LEGEND

LP-02 LEACH PIT LOCATION

SS-08 SUPPLEMENTAL RI SURFACE SOIL SAMPLE LOCATION

RA SUPPLEMENTAL RI SOIL BORING LOCATION

320 CONTOUR LINE (20 FT INTERVAL)

GEOPHYSICAL SURVEY

APPROXIMATE WETLAND AREA

NOTES:
1. QUALIFIERS ARE DEFINED ON TABLES 4-1 and 4-3.

2. BRACKETS INDICATE AN EXCEEDANCE OF NYSDEC SOIL CLEANUP CRITERIA (NY-SCOL) OR MAXIMUM SITE BACKGROUND CONCENTRATION.

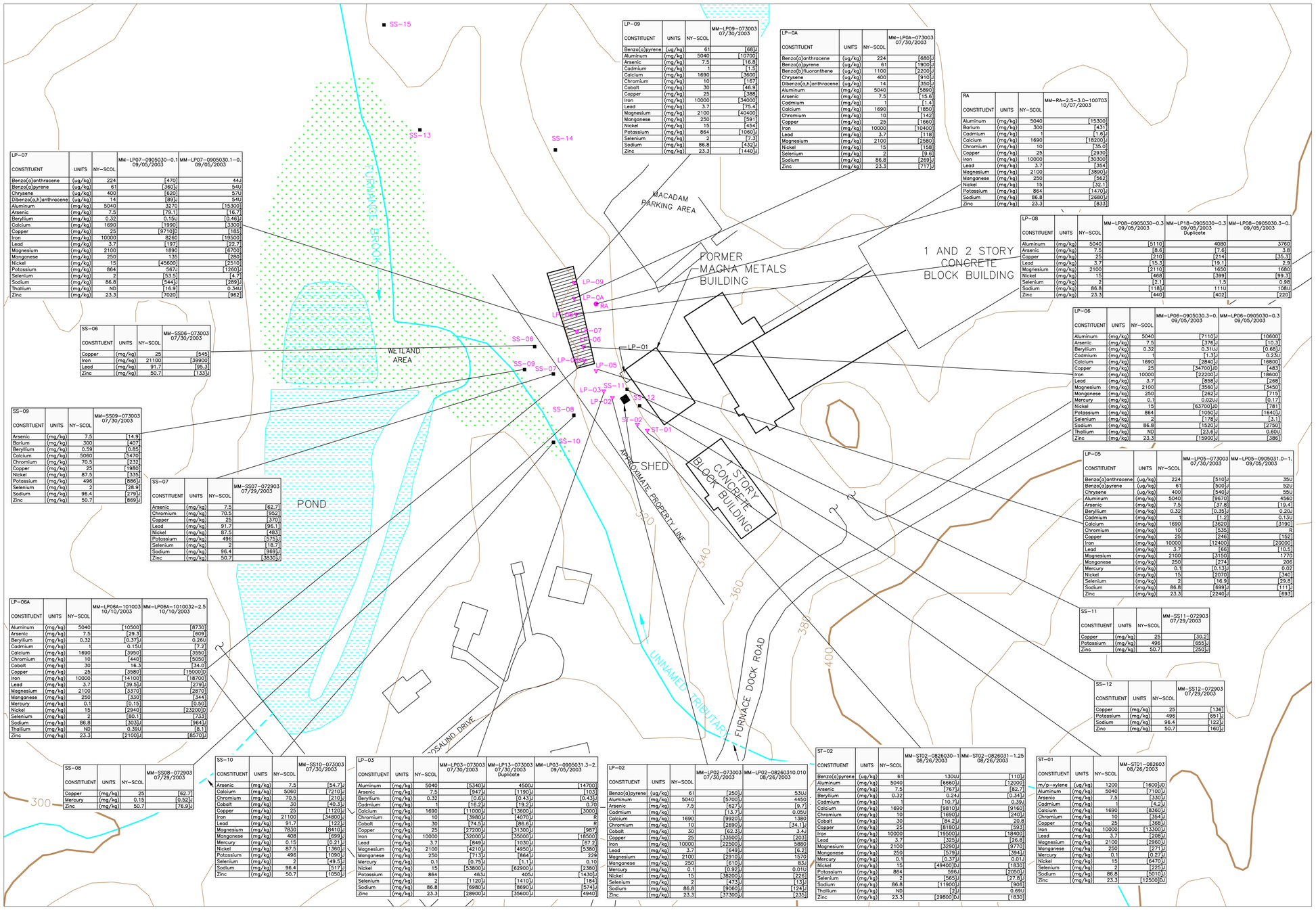
3. LOCATIONS OF FORMER MAGNA METALS BUILDING, 1 STORY CONCRETE BLOCK BUILDING, SHED, GEOPHYSICAL SURVEY AREA, AND MONITORING WELLS ARE BASED ON SURVEY DATA.

SOURCES:
1. CONTOUR LINES, FURNACE DOCK ROAD, AND FURNACE BROOK BELOW POND BASED ON MOHEGAN LAKE, NY AND PEEKSKILL, NY TOPOGRAPHIC QUADRANGLES, 7.5-MINUTE SERIES, DATED 1956 AND 1957, RESPECTIVELY, AND PHOTOREVISED IN 1981.

2. ADDITIONAL SURFACE FEATURES BASED ON WESTCHESTER COUNTY DEPARTMENT OF PLANNING AERIAL PHOTOGRAPH (SPRING 1990), DECEMBER 18, 1999 AERIAL PHOTOGRAPH, AND SURVEY DATA.

3. APPROXIMATE WETLAND AREA BASED ON FIELD OBSERVATIONS.

4. TOPOGRAPHIC LINES ARE APPROXIMATE ESTIMATIONS.



LP-07 CONSTITUENT	UNITS	NY-SCOL	MM-LP07-0905030-0.1 09/05/2003	MM-LP07-0905030.1-0. 09/05/2003
Benzo(a)anthracene	(ug/kg)	224	[470]	44J
Benzo(a)pyrene	(ug/kg)	61	[360]J	54U
Chrysene	(ug/kg)	400	[620]	57U
Dibenzo(a,h)anthracene	(ug/kg)	14	[89]J	54U
Aluminum	(mg/kg)	5040	3270	[15300]
Arsenic	(mg/kg)	7.5	[79.1]	[16.7]
Beryllium	(mg/kg)	0.32	0.15U	[0.46]J
Calcium	(mg/kg)	1690	[1990]	[3300]
Copper	(mg/kg)	25	[9710]D	[185]
Iron	(mg/kg)	10000	8260	[19500]
Lead	(mg/kg)	3.7	[197]	[22.7]
Magnesium	(mg/kg)	2100	1890	[6700]
Manganese	(mg/kg)	250	135	[280]
Nickel	(mg/kg)	15	[45600]	[2510]
Potassium	(mg/kg)	864	567J	[1260]J
Selenium	(mg/kg)	2	[53.5]	[4.7]
Sodium	(mg/kg)	86.8	[544]J	[289]J
Thallium	(mg/kg)	ND	[16.9]	0.34U
Zinc	(mg/kg)	23.3	[7020]	[962]

SS-06 CONSTITUENT	UNITS	NY-SCOL	MM-SS06-073003 07/30/2003
Copper	(mg/kg)	25	[545]
Iron	(mg/kg)	21100	[39900]
Lead	(mg/kg)	91.7	[95.3]
Zinc	(mg/kg)	50.7	[133]J

SS-09 CONSTITUENT	UNITS	NY-SCOL	MM-SS09-073003 07/30/2003
Arsenic	(mg/kg)	7.5	[14.9]
Barium	(mg/kg)	300	[407]
Beryllium	(mg/kg)	0.59	[0.85]
Calcium	(mg/kg)	5060	[5470]
Chromium	(mg/kg)	70.5	[232]
Copper	(mg/kg)	25	[1980]
Nickel	(mg/kg)	87.5	[335]
Potassium	(mg/kg)	496	[886]J
Selenium	(mg/kg)	2	[28.9]
Sodium	(mg/kg)	96.4	[279]J
Zinc	(mg/kg)	50.7	[869]J

SS-07 CONSTITUENT	UNITS	NY-SCOL	MM-SS07-072903 07/29/2003
Arsenic	(mg/kg)	7.5	[62.7]
Chromium	(mg/kg)	70.5	[952]
Copper	(mg/kg)	25	[370]
Lead	(mg/kg)	91.7	[96.1]
Nickel	(mg/kg)	87.5	[483]
Potassium	(mg/kg)	496	[575]J
Selenium	(mg/kg)	2	[18.7]
Sodium	(mg/kg)	96.4	[969]J
Zinc	(mg/kg)	50.7	[3830]J

LP-06A CONSTITUENT	UNITS	NY-SCOL	MM-LP06A-101003 10/10/2003	MM-LP06A-1010032-2.5 10/10/2003
Aluminum	(mg/kg)	5040	[10500]	[8730]
Arsenic	(mg/kg)	7.5	[29.3]	[609]
Beryllium	(mg/kg)	0.32	[0.37]J	0.26U
Cadmium	(mg/kg)	1	0.15U	[7.2]
Calcium	(mg/kg)	1690	[3950]	[3550]
Chromium	(mg/kg)	10	[440]	[5050]
Cobalt	(mg/kg)	30	16.3	[34.0]
Copper	(mg/kg)	25	[3580]	[15000]D
Iron	(mg/kg)	10000	[14100]	[18700]
Lead	(mg/kg)	3.7	[39.5]	[279]J
Magnesium	(mg/kg)	2100	[3370]	[2870]
Manganese	(mg/kg)	250	[330]	[344]
Mercury	(mg/kg)	0.1	[0.15]	[0.50]
Nickel	(mg/kg)	15	[2940]	[23200]D
Selenium	(mg/kg)	2	[80.1]	[733]
Sodium	(mg/kg)	86.8	[303]J	[964]J
Thallium	(mg/kg)	ND	0.39U	[8.1]
Zinc	(mg/kg)	23.3	[2100]J	[8570]J

SS-08 CONSTITUENT	UNITS	NY-SCOL	MM-SS08-072903 07/29/2003
Copper	(mg/kg)	25	[62.7]
Mercury	(mg/kg)	0.15	[0.52]J
Zinc	(mg/kg)	50.7	[76.9]J

SS-10 CONSTITUENT	UNITS	NY-SCOL	MM-SS10-073003 07/30/2003
Arsenic	(mg/kg)	7.5	[54.7]J
Calcium	(mg/kg)	5060	[7210]J
Chromium	(mg/kg)	70.5	[210]J
Cobalt	(mg/kg)	30	[40.3]J
Copper	(mg/kg)	25	[1120]J
Iron	(mg/kg)	21100	[34800]J
Lead	(mg/kg)	91.7	[122]J
Magnesium	(mg/kg)	7830	[8410]J
Manganese	(mg/kg)	408	[699]J
Mercury	(mg/kg)	0.15	[0.21]J
Nickel	(mg/kg)	87.5	[1360]J
Potassium	(mg/kg)	496	[1090]J
Selenium	(mg/kg)	2	[49.5]J
Sodium	(mg/kg)	96.4	[517]J
Zinc	(mg/kg)	50.7	[1050]J

LP-03 CONSTITUENT	UNITS	NY-SCOL	MM-LP03-073003 07/30/2003	MM-LP13-073003 07/30/2003 Duplicate	MM-LP03-0905031.3-2. 09/05/2003
Aluminum	(mg/kg)	5040	[5340]J	4500J	[14700]
Arsenic	(mg/kg)	7.5	[947]J	[1190]J	[103]
Beryllium	(mg/kg)	0.32	[0.6]	[0.43]J	[0.43]J
Cadmium	(mg/kg)	1	[16.2]J	[19.2]J	0.70
Calcium	(mg/kg)	1690	[11000]J	[13600]J	[3000]
Chromium	(mg/kg)	10	[980]J	[4070]J	R
Cobalt	(mg/kg)	30	[74.5]J	[86.6]J	R
Copper	(mg/kg)	25	[27200]J	[31300]J	[987]
Iron	(mg/kg)	10000	[32000]J	[35000]J	[18500]
Lead	(mg/kg)	3.7	[849]J	[1030]J	[67.2]
Magnesium	(mg/kg)	2100	[4210]J	[4950]J	[5380]
Manganese	(mg/kg)	250	[713]J	[864]J	229
Mercury	(mg/kg)	0.1	[0.75]J	[1.1]J	0.10
Nickel	(mg/kg)	15	[53800]J	[62900]J	[2380]
Potassium	(mg/kg)	864	463J	405J	[1430]J
Selenium	(mg/kg)	2	[1120]J	[1410]J	[184]
Sodium	(mg/kg)	86.8	[6980]J	[8690]J	[574]J
Zinc	(mg/kg)	23.3	[28900]J	[35600]J	[4940]

LP-02 CONSTITUENT	UNITS	NY-SCOL	MM-LP02-073003 07/30/2003	MM-LP02-08260310.010 08/26/2003
Benzo(a)pyrene	(ug/kg)	61	[250]J	53UJ
Aluminum	(mg/kg)	5040	[5700]J	4450
Arsenic	(mg/kg)	7.5	[627]J	[9.7]
Cadmium	(mg/kg)	1	[13.7]J	0.05U
Calcium	(mg/kg)	1690	9920J	1380
Chromium	(mg/kg)	10	2690J	[34.1]J
Cobalt	(mg/kg)	30	[62.3]J	3.4J
Copper	(mg/kg)	25	[33500]J	[203]
Iron	(mg/kg)	10000	[22500]J	5880
Lead	(mg/kg)	3.7	[649]J	[6.2]
Magnesium	(mg/kg)	2100	[2910]J	1570
Manganese	(mg/kg)	250	[610]J	83J
Mercury	(mg/kg)	0.1	0.92J	0.01U
Nickel	(mg/kg)	15	[38200]J	[226]
Selenium	(mg/kg)	2	[473]J	[13]J
Sodium	(mg/kg)	86.8	[9060]J	[124]J
Zinc	(mg/kg)	23.3	[37300]J	[235]

ST-02 CONSTITUENT	UNITS	NY-SCOL	MM-ST02-0826030-1 08/26/2003	MM-ST02-0826031-1.25 08/26/2003
Benzo(a)pyrene	(ug/kg)	61	130UJ	[110]J
Aluminum	(mg/kg)	5040	[6660]J	[12000]
Arsenic	(mg/kg)	7.5	[767]J	[82.7]
Beryllium	(mg/kg)	0.32	0.24J	[0.34]J
Cadmium	(mg/kg)	1	[10.7]J	0.39J
Calcium	(mg/kg)	1690	[9810]J	[9160]
Chromium	(mg/kg)	10	1690J	[240]J
Cobalt	(mg/kg)	30	[84.2]J	20.8
Copper	(mg/kg)	25	[8180]J	[593]
Iron	(mg/kg)	10000	[19500]J	[18400]
Lead	(mg/kg)	3.7	[325]J	[26.8]
Magnesium	(mg/kg)	2100	[3290]J	[9770]
Manganese	(mg/kg)	250	[579]J	[394]J
Mercury	(mg/kg)	0.1	[0.37]J	0.01J
Nickel	(mg/kg)	15	[49400]DJ	[1830]
Potassium	(mg/kg)	864	596J	[2050]J
Selenium	(mg/kg)	2	[565]J	[27.8]J
Sodium	(mg/kg)	86.8	[11900]J	[906]
Thallium	(mg/kg)	ND	[2]J	0.69U
Zinc	(mg/kg)	23.3	[29800]DJ	[1830]

ST-01 CONSTITUENT	UNITS	NY-SCOL	MM-ST01-082603 08/26/2003
m/p-xylene	(ug/kg)	1200	[1600]JD
Aluminum	(mg/kg)	5040	[7100]J
Arsenic	(mg/kg)	7.5	[330]J
Cadmium	(mg/kg)	1	[4.2]J
Calcium	(mg/kg)	1690	[8360]J
Chromium	(mg/kg)	10	[354]J
Copper	(mg/kg)	25	[368]J
Iron	(mg/kg)	10000	[13300]J
Lead	(mg/kg)	3.7	[208]J
Magnesium	(mg/kg)	2100	[2960]J
Manganese	(mg/kg)	250	[271]J
Mercury	(mg/kg)	0.1	[0.27]J
Nickel	(mg/kg)	15	[6470]J
Selenium	(mg/kg)	2	[225]J
Sodium	(mg/kg)	86.8	[5010]J
Zinc	(mg/kg)	23.3	[12500]DJ

LP-09 CONSTITUENT	UNITS	NY-SCOL	MM-LP09-073003 07/30/2003
Benzo(a)pyrene	(ug/kg)	61	[68]J
Aluminum	(mg/kg)	5040	[10700]
Arsenic	(mg/kg)	7.5	[16.8]
Cadmium	(mg/kg)	1	[1.5]
Calcium	(mg/kg)	1690	[3600]
Chromium	(mg/kg)	10	[167]
Cobalt	(mg/kg)	30	[46.9]
Copper	(mg/kg)	25	[388]
Iron	(mg/kg)	10000	[34000]
Lead	(mg/kg)	3.7	[75.4]
Magnesium	(mg/kg)	2100	[40400]
Manganese	(mg/kg)	250	[591]
Nickel	(mg/kg)	15	[454]
Potassium	(mg/kg)	864	[1060]J
Selenium	(mg/kg)	2	[7.3]
Sodium	(mg/kg)	86.8	[432]J
Zinc	(mg/kg)	23.3	[1440]J

LP-0A CONSTITUENT	UNITS	NY-SCOL	MM-LP0A-073003 07/30/2003
Benzo(a)anthracene	(ug/kg)	224	[680]J
Benzo(a)pyrene	(ug/kg)	61	[1900]J
Benzo(b)fluoranthene	(ug/kg)	1100	[2200]J
Chrysene	(ug/kg)	400	[910]J
Dibenzo(a,h)anthracene	(ug/kg)	14	[350]J
Aluminum	(mg/kg)	5040	[5890]
Arsenic	(mg/kg)	7.5	[15.6]
Cadmium	(mg/kg)	1	[1.4]
Calcium	(mg/kg)	1690	[1850]
Chromium	(mg/kg)	10	[142]
Copper	(mg/kg)	25	[1660]
Iron	(mg/kg)	10000	[10400]
Lead	(mg/kg)	3.7	[118]
Magnesium	(mg/kg)	2100	[2580]
Nickel	(mg/kg)	15	[158]
Selenium	(mg/kg)	2	[9.6]
Sodium	(mg/kg)	86.8	[269]J
Zinc	(mg/kg)	23.3	[717]J

RA CONSTITUENT	UNITS	NY-SCOL	MM-RA-2.5-3.0-100703 10/07/2003
Aluminum	(mg/kg)	5040	[15300]
Barium	(mg/kg)	300	[431]
Cadmium	(mg/kg)	1	[1.6]J
Calcium	(mg/kg)	1690	[18200]J
Chromium	(mg/kg)	10	[35.0]
Copper	(mg/kg)	25	[2930]
Iron	(mg/kg)	10000	[30300]
Lead	(mg/kg)	3.7	[354]
Magnesium	(mg/kg)	2100	[3890]J
Manganese	(mg/kg)	250	[562]
Nickel	(mg/kg)	15	[32.1]
Potassium	(mg/kg)	864	[1470]J
Sodium	(mg/kg)	86.8	[2680]J
Zinc	(mg/kg)	23.3	[833]

LP-08 CONSTITUENT	UNITS	NY-SCOL	MM-LP08-0905030-0.3 09/05/2003	MM-LP18-0905030-0.3 09/05/2003 (Duplicate	MM-LP08-0905030.3-0. 09/05/2003
Aluminum	(mg/kg)	5040	[5110]	4080	3760
Arsenic	(mg/kg)	7.5	[8.6]	[7.6]	3.8
Copper	(mg/kg)	25	[210]	[214]	[35.3]
Lead	(mg/kg)	3.7	[15.3]	[19.1]	2.9
Magnesium	(mg/kg)	2100	[2110]	1650	1680
Nickel	(mg/kg)	15	[468]	[399]	[99.3]
Selenium	(mg/kg)	2	[2.1]	1.5	0.98
Sodium	(mg/kg)	86.8	[118]J	111U	108U
Zinc	(mg/kg)	23.3	[440]	[402]	[220]

LP-06 CONSTITUENT	UNITS	NY-SCOL	MM-LP06-0905030.3-0. 09/05/2003	MM-LP06-0905030-0.3 09/05/2003
Aluminum	(mg/kg)	5040	[7110]J	[10600]
Arsenic	(mg/kg)	7.5	[376]J	[10.3]
Beryllium	(mg/kg)	0.32	0.31UJ	[0.68]J
Cadmium	(mg/kg)	1	[1.3]J	0.23U
Calcium	(mg/kg)	1690	[2840]J	[16800]
Copper	(mg/kg)	25	[34700]JD	[483]
Iron	(mg/kg)	10000	[22200]J	[18600]
Lead	(mg/kg)	3.7	[858]J	[268]
Magnesium	(mg/kg)	2100	[3560]J	[3450]
Manganese	(mg/kg)	250	[262]J	[715]
Mercury	(mg/kg)	0.1	0.02UJ	[0.17]
Nickel	(mg/kg)	15	[63700]JD	[781]
Potassium	(mg/kg)	864	1050J	[1640]J
Selenium	(mg/kg)	2	[178]J	[3.1]
Sodium	(mg/kg)	86.8	[1520]J	[2750]
Thallium	(mg/kg)	ND	[23.6]J	0.60U
Zinc	(mg/kg)	23.3	[15900]J	[386]

LP-05 CONSTITUENT	UNITS	NY-SCOL	MM-LP05-073003 07/30/2003	MM-LP05-0905031.0-1. 09/05/2003
Benzo(a)anthracene	(ug/kg)	224	[510]J	35U
Benzo(a)pyrene	(ug/kg)	61	[500]J	52U
Chrysene	(ug/kg)	400	[540]J	55U
Aluminum	(mg/kg)	5040	[9670]	4560
Arsenic	(mg/kg)	7.5	[37.8]	[19.4]
Beryllium	(mg/kg)	0.32	[0.35]J	0.20J
Cadmium	(mg/kg)	1	[1.2]	0.13U
Calcium	(mg/kg)	1690	[3620]	[3190]
Chromium	(mg/kg)	10	[535]	R
Copper	(mg/kg)	25	[246]	[152]
Iron	(mg/kg)	10000	[12400]	[20000]
Lead	(mg/kg)	3.7	[66]	[10.5]
Magnesium	(mg/kg)	2100	[3150]	1770
Manganese	(mg/kg)	250	[274]	206
Mercury	(mg/kg)	0.1	[0.13]J	0.02
Nickel	(mg/kg)	15	[2070]	[340]
Selenium	(mg/kg)	2	[16.9]	[29.8]
Sodium	(mg/kg)	86.8	[699]J	[111]J
Zinc	(mg/kg)	23.3	[2240]J	[693]

SS-11 CONSTITUENT	UNITS	NY-SCOL	MM-SS11-072903 07/29/2003
Copper	(mg/kg)	25	[30.2]
Potassium	(mg/kg)	496	[655]J
Zinc	(mg/kg)	50.7	[250]J

SS-12 CONSTITUENT	UNITS	NY-SCOL	MM-SS12-072903 07/29/2003
Copper	(mg/kg)	25	[136]
Potassium	(mg/kg)	496	[651]J
Sodium	(mg/kg)	96.4	[122]J
Zinc	(mg/kg)	50.7	[160]J

TETRA TECH EC, INC.

TITLE:
Soil Exceedances - 2004 Supplemental RI
Magna Metals
Cortlandt, New York

DWN: CTS	DES.: CTS	PROJECT NO.: 106-1172
CHKD:	APPD:	
DATE: 08/21/07	REV.: 0	FIGURE NO.: 4-2

N:\GIS\GISKEY\GISPROJ31\MAGNA METALS\DRAFT FINAL RI\FIGURE 4-2 0082107.DWG

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