Handheld XRF Data (Standards and Reference Analysis)

Date	Time	Reading	Artifact ID	Notes	LE	LE +/-	P	P +/-	S	S +/-
17-Jul-08	9:47:02	2	NIST 2702	soil standard	<LOD	0	<LOD	21283	21571	2802
17-Jul-08	12:09:22	42	NIST 2702	soil standard	<LOD	0	<LOD	21952	24908	3043
17-Jul-08	12:22:41	45	NIST 2702	soil standard	<LOD	0	<LOD	18523	16324	2441
17-Jul-08	13:09:26	61	NIST 2702	soil standard	<LOD	0	<LOD	19487	20477	2586
			NIST 2702 (AVERAGE)						20820	2718
			NIST 2702	known values			1152	66		

17-Jul-08	9:50:30	3	NIST 2781	soil standard	<LOD	0	30934	6717	21602	2122
17-Jul-08	12:06:36	41	NIST 2781	soil standard	<LOD	0	<LOD	19032	22244	2101
17-Jul-08	12:20:20	44	NIST 2781	soil standard	<LOD	0	<LOD	18182	23676	2097
17-Jul-08	13:07:07	60	NIST 2781	soil standard	<LOD	0	<LOD	19465	24420	2165
			NIST 2781 (AVERAGE)				7733.5	15849	22985.5	2121.25
			NIST 2781	known values			24200	900		

key

number "non certified values and uncertainties"

number "certified values and uncertainties"

discrepancy in values

good correspondence

questionable correlation

Cl	Cl +/-	K	K +/-	Ca	Ca +/-	Ti	Ti +/-	Cr	Cr +/-	Mn	Mn +/-	Fe
10631	784	25300	722	4239	233	11530	353	318	23	1725	48	88365
6161	743	25892	783	5297	267	11622	379	374	25	1745	51	89108
3257	601	24466	700	4437	231	11636	352	371	23	1662	46	84813
2303	575	24857	707	4132	227	11469	348	357	23	1727	47	85973
5588	675.75	25128.75	728	4526.25	239.5	11564.25	358	355	23.5	1714.75	48	87064.75
		20540	720			8840	820	352	22	1757	58	79100

8171	510	6370	261	53000	865	4092	151	211	13	877	23	33905
4451	436	6428	263	55148	897	4167	152	223	13	860	23	33885
2032	380	5932	254	52760	863	3898	149	201	13	818	22	33152
2256	396	6337	266	54264	898	4248	156	187	13	853	23	34092
4227.5	430.5	6266.75	261	53793	880.75	4101.25	152	205.5	13	852	22.75	33758.5
		4900	300	39000	1000	3200	300	202	9			28000

Fe +/-	Co	Co +/-	Ni	Ni +/-	Cu	Cu +/-	Zn	Zn +/-	As	As +/-	Se	Se +/-
1636	463	123	<LOD	73	91	12	407	15	42	8	9	2
1762	<LOD	391	<LOD	81	83	12	449	16	51	8	6	2
1559	<LOD	373	<LOD	75	83	12	422	15	66	8	6	2
1578	545	124	<LOD	74	100	12	412	15	52	8	7	2
1633.75	252	252.75	0	75.75	89.25	12	422.5	15.25	52.75	8	7	2
2400	27.76	0.58	75.4	1.5			485.3	4.2	45.3	1.8		

484	<LOD	182	91	17	604	18	1209	22	<LOD	21	19	2
485	270	62	<LOD	48	610	18	1225	22	<LOD	20	21	2
475	209	63	<LOD	47	611	18	1251	23	<LOD	21	17	2
496	<LOD	192	66	17	611	18	1291	24	<LOD	22	20	2
485	119.75	124.75	39.25	32.25	609	18	1244	22.75	0	21	19.25	2
1000			80.2	2.3	627.4	13.5	1273	53	7.82	0.28	16	1.6

Rb	Rb +/-	Sr	Sr +/-	Zr	Zr +/-	Mo	Mo +/-	Ag	Ag +/-	Cd	Cd +/-	Sn
123	4	114	4	263	6	18	3	<LOD	43	<LOD	56	<LOD
119	4	104	4	270	6	13	3	<LOD	45	<LOD	59	<LOD
121	4	106	4	271	6	15	3	<LOD	43	<LOD	55	<LOD
117	4	109	4	274	6	<LOD	10	<LOD	43	<LOD	55	<LOD
120	4	108.25	4	269.5	6	11.5	4.75					
127.7	8.8	119.7	3							0.817	0.011	

30	2	225	4	261	5	42	3	<LOD	35	<LOD	44	<LOD
33	2	218	4	252	4	41	3	<LOD	35	49	15	<LOD
30	2	226	4	256	5	42	3	<LOD	35	<LOD	44	<LOD
30	2	236	5	263	5	45	3	<LOD	36	<LOD	45	<LOD
30.75	2	226.25	4.25	258	4.75	42.5	3					
						46.7	3.2			12.78	0.72	

Sn +/-	Sb	Sb +/-	I	I +/-	Ba	Ba +/-	Hg	Hg +/-	Pb	Pb +/-
96	<LOD		98	<LOD	641	1102	102	<LOD	14	126	7
100	<LOD		103	<LOD	676	1190	110	<LOD	13	127	8
95	<LOD		97	<LOD	623	1148	102	<LOD	14	117	7
94	<LOD		96	<LOD	629	1082	101	<LOD	13	120	7
						1130.5	103.75			122.5	7.25
		5.6	0.24			397.4	3.2	0.4474	0.0069	123.8	1.1

74	<LOD	74	<LOD	546	552	52	<LOD	12	203	7
73	<LOD	72	<LOD	552	539	52	<LOD	11	182	7
73	<LOD	73	<LOD	547	548	51	<LOD	12	202	7
75	<LOD	76	<LOD	564	508	52	<LOD	12	210	8
					536.75	51.75			199.25	7.25
							3.64	0.25	202.1	6.5