Time requirements of traditional laboratory analysis vs. X-ray Fluorescence

- 7 to 30 days……Traditional laboratory analysis
- 60 to 120 seconds……X-Ray Fluorescence

Site Location

SAMPLE LOCATION MAP

XRF and Analytical Samples Collected by Illinois EPA from April 2001 through October 2001

N
W E
S

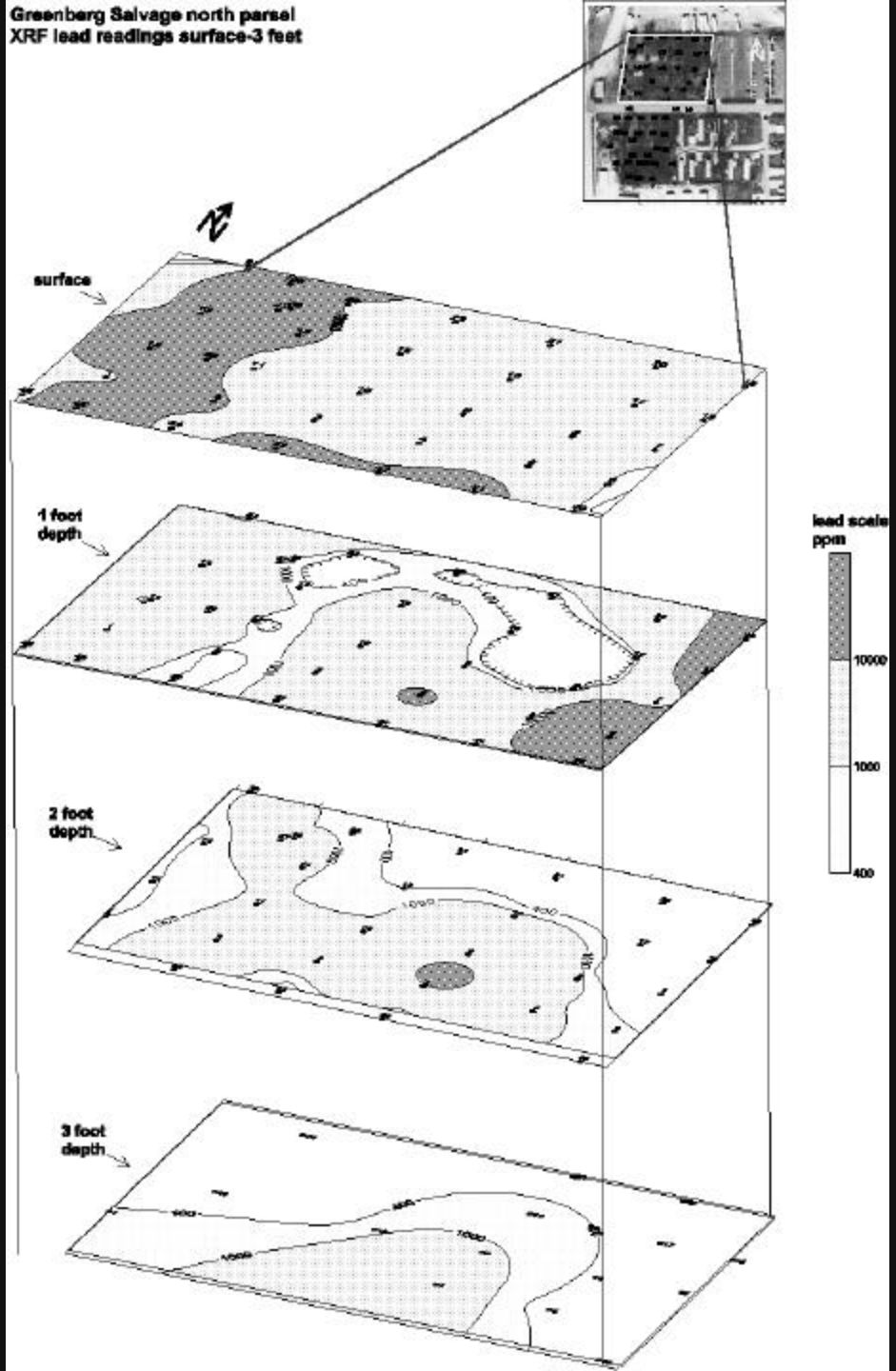
● Sample Collection Point

Map Scale

2000 0 2000 Feet

Stacked Maps Showing XRF - Lead Contamination

- Surface
- 1 foot
- 2 feet
- 3 feet



SOIL SAMPLE SUMMARY

Sample Location ID Lab Organic Sample ID Lab Inorganic Sample ID Description	Objectives * and Benchmarks (ppb)	X102 ECFK6 MEBHR6	X103 ECFK7 MEBHR7	X104 ECFK8 MEBHR8	X105 ECFK9 MEBHR9	X106 ECFK0 MEBHS0	X107 ECFL1 MEBHS1	X108 ECFL2 MEBHS2	X109 ECFL3 MEBHS3	X110 ECFL4 MEBHS4	X111 ECFL5 MEBHS5	X112 ECFL6 MEBHS6
PESTICIDES & PCBs (ppb)												
Aroclor-1242	1000					1600 J	1300 J				820 J	740 J
Aroclor-1248	76	1600 J			15000 J			10000 J				
Aroclor-1254	for all	1100	620	4500 J	7000 J	490	740	12000		68	160 J	200 J
Aroclor-1260	aroclors		370									
INORGANICS (ppm)	(ppm)											
Aluminum			258000	214000	234000	124000	291000	216000	231000	263000	284000	270000
Antimony	82 230	6.0 B	27.4	25.9	141	27.5	106	270	25.9	51.2	29.2	24.7
Barium	14000 41000								662			
Cadmium	20 290	8.2	19.7	30.3	181	22	29.6	108	4.3	18.6	8.9	9.6
Chromium	420 2900	121	467	492	500	174	333	576	553	291	385	422
Copper	8200	1080	9520	8440	7790	6550	18900	8180	4160	9540	9190	9160
Iron					59700							
Lead	400		1510	1340	1980	783	3470	1390	1300	1420	1060	1070
Manganese	8700 2900		1320	1320	3470		1410	1490		1350		
Mercury	61 170	0.35		0.69	9.1			5.7				
Nickel	4100 12000	71.5	379	314	400	204	433	664	115	557	353	426
Selenium	1000 2900	1.9 B	11.2	24.7	48.6	2.7		57.8	1.8	180	3.4	2.3
Silver	1000 2900	2.9 B	5.6	7	10	10	49.8	7.6	4.2	6.3	4.7	4.3
Zinc	61000 170000	1950	5220	5060	8870		12100	11300	3300	6670	6240	6470
Cyanide	4100 12000		1.2	1.4	1.9			1.7	1.1			

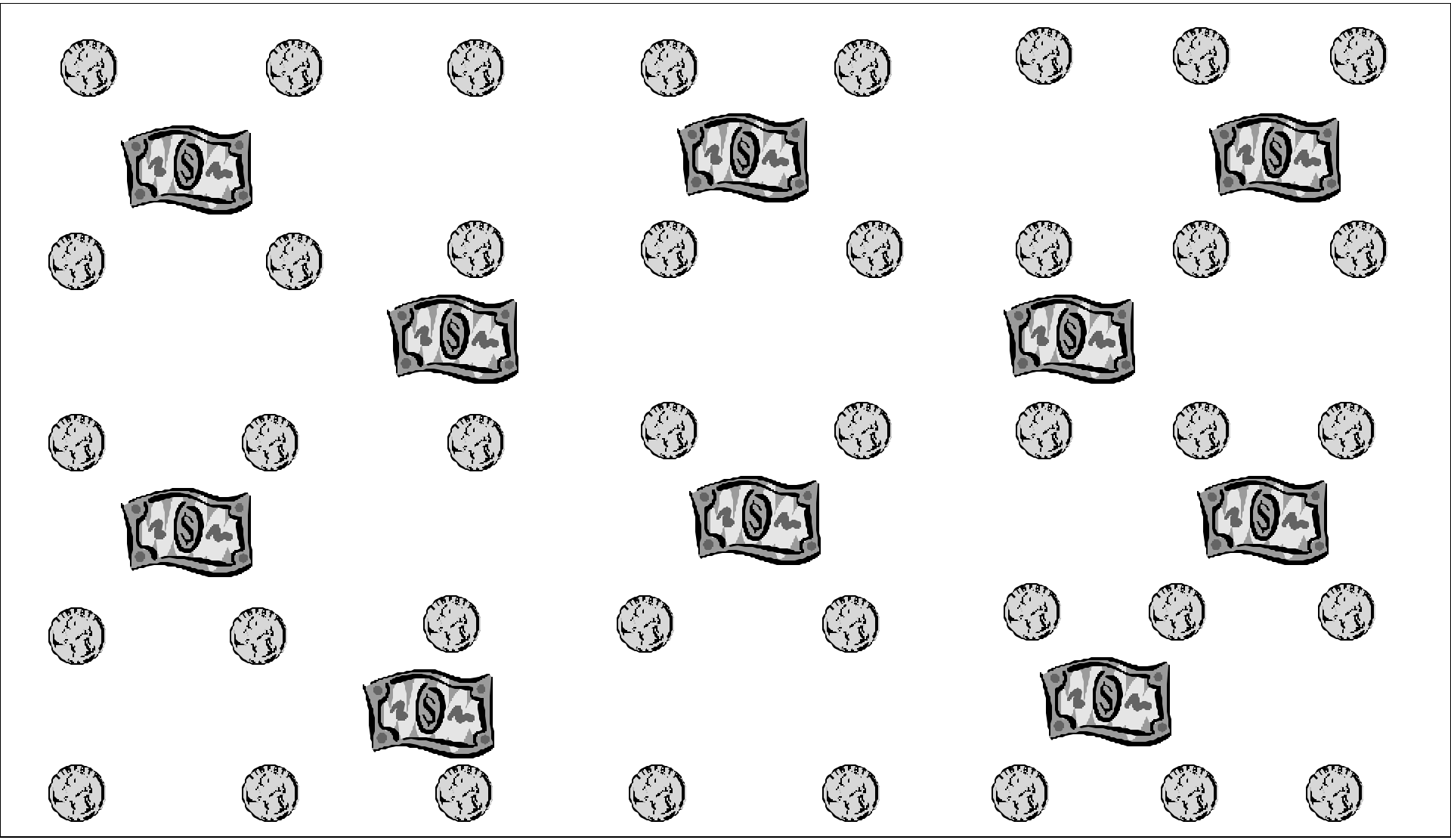
Samples Numbers Not Listed Above - did not contain contaminants above background levels

* Cleanup Objectives were derived from IEPA's "Tiered Approach to Corrective Action Objectives Guidance Document" (TACO)

Green Values are taken from Appendix B: Table B for Commercial Properties and is based on Class II Groundwater

Blue Values are Superfund Chemical Data Matrix (SCDMs) Benchmarks

Red Values are Concentrations that have exceeded TACO and/or SCDMs Objectives or Guidelines

J Indicates an estimated concentration

The $10 Environmental Site Investigation