882
Date 1-9-91

2100 CORPORATE DRIVE ADDISON, ILLINOIS 60101 • TEL. 708 691-5000

Sample No.	Ground Water Level	Moisture	Depth
1		M	4.0

Depth scale: 2.5, 5, 7.5, 10, 12.5, 15, 17.5, 20

VISUAL CLASSIFICATION AND REMARKS

Test Pit No. TP1
1/9/91

0.0 to 0.75 feet: FILL - Black and Dark Brown Solid Sludge material in a clayey sand matrix. Trace rust color and metallic debris at 0.5 feet. HNu = 3 to 4 ppm

0.75 to 5.2 feet: FILL/WASTE - Dense Black Solid Sludge and soft tar-like substance mixed with solid black material. Trace metallic debris, cloth, plastic, rubber hose, and wood encountered.

HNu = 15 ppm Headspace of Black Material collected for sample analysis.
Trace of black liquid around black solid and tar-like material.
Slight lustrous appearance. Creosote-like odor noted.
Encounter apparent native soil at 5.2 feet.

5.2 to 5.5 feet: Brown Silty CLAY, Trace to Some Sand. Moist.

End of test pit excavation at 5.5 feet. Pit backfilled with removed material.

Test pit is located at Geophysical Grid Point 150 North, 320 East around stained surficial soils, approximately 35 to 40 feet from Southern Edge of Pond.

Sample collected at 4 feet (GA-TP01-04)

Approximate pit size, 8 feet by 3 feet.

All HNu readings are reported above background levels.

AR302264

WATER LEVEL OBSERVATIONS

While Excavating: Not Encountered
Upon Completion of Excavating:
Time After Excavating:
Depth to Water:
Depth to Cave In:

GENERAL NOTES

Equipment Used: Case Rubber Tire Backhoe Model #580
Geologist: Tim Maley

LOG OF SOIL TEST PIT

WARZYN

Project: Saegertown Industrial Area Site Remedial Investigation

Location: Saegertown, Pennsylvania

Pit No. TP2

Surface Elevation 1115.7

Job No. 60882

Date 1-9-91

2100 COPRPORATE DRIVE ADDISON, ILLINOIS 60101 • TEL. 708 691-5000

Sample No.	Ground Water Level	Moisture	Depth
1		M	7.0

Depth scale: 2.5, 5, 7.5, 10, 12.5, 15, 17.5, 20

VISUAL CLASSIFICATION AND REMARKS

Test Pit No. TP2
1/9/91

0.0 to 1.0 feet: FILL - Brown and Dark Brown Silty Sand, Trace Gravel and Pebbles. Trace to Little Black Solid Sludge material. Trace debris such as cloth, metallic straps, and wire mesh. HNu = 1 to 2 ppm

1.0 to 6.0 feet: FILL - Black and Dark Brown Sand and Gravel, Some Black Sludge material and staining, Trace Silt and Clay, Some debris such as wire mesh and metal straps. Lustrous appearance. HNu = 2.0 ppm
Increased clay at 5.0 to 6.0 feet
HNu = 5.0 ppm in soils obtained from approximately 5 feet
Encounter Native Soil at 6.0 to 6.5 feet.

6.0 to 7.5 feet: Gray, Dark Brown, and Brown Medium Dense Silty CLAY, Some staining, Trace Fine Sand and pockets of dark brown liquid (Creosote-like). HNu on sample = 7.0 to 8.0 ppm (Headspace)

End of Test Pit Excavation at 7.5 feet. Pit backfilled with removed material.

Test pit is located approximately 25 feet from south - central pond edge, near geophysical grid point 100 North, 220 East.

Sample collected at 7 feet (GA-TP02-07) plus MS/MSD.

Approximate pit size, 8 feet by 3 feet.

All HNu readings are reported above background levels.

AR302265

WATER LEVEL OBSERVATIONS

While Excavating: 5.0 feet (surface runoff)

Upon Completion of Excavating:

Time After Excavating:

Depth to Water:

Depth to Cave In:

GENERAL NOTES

Equipment Used: Case Rubber Tire Backhoe Model #580

Geologist: Tim Maley

LOG OF SOIL TEST PIT

WARZYN

Project: Saegertown Industrial Area Site Remedial Investigation

Location: Saegertown, Pennsylvania

Pit No. TP3

Surface Elevation 1115.5

Job No. 60882

Date 1-9-91

2100 COPRPORATE DRIVE ADDISON, ILLINOIS 60101 • TEL. 708 691-5000

Sample No.	Ground Water Level	Moisture	Depth
1			2.0
			2.5
			5
			7.5
			10
			12.5
			15
			17.5
			20

VISUAL CLASSIFICATION AND REMARKS

Test Pit No. TP3
1/9/91

0 to 1.0 feet: Possible FILL - Brown Silty Sand and Gravel, Trace Clay, Pebbles and Cobbles, Moist, Trace of occasional black staining. HNu = 0 ppm.

1.0 to 5.5 feet: Black to Brown and Gravish Black mottled Clayey SILT, Trace Fine Sand, Gravel, Pebbles, and Cobbles, Moist. No apparent buried fill or waste material. HNu = 0 ppm. Increased Black and Gray mottled Silty Clay at 4.0 to 5.5 feet.

End of test pit excavation at 5.5 feet. Pit backfilled with removed material.

Test pit is located approximately 30 feet from edge of pond at geophysical grid point 210 North, 160 East, near grassy area on southwest corner of pond.

Sample collected and duplicated at 2 feet. (GA-TP03-02)
Approximate pit size, 8 feet by 3 feet.

All HNu readings are reported above background levels.

WATER LEVEL OBSERVATIONS

While Excavating: Not Encountered

Upon Completion of Excavating:

Time After Excavating:

Depth to Water:

Depth to Cave In:

GENERAL NOTES

AR302266

Equipment Used: Ca[illegible] Rubber Tire Backhoe Model #580

Geologist: Tim Maley

LOG OF SOIL TEST PIT

WARZYN

Project: Saegertown Industrial Area Site Remedial Investigation

Location: Saegertown, Pennsylvania

Pit No. TP4

Surface Elevation 1117.4

Job No. 60882

Date 1-10-91

2100 COPRPORATE DRIVE ADDISON, ILLINOIS 60101 • TEL. 708 691-5000

Sample No.	Ground Water Level	Moisture	Depth	VISUAL CLASSIFICATION AND REMARKS
				Test Pit No. TP4 1/10/91
1			2.0	0.0 to 0.5 feet: FILL - Black and Brown Silty Sand, Trace metallic debris.
			2.5	
			5	0.5 to 4.0 feet: FILL - Empty metal drum carcasses and other various metallic debris including rebar, wire, metal straps, and copper tubing in a Brown Silty Sand Matrix, Trace to Little Clay. All drum carcasses encountered appeared empty and crushed. All debris mostly saturated with surface water runoff.
			7.5	4.0 + : Medium Dense Gray and Brown mottled Silty CLAY, Trace Fine Sand.
			10	End of test pit excavation at 4.0 feet. Pit backfilled with removed material. Test pit is located at Geophysical grid point 380 North, 100 East approximately 10 feet south of boring B-7.
			12.5	Sample collected of sandy matrix material around metallic debris at 2 feet (GA-TP4-2') HNu = 0 ppm. Approximate pit size, 8 feet by 3 feet.
			15	All HNu readings are reported above background levels.
			17.5	
			20	

AR302267

WATER LEVEL OBSERVATIONS

While Excavating: 2.0 feet (surface runoff)

Upon Completion of Excavating:

Time After Excavating:

Depth to Water:

Depth to Cave In:

GENERAL NOTES

Equipment Used: Case Rubber Tire Backhoe Model #580

Geologist: Tim Maley

LOG OF SOIL TEST PIT

WARZYN

Project: Saegertown Industrial Area Site Remedial Investigation
Location: Saegertown, Pennsylvania

Pit No. TP5
Surface Elevation 1114.0
Job No. 60882
Date 1-10-91

2100 CORPORATE DRIVE ADDISON, ILLINOIS 60101 • TEL. 708 691-5000

Ground Water Level	Sample No.	Moisture	Depth	VISUAL CLASSIFICATION AND REMARKS
				Test Pit No. TP5 1/10/91
			2.5	0.0 to 1.5 feet: TOPSOIL - Black and Dark Brown Clayey Silt, Trace Fine Sand, Moist. HNu = 0 ppm
				1.5 to 5.0 + feet: Brown SILT and Fine SAND ; Trace Clay, Slightly mottled. No apparent buried fill or waste material. HNu = 0 ppm
			5	No samples collected.
			7.5	End of test pit excavation at 5.0 feet. Pit backfilled with removed material. Test pit is located at Geophysical Grid Point 780 North and 180 East in an open field north of pond area.
				No sample was collected.
			10	Approximate pit size, 8 feet by 3 feet.
				All HNu readings are reported above background levels.
			12.5	
			15	
			17.5	
			20	

WATER LEVEL OBSERVATIONS

While Excavating: Not Encountered
Upon Completion of Excavating:
Time After Excavating:
Depth to Water:
Depth to Cave In:

GENERAL NOTES

AR302268

Equipment Used: Case Rubber Tire Backhoe Model #580

Geologist: Tim Maley

~~V60882.15-xTPlogs~~

APPENDIX K

MONITORING WELL BORINGS LOGS AND WELL CONSTRUCTION REPORTS

WARZYN

LOG OF TEST BORING

Project: Saegertown Industrial Area Remedial Investigation
Location: Saegertown, Pennsylvania

Boring No. W1D
Surface Elevation 1129.2
Job No. 60882.11
Sheet 2 of 2

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · · TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	Profile	VISUAL CLASSIFICATION and Remarks	Borehole	Backfill	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
21		5	M	100+							0.0
22		4	M	100+							0.0
23		6	M/D	100+	45						0.0
24		6	D	100+			Bedrock: Weathered Reddish Brown and Light Gray SHALE.				0.0
25			D	100+							0.0
					50		End of Boring at 50.0 Feet Installed Well W1D to 50.0 Feet				
					55						
					60						
					65						
					70						
					75						
					80						
					85						

AR302275

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W2D
Surface Elevation 1119.9
Job No. 60882.11
Sheet 1 of 2

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
1		20	M	5		TOPSOIL: Dark Brown Silty Sand		0.0
2		14	M/W	8		Loose to Medium Dense Dark Brown Silty Fine to Coarse SAND, Trace Gravel and Clay. (SM)		0.0
3		22	M	13	5	Increased Fine to Coarse Gravel at 5.0 to 10.0 Feet		0.0
4		24	M	19				0.0
5		24	M	16				0.0
6		20	M	17	10	Less Gravel at 10.0 to 12.0 Feet		0.0
7		24	M/W	9		Soft Light Brown Silty CLAY, Trace Gravel (CL-ML)		0.0
8		24	M/W	11	15	Light Gray Silty CLAY, Trace Gravel. (CL-ML)		0.0
9		24	W	17				0.0
10		10	W	24		Dense Gray Sandy CLAY (SC)		0.0
11		10	W	18	20	Light Brown and Gray Fine Gravelly CLAY Some Fine to Coarse Sand and Silt (SC-GC)		0.0
12		12	W	10				0.0
13		12	W	14	25	Loose to Dense Light Brown and Reddish Brown Fine to Coarse SAND and GRAVEL, Some Silt (SP)		0.0
14		13	W	9				0.0
15		10	W	12				0.0
16		14	W	21	30			0.0
17		10	W	17				0.0
18		2	W	35	35			0.0
19		10	W	15				0.0
20		14	W	49				0.0
					40			

WATER LEVEL OBSERVATIONS

While Drilling ▽ 13.0 Upon Completion of Drilling ▼ 12.0
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/7/90 End 12/7/90 Drill
Driller Mathes Chief GM Rig D 50
Logger CSY Editor AJS
Drill Method 4.25" HSA

WARZYN

LOG OF TEST BORING

Project: Saegertown Industrial Area
Remedial Investigation
Location: Saegertown, Pennsylvania

Boring No. W2D
Surface Elevation 1119.9
Job No. 60882.11
Sheet 2 of 2

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · · TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	Profile	VISUAL CLASSIFICATION and Remarks	Borehole	Backfill	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
21		10	W	8							0.0
22		24	W	0			Very Loose Brown Fine to Medium SAND, Little Silt, Trace Clay. (SP-SM)				0.0
23		24	W/M	61	45						0.0
24		17	M	84			Brown Gray and Reddish Brown Lean CLAY, Trace Medium to Fine Gravel (CL)				0.0
25		24	M/W	46							0.0
					50		Bedrock: Weathered Gray Silty SHALE, Fragmented.				
					55		End of Boring at 50.0 Feet Installed Well W2D to 42.5 Feet				
					60						
					65						
					70						
					75						
					80						
					85						

AR302277

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W2S
Surface Elevation 1119.8
Job No. 60882.11
Sheet 1 of 1

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · TEL. (708) 691-5000

SAMPLE						PROFILE	VISUAL CLASSIFICATION and Remarks	BOREHOLE BACKFILL	SOIL PROPERTIES				
Number	TYPE	Rec. (in.)	Mois-ture	N Value	Depth (ft.)				qu (qa) (tsf)	PID (ppm)			
							TOPSOIL: Dark Brown Silty Sand						
					5		Loose to Medium Dense Dark Brown Fine to Coarse Silty SAND, Trace Gravel and Clay. (SM) Straight Drill to 19.0 Feet for Shallow Well Placement. See Log for W2D for Further Details.			0.0			
					10					0.0			
					15		Light Brown Silty CLAY, Trace Gravel (CL-ML) Gray at 15.0 Feet			0.0			
					20		End of Boring at 19.0 Feet Installed Well W2S to 18.0 Feet						
					25								
					30								
					35								
					40								

WATER LEVEL OBSERVATIONS

While Drilling ▽ 13.0 Upon Completion of Drilling ▼ 11.9
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/9/90 End 12/9/90 Drill
Driller Mathes Chief GM Rig D 50
Logger CSY Editor AJS
Drill Method 4.25" HSA

WARZYN

LOG OF TEST BORING

Project: Saegertown Industrial Area
Remedial Investigation
Location: Saegertown, Pennsylvania

Boring No. W3D
Surface Elevation 1122.5
Job No. 60882.11
Sheet 1 of 2

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
						Straight Drill to 4.0 Feet. See Log for W3S for Details between Surface to 4.0 Feet.		
1		10	M/W	16	5	Brown Fine to Coarse SAND and GRAVEL, Little Silt, Trace Clay (SP-SM/GP-GM) Trace to Little Cobbles and Rust Color at 5.0 to 6.0 Feet.		0.0
2		8	W	13				0.0
3		14	W	26				0.0
4		8	W	5	10			0.0
5		6	W	9		Darker Brown at 12.0 Feet		0.0
6		16	W	11	15			0.0
7		10	w	11				0.0
8		12	W	9				0.0
9		8	W	9	20			0.0
10		6	W	11		Increased Silt		0.0
11		14	W	36	25	Medium Dense to Dense Dark Brown, Fine to Coarse SAND and GRAVEL, Trace to Little Silt, Trace to Little Cobbles. (SP-SM/GP-GM)		0.0
12		14	W	24				0.0
13		14	W	24				0.0
14		6	W	32	30	Dense Brown SILT, Trace to Little Fine Sand, Trace Clay and Fine to Medium Gravel, Moist (ML)		0.0
15		6	W	42				0.0
16		14	W	20	35	Medium Dense Brown to Gray Silty Fine SAND, Coarser with Depth with Less Silt, Wet. (SM)		0.0
17		15	W	33				0.0
18		4	W	15	40	Gray Fine to Medium SAND, Trace Silt and Fine to Medium Gravel. (SP)		0.0

WATER LEVEL OBSERVATIONS

While Drilling ▽ 6.0 Upon Completion of Drilling ▼ 7.4
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/5/90 End 12/5/90 Drill
Driller Mathes Chief KFB Rig C
Logger TJM Editor AJS ME550
Drill Method 4.25" HSA

AR302279

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W3D
Surface Elevation 1122.5
Job No. 60882.11
Sheet 2 of 2

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · · TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	PROFILE	VISUAL CLASSIFICATION and Remarks	BORE HOLE BACKFILL	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
19		16	W	40						0.0
20		14	W	49			Gray SILT, Trace to Some Clay and Fine Sand, Trace to Little Fine to Coarse Gravel, Trace Cobbles (ML)			0.0
21		14	W	43	45		At 32.0 Feet, Increasing Fine to Medium Sand with Depth.			0.0
					50		At 36.0 Feet, Grades into Fine to Medium SAND, Trace Silt and Fine to Coarse Gravel, Runny. (SM) At 37.5 Feet, Increased Fine to Coarse Sand and Fine to Medium Gravel, Less Silt			
					55		Gray Fine SAND and Fine to Coarse Gravel, Trace to Little Cobbles. (SP)			
					60		Gray SILT and Fine SAND, Trace to Little Clay and Fine to Coarse Gravel. (SM) Increased Clay at 43.0 to 44.0 Feet At 44.0 feet, Gray Fine to Coarse SAND, Some Gravel and Silt, Little Clay. (SM)			
					65		End of Boring at 46.0 Feet Installed Well W3D to 43.2 Feet			
					70					
					75					
					80					
					85					

AR302280

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W3S
Surface Elevation 1122.6
Job No. 60882.11
Sheet 1 of 1

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (ft.)	Moisture	N Value	Depth (ft.)	Profile	VISUAL CLASSIFICATION and Remarks	Borehole	Backfill	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
1			M	15			TOPSOIL: Dark Brown Organic SILT and Fine SAND, Trace to Little Clay, Gravel and Cobbles. (OL)				0.0
2			M	28							0.0
					5		Brown Silty Fine SAND, Trace Clay, Fine to Coarse Gravel and Roots, Moist. (SM) Grades to Loose Brown and Dark Brown, Fine to Coarse SAND, Clay and Cobbles. (SP) Attempted a 5 Foot Continuous CME Sample Tube at 5.0 to 10.0 Feet. Unsuccessful Recovery. Straight Drill to 15.0 Feet for Shallow Well Placement				
3			M/W		10						NM
					15		End of Boring at 15.0 Feet Installed Well W3S to 14.9 Feet				
					20						
					25						
					30						
					35						
					40						

WATER LEVEL OBSERVATIONS

While Drilling ▽ Upon Completion of Drilling ▼ 5.0
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

AR302281

Begin 12/5/90 End 12/5/90 Drill
Driller Mathes Chief KFB Rig C
Logger TJM Editor AJS ME550
Drill Method 4.25" HSA

WARZYN

LOG OF TEST BORING

Project: Saegertown Industrial Area Remedial Investigation
Location: Saegertown, Pennsylvania

Boring No. W4D
Surface Elevation 1113.8
Job No. 60882.11
Sheet 1 of 2

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · TEL. (708) 691-5000

SAMPLE

Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)
1		17	M	13	
2		18	M	15	
3		16	M	23	5
4		13	M	23	
5		12	M/W	23	
6		3	W	14	10
7		3	W	14	
8		8	W	8	15
9		0		16	
10		5	W	2	
11		18	M/W	11	20
12		12	W	27	
13		12	W	45	25
14		6	M/W	64+	
15		10	M	27	
16		3	M	75+	30
17		2	M	80+	
18		3	M	82+	35
19		4	M	86+	
20		0		50+	40

VISUAL CLASSIFICATION and Remarks

Profile / Borehole / Backfill

- Black Topsoil with Roots, Trace Fine to Coarse Sand and Gravel. (OL) (Possible FILL)
- Brown and Gray CLAY, Trace to Some Fine to Coarse Sand and Gravel, Fine to Coarse Sand Seam at 3.0 Feet (CL) (Possible FILL)
- Black Clayey SILT, Trace Fine to Coarse Sand (ML) (Possible FILL)
- Brown Clayey SILT, Trace Fine to Coarse Sand
- Medium Dense Brown Silty SAND and GRAVEL, Trace Clay (SM)
- Loose to Medium Dense Brown Fine to Coarse SAND and GRAVEL, Trace Silt and Clay. (SP)
- Very Loose Gray Fine to Coarse SAND, Trace Silt and Clay. (SP)
- Medium Dense Fine to Coarse SAND And GRAVEL, Trace Silt and Clay. (SP)
- Medium Dense Brown Clayey SILT, Trace Fine to Coarse Sand, Trace Fine Gravel. (ML)
- Medium Dense Brown Fine to Medium SAND, Trace Silt and Clay. (SM-SP)
- Medium Dense Brown Silty Fine to Coarse SAND and GRAVEL, Trace Clay. (SM)

SOIL PROPERTIES

qu (qa) (tsf)	PID (ppm)			
	ND			
	ND			
	10			
	20			
	14			
	14			
	0.0			
	0.0			
	0.0			
	0.0			
	0.0			
	0.0			
	0.0			
	0.0			
	0.0			
	0.0			
	0.0			
	0.0			
	0.0			

WATER LEVEL OBSERVATIONS

While Drilling ▽ 10.0 Upon Completion of Drilling ▼ 8.0
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/19/90 End 12/19/90 Drill
Driller Mathes Chief KFB Rig C
Logger SJB Editor AJS ME550
Drill Method 4.25" HSA

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W4D
Surface Elevation 1113.8
Job No. 60882.11
Sheet 2 of 2

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - - TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	PROFILE	VISUAL CLASSIFICATION and Remarks	BORE HOLE BACKFILL	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
21		3	M	88+			Medium Dense Gray Silty Fine to Coarse SAND, Trace Gravel (SM)			0.0
					45		Dense Gray Fine to Coarse SAND and GRAVEL, Trace Silt and Clay. (SP)			
					50		Dense to Very Dense Gray SILT and Fine SAND, Trace Fine to Coarse Sand and Gravel. (ML-SM) Sample 32-34': Gray Claey Fine GRAVEL, Some Sand and Silt (GC)			
							End of Boring at 43.0 Feet Installed Well W4D to 42.4 Feet			
					55					
					60					
					65					
					70					
					75					
					80					
					85					

AR302283

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W4S
Surface Elevation 1113.8
Job No. 60882.11
Sheet 1 of 1

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - TEL. (708) 691-5000

SAMPLE						PROFILE	VISUAL CLASSIFICATION and Remarks	BORE HOLE	BACKFILL	SOIL PROPERTIES				
Number	TYPE	Rec. (in.)	Mois-ture	N Value	Depth (ft.)					qu (qa) (tsf)	PID (ppm)			
							TOPSOIL							
							Straight Drill to 20.0 Feet For Shallow Well Placement. See Log for W4D for Stratigraphic Details between Surface to 20.0 Feet							
					5									
					10									
					15									
					20		End of Boring at 20.0 Feet Installed Well W4s to 18.9 Feet							
					25									
					30									
					35									
					40									

WATER LEVEL OBSERVATIONS

While Drilling ▽ 10.0 Upon Completion of Drilling ▼ 7.5
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/19/90 End 12/19/90 Drill
Driller Mathes Chief GM Rig C
Logger SJB Editor AJS ME550
Drill Method 4.25" HSA

WARZYN

LOG OF TEST BORING

Project: Saegertown Industrial Area Remedial Investigation
Location: Saegertown, Pennsylvania

Boring No. W5D
Surface Elevation 1115.7
Job No. 60882.11
Sheet 1 of 3

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · TEL. (708) 691-5000

SAMPLE

Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)
1		15	M	17	
2		12	M	13	
3		10	M	10	5
4		16	M/W	16	
5		8	W	14	
6		8	W	64	10
7		18	W	20	
8		12	W	22	15
9		10	W	27	
10		16	W	33	
11		10	W	27	20
12		12	W	24	
13		14	W	30	25
14		12	W	33	
15		10	W	32	
16		14	W	29	30
17		12	W	75	
18		10	W	38	35
19		16	W	100+	
20		24	W	47	40

VISUAL CLASSIFICATION and Remarks

TOPSOIL: Brown Gray and Black (Mottled) Clayey SILT, Trace Fine Sand, Organics and Fine Gravel. (OL)

Grades to Brown and Black Silty CLAY, Trace Fine Sand (2" Black Layer at 3.8 Feet)
Natural Black Organic (topsoil-like) at 4.0 to 6.0 Feet,
Trace of Gray Silty Fine Sand. (OL-OH/CL-ML)

Grades to Gray Clayey SILT, Trace Fine Sand (Mottled), Trace Fine to Coarse Gravel. (ML)

Gray Fine to Medium SAND, Trace Silt and Pebbles. (SP)

Gray Silty Fine to Coarse SAND and GRAVEL, Trace Clay and Pebbles. (SM-GM)
Fine to Coarse GRAVEL, Some Sand, Little Silt, Trace Clay at 12.0 to 14.0 Feet.
Darker Brownish Black with Increased Gravel, Pebbles and Cobbles at 13.0 to 14.0 Feet.

Brown Silty Fine to Medium SAND and Fine to Coarse GRAVEL, Trace Pebbles and Cobbles. (SM-GM)
Slightly More Silt and Rust Color at 18.0 to 20.0 Feet.

Brown Fine SAND, Trace to Some Silt. (SM)

Brown Fine to Coarse SAND, Trace to Some Fine to Coarse Gravel, Trace Silt and Clay. (SP)

SOIL PROPERTIES

Number	qu (qa) (tsf)	PID (ppm)
1		0.0
2		0.0
3		0.0
4		0.0
5		0.0
6		0.0
7		0.0
8		0.0
9		0.0
10		0.0
11		0.0
12		0.0
13		0.0
14		0.0
15		
16		0.0
17		0.0
18		0.0
19		0.0
20		0.0

WATER LEVEL OBSERVATIONS

While Drilling ▽ 10.0 Upon Completion of Drilling ▼ 6.2
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/10/90 End 12/10/90 Drill
Driller Mathes Chief KJB Rig C
Logger TJM Editor AJS ME550
Drill Method 4.25" HSA

AR302285

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W5D
Surface Elevation 1115.7
Job No. 60882.11
Sheet 2 of 3

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · · TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
21		4	W	100+		Decreasing Sand and Gravel with Depth to 23.4'		0.0
22		4	W	100+		Brown Fine to Medium SAND, Trace Silt. (SP)		0.0
23		6	W	100+	45	Brown Silty Fine to Coarse SAND and GRAVEL, Increasing/Decreasing Zones of Finer/Coarser Sand and Gravel with Varying Amounts of Silt. (SM-GM)		0.0
24		4	W	100+				0.0
25		4	W	100+				0.0
					50	Brown Silty Fine SAND and Fine to Coarse GRAVEL, Trace to Some Shale Pebbles, Trace to Little Clay. (SP-GP)		
					55	Brown (Some Rust Color) Fine SAND, Trace to Some Silt (Layered). (SM-SP)		
					60	Dense Brown, Fine SAND and Fine to Coarse GRAVEL, Trace to Little Pebbles, Trace Clay. (SM-GM)		
						Gray SILT, Trace to Some Fine Sand. (ML)		
					65	Brown Fine to Coarse SAND and GRAVEL, Some Silt, Trace Clay (SM/GM)		
					70	Dense Brown Silty Fine SAND and Fine to Coarse Gravel, Trace to Some Pebbles. (SM)		
					75	Dark Brown Weathered and Fractured Shale and Cobbles.		
					80	Dense Brown Silty Fine SAND and Fine to Coarse Gravel, Trace to Some Pebbles and Trace Clay. (SM-GM) Very Dense Near Base, Increased Silt and Clay, Grades to Gray Bluish-Gray, Weathered SHALE at 47.6 to 47.8 Feet.		
					85	Bedrock: Dark Brown SHALE.		

AR302286

WARZYN

LOG OF TEST BORING

Project: Saegertown Industrial Area
Remedial Investigation
Location: Saegertown, Pennsylvania

Boring No. W5D
Surface Elevation 1115.7
Job No. 60882.11
Sheet 3 of 3

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · · TEL. (708) 691-5000

SAMPLE						PROFILE	VISUAL CLASSIFICATION and Remarks	BACKFILL	SOIL PROPERTIES				
Number	TYPE	Rec. (in.)	Mois-ture	N Value	Depth (ft.)				qu (qa) (tsf)	PID (ppm)			
							End of Boring at 50.0 Feet Installed Well W5D at 42.9 Feet.						
					90								
					95								
					100								
					105								
					110								
					115								
					120								
					125								
					130								

AR302287

WARZYN

LOG OF TEST BORING

Project: Saegertown Industrial Area
Remedial Investigation
Location: Saegertown, Pennsylvania

Boring No. W5S
Surface Elevation 1115.7
Job No. 60882.11
Sheet 1 of 1

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · TEL. (708) 691-5000

SAMPLE						PROFILE	VISUAL CLASSIFICATION and Remarks	BORE HOLE	BACKFILL	SOIL PROPERTIES				
Number	TYPE	Rec. (in.)	Moisture	N Value	Depth (ft.)					qu (qa) (tsf)	PID (ppm)			
							TOPSOIL							
					5		Straight Drilled to 18.5 Feet for Shallow Well Placement. See Log W5D for Stratigraphic Details between Surface to 18.5 Feet.							
					10									
					15									
					20		End of Boring at 18.5 Feet Installed Well W5S to 17.6 Feet							
					25									
					30									
					35									
					40									

WATER LEVEL OBSERVATIONS

While Drilling ▽ _____ Upon Completion of Drilling ▼ 6.3
Time After Drilling _____ _____ _____ _____
Depth to Water _____ _____ _____ _____
Depth to Cave in _____ _____ _____ _____

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/11/90 End 12/11/90 Drill
Driller Mathes Chief KFB Rig C
Logger SJB Editor AJS ME550
Drill Method 4.25" HSA

AR302288

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W6D
Surface Elevation 1124.3
Job No. 60882.11
Sheet 1 of 2

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
1		20	D	10		TOPSOIL: Black Silty Sand		0.0
2		10	D	11		Loose Light Brown Very Fine to Fine Silty SAND, Trace Fine to Medium Gravel, Trace Clay. (SM)		0.0
3		10	M	9	5			0.0
4		14	D/M	11		Loose Brown Fine to Medium SAND, Some Fine to Coarse Gravel, Trace Gravel and Silt. (SP)		0.0
5		18	M	13				0.0
6		18	M	8	10	Loose Brown Fine to Coarse SAND and GRAVEL, Trace to Some Silt and Clay. (SP-GP)		0.0
7		18	M/W	9				0.0
8		24	W	18	15			0.0
9		24	W	35		Medium Dense to Dense Light Brown and Brown Very Fine SAND and SILT, Some Silt, Little Clay. (ML-SM)		0.0
10		24	W	33				0.0
11		24	W	33	20			0.0
12		24	W	25				0.0
13		24	W	18	25			0.0
14		24	W	20				0.0
15		24	W	14		Dense Light Gray Silty SAND, Trace to Some Clay, Trace Gravel. (SM)		0.0
16		24	W	12	30	Varying Amounts of Clay at 32.0 Feet.		0.0
17		24	W	21				0.0
18		24	W	8	35	Trace to Some Clay at 35.0 Feet.		0.0
19		24	W	12				0.0
20		34	W/M	48	40	Dense Light Gray Very Fine Sandy SILT,		0.0

WATER LEVEL OBSERVATIONS

While Drilling ▽ 13.0 Upon Completion of Drilling ▼ 13.5
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/5/90 End 12/5/90 Drill
Driller Mathes Chief GM Rig D 50
Logger CSY Editor AJS
Drill Method 4.25" HSA

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W6D
Surface Elevation 1124.3
Job No. 60882.11
Sheet 2 of 2

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - - TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	Profile	VISUAL CLASSIFICATION and Remarks	Borehole	Backfill	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
21		24	M/W	60			Some Clay, Trace Gravel. (ML/SM)				0.0
22		14	W	5			Loose to Dense Light Gray Fine to Very Fine Silty SAND (SM)				0.0
23		24	W/M	52	45		Dense to Very Dense Light Gray Very Fine to Fine Sandy SILT, Trace Clay and Gravel (ML/SM)				0.0
24		22	M/W	23							0.0
25		24	W	46							0.0
26		20	W	18	50		Very Loose Light Gray Silty Very Fine SAND, Trace Clay and Gravel. (ML/SM)				0.0
							End of Boring at 52.0 Feet Installed Well W6D to 50.9 Feet				

55 60 65 70 75 80 85

AR302290

WARZYN

LOG OF TEST BORING

Project: Saegertown Industrial Area
Remedial Investigation
Location: Saegertown, Pennsylvania

Boring No. W6S
Surface Elevation 1124.5
Job No. 60882.11
Sheet 1 of 1

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - TEL. (708) 691-5000

SAMPLE						PROFILE	VISUAL CLASSIFICATION and Remarks	BORE HOLE	BACKFILL	SOIL PROPERTIES				
Number	TYPE	Rec. (in.)	Mois-ture	N Value	Depth (ft.)					qu (qa) (tsf)	PID (ppm)			
							TOPSOIL: Dark Brown Silty Sand							
							Straight Drilled to 18.0 Feet for Shallow Well Placement. See Log W6D for Stratigraphic Details between Surface to 22.0 Feet.							
					5									
					10									
					15									
					20									
							End of Boring at 22.0 Feet Installed Well W6S to 21.10 Feet							
					25									
					30									
					35									
					40									

WATER LEVEL OBSERVATIONS

While Drilling ▽ _____ Upon Completion of Drilling ▼ 13.0
Time After Drilling _____ _____ _____ _____
Depth to Water _____ _____ _____ _____
Depth to Cave in _____ _____ _____ _____

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/7/90 End 12/7/90 Drill
Driller Mathes Chief GM Rig D 50
Logger CSY Editor AJS
Drill Method 4.25" HSA

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W7D
Surface Elevation 1106.2
Job No. 60882.11
Sheet 1 of 2

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
1		20	M	6		TOPSOIL: Dark Brown Silty Sand		0.0
2		24	M	6		Loose Light Brown Very Fine Sandy SILT. (ML)		0.0
3		24	M	10	5	Medium Dense Light Brown Silty Fine to Medium SAND. (SM) Some Fine to Coarse Gravel.		0.0
4		20	M/W	15				0.0
5		20	W	11		Increased Fine to Coarse Gravel at 10.0 Feet.		0.0
6		8	W	1	10	Loose Light Brown Fine to Medium SAND and GRAVEL, Some Silt. (SM-GM)		0.0
7		8	W	3				0.0
8		24	W	24	15	Dense Light Brown Fine to Coarse SAND, Some Silt. (SM) Increased Silt and Very Fine Sand at 17.0 Feet. Trace Fine to Medium Gravel at 18.0 to 20.0 Feet.		0.0
9		24	W	32				0.0
10		24	W	39				0.0
11		24	W	27	20			0.0
12		24	W	32		Dense Light Gray Fine to Medium SAND and Fine to Coarse GRAVEL, Some Silt. (SP-GM) Sample 24-26': Gray and Brown SILT, Some Sand, Little Clay and Gravel (ML) Increased Silt and Less Medium Sand at 25.0 Feet. Trace Shale Fragments at 27.0 to 30.0 Feet		0.0
13		24	W	38	25			0.0
14		11	W	78				0.0
15		22	W/M	130				0.0
16		13	W/M	175	30			0.0
17		12	M	100+				0.0
18		18	M	31	35			0.0
19		20	M	62				0.0
20		24	M/W	100	40			0.0

WATER LEVEL OBSERVATIONS

While Drilling ▽ 7.0 Upon Completion of Drilling ▼ 5.7
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

AR302292

Begin 12/11/90 End 12/11/90 Drill
Driller Mathes Chief GM Rig D 50
Logger CSY Editor AJS
Drill Method 4.25" HSA

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W7D
Surface Elevation 1106.2
Job No. 60882.11
Sheet 2 of 2

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	Profile	VISUAL CLASSIFICATION and Remarks	Borehole Backfill	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
21		24	D	150			Bedrock: Reddish Brown and Gray SHALE			0.0
					45		End of Boring at 42.0 Feet Installed Well W7D to 39.5 Feet			
					50					
					55					
					60					
					65					
					70					
					75					
					80					
					85					

AR302293

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W7S
Surface Elevation 1106.2
Job No. 60882.11
Sheet 1 of 1

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	Profile	VISUAL CLASSIFICATION and Remarks	Borehole	Backfill	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
							TOPSOIL: Dark Brown Silty Sand				
							Loose Light Brown Very Fine Sandy SILT (ML)				
					5		Straight Drilled to 16.5 Feet for Shallow Well Placement. See Log W7D for Stratigraphic Details between Surface to 16.5 Feet.				
					10						
					15		Dense Light Brown Fine to Coarse SAND, Some Silt (SM)				
							End of Boring at 16.5 Feet Installed Well W7S to 14.5 Feet				
					20						
					25						
					30						
					35						
					40						

WATER LEVEL OBSERVATIONS

While Drilling ▽ _____ Upon Completion of Drilling ▼ 5.6
Time After Drilling _____ _____ _____ _____
Depth to Water _____ _____ _____ _____
Depth to Cave in _____ _____ _____ _____

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/12/90 End 12/12/90 Drill
Driller Mathes Chief GM Rig D 50
Logger CSY Editor AJS
Drill Method 4.25" HSA

AR302294

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W8D
Surface Elevation 1105.2
Job No. 60882.11
Sheet 1 of 2

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
1		3	M	7		TOPSOIL: Black Brown Silty Clay, Trace Roots (OL)		ND
2		10	M	7		Brown Silty CLAY, Trace Fine Sand. (CL-ML)		1
3		24	M/W	20	5	Increasing Fine to Medium Sand		ND
4		13	W	17		Brown Silty SAND, Some Gravel, Trace to Little Clay (SM)		ND
5		0	NM	4		Reddish Brown Fine to Medium Sand		NM
6		0	NM	4	10	Layer (1") at 8.0 Feet		NM
7		4	W	17		Trace Clay at 12.0 to 14.0 Feet		1
8		4	W	13	15			ND
9		3	W	6		Brown Fine to Coarse SAND, Trace Fine to Coarse Gravel. (SP)		.5
10		6	M	52				ND
11		4	W	45	20	Brown Clayey SILT, Trace Fine to Coarse Sand, Trace Fine Gravel. (ML)		ND
12		18	W	41		Gray Silty CLAY, Trace Shale Fragments. (CL-ML)		ND
13		8	W	68	25	Brown Fine to Coarse SAND, Trace Silt		ND
14		6	M/W	50		and Clay. (SM-SP)		ND
15		12	M	50		Gray Silty Fine to Coarse SAND and GRAVEL, Some Clay, Trace Shale		ND
16		10	M	50	30	Fragments. (SM-GM) Trace Gray Clayey Silt at 24.0 Feet		ND
17		6	M	50		Gray Silty Fine SAND and GRAVEL,		ND
18		4	M		35	Trace Clay. Decreasing Shale Fragments.		ND
19		4	M	50		(SM-GM)		ND
20		2	M	50	40			ND

WATER LEVEL OBSERVATIONS

While Drilling ▽ 5.0 Upon Completion of Drilling ▼ 4.5
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/12/90 End 12/12/90 Drill
Driller Mathes Chief KFB Rig C
Logger SJB Editor AJS ME550
Drill Method 4.25" HSA

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W8D
Surface Elevation 1105.2
Job No. 60882.11
Sheet 2 of 2

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · · TEL. (708) 691-5000

SAMPLE						PROFILE	VISUAL CLASSIFICATION and Remarks	BOREHOLE BACKFILL	SOIL PROPERTIES				
Number	TYPE	Rec. (in.)	Mois-ture	N Value	Depth (ft.)				qu (qa) (tsf)	PID (ppm)			
							End of Boring at 40.0 Feet Installed Well W8D to 37.8 Feet						
					45								
					50								
					55								
					60								
					65								
					70								
					75								
					80								
					85								

AR302296

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W8S
Surface Elevation 1105.0
Job No. 60882.11
Sheet 1 of 1

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - TEL. (708) 691-5000

SAMPLE						PROFILE	VISUAL CLASSIFICATION and Remarks	BORE HOLE BACKFILL	SOIL PROPERTIES				
Number	TYPE	Rec. (in.)	Mois-ture	N Value	Depth (ft.)				qu (qa) (tsf)	PID (ppm)			
							TOPSOIL						
					5		Straight Drilled to 15.5 Feet for Shallow Well Placement. Refer to Log W8D for Stratigraphic Sequence between Surface to 15.5 Feet.						
					10								
					15								
							End of Boring at 15.5 Feet Installed Well W8s to 14.9 Feet						
					20								
					25								
					30								
					35								
					40								

WATER LEVEL OBSERVATIONS

While Drilling ▽ 5.3 Upon Completion of Drilling ▼ 4.5
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/13/90 End 12/13/90 Drill
Driller Mathes Chief KFB Rig C
Logger SJB Editor AJS ME550
Drill Method 4.25" HSA

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W9D
Surface Elevation 1115.1
Job No. 60882.11
Sheet 1 of 3

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
1		15	M	15		FILL: Brown Clayey Silt		0.0
2		18	M	21		Black to Dark Brown Clayey SILT, Trace Fine to Medium Sand and Fine Gravel. (ML)		0.0
3		14	M/D	20	5			0.0
4		16	M/W	16		Brown Clayey SILT, Trace Fine Sand. (ML)		0.0
5		16	M/W	25				0.0
6		10	W	15	10	Medium Dense SIlty Fine SAND, Trace Clay. (SM) Rust Color at 4.0 Feet.		0.0
7		16	W	25				0.0
8		6	W	15	15	Loose Brown Silty Fine to Coarse SAND, Trace to Little Fine to Medium Gravel. Trace Coarse Gravel and Pebbles. Dry.		0.0
9		6	W	5		Trace Cobbles and Wet at 9.0 to 10.0 Feet Less Silt at 10.0 to 12.0 Feet		0.0
10		10	W	12		Coarser Sand and Gravel with Depth.		0.0
11		12	W	16	20	Becomes Loose to Medium Dense Brown and Dark Brown Fine to Coarse SAND and GRAVEL, Trace Silt and Clay. (SP-GP)		0.0
12		14	W	42				0.0
13		12	W	25	25	Grades to Medium Dense to Dense Brown Fine to Coarse SAND, Trace Silt and Fine to Coarse Gravel. (SP)		0.0
14		12	W	32				0.0
15		20	W	52		Increased Pebbles and Cobbles at 25.0 Feet		0.0
16		22	W	26	30	Less Silt at 26.0 to 27.5 Feet		0.0
17		18	W	40		Brown SILT, Trace Fine Sand (Increasing with Depth). (ML-SM)		0.0
18		18	W	91	35	Brown Silty Fine SAND. (SM)		0.0
19		18	W	31		Gray Silty Fine SAND, Trace Fine Gravel. (SM)		0.0
20		18	W	47	40	Trace Fine to Medium Sand Seam at 29.7		0.0

WATER LEVEL OBSERVATIONS

While Drilling ▽ 9.0 Upon Completion of Drilling ▼ 8.0
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/7/90 End 12/7/90 Drill
Driller Mathes Chief KJB Rig C
Logger TJM Editor AJS ME550
Drill Method 4.25" HSA

AR302298

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W9D
Surface Elevation 1115.1
Job No. 60882.11
Sheet 2 of 3

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - - TEL. (708) 691-5000

SAMPLE Number	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	PID (ppm)
21		20	W	78		Feet, Clayey at 29.8 Feet. (Interbedding of Finer/Coarser Silt and Sand)		0.0
22		18	W	26				0.0
23		24	W	49	45	Brown and Gray (Alternating Layers) Laminated SILT and Fine SAND. (ML-SM)		0.0
24		10	W	37				0.0
25		14	W	90		Brown Fine to Coarse SAND and GRAVEL. (SP-GP) Decreasing Coarse Sand and Gravel with Depth.		0.0
					50			
						Brown SILT and Fine SAND (1" Layer). (ML-SM)		
					55			
						Brown Fine to Medium SAND, Trace Silt. (SM)		
					60	Gray Fine SAND, Trace Silt. (SM) Increased Silt with Depth.		
						Gray Clayey SILT, Trace Fine Sand. (ML) Increasing Fine Sand with Depth.		
					65			
						Gray to Brown Silty Fine SAND (SM)		
						Brown Fine to Medium SAND, Trace to Little Silt (SP)		
					70			
						Brown, Fine SAND, Trace Silt and Medium Sand (SP)		
					75	Brown Silty Fine to Medium SAND and Fine to Coarse GRAVEL, Trace Pebbles (SM-GM)		
						Brown Silty Fine SAND, Trace Thin Silt Layers (SM) Interbedding of Fine to Medium Sand Layers in Fine Sand Increasing Fine Sand and Less Silt with Depth		
					80			
					85			

AR302299

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W9D
Surface Elevation 1115.1
Job No. 60882.11
Sheet 3 of 3

2100 CORPORATE DRIVE · ADDISON, ILLINOIS 60101 · TEL. (708) 691-5000

SAMPLE						PROFILE	VISUAL CLASSIFICATION and Remarks	BORE HOLE BACKFILL	SOIL PROPERTIES				
Number	TYPE	Rec. (in.)	Mois-ture	N Value	Depth (ft.)				qu (qa) (tsf)	PID (ppm)			
							Brown Fine to Medium SAND, Trace Silt and Coarse Sand, Trace Fine to Medium Gravel (SP)						
					90		Dense Brown Fine to Medium SAND and Fine to Coarse GRAVEL, Trace to Some Silt and Coarse Sand, Trace Clay. (SP-SM/GP-GM)						
					95		Dense Brown and Gray (Mottled) Clayey SILT, Trace Fine Sand and Gravel, Trace Cobbles and Pebbles (ML)						
					100		Dense Gray SILT, Trace Clay and Fine to Coarse Gravel, Trace to Some Fine Sand (ML)						
							Bedrock: Dense Dark Gray SHALE, Crumbly and Dry.						
					105		End of Boring at 50.0 Feet Installed Well W9D to 46.1 Feet						
					110								
					115								
					120								
					125								
					130								

AR302300

WARZYN

LOG OF TEST BORING

Project Saegertown Industrial Area
Remedial Investigation
Location Saegertown, Pennsylvania

Boring No. W9S
Surface Elevation 1115.0
Job No. 60882.11
Sheet 1 of 1

2100 CORPORATE DRIVE - ADDISON, ILLINOIS 60101 - TEL. (708) 691-5000

SAMPLE						PROFILE	VISUAL CLASSIFICATION and Remarks	BORE HOLE	BACKFILL	SOIL PROPERTIES				
Number	TYPE	Rec. (in.)	Mois-ture	N Value	Depth (ft.)					qu (qa) (tsf)	PID (ppm)			
							FILL							
							Straight Drilled to 18.0 Feet for Shallow Well Placement. See Log of W9D for Stratigraphic Details between Surface to 18.0 Feet.							
					5									
					10									
					15									
					20		End of Boring at 18.0 Feet Installed Well W9S to 17.70 Feet							
					25									
					30									
					35									
					40									

WATER LEVEL OBSERVATIONS

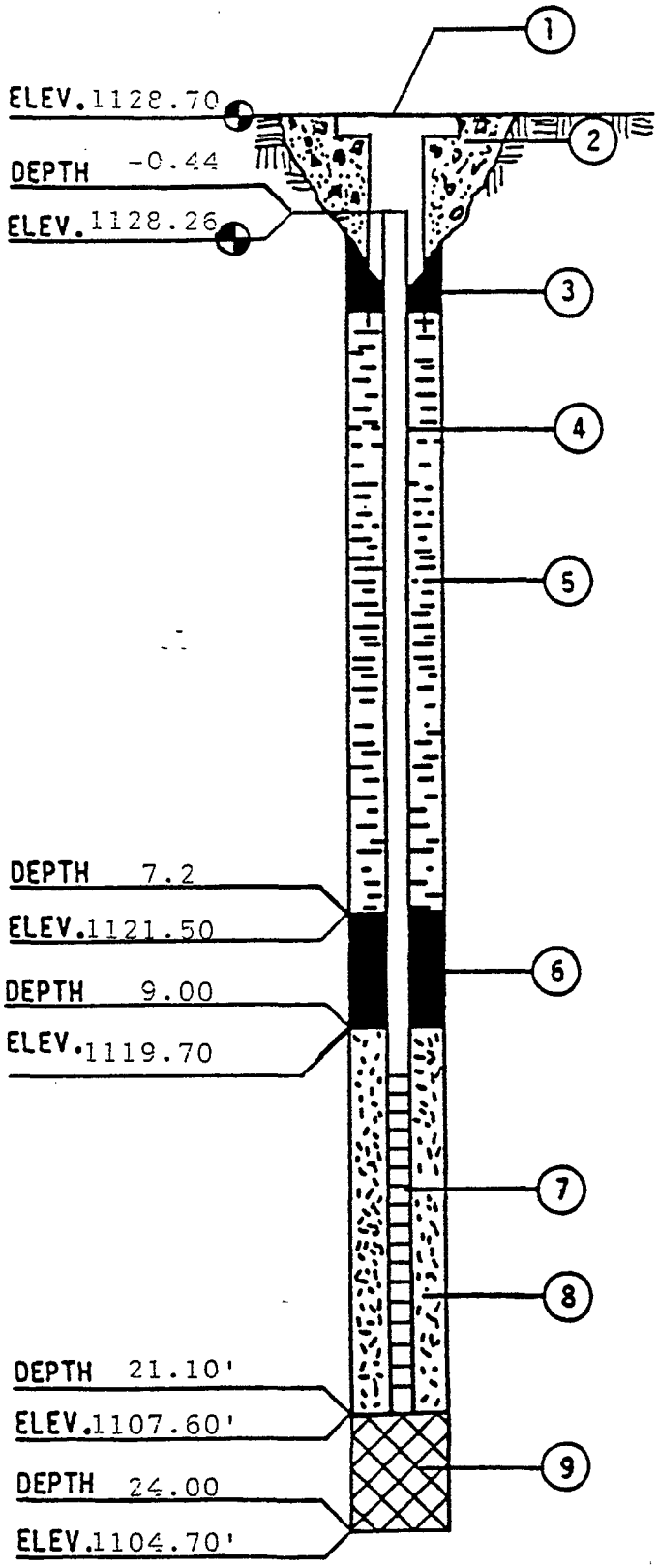
While Drilling ▽ _____ Upon Completion of Drilling ▼ 8.0
Time After Drilling _____ _____ _____ _____
Depth to Water _____ _____ _____ _____
Depth to Cave in _____ _____ _____ _____

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

GENERAL NOTES

Begin 12/8/90 End 12/8/90 Drill
Driller Mathes Chief KJB Rig C
Logger TJM Editor AJS ME550
Drill Method 4.25" HSA

AR302301



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W1S Date 12/13/90

1. Protective Casing Flush Mount

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) Powder Bentonite

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 11.4 ft

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed Tremie

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 10.1 ft

   Slot Size 0.010 in.

   Slotted Interval Length 9.6 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #5 Silica Sand

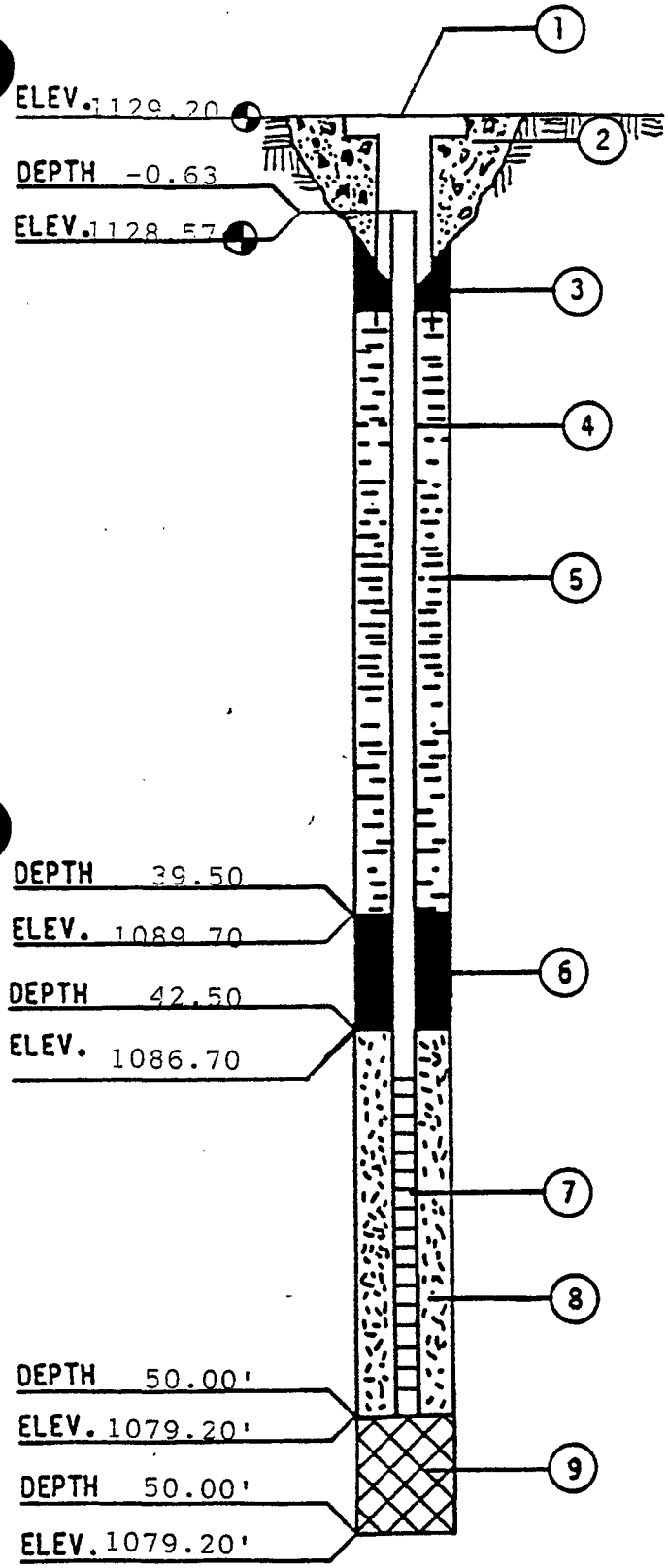
9. Type of Backfill #5 (50) Silica Sand

10. Drilling Method 4.25" HSA

11. Additives Used (if any) None

All Depths Measured from Ground Surface

AR302302



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W1D Date 12/18/90

1. Protective Casing Flush Mount

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) Powder Bentonite

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 44.4 ft

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed Tremie

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 5.1 ft

   Slot Size 0.010 in.

   Slotted Interval Length 4.7 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #5 Silica Sand

9. Type of Backfill None

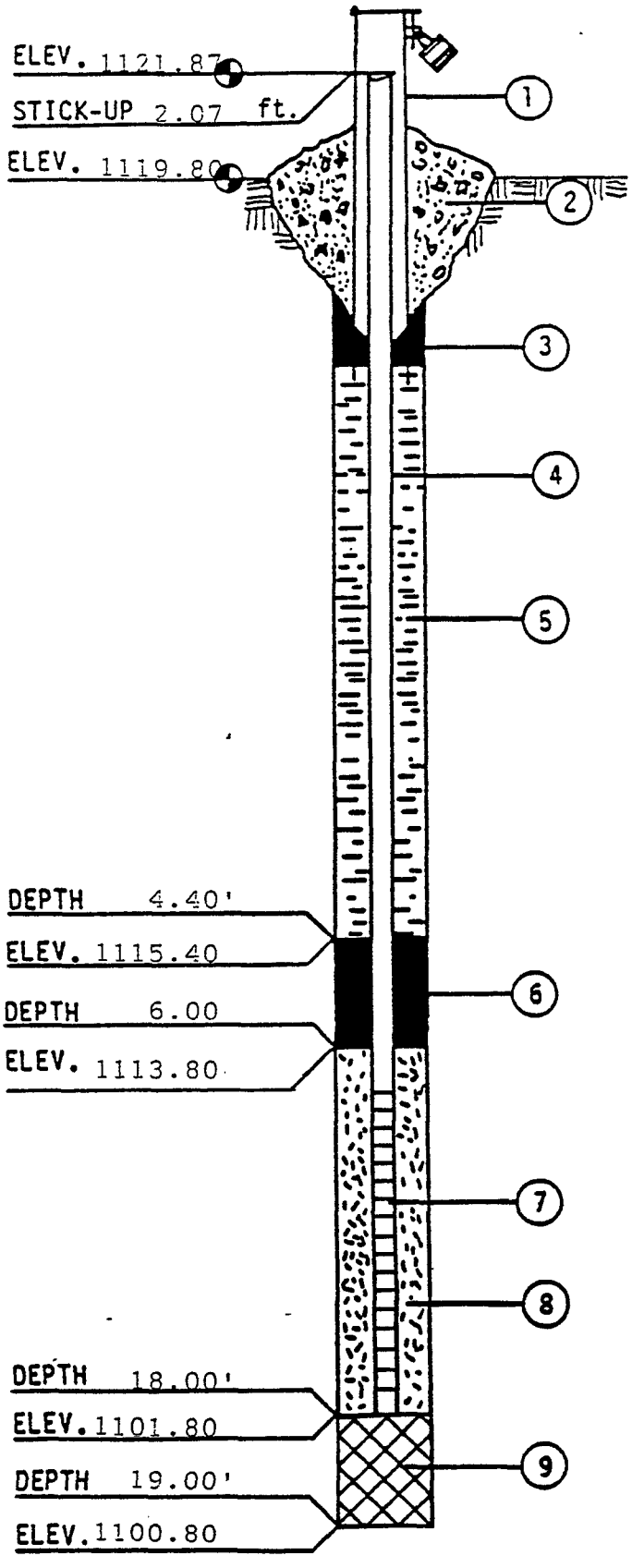
10. Drilling Method 4.25" HSA

11. Additives Used (if any)

    None

All Depths Measured from Ground Surface

AR302303



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W2S Date 12/09/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) Quikrete

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 10.1 ft

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed Tremie

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 10.1 ft

   Slot Size 0.010 in.

   Slotted Interval Length 9.6 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #5 Silica Sand

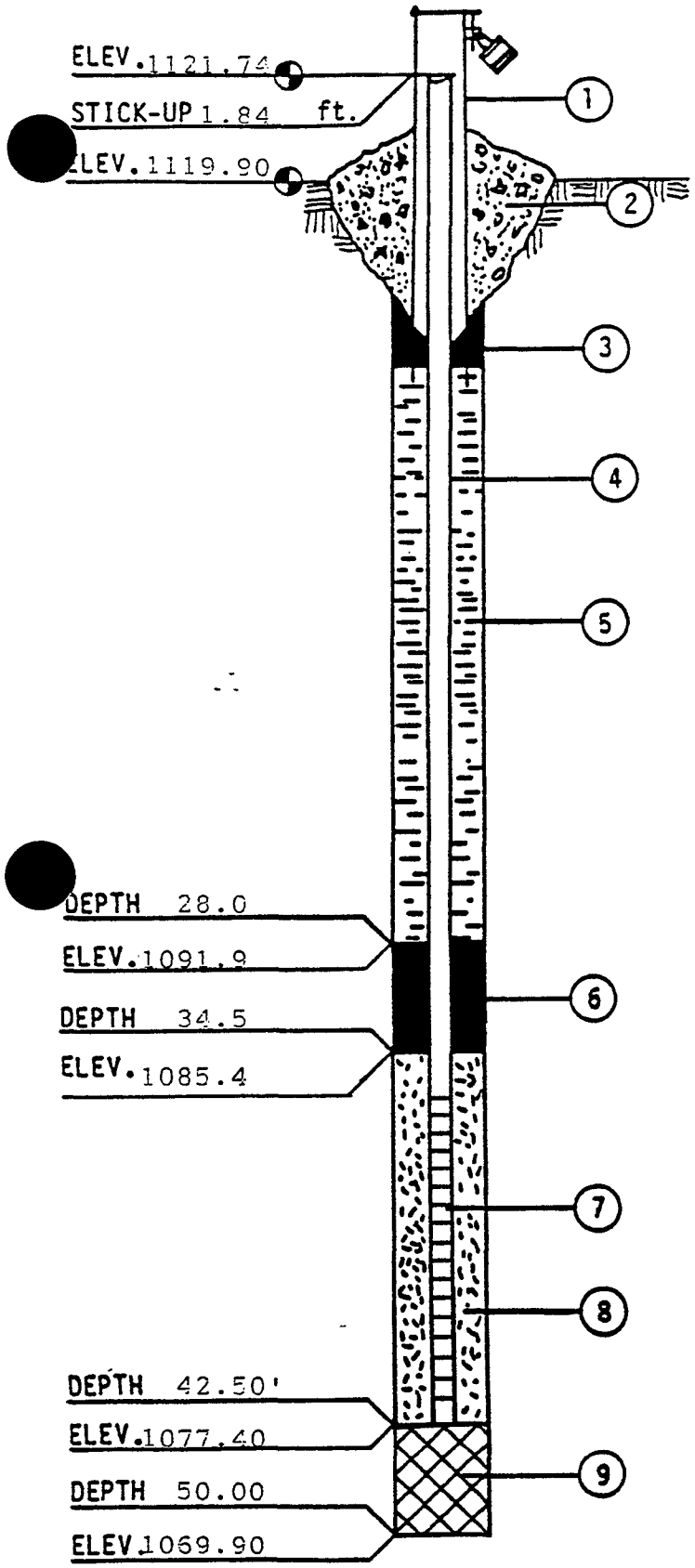
9. Type of Backfill #5 Silica Sand

10. Drilling Method 4 25 HSA

11. Additives Used (if any) None

All Depths Measured from Ground Surface

AR302304



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W2D Date 12/08/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) Quikrete

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 40.0 ft

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed Tremie

6. Type of Lower Seal (if installed) Bentonite Slurry over Pellets

7. Screen Type Sch 40 PVC

   Screen Length 5.1 ft

   Slot Size 0.010 in.

   Slotted Interval Length 4.6 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #5 Silica Sand

9. Type of Backfill Natural & Silica Sand

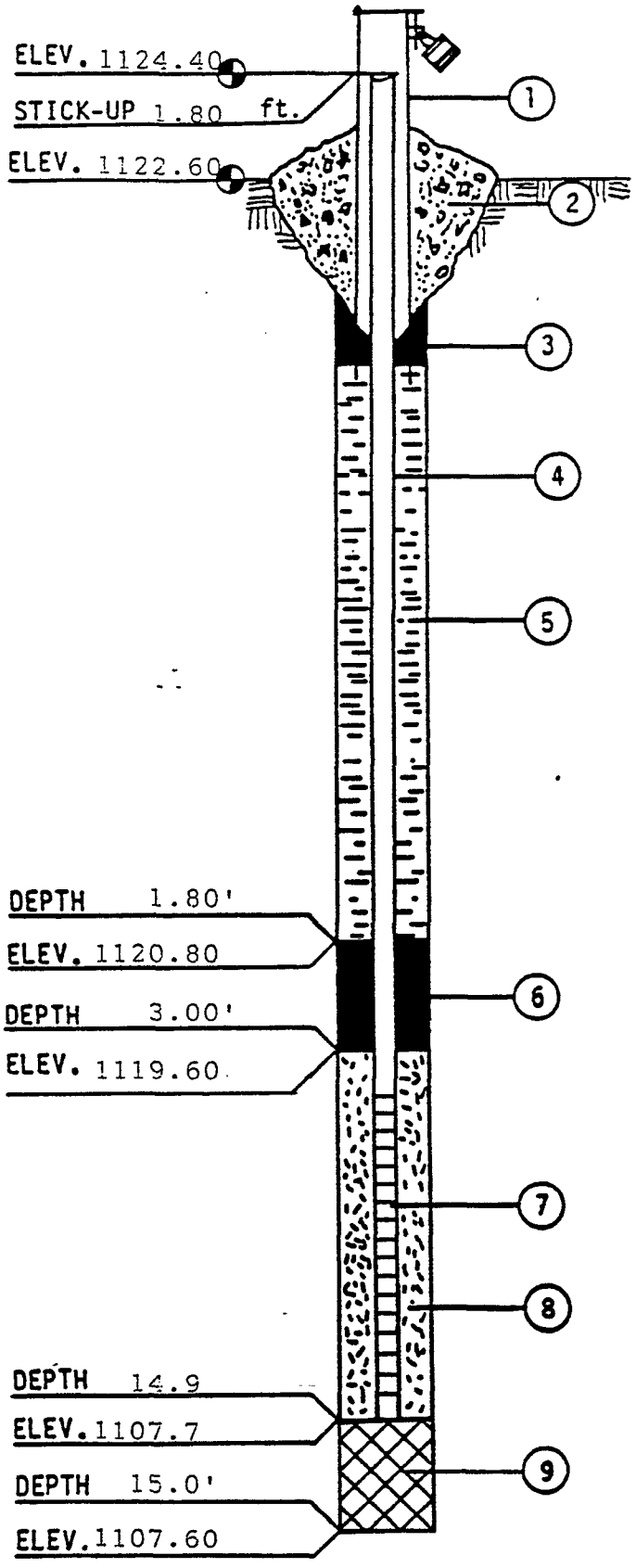
10. Drilling Method 4.25" HSA

AR302305

11. Additives Used (if any)

    Clear Water

All Depths Measured from Ground Surface



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W3S Date 12/05/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) None

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 6.5 ft.

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed From Surface

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 10.1 ft

   Slot Size 0.010 in.

   Slotted Interval Length 9.7 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen 2" #7 Sand Above #5 Silica Sand

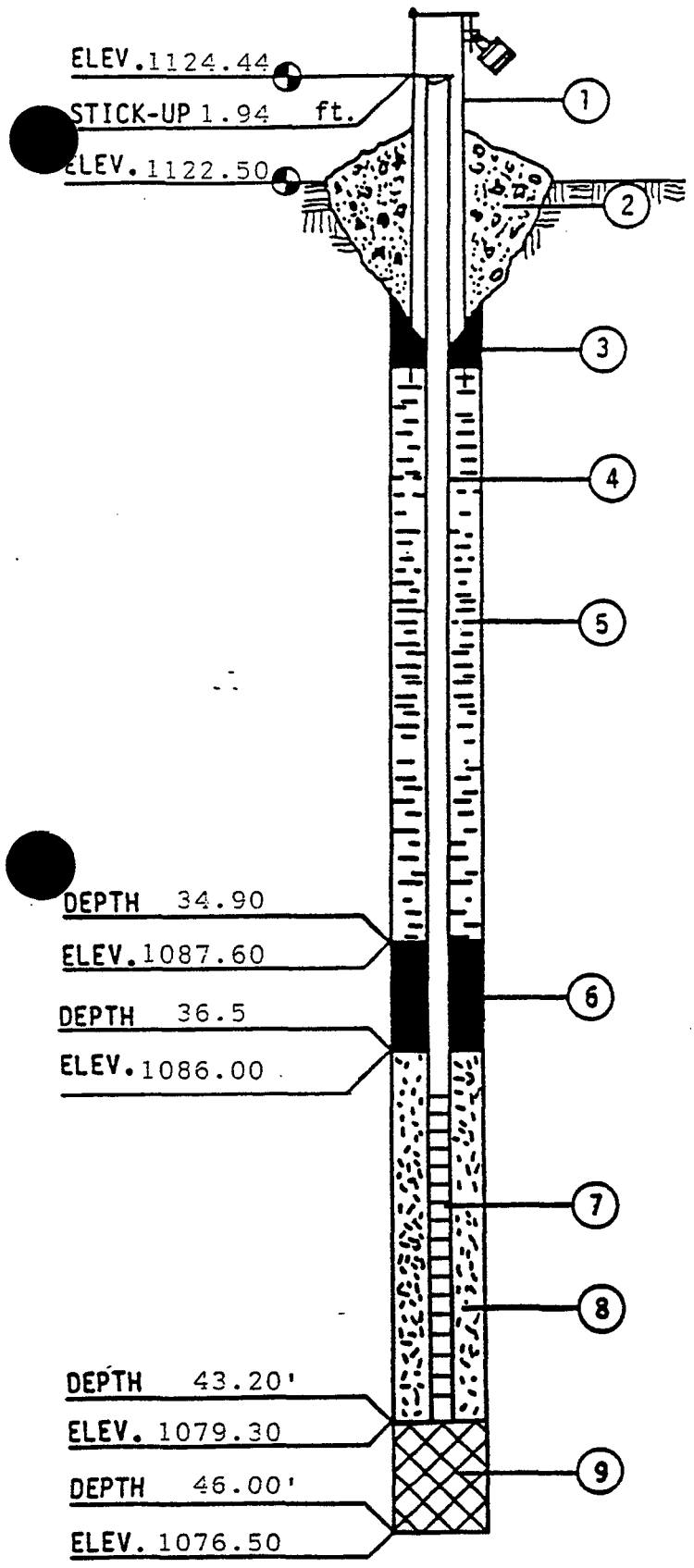
9. Type of Backfill Natural Cave

10. Drilling Method 4.25" HSA

11. Additives Used (if any) None

All Depths Measured from Ground Surface

AR302306



WARZYN

Monitoring Well Construction Information

Project Number: 60882.15

Description: Saegertown RI

Boring/ Well No: W3D Date: 12/06/90

1. Protective Casing: Above Ground

   Locking: Locking Well Cap

2. Concrete Seal: Quikrete

3. Type of Surface Seal (if Installed): None

4. Solid Pipe Type: Sch 40 PVC

   Solid Pipe Length: 42 ft

   Joint Type: Threaded

5. Type of Backfill: Cement/Bentonite Grout

   Backfill Installed: Tremie

6. Type of Lower Seal (if installed): Bentonite Pellets

7. Screen Type: Sch 40 PVC

   Screen Length: 5.1 ft

   Slot Size: 0.010 in.

   Slotted Interval Length: 4.7 ft

   Screen Diameter: 2.0 in.

8. Type of Backfill around Screen: #5 Silica Sand

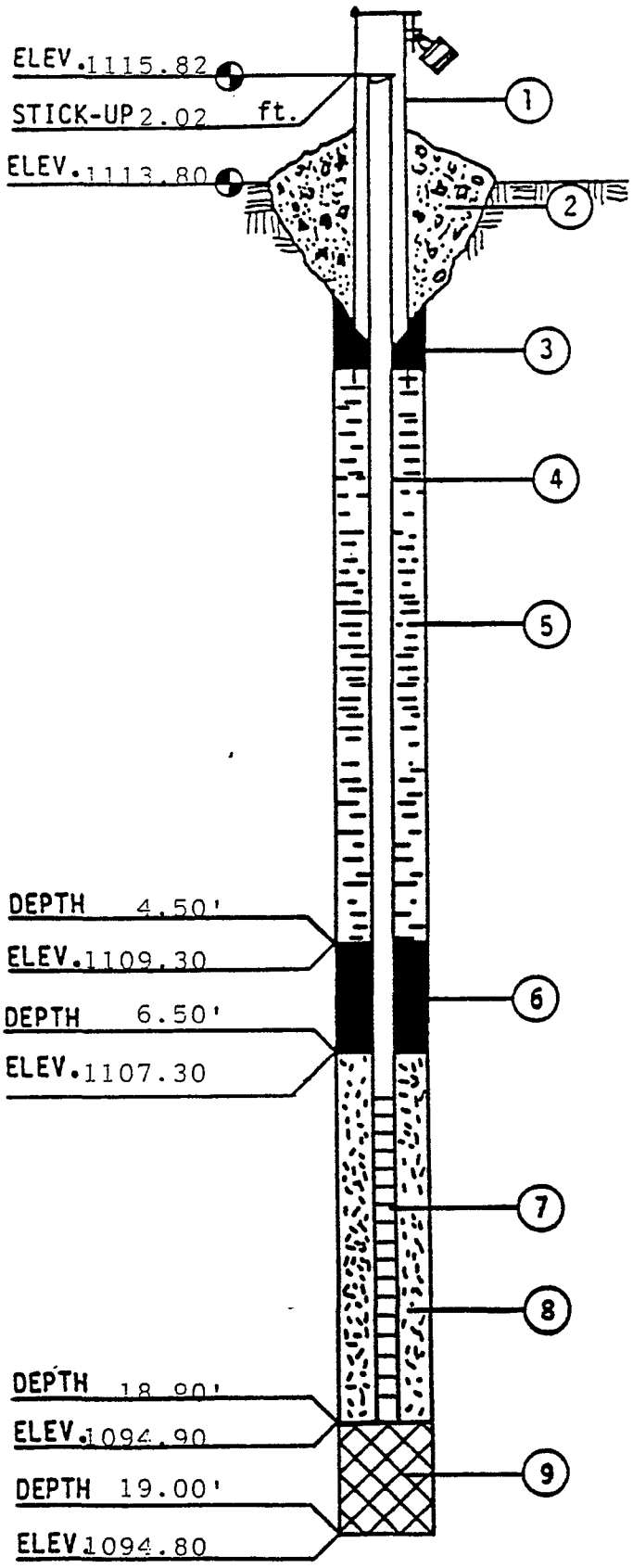
9. Type of Backfill: Natural Cave

10. Drilling Method: 4.25" HSA

11. Additives Used (if any): Clear Water

All Depths Measured from Ground Surface

AR302307



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W4S Date 12/19/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) None

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 11 ft.

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed From Surface

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 10 ft

   Slot Size 0.010 in.

   Slotted Interval Length 9.7 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #7 sand above #5 Silica Sand

9. Type of Backfill Natural Cave

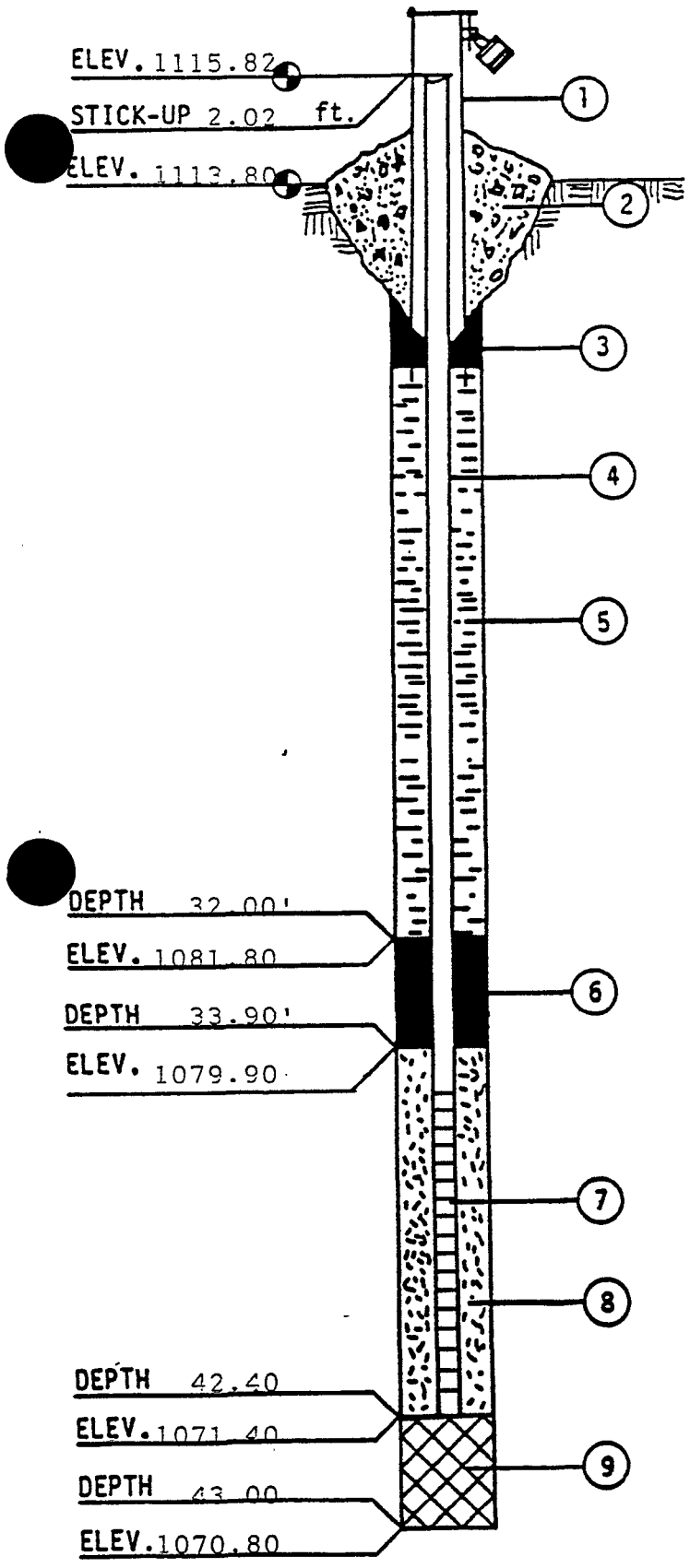
10. Drilling Method 4.25" HSA

11. Additives Used (if any)

    None

All Depths Measured from Ground Surface

AR302308



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W4D Date 12/19/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) None

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 40 ft.

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 5 ft

   Slot Size 0.010 in.

   Slotted Interval Length 4.7 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen 1.1ft#7 Sand above #5 Silica Sand

9. Type of Backfill Natural Cave

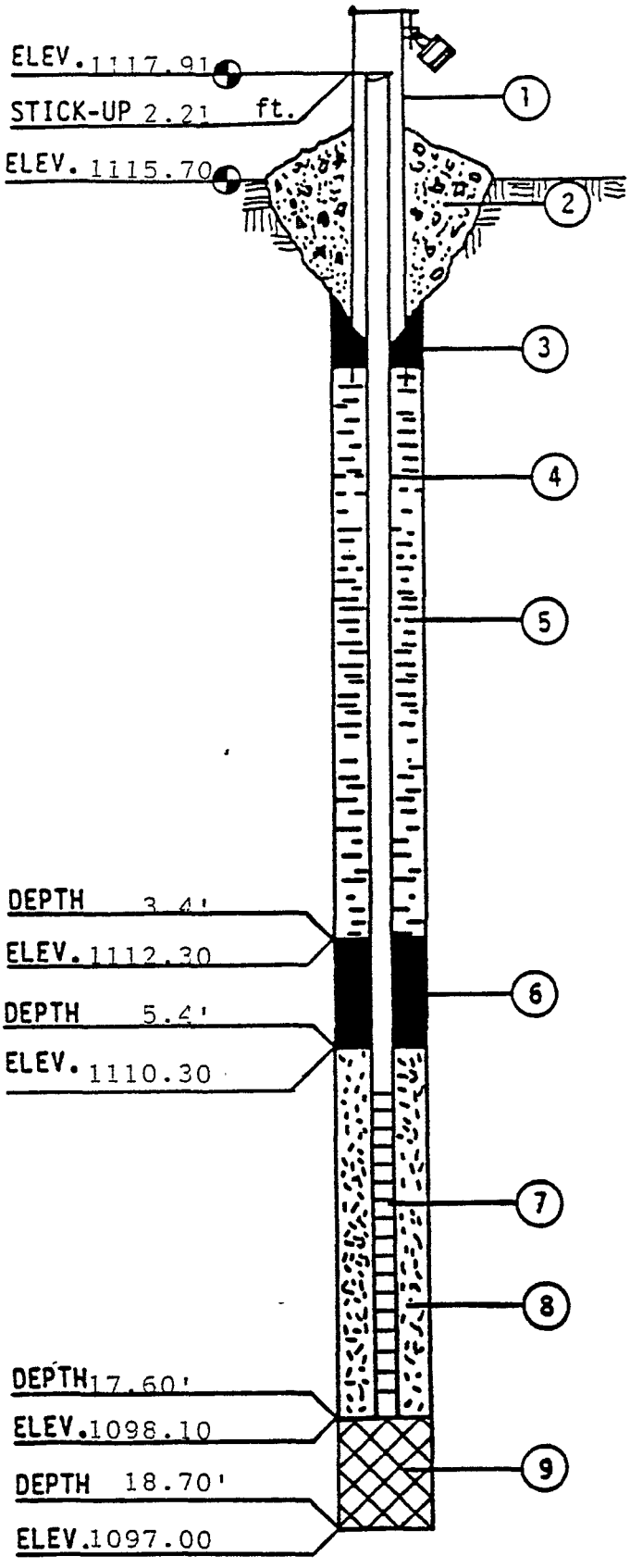
10. Drilling Method 4.25" HSA

11. Additives Used (if any)

    None

All Depths Measured from Ground Surface

AR302309



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W5S Date 12/11/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) None

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 10 ft.

   Joint Type Threaded

5. Type of Backfill Concrete

   Backfill Installed From Surface

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 10.1 ft

   Slot Size 0.010 in.

   Slotted Interval Length 9.7 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #5 Silica Sand

9. Type of Backfill Natural Cave

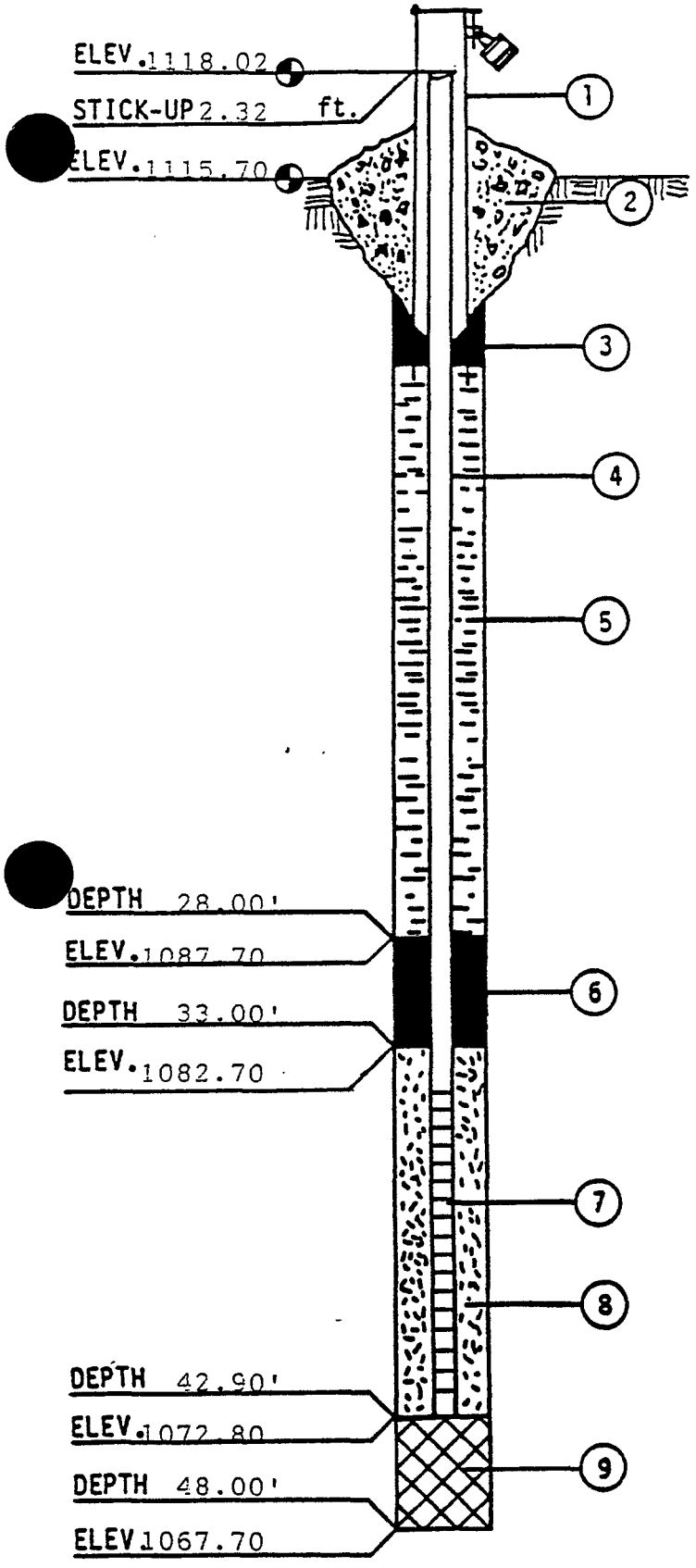
10. Drilling Method 4.25" HSA

AR302310

11. Additives Used (if any)

    Clear Water

All Depths Measured from Ground Surface



WARZYN

Monitoring Well Construction Information

Project Number: 60882.15

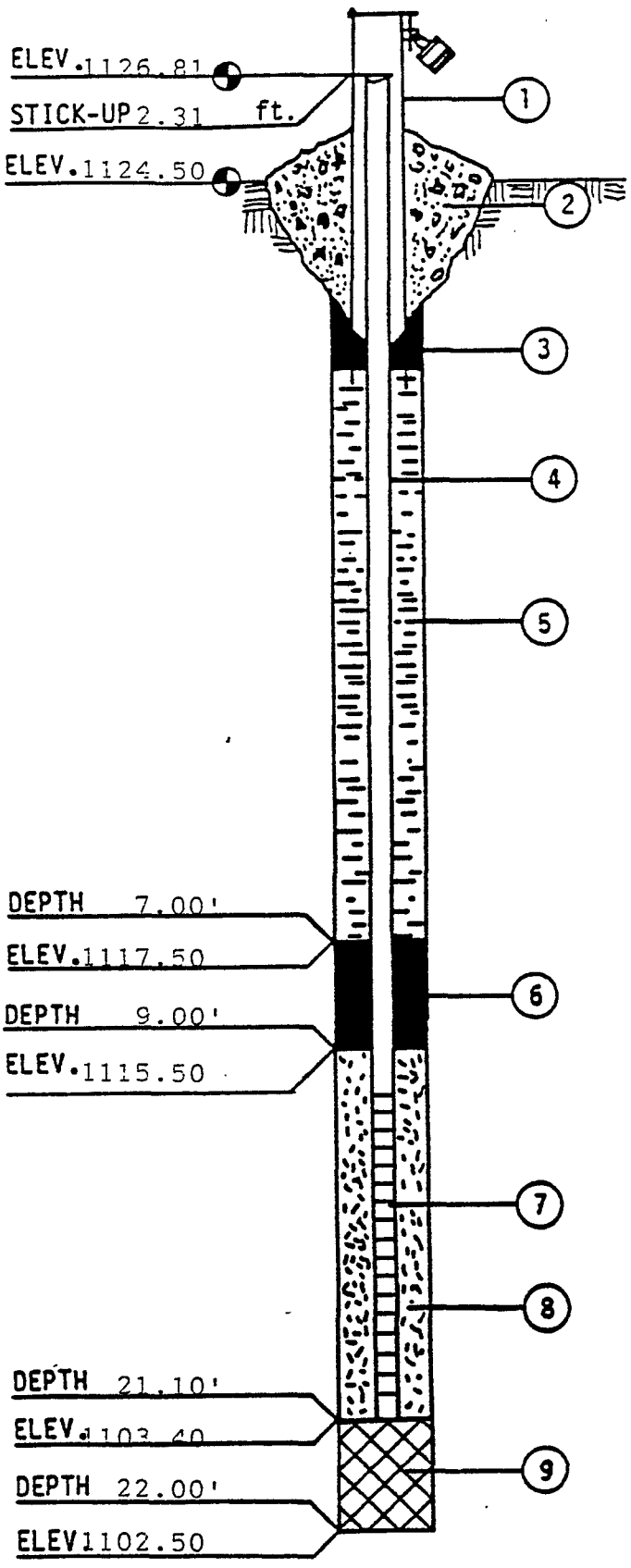
Description: Saegertown RI

Boring/ Well No: W5D Date: 12/10/90

1. Protective Casing: Above Ground
   Locking: Locking Well Cap
2. Concrete Seal: Quikrete
3. Type of Surface Seal (if Installed): None
4. Solid Pipe Type: Sch 40 PVC
   Solid Pipe Length: 40 ft.
   Joint Type: Threaded
5. Type of Backfill: Cement/Bentonite Grout
   Backfill Installed: Tremie
6. Type of Lower Seal (if installed): Bentonite Slurry over Pellets
7. Screen Type: Sch 40 PVC
   Screen Length: 5.1 ft
   Slot Size: 0.010 in.
   Slotted Interval Length: 4.7 ft
   Screen Diameter: 2.0 in.
8. Type of Backfill around Screen: #5 Silica Sand
9. Type of Backfill: Natural Cave
10. Drilling Method: 4.25" ID HSA
11. Additives Used (if any): Clear Water

All Depths Measured from Ground Surface

AR302311



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W6S Date 12/07/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) None

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 10.5 ft

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed Tremie

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 10 ft

   Slot Size 0.010 in.

   Slotted Interval Length 9.6 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #7 Silica Sand

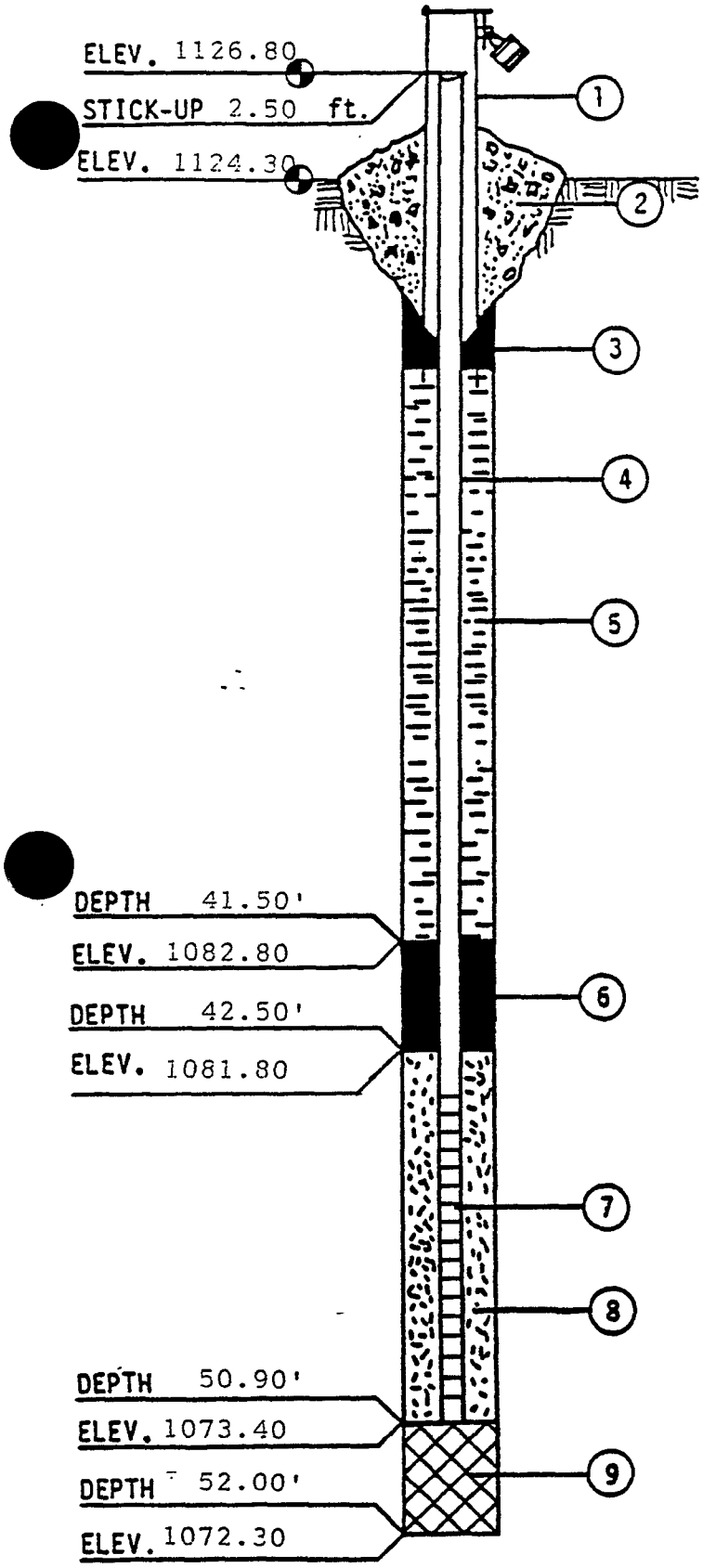
9. Type of Backfill None

10. Drilling Method 4.25 HSA

11. Additives Used (if any) Clear Water

All Depths Measured from Ground Surface

AR302212



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W6D Date 12/06/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal None

3. Type of Surface Seal (if Installed) Quikrete

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 48.5 ft

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed Tremie

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 5.0 ft

   Slot Size 0.010 in.

   Slotted Interval Length ~~5.0 ft~~ 4.7

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #7 Silica Sand

9. Type of Backfill #7 Silica Sand

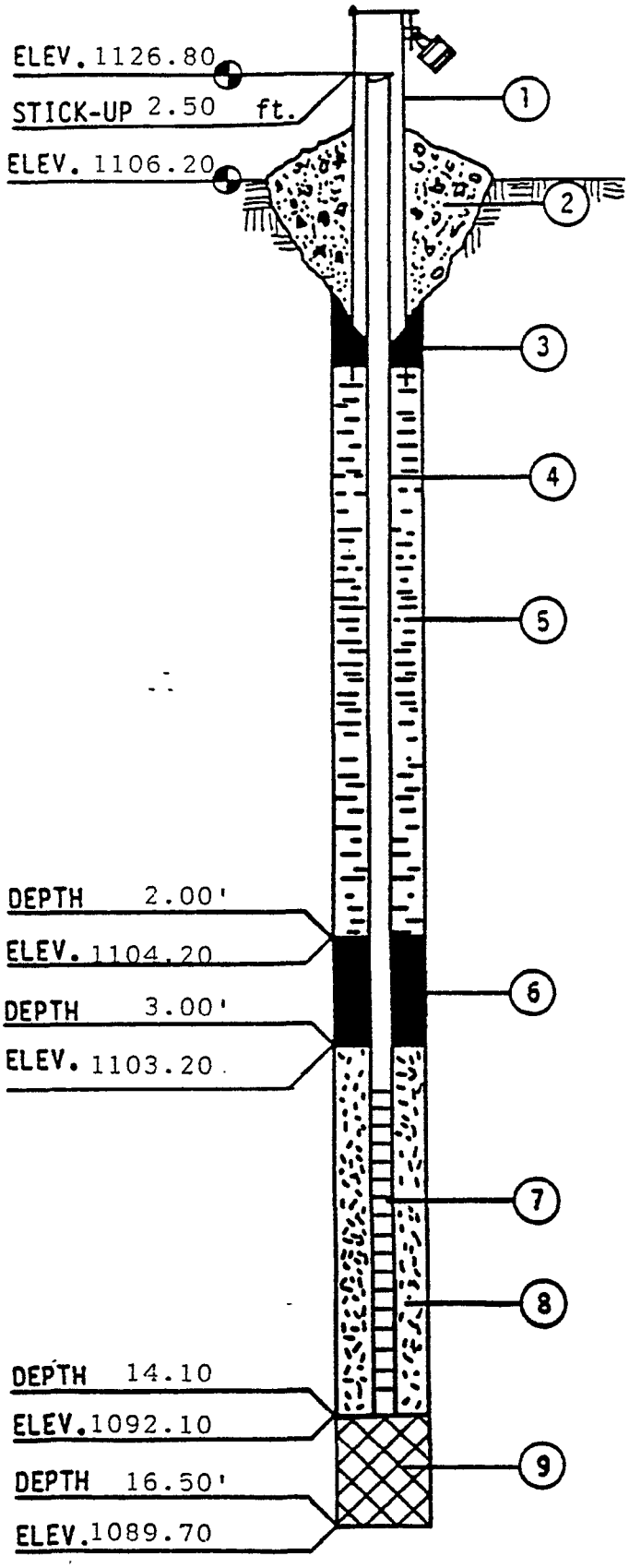
10. Drilling Method 4.25" HSA

11. Additives Used (if any)

    Clear Water

All Depths Measured from Ground Surface

AR302313



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W7S Date 12/12/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) None

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 8.8 ft

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed From Surface

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 10.1 ft

   Slot Size 0.010 in.

   Slotted Interval Length 9.6 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #5 Silica Sand

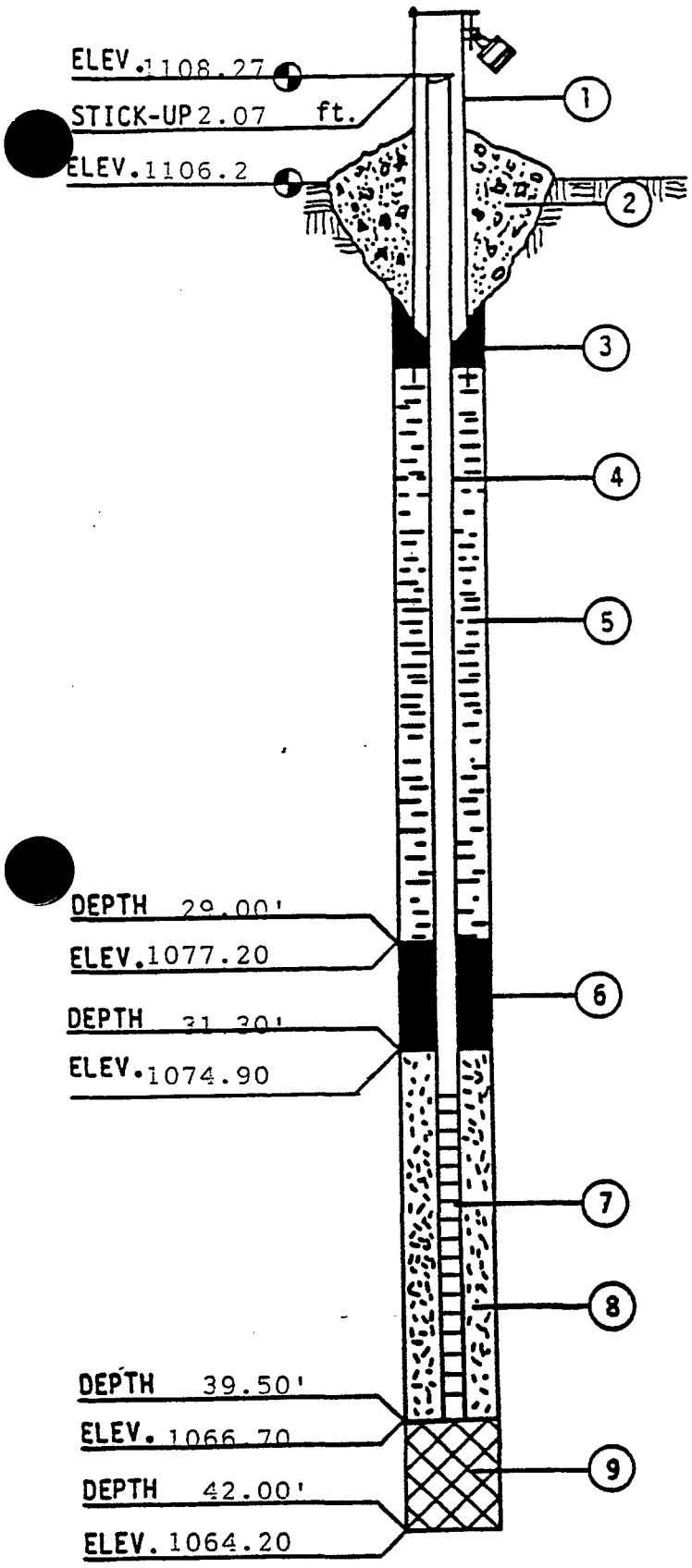
9. Type of Backfill #5 Silica Sand

10. Drilling Method 4.25" HSA

11. Additives Used (if any) None

All Depths Measured from Ground Surface

AR302314



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W7D Date 12/12/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal None

3. Type of Surface Seal (if Installed) Quikrete

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 36.5 ft

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed Tremie

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 5.1 ft

   Slot Size 0.010 in.

   Slotted Interval Length 4.7 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #5 Silica Sand

9. Type of Backfill #5 Silica Sand

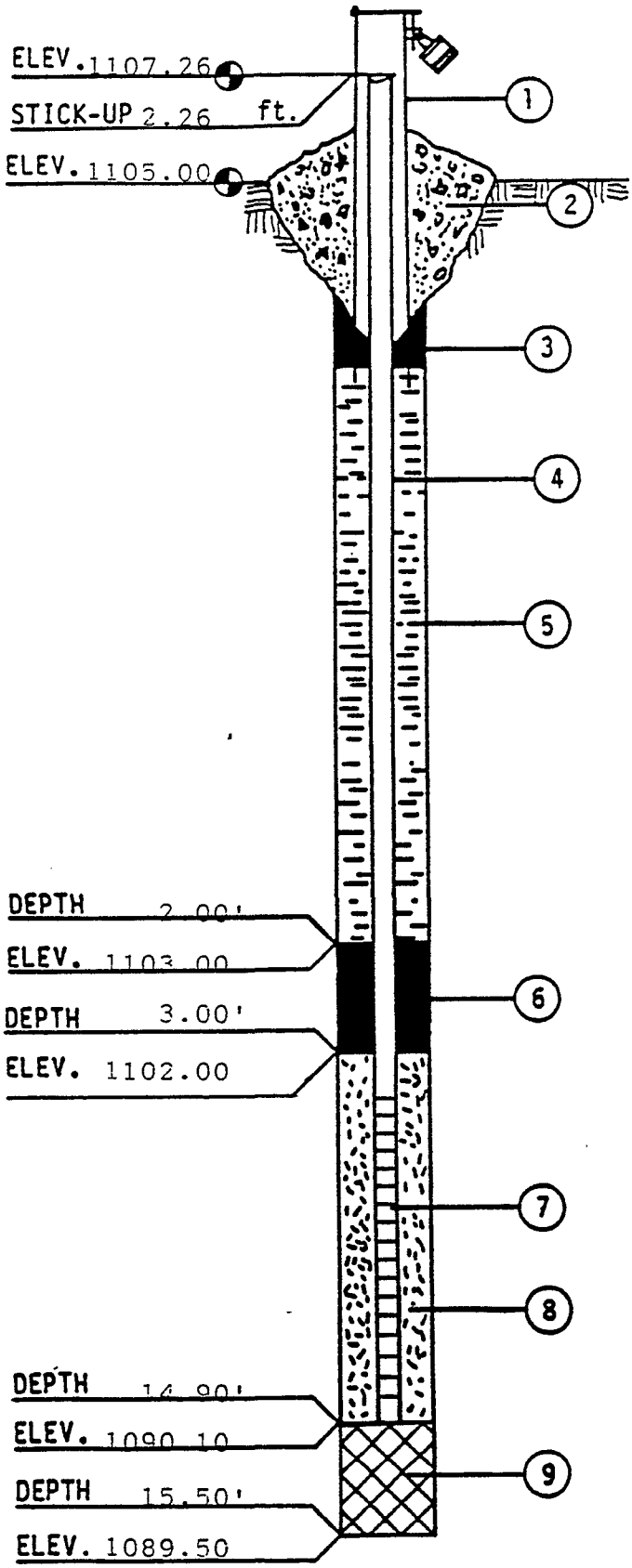
10. Drilling Method 4.25" HSA

11. Additives Used (if any)

    None

All Depths Measured from Ground Surface

AR302315



WARZYN

Monitoring Well Construction Information

Project Number: 60882.15

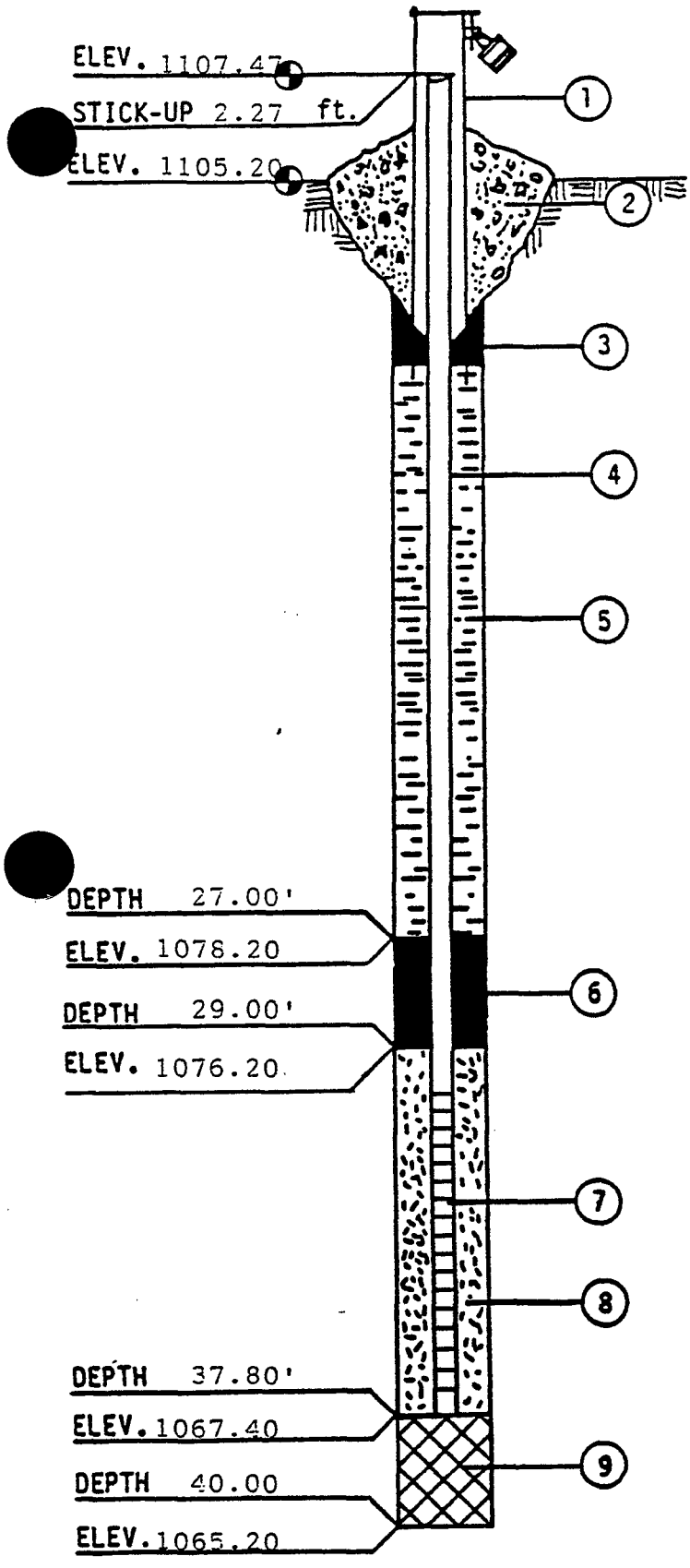
Description: Saegertown RI

Boring/ Well No: W8S Date: 12/08/90

1. Protective Casing: Above Ground
   Locking: Locking Well Cap
2. Concrete Seal: Quikrete
3. Type of Surface Seal (if Installed): None
4. Solid Pipe Type: Sch 40 PVC
   Solid Pipe Length: 7.5 ft
   Joint Type: Threaded
5. Type of Backfill: Cement/Bentonite Grout
   Backfill Installed: Tremie
6. Type of Lower Seal (if installed): Bentonite Pellets
7. Screen Type: Sch 40 PVC
   Screen Length: 10.1 ft
   Slot Size: 0.010 in.
   Slotted Interval Length: 9.7 ft
   Screen Diameter: 2.0 in.
8. Type of Backfill around Screen: 1.0' #7 Sand above #5 Silica Sand
9. Type of Backfill: None
10. Drilling Method: 4.25 HSA
11. Additives Used (if any): None

All Depths Measured from Ground Surface

AR302316



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W8D Date 12/08/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) Grout

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 35 ft

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed Tremie

6. Type of Lower Seal (if Installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 5.1 ft

   Slot Size 0.010 in.

   Slotted Interval Length 4.7 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen 1.5' #7 Sand above #5 Silica Sand

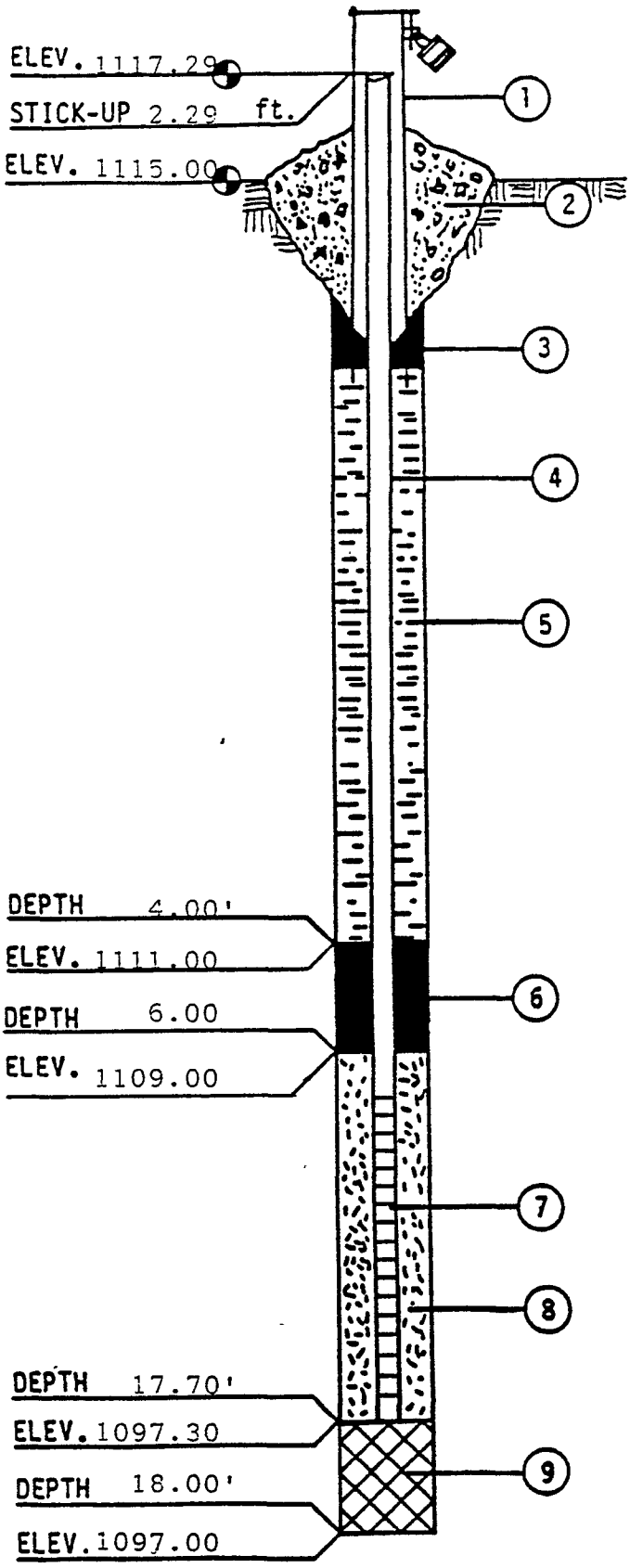
9. Type of Backfill none

10. Drilling Method 4.25" HSA

11. Additives Used (if any) Clear Water

All Depths Measured from Ground Surface

AR302317



WARZYN

Monitoring Well Construction Information

Project Number 60882.15

Description Saegertown RI

Boring/ Well No W9S Date 12/08/90

1. Protective Casing Above Ground

   Locking Locking Well Cap

2. Concrete Seal Quikrete

3. Type of Surface Seal (if Installed) None

4. Solid Pipe Type Sch 40 PVC

   Solid Pipe Length 10 ft

   Joint Type Threaded

5. Type of Backfill Cement/Bentonite Grout

   Backfill Installed Tremie

6. Type of Lower Seal (if installed) Bentonite Pellets

7. Screen Type Sch 40 PVC

   Screen Length 10.1 ft

   Slot Size 0.010 in.

   Slotted Interval Length 9.7 ft

   Screen Diameter 2.0 in.

8. Type of Backfill around Screen #5 Silica Sand

9. Type of Backfill None

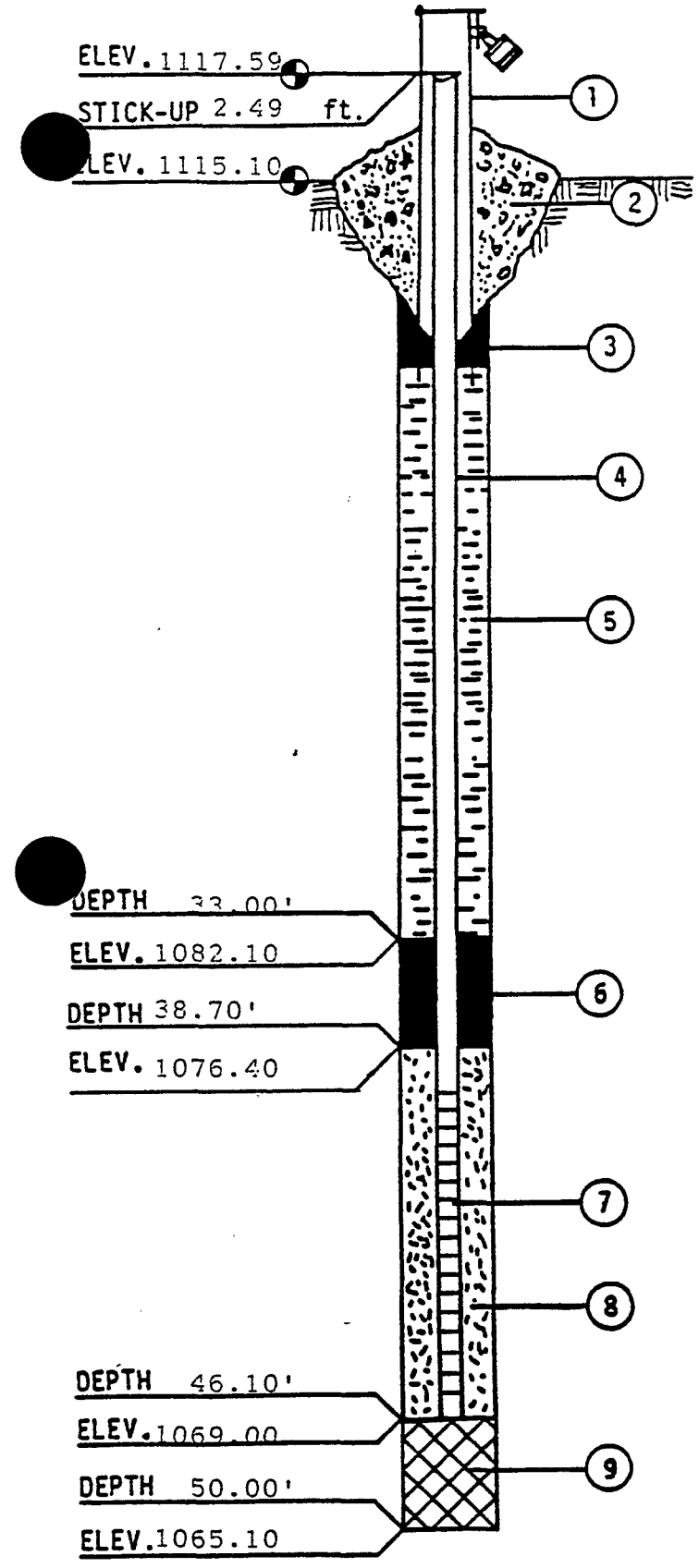
10. Drilling Method 4.25" HSA

11. Additives Used (if any)

    None

All Depths Measured from Ground Surface

AR302318



WARZYN

Monitoring Well Construction Information

Project Number: 60882.15

Description: Saegertown RI

Boring/ Well No: W9D Date: 12/08/90

1. Protective Casing: Above Ground
   Locking: Locking Well Cap
2. Concrete Seal: Quikrete
3. Type of Surface Seal (if Installed): None
4. Solid Pipe Type: Sch 40 PVC
   Solid Pipe Length: 44.2 ft
   Joint Type: Threaded
5. Type of Backfill: Cement/Bentonite Grout
   Backfill Installed: Tremie
6. Type of Lower Seal (if installed): Bentonite Pellets
7. Screen Type: Sch 40 PVC
   Screen Length: 5.1 ft
   Slot Size: 0.010 in.
   Slotted Interval Length: 4.7 ft
   Screen Diameter: 2.0 in.
8. Type of Backfill around Screen: #5 Silica Sand
9. Type of Backfill: #5 Silica Sand
10. Drilling Method: 4.25" HSA

AR302319

11. Additives Used (if any): Clear Water

All Depths Measured from Ground Surface