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ASX ANNOUNCEMENT

11 November 2024

HIGH GRADE PHOSPHATE AND REE ASSAYS AT SHAWA CARBONATITE MINING LICENCES, ZIMBABWE

Key Highlights

- **Laboratory assay results confirm previously reported, highly anomalous portable XRF (pXRF) results (refer ASX Announcement 1 July 2024).**
  - **Very high P_2O_5 assay results from outcrop/subcrop samples up to 17.24% P_2O_5, with 21 of the 163 outcrop samples returning assays >3% P_2O_5.**
  - **Very high P_2O_5 assays from soil samples up to 8.04% P_2O_5, with 96 of the 292 soil samples returning assays >1% P_2O_5.**
  - **Phosphate targets, both outcrop and soil have now been identified for trenching and drilling.**
  - **TREO assay results up to 2,522ppm in outcrop/subcrop (11 samples >1000ppm) and 1,103ppm in soil samples:**
    - **MREO assay results (Nd+Pr+Tb+Dy oxides) in outcrop/subcrop up to 508ppm (6 samples >300ppm); and up to 295ppm in soils;**
    - **Assays for NdPr oxides in outcrop/subcrop up to 300ppm; and**
    - **Assays for TbDy oxides in outcrop/subcrop up to 315ppm.**
  - **Sr in 5 outcrop/subcrop samples assayed >5,000ppm (detection limit), with assays up to 1,366ppm in sieved soil samples.**
  - **Nb oxide assays up to 658ppm in outcrop/subcrop and 919ppm in soil samples.**
  - **Fe for 5 samples in outcrop/subcrop and 10 in soil assayed above detection of 25%.**
  - **Ba oxide as high as >50,000ppm in outcrop/subcrop (detection limit) and 22,345ppm in soil.**
- **Carbonatite expert Pete Siegfried reviewed the assay results and made the following comments and recommendations:**
  - **Clear association of the REO-enriched areas with Ca-enriched dolomite carbonatite;**
  - **A number of high Nd samples show enrichment in intermediate and heavy REE; and**
  - **Plotts of LREE vs HREE indicate multiple mineral control and probable presence of monazite <u>and</u> xenotime.**
- **Mineralogical studies to be conducted during the next phase of exploration to define the mineral assemblage of the REEs (monazite vs xenotime and the REE composition of each), Sr (Sr in strontianite or celestite) and the REE composition of the apatite.**

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- **Next stage exploration:**
  - **Target testing by trenching the phosphate targets, both outcrop and soil, followed by Reverse Circulation (RC) drilling to test tonnage and grade continuity;**
  - **Anthill sampling for residual minerals (apatite, monazite, pyrochlore, vermiculite and heavy minerals including magnetite) and to generate apatite concentrate for chemical analysis to determine the REE content of the apatite; and**
  - **Analytical techniques will need to analyse for higher grade samples, which are reporting above the upper detection limits using current techniques.**

MRG Metals Limited ("MRG" or "the Company") is pleased to announce assay results of Phase 2 exploration (**refer to Binding MOU ASX Announcement, 2 October 2023**) at the Shawa Carbonatite Mining Licences in Zimbabwe (**Figure 1**). The assay results are from collected outcrop, subcrop (from a pitting program) and soil samples (**refer Figure 1, ASX Announcement 21 February 2024**) and follow the reported portable XRF (pXRF) results for the exploration program (**refer ASX Announcement 1 July 2024 for the pXRF results**).

MRG Chairman, Mr Andrew Van Der Zwan, said:
"These impressive assay results from the recent sampling program at the Shawa Carbonatite Mining Licences are an important step forward for MRG in Zimbabwe and provide confidence as we make plans for trenching, an initial drilling campaign and further field exploration. The confirmation of our previously reported pXRF results has reinforced the potential for a significant phosphate and rare earths discovery at Shawa, bolstering the value of MRG's diverse exploration portfolio across multiple jurisdictions. We will now work towards finalising our next phase of exploration in Zimbabwe and will update the market as these plans progress."

Details of assay results

A geological mapping, grid soil sampling and outcrop / subcrop (pitting) sampling program was completed by MRG at the ten (10) Wickbury Mining Licences within the Shawa carbonatite (**refer ASX Announcements 21 February 2024 and 1 July 2024 for details on exploration work**). pXRF analyses were collected on 376 outcrop / subcrop and subcrop samples and 670 soil samples (**refer ASX Announcement 1 July 2024 for the pXRF results**). Of these, 163 outcrop / subcrop and 292 soil samples (with an additional 66 QA/QC duplicates, standards and blanks added by MRG) were sent to the accredited SGS laboratory in Johannesburg, South Africa. The assay results from these samples have now been received.

Very high P_2O_5 assay results were received from the 163 outcrop / subcrop samples, with 43 samples with >1% P_2O_5, 21 samples with >3% P_2O_5 and assays as high as 17.24% P_2O_5 (results

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summary **Table 1 and Figure 2**). Clear hard-rock P_2O_5 targets for further exploration (**Figure 2**) have been generated by the assay results:

- Target 1, the area to the west of the inner ring in the carbonatite rocks (magenta coloured on map);
- Target 2, the area to the east of the inner ring in the carbonatite rocks;
- Target 3, the area to the west of the inner ring in the Ijolite rocks (green coloured on map), target is supported by soil sampling results (**Figure 3**); and
- Target 4, some high grade samples to the east of the inner ring seen on the edge of the granite (green coloured on map).

Very high P_2O_5 assay results were received from the 292 soil samples, with 96 samples with >1% P_2O_5, 23 samples with >3% P_2O_5 and results as high as 8.04% P_2O_5 (results summary **Table 2 and Figure 3**). Clear soil P_2O_5 targets for further exploration (**Figure 3**) have been generated by the assay results:

- Target 5, the area directly to the west of the inner ring in the carbonatite rocks (magenta coloured on map);
- Target 6, the area east of the inner ring in the carbonatite rocks, closer to the granite contact; and
- Target 7, the area east and within the inner carbonatite ring and going across the inner ring.

Total rare earth oxides (TREO) assay results were returned as high as 2,522ppm in outcrop / subcrop, with 11 samples >1000ppm TREO (**Figure 4a**) and TREO as high as 1,103ppm in soil samples (**Figure 4b**). The magnet rare earth oxides (MREO) assay results (Nd+Pr+Tb+Dy oxides) in outcrop / subcrop is as high as 508ppm (6 samples >300ppm) and as high as 295ppm in soils. Assays for the NdPr oxides in outcrop / subcrop is as high as 300ppm, while assays for TbDy oxides in outcrop / subcrop are as high as 315ppm. The highest TREO and MREO assays for outcrop / subcrop samples correspond with the P_2O_5 Target 1 and to a lesser degree the outcrop / subcrop P_2O_5 Target 2. The higher TREO and MREO assay for soil samples strongly corresponds with the P_2O_5 Targets 5 and 7.

Highly elevated Sr assays, with 89 of the outcrop / subcrop samples >1,000ppm Sr and 5 samples >5,000ppm (detection limit, **Figure 5a**); with 31 soil samples assays >500ppm Sr and up to 1,366 ppm (**Figure 5b**).

Other anomalous assay results

Nb oxide assays as high as 658ppm in outcrop / subcrop and 5 assays in soil >500ppm and as high as 919ppm in the soil samples.

Fe assays for 5 samples in outcrop / subcrop and 10 in the soil samples are above the detection limit of 25%.

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Ba assays for 9 samples in outcrop / subcrop >10,00ppm and as high as >50,000ppm (detection limit); and as high as 22,345ppm in soil.

Carbonatite expert Pete Siegfried reviewed assay results and made the following comments and recommendations:

- Review of this data shows a clear association of the REE enriched areas with Ca enriched dolomite carbonatite (**Figure 6**).
- A number of high Nd samples show enrichment in intermediate REE.
- There is a clear association of the REE enriched areas with Ca enriched dolomite carbonatite (**Figure 7**).
- Two mineralogical controls (by plotting LREE vs HREE) can be identified indicating the presence of monazite and xenotime (**Figure 8**).
- Mineralogical studies need to be conducted during the next phase of exploration to define the mineral assemblage of the REEs (monazite vs xenotime and the REE composition of each), as well as Sr – is the Sr in strontianite or celestite?

66 QAQC samples (Duplicates, AMIS sourced Blanks and Standards) were added by MRG to the sample stream. Very good repeatability of results were found for the Duplicates, with good correlation from the Standards and Blank used.

Exploration – next steps

Follow-up field exploration will commence in Q1 2025 with the following programs:

- Trenching of the various outcrop / subcrop and soil phosphate targets.
- Reverse Circulation (RC) drilling to follow positive trenching results of the phosphate targets.
- Anthill sampling for residual minerals (apatite, monazite, pyrochlore, vermiculite and heavy minerals including magnetite) and to generate apatite concentrate for chemical analysis to determine the REE content of the apatite.
- pXRF analyses of all samples, with the pXRF instrument calibrated with the received assay results (**refer ASX Announcement 1 July 2024**).
- Analytical techniques need to be able to analyse high grade samples currently reporting above detection limits.

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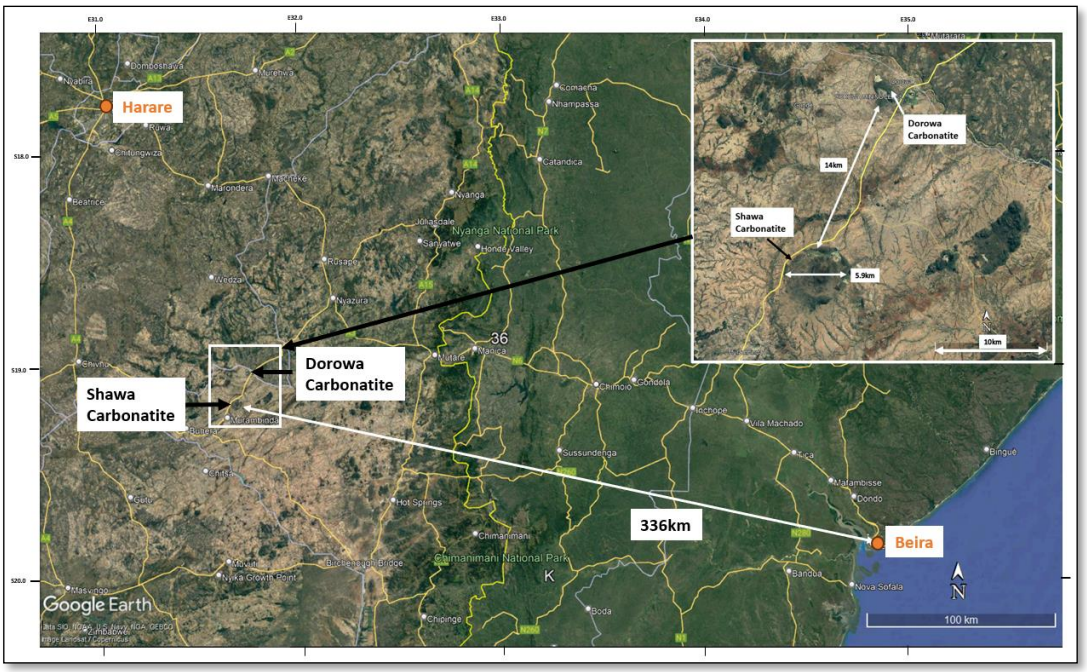

Figure 1: *Shawa Carbonatite in relation to Harare and the Mozambican Beira Port shown on Google Earth image, yellow roads national tar roads. Insert of Shawa and adjacent Dorowa carbonatites.*

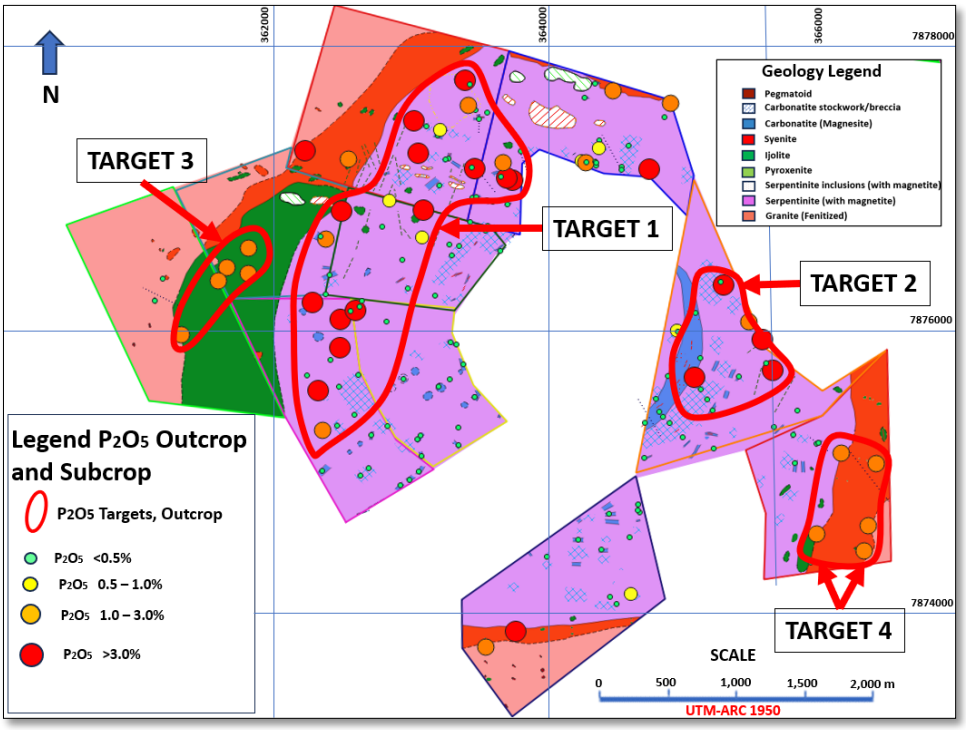

Figure 2: *Outcrop / subcrop P_2O_5 assay results, as well as the hard-rock P_2O_5 targets generated within the 10 Wickbury Mining Claims.*

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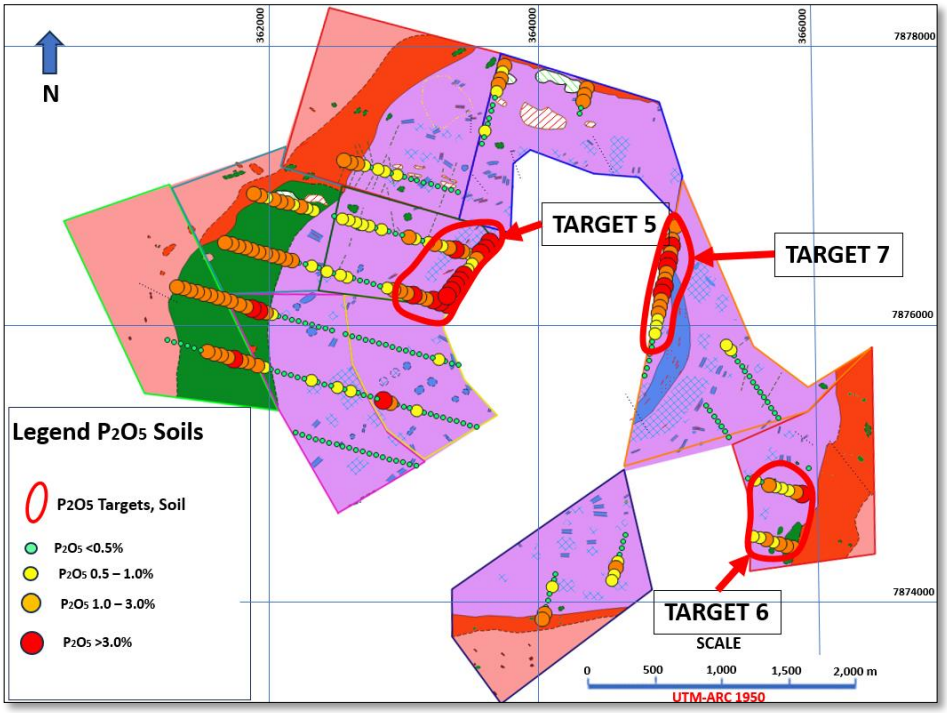
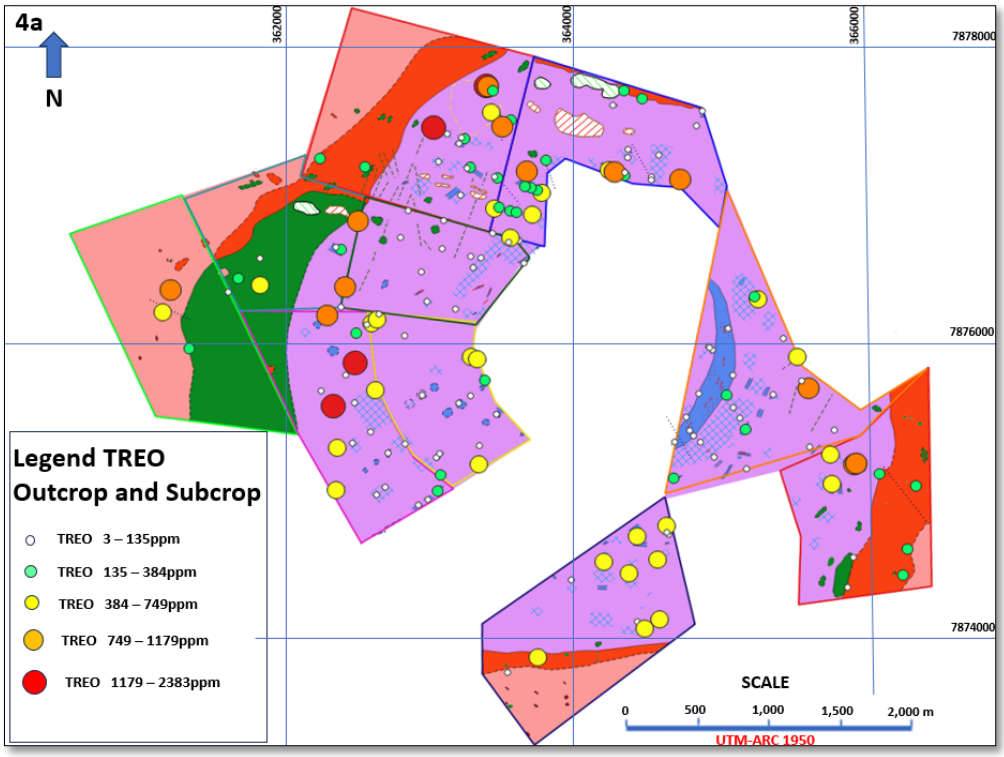


Figure 3: *Soil P_2O_5 assay results, as well as the hard-rock P_2O_5 targets generated within the 10 Wickbury Mining Claims.*



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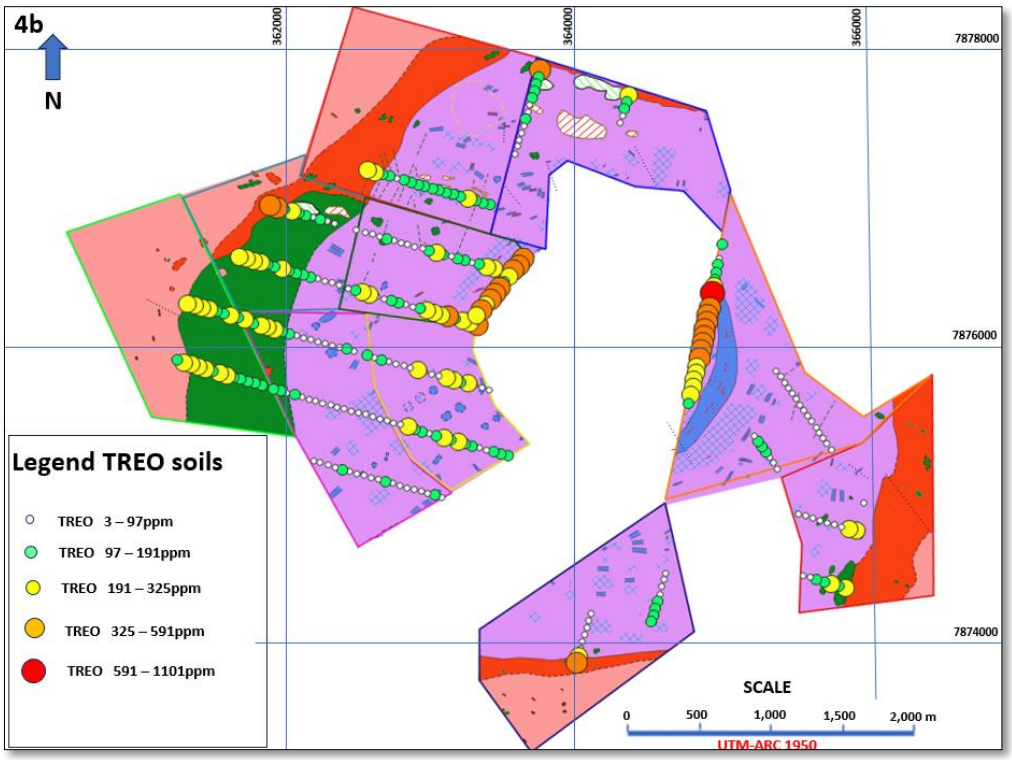
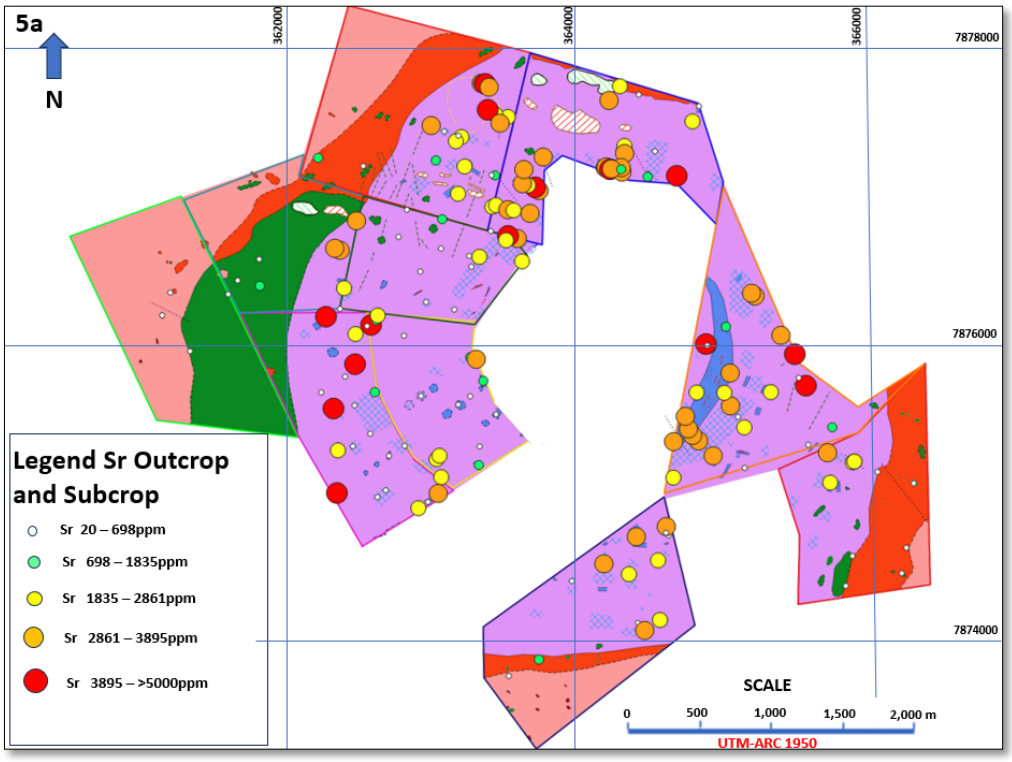


Figure 4: *a) Total rare earth oxide (TREO) assay results from outcrop / subcrop samples; b) TREO assay results from soil samples in the Wickbury claims.*



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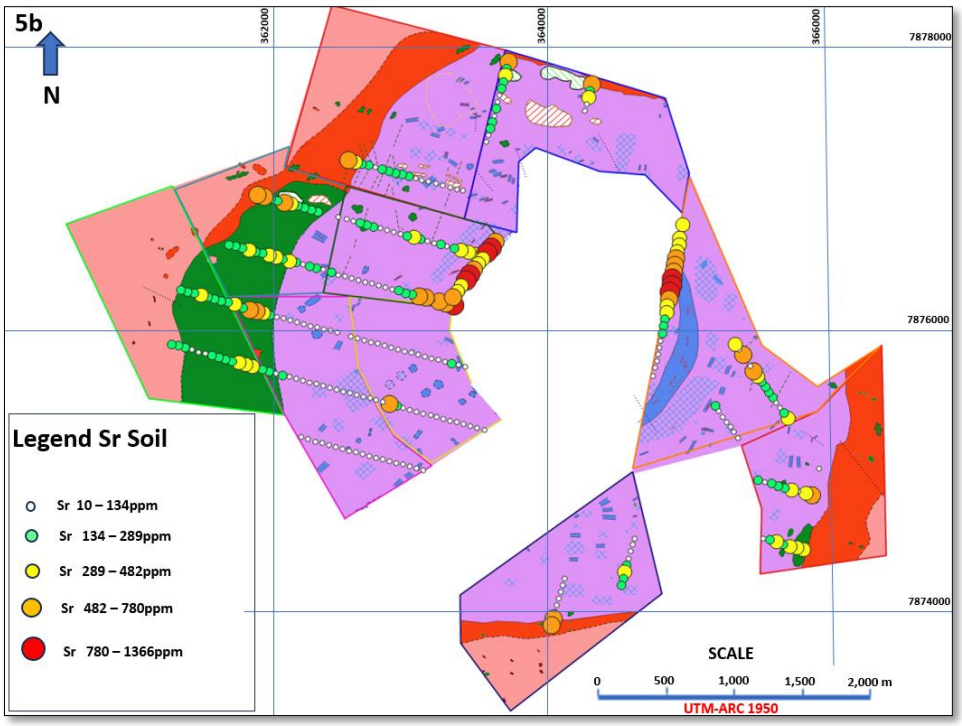

Figure 5: *a) Strontium (Sr) assay results from outcrop and subcrop samples; b) Strontium (Sr) assay results from soil samples in the Wickbury claims.*

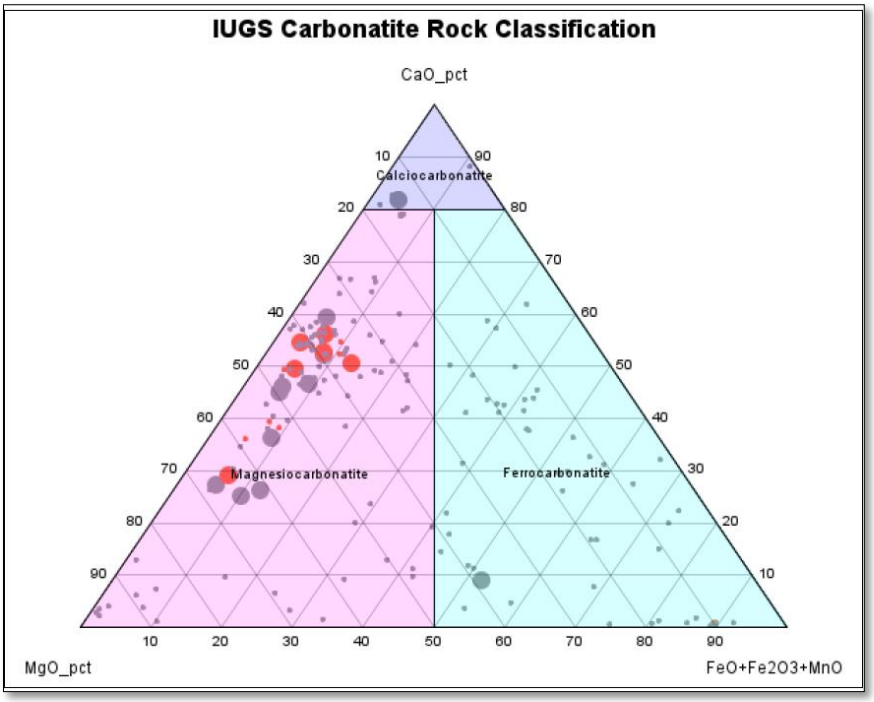

Figure 6: *Standard carbonatite plot with all data shown in orange as the >90% Mn (very limited in terms of occurrence and all within the same population) and the size of the point is >90% Nd (Nd >113 ppm).*

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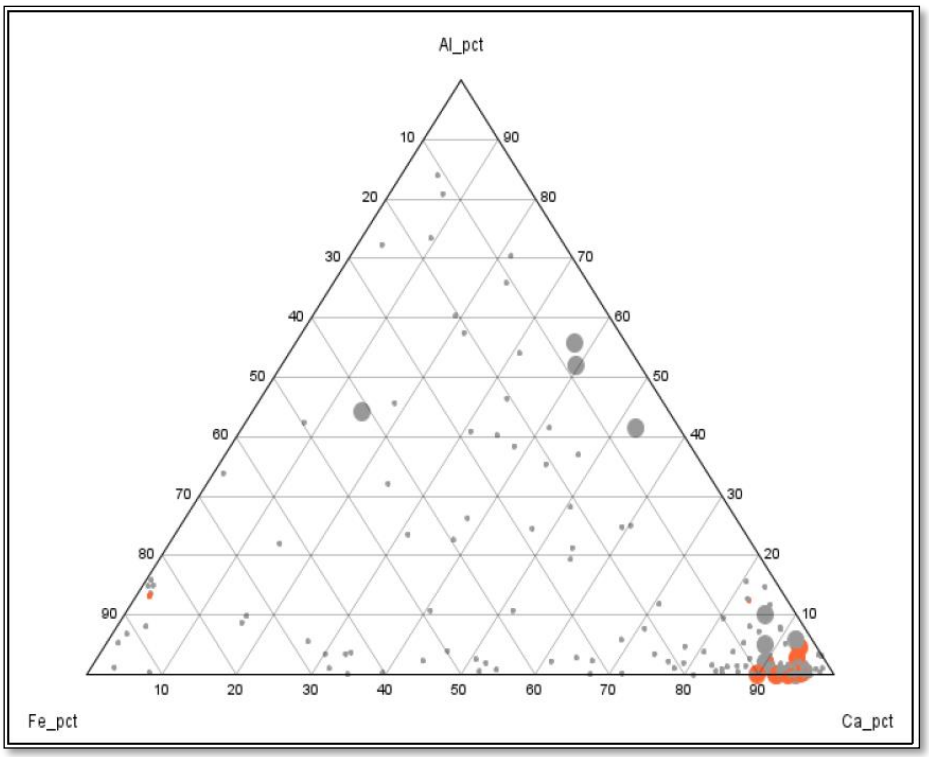

Figure 7: *Plot showing clear control of REE (using Nd as large circle) with Ca enriched lithologies as well as importantly Mn enrichment (orange coloured points).*

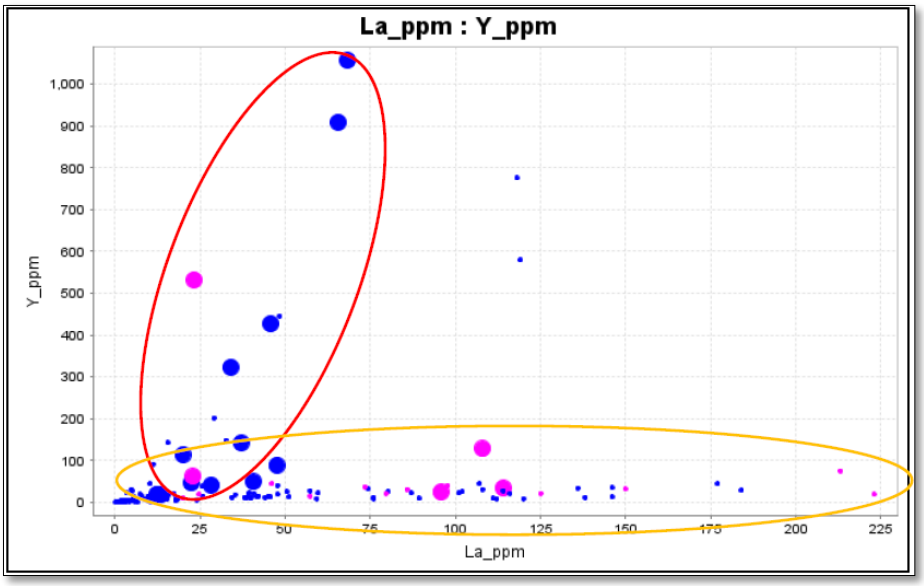

Figure 8: *In this LREE vs. HREE (La vs. Y) plot colour is Th and size is Dy; showing two mineralogical controls. These are regarded to indicate the presence of monazite (indicated in orange) and xenotime (indicated in red).*

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Table 1: Summary analytical results from SGS for all outcrop and subcrop samples

SAMPLE DESCRIPTION	TREO ppm	MREO ppm	NdPr oxides ppm	TbDy oxides ppm	P2O5 %	Nb2O5 mg/kg	Ba mg/kg	Fe %	Mg %	Sr mg/kg
X4101	560	128	123	4	0.07	16	719	5.54	12.14	2640
X4102	167	40	35	6	0.41	96	339	1.85	10.50	2408
X4103	385	94	85	10	0.02	47	8265	2.77	11.05	3032
X4104	258	58	49	9	0.05	51	9194	0.92	11.60	2697
X4105	545	128	119	9	0.05	5	442	0.62	13.66	3009
X4106	559	134	123	11	0.05	7	911	0.53	10.87	2923
X4107	352	64	38	26	**8.20**	5	1042	0.24	4.46	4395
X4108	292	75	60	15	**9.66**	11	912	6.69	2.02	2304
X4109	252	57	45	12	0.44	<2	832	0.40	3.68	3282
X4111	317	83	77	6	0.05	5	315	0.73	14.44	3052
X4112	464	114	110	4	0.27	8	434	1.89	11.42	3777
X4113	311	79	73	6	0.85	9	503	0.96	12.14	3724
X4114	410	119	115	4	1.69	6	563	0.67	14.43	4128
X4115	255	66	63	3	0.05	5	129	1.56	13.41	3057
X4116	11	2	2	0	0.02	53	225	24.27	5.71	290
X4118	123	25	22	3	0.05	24	105	<0.01	11.61	2383
X4121	102	23	22	2	1.05	23	459	3.15	0.92	299
X4122	26	3	2	1	0.27	5	558	9.08	4.51	224
X4123	22	1	1	0	0.07	24	620	10.20	5.70	1175
X4124	234	54	50	4	1.35	13	1226	2.05	1.12	536
X4125	68	14	11	3	<0.02	44	85	0.51	13.34	2104
X4126	83	19	16	3	0.80	658	159	1.56	11.12	3027
X4127	26	5	4	1	0.07	10	139	2.40	9.85	2978
X4129	29	7	5	1	<0.02	<2	60	0.77	10.58	3416
X4131	204	46	32	14	0.05	3	214	0.36	11.08	2224
X4132	**1140**	274	265	9	1.19	5	809	1.50	13.54	3371
X4133	**1065**	207	81	126	**7.97**	13	1219	0.67	3.52	3472
X4134	**1250**	268	104	164	1.12	<2	461	0.73	9.43	3508
X4135	**1795**	373	188	184	1.10	3	243	0.85	11.04	3895
X4136	**1205**	198	76	122	**9.69**	19	446	1.41	7.71	4807
X4137	263	45	21	24	0.07	7	179	0.08	11.93	3299
X4138	194	33	29	4	0.02	4	199	0.84	13.24	2498
X4141	127	29	23	6	0.05	20	194	0.90	12.47	2465
X4142	484	106	44	62	1.90	8	313	<0.01	9.74	4349
X4143	784	167	148	19	0.07	9	89	1.78	11.77	3038
X4144	**2371**	508	241	267	**3.53**	13	259	1.20	10.08	3290
X4145	215	41	37	4	0.05	92	149	1.39	11.88	2133
X4146	98	22	17	5	0.14	5	174	0.71	11.48	2316
X4147	361	89	69	21	**9.32**	37	857	**>25.00**	3.84	1505
X4148	290	48	45	3	0.18	314	144	4.36	9.97	1218
X4149	73	15	12	3	<0.02	74	134	0.63	10.90	2664
X4251	393	83	58	24	**7.14**	3	1324	4.53	12.24	2386
X4252	58	10	4	5	0.50	8	556	13.92	3.21	74
X4253	10	2	2	0	0.41	90	219	**>25.00**	4.67	70
X4254	8	2	2	0	0.05	71	45	**>25.00**	4.89	25
X4256	2	0	0	0	0.02	<2	35	0.26	>25.00	35
X4257	607	142	130	12	0.05	14	4613	0.76	14.18	3774
X4258	9	2	1	0	0.05	11	8313	4.38	6.00	983
X4265	7	1	1	0	0.09	11	6155	3.94	6.57	951
X4266	71	21	19	2	0.07	3	1208	1.05	11.11	3514
X4267	46	12	11	1	0.37	22	248	9.90	4.96	888
X4268	16	4	3	0	0.07	14	89	5.31	7.36	2239
X4269	11	2	2	0	0.11	43	318	4.76	10.69	2112
X4271	28	5	4	1	0.14	24	14195	3.24	6.70	1252
X4272	29	7	6	1	0.69	8	312	3.47	10.65	4148
X4273	37	13	12	1	0.23	92	583	18.00	9.00	618
X4274	331	96	87	8	0.05	6	319	1.01	18.78	2861
X4275	9	2	2	0	0.09	<2	298	6.77	3.77	204
X4276	65	17	15	2	0.07	5	209	1.92	10.91	3833
X4277	245	60	47	13	**9.34**	22	322	15.41	5.31	2267

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SAMPLE DESCRIPTION	TREO ppm	MREO ppm	NdPr oxides ppm	TbDy oxides ppm	P2O5 %	Nb2O5 mg/kg	Ba mg/kg	Fe %	Mg %	Sr mg/kg
X4278	24	3	2	0	0.32	9	>50000	0.74	7.10	1869
X4281	37	10	8	1	0.02	2	3471	0.77	11.98	3855
X4282	9	2	2	0	0.05	17	154	1.92	10.75	3513
X4283	39	9	8	1	0.02	3	124	0.85	11.12	3204
X4284	80	24	22	2	0.05	12	188	1.87	12.57	3462
X4285	38	9	7	2	0.05	30	149	3.02	10.17	3671
X4286	62	13	11	2	0.02	47	5493	2.74	11.94	3408
X4287	223	47	43	4	0.05	26	1597	0.78	16.98	2418
X4288	**1074**	337	298	39	**7.79**	23	1999	1.07	12.57	>5000
X4289	755	221	207	14	**7.28**	101	3713	0.99	11.69	>5000
X4291	137	41	38	3	1.01	6	154	0.96	12.00	2935
X4292	451	106	98	8	**3.57**	62	868	0.91	11.11	3164
X4293	180	36	32	4	0.07	30	273	0.76	13.91	2949
X4294	15	4	3	0	0.07	184	2123	1.16	12.00	3180
X4295	280	68	60	8	0.14	35	888	0.71	17.12	2634
X4296	577	140	128	12	0.07	12	2587	0.50	11.62	4226
X4297	138	40	33	6	**5.43**	20	99	1.06	5.24	1450
X4298	93	22	14	8	0.09	41	812	1.42	12.06	2729
X4151	123	32	26	6	**3.89**	13	90	2.71	7.48	1663
X4152	120	28	27	1	0.02	46	75	1.15	11.72	2699
X4153	247	51	35	16	**6.18**	31	342	0.40	0.05	947
X4154	245	58	53	5	1.92	20	1452	2.27	2.76	624
X4155	191	38	29	9	2.06	12	300	1.33	6.78	3007
X4156	35	9	8	1	0.05	25	60	0.95	10.07	2937
X4157	85	21	18	3	1.44	19	89	5.06	4.37	357
X4161	465	105	96	9	2.36	7	626	2.88	1.97	909
X4162	229	51	47	4	1.79	28	460	4.31	3.47	380
X4163	92	22	19	3	2.06	20	84	3.09	3.30	387
X4165	590	133	125	8	0.41	60	833	1.16	0.11	319
X4166	228	57	51	7	1.24	138	223	6.65	4.32	426
X4167	408	126	115	11	0.07	42	11721	0.71	18.28	1835
X4168	391	104	94	10	0.07	41	304	0.98	11.41	2749
X4169	161	42	35	7	0.05	23	322	1.30	10.47	2961
X4171	8	2	2	0	0.05	20	55	0.13	>25.00	60
X4172	70	18	15	3	0.09	22	105	2.23	12.72	2228
X4173	100	26	21	5	0.07	30	199	0.69	14.24	2742
X4174	136	37	31	6	0.05	26	193	0.58	12.79	2440
X4175	24	5	4	1	0.11	15	105	9.59	3.44	25
X4176	7	1	1	0	0.05	7	25	0.86	3.52	20
X4177	277	99	94	5	0.07	7	868	0.58	15.53	1622
X4178	5	1	1	0	0.05	18	100	1.16	23.43	65
X4181	521	161	154	7	0.05	4	1221	0.80	14.52	4855
X4182	497	184	176	8	0.07	6	484	0.71	17.78	1650
X4183	708	266	255	12	0.07	6	363	0.85	14.61	2927
X4184	619	145	66	79	1.24	4	239	0.65	11.05	2590
X4185	21	5	3	2	0.02	5	45	0.15	24.88	60
X4186	10	2	1	1	0.05	4	70	2.47	19.48	75
X4187	495	104	99	5	0.09	12	413	1.09	15.39	1257
X4188	8	2	1	0	0.05	3	80	0.75	23.17	89
X4189	**2545**	477	162	315	**10.99**	10	854	0.56	3.63	>5000
X4191	**2094**	385	104	281	**17.01**	8	2590	0.88	3.97	>5000
X4192	536	128	85	43	**9.48**	12	1369	0.43	7.43	4940
X4193	668	160	149	10	0.25	27	160	1.52	14.88	1655
X4194	80	18	12	6	0.41	4	145	1.14	12.90	2003
X4195	830	158	60	98	**17.24**	12	3355	0.86	3.69	>5000
X4196	107	22	19	3	2.04	10	542	1.00	0.62	512
X4197	481	109	101	8	**5.93**	8	901	3.17	2.43	1300
X4198	12	3	3	0	0.02	4	70	0.24	23.85	115
X4201	587	169	161	8	0.18	45.7	12383	1.34	15.10	3754
X4202	565	165	159	6	0.09	44.6	4143	0.88	18.68	3639

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SAMPLE DESCRIPTION	TREO ppm	MREO ppm	NdPr oxides ppm	TbDy oxides ppm	P2O5 %	Nb2O5 mg/kg	Ba mg/kg	Fe %	Mg %	Sr mg/kg
X4203	541	225	216	9	0.05	65.7	2981	0.85	18.80	2413
X4204	284	75	54	22	0.66	14.7	743	1.63	10.89	2772
X4205	483	131	125	7	0.07	29.5	284	3.28	13.41	2647
X4206	6	1	1	0	<0.02	0.2	94	0.32	>25.00	94
X4207	535	144	138	7	0.11	31.4	5915	1.11	15.32	3628
X4208	4	1	1	0	0.02	0.2	30	7.84	>25.00	35
X4209	689	173	166	7	0.09	23.7	273	0.54	11.82	3505
X4211	**1195**	311	300	11	0.05	53.8	880	1.20	11.64	2202
X4212	962	266	259	7	0.05	41.7	269	0.84	10.73	2440
X4213	801	220	214	6	0.05	37.5	1768	0.63	12.90	2408
X4214	277	57	54	4	1.83	8.4	352	3.23	2.81	655
X4215	223	45	43	2	1.63	6	573	4.92	3.29	698
X4216	716	194	188	6	0.07	47.3	6914	2.04	10.92	2278
X4217	284	60	52	8	1.44	12.3	1220	1.32	0.83	685
X4218	212	36	32	4	1.53	5.6	1214	4.08	1.60	577
X4221	146	30	27	2	1.44	4.6	179	4.58	4.37	467
X4222	40	3	3	0	0.16	0.6	10372	18.35	3.78	253
X4223	77	10	8	2	0.32	2.1	5372	6.26	9.44	932
X4224	11	1	1	0	0.02	0.2	40	0.91	19.58	40
X4225	64	2	1	0	0.05	0.3	115	**>25.00**	9.64	65
X4226	90	9	8	1	0.37	1.3	1418	20.74	2.67	75
X4227	50	6	6	1	<0.02	0.8	20	0.42	0.02	55
X4228	114	18	11	7	0.96	3.2	6607	9.52	9.90	607
X4229	28	2	1	0	0.21	0.3	335	5.23	9.92	65
X4231	117	12	8	4	0.87	2.5	11396	2.78	13.11	678
X4232	82	2	2	0	0.07	0.3	184	**>25.00**	4.46	50
X4233	102	3	2	0	0.05	0.4	64	**>25.00**	4.49	30
X4234	34	2	2	0	0.11	0.5	194	7.80	12.33	105
X4235	36	6	5	1	0.25	1.1	303	7.50	11.17	144
X4236	76	12	7	5	0.55	2.6	44782	3.98	5.18	680
X4237	22	2	1	0	0.07	0.4	12849	8.43	4.00	168
X4238	40	2	1	0	0.07	0.4	37166	2.02	2.58	433
X4241	96	12	12	0	0.09	1.5	229	7.70	14.56	100
X4242	50	3	3	0	0.02	0.4	40	**>25.00**	6.66	35
X4243	25	2	2	0	0.02	0.3	145	18.62	10.24	25
X4244	93	16	15	1	0.02	3	159	6.11	18.05	233
X4245	55	2	2	0	0.07	0.4	179	20.23	11.40	164
X4246	25	3	2	0	0.07	0.4	130	4.65	13.67	115
X4247	62	2	2	0	0.02	0.3	119	6.38	14.33	139
X4248	39	1	1	0	0.05	0.2	30	1.37	19.64	20
X4249	9	1	1	0	0.07	0.3	194	7.78	10.34	80
X4301	21	5	4	1	0.05	25	NR	3.95	10.80	2378
X4302	43	11	10	1	0.07	33	NR	3.23	10.55	2210

Total rare earth oxides >1,000ppm

P_2O_5 >3%

Fe >25% (detection limit)

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Table 2: Summary analytical results from SGS for all soil samples

SAMPLE DESCRIPTION	TREO ppm	MREO ppm	NdPr oxides ppm	TbDy oxides ppm	P2O5 %	Nb2O5 mg/kg	Ba mg/kg	Fe %	Mg %	Sr mg/kg
P7458	47	10	7	2	0.23	25	278	18.50	9.37	45
P7461	38	9	8	1	0.25	136	448	24.07	4.99	15
P7462	42	10	9	1	0.21	35	920	21.56	5.21	284
P7463	88	20	17	3	0.21	76	652	17.35	8.49	269
P7464	74	17	14	3	0.27	56	596	16.15	9.74	253
P7465	59	13	10	2	0.37	47	1007	14.80	6.80	218
P7466	66	15	9	6	0.50	32	924	6.79	10.28	420
P7467	21	5	4	1	0.27	15	4041	7.69	7.23	681
P7468	22	4	3	1	0.27	12	7802	15.39	6.24	50
P7469	44	9	7	2	0.23	32	22345	10.68	5.23	60
P7471	19	5	4	1	0.23	21	1087	6.60	10.43	613
P7472	75	17	12	5	0.53	45	6152	10.95	7.99	125
P7473	67	15	9	6	0.66	34	1822	5.42	12.87	392
P7493	46	10	9	2	0.23	43	323	11.65	8.92	35
P7494	73	18	15	2	0.30	69	387	17.32	6.35	25
P7495	59	13	11	2	0.39	82	273	17.14	8.63	60
P7496	105	26	23	4	0.23	134	389	21.02	3.54	40
P7497	105	24	21	3	0.44	128	349	18.61	5.80	80
P7498	137	34	29	5	0.50	124	399	19.13	6.24	65
P7501	53	13	11	2	0.27	37	287	12.79	7.43	149
P7518	116	28	23	5	**1.28**	124	1233	13.32	7.73	388
P7522	7	2	1	0	**2.70**	5	1410	16.06	5.14	432
P7523	159	40	33	7	**3.44**	4	1673	14.84	4.97	478
P7524	164	41	34	7	**2.15**	7	1127	18.61	5.78	333
P7525	133	34	28	7	**5.34**	156	623	19.68	4.19	494
P7526	286	73	62	11	**4.67**	278	638	21.11	4.66	533
P7527	**596**	150	133	16	**2.61**	368	852	23.76	3.75	672
P7528	**1108**	295	267	29	**1.42**	747	3091	**>25.00**	2.01	1366
P7529	365	99	85	14	**5.61**	479	2642	**>25.00**	3.18	988
P7531	353	95	84	12	**3.48**	919	1736	**>25.00**	2.12	982
P7532	375	96	86	10	**1.26**	722	1469	**>25.00**	3.59	762
P7533	446	122	110	12	**1.19**	605	2859	**>25.00**	3.12	466
P7534	**509**	139	124	15	**1.12**	633	2019	**>25.00**	3.27	451
P7535	463	130	115	15	0.92	770	4359	22.90	2.69	263
P7536	406	110	96	14	0.69	526	4075	22.79	3.40	284
P7537	497	128	113	15	0.87	543	1537	**>25.00**	2.51	249
P7538	200	45	39	6	0.30	253	695	**>25.00**	2.12	79
P7541	214	50	43	7	0.34	274	632	23.03	2.54	65
P7542	230	54	45	8	0.37	216	685	**>25.00**	2.74	79
P7543	236	53	44	9	0.37	210	734	24.64	2.08	79
P7544	221	55	46	9	0.30	225	754	23.51	1.51	99
P7545	185	45	38	8	0.39	175	653	23.37	3.07	110
P7581	155	41	35	6	0.62	43	387	15.36	5.53	348
P7582	193	49	41	8	**2.73**	55	323	20.05	2.86	427
P7583	205	53	45	8	**4.10**	142	452	17.22	2.84	343
P7584	116	30	26	4	**1.65**	120	604	17.06	3.23	145
P7585	90	24	21	3	0.80	77	589	11.73	7.58	95
P7586	125	33	28	5	**1.10**	99	917	18.05	4.89	160
P7587	117	31	27	5	0.87	83	861	18.91	5.07	119
P7588	84	20	15	5	0.41	74	1212	14.17	5.28	84
P7589	126	29	18	11	0.57	77	2158	14.46	6.62	210
P7591	244	55	30	25	**1.08**	88	1430	10.46	7.05	462
P7592	123	27	18	9	0.50	50	2617	13.26	5.83	258
P7593	26	6	5	1	0.16	25	2326	9.67	2.74	40
P7594	39	8	7	2	0.23	21	1711	12.69	3.64	50
P7595	38	8	6	2	0.60	17	1498	10.70	3.13	50
P7596	43	9	7	2	0.48	27	1364	11.13	4.62	79
P7597	96	18	11	7	0.78	76	1665	13.02	6.98	244
P7598	114	21	12	9	0.92	41	1809	11.33	6.15	268
P7601	57	13	10	3	0.71	31	636	11.66	5.39	179

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SAMPLE DESCRIPTION	TREO ppm	MREO ppm	NdPr oxides ppm	TbDy oxides ppm	P2O5 %	Nb2O5 mg/kg	Ba mg/kg	Fe %	Mg %	Sr mg/kg
P7602	77	17	13	3	0.53	35	833	11.31	4.74	100
P7603	71	15	12	3	0.69	31	691	13.45	4.85	134
P7604	57	11	9	2	0.37	30	808	11.26	4.55	84
P7627	369	104	89	15	8.04	65	322	>25.00	2.61	917
P7628	298	85	73	11	3.80	99	432	21.55	3.83	511
P7629	295	83	71	12	5.61	167	501	20.66	3.15	640
P7631	180	48	42	5	1.17	72	290	16.85	8.87	123
P7632	445	112	97	15	2.89	166	434	22.54	2.59	549
P7633	309	82	70	12	5.50	126	372	21.19	2.17	542
P7634	226	57	50	7	1.44	127	894	12.34	5.94	198
P7635	214	52	44	8	1.72	143	633	17.08	4.22	213
P7636	168	41	34	6	1.42	107	542	16.38	4.28	170
P7637	95	21	18	3	0.60	52	319	18.81	4.90	57
P7638	93	21	18	3	0.44	59	299	19.88	3.44	38
P7641	150	36	31	4	0.37	82	476	19.20	5.35	42
P7642	138	31	27	4	0.39	87	373	18.46	5.31	33
P7643	71	15	13	3	0.27	35	357	19.62	3.84	33
P7644	79	17	12	4	0.46	26	1205	18.48	3.87	28
P7645	249	47	25	22	0.82	55	689	17.01	4.74	104
P7646	199	38	24	14	0.66	74	605	20.63	5.00	94
P7647	125	22	15	7	0.32	61	2021	17.95	5.32	71
P7648	69	14	11	3	0.55	98	254	10.77	9.92	147
P7668	411	104	87	17	6.32	208	368	19.30	5.27	780
P7669	437	109	92	18	5.98	208	393	24.27	5.31	879
P7671	420	113	97	16	4.12	217	408	17.30	5.15	827
P7672	194	51	44	7	1.03	193	442	12.02	7.42	481
P7673	152	42	37	5	0.80	127	343	14.14	5.65	330
P7674	418	114	101	13	0.98	164	444	17.40	5.23	677
P7675	544	149	128	21	8.02	179	407	21.68	3.36	1164
P7676	361	90	76	15	6.76	119	378	21.91	3.71	813
P7677	232	57	48	8	3.32	109	382	19.00	4.16	391
P7678	473	139	125	15	4.99	120	493	18.92	4.99	463
P7681	238	62	52	10	5.75	95	273	22.93	3.62	589
P7682	329	73	59	14	1.63	38	883	7.29	3.30	646
P7683	128	27	19	8	0.89	80	952	9.64	5.61	137
P7684	151	34	23	11	1.56	29	953	8.76	4.71	302
P7685	132	27	16	11	1.05	33	649	7.01	5.02	231
P7686	105	22	11	11	0.62	24	594	6.66	5.58	199
P7687	54	12	7	4	0.44	36	738	7.71	5.11	127
P7688	81	20	16	4	0.18	33	1086	12.34	5.85	99
P7689	167	40	32	8	0.44	115	1038	12.35	8.00	204
P7691	40	9	7	2	0.16	23	1628	11.45	5.07	57
P7692	32	7	5	2	0.30	18	972	9.72	6.94	137
P7693	50	10	6	4	0.66	18	1311	10.98	8.39	236
P7694	82	17	8	9	0.18	22	2063	11.46	8.04	104
P7695	42	9	7	2	0.14	28	1195	11.79	7.88	94
P7722	261	59	46	14	2.18	27	369	6.99	4.48	564
P7723	158	35	28	7	1.05	36	452	8.41	4.23	241
P7724	135	31	25	6	1.56	50	638	12.47	6.29	322
P7725	20	4	3	1	0.14	67	195	8.43	6.47	115
P7726	48	14	12	1	0.18	63	558	8.72	7.47	120
P7769	124	29	24	5	0.23	97	1196	10.73	9.92	75
P7771	111	26	20	6	0.23	94	1044	10.58	10.15	70
P7772	98	26	23	3	0.11	66	1557	5.62	13.27	60
P7773	199	49	44	5	0.37	95	491	19.74	8.63	50
P7774	116	29	26	2	0.05	89	259	11.03	11.69	30
P7775	138	32	26	6	0.21	89	2734	10.78	10.28	100
P7776	116	26	22	4	0.09	66	1404	13.21	8.89	79
P7777	119	26	21	5	0.11	76	1275	10.48	10.20	80
P7778	120	25	17	8	0.41	57	2911	8.84	10.24	174

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SAMPLE DESCRIPTION	TREO ppm	MREO ppm	NdPr oxides ppm	TbDy oxides ppm	P2O5 %	Nb2O5 mg/kg	Ba mg/kg	Fe %	Mg %	Sr mg/kg
P7781	107	22	14	8	0.57	48	2495	6.64	10.49	263
P7782	144	32	19	14	0.41	54	909	10.94	9.89	154
P7783	125	26	15	11	0.55	55	2017	11.28	8.78	164
P7784	135	30	18	12	0.76	55	4104	8.97	8.43	239
P7785	94	22	15	7	0.48	31	823	10.52	7.45	115
P7786	140	31	24	7	0.78	41	637	10.11	6.23	179
P7787	149	33	26	7	1.19	33	900	7.42	3.62	269
P7788	207	49	41	7	1.83	41	748	8.68	1.93	354
P7789	266	63	55	8	2.63	26	595	10.35	2.20	526
P7791	97	22	18	4	0.80	18	844	6.24	4.15	180
P7792	95	21	16	5	0.71	21	1426	6.04	2.54	169
P7793	157	35	26	9	1.08	32	622	8.82	2.42	284
P7794	98	24	19	4	0.94	19	804	7.88	2.13	180
P7795	180	41	34	7	1.95	41	629	7.03	2.54	379
P7796	183	44	36	7	1.26	20	654	7.94	2.35	564
P7797	232	54	47	6	1.37	36	559	7.95	1.48	269
P7798	170	39	34	5	0.87	25	447	9.55	2.11	199
P7801	346	78	69	9	2.95	65	612	8.41	1.82	547
P7802	342	79	70	9	1.53	36	599	13.02	2.08	524
P7815	34	7	5	2	0.25	26	229	10.42	11.20	85
P7816	36	8	6	2	0.53	29	330	8.33	5.39	160
P7817	24	5	4	1	0.32	10	579	5.82	4.39	140
P7818	29	7	5	1	0.41	67	264	7.82	3.12	90
P7821	99	23	19	4	1.35	33	1204	8.54	4.33	249
P7822	142	29	22	7	2.13	37	1276	9.38	3.07	333
P7823	132	26	19	7	1.44	34	927	14.04	3.36	204
P7824	172	37	31	6	1.81	28	779	8.22	1.80	405
P7825	209	45	40	6	2.13	33	420	9.34	1.42	400
P7826	144	32	28	4	1.90	32	398	11.00	1.24	239
P7827	167	37	33	4	1.99	72	508	10.69	1.31	239
P7828	257	54	48	6	1.99	39	609	10.42	1.14	334
P7829	261	55	49	6	1.63	40	594	9.21	0.88	255
P7831	273	55	49	6	1.56	42	696	10.27	0.94	263
P7832	264	50	44	6	1.15	45	903	8.86	0.98	230
P7869	38	12	11	1	0.14	47	NR	8.57	12.35	65
P7871	51	16	14	2	0.14	95	NR	21.83	6.76	20
P7872	61	16	14	2	0.27	35	NR	14.16	7.97	169
P7873	234	73	67	7	0.57	251	NR	24.89	7.14	70
P7874	140	44	40	4	0.32	125	NR	15.39	8.53	99
P7875	210	73	68	5	0.48	161	NR	18.76	7.14	60
P7876	201	63	58	5	0.39	151	NR	20.03	5.49	30
P7877	71	20	18	2	0.46	54	NR	20.32	6.35	40
P7878	43	14	13	1	0.21	20	NR	10.36	10.08	20
P7881	95	31	29	2	0.25	28	NR	16.14	8.83	<10
P7882	301	106	101	5	0.18	103	NR	13.52	10.61	50
P7883	89	23	21	3	0.27	45	NR	8.10	11.99	55
P7884	40	12	10	1	0.18	34	NR	15.20	9.01	<10
P7885	49	14	13	1	0.25	28	NR	20.41	5.29	<10
P7886	86	23	20	2	0.25	47	NR	19.28	4.54	20
P7887	136	31	26	5	0.50	38	NR	18.99	4.87	45
P7888	3	1	1	0	0.23	31	NR	20.94	3.14	<10
P7912	136	39	36	3	0.16	182	NR	>25.00	4.58	30
P7913	116	35	33	2	0.21	92	NR	17.85	8.20	55
P7914	157	43	39	4	0.27	204	NR	>25.00	4.24	60
P7915	60	16	14	2	0.11	50	NR	19.84	6.31	<10
P7916	43	11	10	1	0.11	29	NR	14.28	9.54	<10
P7917	125	31	29	3	0.25	175	NR	>25.00	3.02	30
P7918	125	32	28	4	0.21	79	NR	22.28	6.14	25
P7921	286	77	73	5	0.11	138	NR	17.89	6.25	35
P7922	140	38	34	3	0.21	92	NR	17.68	4.85	25

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SAMPLE DESCRIPTION	TREO ppm	MREO ppm	NdPr oxides ppm	TbDy oxides ppm	P2O5 %	Nb2O5 mg/kg	Ba mg/kg	Fe %	Mg %	Sr mg/kg
P7923	303	90	82	8	0.80	144	NR	17.27	5.42	109
P7924	106	27	24	3	0.14	63	NR	9.88	10.69	30
P7925	69	18	16	2	0.11	35	NR	11.99	7.43	15
P7926	101	23	18	5	0.44	44	NR	17.79	4.69	104
P7927	182	40	31	9	**1.19**	46	NR	17.95	5.72	209
P7928	252	56	46	10	**4.95**	61	NR	22.98	3.55	569
P7929	43	10	8	2	0.27	20	NR	15.45	5.68	<10
P7931	69	16	13	3	0.30	25	NR	18.61	4.72	20
P7949	142	27	20	8	0.46	49	NR	21.40	5.13	40
P7952	71	15	9	6	0.34	29	NR	20.10	8.37	<10
P7953	127	25	17	8	0.41	61	NR	18.72	5.79	45
P7954	41	9	7	2	0.16	21	NR	14.11	8.74	15
P7955	57	12	8	4	0.25	24	NR	10.72	11.54	75
P7956	76	18	14	4	0.25	37	NR	11.52	8.90	115
P7957	50	10	8	3	0.23	21	159	11.24	9.99	55
P7958	74	17	12	5	0.46	26	214	13.15	9.68	94
P7961	82	19	15	4	0.34	30	269	15.11	8.10	60
P7962	66	15	13	3	0.37	20	254	14.70	9.34	65
P7963	136	32	26	5	0.71	51	425	18.37	3.82	105
P7964	168	39	32	7	**1.44**	50	478	12.85	3.64	254
P7965	249	57	48	9	**3.07**	56	521	10.90	2.59	482
P7966	292	69	59	10	**3.62**	40	434	9.29	1.94	683
P7967	266	62	54	9	**1.49**	28	444	9.92	1.59	599
P7968	191	43	35	8	**1.10**	48	888	11.15	3.50	243
P7969	288	65	57	8	**1.42**	34	569	7.58	1.02	319
P7991	33	7	5	2	0.32	19	120	5.87	13.45	70
P7992	85	20	15	5	0.48	33	533	14.92	5.18	45
P7993	63	13	10	3	0.55	25	4916	13.93	4.32	60
P7994	51	11	9	2	0.44	50	497	17.04	6.91	55
P7995	93	20	15	5	0.53	44	899	15.70	5.14	70
P7996	64	13	9	4	0.27	24	492	16.38	6.31	35
P7997	34	7	5	2	0.25	22	382	17.78	7.31	25
P7998	70	13	7	5	0.39	28	223	16.27	7.83	59
U7001	64	12	7	5	0.55	27	244	14.77	9.57	60
U7002	55	12	10	2	0.25	30	253	21.45	6.98	25
U7003	15	3	2	1	0.11	20	140	10.86	11.14	25
U7004	36	7	5	2	0.32	68	209	15.01	8.48	35
U7005	22	5	4	1	0.23	20	160	10.99	10.80	35
U7006	101	22	18	4	0.34	64	234	13.51	9.52	169
U7007	64	14	11	3	0.39	63	269	12.96	8.84	65
U7008	97	21	16	4	0.76	107	647	10.90	5.18	144
U7009	107	24	20	4	**1.28**	24	1326	10.28	2.19	154
U7031	33	8	7	1	0.14	25	210	15.40	7.58	20
U7032	109	26	23	3	0.18	93	278	15.93	7.91	109
U7033	39	9	8	1	0.09	21	189	16.79	6.26	15
U7034	48	11	10	2	0.18	30	329	19.89	3.86	<10
U7035	90	21	18	3	0.21	74	253	18.72	5.00	45
U7036	73	16	13	3	0.14	23	193	22.30	3.90	20
U7037	56	13	11	2	0.16	37	293	19.76	4.51	30
U7038	66	17	15	2	0.34	31	354	18.39	3.86	20
U7041	113	28	26	2	0.14	46	220	16.36	7.01	25
U7042	57	12	10	2	0.16	37	269	17.48	5.01	25
U7043	46	10	9	1	0.16	34	260	17.86	5.73	<10
U7044	75	17	14	3	0.21	41	229	23.93	2.89	25
U7045	49	11	9	2	0.16	24	304	14.76	8.11	25
U7046	82	19	16	3	0.25	48	315	23.94	4.43	25
U7047	171	39	32	7	0.37	57	204	9.00	12.52	130
U7048	21	5	4	1	0.16	14	140	15.20	9.58	<10
U7049	70	16	13	3	0.32	36	160	14.64	7.71	45
U7051	34	8	7	1	0.18	21	159	13.36	9.56	30

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SAMPLE DESCRIPTION	TREO ppm	MREO ppm	NdPr oxides ppm	TbDy oxides ppm	P2O5 %	Nb2O5 mg/kg	Ba mg/kg	Fe %	Mg %	Sr mg/kg
U7052	64	16	13	3	0.21	35	164	15.62	8.39	35
U7074	181	40	35	5	1.37	36	432	8.15	0.90	179
U7075	197	45	39	5	1.60	25	440	8.71	0.91	250
U7076	193	40	35	5	1.19	22	375	10.79	1.50	200
U7077	155	35	31	5	1.31	24	428	9.49	1.08	184
U7078	247	55	48	7	2.27	50	544	8.65	0.91	340
U7081	306	75	68	7	1.12	79	574	10.60	1.05	220
U7082	323	67	59	8	1.69	36	574	16.18	0.75	269
U7083	280	61	55	6	1.03	72	739	7.93	0.50	230
U7094	180	46	40	6	2.56	34	524	9.64	2.12	309
U7095	177	43	37	6	2.68	25	538	8.14	2.20	354
U7096	190	46	40	6	3.16	48	487	8.95	2.57	367
U7097	160	39	32	7	1.40	67	836	10.81	3.54	224
U7098	172	42	34	7	1.42	40	809	9.17	2.99	213
U7101	309	73	65	8	1.17	61	897	8.35	1.58	263
U7102	304	73	65	8	1.19	54	665	8.51	1.48	169
U7103	184	45	41	5	0.25	54	621	6.33	0.79	104
U7104	206	46	41	5	0.30	103	759	5.43	0.60	104
U7105	228	53	48	5	0.14	43	857	4.78	0.50	130
U7106	224	52	47	5	0.11	51	1057	4.43	0.43	169
U7107	204	45	41	4	0.27	63	1188	4.40	0.46	240
U7108	166	34	31	3	0.18	66	1106	3.61	0.30	169
U7138	31	7	6	1	0.16	36	1781	15.20	5.51	25
U7141	63	15	11	4	0.23	40	457	17.70	5.04	40
U7142	89	20	14	6	0.53	29	405	14.97	7.97	125
U7143	29	7	6	1	0.25	18	215	10.12	7.58	45
U7144	40	9	8	1	0.23	21	204	9.47	11.76	70
U7145	22	6	5	1	0.18	9	205	5.78	11.89	80
U7146	247	59	53	6	1.53	49	1530	8.79	2.17	494
U7147	396	93	85	8	1.37	56	1519	7.11	1.03	543
U7161	70	18	16	2	0.32	67	308	13.74	6.86	40
U7162	82	22	19	3	0.21	42	364	14.27	6.87	50
U7163	13	4	3	1	0.07	9	298	8.44	13.16	35
U7164	27	7	5	2	0.11	16	189	15.69	9.26	15
U7165	114	28	24	4	0.73	34	647	9.81	6.15	174
U7166	157	38	33	5	1.15	35	569	8.10	6.65	319
U7167	103	25	21	3	0.66	26	556	7.60	8.19	233
U7168	132	31	26	5	0.96	28	373	8.43	8.99	249
U7177	219	54	46	7	2.38	47	664	8.39	2.40	449
U7178	182	44	38	6	2.50	45	810	7.44	1.71	417
U7181	272	73	65	8	1.63	58	1081	5.97	1.72	349
U7182	102	27	22	5	0.98	20	1548	5.79	1.82	220
U7183	160	39	33	7	1.53	40	6998	5.98	2.61	308
U7184	58	14	12	2	0.55	22	1747	11.36	7.64	205
U7185	86	20	16	4	0.62	29	1162	12.28	4.91	95
U7194	251	63	54	8	3.48	47	734	8.13	2.60	634
U7195	235	57	48	9	2.54	45	768	7.45	2.99	449
U7196	23	6	5	1	0.82	28	1037	10.69	7.87	130
U7197	24	6	5	1	0.94	19	1306	8.32	5.82	338
U7198	22	6	4	1	0.94	42	398	12.41	5.16	289
U7201	98	24	18	6	1.05	25	2131	15.85	4.62	199
U7202	35	9	7	2	0.34	16	675	6.75	10.53	174

Total rare earth oxides >500ppm

P_2O_5 >1%

Fe >25% (detection limit)

Competent Persons' Statement

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The information in this report, as it relates to Mozambique Exploration Results is based on information compiled and/or reviewed by Mr JN Badenhorst, who is a member of the South African Council for Natural Scientific Professions (SACNASP) and the Geological Society of South Africa (GSSA). Mr Badenhorst is a consultant of the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Badenhorst consents to the inclusion in this report of the matters based on the information in the form and context in which they appear.

Cautionary Statement

The outcrop, subcrop and soil sampling conducted by MRG is an early-stage exploration, with the assay results seen as point data (no trenching or drilling has been conducted by MRG yet). The sampling results and data will be used for target generation and to guide further exploration.

This release is authorized by the Board of MRG Metals Ltd.

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Appendix One: JORC Table

Section 1 Sampling Techniques and Data		
Criteria	**Explanation**	**Comment**
Sampling techniques	*Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be*	***Shawa Carbonatite*** • *A geological mapping and grid soil sampling program (670 soil samples), with outcrop and subcrop rock sampling (shallow pitting program) (376 rock samples), was completed that covered all 10 Wickbury Mining Claims.* • *Rock samples were pulverized at Performance Laboratory in Zimbabwe, an accredited preparatory laboratory, soil samples sieved to -80#.* • *Handheld pXRF was then used for analyses on all sieved soil and pulverized outcrop and subcrop samples, results reported (refer ASX Announcement 1 July 2024).* • *Results from the pXRF reported were used to define which samples were submitted for full analytical work at an accredited laboratory.* • *163 Of the outcrop and subcrop samples (from shallow pitting), and 292 of the grid soil samples were sent to SGS*

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Criteria	Explanation	Comment
	required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	*N/A*
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	*N/A*

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Criteria	Explanation	Comment
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	• *All outcrop, subcrop and soil samples are geologically logged.* • *Outcrop and subcrop samples were prepped (pulverized) at Performance Laboratory in Zimbabwe, the pulp and sieved soil samples were then all analysed via handheld pXRF.* • *All outcrop, subcrop and soil samples are interpreted as early-stage work, assisting in geological interpretation and target generation for further exploration and possibly drilling.* • *All logging data is captured in an excel database.*
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in situ material collected,*	• *Outcrop was sampled during mapping, while a shallow pitting program (<1m deep) generated sub-crop rock samples. These samples are of sufficient size and are representative of the lithological units sampled. Rock samples were pulverized at an accredited laboratory.* • *Soil samples are sun dried and sieved at -80# for analyses.* • *Handheld pXRF was then used for analyses on sieved soil and pulverized outcrop samples.* • *Reference samples (AMIS sourced standards and blanks, as well as duplicates for analyses) were added to the sample stream.* • *Samples were analysed at the accredited SGS analytical laboratory in Johannesburg, South Africa.*

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Criteria	Explanation	Comment
	including for instance results for field duplicate/second-half sampling. *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• *SGS analytical laboratory in Johannesburg, South Africa is an accredited laboratory and complies with ISO17025.* • *Analytical results are from target generation outcrop, subcrop rock samples, as well as sieved soil samples. As such an analytical technique analysing a broad spectrum of elements was required.* • *For the analytical program, an ICP/MS method was used to generate multi element analyses.* • *2 African Mineral Standards (AMIS) sourced standards (AMIS0276 and AMIS0304) and 1 AMIS sourced blank (AMIS0908) was added to the samples for analyses by the company. Duplicate analyses also took place, with a total of 66 MRG introduced Quality control (QC) samples used. Acceptable levels of accuracy were seen.*

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Criteria	Explanation	Comment
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	• *The assay data was checked by a Carbonatite expert, Pete Siegfried.* • *Logging and assay data are in excel format, kept with the senior site geologist and the geological manager.*
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	*The location data from all sampling is via a handheld Garmin GPS. The handheld GPS has an accuracy of +/-5m in the horizontal, with this accuracy sufficient for the early phase work taking place. All coordinates for sample points with assays are supplied in the Appendixes.*
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade*	• *Soil sampling was done on all soil covered areas, with a radial soil sampling grid covering the carbonatite at c 200m by 50m grid. Selected soil samples were sent to SGS for analyses.*

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Criteria	Explanation	Comment
	continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. *Whether sample compositing has been applied.*	• *Outcrop and subcrob sampling was done where outcrop was present, or subcrop was close to surface.* • *The samples are all seen as "point data" with no width associated to the data, the samples and associated analyses are used for target generation and exploration planning. Data will not be used during Mineral Resource and Ore Reserve estimation*
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• *Soil sampling was done on all soil covered areas, with a radial soil sampling grid covering the carbonatite at c 200m by 50m grid.* • *Outcrop and subcrob sampling was done where outcrop was present, or subcrop was close to surface.*
Sample security	*The measures taken to ensure sample security.*	• *All samples remained in the custody of Company representatives on the project areas, as well as during transport to the sample export facility.* • *Samples were transported by the senior geologist on site to the analytical laboratory.*
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• *Carbonatite expert Pete Siegfried assessed the assay data and is assisted MRG in developing the follow-up exploration program.*

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Section 2 Reporting of Exploration Results		
Criteria	**Explanation**	**Comment**
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• *10 Mining claims on the Shawa Carbonatite are held by the Zimbabwean company Wickbury Investments (Pvt) Ltd ("Wickbury").* • *Validity of licences checked by registered Zimbabwean pegger.* • *MRG conducting exploration under a binding Memorandum of Understanding (MOU) with Wickbury.*
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• *Information on the historical exploration over the Shawa Carbonatite was reported, refer ASX Announcement 2 October 2023.* • *Hawkmoth Mining and Exploration conducted exploration in 2022 under an option agreement, the option was not exercised. The work included soil sampling, followed by outcrop rock chip sampling, then a limited amount of trenching.* • *Steffen, Robertson and Kirsten (SRK) conducted exploration on the vermiculite deposit on licences now belonging to Wickbury in 2001 (work done for Dinidza Vermiculite Mining Private Limited), culminating in a resource potential report in August 2001.* • *Watts, Griffis and McQuat (2000) reported 43-101 vermiculite resources and reserves on then James 13 and James 14 licences (now James 10 and James 13) of Indicated 426,530t @ 50% vermiculite and Inferred 4,590,000t at 49% vermiculite.* • *Dodd (1971) supplied resource estimation figures in 1971 for the phosphate mineralisation*

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Criteria	Explanation	Comment
		in weathered ijolite, with the majority of this resource situated within the IDC mining licences. The resource from Dodd is 20.3 million tons containing 10.8% P2O5, 31.4% Fe2O3 and 1.3% CO2. Dodd calculated a lower CO2 resource with CO2 at 0.8% then with 16.3 million tons at 10.4% P2O5 and 32.5% Fe2O3. • *A gravity survey was conducted on the Shawa Carbonatite Complex in an attempt to establish the subsurface of both the dunite and the Complex as a whole.* *Mozambique* • *A regional Radiometric aerial survey covered the Adriano 11002 and Olinga 11005 licences.*
Geology	*Deposit type, geological setting and style of mineralisation.*	• *Shawa Carbonatite Complex is c 5.9km in diameter, or c 34.8 km². It has a currently active vermiculite mine by SAMREC, a mothballed vermiculite mine on the Wickbury mining licences, and a P_2O_5 (Apatite) resource from the Zimbabwe IDC within the central ring structure.*
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *- easting and northing of the drill hole collar* *- elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *- dip and azimuth of the hole* *- down hole length and interception depth* *- hole length.* *If the exclusion of this information is justified on the basis that the*	*N/A*

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Criteria	Explanation	Comment
	information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• *No weighting or aggregate intercepts have been used in the pXRF results.*

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Criteria	Explanation	Comment
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• *The assay data is seen as "point data", follow-up trenching and drilling will take place to determine mineralisation widths.*
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	*All figures (Figures 1 to 8) are in the main body, refer to the main body of the report. Summary tables (Tables 1 and 2) of assay data is in the body of the release, full assay data as well as coordinate data of the sampling points are attached as an Appendix.*
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	*All exploration results and information linked to all the MRG projects / licences have been reported.*

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Criteria	Explanation	Comment
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• *N/A*
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• *Exploration planning is currently taking place, with the expectations to do the following:* ○ *Anthill sampling for residual minerals (apatite, pyrochlore, vermiculite and heavy minerals including magnetite); and to generate apatite concentrate for chemical analysis to determine the REE content of the apatite;* ○ *Trenching of the phosphate-rich outcrop and soil targets, as well as other targets;* ○ *Reverse Circulation (RC) drilling to follow.*

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Appendix Two: Outcrop Coordinates

SAMPLE	X	Y	SAMPLE	X	Y	SAMPLE	X	Y
X4101	363385	7876946	X4273	364900	7876056	X4191	362493	7875821
X4102	363413	7876958	X4274	365177	7875502	X4192	362590	7876098
X4103	363496	7876932	X4275	365135	7875576	X4193	362622	7876127
X4104	363533	7876930	X4276	365080	7875649	X4194	362633	7876165
X4105	363644	7876916	X4277	365033	7875733	X4195	362282	7876140
X4106	363700	7877075	X4278	364841	7875731	X4196	363639	7873717
X4107	363671	7877092	X4281	364971	7875296	X4197	363845	7873839
X4108	363627	7877103	X4282	364872	7875393	X4198	364041	7874391
X4109	363584	7877114	X4283	364826	7875434	X4201	364259	7874523
X4111	363719	7877303	X4284	364794	7875475	X4202	364473	7874718
X4112	364148	7877252	X4285	364769	7875562	X4203	364431	7874456
X4113	364154	7877253	X4286	364698	7875386	X4204	364656	7874149
X4114	364183	7877242	X4287	364705	7875134	X4205	364626	7874559
X4115	364263	7877227	X4288	365589	7875807	X4206	364690	7874737
X4116	364440	7877221	X4289	365503	7876025	X4207	364673	7874799
X4118	364733	7877594	X4291	365402	7876148	X4208	364676	7874756
X4121	364769	7877700	X4292	365212	7876410	X4209	365759	7875354
X4122	364485	7877380	X4293	365190	7876427	X4211	365929	7875296
X4123	364444	7877203	X4294	363567	7876734	X4212	365944	7875301
X4124	364355	7877766	X4295	363511	7876744	X4213	365944	7875303
X4125	364274	7877405	X4296	363505	7876749	X4214	366107	7875238
X4126	364275	7877353	X4297	363044	7876846	X4215	366358	7875170
X4127	364256	7877255	X4298	363492	7876718	X4216	365783	7875151
X4129	364152	7877712	X4151	362985	7877251	X4217	366324	7874725
X4131	364226	7877817	X4152	363146	7877028	X4218	366302	7874543
X4132	363594	7877214	X4153	362179	7877233	X4221	365959	7874647
X4133	362462	7876806	X4154	362488	7877186	X4222	365925	7874441
X4134	363276	7877795	X4155	362354	7876603	X4223	365783	7875531
X4135	363284	7877794	X4156	362316	7876616	X4224	365538	7875860
X4136	363299	7877792	X4157	361807	7876513	X4225	365620	7875404
X4137	363330	7877767	X4161	361816	7876329	X4226	365196	7875224
X4138	363465	7877570	X4162	361661	7876365	X4227	363382	7876775
X4141	363379	7877581	X4163	361604	7876265	X4228	362800	7876902
X4142	363326	7877614	X4165	361158	7876100	X4229	363242	7876603
X4143	363411	7877522	X4166	361358	7875861	X4231	363044	7876647
X4144	362943	7877487	X4167	363372	7875162	X4232	362756	7876711
X4145	363155	7877420	X4168	363115	7875070	X4233	362912	7876481
X4146	363118	7877388	X4169	363101	7874957	X4234	363156	7876230
SAMPLE	X	Y	SAMPLE	X	Y	SAMPLE	X	Y
X4147	363395	7877161	X4171	363035	7874897	X4235	362959	7876272
X4148	363204	7877227	X4172	362972	7874850	X4236	363132	7877428
X4149	363182	7877218	X4173	363080	7875193	X4237	363037	7877449
X4251	362485	7876027	X4174	363097	7875216	X4238	363373	7877166
X4252	362376	7876200	X4175	362684	7874910	X4241	363473	7875517
X4253	363261	7876528	X4176	362742	7874963	X4242	363290	7875635
X4254	363370	7875292	X4177	363380	7875743	X4243	363215	7875574
X4256	364509	7874121	X4178	362860	7875274	X4244	362956	7875620
X4257	364557	7874073	X4181	362408	7874927	X4245	362820	7876029
X4258	364257	7877243	X4182	363281	7875901	X4246	362751	7875203
X4265	364925	7876041	X4183	363323	7875890	X4247	362431	7875732
X4266	365068	7875875	X4184	362401	7875221	X4248	362272	7875616
X4267	363759	7875685	X4185	362504	7875258	X4249	362561	7876089
X4268	363759	7875685	X4186	362619	7875348	X4301	363609	7876578
X4269	365349	7875752	X4187	362636	7875634	X4302	363310	7876596
X4271	365021	7876194	X4188	362500	7875539			
X4272	364890	7876063	X4189	362356	7875510			

Appendix Three: Soil Coordinates

SAMPLE	X	Y	SAMPLE	X	Y	SAMPLE	X	Y
P7458	365691	7875514	P7501	365224	7875503	P7542	364794	7875860
P7461	365661	7875550	P7518	364930	7876810	P7543	364789	7875810
P7462	365636	7875587	P7522	364913	7876711	P7544	364780	7875760
P7463	365606	7875623	P7523	364910	7876664	P7545	364766	7875699
P7464	365578	7875660	P7524	364901	7876615	P7581	363449	7876530
P7465	365548	7875697	P7525	364896	7876565	P7582	363401	7876543
P7466	365520	7875735	P7526	364888	7876516	P7583	363347	7876553
P7467	365490	7875772	P7527	364883	7876465	P7584	363299	7876567
P7468	365464	7875806	P7528	364874	7876416	P7585	363245	7876576
P7469	365434	7875843	P7529	364870	7876365	P7586	363197	7876587
P7471	365406	7875883	P7531	364861	7876316	P7587	363151	7876596
P7472	365375	7875919	P7532	364856	7876266	P7588	363103	7876609
P7473	365346	7875958	P7533	364847	7876217	P7589	363053	7876619
P7493	365396	7875282	P7534	364843	7876166	P7591	363004	7876630
P7494	365366	7875321	P7535	364834	7876116	P7592	362955	7876640
P7495	365338	7875357	P7536	364829	7876066	P7593	362906	7876652
P7496	365310	7875392	P7537	364820	7876017	P7594	362857	7876662
P7497	365282	7875428	P7538	364807	7875956	P7595	362808	7876674
P7498	365252	7875467	P7541	364802	7875909	P7596	362759	7876684
SAMPLE	X	Y	SAMPLE	X	Y	SAMPLE	X	Y
P7597	362711	7876695	P7684	363608	7877835	P7795	362109	7876831
P7598	362660	7876706	P7685	363598	7877786	P7796	362061	7876842
P7601	362611	7876718	P7686	363586	7877739	P7797	362011	7876853
P7602	362562	7876728	P7687	363574	7877691	P7798	361961	7876864
P7603	362513	7876740	P7688	363563	7877638	P7801	361913	7876875
P7604	362453	7876755	P7689	363552	7877591	P7802	361864	7876886
P7627	363311	7876149	P7691	363539	7877539	P7815	362363	7876366
P7628	363257	7876158	P7692	363529	7877493	P7816	362313	7876376
P7629	363208	7876173	P7693	363518	7877444	P7817	362265	7876388
P7631	363154	7876181	P7694	363508	7877396	P7818	362216	7876398
P7632	363106	7876195	P7695	363496	7877346	P7821	362167	7876409
P7633	363061	7876202	P7722	364233	7877799	P7822	362117	7876420
P7634	363012	7876216	P7723	364224	7877750	P7823	362068	7876431
P7635	362962	7876225	P7724	364213	7877700	P7824	362019	7876442
P7636	362915	7876237	P7725	364203	7877651	P7825	361971	7876453
P7637	362864	7876246	P7726	364191	7877604	P7826	361921	7876463
P7638	362816	7876259	P7769	363343	7876984	P7827	361871	7876475
P7641	362766	7876268	P7771	363295	7876993	P7828	361823	7876486
P7642	362718	7876281	P7772	363246	7877005	P7829	361774	7876497
P7643	362668	7876290	P7773	363193	7877016	P7831	361725	7876506
P7644	362620	7876303	P7774	363144	7877028	P7832	361675	7876517
P7645	362570	7876312	P7775	363091	7877039	P7869	363414	7875707
P7646	362521	7876325	P7776	363042	7877050	P7871	363366	7875718
P7647	362472	7876334	P7777	362997	7877059	P7872	363317	7875729
P7648	362423	7876347	P7778	362948	7877071	P7873	363270	7875740
P7668	363589	7876623	P7781	362899	7877082	P7874	363221	7875748
P7669	363562	7876580	P7782	362850	7877093	P7875	363171	7875758
P7671	363532	7876540	P7783	362801	7877104	P7876	363122	7875770
P7672	363505	7876497	P7784	362752	7877115	P7877	363073	7875780
P7673	363474	7876458	P7785	362702	7877125	P7878	363024	7875792

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Appendix Three: Soil Coordinates

SAMPLE	X	Y	SAMPLE	X	Y	SAMPLE	X	Y
P7674	363447	7876415	P7786	362654	7877137	P7881	362974	7875802
P7675	363417	7876375	P7787	362605	7877147	P7882	362925	7875813
P7676	363390	7876332	P7788	362556	7877158	P7883	362877	7875824
P7677	363359	7876293	P7789	362506	7877169	P7884	362829	7875835
P7678	363332	7876250	P7791	362305	7876787	P7885	362778	7875846
P7681	363301	7876211	P7792	362257	7876799	P7886	362729	7875857
P7682	363628	7877934	P7793	362207	7876809	P7887	362680	7875868
P7683	363618	7877885	P7794	362158	7876820	P7888	362631	7875879
SAMPLE	X	Y	SAMPLE	X	Y	SAMPLE	X	Y
P7912	363571	7875258	U7197	365801	7874922	U7081	361444	7876152
P7913	363521	7875268	U7198	365753	7874932	U7082	361395	7876163
P7914	363472	7875279	U7201	365704	7874944	U7083	361347	7876174
P7915	363423	7875289	U7202	365651	7874960	U7094	361886	7875642
P7916	363374	7875301	P7995	362547	7875490	U7095	361836	7875652
P7917	363324	7875311	P7996	362497	7875501	U7096	361787	7875664
P7918	363275	7875323	P7997	362448	7875512	U7097	361738	7875674
P7921	363226	7875333	P7998	362399	7875522	U7098	361689	7875685
P7922	363178	7875344	U7001	362350	7875534	U7101	361639	7875696
P7923	363128	7875355	U7002	362301	7875544	U7102	361590	7875707
P7924	363078	7875367	U7003	362251	7875556	U7103	361542	7875718
P7925	363030	7875377	U7004	362203	7875566	U7104	361494	7875729
P7926	362981	7875389	U7005	362155	7875577	U7105	361442	7875744
P7927	362934	7875400	U7006	362104	7875588	U7106	361393	7875755
P7928	362884	7875416	U7007	362055	7875599	U7107	361344	7875767
P7929	362834	7875426	U7008	362006	7875610	U7108	361297	7875778
P7931	362785	7875438	U7009	361957	7875622	U7138	364197	7874204
P7949	362582	7875892	U7031	363144	7874945	U7141	364185	7874156
P7952	362484	7875914	U7032	363095	7874956	U7142	364173	7874108
P7953	362437	7875926	U7033	363046	7874967	U7143	364162	7874055
P7954	362388	7875934	U7034	362999	7874978	U7144	364151	7874008
P7955	362338	7875944	U7035	362950	7874986	U7145	364138	7873956
P7956	362289	7875955	U7036	362900	7874996	U7146	364128	7873910
P7957	362240	7875965	U7037	362851	7875008	U7147	364117	7873861
P7958	362192	7875977	U7038	362802	7875018	U7161	364686	7874517
P7961	362142	7875987	U7041	362753	7875030	U7162	364674	7874470
P7962	362093	7875999	U7042	362704	7875040	U7163	364662	7874421
P7963	362044	7876009	U7043	362655	7875051	U7164	364651	7874369
P7964	361996	7876020	U7044	362606	7875062	U7165	364640	7874321
P7965	361946	7876031	U7045	362558	7875073	U7166	364628	7874270
P7966	361896	7876043	U7046	362507	7875084	U7167	364617	7874223
P7967	361848	7876053	U7047	362458	7875095	U7168	364606	7874174
P7968	361799	7876065	U7048	362410	7875106	U7177	365906	7874489
P7969	361738	7876087	U7049	362361	7875117	U7178	365856	7874500
P7991	362741	7875449	U7051	362307	7875134	U7181	365808	7874511
P7992	362692	7875460	U7052	362259	7875144	U7182	365759	7874522
P7993	362643	7875471	U7074	361691	7876098	U7183	365706	7874538
P7994	362596	7875483	U7075	361641	7876108	U7184	365657	7874549
U7194	365949	7874888	U7076	361592	7876120	U7185	365608	7874560
U7195	365901	7874899	U7077	361543	7876130			
U7196	365851	7874910	U7078	361494	7876142			

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Appendix Four: Outcrop Results

SAMPLE	CeO2	Dy2O3	Er2O3	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Nd	Nd2O3 (Nd*1.16673)	Pr	Pr6O11 (Pr*1.208)	Sm2O3	Tb	Tb2O3 (Tb*1.15)	Tm2O3	Y2O3	Yb2O3	TREO	MREO	Nd_Pr	Tb_Dy	P	P2O5 (P*2.29)	Nb2O5	SnO2	Ta2O5	ThO2	U3O8	As	Be	Bi
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					%		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DETECTION	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1	0.1	0.05	0.05	0.1	0.05	0.05	0.05	0.6	0.1					0.01		2	12	0.6	0.1	2	3	1	0.1
X4101	265	3.47	0.96	3.28	8.4	0.48	130	<0.05	80.8	94.27	23.92	28.90	12.3	0.77	0.89	0.12	11.9	0.3	560	128	123	4	0.03	0.07	16	<12	3.6	4.1	2	4	<1	5.1
X4102	62.7	4.69	1.48	1.9	6.1	0.7	30.3	<0.05	23.3	27.18	6.18	7.47	5.7	0.8	0.92	0.16	18.1	<0.1	167	40	35	6	0.18	0.41	96	<12	2.7	1.5	<2	4	<1	2.2
X4103	151	7.89	2.17	5.1	12.8	1.21	70	<0.05	57.6	67.20	14.58	17.61	13.6	1.49	1.71	0.21	29.4	4.9	385	94	85	10	0.01	0.02	47	<12	3	3.4	<2	9	<1	7.5
X4104	84.5	7.32	2.12	4.28	10.6	1.09	46.2	<0.05	33.8	39.44	8.06	9.74	9	1.27	1.46	0.23	28.9	13.6	258	58	49	9	0.02	0.05	51	<12	1.6	1.7	3	5	<1	0.9
X4105	231	7.71	2.02	4.8	14.28	1.11	118	<0.05	80.5	93.92	20.78	25.10	16.1	1.46	1.68	0.19	28.3	0.5	545	128	119	9	0.02	0.05	5	<12	0.6	4	<2	<3	<1	0.8
X4106	231	9.42	2.77	4.65	13.58	1.45	120	1.07	83.2	97.07	21.59	26.08	16.2	1.66	1.91	0.34	32.8	0.8	559	134	123	11	0.02	0.05	7	<12	1	3.1	<2	4	<1	0.8
X4107	50.1	22.81	14.39	4.84	17.95	4.91	23.4	0.29	27	31.50	5.48	6.62	11.3	2.84	3.27	1.89	145	13.8	352	64	38	26	3.58	8.20	5	<12	1.9	4.3	7	5	<1	0.3
X4108	80.1	12.45	5	4.74	16.67	2.2	33.2	<0.05	42.4	49.47	9	10.87	13.7	2.02	2.32	0.61	51.8	9.2	292	75	60	15	4.22	9.66	11	<12	4.8	1.6	<2	7	<1	0.3
X4109	75.3	10.3	5.04	3.31	11.66	1.95	34	<0.05	31	36.17	7.28	8.79	9	1.54	1.77	0.69	51.2	3.2	252	57	45	12	0.19	0.44	<2	<12	1.8	0.2	<2	<3	<1	0.2
X4111	132	4.79	1.43	2.96	8.71	0.68	60	<0.05	53	61.84	12.93	15.62	10.4	0.92	1.06	0.15	17.1	<0.1	317	83	77	6	0.02	0.05	5	<12	1	2.1	<2	3	<1	<0.1
X4112	205	3.43	0.91	2.9	8.08	0.48	105	<0.05	74.1	86.45	19.65	23.74	11.2	0.74	0.85	0.13	11.7	4.5	464	114	110	4	0.12	0.27	8	<12	1	2.4	<2	<3	<1	<0.1
X4113	127	4.94	1.48	3.06	9.05	0.69	52.8	<0.05	49.4	57.64	12.55	15.16	9.8	0.95	1.09	0.17	17.8	10.3	311	79	73	6	0.37	0.85	9	<12	1.5	1.2	3	4	<1	<0.1
X4114	187	3.45	0.91	2.88	8	0.43	69.4	<0.05	77.6	90.54	19.84	23.97	11.5	0.74	0.85	0.11	11.4	<0.1	410	119	115	4	0.74	1.69	6	<12	0.9	2	3	3	1	<0.1
X4115	116	2.7	0.95	1.54	4.64	0.45	46.8	<0.05	41.9	48.89	11.65	14.07	5.8	0.55	0.63	0.16	11.8	0.1	255	66	63	3	0.02	0.05	5	<12	0.7	1.1	<2	4	<1	<0.1
X4116	1.6	0.31	0.13	0.1	0.33	0.06	5	<0.05	1	1.17	0.32	0.39	0.2	0.05	0.06	<0.05	1.6	<0.1	11	2	2	0	0.01	0.02	53	<12	3.1	0.6	<2	4	2	<0.1
X4118	36.5	2.32	0.88	1.16	3.45	0.35	21	<0.05	15.6	18.20	3.52	4.25	3.7	0.38	0.44	0.1	11.1	19.2	123	25	22	3	0.02	0.05	24	<12	0.9	0.7	5	5	<1	<0.1
X4121	43.1	1.32	0.51	0.66	2.37	0.2	21	2.27	14.5	16.92	3.81	4.60	2.8	0.24	0.28	0.07	5.6	<0.1	102	23	22	2	0.46	1.05	23	<12	1.6	5.1	<2	4	3	<0.1
X4122	2.7	1.14	0.5	0.24	0.56	0.26	3.3	<0.05	1.1	1.28	0.28	0.34	0.4	0.15	0.17	0.07	6	8.7	26	3	2	1	0.12	0.27	5	<12	0.7	0.4	2	5	<1	<0.1
X4123	1	0.21	0.1	0.13	0.13	0.07	0.9	<0.05	0.5	0.58	0.11	0.13	0.1	0.05	0.06	<0.05	1.9	16.5	22	1	1	0	0.03	0.07	24	<12	1.6	0.2	3	5	<1	<0.1
X4124	102	3.63	1.27	1.55	6.29	0.59	46.9	<0.05	33.6	39.20	8.97	10.84	6.8	0.6	0.69	0.13	13.7	0.7	234	54	50	4	0.59	1.35	13	<12	0.6	5.2	<2	<3	2	<0.1
X4125	21.9	2.68	1.13	0.83	3.18	0.43	11.2	<0.05	7.6	8.87	1.97	2.38	2	0.46	0.53	0.12	13	<0.1	68	14	11	3	<0.01	<0.02	44	<12	<0.6	0.4	<2	3	<1	<0.1
X4126	28.8	2.92	1.08	1.14	3.42	0.46	12.5	<0.05	10.6	12.37	2.69	3.25	3	0.48	0.55	0.15	13.2	0.2	83	19	16	3	0.35	0.80	658	<12	1.3	0.8	<2	<3	<1	<0.1
X4127	7.7	0.91	0.34	0.25	0.82	0.15	7.2	<0.05	2.7	3.15	0.68	0.82	0.5	0.11	0.13	0.05	4.4	<0.1	26	5	4	1	0.03	0.07	10	<12	1	0.4	<2	6	<1	<0.1
X4129	9.6	1.01	0.44	0.32	0.97	0.18	5.3	<0.05	3.7	4.32	0.91	1.10	0.8	0.14	0.16	0.05	4.9	<0.1	29	7	5	1	<0.01	<0.02	<2	<12	<0.6	0.2	<2	5	<1	<0.1
X4131	51.7	11.77	3.7	2.85	11.09	1.86	24.8	0.09	21.9	25.55	5.15	6.22	6.6	1.8	2.07	0.37	49.7	5.9	204	46	32	14	0.02	0.05	3	<12	0.8	0.5	<2	4	<1	0.5
X4132	515	7.08	1.97	8.32	18.77	1.01	261	0.06	179	208.84	46.28	55.91	34.9	1.49	1.71	0.19	24.4	0.7	1140	274	265	9	0.52	1.19	5	<12	<0.6	11.9	3	4	2	<0.1
X4133	115	113	39.83	8.57	38.83	21.05	53.6	0.55	56.7	66.15	12.23	14.77	19.6	11.38	13.09	2.7	542	16.7	1065	207	81	126	3.48	7.97	13	<12	1.2	4	4	13	2	<0.1
X4134	140	143	49.19	16.96	78.94	24.59	56.6	1.23	74.3	86.69	14.17	17.12	33.4	18.05	20.76	3.77	565	12.9	1250	268	104	164	0.49	1.12	<2	<12	<0.6	3.1	4	11	<1	<0.1
X4135	294	164	70.04	16.99	71.24	32.43	139	1.21	133	155.18	27.38	33.08	40.8	17.62	20.26	5.19	737	14.4	1795	373	188	184	0.48	1.10	3	<12	0.7	7.5	3	11	<1	0.4
X4136	77.4	108	66.21	12.36	54.83	24.46	27.3	2.66	54.7	63.82	10.04	12.13	24.7	11.95	13.74	7.16	676	34.5	1205	198	76	122	4.23	9.69	19	<12	1.7	46.8	16	8	<1	0.2
X4137	29.6	20.79	6.16	4.53	18.11	3.36	13.1	<0.05	14.6	17.03	2.92	3.53	8	2.99	3.44	0.51	116	19.1	263	45	21	24	0.03	0.07	7	<12	1	0.7	3	4	<1	<0.1
X4138	80.2	3.7	1.56	1.57	5.04	0.59	49	<0.05	18.9	22.05	5.65	6.83	4.6	0.59	0.68	0.22	17	0.6	194	33	29	4	0.01	0.02	4	<12	0.9	0.9	<2	<3	<1	<0.1
X4141	36.3	4.96	2.05	1.79	5.64	0.83	18.5	0.05	16.1	18.78	3.69	4.46	5.3	0.74	0.85	0.26	22	5.2	127	29	23	6	0.02	0.05	20	<12	2.3	2.1	<2	4	<1	<0.1
X4142	47.2	51.89	11.14	13.95	53.89	6.94	18.3	0.09	31.8	37.10	5.56	6.72	25	8.83	10.15	0.76	181	19.6	484	106	44	62	0.83	1.90	8	<12	0.8	5	8	4	<1	<0.1
X4143	334	15.41	3.52	8.37	26.9	2.06	171	<0.05	98.4	114.81	27.8	33.58	24.2	3.02	3.47	0.27	45.7	0.7	784	167	148	19	0.03	0.07	9	<12	1.1	5.4	<2	3	1	<0.1
X4144	337	231	67.04	36.32	159	36.94	139	1.8	169	197.18	36.23	43.77	73.3	31.5	36.23	4.73	986	22	2371	508	241	267	1.54	3.53	13	<12	3.2	9	6	13	<1	<0.1
X4145	84.9	4.47	1.58	1.82	6.02	0.69	49.4	<0.05	24.9	29.05	6.55	7.91	5.7	-		0.18	18.1	5.2	215	41	37	4	0.02	0.05	92	<12	1.4	0.8	<2	4	<1	<0.1
X4146	30.9	4.22	1.51	1.39	4.75	0.7	15	<0.05	11.5	13.42	2.77	3.35	3.7	0.66	0.76	0.17	18.2	<0.1	98	22	17	5	0.06	0.14	5	<12	0.9	0.3	<2	<3	<1	<0.1
X4147	108	17.37	5.3	5.49	19.56	2.65	47.6	0.11	47.4	55.30	11.06	13.36	14.4	2.84	3.27	0.49	62.1	6.5	361	89	69	21	4.07	9.32	37	<12	6.9	2.4	2	7	<1	<0.1
X4148	124	2.75	0.99	2.23	5.95	0.41	89.1	<0.05	29.7	34.65	8.48	10.24	7.5	0.54	0.62	0.13	11.2	0.5	290	48	45	3	0.08	0.18	314	<12	2.5	3.7	<2	<3	<1	<0.1
X4149	25.4	2.51	1.22	0.82	2.65	0.44	11.8	<0.05	7.9	9.22	2.1	2.54	2	0.39	0.45	0.14	12.8	0.6	73	15	12	3	<0.01	<0.02	74	<12	0.9	0.4	<2	<3	<1	<0.1
X4251	90.4	19.81	5.27	5.62	19.15	3.04	55.7	0.12	40.4	47.14	9.4	11.36	16.1	3.83	4.40	0.63	112	1.9	393	83	58	24	3.12	7.14	3	<12	1.3	1.5	<2	<3	4	4.3
X4252	7.3	4.49	1.66	0.92	3.25	0.89	3.9	<0.05	2.9	3.38	0.8	0.97	1.7	0.85	0.98	0.28	27.8	0.8	58	10	4	5	0.22	0.50	8	<12	1.3	1.3	<2	<3	1	2.7
X4253	2.6	0.35	0.22	0.23	0.37	0.13	1.3	<0.05	1.2	1.40	0.33	0.40	0.5	0.12	0.14	0.12	2	<0.1	10	2	2	0	0.18	0.41	90	16	21.2	1.9	<2	6	<1	3
X4254	2	0.15	0.08	0.1	0.16	0.05	2.4	<0.05	1.1	1.28	0.28	0.34	0.3	0.06	0.07	0.07	0.9	<0.1	8	2	2	0	0.02	0.05	71	16	12.9	0.3	<2	20	<1	1.3
X4256	0.9	<0.05	0.06	<0.05	<0.05	<0.05	0.2	<0.05	0.3	0.35	0.07	0.08	0.1	<0.05	<0.06	<0.05	<0.6	<0.1	2	0	0	0	0.01	0.02	<2	<12	1.1	0.1	<2	15	<1	1
X4257	242	8.78	2.32	7.28	19.75	1.26	134	<0.05	88	102.67	22.95	27.72	22.8	2.47	2.84	0.34	34.3	1.4	607	142	130	12	0.02	0.05	14	<12	0.9	1.3	<2	22	9	0.9
X4258	2.3	0.17	0.11	1.19	0.31	0.08	1.4	<0.05	0.9	1.05	0.24	0.29	0.4	0.08	0.09	0.07	1.1	0.3	9	2	1	0	0.02	0.05	11	<12	1.1	0.3	<2	21	1	0.5
X4265	2.1	0.09	0.06	0.84	0.12	<0.05	0.9	<0.05	1	1.17	0.2	0.24	0.3	<0.05	<0.06	<0.05	0.8	<0.1	7	1	1	0	0.04	0.09	11	<12	0.9	0.2	<2	5	1	0.3
X4266	25.4	1.15	0.41	1.09	2.56	0.23	11.3	<0.05	13.5	15.75	3.03	3.66	3.2	0.33	0.38	0.13	5.7	0.5	71	21	19	2	0.03	0.07	3	<12	1.4	0.9	<2	22	<1	0.5
X4267	15.1	1.03	0.58	0.69	1.79	0.2	7.2	<0.05	7.8	9.10	1.71	2.07	2.5	0.26	0.30	0.11	5.1	0.5	46	12	11	1	0.16	0.37	22	<12	4.4	1	<2	11	<1	0.4
X4268	4.8	0.37	0.18	0.2	0.54	0.08	2.2	<0.05	2.4	2.80	0.48	0.58	0.6	0.09	0.10	<0.05	3.1	<0.1	16	4	3	0	0.03	0.07	14	<12	2.1	0.2	<2	6	<1	0.5
X4269	3.7	0.24	0.16	0.18	0.35	0.06	2.1	<0.05	1.4	1.63	0.33	0.40	0.3	0.07	0.08	<0.05	1.8	<0.1	11	2	2	0	0.05	0.11	43	<12	3.3	0.7	<2	7	1	0.3
X4271	7.6	0.86	0.38	2.39	1.04	0.15	4.3	<0.05	2.9	3.38	0.76	0.92	1	0.19	0.22	0.07	5.4	0.3	28	5	4	1	0.06	0.14	24	<12	0.8	0.7	<2	7	4	0.4
X4272	8.1	1.13	0.5	0.52	1.55	0.21	3.2	<0.05	4.2	4.90	0.87	1.05	1.3	0.26	0.30	0.09	6	0.5	29	7	6	1	0.3	0.69	8	<12	1.8	0.2	<2	3	<1	0.3
X4273	10	0.78	0.45	0.65	1.59	0.15	3.6	<0.05	8.8	10.27	1.57	1.90	2.2	0.19	0.22	0.13	4.6	0.9	37	13	12	1	0.1	0.23	92	<12	6.7	0.9	2	7	2	0.3
X4274	112	6.36	2.4	5.96	15.1	0.96	47.7	0.14	61.3	71.52	13.1	15.82	20.8	1.63	1.87	0.38	27.3	2.4	331	96	87	8	0.02	0.05	6	<12	1.4	7	<2	<3	<1	0.6
X4275	2.9	0.21	0.14	0.15	0.31	0.06	1.2	<0.05	1.3	1.52	0.3	0.36	0.4	0.06	0.07	<0.05	1.4	0.1	9	2	2	0	0.04	0.09	<2	<12	<0.6	0.4	<2	4	1	0.3

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Appendix Four: Outcrop Results

SAMPLE	CeO2	Dy2O3	Er2O3	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Nd	Nd2O3	Pr	Pr6O11	Sm2O3	Tb	Tb2O3	Tm2O3	Y2O3	Yb2O3	TREO	MREO	Nd_Pr	Tb_Dy	P	P2O5	Nb2O5	SnO2	Ta2O5	ThO2	U3O8	As	Be	Bi
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	(Nd*1.16673) mg/kg	mg/kg	(Pr*1.208) mg/kg	mg/kg	mg/kg	(Tb*1.15) mg/kg	mg/kg	mg/kg	mg/kg					%	(P*2.29)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DETECTION	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1	0.1	0.05	0.05	0.1	0.05	0.05	0.05	0.6	0.1					0.01		2	12	0.6	0.1	2	3	1	0.1
X4276	22.3	1.32	0.66	0.85	2.24	0.25	11.5	<0.05	10.4	12.13	2.23	2.69	3	0.31	0.36	0.1	6.8	0.7	65	17	15	2	0.03	0.07	5	<12	0.9	0.8	<2	3	<1	0.3
X4277	58.9	10.84	5.39	3.8	13.05	2.12	26.3	0.38	33	38.50	6.82	8.24	11.5	2.07	2.38	0.94	58.1	4.4	245	60	47	13	4.08	9.34	22	<12	6.4	1.3	3	<3	<1	0.3
SAMPLE	CeO2	Dy2O3	Er2O3	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Nd	Nd2O3	Pr	Pr6O11	Sm2O3	Tb	Tb2O3	Tm2O3	Y2O3	Yb2O3	TREO	MREO	Nd_Pr	Tb_Dy	P	P2O5	Nb2O5	SnO2	Ta2O5	ThO2	U3O8	As	Be	Bi
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	(Nd*1.16673)	mg/kg	(Pr*1.208)	mg/kg	mg/kg	(Tb*1.15)	mg/kg	mg/kg	mg/kg					%	(P*2.29)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DETECTION	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1		0.05		0.1	0.05		0.05	0.6	0.1					0.01		2	12	0.6	0.1	2	3	1	0.1
X4278	2.5	0.4	0.25	9.29	0.42	0.09	2.6	<0.05	1.7	1.98	0.32	0.39	0.8	0.06	0.07	0.08	4.8	0.4	24	3	2	0	0.14	0.32	9	<12	1.8	0.2	<2	4	2	0.3
X4281	11.4	0.94	0.4	1.02	1.69	0.17	5.3	<0.05	5.9	6.88	1.26	1.52	2	0.23	0.26	0.07	5.2	0.4	37	10	8	1	0.01	0.02	2	<12	1.1	0.6	<2	<3	<1	0.3
X4282	3.2	0.11	0.05	0.17	0.34	<0.05	1.8	<0.05	1.3	1.52	0.29	0.35	0.5	<0.05	<0.06	<0.05	1	<0.1	9	2	2	0	0.02	0.05	17	<12	4	0.4	<2	<3	<1	0.3
X4283	15	0.73	0.34	0.42	1.32	0.15	7.3	<0.05	5.6	6.53	1.37	1.65	1.4	0.19	0.22	0.1	3.9	0.3	39	9	8	1	0.01	0.02	3	<12	1	0.4	<2	<3	<1	0.3
X4284	29.6	1.46	0.53	0.89	2.37	0.24	12.9	<0.05	15	17.50	3.49	4.22	3.1	0.33	0.38	0.09	6.5	0.3	80	24	22	2	0.02	0.05	12	<12	0.9	0.9	<2	<3	<1	0.2
X4285	11.1	1.42	0.54	0.5	1.55	0.25	5.9	<0.05	5.1	5.95	1.18	1.43	1.6	0.25	0.29	0.09	6.9	0.5	38	9	7	2	0.02	0.05	30	<12	1.8	0.4	<2	<3	2	0.4
X4286	21.7	1.6	0.56	1.41	2.27	0.27	12.4	<0.05	7.6	8.87	1.8	2.17	2.1	0.34	0.39	0.08	7.8	0.3	62	13	11	2	0.01	0.02	47	<12	3.5	0.5	<2	<3	<1	0.4
X4287	88.1	3.43	1.13	2.27	5.89	0.52	53.5	<0.05	28.8	33.60	7.53	9.10	7.4	0.77	0.89	0.16	15.8	0.8	223	47	43	4	0.02	0.05	26	<12	1.2	1.8	<2	<3	<1	0.3
X4288	276	32.38	14.37	18.28	44.89	6.48	126	1.1	219	255.51	34.94	42.21	76.9	5.92	6.81	1.86	162	9	1074	337	298	39	3.4	7.79	23	<12	0.8	32.6	6	4	<1	0.5
X4289	282	10.88	3.32	9.1	23.38	1.69	134	0.06	145	169.18	31.2	37.69	35.4	2.72	3.13	0.38	42.7	1.8	755	221	207	14	3.18	7.28	101	<12	1	25.8	9	<3	<1	0.6
X4291	47.4	2.57	0.96	1.73	4.77	0.44	21.6	<0.05	26.7	31.15	5.54	6.69	7	0.58	0.67	0.14	11.1	0.6	137	41	38	3	0.44	1.01	6	<12	0.8	2.4	<2	<3	<1	0.3
X4292	190	6.54	2.46	3	8.65	1.24	94.1	<0.05	65.6	76.54	17.93	21.66	11.5	1.2	1.38	0.29	32.4	0.9	451	106	98	8	1.56	3.57	62	<12	2.5	4.2	9	<3	<1	0.2
X4293	72	3.17	1.06	1.34	4.47	0.54	45.4	<0.05	21.2	24.73	5.98	7.22	4.4	0.71	0.82	0.16	13.7	0.8	180	36	32	4	0.03	0.07	30	<12	1.4	0.8	<2	<3	<1	0.9
X4294	5.6	0.22	0.09	0.45	0.38	<0.05	3.1	<0.05	2.4	2.80	0.56	0.68	0.5	0.06	0.07	<0.05	1	<0.1	15	4	3	0	0.03	0.07	184	<12	2.7	0.4	<2	<3	<1	0.3
X4295	102	6.34	2.08	3.21	10.3	0.97	56.1	<0.05	41.3	48.19	9.85	11.90	10.6	1.46	1.68	0.29	24.9	1.2	280	68	60	8	0.06	0.14	35	<12	1.1	2.4	<2	<3	<1	0.3
X4296	226	9.86	3.15	5.32	15.65	1.55	126	0.11	87.4	101.97	21.5	25.97	18.2	2.18	2.51	0.42	38.7	2	577	140	128	12	0.03	0.07	12	<12	1.8	5	<2	<3	<1	0.4
X4297	40	5.23	1.86	2.24	7.75	0.91	15.6	<0.05	23.5	27.42	4.76	5.75	7.2	1.06	1.22	0.29	22	0.9	138	40	33	6	2.37	5.43	20	36	1.9	0.5	<2	<3	<1	0.1
X4298	18.6	6.48	1.95	2.18	7.31	0.98	8.6	<0.05	9.7	11.32	2.05	2.48	4.9	1.38	1.59	0.25	25.2	1.1	93	22	14	8	0.04	0.09	41	<12	2.7	0.8	<2	<3	<1	1.5
X4151	31.6	5.34	2.05	1.97	6.49	1.07	14.5	0.18	17.9	20.88	3.86	4.66	5.9	0.94	1.08	0.3	25.4	1.4	123	32	26	6	1.7	3.89	13	<12	1.7	0.9	<2	3	<1	12.5
X4152	51.3	1.21	0.5	0.51	1.69	0.24	28.1	<0.05	17.7	20.65	5	6.04	2.2	0.24	0.28	0.08	6.8	0.2	120	28	27	1	0.01	0.02	46	35	2.1	0.6	<2	4	<1	3.7
X4153	53.3	14.12	6.25	2.74	10.92	3.02	26.9	0.53	24.2	28.23	5.62	6.79	8.4	1.96	2.25	0.92	78.2	4	247	51	35	16	2.7	6.18	31	24	5.6	22.2	7	5	7	8.5
X4154	101	4.1	1.46	1.67	6.52	0.73	49	0.15	35.2	41.07	9.66	11.67	7.5	0.8	0.92	0.19	17.9	1.1	245	58	53	5	0.84	1.92	20	25	2.3	3.4	<2	4	2	2.7
X4155	49.6	7.76	4.43	1.97	6.88	1.79	30	0.55	19.5	22.75	4.93	5.96	5.8	1.08	1.24	0.74	47.8	4	191	38	29	9	0.9	2.06	12	16	1.4	0.2	<2	4	<1	12.3
X4156	11.9	0.95	0.42	0.36	1.11	0.17	5.6	<0.05	5.4	6.30	1.29	1.56	1.2	0.15	0.17	0.05	5	0.1	35	9	8	1	0.02	0.05	25	50	1.3	0.5	<2	<3	<1	3.4
X4157	30.5	2.07	0.91	0.61	2.89	0.47	14.8	0.13	12.4	14.47	3.19	3.85	2.9	0.39	0.45	0.17	10.4	0.7	85	21	18	3	0.63	1.44	19	36	2	1.1	<2	4	1	9.5
X4161	197	7.03	2.46	2.12	11.23	1.25	102	0.16	64	74.67	17.89	21.61	13	1.34	1.54	0.32	29.2	1.6	465	105	96	9	1.03	2.36	7	<12	1	3.8	5	5	<1	3.8
X4162	97.8	2.95	1.15	0.94	5	0.57	51.6	0.18	31.3	36.52	8.89	10.74	6.2	0.59	0.68	0.18	13.7	1	229	51	47	4	0.78	1.79	28	33	2.3	7.6	13	4	<1	8.3
X4163	34.1	2.17	0.92	0.67	2.85	0.43	17.9	0.06	12.8	14.93	3.29	3.97	2.9	0.39	0.45	0.12	10	0.6	92	22	19	3	0.9	2.06	20	28	1.6	3.2	<2	5	1	17.4
X4165	205	6.63	3.59	2.37	10.07	1.41	176	0.54	81	94.51	25.21	30.45	12.8	1.18	1.36	0.65	40.6	4.4	590	133	125	8	0.18	0.41	60	32	2.5	70.6	8	3	12	5.5
X4166	83.6	5.5	2.33	1.81	7.11	1.05	41.4	0.32	34	39.67	9.07	10.96	7.9	0.91	1.05	0.33	22.7	2.3	228	57	51	7	0.54	1.24	138	36	16.1	9.8	5	3	2	11.6
X4167	130	8.76	2.3	8.98	19.65	1.31	59.2	0.2	81.6	95.21	16.2	19.57	26.5	1.95	2.24	0.33	32.3	1.7	408	126	115	11	0.03	0.07	42	44	1.8	6.1	<2	23	<1	13.5
X4168	131	7.78	2.69	6.65	17.26	1.28	67.2	0.28	66	77.00	14.44	17.44	24	1.62	1.86	0.43	33.8	2.2	391	104	94	10	0.03	0.07	41	51	4.1	7.7	<2	8	<1	15.2
X4169	46.4	6	2.18	2.69	8.06	1.1	20.3	0.25	24.2	28.23	5.37	6.49	8.6	1.03	1.18	0.34	27.1	1.8	161	42	35	7	0.02	0.05	23	36	1.6	2	<2	<3	<1	11
X4171	2.1	0.23	0.09	0.19	0.43	0.05	1.3	<0.05	1.3	1.52	0.31	0.37	0.5	0.06	0.07	<0.05	1.5	<0.1	8	2	2	0	0.02	0.05	20	38	2.6	0.4	<2	<3	<1	23.5
X4172	20.7	2.34	0.77	1.17	3.53	0.42	10.3	<0.05	10.6	12.37	2.27	2.74	4	0.43	0.49	0.12	10.8	0.6	70	18	15	3	0.04	0.09	22	40	2.1	0.5	<2	4	<1	10
X4173	26.6	4.16	1.39	2.04	6.13	0.71	11.3	0.11	14.8	17.27	3.18	3.84	6.3	0.76	0.87	0.22	18.5	0.9	100	26	21	5	0.03	0.07	30	46	1.9	1.6	<2	3	<1	13.6
X4174	39	5.04	1.77	2.3	7.02	0.9	16.6	0.14	21.4	24.97	4.66	5.63	7.8	0.91	1.05	0.25	22.8	1	136	37	31	6	0.02	0.05	26	63	1.5	1.8	<2	4	<1	15
X4175	5.7	1.17	0.56	0.26	1.01	0.25	3.7	<0.05	2.7	3.15	0.68	0.82	0.7	0.17	0.20	0.07	6.2	0.3	24	5	4	1	0.05	0.11	15	<12	1.4	0.6	<2	<3	2	16.4
X4176	1.5	0.33	0.16	0.08	0.28	0.08	0.8	<0.05	0.8	0.93	0.17	0.21	0.2	<0.05	<0.06	<0.05	2.1	0.1	7	1	1	0	0.02	0.05	7	<12	1.1	0.2	<2	3	<1	6.3
X4177	88	4.2	1.06	4.35	11.14	0.62	40.2	<0.05	67.8	79.10	12.32	14.88	17.9	1.04	1.20	0.15	13.7	0.8	277	99	94	5	0.03	0.07	7	<12	1.1	6.4	<2	<3	<1	11.4
X4178	1.4	0.13	0.07	0.08	0.16	<0.05	0.7	<0.05	0.8	0.93	0.17	0.21	0.3	<0.05	<0.06	<0.05	1.2	<0.1	5	1	1	0	0.02	0.05	18	35	1.4	0.3	<2	<3	<1	8.6
X4181	209	5.15	1.25	5.68	14.76	0.71	89	0.07	107	124.84	24.5	29.60	23.1	1.29	1.48	0.17	15.4	1	521	161	154	7	0.02	0.05	4	<12	1	1.8	<2	<3	<1	3.5
X4182	172	6.14	1.32	6.71	18.11	0.84	67.1	0.06	125	145.84	24.93	30.12	27.8	1.6	1.84	0.17	17.9	1	497	184	176	8	0.03	0.07	6	<12	1.2	11	<2	<3	<1	5
X4183	241	8.92	2.17	9.56	25.89	1.21	93.5	0.14	181	211.18	36.09	43.60	39.7	2.27	2.61	0.27	26.6	1.5	708	266	255	12	0.03	0.07	6	<12	1.6	16.2	<2	<3	<1	6.9
X4184	76.8	67.93	17.78	9.54	42.04	11.46	34.1	0.41	47.1	54.95	9.32	11.26	21.4	9.33	10.73	1.36	255	4.2	619	145	66	79	0.54	1.24	4	<12	1.6	1.6	<2	4	<1	8.6
X4185	4.1	1.58	0.44	0.31	1.27	0.27	2.2	<0.05	2.3	2.68	0.5	0.60	0.8	0.23	0.26	<0.05	6.3	0.2	21	5	3	2	0.01	0.02	5	<12	1.4	0.6	<2	<3	<1	4.8
X4186	1.9	0.92	0.21	0.16	0.58	0.14	0.8	<0.05	1	1.17	0.23	0.28	0.4	0.11	0.13	<0.05	3.3	<0.1	10	2	1	1	0.02	0.05	4	<12	0.9	0.2	<2	<3	<1	4
X4187	201	4.08	0.9	6.59	15.18	0.53	131	<0.05	66.6	77.70	17.72	21.41	24.2	1.1	1.27	0.1	10.8	0.6	495	104	99	5	0.04	0.09	12	<12	1.9	6.9	<2	<3	<1	7.7
X4188	2.3	0.34	0.15	0.11	0.26	0.08	1.3	<0.05	0.9	1.05	0.2	0.24	0.3	<0.05	<0.06	<0.05	2.3	<0.1	8	2	1	0	0.02	0.05	3	<12	1.1	0.3	<2	3	<1	6.6
X4189	190	276	97.74	37.47	161	56.47	80.1	2.12	115	134.17	23.38	28.24	69.9	33.82	38.89	7.85	1342	23.1	2545	477	162	315	4.8	10.99	10	<12	1.2	9.1	2	11	<1	6.1
X4191	144	246	80.27	22.85	113	46.94	76.9	2.28	72.2	84.24	16.15	19.51	39.1	30.54	35.12	6.91	1154	23.2	2094	385	104	281	7.43	17.01	8	<12	2.3	5.4	6	11	<1	8.5
X4192	101	36.83	12.92	7.62	27.76	7.05	43.4	0.67	60.1	70.12	12.46	15.05	20.9	5.09	5.85	1.33	180	5.9	536	128	85	43	4.14	9.48	12	<12	1	1.6	5	4	<1	4.7

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Appendix Four: Outcrop Results

SAMPLE	CeO2	Dy2O3	Er2O3	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Nd	Nd2O3 (Nd*1.16673)	Pr	Pr6O11 (Pr*1.208)	Sm2O3	Tb	Tb2O3 (Tb*1.15)	Tm2O3	Y2O3	Yb2O3	TREO	MREO	Nd_Pr	Tb_Dy	P	P2O5 (P*2.29)	Nb2O5	SnO2	Ta2O5	ThO2	U3O8	As	Be	Bi
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					%		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DETECTION	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1	0.1	0.05	0.05	0.1	0.05	0.05	0.05	0.6	0.1					0.01		2	12	0.6	0.1	2	3	1	0.1
X4193	253	8.12	2.12	10.86	24.86	1.22	146	0.07	103	120.17	24.05	29.05	41.7	1.89	2.17	0.22	26.8	1.2	668	160	149	10	0.11	0.25	27	<12	1.2	15.6	<2	<3	<1	5.5
X4194	16.2	4.92	1.49	2	6.32	0.82	9.2	<0.05	8.3	9.68	1.68	2.03	5.2	0.85	0.98	0.18	20.2	0.8	80	18	12	6	0.18	0.41	4	<12	1.1	1.9	<2	4	<1	7.7
X4195	79.3	84.97	31.67	10.63	46.19	16.4	39.9	1.44	41.9	48.89	9.06	10.94	20.9	11.09	12.75	3.21	410	12.6	830	158	60	98	7.53	17.24	12	<12	0.7	4.8	15	5	<1	7.9
X4196	40.9	2.53	1.07	0.72	2.67	0.53	23.4	0.09	12.4	14.47	3.63	4.39	2.7	0.4	0.46	0.16	12.3	1	107	22	19	3	0.89	2.04	10	<12	1.2	12.3	2	<3	5	4.4
X4197	197	6.68	2.53	2.59	10.98	1.23	112	0.26	66.8	77.94	18.88	22.81	12.4	1.22	1.40	0.34	31	2	481	109	101	8	2.59	5.93	8	<12	<0.6	12.8	<2	4	1	2.6
X4198	2.9	0.33	0.12	0.22	0.59	0.06	2.8	<0.05	2	2.33	0.49	0.59	0.6	0.07	0.08	<0.05	1.5	0.1	12	3	3	0	0.01	0.02	4	<12	0.9	0.5	<2	3	<1	1.7
X4201	226	4.04	15.28	36.64	1.97	114	0.48	6	112	130.67	25.14	30.37	<12	3.37	3.88	<2	3.3	14.05	587	169	161	8	0.08	0.18	45.7	1.5	15.6	0.59	50.4	<3	<1	1.7
X4202	204	3.34	12.89	29.55	1.61	101	0.43	37	112	130.67	23.42	28.29	<12	2.72	3.13	<2	2.4	10.92	565	165	159	6	0.04	0.09	44.6	2.8	21.4	0.54	39.5	<3	<1	1.5
SAMPLE	CeO2	Dy2O3	Er2O3	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Nd	Nd2O3 (Nd*1.16673)	Pr	Pr6O11 (Pr*1.208)	Sm2O3	Tb	Tb2O3 (Tb*1.15)	Tm2O3	Y2O3	Yb2O3	TREO	MREO	Nd_Pr	Tb_Dy	P	P2O5 (P*2.29)	Nb2O5	SnO2	Ta2O5	ThO2	U3O8	As	Be	Bi
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	mg/kg		mg/kg	mg/kg	mg/kg					%		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DETECTION	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1		0.05		0.1	0.05		0.05	0.6	0.1					0.01		2	12	0.6	0.1	2	3	1	0.1
X4203	163	3.69	18.91	49.05	2.13	56	0.36	6	158	184.34	26.24	31.70	<12	4.66	5.36	<2	2.4	17.82	541	225	216	9	0.02	0.05	65.7	3.7	8.4	0.52	50.6	3	<1	1
X4204	71	16.68	5.38	20.22	7.38	38.3	0.6	25	37.9	44.22	7.8	9.42	<12	4.48	5.15	<2	4.8	35.91	284	75	54	22	0.29	0.66	14.7	1.9	0.5	1.5	188	6	<1	1.1
X4205	201	4.06	8.78	22.15	1.68	87.2	0.52	18	86.8	101.27	19.56	23.63	<12	2.13	2.45	<2	3	9.58	483	131	125	7	0.03	0.07	29.5	1.8	9.7	0.66	41.7	5	<1	0.9
X4206	0.7	0.1	0.1	0.18	0.07	0.3	<0.05	4	0.5	0.58	0.11	0.13	<12	0.05	0.06	<2	<0.1	0.24	6	1	1	0	<0.01	<0.02	0.2	1.8	0.3	<0.05	1.1	9	<1	1.3
X4207	184	3.42	10.09	26.57	1.6	86	0.34	69	95.9	111.89	21.32	25.75	<12	2.68	3.08	<2	1.5	11.86	535	144	138	7	0.05	0.11	31.4	1.2	16.8	0.46	46.4	4	<1	1.1
X4208	1.3	0.14	0.1	0.14	<0.05	0.7	0.06	<2	0.6	0.70	0.19	0.23	<12	<0.05	<0.06	<2	<0.1	0.19	4	1	1	0	0.01	0.02	0.2	2.5	0.2	<0.05	0.8	11	<1	0.6
X4209	261	4.11	5.91	19.36	2.19	125	0.28	85	113	131.84	28.45	34.37	<12	2.61	3.00	<2	2.2	14.67	689	173	166	7	0.04	0.09	23.7	2.2	3.2	0.46	57.7	10	<1	0.4
X4211	423	4.92	14.62	44.18	2.95	208	0.2	166	208	242.68	47.79	57.73	<12	5.18	5.96	<2	1.8	23.42	1195	311	300	11	0.02	0.05	53.8	3.6	3.4	0.45	56.4	7	<1	1.5
X4212	407	3.34	10.5	29.49	1.92	216	0.19	15	177	206.51	43.46	52.50	<12	3.23	3.71	<2	1.5	14.29	962	266	259	7	0.02	0.05	41.7	1.8	3.4	0.37	37.6	4	<1	0.9
X4213	308	3.49	8.97	23.23	1.72	160	0.17	33	148	172.68	34.2	41.31	33	2.54	2.92	<2	1.3	11.66	801	220	214	6	0.02	0.05	37.5	3.5	3.6	0.37	42.5	15	<1	0.7
X4214	91.7	2.66	1.98	7.28	1.12	46.1	0.4	44	36.3	42.35	9.23	11.15	18	1.09	1.25	<2	2.3	6.21	277	57	54	4	0.8	1.83	8.4	2.1	6.9	0.41	26.3	6	9	1.2
X4215	85	1.5	1.27	4.71	0.63	44.7	0.22	19	28.7	33.49	7.9	9.54	18	0.68	0.78	<2	1.2	3.4	223	45	43	2	0.71	1.63	6	1.4	5	0.23	14.1	8	2	2.6
X4216	268	2.21	14.68	37.4	1.35	135	0.18	26	131	152.84	29.36	35.47	26	3.41	3.92	<2	1.2	11.82	716	194	188	6	0.03	0.07	47.3	1.6	8.8	0.26	27.6	10	<1	1.1
X4217	81.2	5.59	3.53	12.41	2.23	53.9	0.45	35	35.6	41.54	9.03	10.91	21	1.81	2.08	<2	3.1	11.4	284	60	52	8	0.63	1.44	12.3	3.4	29.8	0.69	56.9	8	9	0.6
X4218	57.6	2.65	1.51	5.67	1	28.9	0.37	73	21.8	25.43	5.71	6.90	<12	0.9	1.04	<2	2.5	5.34	212	36	32	4	0.67	1.53	5.6	3	10.4	0.39	24.9	<3	7	0.6
X4221	45.3	1.38	1.2	4.61	0.59	21.6	0.21	19	18.7	21.82	4.65	5.62	19	0.61	0.70	<2	1.2	3.55	146	30	27	2	0.63	1.44	4.6	3	2.9	0.22	13.4	6	1	1
X4222	4.5	0.29	1.87	0.65	0.16	3.2	<0.05	25	1.8	2.10	0.51	0.62	<12	0.14	0.16	<2	0.3	0.79	40	3	3	0	0.07	0.16	0.6	4.6	0.3	0.06	3.9	<3	<1	0.6
X4223	11.9	1.46	1.64	2.91	0.7	6.5	0.06	19	5.7	6.65	1.32	1.59	20	0.59	0.68	<2	0.4	3.88	77	10	8	2	0.14	0.32	2.1	31.6	0.4	0.16	16.3	5	<1	0.5
X4224	1.3	0.09	0.06	0.12	0.05	0.6	<0.05	8	0.5	0.58	0.14	0.17	<12	<0.05	<0.06	<2	<0.1	0.15	11	1	1	0	0.01	0.02	0.2	2.6	0.1	<0.05	<0.6	4	<1	1.5
X4225	3	0.12	0.12	0.26	0.07	1.2	<0.05	33	0.9	1.05	0.24	0.29	25	0.06	0.07	<2	<0.1	0.23	64	2	1	0	0.02	0.05	0.3	5.5	0.2	<0.05	1	<3	<1	1.1
X4226	12.5	0.67	0.64	1.5	0.34	7	0.06	36	5.5	6.42	1.35	1.63	21	0.3	0.35	<2	0.5	1.86	90	9	8	1	0.16	0.37	1.3	4.1	1.3	0.08	7	4	1	1
X4227	10.2	0.42	0.16	0.69	0.15	5.1	0.05	15	3.7	4.32	0.98	1.18	12	0.12	0.14	<2	0.3	0.7	50	6	6	1	<0.01	<0.02	0.8	1.5	2.6	0.08	4.3	3	<1	0.6
X4228	16.3	4.26	2.71	8.58	2.63	12.1	0.1	35	7.5	8.75	1.63	1.97	<12	2.29	2.63	2	0.7	16.47	114	18	11	7	0.42	0.96	3.2	4	1.1	0.28	56.5	7	4	0.5
X4229	2	0.14	0.17	0.39	0.07	1	<0.05	8	1	1.17	0.23	0.28	14	0.07	0.08	<2	<0.1	0.34	28	2	1	0	0.09	0.21	0.3	2	0.2	<0.05	1.5	4	<1	1.1
X4231	10.3	2.13	2.81	5.82	1.41	5.9	0.05	68	5.4	6.30	1.17	1.41	<12	1.57	1.81	<2	0.5	10.44	117	12	8	4	0.38	0.87	2.5	4.1	0.5	0.15	34.2	4	<1	0.9
X4232	3	0.19	0.13	0.36	0.11	2.3	<0.05	60	1.4	1.63	0.33	0.40	13	0.07	0.08	<2	<0.1	0.42	82	2	2	0	0.03	0.07	0.3	11.3	0.3	<0.05	2	<3	<1	0.5
X4233	3.3	0.1	0.12	0.33	0.06	2.8	<0.05	68	1.6	1.87	0.4	0.48	25	0.05	0.06	<2	<0.1	0.25	102	3	2	0	0.02	0.05	0.4	12.8	0.3	<0.05	1	<3	<1	0.7
X4234	1.4	0.29	0.21	0.55	0.11	1.1	<0.05	15	1.4	1.63	0.28	0.34	12	0.1	0.12	<2	0.4	0.58	34	2	2	0	0.05	0.11	0.5	1.3	0.3	0.06	2.5	<3	<1	0.4
X4235	5.7	0.36	0.31	0.96	0.14	3.8	<0.05	18	3.8	4.43	0.83	1.00	<12	0.14	0.16	<2	0.3	0.81	36	6	5	1	0.11	0.25	1.1	1.4	0.4	<0.05	3.3	<3	<1	0.5
X4236	8.7	3.26	7.48	5.07	1.7	5.7	0.16	25	4.8	5.60	1	1.21	<12	1.26	1.45	<2	1	9.38	76	12	7	5	0.24	0.55	2.6	1.5	1.2	0.26	38.7	3	2	0.8
X4237	2	0.15	2.15	0.29	0.06	1.2	<0.05	12	0.9	1.05	0.23	0.28	<12	0.06	0.07	2	<0.1	0.31	22	2	1	0	0.03	0.07	0.4	2.3	0.2	<0.05	1.6	<3	5	0.6
X4238	1.8	0.24	5.66	0.3	0.08	1.6	0.05	12	1	1.17	0.21	0.25	16	0.05	0.06	<2	0.1	0.4	40	2	1	0	0.03	0.07	0.4	1.8	0.4	<0.05	2.5	<3	2	1.6
X4241	18.7	0.19	0.36	0.97	0.07	7.7	<0.05	55	8.1	9.45	1.95	2.36	<12	0.11	0.13	<2	0.2	0.47	96	12	12	0	0.04	0.09	1.5	1.7	1.3	<0.05	1.6	<3	<1	0.9
X4242	4.7	0.08	0.08	0.25	<0.05	3.4	<0.05	35	2.2	2.57	0.5	0.60	<12	<0.05	<0.06	3	<0.1	0.23	50	3	3	0	0.01	0.02	0.4	3.7	0.5	<0.05	1	<3	<1	0.6
X4243	2.8	0.14	0.09	0.22	<0.05	1.8	<0.05	18	1.4	1.63	0.35	0.42	<12	<0.05	<0.06	<2	<0.1	0.15	25	2	2	0	0.01	0.02	0.3	2.1	0.3	<0.05	0.7	<3	<1	0.8
X4244	21.6	0.3	0.69	1.86	0.13	12.2	<0.05	38	10.6	12.37	2.24	2.71	<12	0.2	0.23	2	0.3	0.87	93	16	15	1	0.01	0.02	3	2.5	5.7	<0.05	2.8	5	2	0.7
X4245	2.1	0.15	0.1	0.36	0.06	1.4	<0.05	33	1.2	1.40	0.29	0.35	16	<0.05	<0.06	<2	<0.1	0.25	55	2	2	0	0.03	0.07	0.4	6.5	0.3	<0.05	1.5	<3	<1	0.3
X4246	2.5	0.26	0.16	0.43	0.12	1.6	<0.05	17	1.5	1.75	0.36	0.43	<12	0.07	0.08	<2	<0.1	0.52	25	3	2	0	0.03	0.07	0.4	1.8	0.3	<0.05	3	<3	<1	0.6
X4247	3.8	0.1	0.1	0.28	0.06	1.2	<0.05	40	1.3	1.52	0.28	0.34	14	<0.05	<0.06	<2	<0.1	0.25	62	2	2	0	0.01	0.02	0.3	3	0.2	<0.05	1.1	7	<1	0.3
X4248	1.8	0.14	0.06	0.22	0.06	0.7	<0.05	17	0.9	1.05	0.19	0.23	16	<0.05	<0.06	2	<0.1	0.23	39	1	1	0	0.02	0.05	0.2	6.2	0.2	<0.05	1.4	9	<1	0.8
X4249	1.5	0.25	0.09	0.32	0.1	1	<0.05	4	0.8	0.93	0.2	0.24	<12	0.06	0.07	<2	0.2	0.4	9	1	1	0	0.03	0.07	0.3	1.3	0.1	<0.05	2.7	<3	<1	0.4
X4301	4.9	0.81	0.37	0.36	1.03	0.18	3.9	0.11	2.8	3.27	0.81	0.98	0.9	0.21	0.24	0.11	3.8	<0.1	21	5	4	1	0.02	0.05	25	19	2.4	0.5	<2	<3	<1	1.6
X4302	12.1	1.08	0.43	0.53	1.49	0.26	10.4	0.17	6.6	7.70	1.88	2.27	1.4	0.21	0.24	0.16	4.6	0.1	43	11	10	1	0.03	0.07	33	30	2.4	0.7	<2	<3	4	1.1

Appendix Four: Outc

SAMPLE	Cd	Co	Cs	Ga	Ge	In	Mo	Ni	Pb	Rb	Re	Sb	Te	Tl	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	S	Sc	Si	Sr	Ti	V	W	Zn
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg
DETECTION	0.2	0.5	0.1	1	1	0.2	2	10	2	2	0.05	1	1	0.5	0.01	10	0.1	20	10	0.01	0.1	10	0.01	10	0.01	5	0.1	10	0.01	10	50	10
X4101	1.7	32.2	0.6	2	<1	0.5	2	91	222	2	<0.05	<1	<1	<0.5	0.86	719	18.5	75	20	5.54	0.7	49	12.14	3129	0.03	<5	2.4	2640	0.06	15	<50	45
X4102	3.2	12.9	0.3	<1	<1	0.4	<2	67	223	<2	<0.05	<1	<1	<0.5	0.48	339	18.7	60	<10	1.85	0.5	27	10.5	2986	0.01	<5	1	2408	0.03	<10	<50	100
X4103	3.4	44.1	0.2	<1	<1	0.3	3	74	1271	<2	<0.05	<1	<1	<0.5	0.27	8265	17.3	25	<10	2.77	0.5	22	11.05	2729	0.18	<5	1	3032	0.04	<10	<50	65
X4104	3.8	12.2	0.3	<1	<1	0.3	2	55	212	4	<0.05	2	<1	<0.5	0.49	9194	20.6	75	<10	0.92	0.6	58	11.6	3129	0.21	<5	0.5	2697	0.03	<10	<50	80
X4105	0.5	10	<0.1	1	<1	<0.2	<2	49	128	<2	<0.05	<1	<1	<0.5	0.39	442	20.7	<20	<10	0.62	0.6	49	13.66	2567	0.02	<5	1.4	3009	<0.01	<10	<50	<10
X4106	1.3	9.7	0.1	1	<1	<0.2	<2	58	34	<2	0.06	<1	<1	<0.5	0.25	911	19.2	35	<10	0.53	0.6	27	10.87	2649	0.04	<5	0.4	2923	0.02	<10	<50	40
X4107	1	9.6	<0.1	<1	<1	<0.2	<2	50	23	3	<0.05	<1	<1	<0.5	0.27	1042	>25.0	35	<10	0.24	0.6	40	4.46	1394	0.02	<5	0.5	4395	<0.01	<10	<50	30
X4108	1.6	30.7	0.1	3	<1	0.3	2	58	17	4	<0.05	<1	<1	<0.5	0.35	912	>25.0	35	<10	6.69	0.8	45	2.02	976	0.03	<5	1	2304	0.08	30	<50	40
X4109	1.1	9.7	2.4	<1	<1	<0.2	<2	47	24	19	<0.05	<1	<1	<0.5	0.13	832	>25.0	<20	<10	0.4	0.6	49	3.68	931	0.02	<5	0.2	3282	<0.01	<10	<50	<10
X4111	0.8	8.4	0.5	<1	<1	<0.2	<2	59	44	4	<0.05	<1	<1	<0.5	0.47	315	16.6	35	<10	0.73	0.5	36	14.44	3541	0.01	<5	1.3	3052	0.01	<10	<50	45
X4112	1.3	20.4	0.3	2	<1	<0.2	<2	71	78	4	<0.05	<1	<1	<0.5	0.9	434	24.8	60	<10	1.89	0.9	72	11.42	3199	0.01	<5	1.4	3777	0.05	<10	<50	<10
X4113	4.5	15	0.4	1	<1	<0.2	<2	62	120	3	<0.05	<1	<1	<0.5	1.3	503	22.6	40	<10	0.96	0.7	67	12.14	3669	0.02	<5	2.2	3724	0.04	<10	<50	35
X4114	0.7	6.2	<0.1	3	<1	<0.2	<2	49	37	<2	<0.05	<1	<1	<0.5	2.73	563	14	<20	<10	0.67	0.7	54	14.43	3465	0.02	<5	6.1	4128	0.01	<10	<50	30
X4115	1.3	6.8	<0.1	1	<1	<0.2	<2	56	27	<2	<0.05	<1	<1	<0.5	0.35	129	19.3	<20	<10	1.56	0.6	45	13.41	4369	0.01	<5	2	3057	0.01	<10	<50	<10
X4116	1	81.5	0.2	6	<1	0.3	2	249	47	3	<0.05	<1	<1	<0.5	2.01	225	9.6	170	110	24.27	0.6	32	5.71	1815	0.01	<5	4.8	290	0.33	100	<50	110
X4118	2.8	4.7	<0.1	<1	<1	0.2	<2	57	25	<2	<0.05	2	<1	<0.5	0.61	105	18.9	85	<10	<0.01	0.7	45	11.61	3981	0.01	<5	0.7	2383	0.05	<10	<50	65
X4121	0.5	16.8	0.3	17	<1	<0.2	3	65	20	138	<0.05	<1	<1	<0.5	8.7	459	3.3	254	304	3.15	6.8	49	0.92	508	0.02	<5	24.4	299	0.1	120	<50	35
X4122	1.7	110	<0.1	<1	<1	<0.2	3	453	13	3	<0.05	<1	<1	<0.5	0.51	558	9.9	652	35	9.08	0.6	49	4.51	1992	0.02	<5	18.1	224	0.04	<10	<50	50
X4123	2.5	103	<0.1	3	<1	<0.2	3	501	12	3	<0.05	2	<1	<0.5	0.81	620	9.5	1035	30	10.2	0.4	23	5.7	1710	0.01	<5	13.7	1175	0.26	<10	<50	50
X4124	0.3	8.1	0.2	11	<1	<0.2	4	50	18	164	<0.05	<1	<1	<0.5	7.35	1226	4.2	303	<10	2.05	6.2	27	1.12	427	<0.01	<5	26.5	536	0.06	55	<50	20
X4125	1.9	6.7	<0.1	<1	<1	<0.2	<2	46	56	2	<0.05	<1	<1	<0.5	0.27	85	16.8	40	<10	0.51	0.7	40	13.34	4557	0.01	<5	0.6	2104	0.01	<10	<50	65
X4126	2	13.3	<0.1	<1	<1	<0.2	<2	73	250	2	<0.05	<1	<1	<0.5	0.56	159	20.1	55	<10	1.56	0.7	36	11.12	4940	0.01	<5	1.1	3027	0.04	<10	<50	25
X4127	1.3	18.3	0.1	<1	<1	<0.2	2	98	20	2	<0.05	<1	<1	<0.5	0.65	139	21.1	119	<10	2.4	0.5	27	9.85	2552	0.02	<5	1.2	2978	0.04	<10	<50	20
X4129	1.1	5.9	<0.1	<1	<1	<0.2	2	61	23	<2	<0.05	<1	<1	<0.5	0.12	60	18.2	50	<10	0.77	0.7	36	10.58	2200	0.02	<5	0.2	3416	<0.01	<10	<50	25
X4131	0.7	3.5	<0.1	<1	<1	<0.2	<2	46	33	2	<0.05	<1	<1	<0.5	0.19	214	18.7	30	<10	0.36	0.7	31	11.08	3128	0.01	<5	0.3	2224	0.01	<10	<50	15
X4132	5.7	12.9	<0.1	5	8	<0.2	2	80	130	3	<0.05	<1	<1	<0.5	9.09	809	6.9	45	<10	1.5	0.8	170	13.54	3337	0.02	<5	8.8	3371	0.02	<10	<50	30
X4133	1.9	5.8	<0.1	2	<1	<0.2	2	67	25	2	<0.05	2	<1	<0.5	3	1219	21.8	55	<10	0.67	0.6	108	3.52	3227	0.02	<5	3.3	3472	0.02	<10	<50	20
X4134	0.7	5.3	<0.1	<1	<1	<0.2	<2	54	23	3	<0.05	<1	<1	<0.5	0.1	461	22.8	<20	<10	0.73	0.6	45	9.43	3038	0.02	<5	0.5	3508	<0.01	<10	<50	<10
X4135	0.9	4.5	<0.1	1	<1	<0.2	<2	50	34	2	<0.05	<1	<1	<0.5	0.15	243	22	50	119	0.85	0.8	54	11.04	2924	0.02	<5	0.4	3895	0.01	<10	<50	<10
X4136	1.1	14	<0.1	<1	<1	<0.2	<2	73	54	<2	<0.05	<1	<1	<0.5	0.24	446	24.6	30	179	1.41	0.6	36	7.71	2758	0.02	<5	0.4	4807	0.02	<10	<50	35
X4137	3.3	4.4	<0.1	<1	<1	<0.2	<2	50	33	<2	<0.05	3	<1	<0.5	0.7	179	20	45	<10	0.08	0.7	49	11.93	3279	<0.01	<5	0.7	3299	0.03	<10	<50	30
X4138	0.7	3.7	<0.1	<1	<1	<0.2	<2	42	41	<2	0.05	<1	<1	<0.5	0.26	199	20.8	35	<10	0.84	0.5	36	13.24	6495	0.02	<5	0.9	2498	<0.01	<10	<50	99
X4141	1.8	8.6	<0.1	<1	<1	<0.2	2	69	33	<2	<0.05	1	<1	<0.5	0.54	194	19.8	50	20	0.9	0.5	25	12.47	4890	0.02	<5	1.4	2465	0.02	<10	<50	<10
X4142	2.5	4	<0.1	<1	<1	<0.2	<2	55	42	<2	<0.05	2	<1	<0.5	0.61	313	19.2	50	<10	<0.01	0.5	49	9.74	2147	0.02	<5	0.8	4349	0.03	<10	<50	<10
X4143	1.5	17.3	<0.1	2	<1	<0.2	<2	62	80	3	<0.05	<1	<1	<0.5	1.69	89	14.3	25	<10	1.78	0.6	62	11.77	1620	0.01	<5	4.2	3038	0.03	<10	<50	30
X4144	2	17.1	0.2	6	<1	<0.2	4	124	107	7	<0.05	<1	<1	<0.5	0.89	259	15.8	130	<10	1.2	0.6	<10	10.08	2114	0.03	<5	2.4	3290	0.02	<10	<50	<10
X4145	1.6	7.7	0.2	<1	<1	<0.2	<2	51	124	3	<0.05	<1	<1	<0.5	0.24	149	18.9	25	<10	1.39	0.6	54	11.88	4449	0.01	<5	0.7	2133	0.02	<10	<50	193
X4146	0.7	5.5	<0.1	<1	<1	<0.2	<2	44	40	<2	<0.05	<1	<1	<0.5	0.23	174	19.2	30	<10	0.71	0.6	40	11.48	3695	0.01	<5	0.4	2316	<0.01	<10	<50	<10
X4147	1.3	89.5	<0.1	10	1	0.3	2	132	21	3	<0.05	<1	<1	<0.5	1.49	857	13.4	85	160	>25.00	0.6	45	3.84	2288	0.03	<5	1.1	1505	0.55	219	<50	160
X4148	1.6	17.3	0.3	1	<1	<0.2	<2	73	199	2	<0.05	<1	<1	<0.5	1.18	144	19.3	40	<10	4.36	0.6	63	9.97	3126	0.01	<5	2.7	1218	0.06	15	<50	124
X4149	3.3	8	0.2	<1	<1	<0.2	<2	53	240	5	<0.05	<1	<1	<0.5	0.31	134	17.4	<20	<10	0.63	0.6	49	10.9	4299	0.02	<5	0.9	2664	<0.01	<10	<50	139
X4251	<0.2	20.4	15.8	6	2	3.7	6	360	28	3	0.08	<1	2	5.5	7.37	1324	7.3	377	25	4.53	0.2	189	12.24	2495	0.02	<5	11	2386	0.12	20		60
X4252	0.4	196	8.9	4	<1	2	7	1884	14	6	0.08	<1	<1	3.6	1.28	556	0.6	1792	89	13.92	0.3	23	3.21	3277	<0.01	<5	28	74	0.12	15		74
X4253	0.6	159	3.3	32	<1	0.9	8	238	12	3	0.1	3	1	2.2	3.89	219	0.5	214	354	>25.00	0.4	23	4.67	4666	0.02	25	0.4	70	1.1	413		359
X4254	0.6	155	4.3	34	<1	0.8	7	389	12	2	0.06	<1	<1	2.4	4.78	45	0.2	279	294	>25.00	0.2	14	4.89	4462	0.01	30	0.3	25	1.73	503		413
X4256	0.6	3.6	1.8	<1	<1	<0.2	6	98	11	3	<0.05	<1	<1	1.2	0.06	35	0.7	25	<10	0.26	0.3	<10	>25.00	45	0.01	<5	2	35	<0.01	<10		<10
X4257	0.7	5.7	1.6	14	<1	0.3	6	86	110	4	0.06	<1	<1	1.1	1.88	4613	12.4	55	<10	0.76	0.3	28	14.18	7974	0.09	<5	7	3774	0.03	<10		238
X4258	0.5	26	3.1	17	<1	<0.2	6	143	17	195	<0.05	<1	<1	1.2	12.98	8313	0.6	60	25	4.38	4.5	23	6	389	0.01	<5	16.9	983	0.8	35		<10
X4265	0.8	20.3	2	14	<1	<0.2	5	129	12	170	<0.05	<1	<1	0.7	11.65	6155	3.7	69	25	3.94	4.3	28	6.57	327	<0.01	<5	15.7	951	0.76	35		<10
X4266	1.5	7.5	0.7	<1	<1	<0.2	6	91	29	6	<0.05	<1	<1	<0.5	0.1	1208	19	55	<10	1.05	0.4	14	11.11	2192	0.03	<5	0.4	3514	<0.01	<10		<10
X4267	1.7	44.5	0.7	4	<1	<0.2	6	275	15	5	0.07	<1	1	<0.5	0.75	248	21.1	789	64	9.9	0.3	18	4.96	2123	0.01	<5	2.2	888	0.3	40		79
X4268	2.9	39.2	0.4	1	<1	<0.2	7	115	11	5	<0.05	<1	<1	<0.5	0.57	89	19.4	65	35	5.31	0.5	28	7.36	1733	<0.01	<5	0.7	2239	0.06	<10		20
X4269	1.1	33.1	0.4	3	<1	<0.2	6	104	52	5	<0.05	<1	<1	0.5	1.72	318	15.7	40	30	4.76	0.5	18	10.69	1909	<0.01	<5	2.9	2112	0.1	20		89
X4271	1	32.8	0.5	1	<1	<0.2	6	429	45	5	<0.05	<1	<1	0.7	0.8	14195	16.9	169	20	3.24	0.4	23	6.7	1138	0.29	<5	7.3	1252	0.02	<10		15
X4272	1.1	17.6	0.5	2	<1	<0.2	6	75	19	4	<0.05	<1	<1	<0.5	0.36	312	18.6	50	20	3.47	0.3	14	10.65	1873	<0.01	<5	0.8	4148	0.04	15		<10
X4273	2.1	89.4	0.6	5	<1	0.3	6	361	24	5	<0.05	<1	<1	0.5	0.97	583	9.3	528	115	18	0.4	28	9	2714	<0.01	<5	6.7	618	0.53	35		149
X4274	1.6	3.8	0.3	<1	<1	<0.2	5	61	128	5	<0.05	<1	<1	<0.5	0.03	319	10.7	35	<10	1.01	0.4	19	18.78	3365	<0.01	<5	0.6	2861	<0.01	<10		<10
X4275	0.9	74.4	0.4	<1	<1	<0.2	5	674	50	5	<0.05	<1	<1	<0.5	0.08	298	7.5	1213	40	6.77	0.3	<10	3.77	1889	<0.01	<5	16.2	204	0.03	<10		<10

For personal use only

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Appendix Four: Outc

SAMPLE	Cd	Co	Cs	Ga	Ge	In	Mo	Ni	Pb	Rb	Re	Sb	Te	Tl	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	S	Sc	Si	Sr	Ti	V	W	Zn
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg
DETECTION	0.2	0.5	0.1	1	1	0.2	2	10	2	2	0.05	1	1	0.5	0.01	10	0.1	20	10	0.01	0.1	10	0.01	10	0.01	5	0.1	10	0.01	10	50	10
X4276	1.1	10.9	0.4	<1	<1	<0.2	6	115	22	6	<0.05	<1	<1	<0.5	0.15	209	18.4	288	15	1.92	0.3	<10	10.91	2041	0.01	<5	1	3833	0.03	<10		<10
X4277	1.3	60.6	0.6	5	<1	0.2	7	167	18	5	<0.05	<1	<1	<0.5	0.67	322	17.7	79	99	15.41	0.4	14	5.31	1825	<0.01	<5	1.3	2267	0.13	69		89
SAMPLE	Cd	Co	Cs	Ga	Ge	In	Mo	Ni	Pb	Rb	Re	Sb	Te	Tl	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	S	Sc	Si	Sr	Ti	V	W	Zn
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg
DETECTION	0.2	0.5	0.1	1	1	0.2	2	10	2	2	0.05	1	1	0.5	0.01	10	0.1	20	10	0.01	0.1	10	0.01	10	0.01	5	0.1	10	0.01	10	50	10
X4278	2.4	6.2	0.3	<1	<1	<0.2	6	113	19	4	<0.05	<1	<1	<0.5	0.43	>50000	19.8	105	<10	0.74	0.4	<10	7.1	204	1.68	<5	0.6	1869	0.03	<10		<10
X4281	1.3	3.3	11.6	<1	<1	<0.2	6	62	18	12	<0.05	<1	<1	<0.5	0.11	3471	18.8	125	<10	0.77	0.4	<10	11.98	1863	0.08	<5	0.1	3855	<0.01	<10		<10
X4282	1.5	25.4	3.9	<1	<1	<0.2	5	111	17	6	<0.05	<1	<1	<0.5	0.21	154	18.7	114	20	1.92	0.5	14	10.75	2225	0.01	<5	1.1	3513	0.03	<10		<10
X4283	1.1	10.8	2.6	<1	<1	<0.2	5	78	15	6	<0.05	<1	<1	<0.5	0.04	124	17.8	35	<10	0.85	0.5	<10	11.12	1771	0.02	<5	0.3	3204	<0.01	<10		<10
X4284	1.2	10.4	1.6	<1	<1	<0.2	6	82	24	5	<0.05	<1	<1	0.7	0.04	188	16.9	40	<10	1.87	0.4	<10	12.57	2242	0.01	<5	0.6	3462	<0.01	<10		<10
X4285	1.2	22.9	1.3	2	<1	<0.2	6	116	31	5	<0.05	<1	<1	<0.5	0.21	149	17.6	64	15	3.02	0.5	<10	10.17	2257	<0.01	<5	0.7	3671	0.03	<10		<10
X4286	1.9	11.3	0.7	<1	<1	<0.2	6	52	55	5	<0.05	<1	<1	<0.5	0.07	5493	15.7	50	15	2.74	0.4	<10	11.94	2328	0.12	<5	1	3408	0.02	<10		<10
X4287	3.3	4.3	0.5	2	<1	<0.2	64	65	78	4	<0.05	<1	<1	<0.5	0.23	1597	11.6	55	<10	0.78	0.4	<10	16.98	3070	0.05	<5	0.4	2418	0.02	<10		109
X4288	1.2	4.5	0.6	6	3	<0.2	5	67	135	5	<0.05	<1	<1	<0.5	7.78	1999	9.9	<20	<10	1.07	0.4	172	12.57	3888	0.02	<5	9.6	>5000	0.03	<10		25
X4289	1	7.7	0.5	4	2	<0.2	5	76	117	5	<0.05	<1	<1	<0.5	8.05	3713	5.4	25	<10	0.99	0.5	79	11.69	2924	0.02	<5	8.7	>5000	0.02	<10		<10
X4291	0.9	6.9	0.4	<1	<1	<0.2	6	77	72	5	<0.05	<1	<1	<0.5	0.17	154	18.6	<20	<10	0.96	0.5	<10	12	2935	0.02	<5	0.4	2935	<0.01	<10		<10
X4292	1.6	8.2	0.3	4	<1	<0.2	6	70	82	4	<0.05	<1	<1	<0.5	2.25	868	14.5	45	<10	0.91	0.4	<10	11.11	3239	0.02	<5	3.7	3164	0.02	<10		<10
X4293	0.9	5.9	0.2	1	<1	<0.2	6	59	154	4	<0.05	<1	<1	<0.5	0.23	273	15.6	<20	<10	0.76	0.4	<10	13.91	3496	0.02	<5	0.9	2949	<0.01	<10		<10
X4294	1.5	8.3	0.3	<1	<1	<0.2	5	72	90	6	<0.05	<1	<1	<0.5	0.11	2123	15.3	45	<10	1.16	0.5	14	12	2589	0.07	<5	0.4	3180	0.01	<10		139
X4295	6.6	4	0.3	1	<1	<0.2	5	63	150	5	<0.05	<1	<1	<0.5	0.08	888	12.5	35	<10	0.71	0.4	<10	17.12	5119	0.03	<5	0.3	2634	0.02	<10		238
X4296	2.3	4.4	0.3	2	<1	<0.2	5	62	735	5	<0.05	<1	<1	<0.5	0.15	2587	17.9	30	<10	0.5	0.4	<10	11.62	3277	0.06	<5	0.3	4226	0.01	<10		25
X4297	0.7	5.7	0.3	<1	<1	<0.2	6	61	20	6	<0.05	3	<1	<0.5	0.13	99	15	283	<10	1.06	0.4	<10	5.24	710	0.02	<5	15.9	1450	0.04	<10		<10
X4298	1.8	8.7	0.3	<1	<1	<0.2	6	86	349	5	<0.05	<1	<1	<0.5	0.19	812	15.9	40	<10	1.42	0.5	<10	12.06	3307	0.03	<5	1	2729	0.02	<10		15
X4151	0.5	21.9	0.4	2	<1	0.2	7	122	27	3	<0.05	<1	2	<0.5	0.36	90	21.5	170	50	2.71	0.4	<10	7.48	1409	0.02		1.1	1663	0.09	<10		<10
X4152	1.2	7.6	0.2	<1	<1	<0.2	6	67	36	2	<0.05	<1	<1	<0.5	0.05	75	19.7	25	15	1.15	0.3	<10	11.72	2615	0.03		0.5	2699	0.03	<10		18
X4153	0.7	2.8	0.2	43	<1	<0.2	10	70	35	3	0.06	<1	1	<0.5	<0.01	342	6.9	427	20	0.4	0.2	25	0.05	908	0.03		11.5	947	<0.01	<10		18
X4154	0.3	13.6	0.3	11	<1	<0.2	7	70	11	142	<0.05	<1	<1	<0.5	5.46	1452	5.4	230	30	2.27	5.8	30	2.76	584	0.02		23.2	624	0.13	50		<10
X4155	0.7	7.4	0.2	1	<1	<0.2	6	76	13	3	<0.05	<1	<1	<0.5	<0.01	300	21.2	30	15	1.33	0.4	25	6.78	2143	0.02		0.2	3007	0.02	<10		30
X4156	1	5.5	0.1	<1	<1	<0.2	6	72	25	3	<0.05	<1	<1	<0.5	0.01	60	18.1	55	15	0.95	0.3	50	10.07	2455	0.03		0.2	2937	0.03	<10		12
X4157	0.4	38.4	0.3	8	1	<0.2	6	88	23	29	<0.05	<1	<1	<0.5	4.44	89	11.3	149	328	5.06	1.5	35	4.37	849	0.02		18	357	0.34	144		<10
X4161	0.2	17.8	0.3	9	<1	<0.2	7	68	22	122	<0.05	<1	<1	<0.5	4.49	626	10.7	189	99	2.88	4.9	40	1.97	626	0.03		19.6	909	0.06	119		36
X4162	0.5	26.4	0.3	7	1	<0.2	6	70	79	72	<0.05	<1	<1	0.6	3.27	460	9.3	180	320	4.31	2.7	20	3.47	859	0.02		21	380	0.32	125		<10
X4163	0.4	20.4	0.5	10	1	<0.2	6	68	28	59	<0.05	<1	<1	0.5	7.29	84	9.3	179	89	3.09	2.1	45	3.3	506	0.02		17.9	387	0.21	79		<10
X4165	0.5	3.6	2.3	20	1	<0.2	7	61	97	277	<0.05	<1	<1	1	7.85	833	0.7	299	30	1.16	4.9	30	0.11	494	0.02		28.1	319	0.13	<10		36
X4166	0.4	38.9	1	5	1	<0.2	6	69	18	14	<0.05	<1	<1	<0.5	0.57	223	12.9	119	188	6.65	0.5	50	4.32	1323	0.03		17.5	426	2.17	263		24
X4167	1.2	2.6	0.3	2	<1	<0.2	6	59	118	4	<0.05	<1	<1	<0.5	<0.01	11721	8.4	25	15	0.71	0.4	40	18.28	3581	0.26		0.3	1835	0.03	<10		71
X4168	1.2	4.5	5	2	<1	<0.2	6	64	37	13	<0.05	<1	<1	<0.5	<0.01	304	17.9	<20	20	0.98	0.5	40	11.41	3337	0.01		0.2	2749	0.03	<10		24
X4169	0.9	10.5	0.5	3	<1	<0.2	5	101	20	6	<0.05	<1	<1	<0.5	0.17	322	19.4	193	15	1.3	0.5	50	10.47	2515	0.02		1.4	2961	0.04	<10		30
X4171	0.5	2.1	0.2	<1	<1	<0.2	6	65	19	3	<0.05	<1	<1	<0.5	<0.01	55	0.9	55	15	0.13	0.3	94	>25.00	60	0.02		0.8	60	0.02	<10		<10
X4172	0.8	17.2	0.2	<1	<1	<0.2	6	123	18	3	<0.05	<1	<1	<0.5	0.05	105	18.3	50	30	2.23	0.3	60	12.72	2921	0.02		0.5	2228	0.03	<10		12
X4173	1.1	6	0.3	<1	<1	<0.2	6	69	17	3	<0.05	<1	<1	<0.5	<0.01	199	16.7	45	299	0.69	0.4	40	14.24	3011	0.01		0.6	2742	0.03	<10		12
X4174	1.3	6.5	0.5	2	<1	<0.2	6	64	28	3	<0.05	<1	<1	<0.5	<0.01	193	15.4	45	784	0.58	0.4	15	12.79	3338	0.02		0.5	2440	0.03	<10		54
X4175	0.5	155	0.3	3	<1	<0.2	6	998	21	4	<0.05	<1	<1	<0.5	0.12	105	0.3	1989	115	9.59	0.4	25	3.44	2328	<0.01		17.4	25	0.06	<10		96
X4176	0.7	21.6	0.4	2	<1	<0.2	6	385	38	4	<0.05	<1	<1	<0.5	0.3	25	0.2	110	40	0.86	0.4	15	3.52	330	<0.01		20.2	20	<0.01	<10		<10
X4177	1.2	4.3	0.2	2	<1	<0.2	6	60	48	3	<0.05	<1	<1	<0.5	<0.01	868	7.1	25	<10	0.58	0.4	15	15.53	2959	0.01		0.6	1622	<0.01	<10		<10
X4178	0.5	21.4	0.5	<1	<1	<0.2	6	181	8	4	<0.05	<1	<1	<0.5	<0.01	100	2.4	190	20	1.16	0.4	55	23.43	420	0.01		3.7	65	0.02	<10		<10
X4181	0.9	3.2	0.7	3	<1	<0.2	6	59	40	23	<0.05	<1	<1	<0.5	0.02	1221	18.7	25	20	0.8	0.4	80	14.52	3734	0.02		0.9	4855	<0.01	<10		<10
X4182	0.9	14.7	0.4	3	<1	<0.2	6	76	75	8	<0.05	<1	<1	<0.5	<0.01	484	8.6	70	15	0.71	0.4	55	17.78	4148	0.02		2.2	1650	<0.01	<10		<10
X4183	0.9	13.7	2.7	3	<1	<0.2	6	108	53	11	<0.05	<1	<1	<0.5	<0.01	363	15.8	50	15	0.85	0.5	70	14.61	3623	<0.01		1.4	2927	<0.01	<10		30
X4184	1.2	7.3	0.9	1	<1	<0.2	6	83	36	4	<0.05	<1	<1	<0.5	<0.01	239	20.5	30	<10	0.65	0.4	45	11.05	2341	<0.01		0.2	2590	<0.01	<10		12
X4185	0.7	2	0.4	<1	<1	<0.2	7	66	28	5	<0.05	<1	<1	<0.5	0.05	45	1.1	45	<10	0.15	0.6	55	24.88	45	<0.01		0.6	60	<0.01	<10		<10
X4186	0.5	16.9	0.2	1	<1	<0.2	5	86	22	3	<0.05	<1	<1	<0.5	0.05	70	3	45	20	2.47	0.4	65	19.48	548	<0.01		2.5	75	0.08	<10		<10
X4187	0.9	6.5	2	2	<1	<0.2	6	61	60	10	<0.05	<1	<1	<0.5	1.23	413	12.8	45	20	1.09	0.4	104	15.39	4170	<0.01		2.1	1257	<0.01	<10		256
X4188	0.6	10.4	0.4	<1	<1	<0.2	6	121	9	4	<0.05	<1	<1	<0.5	<0.01	80	1.9	80	<10	0.75	0.4	40	23.17	358	<0.01		3	89	<0.01	<10		<10
X4189	0.6	4.3	0.5	5	<1	<0.2	6	114	56	5	<0.05	<1	<1	<0.5	1.61	854	>25.0	<20	<10	0.56	0.3	79	3.63	1574	0.01		3.3	>5000	<0.01	<10		<10
X4191	0.4	4.7	1.4	3	<1	<0.2	6	87	33	7	<0.05	<1	<1	<0.5	2.08	2590	24.3	70	<10	0.88	0.3	120	3.97	1743	0.02		5.4	>5000	<0.01	<10		18
X4192	0.6	3.7	0.5	2	<1	<0.2	6	76	51	4	<0.05	<1	<1	<0.5	3.48	1369	19.7	<20	<10	0.43	0.4	125	7.43	1444	0.03		3.1	4940	<0.01	<10		<10

Appendix Four: Outc

SAMPLE	Cd	Co	Cs	Ga	Ge	In	Mo	Ni	Pb	Rb	Re	Sb	Te	Tl	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	S	Sc	Si	Sr	Ti	V	W	Zn
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg
DETECTION	0.2	0.5	0.1	1	1	0.2	2	10	2	2	0.05	1	1	0.5	0.01	10	0.1	20	10	0.01	0.1	10	0.01	10	0.01	5	0.1	10	0.01	10	50	10
X4193	0.7	7.4	0.3	3	<1	<0.2	5	74	99	4	<0.05	<1	<1	<0.5	0.86	160	13.8	50	15	1.52	0.4	55	14.88	3855	<0.01		2	1655	<0.01	<10		42
X4194	0.9	6.5	0.3	1	<1	<0.2	6	74	33	3	<0.05	<1	<1	<0.5	1.32	145	15.6	<20	15	1.14	0.4	110	12.9	4466	<0.01		3.2	2003	<0.01	<10		<10
X4195	0.5	8.1	0.4	3	<1	<0.2	6	217	122	5	<0.05	<1	<1	<0.5	2.12	3355	23.7	45	<10	0.86	0.4	45	3.69	2047	<0.01		3	>5000	<0.01	<10		12
X4196	0.3	2.9	0.7	14	<1	<0.2	8	61	30	204	<0.05	<1	<1	<0.5	8.82	542	2.7	179	15	1	9.5	40	0.62	388	<0.01		27.6	512	0.03	<10		<10
X4197	0.3	16.5	0.2	10	<1	<0.2	6	84	10	69	<0.05	<1	<1	<0.5	5.41	901	13	199	35	3.17	4.3	95	2.43	832	0.02		25.4	1300	0.03	134		36
X4198	<0.2	1.6	0.1	<1	<1	<0.2	6	64	8	3	<0.05	<1	<1	<0.5	0.08	70	4.3	45	<10	0.24	0.5	25	23.85	80	<0.01		1.1	115	<0.01	<10		<10
X4201	1	13.8	0.3	2	<1	<0.2	6	69	41	2	0.06	<1	<1	<0.5	0.13	12383	13	40	30	1.34	0.5	<10	15.1	5065	0.25	<5	0.9	3754	<0.01	<10		77
X4202	<0.2	10.1	0.3	2	<1	<0.2	6	72	103	2	0.09	<1	1	<0.5	<0.01	4143	10.3	35	<10	0.88	0.5	18	18.68	5842	0.09	<5	0.3	3639	<0.01	<10		66
SAMPLE	Cd	Co	Cs	Ga	Ge	In	Mo	Ni	Pb	Rb	Re	Sb	Te	Tl	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	S	Sc	Si	Sr	Ti	V	W	Zn
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg
DETECTION	0.2	0.5	0.1	1	1	0.2	2	10	2	2	0.05	1	1	0.5	0.01	10	0.1	20	10	0.01	0.1	10	0.01	10	0.01	5	0.1	10	0.01	10	50	10
X4203	0.9	9.3	0.3	2	<1	0.2	6	66	53	<2	0.07	<1	<1	<0.5	<0.01	2981	10.1	<20	<10	0.85	0.4	14	18.8	6411	0.07	<5	0.6	2413	<0.01	<10		93
X4204	1.3	19.4	0.3	1	<1	0.2	6	103	72	2	0.07	<1	<1	<0.5	<0.01	743	18.2	45	25	1.63	0.5	216	10.89	5010	0.02	<5	1.2	2772	0.03	<10		<10
X4205	2.6	26.3	0.4	2	<1	0.3	6	132	94	3	0.09	<1	<1	<0.5	<0.01	284	14.2	55	25	3.28	0.5	<10	13.41	4104	0.02	<5	1.2	2647	0.02	<10		33
X4206	0.5	4	2.1	<1	<1	<0.2	6	108	2	3	0.09	<1	<1	<0.5	0.22	94	1.3	60	15	0.32	0.6	50	>25.00	144	0.01	<5	2.8	94	0.01	<10		<10
X4207	1.5	10.8	1.3	1	<1	<0.2	7	93	104	3	0.05	<1	<1	<0.5	0.28	5915	14	75	40	1.11	0.6	45	15.32	2952	0.14	<5	0.8	3628	0.02	<10		<10
X4208	0.2	130	0.7	1	<1	<0.2	6	1315	70	7	0.06	<1	<1	<0.5	0.03	30	0.7	1404	64	7.84	0.5	<10	>25.00	1910	0.01	<5	18.3	35	0.03	<10		44
X4209	0.8	8	0.5	1	<1	<0.2	5	125	96	4	<0.05	<1	<1	<0.5	0.29	273	18	55	55	0.54	0.5	32	11.82	4056	0.03	<5	1.6	3505	0.01	<10		60
X4211	3.7	14	0.2	4	<1	0.3	6	88	87	3	<0.05	<1	<1	<0.5	<0.01	880	18.6	35	20	1.2	0.4	<10	11.64	5109	0.04	<5	0.4	2202	0.04	<10		284
X4212	3.9	16.7	0.5	3	<1	0.4	6	102	43	8	<0.05	<1	<1	<0.5	0.07	269	19.2	60	15	0.84	0.5	18	10.73	6728	0.02	<5	0.9	2440	<0.01	<10		520
X4213	0.8	7.2	0.4	4	<1	<0.2	6	80	28	4	<0.05	<1	<1	<0.5	0.5	1768	16.9	<20	<10	0.63	0.5	<10	12.9	7443	0.06	<5	2.3	2408	0.04	<10		66
X4214	0.9	15.1	0.5	19	<1	0.3	7	87	<2	119	<0.05	<1	<1	<0.5	5.5	352	6.8	129	30	3.23	3.7	18	2.81	1171	0.03	<5	24	655	0.16	114		44
X4215	0.7	35.8	0.4	12	<1	0.2	6	114	<2	106	<0.05	6	<1	<0.5	4.3	573	8.3	100	90	4.92	3.8	<10	3.29	1102	0.04	<5	23	698	0.23	199		33
X4216	0.9	7.6	0.2	3	<1	0.2	6	89	39	4	<0.05	1	<1	<0.5	0.03	6914	18	45	20	2.04	0.4	18	10.92	7433	0.15	<5	1.8	2278	0.03	<10		60
X4217	0.8	6.9	0.6	21	<1	0.2	6	65	36	197	<0.05	<1	<1	0.5	7.96	1220	2.8	179	20	1.32	7.8	50	0.83	685	0.04	10	26.3	685	0.09	25		<10
X4218	<0.2	15.3	1.4	23	<1	<0.2	6	77	21	140	<0.05	<1	<1	<0.5	6.58	1214	5.7	104	50	4.08	4.4	14	1.6	1343	0.02	<5	24.8	577	0.3	159		27
X4221	0.2	22.3	0.5	14	1	<0.2	6	99	23	62	<0.05	<1	<1	0.5	6.12	179	11	184	253	4.58	1.8	<10	4.37	949	0.03	<5	21.6	467	0.31	139		16
X4222	<0.2	66.3	0.3	15	<1	<0.2	5	164	24	8	<0.05	<1	<1	<0.5	4.08	10372	15.3	208	342	18.35	0.6	14	3.78	1739	0.02	<5	4.9	253	0.47	159		185
X4223	<0.2	45.1	1.1	7	<1	<0.2	5	279	<2	14	<0.05	<1	<1	<0.5	4.59	5372	6.6	471	40	6.26	1	23	9.44	1477	0.03	<5	13.1	932	0.22	<10		44
X4224	<0.2	23.3	0.3	5	<1	<0.2	5	218	<2	5	<0.05	<1	<1	<0.5	1.32	40	1	75	<10	0.91	0.5	14	19.58	473	0.01	<5	18.6	40	0.15	<10		<10
X4225	<0.2	69.1	0.3	33	<1	<0.2	6	302	39	6	<0.05	<1	<1	<0.5	1.9	115	0.5	832	204	>25.00	0.5	23	9.64	2490	0.03	<5	9.9	65	2.85	259		197
X4226	<0.2	94.4	0.4	13	<1	<0.2	6	347	27	8	<0.05	<1	<1	<0.5	3.35	1418	0.4	1343	144	20.74	0.5	23	2.67	2612	0.03	<5	22.5	75	0.37	95		120
X4227	<0.2	2	0.3	3	<1	<0.2	6	44	25	6	<0.05	<1	<1	<0.5	0.24	20	0.4	45	<10	0.42	0.4	<10	0.02	50	0.03	<5	13	55	0.04	<10		<10
X4228	<0.2	53.3	1	10	<1	<0.2	5	322	38	10	<0.05	<1	<1	<0.5	8.12	6607	1.5	711	104	9.52	0.6	69	9.9	1980	0.04	<5	15.8	607	0.26	30		109
X4229	0.3	48.9	0.4	3	<1	<0.2	5	453	4	6	<0.05	<1	<1	<0.5	<0.01	335	2.8	1124	35	5.23	0.5	<10	9.92	1359	0.02	<5	19.1	65	0.04	<10		11
X4231	<0.2	14	2.1	7	<1	<0.2	5	53	52	118	<0.05	<1	<1	<0.5	11.81	11396	1.5	80	15	2.78	7.6	37	13.11	454	0.02	<5	15.8	678	0.11	15		11
X4232	<0.2	81.4	0.2	24	<1	0.3	6	175	89	4	<0.05	<1	<1	<0.5	3.97	184	0.5	323	333	>25.00	0.4	37	4.46	4637	0.03	25	0.6	50	1.76	473		405
X4233	<0.2	85.1	0.2	28	<1	0.4	7	227	82	4	<0.05	<1	<1	<0.5	4.51	64	0.4	317	268	>25.00	0.4	23	4.49	4301	0.04	35	0.3	30	1.85	446		382
X4234	<0.2	65.7	0.3	3	<1	<0.2	5	493	18	5	<0.05	<1	<1	<0.5	0.04	194	5.1	828	50	7.8	0.5	23	12.33	2089	0.04	<5	18.6	105	0.05	<10		82
X4235	<0.2	57	0.3	3	<1	<0.2	5	614	3	5	<0.05	<1	<1	<0.5	0.32	303	6.1	1054	45	7.5	0.5	18	11.17	1864	0.03	<5	17.9	144	0.07	<10		60
X4236	<0.2	16	0.5	5	<1	<0.2	5	122	2	7	<0.05	<1	<1	<0.5	8.99	44782	6.4	313	35	3.98	0.6	82	5.18	833	0.04	<5	16.2	680	0.14	20		<10
X4237	<0.2	19.2	0.6	12	<1	<0.2	6	84	22	5	<0.05	<1	<1	<0.5	10.71	12849	4.3	164	59	8.43	0.5	<10	4	1080	0.03	<5	13.5	168	0.43	45		55
X4238	<0.2	6.1	1.8	12	<1	<0.2	6	58	<2	26	<0.05	<1	<1	<0.5	15.29	37166	0.9	40	15	2.02	2.4	14	2.58	329	0.05	<5	18.4	433	0.07	<10		44
X4241	<0.2	38.6	0.2	4	<1	<0.2	6	300	15	4	<0.05	<1	<1	<0.5	0.4	229	3.5	1801	50	7.7	0.6	32	14.56	2060	0.02	<5	15.8	100	0.17	<10		60
X4242	<0.2	70.5	0.2	51	<1	<0.2	8	204	21	4	<0.05	<1	<1	<0.5	13.11	40	0.5	633	179	>25.00	0.4	14	6.66	3390	0.02	<5	0.4	35	3.19	169		581
X4243	<0.2	57.8	0.2	15	<1	<0.2	6	287	7	4	<0.05	<1	<1	<0.5	1.06	145	0.3	1028	115	18.62	0.4	18	10.24	2934	0.02	<5	16	25	1.27	60		93
X4244	<0.2	31.8	0.5	11	1	<0.2	6	87	29	5	<0.05	<1	<1	<0.5	4.49	159	3.4	119	55	6.11	0.5	18	18.05	2289	0.02	<5	9.3	233	0.07	25		355
X4245	<0.2	44	0.3	18	<1	<0.2	6	145	<2	4	<0.05	<1	<1	<0.5	2.7	179	4.5	134	119	20.23	0.4	<10	11.4	2753	0.04	<5	5.8	164	2.12	124		186
X4246	<0.2	28	0.2	6	<1	<0.2	6	294	<2	4	<0.05	<1	<1	<0.5	1.34	130	6.4	470	30	4.65	0.5	18	13.67	1184	0.03	<5	13.5	115	0.07	<10		60
X4247	<0.2	17.8	0.2	6	<1	<0.2	6	77	<2	4	<0.05	<1	<1	<0.5	3.33	119	4.4	55	50	6.38	0.5	23	14.33	1151	0.04	<5	13.6	139	0.28	30		55
X4248	<0.2	10.8	0.2	3	1	<0.2	6	166	<2	4	<0.05	<1	<1	<0.5	0.16	30	0.3	154	<10	1.37	0.5	<10	19.64	501	0.04	<5	20.5	20	0.05	<10		<10
X4249	<0.2	47.7	0.3	3	<1	<0.2	6	456	3	4	<0.05	<1	<1	<0.5	0.12	194	3.7	1458	55	7.78	0.5	18	10.34	1955	0.02	<5	20.7	80	0.07	<10		55
X4301	0.7	25.6	1.4	1	<1	<0.2	5	158	16	5	<0.05	2	<1	0.6	0.16		21.4	25	25	3.95	0.5	<10	10.8	2011	0.03	<5	1.5	2378	0.05	<10		45
X4302	0.8	43.9	1.3	2	<1	<0.2	5	191	17	6	<0.05	3	<1	0.7	0.4		22.9	99	30	3.23	0.5	<10	10.55	1566	0.03	<5	1.3	2210	0.06	<10		30

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Appendix Five: Soil Results

SAMPLE	CeO2	Dy2O3	Er2O3	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Nd	Nd2O3 (Nd*1.16673)	Pr	Pr6O11 (Pr*1.208)	Sm2O3	Tb	Tb2O3 (Tb*1.15)	Tm2O3	Y2O3	Yb2O3	TREO	MREO	Nd_Pr	Tb_Dy	P	P2O5 (P*2.29)	Nb2O5	SnO2	Ta2O5	ThO2	U3O8	As	Be	Bi	Cd
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	mg/kg	mg/kg					%		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DETECTION	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1	0.1	0.05	0.05	0.1	0.05		0.05	0.6	0.1					0.01		2	12	0.6	0.1	2	3	1	0.1	0.2
P7458	11.6	2.06	0.92	0.49	1.83	0.41	7.9	0.14	4.9	5.72	1.27	1.53	1.4	0.3	0.35	0.13	11.9	0.8	47	10	7	2	0.1	0.23	25	<12	1.5	2.1	4	3	2	0.4	0.2
P7461	14.3	0.64	0.24	0.36	0.96	0.11	7.5	0.05	5.3	6.18	1.51	1.82	1.3	0.1	0.12	<0.05	4	<0.1	38	9	8	1	0.11	0.25	136	214	14.5	2.2	4	7	1	0.4	<0.2
P7462	13.9	0.92	0.38	0.49	1.52	0.2	8.3	0.09	5.9	6.88	1.46	1.76	1.5	0.17	0.20	0.07	5	0.3	42	10	9	1	0.09	0.21	35	16	3.4	3.3	<2	<3	<1	0.3	0.4
P7463	26.8	2.41	0.94	1.75	4.75	0.37	15.8	0.15	12.1	14.12	2.8	3.38	5.5	0.41	0.47	0.15	10.9	0.8	88	20	17	3	0.09	0.21	76	<12	3	5.6	<2	<3	5	0.2	0.4
P7464	20.5	2.83	1.11	1.25	3.63	0.49	11.7	0.13	9.5	11.08	2.09	2.52	3.3	0.45	0.52	0.15	13.7	0.8	74	17	14	3	0.12	0.27	56	<12	1.8	2.8	<2	<3	5	0.1	0.4
P7465	18.4	1.95	0.85	0.75	2.19	0.36	10.4	0.11	7	8.17	1.78	2.15	2.2	0.33	0.38	0.1	10.6	<0.1	59	13	10	2	0.16	0.37	47	46	1.7	2.7	<2	<3	2	0.1	0.6
P7466	13.5	4.92	1.38	1.12	4.73	0.68	8.5	0.09	6.4	7.47	1.33	1.61	2.3	0.88	1.01	0.09	18.2	0.5	66	15	9	6	0.22	0.50	32	12	2.2	2	<2	<3	3	0.2	0.7
P7467	5.9	0.67	0.35	0.73	0.74	0.12	3.6	0.06	2.9	3.38	0.55	0.66	0.6	0.11	0.13	<0.05	3.5	0.3	21	5	4	1	0.12	0.27	15	<12	1.6	1.2	<2	<3	<1	0.2	0.4
P7468	5.8	0.75	0.47	1.22	0.91	0.15	3.5	0.11	2.2	2.57	0.64	0.77	0.7	0.11	0.13	0.08	4.2	0.5	22	4	3	1	0.12	0.27	12	<12	1.3	1.4	<2	<3	1	<0.1	<0.2
P7469	13	1.37	0.49	3.1	1.69	0.23	7.5	0.1	5.1	5.95	1.17	1.41	1.7	0.19	0.22	0.07	6.7	<0.1	44	9	7	2	0.1	0.23	32	<12	1.9	2.1	<2	4	2	<0.1	0.8
P7471	5.1	0.63	0.17	0.36	0.87	0.11	3.7	<0.05	2.8	3.27	0.6	0.72	0.7	0.11	0.13	<0.05	2.9	<0.1	19	5	4	1	0.1	0.23	21	<12	1.1	0.4	<2	<3	1	<0.1	0.4
P7472	18.4	4.13	1.29	1.77	4.14	0.67	10.6	0.11	8.5	9.92	1.97	2.38	2.8	0.65	0.75	0.15	17.5	0.4	75	17	12	5	0.23	0.53	45	<12	2.5	3.3	<2	4	2	<0.1	0.4
P7473	13.9	4.97	1.3	1.44	4.38	0.73	7.8	0.09	6.3	7.35	1.54	1.86	2.6	0.79	0.91	0.12	19.2	0.4	67	15	9	6	0.29	0.66	34	<12	2	1.4	<2	6	2	<0.1	0.4
P7493	12.3	1.65	0.71	0.7	1.9	0.28	8.6	0.14	5.8	6.77	1.49	1.80	2	0.22	0.25	0.09	8.2	0.4	46	10	9	2	0.1	0.23	43	<12	1.5	2.5	<2	<3	4	<0.1	0.7
P7494	20.8	1.99	0.96	0.96	3.1	0.4	14.8	0.15	10.3	12.02	2.73	3.30	2.8	0.37	0.43	0.16	10.9	0.4	73	18	15	2	0.13	0.30	69	<12	3	4.5	2	<3	7	<0.1	1.2
P7495	18.2	1.68	0.83	0.56	1.99	0.33	12.2	0.15	7.8	9.10	1.95	2.36	1.9	0.29	0.33	0.15	8.2	0.8	59	13	11	2	0.17	0.39	82	<12	2.8	7.2	<2	7	4	<0.1	0.4
P7496	27.4	3.11	1.55	1.5	4.15	0.53	22.6	0.26	15.3	17.85	3.97	4.80	4.6	0.5	0.58	0.2	14.7	1.2	105	26	23	4	0.1	0.23	134	<12	4.3	11.2	<2	<3	10	0.1	0.4
P7497	33.1	2.61	1.3	1.3	4.17	0.48	21.1	0.22	14.1	16.45	3.85	4.65	4.4	0.46	0.53	0.18	13.1	1.2	105	24	21	3	0.19	0.44	128	<12	3.9	9.3	<2	<3	8	0.1	0.9
P7498	42.7	4.07	1.86	2.04	5.32	1.01	24.1	0.64	19.5	22.75	5.35	6.46	5.6	0.87	1.00	0.61	16.8	1.9	137	34	29	5	0.22	0.50	124	<12	4.6	13.1	3	<3	12	3.9	1.4
P7501	16.1	1.62	0.81	0.83	2.12	0.35	8.7	0.23	7.4	8.63	1.97	2.38	2.2	0.31	0.36	0.19	7.3	0.9	53	13	11	2	0.12	0.27	37	<12	2.2	2.6	<2	4	3	0.7	1.3
P7518	36.1	3.92	1.85	1.55	4.93	0.76	18.6	0.29	15.9	18.55	4.09	4.94	4.6	0.66	0.76	0.28	17.6	1.5	116	28	23	5	0.56	1.28	124	<12	3	9	3	<3	7	0.5	1.2
P7522	2	0.25	0.11	0.1	0.31	<0.05	1	<0.05	1	1.17	0.24	0.29	0.3	<0.05	<0.06	<0.05	1	<0.1	7	2	1	0	1.18	2.70	5	<12	<0.6	0.3	<2	<3	<1	<0.1	<0.2
P7523	47.4	6.19	2.36	2.49	8.03	1.07	23.1	0.32	22.9	26.72	5.26	6.35	6.7	1.04	1.20	0.18	25.6	1.7	159	40	33	7	1.5	3.44	4	17	6.3	6.9	3	3	4	2.1	0.5
P7524	49.8	5.55	2.51	2.39	7.5	1.12	25.2	0.44	23.3	27.18	5.5	6.64	6.9	1.06	1.22	0.26	25	1.9	164	41	34	7	0.94	2.15	7	16	6	6.6	3	8	9	1.3	0.4
P7525	37	5.36	2.32	2.2	7.13	1.01	18.3	0.4	19.2	22.40	4.48	5.41	6.2	1.03	1.18	0.24	22.5	1.3	133	34	28	7	2.33	5.34	156	32	6.1	6.5	2	3	4	1.2	0.4
P7526	91.1	8.91	3.78	4.4	12.9	1.65	44.1	0.67	42.7	49.82	10.13	12.24	13	1.68	1.93	0.36	37.9	3.2	286	73	62	11	2.04	4.67	278	13	9.6	15.2	5	4	15	1.5	0.6
P7527	206	13.31	5.48	7.79	21.7	2.33	115	0.85	91.1	106.29	22.49	27.17	24.9	2.53	2.91	0.46	57.3	4.3	596	150	133	16	1.14	2.61	368	14	11.4	13.7	6	8	13	1.5	0.8
P7528	393	23.94	8.4	13.58	37.81	3.89	207	1.05	183	213.51	43.91	53.04	43.7	4.33	4.98	0.61	98.2	5.6	1108	295	267	29	0.62	1.42	747	13	12.7	17.6	9	13	10	2.3	1.5
P7529	105	11.4	5.14	5.98	16.85	2.03	57.9	0.69	58.9	68.72	13.47	16.27	17.5	2.16	2.48	0.36	51.4	3.3	365	99	85	14	2.45	5.61	479	32	13.8	13.6	6	12	10	1.2	0.7
P7531	112	9.78	4.15	5.11	13.48	1.78	59.6	0.62	57.9	67.55	13.3	16.07	15.3	1.74	2.00	0.35	42	3.4	353	95	84	12	1.52	3.48	919	15	16.8	21.3	6	8	8	1.1	0.9
P7532	134	8.36	3.12	4.5	13.03	1.5	71.1	0.48	58.4	68.14	14.54	17.56	14.1	1.59	1.83	0.26	34.6	2.6	375	96	86	10	0.55	1.26	722	<12	13.2	20.1	5	9	13	1.2	0.5
P7533	151	9.69	3.85	6.39	17.32	1.6	79.1	0.58	76	88.67	17.68	21.36	20.3	1.95	2.24	0.29	40.5	2.9	446	122	110	12	0.52	1.19	605	<12	12.7	25.6	5	7	14	1	0.5
P7534	170	11.96	4.43	7.89	22.41	1.86	89.7	0.57	85.8	100.11	20.01	24.17	23.4	2.4	2.76	0.34	46.5	3.4	509	139	124	15	0.49	1.12	633	<12	14	23.5	5	<3	14	1.1	0.6
P7535	139	12.12	4.48	8.64	22.49	1.91	79.5	0.58	79.4	92.64	18.41	22.24	23	2.35	2.70	0.31	50.1	3.2	463	130	115	15	0.4	0.92	770	42	13	18.9	6	9	16	0.8	0.5
P7536	119	11.58	4.51	6.59	18.28	1.98	77.2	0.48	65.8	76.77	15.63	18.88	17.5	2.1	2.42	0.28	47.4	3.3	406	110	96	14	0.3	0.69	526	13	10.4	14.9	4	16	22	0.6	0.6
P7537	164	12.2	4.5	6.81	20.07	1.88	99.6	0.55	77.1	89.95	19.38	23.41	20.5	2.22	2.55	0.28	47.8	3.1	497	128	113	15	0.38	0.87	543	22	11.7	18.2	4	12	17	0.6	0.8
P7538	69.1	5.38	2.5	2.37	7.67	1	36.8	0.35	26.4	30.80	6.78	8.19	7	0.91	1.05	0.22	25.8	2	200	45	39	6	0.13	0.30	253	<12	6	14.1	2	7	17	0.4	0.6
P7541	71.8	6.04	2.71	2.69	8.11	1.08	39	0.42	29	33.84	7.63	9.22	7.8	1	1.15	0.2	27.8	2.3	214	50	43	7	0.15	0.34	274	<12	5.5	12.5	2	6	17	0.8	0.3
P7542	72.9	7.02	3.45	2.83	9	1.33	41.2	0.45	30.7	35.82	7.72	9.33	8.3	1.23	1.41	0.24	34.5	2.4	230	54	45	8	0.16	0.37	216	19	5.2	16.7	2	6	17	0.5	0.4
P7543	78.2	7.52	3.4	3.01	9.54	1.29	42.7	0.4	29.8	34.77	7.69	9.29	8.3	1.27	1.46	0.22	33.6	2.6	236	53	44	9	0.16	0.37	210	<12	4.9	13.4	2	11	18	0.4	0.6
P7544	61.1	7.33	3.21	2.84	10.13	1.29	42.3	0.44	31.6	36.87	7.78	9.40	8.1	1.21	1.39	0.22	33.5	2.6	221	55	46	9	0.13	0.30	225	34	4.5	11.1	3	18	22	0.3	0.4
P7545	48	6.3	2.75	2.43	7.95	1.19	35.7	0.35	25.5	29.75	6.53	7.89	7.4	1.09	1.25	0.19	32.1	2.2	185	45	38	8	0.17	0.39	175	13	4.9	8.7	2	15	20	0.4	0.4
P7581	50.1	5.1	1.98	1.96	6.7	0.85	22.9	0.28	23.8	27.77	5.77	6.97	5.8	0.87	1.00	0.13	22.1	1.8	155	41	35	6	0.27	0.62	43	<12	4.8	5.6	<2	8	6	0.3	0.4
P7582	62.6	6.34	2.69	2.51	8.42	1.08	29.3	0.31	28.4	33.14	6.82	8.24	7.8	1.07	1.23	0.16	27.4	2	193	49	41	8	1.19	2.73	55	<12	4.1	4.8	<2	9	6	0.3	0.3
P7583	66.2	6.48	2.6	2.47	8.66	1.07	32.5	0.29	30.8	35.94	7.34	8.87	8.5	1.06	1.22	0.17	29	1.5	205	53	45	8	1.79	4.10	142	<12	4.5	7.6	<2	<3	6	0.3	0.5
P7584	36	3.7	1.67	1.42	4.74	0.64	19.1	0.2	17.6	20.53	4.28	5.17	4.2	0.62	0.71	0.11	17.8	0.4	116	30	26	4	0.72	1.65	120	64	3.6	2.7	2	5	4	0.3	0.7
P7585	29.9	2.24	0.95	1.2	3.58	0.38	15.2	0.15	14.4	16.80	3.38	4.08	4	0.44	0.51	0.07	10.7	0.6	90	24	21	3	0.35	0.80	77	<12	1.8	1.9	<2	<3	5	0.2	0.4
P7586	36.9	4.17	1.78	1.71	4.92	0.8	18.2	0.21	19.3	22.52	4.18	5.05	5.1	0.7	0.81	0.13	21.2	1.2	125	33	28	5	0.48	1.10	99	<12	3.1	6.7	<2	<3	3	0.2	0.3
P7587	34.9	3.98	1.69	1.52	4.16	0.76	17.9	0.18	18.7	21.82	3.98	4.81	5	0.63	0.72	0.12	18.6	1	117	31	27	5	0.38	0.87	83	<12	2.6	5.8	<2	<3	2	0.3	0.2
P7588	21.2	4.57	1.51	1.09	3.76	0.77	11	0.15	10.4	12.13	2.29	2.77	3.1	0.64	0.74	0.09	20.6	0.7	84	20	15	5	0.18	0.41	74	<12	1.7	5.2	<2	4	3	0.2	0.3
P7589	25.7	9.39	3.06	1.84	6.74	1.53	14.1	0.14	12.3	14.35	2.82	3.41	4	1.27	1.46	0.11	39.4	0.9	126	29	18	11	0.25	0.57	77	<12	2.8	6.7	<2	3	3	0.1	0.3
P7591	43.9	21.68	5.27	3.56	13.95	3.07	24	0.16	20.5	23.92	4.68	5.65	7.8	2.88	3.31	0.2	86.5	1.3	244	55	30	25	0.47	1.08	88	<12	1.9	3.9	<2	<3	3	0.1	0.3
P7592	31.9	8.19	2.06	1.54	5.69	1.19	17.4	0.12	12.1	14.12	3.15	3.81	3.6	1.11	1.28	0.09	31.3	0.7	123	27	18	9	0.22	0.50	50	<12	1.5	6.2	<2	4	3	0.2	0.3
P7593	7.5	1.11	0.5	0.56	0.98	0.19	4.2	0.09	3.1	3.62	0.77	0.93	0.8	0.15	0.17	<0.05	5.6	<0.1	26	6	5	1	0.07	0.16	25	<12	1.3	1.5	<2	<3	2	0.2	0.3
P7594	12.6	1.32	0.72	0.63	1.32	0.27	5.9	0.11	4.7	5.48	1.14	1.38	1.2	0.19	0.22	<0.05	7.5	0.6	39	8	7	2	0.1	0.23	21	<12	1.2	2.7	<2	5	2	0.1	0.2
P7595	13.1	1.3	0.64	0.55	1.31	0.23	6.5	0.08	4.2	4.90	1.17	1.41	1	0.18	0.21	<0.05	6.7	0.1	38	8	6	2	0.26	0.60	17	<12	1	3.4	<2	4	2	0.2	0.3
P7596	12.9	1.65	0.76	0.55	1.49	0.33	5.8	0.11	5.2	6.07	1.11	1.34	1	0.24	0.28	0.07	9.9	0.4	43	9	7	2	0.21	0.48	27	<12	1.5	5	<2	<3	2	0.2	0.2
P7597	21	5.82	2.77	0.89	2.82	1.21	12.5	0.12	7.6	8.87	1.93	2.33	2	0.63	0.72	0.12	33.7	0.9	96	18	11	7	0.34	0.78	76	<12	2.2	2.5	<2	3	4	0.2	0.3
P7598	22	7.88	3.48	1.26	4.01	1.55	12	0.14	8.5	9.92	2.1	2.54	2.7	0.87	1.00	0.15	44.3	1.2	114	21	12	9	0.4	0.92	41	<12	1.9	3.3	<2	6	3	1.5	0.2

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Appendix Five: Soil Results

SAMPLE	CeO2	Dy2O3	Er2O3	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Nd	Nd2O3 (Nd*1.16673)	Pr	Pr6O11 (Pr*1.208)	Sm2O3	Tb	Tb2O3 (Tb*1.15)	Tm2O3	Y2O3	Yb2O3	TREO	MREO	Nd_Pr	Tb_Dy	P	P2O5 (P*2.29)	Nb2O5	SnO2	Ta2O5	ThO2	U3O8	As	Be	Bi	Cd
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	mg/kg	mg/kg					%		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DETECTION	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1	0.1	0.05	0.05	0.1	0.05		0.05	0.6	0.1					0.01		2	12	0.6	0.1	2	3	1	0.1	0.2
P7601	15.5	2.53	1.33	0.57	1.77	0.52	6.8	0.1	6.6	7.70	1.58	1.91	1.5	0.33	0.38	0.09	15.4	0.5	57	13	10	3	0.31	0.71	31	<12	0.9	3.3	<2	<3	2	0.4	0.3
P7602	24.3	2.77	1.55	0.73	2.47	0.56	11.1	0.17	9.1	10.62	2.34	2.83	2.1	0.39	0.45	0.11	16.4	0.9	77	17	13	3	0.23	0.53	35	<12	1.4	4.3	<2	5	3	0.9	0.2
P7603	21.4	2.74	1.63	0.79	2.38	0.56	10.5	0.18	8.1	9.45	2.01	2.43	2.1	0.35	0.40	0.1	15.8	0.9	71	15	12	3	0.3	0.69	31	<12	1.3	4.4	<2	4	3	0.3	0.2
P7604	16.7	2.16	1.19	0.66	2.11	0.45	8.3	0.16	6.1	7.12	1.54	1.86	1.8	0.27	0.31	0.08	13.1	0.8	57	11	9	2	0.16	0.37	30	<12	1.4	2.3	<2	<3	4	0.2	<0.2
P7627	109	12.75	4.82	5.58	18.31	2.08	45.3	0.49	62.9	73.39	12.93	15.62	17.8	2.27	2.61	0.29	58.1	3.1	369	104	89	15	3.51	8.04	65	<12	5.4	7.7	2	5	8	0.2	0.4
P7628	89.7	9.23	3.58	4.14	13.11	1.5	41.4	0.34	52.1	60.79	10.52	12.71	13.8	1.62	1.86	0.21	43.8	2.3	298	85	73	11	1.66	3.80	99	<12	4.9	12.2	<2	6	11	0.3	0.4
P7629	85.5	9.79	3.75	4.47	13.57	1.61	41.3	0.38	49.8	58.10	10.68	12.90	14.4	1.64	1.89	0.22	45	2.3	295	83	71	12	2.45	5.61	167	<12	7	11.8	2	5	8	0.3	0.5
P7631	58.1	4.37	1.74	2.63	6.9	0.75	27.2	0.31	29.5	34.42	6.6	7.97	8.7	0.82	0.94	0.29	24.4	1.3	180	48	42	5	0.51	1.17	72	<12	3.3	6.7	<2	<3	6	1.5	1.5
P7632	141	12.61	5.22	5.39	16.09	2.2	67.5	0.74	67.4	78.64	15.41	18.62	17.8	2.16	2.48	0.78	71.4	4.1	445	112	97	15	1.26	2.89	166	13	9.9	21.8	5	7	10	1.4	2.1
P7633	88.5	10.02	3.62	4.48	12.84	1.58	43.2	0.38	48.6	56.70	10.79	13.03	14	1.63	1.87	0.46	55.5	2.6	309	82	70	12	2.4	5.50	126	<12	7.8	13.3	3	<3	6	1	1.5
P7634	73.5	6.19	2.57	2.74	7.08	1.13	35.9	0.33	34.4	40.14	7.97	9.63	7.9	0.99	1.14	0.42	35.2	2	226	57	50	7	0.63	1.44	127	<12	6.1	8	<2	<3	6	0.9	1.5
P7635	66.8	7	2.62	2.61	7.66	1.15	31.8	0.36	30.2	35.24	7.21	8.71	7.9	1.09	1.25	0.34	38.6	1.7	214	52	44	8	0.75	1.72	143	<12	5.8	7.9	2	<3	5	0.8	0.9
P7636	54	5.41	1.94	2	6.1	0.95	25.8	0.26	23.7	27.65	5.49	6.63	6.6	0.84	0.97	0.28	27.6	1.5	168	41	34	6	0.62	1.42	107	<12	4.4	5	<2	6	4	0.7	2
P7637	32.6	2.32	1.17	0.95	2.94	0.46	17	0.18	11.9	13.88	3.18	3.84	3.6	0.4	0.46	0.18	14.9	1	95	21	18	3	0.26	0.60	52	<12	3.2	7	<2	<3	2	0.5	1.3
P7638	29.4	2.68	1.29	1.11	3.19	0.44	15.4	0.2	12	14.00	2.96	3.58	3.6	0.39	0.45	0.17	17	0.8	93	21	18	3	0.19	0.44	59	<12	3.4	5	3	<3	2	0.5	2.1
P7641	51.9	3.64	1.22	2.06	5.53	0.62	26.4	0.2	21.5	25.08	5.11	6.17	6.5	0.62	0.71	0.19	19.2	1	150	36	31	4	0.16	0.37	82	<12	3.9	6.2	<2	<3	4	0.3	1.5
P7642	45.5	3.67	1.45	1.78	4.82	0.58	23.6	0.19	18.7	21.82	4.36	5.27	6.2	0.58	0.67	0.17	21.3	0.7	138	31	27	4	0.17	0.39	87	<12	3	6	2	<3	4	0.3	3.1
P7643	23.3	2.1	0.98	1.01	2.65	0.38	11.9	0.16	8.6	10.03	2.16	2.61	3	0.35	0.40	0.13	11.5	0.7	71	15	13	3	0.12	0.27	35	<12	3.1	2.5	<2	<3	3	0.2	1
P7644	21.4	3.86	1.4	1.14	2.99	0.63	11.1	0.13	8.4	9.80	2.18	2.63	2.5	0.55	0.63	0.15	20.3	0.8	79	17	12	4	0.2	0.46	26	<12	2.1	2.6	<2	<3	2	0.2	0.7
P7645	44.9	18.54	6.86	3.57	13.57	3.18	23.6	0.29	17.3	20.18	4.39	5.30	7.3	2.58	2.97	0.61	95.8	2.2	249	47	25	22	0.36	0.82	55	23	3.5	4.6	2	<3	3	0.2	1
P7646	44.6	12.27	4.64	2.32	8.86	2.11	23.9	0.29	15.8	18.43	4.25	5.13	5.3	1.67	1.92	0.42	66.7	1.7	199	38	24	14	0.29	0.66	74	39	4.3	7.2	3	9	4	0.2	1.1
P7647	32.9	5.81	2.58	1.65	4.75	1.13	17.6	0.23	10.1	11.78	2.89	3.49	3.3	0.87	1.00	0.28	37.8	1	125	22	15	7	0.14	0.32	61	56	2.9	5.7	3	<3	4	0.2	1
P7648	17.8	2.74	1.24	0.81	2.51	0.45	8.7	0.14	7.4	8.63	1.78	2.15	2.1	0.36	0.41	0.17	19.9	1	69	14	11	3	0.24	0.55	98	191	3.1	3.9	4	3	2	0.1	1.4
P7668	129	14.47	5.11	5.59	18.4	2.31	56.2	0.56	60.2	70.24	13.91	16.80	16.8	2.4	2.76	0.69	68.8	3.7	411	104	87	17	2.76	6.32	208	<12	10.3	6.9	2	10	7	0.2	1.3
P7669	148	14.75	5.42	5.92	18.27	2.26	57.7	0.55	63.7	74.32	14.56	17.59	18.2	2.41	2.77	0.66	66.8	3.5	437	109	92	18	2.61	5.98	208	<12	9.2	15.1	3	<3	9	0.3	0.8
P7671	143	13.13	5.06	5.45	17.18	1.88	58.4	0.49	67.3	78.52	15.6	18.84	17.1	2.11	2.43	0.61	54.9	2.9	420	113	97	16	1.8	4.12	217	12	10	16.3	2	<3	7	0.2	1.9
P7672	60.8	6.05	2.31	2.4	6.98	0.89	26.2	0.25	30.2	35.24	7.13	8.61	7.4	0.93	1.07	0.3	35.9	<0.1	194	51	44	7	0.45	1.03	193	326	8.2	3.5	4	4	9	0.2	2.9
P7673	50.9	4	1.66	1.89	5.45	0.64	22.9	0.2	25.6	29.87	6.03	7.28	5.6	0.68	0.78	0.23	19.1	1.2	152	42	37	5	0.35	0.80	127	16	7.2	4.3	<2	22	3	0.3	0.9
P7674	147	10.97	3.77	4.77	14.57	1.64	64.5	0.42	70	81.67	16.39	19.80	15.6	1.77	2.04	0.49	47.7	2.8	418	114	101	13	0.43	0.98	164	13	10.2	7.3	2	<3	6	0.2	1.5
P7675	174	17.67	6.32	7.56	23.67	2.83	73.9	0.64	89.1	103.96	19.73	23.83	24.2	3.04	3.50	0.7	77.4	4.1	544	149	128	21	3.5	8.02	179	<12	9.2	17.1	3	4	5	0.3	1.4
P7676	115	12.49	4.54	4.83	15.86	1.98	48.6	0.41	52.7	61.49	11.76	14.21	15.8	2.01	2.31	0.54	60.6	2.7	361	90	76	15	2.95	6.76	119	72	9.4	14.3	3	<3	5	0.2	0.8
P7677	77.1	7.14	2.9	2.95	8.86	1.17	36.6	0.3	33.2	38.74	7.74	9.35	9.5	1.11	1.28	0.35	34.1	2	232	57	48	8	1.45	3.32	109	97	12	8.6	3	<3	5	0.2	1.4
P7678	152	12.31	4.39	6.58	18.22	1.87	68.6	0.43	88	102.67	18.16	21.94	23.7	2.03	2.33	0.55	54.4	3.1	473	139	125	15	2.18	4.99	120	24	9.2	17.7	2	<3	5	0.4	2.1
P7681	75.8	8.43	3.01	3.39	10.75	1.28	30.3	0.32	36.7	42.82	7.82	9.45	10.5	1.36	1.56	0.4	37.8	2.2	238	62	52	10	2.51	5.75	95	<12	8.1	11.5	4	3	3	1.3	1.4
P7682	108	11.87	5.82	3.31	12.19	2.13	49.2	0.53	40	46.67	10.08	12.18	10.8	1.74	2.00	0.68	59.8	3.8	329	73	59	14	0.71	1.63	38	<12	3.2	14.4	3	4	3	0.6	0.9
P7683	26.3	7.08	3	1.67	6.05	1.25	13.2	0.21	13.1	15.28	2.86	3.45	4.1	1.1	1.27	0.32	43.8	1	128	27	19	8	0.39	0.89	80	194	3.3	6.4	4	<3	2	0.3	1.2
P7684	36.1	9.11	3.68	2.26	7.36	1.7	16	0.32	16.4	19.13	3.56	4.30	5.3	1.27	1.46	0.37	42.1	2	151	34	23	11	0.68	1.56	29	<12	2.7	4.5	<2	<3	2	0.2	0.6
P7685	22.7	9.81	4.22	2.09	7.23	1.73	10.7	0.33	11.1	12.95	2.51	3.03	4.3	1.32	1.52	0.47	48.8	2.3	132	27	16	11	0.46	1.05	33	15	2.5	4.5	<2	<3	3	0.2	0.2
P7686	13	9.48	3.62	1.95	6.64	1.62	6	0.28	8.1	9.45	1.59	1.92	4.1	1.35	1.55	0.36	43.3	1.3	105	22	11	11	0.27	0.62	24	31	3.3	2	<2	7	1	0.2	0.5
P7687	11.2	3.78	1.43	0.91	3.34	0.6	5.1	0.11	5.1	5.95	1.13	1.37	1.8	0.55	0.63	0.15	17	0.6	54	12	7	4	0.19	0.44	36	45	2.5	2.7	<2	<3	2	0.2	1
P7688	22.4	3.39	1.41	1.22	3.82	0.6	11.4	0.18	11.7	13.65	1.76	2.13	3.7	0.5	0.58	0.17	14.9	1	81	20	16	4	0.08	0.18	33	36	2.8	1.7	<2	<3	2	0.2	1.3
P7689	48.4	6.82	2.94	2.78	7.88	1.07	22.8	0.24	22	25.67	4.94	5.97	8.1	1.05	1.21	0.32	31	1.5	167	40	32	8	0.19	0.44	115	18	8.8	21.1	3	5	4	0.1	0.5
P7691	9.4	1.95	1.05	0.74	1.63	0.37	5.1	0.13	4.8	5.60	1.05	1.27	1.1	0.31	0.36	0.11	10.6	1	40	9	7	2	0.07	0.16	23	31	1.6	1.6	<2	<3	1	0.1	<0.2
P7692	9	1.46	0.55	0.51	1.24	0.22	4.3	0.09	3.5	4.08	0.92	1.11	1.2	0.19	0.22	0.09	7	0.5	32	7	5	2	0.13	0.30	18	<12	1.7	1.7	<2	3	1	0.1	0.6
P7693	7.4	3.41	1.6	0.7	2.22	0.55	4.6	0.07	4	4.67	0.84	1.01	1.1	0.41	0.47	0.15	21.7	<0.1	50	10	6	4	0.29	0.66	18	<12	1.6	0.7	3	<3	1	<0.1	3
P7694	13.7	7.27	2.4	1.7	6.02	1.15	6	0.13	5.7	6.65	1.35	1.63	2.5	1.08	1.24	0.21	29.7	1.3	82	17	8	9	0.08	0.18	22	<12	1.2	6.3	<2	<3	2	0.1	0.4
P7695	12.8	2.13	0.74	0.6	1.73	0.28	6.2	0.08	4.8	5.60	1.17	1.41	1.2	0.29	0.33	0.08	8.5	0.3	42	9	7	2	0.06	0.14	28	<12	0.9	3	<2	<3	1	0.1	0.6
P7722	80.4	11.69	5.25	2.61	10.75	2.11	35.2	0.46	31.4	36.64	7.5	9.06	8.5	1.67	1.92	0.56	53	3	261	59	46	14	0.95	2.18	27	<12	2.5	10.5	2	5	3	0.1	0.5
P7723	49.6	5.93	2.85	1.66	6.2	1.07	23.4	0.34	19.2	22.40	5.04	6.09	5.8	0.92	1.06	0.36	29	2.1	158	35	28	7	0.46	1.05	36	20	3.1	11.2	2	<3	3	0.1	0.7
P7724	42.8	5.35	2.41	1.6	5.47	0.95	19	0.21	17.2	20.07	4	4.83	4.2	0.83	0.95	0.26	24.9	1.6	135	31	25	6	0.68	1.56	50	34	2.7	6.8	<2	4	2	0.1	0.4
P7725	6	0.71	0.34	0.28	0.67	0.21	4.1	0.08	2.3	2.68	0.58	0.70	0.6	0.14	0.16	0.1	3.3	0.2	20	4	3	1	0.06	0.14	67	<12	1.6	1.8	<2	<3	5	1.9	<0.2
P7726	11.7	1.12	0.49	1.22	2.3	0.25	7.7	0.1	9.1	10.62	1.47	1.78	4.3	0.29	0.33	0.12	6	0.3	48	14	12	1	0.08	0.18	63	20	1.2	2.6	<2	<3	6	1	0.2
P7769	38.6	3.92	1.82	1.26	4.25	0.6	23.1	0.15	16.8	19.60	3.65	4.41	3.1	0.76	0.87	0.18	21.1	0.7	124	29	24	5	0.1	0.23	97	<12	3.8	5.4	2	<3	7	0.4	0.3
P7771	34.7	4.74	1.66	1.1	4.18	0.79	18.4	0.12	13.3	15.52	3.69	4.46	3.6	0.73	0.84	0.15	19.9	0.8	111	26	20	6	0.1	0.23	94	<12	2.7	6.7	<2	4	7	0.4	0.3
P7772	34.4	2.89	0.84	1	3.23	0.39	17.8	0.07	15.4	17.97	3.91	4.72	3.2	0.48	0.55	0.07	10.6	0.4	98	26	23	3	0.05	0.11	66	15	3.8	1.3	<2	6	4	0.2	0.4
P7773	74	4.17	1.87	1.12	4.39	0.71	41.2	0.18	29.6	34.54	8.12	9.81	5.2	0.68	0.78	0.21	19.4	1.1	199	49	44	5	0.16	0.37	95	24	3.3	4.1	<2	15	7	0.2	0.8
P7774	44.8	1.99	0.89	0.56	2.11	0.38	25.1	0.1	17.4	20.30	4.9	5.92	3.1	0.3	0.35	0.1	10.3	0.5	116	29	26	2	0.02	0.05	89	53	5.7	1.8	<2	9	3	0.2	0.6
P7775	47	5.28	2.11	1.28	3.88	0.92	23.7	0.17	17.5	20.42	4.73	5.71	3.6	0.73	0.84	0.17	22.5	0.7	138	32	26	6	0.09	0.21	89	<12	4.8	7	<2	7	4	0.3	0.4
P7776	43.2	3.51	1.45	0.81	2.71	0.65	21.5	0.15	14.6	17.03	4.13	4.99	2.8	0.49	0.56	0.15	16	0.8	116	26	22	4	0.04	0.09	66	<12	3.8	8.2	<2	6	4	0.1	0.4

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Appendix Five: Soil Results

SAMPLE	CeO2	Dy2O3	Er2O3	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Nd	Nd2O3 (Nd*1.16673)	Pr	Pr6O11 (Pr*1.208)	Sm2O3	Tb	Tb2O3 (Tb*1.15)	Tm2O3	Y2O3	Yb2O3	TREO	MREO	Nd_Pr	Tb_Dy	P	P2O5 (P*2.29)	Nb2O5	SnO2	Ta2O5	ThO2	U3O8	As	Be	Bi	Cd
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	mg/kg	mg/kg					%		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DETECTION	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1	0.1	0.05	0.05	0.1	0.05		0.05	0.6	0.1					0.01		2	12	0.6	0.1	2	3	1	0.1	0.2
P7777	41.3	3.93	1.67	0.93	3.1	0.72	22.3	0.16	14.2	16.57	3.9	4.71	3.3	0.58	0.67	0.17	19	0.8	119	26	21	5	0.05	0.11	76	<12	3.3	6.6	<2	5	4	0.1	0.4
P7778	31.1	7.19	2.66	1.46	4.96	1.22	17.3	0.18	11.4	13.30	3.04	3.67	3.3	1.08	1.24	0.27	30.5	1.3	120	25	17	8	0.18	0.41	57	<12	3.1	2.9	<2	4	4	0.2	0.5
P7781	25.6	7.22	2.67	1.35	4.82	1.33	14.1	0.12	9.2	10.73	2.57	3.10	3	0.97	1.12	0.23	30.4	0.9	107	22	14	8	0.25	0.57	48	<12	2.4	2.4	<2	4	4	0.2	0.4
P7782	29.9	11.75	4.13	1.53	6.65	2.17	15.4	0.16	12.8	14.93	2.97	3.59	3.7	1.53	1.76	0.33	46.9	1.3	144	32	19	14	0.18	0.41	54	<12	3.4	4.9	<2	<3	5	0.1	0.5
P7783	26	9.53	3.51	1.47	6	1.69	13.4	0.18	10.1	11.78	2.53	3.06	3.9	1.27	1.46	0.31	41.8	1.2	125	26	15	11	0.24	0.55	55	<12	4.8	6.9	3	4	5	0.2	0.5
P7784	29	10.53	3.76	1.93	6.65	1.8	14.3	0.2	12.5	14.58	2.83	3.42	4.5	1.44	1.66	0.3	40.8	1.3	135	30	18	12	0.33	0.76	55	<12	5.4	8.8	<2	5	4	<0.1	0.5
P7785	23.3	5.79	2.47	1.01	3.98	0.99	12.1	0.2	10.4	12.13	2.41	2.91	3	0.82	0.94	0.24	23.8	1.4	94	22	15	7	0.21	0.48	31	<12	2.3	4	<2	14	3	0.2	0.6
P7786	42.7	6.27	3	1.14	5.09	1.17	20.6	0.35	16.1	18.78	3.98	4.81	4.3	0.82	0.94	0.38	28.4	2.1	140	31	24	7	0.34	0.78	41	<12	2.9	5.2	<2	18	4	<0.1	0.7
P7787	43.7	5.9	3.12	1.21	4.91	1.23	23.1	0.35	18	21.00	4.53	5.47	4.9	0.89	1.02	0.38	30	2.4	149	33	26	7	0.52	1.19	33	<12	2.8	6.7	2	11	5	0.1	0.7
P7788	73.3	6.32	2.81	1.37	6.23	1.19	37.1	0.37	27.7	32.32	7.5	9.06	6.4	0.93	1.07	0.37	26.9	2.2	207	49	41	7	0.8	1.83	41	<12	2.7	12.3	4	3	5	<0.1	0.4
P7789	101	6.79	3.24	1.7	7.69	1.19	50.7	0.42	37.3	43.52	9.66	11.67	7.8	1.07	1.23	0.42	26.5	2.5	266	63	55	8	1.15	2.63	26	<12	2.6	8.8	2	<3	4	<0.1	0.4
P7791	30.3	3.82	1.97	0.84	3.39	0.74	14.4	0.28	12.1	14.12	2.98	3.60	3.2	0.53	0.61	0.27	17.9	1.5	97	22	18	4	0.35	0.80	18	<12	1.4	5.4	<2	<3	4	0.1	0.2
P7792	29.5	4.17	2.23	0.95	3.51	0.77	13	0.31	10.7	12.48	2.74	3.31	2.9	0.56	0.64	0.29	18.8	1.8	95	21	16	5	0.31	0.71	21	<12	1.5	7.7	<2	7	4	0.1	0.3
P7793	41.6	7.82	4.63	1.33	5.87	1.58	22.7	0.52	17.8	20.77	4.6	5.56	5.1	1.01	1.16	0.59	34.5	3.3	157	35	26	9	0.47	1.08	32	<12	1.6	11	3	4	6	0.1	0.5
P7794	30.7	3.79	1.87	0.79	3.54	0.76	16.1	0.3	13	15.17	3.22	3.89	3.4	0.58	0.67	0.3	15.2	1.7	98	24	19	4	0.41	0.94	19	<12	1.2	8.2	<2	<3	3	<0.1	0.3
P7795	64.9	5.74	2.87	1.24	5.94	1.04	31.5	0.37	22.9	26.72	6.05	7.31	6	0.9	1.04	0.38	22.4	2.2	180	41	34	7	0.85	1.95	41	13	2.3	19.8	4	4	4	0.3	0.3
P7796	59.9	6.27	3.34	1.29	6.14	1.2	30.8	0.42	25	29.17	6.02	7.27	6	0.86	0.99	0.45	27	2.8	183	44	36	7	0.55	1.26	20	<12	0.7	8.6	6	<3	4	0.2	0.4
P7797	88.1	5.37	2.66	1.25	5.74	0.98	48.8	0.39	31.8	37.10	8.59	10.38	7.1	0.77	0.89	0.35	21	2.2	232	54	47	6	0.6	1.37	36	<12	2.2	27.1	7	<3	4	0.2	0.5
P7798	64.2	4.05	2.17	0.97	4.46	0.75	33.8	0.38	22.9	26.72	6.44	7.78	5.4	0.63	0.72	0.3	15.8	2.1	170	39	34	5	0.38	0.87	25	<12	1.6	20.8	4	<3	4	0.2	0.4
P7801	143	7.15	3.32	1.86	9.21	1.31	67.6	0.47	45.9	53.55	12.92	15.61	10.8	1.18	1.36	0.46	27.2	2.8	346	78	69	9	1.29	2.95	65	<12	2.4	28.9	7	<3	4	0.4	0.5
P7802	138	7.58	3.68	2.01	9.02	1.32	66.1	0.65	46.8	54.60	12.4	14.98	10.4	1.23	1.41	0.54	28.3	3.5	342	79	70	9	0.67	1.53	36	<12	1.2	21.8	8	<3	5	0.3	0.5
P7815	9.3	1.43	0.72	0.45	1.31	0.31	5.7	0.11	3.6	4.20	0.93	1.12	0.8	0.25	0.29	0.1	8.2	0.3	34	7	5	2	0.11	0.25	26	29	2	1.4	<2	<3	1	2.5	<0.2
P7816	9.3	1.57	0.83	0.46	1.38	0.33	5.3	0.18	4.3	5.02	1	1.21	1.3	0.28	0.32	0.16	8.4	0.4	36	8	6	2	0.23	0.53	29	28	1.5	3.4	<2	<3	3	1.8	0.4
P7817	5.9	1.23	0.63	0.4	0.92	0.29	3.3	0.18	2.5	2.92	0.66	0.80	0.7	0.22	0.25	0.17	6.1	0.6	24	5	4	1	0.14	0.32	10	<12	0.9	1.1	<2	<3	1	1	0.3
P7818	7.9	1.06	0.53	0.4	1.11	0.26	4.2	0.16	3.7	4.32	0.82	0.99	1	0.24	0.28	0.14	6.9	<0.1	29	7	5	1	0.18	0.41	67	114	5.6	2.5	3	<3	1	1.3	0.8
P7821	30	3.22	1.69	1.23	3.71	0.71	16.2	0.27	12.7	14.82	3.27	3.95	3.7	0.58	0.67	0.3	17.7	1.3	99	23	19	4	0.59	1.35	33	26	1.8	3.9	<2	11	2	0.8	0.3
P7822	38.3	5.93	2.75	1.5	5.42	1.1	23.8	0.35	14.9	17.38	4.22	5.10	4.3	0.84	0.97	0.37	32.5	1.8	142	29	22	7	0.93	2.13	37	38	2	5.3	<2	<3	4	0.4	0.6
P7823	34.7	5.89	2.76	1.4	5.41	1.17	19.4	0.33	13	15.17	3.34	4.03	3.9	0.86	0.99	0.38	34	2.1	132	26	19	7	0.63	1.44	34	<12	1.7	5	<2	<3	3	0.4	0.4
P7824	57.8	5.01	2.45	1.47	5.69	0.93	31.8	0.33	20.9	24.38	5.55	6.70	5	0.73	0.84	0.32	27.3	1.8	172	37	31	6	0.79	1.81	28	18	1.5	14.5	<2	6	3	0.4	0.3
P7825	74.6	5	2.42	1.41	6.33	0.92	43.6	0.35	26.2	30.57	7.43	8.98	6.4	0.82	0.94	0.32	25.6	1.7	209	45	40	6	0.93	2.13	33	18	1.5	14.5	3	<3	3	0.4	<0.2
P7826	47.1	3.64	1.65	1.08	4.82	0.61	31.7	0.28	18.3	21.35	5.21	6.29	4.5	0.6	0.69	0.24	18.5	1.1	144	32	28	4	0.83	1.90	32	31	1.2	9.4	2	5	3	1.5	0.2
P7827	56.4	3.77	1.84	1.22	4.89	0.67	35.4	0.3	22	25.67	6.03	7.28	5	0.61	0.70	0.26	23	1	167	37	33	4	0.87	1.99	72	109	3.2	11.3	4	4	4	0.7	0.9
P7828	97.9	4.62	2.23	1.58	6.85	0.85	57.9	0.35	31.8	37.10	9.3	11.23	7.3	0.86	0.99	0.3	26.3	1.7	257	54	48	6	0.87	1.99	39	14	2.2	18.6	4	5	4	0.5	0.3
P7829	101	4.91	2.32	1.52	6.85	0.85	59.4	0.34	32.6	38.04	9.41	11.37	7.2	0.82	0.94	0.33	24.3	1.9	261	55	49	6	0.71	1.63	40	22	1.7	22.6	5	5	6	0.4	<0.2
P7831	109	5.11	2.4	1.76	7.23	0.97	60	0.39	31.9	37.22	9.65	11.66	7.3	0.83	0.95	0.35	26	2.4	273	55	49	6	0.68	1.56	42	<12	2.2	18.2	4	<3	5	0.2	0.3
P7832	110	4.85	2.29	1.58	6.38	0.93	58.7	0.38	29	33.84	8.57	10.35	6.5	0.72	0.83	0.35	25	2.2	264	50	44	6	0.5	1.15	45	<12	2.3	20.1	5	<3	7	0.3	0.4
P7869	8.2	1	0.56	0.62	1.86	0.3	6.9	0.23	7.6	8.87	1.54	1.86	2	0.29	0.33	0.19	4.9	0.1	38	12	11	1	0.06	0.14	47	41	1.8	2.1	<2	11	10	0.9	0.8
P7871	9.2	1.42	0.69	0.74	2.4	0.3	10.1	0.2	9.7	11.32	2.08	2.51	2.7	0.27	0.31	0.16	8	0.7	51	16	14	2	0.06	0.14	95	64	4	2.1	2	<3	2	1.4	1
P7872	15.6	1.65	0.78	0.82	2.67	0.31	14.3	0.18	9.1	10.62	2.42	2.92	2.7	0.29	0.33	0.17	7.6	0.7	61	16	14	2	0.12	0.27	35	<12	1.6	8.1	<2	<3	2	0.5	0.7
P7873	62.2	5.46	2.36	3.4	9.65	0.97	42.9	0.37	47.6	55.54	9.3	11.23	12.6	1	1.15	0.35	23.8	2	234	73	67	7	0.25	0.57	251	<12	4.5	14.2	2	<3	11	0.4	0.9
P7874	34.5	2.99	1.26	2.21	6.05	0.53	28.4	0.24	28.3	33.02	5.81	7.02	7.5	0.66	0.76	0.23	14.1	1	140	44	40	4	0.14	0.32	125	30	2.9	6	2	<3	5	0.6	0.8
P7875	54.8	4.13	1.6	2.79	8.01	0.65	37.4	0.21	48.7	56.82	9.58	11.57	11.4	0.82	0.94	0.2	18.6	1.3	210	73	68	5	0.21	0.48	161	39	4.8	10.4	3	5	8	0.3	0.8
P7876	56.3	4.08	1.85	2.76	7.31	0.68	36.6	0.25	41.2	48.07	8.47	10.23	10.4	0.81	0.93	0.27	21.6	<0.1	201	63	58	5	0.17	0.39	151	<12	4.5	8.3	4	4	8	0.4	1.9
P7877	18	2.06	0.83	0.97	2.78	0.37	14.7	0.19	12.5	14.58	2.77	3.35	3	0.38	0.44	0.2	8.9	0.8	71	20	18	2	0.2	0.46	54	<12	2.6	3.8	<2	8	3	0.3	0.8
P7878	10.8	0.84	0.39	0.6	1.46	0.17	8.5	0.1	9	10.50	1.89	2.28	2.2	0.19	0.22	0.07	4.7	0.3	43	14	13	1	0.09	0.21	20	<12	2	1.4	<2	5	<1	0.3	0.9
P7881	18	1.66	0.85	1.41	3.88	0.45	24.4	0.18	20.3	23.68	4.41	5.33	5.2	0.62	0.71	0.15	8.5	0.8	95	31	29	2	0.11	0.25	28	<12	2.6	1.2	<2	7	2	0.4	0.8
P7882	77.1	3.92	1.34	4.18	10.86	0.58	68.1	0.17	72	84.00	14.28	17.25	17.1	0.86	0.99	0.17	14.4	0.9	301	106	101	5	0.08	0.18	103	<12	2.2	8.1	<2	4	7	0.2	0.9
P7883	23.1	2.22	0.76	1.27	3.59	0.36	22.5	0.11	14.3	16.68	3.36	4.06	4.5	0.44	0.51	0.11	9	0.5	89	23	21	3	0.12	0.27	45	<12	1.7	2.2	<2	6	2	<0.1	0.9
P7884	9	0.99	0.5	0.56	1.73	0.21	8.7	0.1	7.2	8.40	1.58	1.91	2	0.21	0.24	0.1	5.5	0.4	40	12	10	1	0.08	0.18	34	<12	1.9	1.9	<2	17	1	0.2	1.3
P7885	11.2	1.16	0.5	0.66	2.04	0.21	11.4	0.11	9	10.50	1.94	2.34	2.3	0.23	0.26	0.1	6.6	<0.1	49	14	13	1	0.11	0.25	28	<12	1.6	2.2	3	17	1	0.2	1.8
P7886	22.6	1.91	0.85	1.12	3.23	0.37	20.5	0.15	14.1	16.45	3.32	4.01	3.7	0.38	0.44	0.16	9.4	0.9	86	23	20	2	0.11	0.25	47	<12	2.1	4	<2	8	2	0.2	0.7
P7887	38.1	3.91	1.56	1.62	5.11	0.7	31.6	1.58	17.8	20.77	4.5	5.44	5.1	0.63	0.72	0.2	18.4	0.7	136	31	26	5	0.22	0.50	38	<12	1.5	5.7	<2	7	4	0.1	0.9
P7888	0.7	0.06	<0.05	0.09	0.16	<0.05	0.5	<0.05	0.6	0.70	0.1	0.12	<0.1	<0.05	<0.06	<0.05	<0.6	<0.1	3	1	1	0	0.1	0.23	31	<12	65.8	1	<2	13	2	2.4	0.7
P7912	45.4	2.23	1.15	1.59	4.11	0.41	25.5	0.22	25.7	29.98	5.39	6.51	6.5	0.44	0.51	0.2	11.6	<0.1	136	39	36	3	0.07	0.16	182	<12	10.6	10.9	3	11	2	0.3	1.5
P7913	32.3	1.84	0.78	1.59	3.94	0.33	25.6	0.13	23	26.83	4.81	5.81	6.5	0.38	0.44	0.14	9.2	0.7	116	35	33	2	0.09	0.21	92	<12	7.1	5.2	<2	12	2	0.2	0.7
P7914	53.2	2.94	1.45	2.01	4.96	0.58	29.2	0.27	27.7	32.32	5.66	6.84	7.5	0.53	0.61	0.24	13.7	1.4	157	43	39	4	0.12	0.27	204	<12	5	8.4	2	10	3	0.3	0.9
P7915	15	1.64	0.85	0.81	2.44	0.28	12.3	0.14	9.8	11.43	2.19	2.65	3.1	0.27	0.31	0.1	7.8	0.8	60	16	14	2	0.05	0.11	50	<12	2.3	1.7	<2	6	1	0.1	0.8
P7916	10.6	0.95	0.48	0.58	1.68	0.19	11.2	0.1	6.8	7.93	1.66	2.01	1.7	0.18	0.21	0.08	4.5	0.5	43	11	10	1	0.05	0.11	29	<12	2	2.1	<2	11	1	<0.1	0.8
P7917	43.6	2.07	0.98	1.58	3.92	0.39	27.4	0.19	19.7	22.98	4.65	5.62	6.1	0.44	0.51	0.16	8.7	1	125	31	29	3	0.11	0.25	175	13	4.1	9	<2	6	4	0.2	1.1

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Appendix Five: Soil Results

SAMPLE	CeO2	Dy2O3	Er2O3	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Nd	Nd2O3 (Nd*1.16673)	Pr	Pr6O11 (Pr*1.208)	Sm2O3	Tb	Tb2O3 (Tb*1.15)	Tm2O3	Y2O3	Yb2O3	TREO	MREO	Nd_Pr	Tb_Dy	P	P2O5 (P*2.29)	Nb2O5	SnO2	Ta2O5	ThO2	U3O8	As	Be	Bi	Cd
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	mg/kg	mg/kg					%		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DETECTION	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1	0.1	0.05	0.05	0.1	0.05		0.05	0.6	0.1					0.01		2	12	0.6	0.1	2	3	1	0.1	0.2
P7918	35.1	2.95	1.37	1.56	4.52	0.59	27.7	0.21	19.4	22.63	4.6	5.56	5.5	0.5	0.58	0.21	15.4	1.2	125	32	28	4	0.09	0.21	79	22	3.5	7.3	2	8	3	0.1	0.7
P7921	105	3.79	1.46	2.97	7.58	0.57	61.6	0.23	49.4	57.64	12.45	15.04	12.1	0.72	0.83	0.22	15.3	1.2	286	77	73	5	0.05	0.11	138	34	4.2	7.6	<2	7	3	0.2	0.7
P7922	41.8	2.59	1.24	1.79	4.73	0.47	31.6	0.16	23.6	27.53	5.75	6.95	6.8	0.52	0.60	0.17	12.5	1	140	38	34	3	0.09	0.21	92	<12	3	6.7	<2	8	4	0.1	1
P7923	84.9	6.28	2.77	3.73	10.68	1.1	63.5	0.36	57.1	66.62	12.63	15.26	13.5	1.17	1.35	0.4	30.3	2.2	303	90	82	8	0.35	0.80	144	21	5	8.7	<2	9	10	0.2	1
P7924	34.4	2.3	0.87	1.44	3.97	0.4	22.1	0.13	16.9	19.72	3.78	4.57	4.7	0.44	0.51	0.13	9.8	0.9	106	27	24	3	0.06	0.14	63	23	2.4	2.6	<2	9	2	0.1	0.7
P7925	19.1	1.54	0.68	0.86	2.57	0.27	16.5	0.13	10.9	12.72	2.55	3.08	3.2	0.27	0.31	0.11	7.5	0.8	69	18	16	2	0.05	0.11	35	<12	1.2	1.9	<2	7	2	<0.1	0.9
P7926	27.7	4.29	1.57	1.56	4.72	0.76	18.4	0.18	12.6	14.70	2.93	3.54	4.2	0.68	0.78	0.21	17.8	1	101	23	18	5	0.19	0.44	44	<12	2.2	3.1	<2	10	2	<0.1	0.8
P7927	50.6	7.26	3.29	2.55	7.71	1.38	32.3	0.8	21.6	25.20	5.2	6.28	6.7	1.11	1.28	0.37	34.8	1.7	182	40	31	9	0.52	1.19	46	<12	2.3	5	<2	9	3	<0.1	0.7
P7928	74.7	8.5	4	3.64	11.84	1.48	46	0.53	31.4	36.64	7.44	8.99	10.4	1.5	1.73	0.54	39.2	3.5	252	56	46	10	2.16	4.95	61	<12	2.7	10.7	3	17	4	<0.1	0.8
P7929	10.9	1.26	0.6	0.54	1.7	0.25	9.3	0.1	5.7	6.65	1.35	1.63	1.5	0.22	0.25	0.07	7.2	0.8	43	10	8	2	0.12	0.27	20	<12	1.4	1.6	<2	8	2	0.1	0.9
P7931	20	2.31	0.95	0.68	2.31	0.4	15.2	0.14	8.8	10.27	2.2	2.66	2.3	0.33	0.38	0.13	11	0.7	69	16	13	3	0.13	0.30	25	<12	1.7	3.6	2	8	2	<0.1	1.1
P7949	47.9	6.49	2.17	1.77	6.28	1.06	23.7	0.16	13.1	15.28	3.53	4.26	4.4	1.02	1.17	0.21	26.1	1.1	142	27	20	8	0.2	0.46	49	<12	3.8	6.5	<2	7	3	<0.1	0.7
P7952	10.5	5.32	1.79	1.1	4.13	0.92	10.3	0.19	6	7.00	1.49	1.80	2.1	0.79	0.91	0.19	24.1	0.8	71	15	9	6	0.15	0.34	29	18	1.1	1.7	<2	7	3	<0.1	0.7
P7953	32.6	6.89	2.85	1.49	5.86	1.24	19	0.19	11.8	13.77	2.89	3.49	3.8	1.02	1.17	0.28	32.6	1.5	127	25	17	8	0.18	0.41	61	26	2.6	7.5	<2	8	4	<0.1	0.5
P7954	8.5	2.1	0.82	0.65	2	0.36	7.4	0.1	4.6	5.37	1.19	1.44	1.5	0.34	0.39	0.11	10	0.5	41	9	7	2	0.07	0.16	21	<12	1.1	1.3	<2	9	2	<0.1	0.5
P7955	11.1	3.05	1.27	0.77	2.87	0.6	9.4	0.27	5.8	6.77	1.41	1.70	2	0.46	0.53	0.17	15.4	0.7	57	12	8	4	0.11	0.25	24	13	2.3	1.8	<2	10	3	<0.1	0.6
P7956	18	3.25	1.36	0.99	3.42	0.58	14.8	0.14	9.7	11.32	2.39	2.89	2.7	0.47	0.54	0.16	15.1	0.9	76	18	14	4	0.11	0.25	37	16	1.9	3.4	<2	11	3	<0.1	0.5
P7957	14.9	2.1	1	0.43	1.8	0.44	7.9	0.18	5	5.83	1.51	1.82	1.5	0.35	0.40	0.16	10.6	0.7	50	10	8	3	0.1	0.23	21	13	2.6	4.8	<2	<3	2	2.8	<0.2
P7958	18.4	4.04	1.81	0.78	3.1	0.75	10	0.23	8.1	9.45	2.02	2.44	2.4	0.58	0.67	0.26	18.4	1.1	74	17	12	5	0.2	0.46	26	15	2	12.1	<2	<3	2	1.4	0.3
P7961	23.6	3.26	1.57	0.74	2.99	0.7	13.5	0.25	9.8	11.43	2.65	3.20	2.7	0.54	0.62	0.26	16.2	1.1	82	19	15	4	0.15	0.34	30	<12	1.7	6.6	<2	<3	3	0.8	0.4
P7962	20	2.17	1.17	0.62	2.21	0.51	11.4	0.24	8.7	10.15	2.2	2.66	2.2	0.39	0.45	0.2	11.4	0.8	66	15	13	3	0.16	0.37	20	<12	1.6	4.8	<2	<3	3	0.7	0.3
P7963	42.9	4.62	2.3	1.21	4.42	0.89	22.4	0.38	17.9	20.88	4.49	5.42	4.7	0.76	0.87	0.33	22.7	1.7	136	32	26	5	0.31	0.71	51	<12	3.1	9.6	<2	<3	6	0.9	0.4
P7964	47.8	6.13	3.37	1.48	6.08	1.17	27.3	0.4	21.8	25.43	5.52	6.67	6.1	0.91	1.05	0.44	32.4	2.4	168	39	32	7	0.63	1.44	50	<12	3.3	6.7	<2	<3	6	0.6	0.3
P7965	85.7	7.63	3.64	1.83	8.22	1.33	41.8	0.41	32.1	37.45	8.38	10.12	8.2	1.18	1.36	0.46	38.8	2.5	249	57	48	9	1.34	3.07	56	<12	4.5	10.2	3	<3	5	0.5	0.8
P7966	104	8.23	3.8	2.03	9.28	1.55	50.5	0.47	40	46.67	10.38	12.54	10.3	1.32	1.52	0.51	37.6	2.6	292	69	59	10	1.58	3.62	40	<12	2.7	10.2	2	<3	4	0.4	0.3
P7967	95.1	7.17	3.23	1.97	8.36	1.33	47.5	0.41	36.2	42.24	9.4	11.36	8.9	1.17	1.35	0.46	34.5	2.5	266	62	54	9	0.65	1.49	28	<12	1	8.9	3	<3	4	0.5	0.3
P7968	63	6.86	3.23	1.67	6.49	1.29	29.4	0.37	23.7	27.65	5.97	7.21	6.3	1.03	1.18	0.42	33.9	2.1	191	43	35	8	0.48	1.10	48	<12	3.6	9.2	2	<3	5	0.3	0.3
P7969	110	6.67	3.21	1.88	7.77	1.23	53.8	0.44	38.6	45.04	10.17	12.29	9.4	1.1	1.27	0.42	31.9	2.8	288	65	57	8	0.62	1.42	34	<12	1.9	19.8	4	<3	5	0.4	0.3
P7991	7.8	1.69	0.84	0.35	1.44	0.31	5	0.1	3.1	3.62	0.8	0.97	1	0.24	0.28	0.08	8.9	0.6	33	7	5	2	0.14	0.32	19	<12	1.4	1.1	<2	<3	4	1	<0.2
P7992	23.1	3.86	1.75	1.04	3.4	0.69	11.9	0.27	10.5	12.25	2.34	2.83	3.2	0.59	0.68	0.25	18.1	1.4	85	20	15	5	0.21	0.48	33	<12	2.7	6	<2	<3	5	0.5	0.2
P7993	17.3	2.88	1.29	1.21	2.34	0.52	9.5	0.16	6.8	7.93	1.74	2.10	2.2	0.39	0.45	0.15	14.1	0.7	63	13	10	3	0.24	0.55	25	<12	1.8	6	<2	<3	4	0.4	0.4
P7994	12.8	1.96	0.97	0.66	1.98	0.38	9.5	0.08	6.5	7.58	1.34	1.62	1.8	0.29	0.33	0.11	11.2	0.5	51	11	9	2	0.19	0.44	50	42	1.7	3.7	<2	<3	4	0.4	0.3
P7995	22.3	4.1	1.61	1.27	3.81	0.85	15.9	0.23	10.5	12.25	2.37	2.86	3.6	0.65	0.75	0.29	21.6	1.2	93	20	15	5	0.23	0.53	44	12	2.1	3.9	<2	4	4	0.5	<0.2
P7996	13.8	3.4	1.34	0.97	3.02	0.74	10	0.22	6.2	7.23	1.5	1.81	2.2	0.58	0.67	0.25	17.4	0.8	64	13	9	4	0.12	0.27	24	17	4.6	5.2	<2	4	3	0.5	0.4
P7997	7.3	1.93	0.72	0.46	1.5	0.41	5.2	0.1	3.2	3.73	0.83	1.00	1	0.29	0.33	0.14	10.1	0.5	34	7	5	2	0.11	0.25	22	17	1	1.9	<2	4	1	0.4	0.2
P7998	12.6	4.67	1.78	0.87	3.33	1	8.3	0.13	5.1	5.95	1.27	1.53	1.9	0.64	0.74	0.22	26.5	0.8	70	13	7	5	0.17	0.39	28	25	1.1	5	<2	4	2	0.4	<0.2
U7001	9	4.62	1.89	0.83	3.25	0.92	6.1	0.09	4.8	5.60	1.08	1.30	1.8	0.59	0.68	0.23	26.9	1.2	64	12	7	5	0.24	0.55	27	20	1.5	2	<2	4	2	0.2	<0.2
U7002	14.4	1.57	0.65	0.53	1.73	0.31	13.9	0.06	6.8	7.93	1.72	2.08	1.5	0.24	0.28	0.12	9	0.5	55	12	10	2	0.11	0.25	30	19	0.9	1.6	<2	<3	2	0.1	<0.2
U7003	4.5	0.45	0.27	0.15	0.46	0.14	2.6	0.05	1.6	1.87	0.41	0.50	0.4	0.09	0.10	0.07	3.1	0.4	15	3	2	1	0.05	0.11	20	31	0.9	1.3	<2	<3	1	0.2	<0.2
U7004	9.3	1.31	0.73	0.35	1.21	0.29	6.1	0.09	3.6	4.20	0.94	1.14	1.1	0.18	0.21	0.12	9.9	<0.1	36	7	5	2	0.14	0.32	68	97	3	2.5	2	3	2	0.2	0.6
U7005	5.5	0.83	0.43	0.24	0.85	0.17	3.8	<0.05	2.6	3.03	0.59	0.71	0.7	0.12	0.14	0.05	5.2	0.4	22	5	4	1	0.1	0.23	20	14	0.6	2.1	<2	<3	<1	1.5	<0.2
U7006	29.2	3.28	1.39	1.15	3.46	0.68	17.7	0.22	12.5	14.58	3.09	3.73	3.3	0.53	0.61	0.26	20.2	1.4	101	22	18	4	0.15	0.34	64	18	1.2	7.1	<2	<3	6	0.6	0.3
U7007	17.8	2.2	0.94	0.71	2.55	0.46	11.2	0.13	7.9	9.22	1.86	2.25	2.3	0.35	0.40	0.17	13.4	0.5	64	14	11	3	0.17	0.39	63	67	2.4	5	<2	5	3	0.4	0.4
U7008	25.7	3.82	1.68	1.12	3.57	0.81	15.9	0.22	11	12.83	2.83	3.42	3.2	0.55	0.63	0.26	23.5	<0.1	97	21	16	4	0.33	0.76	107	131	3.6	4.7	3	10	4	0.3	0.8
U7009	35.8	3.16	1.34	1.16	3.75	0.63	19.2	0.22	13.8	16.10	3.35	4.05	3.4	0.5	0.58	0.24	16	1.4	107	24	20	4	0.56	1.28	24	<12	1.6	3.6	<2	4	3	0.3	<0.2
U7031	9.4	0.78	0.41	0.44	1.04	0.16	7.3	0.05	5	5.83	1.07	1.29	1.3	0.13	0.15	0.09	4.3	0.5	33	8	7	1	0.06	0.14	25	<12	0.8	2.9	<2	<3	2	0.2	<0.2
U7032	30.1	2.57	1.13	1.65	4.55	0.51	23.4	0.17	16.2	18.90	3.61	4.36	5.2	0.45	0.52	0.2	14	1.3	109	26	23	3	0.08	0.18	93	<12	3.3	6.6	<2	<3	3	0.2	0.3
U7033	10	0.97	0.41	0.57	1.33	0.21	8.5	0.08	5.5	6.42	1.27	1.53	1.7	0.19	0.22	0.1	6.1	0.8	39	9	8	1	0.04	0.09	21	<12	2.3	1.9	<2	<3	2	0.2	0.4
U7034	11.6	1.38	0.67	0.64	1.73	0.27	10.4	0.11	6.6	7.70	1.57	1.90	2.1	0.21	0.24	0.12	9.2	<0.1	48	11	10	2	0.08	0.18	30	<12	1.9	5.8	3	<3	2	0.2	0.8
U7035	24.9	2.34	1.07	1.23	3.56	0.45	18.8	0.14	12.5	14.58	2.83	3.42	4	0.4	0.46	0.17	13.6	1	90	21	18	3	0.09	0.21	74	<12	3.5	8.1	<2	<3	4	0.1	<0.2
U7036	18	2.44	0.86	1.14	3.21	0.46	16.4	0.1	9.3	10.85	2.14	2.59	3.3	0.41	0.47	0.12	11.9	0.7	73	16	13	3	0.06	0.14	23	<12	0.7	2.6	<2	<3	6	0.2	<0.2
U7037	15.7	1.53	0.64	0.69	1.95	0.26	12.3	0.07	7.9	9.22	1.78	2.15	2.2	0.23	0.26	0.09	8.3	0.4	56	13	11	2	0.07	0.16	37	<12	1.8	5.1	<2	<3	3	0.1	0.2
U7038	17.4	1.8	0.63	0.86	2.54	0.34	14.2	0.06	10.1	11.78	2.31	2.79	2.9	0.3	0.35	0.1	9.6	0.9	66	17	15	2	0.15	0.34	31	<12	1.5	3.7	<2	<3	4	0.1	0.4
U7041	43.8	1.7	0.6	1.04	2.91	0.29	23.7	0.08	17.7	20.65	4.63	5.59	3.6	0.31	0.36	0.1	7.9	0.6	113	28	26	2	0.06	0.14	46	<12	1.1	6	<2	<3	2	0.3	<0.2
U7042	16.6	1.73	0.86	0.54	1.81	0.33	10.7	0.13	6.6	7.70	1.61	1.94	1.7	0.27	0.31	0.15	11.1	0.9	57	12	10	2	0.07	0.16	37	<12	1	7.2	<2	4	2	0.2	0.3
U7043	14	1.16	0.56	0.46	1.47	0.24	9.9	0.07	6.2	7.23	1.46	1.76	1.6	0.2	0.23	0.08	7.5	<0.1	46	10	9	1	0.07	0.16	34	<12	1.6	4.7	3	<3	2	0.1	0.9
U7044	20.6	2.45	1.01	1.03	3.23	0.46	15.2	0.11	9.5	11.08	2.2	2.66	2.7	0.38	0.44	0.17	12.7	1	75	17	14	3	0.09	0.21	41	<12	1.1	3.3	<2	<3	4	0.1	<0.2
U7045	13.6	1.44	0.74	0.56	1.77	0.34	9.8	0.1	6	7.00	1.49	1.80	1.7	0.26	0.30	0.11	8.7	0.7	49	11	9	2	0.07	0.16	24	<12	1	2.8	<2	<3	3	0.1	<0.2
U7046	21	2.92	1.17	0.96	3	0.58	15.9	0.13	10.9	12.72	2.57	3.10	2.8	0.43	0.49	0.18	16.5	1	82	19	16	3	0.11	0.25	48	<12	1.8	4.5	<2	<3	6	0.1	0.4

Appendix Five: Soil Results

SAMPLE	CeO2	Dy2O3	Er2O3	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Nd	Nd2O3 (Nd*1.16673)	Pr	Pr6O11 (Pr*1.208)	Sm2O3	Tb	Tb2O3 (Tb*1.15)	Tm2O3	Y2O3	Yb2O3	TREO	MREO	Nd_Pr	Tb_Dy	P	P2O5 (P*2.29)	Nb2O5	SnO2	Ta2O5	ThO2	U3O8	As	Be	Bi	Cd
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	mg/kg	mg/kg					%		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DETECTION	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1	0.1	0.05	0.05	0.1	0.05		0.05	0.6	0.1					0.01		2	12	0.6	0.1	2	3	1	0.1	0.2
U7047	46.8	6.29	2.34	2.38	7.41	1.16	30.8	0.21	22	25.67	5.03	6.08	6.8	1.03	1.18	0.29	31.7	1.7	171	39	32	7	0.16	0.37	57	<12	1.6	2.6	<2	<3	3	<0.1	0.3
U7048	5.3	0.75	0.3	0.3	0.82	0.16	3.7	<0.05	2.8	3.27	0.6	0.72	0.9	0.11	0.13	<0.05	4.2	0.3	21	5	4	1	0.07	0.16	14	<12	0.7	0.7	<2	<3	<1	0.1	0.4
U7049	17.3	2.67	1.14	0.97	3.1	0.55	12.8	0.13	8.8	10.27	2.05	2.48	2.4	0.41	0.47	0.15	14.2	1	70	16	13	3	0.14	0.32	36	<12	1.3	2.4	<2	<3	4	0.1	<0.2
U7051	9	1.17	0.54	0.43	1.4	0.22	6.1	0.07	4.6	5.37	1.06	1.28	1.3	0.17	0.20	0.08	6.1	0.6	34	8	7	1	0.08	0.18	21	<12	3.7	3	<2	<3	3	0.2	<0.2
U7052	15.3	2.18	0.95	0.84	2.89	0.43	12.8	0.11	9	10.50	2.14	2.59	2.8	0.36	0.41	0.14	10.8	0.9	64	16	13	3	0.09	0.21	35	<12	1.3	5.1	<2	<3	5	0.1	0.8
U7074	61.2	4.48	2.25	1.47	6.02	0.93	39.1	0.33	23.7	27.65	6	7.25	5.9	0.77	0.89	0.35	21	2.2	181	40	35	5	0.6	1.37	36	<12	2.2	16.6	2	<3	4	0.2	<0.2
U7075	67.8	4.58	2	1.54	6.27	0.93	44	0.31	26.5	30.92	6.79	8.20	5.9	0.79	0.91	0.33	21.2	2.1	197	45	39	5	0.7	1.60	25	<12	1.8	17.7	4	<3	3	0.1	<0.2
U7076	77.2	4	1.78	1.36	5.29	0.79	40.2	0.3	23.7	27.65	6.03	7.28	5.2	0.65	0.75	0.31	18.4	2	193	40	35	5	0.52	1.19	22	<12	1.4	17.9	4	<3	3	0.2	<0.2
U7077	52.2	3.8	1.75	1.22	4.89	0.74	33.9	0.23	20.7	24.15	5.41	6.54	4.6	0.62	0.71	0.26	18.4	1.6	155	35	31	5	0.57	1.31	24	<12	1.9	13.9	2	<3	3	0.1	<0.2
U7078	88.4	5.85	2.64	2.09	7.76	1.2	51.8	0.39	32.8	38.27	8.34	10.07	7.5	0.98	1.13	0.38	27	2.6	247	55	48	7	0.99	2.27	50	12	5	16.9	3	5	3	0.1	0.4
U7081	116	5.6	2.19	2.59	8.48	1.04	64.1	0.34	46.1	53.79	11.95	14.44	9.7	1.03	1.18	0.34	23.8	2.2	306	75	68	7	0.49	1.12	79	<12	2.8	15.5	<2	<3	4	0.3	<0.2
U7082	138	6.86	2.86	2.3	9.04	1.36	59.9	0.53	40	46.67	10.28	12.42	9.1	1.1	1.27	0.53	29	3.4	323	67	59	8	0.74	1.69	36	<12	3.2	14.8	3	<3	6	0.3	<0.2
U7083	107	5.34	2.38	1.88	7.41	1.06	63.1	0.37	36.8	42.94	9.71	11.73	8.2	0.89	1.02	0.4	25	2.3	280	61	55	6	0.45	1.03	72	<12	5.6	31.2	5	<3	5	0.2	0.4
U7094	59	5.13	1.48	1.23	5.14	0.97	34.6	0.31	26.9	31.39	6.93	8.37	5.3	0.93	1.07	0.31	23.9	1.9	180	46	40	6	1.12	2.56	34	17	3.5	8.8	<2	8	4	2	1.2
U7095	62.9	4.95	1.26	1.15	4.84	0.95	33.8	0.35	25.1	29.28	6.8	8.21	5.3	0.87	1.00	0.34	20.8	1.7	177	43	37	6	1.17	2.68	25	<12	2.8	14.5	<2	9	3	1.1	1.3
U7096	65.7	5.3	1.49	1.26	5.58	0.97	35.9	0.32	26.9	31.39	7.09	8.56	5.7	0.95	1.09	0.35	24.4	1.8	190	46	40	6	1.38	3.16	48	34	4.7	8.2	2	11	5	0.9	1.2
U7097	49.5	6.1	1.58	1.16	4.67	1.08	26.8	0.28	21.8	25.43	5.39	6.51	4.8	0.91	1.05	0.33	29	1.6	160	39	32	7	0.61	1.40	67	55	4.9	8	3	10	4	0.6	1.3
U7098	56.1	6.25	1.77	1.25	4.82	1.16	29.9	0.3	23.3	27.18	5.98	7.22	4.9	1	1.15	0.38	27.4	1.9	172	42	34	7	0.62	1.42	40	13	4.2	10.5	<2	8	4	0.5	1.5
U7101	117	6.9	2.05	1.73	7.21	1.27	63.4	0.52	42.9	50.05	12	14.50	8.3	1.29	1.48	0.5	31	2.9	309	73	65	8	0.51	1.17	61	30	6	30.8	5	8	4	0.2	1.2
U7102	111	6.65	1.91	1.75	7.2	1.2	63.7	0.48	43.1	50.29	12.09	14.60	8.7	1.23	1.41	0.48	31.7	2.7	304	73	65	8	0.52	1.19	54	41	4.3	27.1	4	12	4	0.2	0.8
U7103	63	3.96	1.3	0.9	4.17	0.76	42	0.29	27.3	31.85	7.37	8.90	5.1	0.68	0.78	0.28	18.7	1.6	184	45	41	5	0.11	0.25	54	61	2.5	21.2	5	7	4	0.1	0.8
U7104	80.8	4.14	1.19	1.04	4.22	0.76	43.5	0.29	27.4	31.97	7.85	9.48	5.2	0.68	0.78	0.33	22	<0.1	206	46	41	5	0.13	0.30	103	132	7.6	29.6	7	7	4	0.2	1.4
U7105	85.6	4.17	1.3	1.07	4.79	0.8	52.6	0.34	31.6	36.87	9.32	11.26	5.8	0.77	0.89	0.31	20.8	1.7	228	53	48	5	0.06	0.14	43	18	2.5	33.8	6	8	5	1.7	1
U7106	82	3.97	1.26	1.14	4.55	0.72	55.5	0.34	30.9	36.05	9.06	10.94	5.5	0.68	0.78	0.29	19.3	2	224	52	47	5	0.05	0.11	51	23	2.7	35.3	8	8	3	0.6	0.9
U7107	78.8	3.48	1.2	0.83	3.56	0.66	48.9	0.33	26.8	31.27	8.18	9.88	4.7	0.55	0.63	0.32	17.8	1.9	204	45	41	4	0.12	0.27	63	41	6.1	36.6	10	9	3	0.3	1
U7108	67.9	2.42	0.79	0.6	2.46	0.48	40.7	0.31	20.4	23.80	6.17	7.45	3.2	0.43	0.49	0.26	14	1.6	166	34	31	3	0.08	0.18	66	67	2.9	41.6	11	9	3	0.2	0.9
U7138	9.1	1.11	0.34	0.39	0.94	0.21	5.9	0.11	3.9	4.55	1.03	1.24	0.8	0.18	0.21	0.08	5.4	0.5	31	7	6	1	0.07	0.16	36	14	4.9	6.5	<2	8	2	0.2	1.4
U7141	16.9	3.36	1	0.51	2.1	0.64	10.7	0.2	7.5	8.75	1.87	2.26	1.9	0.54	0.62	0.21	13.1	0.8	63	15	11	4	0.1	0.23	40	<12	4.1	2.7	<2	10	4	<0.1	1.1
U7142	22.2	5.44	1.18	0.74	3.52	0.95	13.7	0.17	9.3	10.85	2.4	2.90	2.3	0.79	0.91	0.21	23.1	1.1	89	20	14	6	0.23	0.53	29	<12	<0.6	5.6	<2	7	6	<0.1	1.2
U7143	9.2	0.7	0.25	0.2	0.77	0.14	5.5	0.08	4.3	5.02	1.03	1.24	0.8	0.13	0.15	<0.05	4.6	<0.1	29	7	6	1	0.11	0.25	18	<12	3.2	2.3	3	8	<1	<0.1	2.8
U7144	14	1.07	0.34	0.26	1.13	0.2	8.3	0.1	5.2	6.07	1.45	1.75	1	0.21	0.24	0.08	5	0.5	40	9	8	1	0.1	0.23	21	<12	1.1	4.2	<2	7	3	<0.1	1.3
U7145	7.1	0.68	0.2	0.15	0.63	0.12	4.1	0.07	3.3	3.85	0.81	0.98	0.6	0.1	0.12	<0.05	3.6	<0.1	22	6	5	1	0.08	0.18	9	<12	<0.6	1.1	<2	7	<1	<0.1	1.2
U7146	93.4	5.2	1.35	1.26	5.38	0.91	53.9	0.31	35.2	41.07	9.74	11.77	5.9	0.87	1.00	0.34	23.5	1.3	247	59	53	6	0.67	1.53	49	<12	4.6	16.2	3	8	3	<0.1	1.3
U7147	156	6.59	1.66	1.8	7.16	1.08	91.6	0.39	56.4	65.80	16.11	19.46	9.8	1.17	1.35	0.4	30.8	2.1	396	93	85	8	0.6	1.37	56	<12	5.5	26.5	5	7	5	<0.1	1.5
U7161	20.9	2.05	0.52	0.67	2.31	0.36	11.8	0.11	11.2	13.07	2.44	2.95	2.4	0.36	0.41	0.14	12.2	<0.1	70	18	16	2	0.14	0.32	67	<12	2.9	5	6	7	7	<0.1	3.5
U7162	23.7	2.64	0.69	0.91	3.21	0.45	14.9	0.16	13.2	15.40	3.13	3.78	3.2	0.49	0.56	0.17	11.1	0.9	82	22	19	3	0.09	0.21	42	<12	2	6	<2	6	6	<0.1	1.2
U7163	3.1	0.53	0.16	0.18	0.53	0.11	1.8	0.06	2.1	2.45	0.43	0.52	0.6	0.08	0.09	<0.05	2.6	0.3	13	4	3	1	0.03	0.07	9	<12	<0.6	0.7	<2	6	<1	<0.1	1.1
U7164	6	1.64	0.38	0.29	1.17	0.28	3.9	0.08	3.5	4.08	0.72	0.87	0.9	0.22	0.25	0.08	7.4	<0.1	27	7	5	2	0.05	0.11	16	<12	5.2	1.2	<2	7	3	0.1	1.8
U7165	38.1	3.18	0.92	0.78	2.95	0.6	22.3	0.23	16.3	19.02	4.28	5.17	3	0.55	0.63	0.21	17.2	<0.1	114	28	24	4	0.32	0.73	34	<12	3	5.7	3	8	3	<0.1	2.9
U7166	55.6	3.84	1.11	0.89	4	0.73	33	0.24	22.4	26.13	6	7.25	4.1	0.67	0.77	0.23	17.8	1.3	157	38	33	5	0.5	1.15	35	<12	2.7	11.3	<2	7	3	<0.1	1
U7167	35.3	2.94	0.83	0.7	2.56	0.54	21.1	0.17	14.3	16.68	3.9	4.71	2.8	0.48	0.55	0.19	13.6	0.7	103	25	21	3	0.29	0.66	26	<12	1.4	8	<2	7	3	<0.1	1.2
U7168	41.8	4.29	1.27	0.89	3.56	0.84	25.6	0.22	17.6	20.53	4.69	5.67	3.7	0.66	0.76	0.27	21.7	1.3	132	31	26	5	0.42	0.96	28	<12	2	7.1	2	7	4	<0.1	1.6
U7177	76.2	6.04	1.64	1.39	6.09	1.06	42.6	0.37	31.2	36.40	8.28	10.00	6.5	1.04	1.20	0.34	29.4	<0.1	219	54	46	7	1.04	2.38	47	<12	3.9	13.4	4	7	5	<0.1	2.3
U7178	61.2	5.37	1.41	1.32	5.43	0.99	32.4	0.31	25.6	29.87	6.57	7.94	5.5	0.92	1.06	0.32	28.6	<0.1	182	44	38	6	1.09	2.50	45	<12	3.1	8.5	3	8	5	<0.1	2.7
U7181	97.2	6.8	1.74	2.11	7.54	1.12	49.5	0.39	43.9	51.22	11.15	13.47	8.6	1.27	1.46	0.4	28.3	2.3	272	73	65	8	0.71	1.63	58	<12	0.8	7.8	<2	7	5	0.2	0.8
U7182	29.9	3.85	1.05	1.08	3.84	0.66	17	0.24	15.1	17.62	3.74	4.52	3.6	0.65	0.75	0.26	16.5	1.5	102	27	22	5	0.43	0.98	20	<12	<0.6	2.7	<2	6	5	<0.1	0.9
U7183	51.6	5.56	1.51	2.23	5	1	28.1	0.33	22.2	25.90	5.7	6.89	4.9	0.89	1.02	0.33	24.2	1.9	160	39	33	7	0.67	1.53	40	<12	3.3	8.1	<2	7	6	<0.1	0.9
U7184	17.1	2	0.57	0.65	1.77	0.37	10.3	0.17	8	9.33	1.97	2.38	1.7	0.32	0.37	0.14	9.9	0.9	58	14	12	2	0.24	0.55	22	<12	<0.6	4	<2	8	3	<0.1	1
U7185	25.6	3.27	0.96	0.84	2.64	0.6	15	0.2	11	12.83	2.74	3.31	2.6	0.54	0.62	0.22	15.7	1.3	86	20	16	4	0.27	0.62	29	<12	1.3	3.9	<2	8	5	<0.1	1.1
U7194	85	6.91	1.9	1.8	7.02	1.26	48.1	0.39	36.9	43.05	9.42	11.38	7.2	1.26	1.45	0.38	33.1	2.5	251	63	54	8	1.52	3.48	47	<12	6	11.4	2	9	7	<0.1	1.5
U7195	77.9	7.16	2.05	1.65	6.9	1.28	42.6	0.44	32.4	37.80	8.5	10.27	6.9	1.21	1.39	0.45	38.1	<0.1	235	57	48	9	1.11	2.54	45	<12	5.1	10.3	2	9	6	<0.1	2.2
U7196	6.5	1	0.27	0.35	0.76	0.17	3.9	0.08	3.4	3.97	0.78	0.94	0.6	0.14	0.16	<0.05	3.8	0.3	23	6	5	1	0.36	0.82	28	<12	<0.6	2.8	<2	12	3	<0.1	0.9
U7197	6.5	0.94	0.3	0.36	0.66	0.18	4.6	0.07	3.1	3.62	0.77	0.93	0.7	0.15	0.17	0.06	5	0.2	24	6	5	1	0.41	0.94	19	<12	<0.6	5.6	<2	9	4	<0.1	1.2
U7198	5.7	1.12	0.31	0.26	0.72	0.2	3.6	0.08	2.9	3.38	0.71	0.86	0.7	0.17	0.20	0.05	4.2	0.2	22	6	4	1	0.41	0.94	42	<12	2.2	6.6	<2	9	3	<0.1	1.2
U7201	25.8	4.72	1.17	1	3.33	0.9	15.6	0.22	12.6	14.70	3.1	3.74	2.8	0.69	0.79	0.23	21.5	1.4	98	24	18	6	0.46	1.05	25	<12	1	10.6	<2	9	3	<0.1	1.1
U7202	9.2	1.72	0.4	0.35	1.06	0.28	6.1	0.07	4.7	5.48	1.17	1.41	0.9	0.24	0.28	0.07	7	0.2	35	9	7	2	0.15	0.34	16	<12	<0.6	3.9	<2	8	1	<0.1	1

For personal use only

Appendix Five: Soil F

SAMPLE	Co	Cs	Ga	Ge	In	Mo	Ni	Pb	Rb	Re	Sb	Te	Tl	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	S	Sc	Si	Sr	Ti	V	W	Zn
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg
DETECTION	0.5	0.1	1	1	0.2	2	10	2	2	0.05	1	1	0.5	0.01	10	0.1	20	10	0.01	0.1	10	0.01	10	0.01	5	0.1	10	0.01	10	50	10
P7458	273	0.5	9	2	<0.2	3	1145	25	7	<0.05	<1	<1	<0.5	4.4	278	0.2	1153	124	18.5	0.3	40	9.37	3539	0.05	<5	17.4	45	0.42	25		99
P7461	381	0.5	10	2	<0.2	5	1692	19	10	<0.05	<1	<1	<0.5	0.44	448	<0.1	1175	164	24.07	0.7	40	4.99	4492	0.08	<5	6.3	15	0.55	20		110
P7462	374	1.1	9	2	<0.2	3	1370	22	13	<0.05	<1	<1	0.6	3.22	920	4.1	1363	144	21.56	0.4	27	5.21	4294	0.07	<5	13.8	284	0.33	30		134
P7463	215	0.7	15	2	<0.2	3	920	31	17	<0.05	<1	<1	0.6	5.85	652	2.1	1843	120	17.35	0.7	40	8.49	3237	0.06	<5	16.3	269	0.48	55		164
P7464	267	0.6	11	2	<0.2	3	1060	35	8	<0.05	<1	<1	0.6	5.24	596	2.7	1003	109	16.15	0.5	49	9.74	3297	0.06	<5	14	253	0.27	20		94
P7465	227	0.7	9	2	<0.2	3	1014	29	13	<0.05	<1	<1	0.5	4.61	1007	4.9	1052	104	14.8	0.6	31	6.8	2971	0.08	<5	12.7	218	0.29	20		99
P7466	83.8	0.5	10	1	<0.2	4	406	26	8	<0.05	<1	<1	<0.5	7.36	924	7.3	435	50	6.79	0.6	72	10.28	1409	0.07	<5	12.4	420	0.17	<10		85
P7467	103	5.6	7	<1	<0.2	3	468	22	15	<0.05	<1	<1	<0.5	3.03	4041	10	487	60	7.69	0.6	27	7.23	1720	0.08	<5	10.7	681	0.13	<10		70
P7468	252	2.8	8	1	<0.2	3	1121	21	11	<0.05	<1	<1	<0.5	4.06	7802	0.6	748	110	15.39	0.5	22	6.24	3814	0.04	<5	18.7	50	0.15	<10		90
P7469	172	2.2	10	2	<0.2	2	877	24	13	<0.05	<1	<1	<0.5	7.95	22345	0.7	768	85	10.68	0.6	27	5.23	2490	0.05	<5	18.5	60	0.15	<10		105
P7471	109	0.9	8	2	<0.2	3	636	17	4	<0.05	<1	<1	<0.5	2.3	1087	10.9	329	55	6.6	0.5	27	10.43	1740	0.07	<5	11.6	613	0.06	<10		60
P7472	150	1.6	13	1	<0.2	3	698	20	14	<0.05	<1	<1	0.5	9.5	6152	0.8	528	80	10.95	0.8	45	7.99	2507	0.05	<5	16.8	125	0.2	20		90
P7473	66.1	0.7	10	2	<0.2	2	340	20	6	<0.05	<1	<1	<0.5	9.83	1822	2.3	253	45	5.42	0.4	45	12.87	953	0.06	<5	15	392	0.12	<10		60
P7493	173	0.6	8	2	<0.2	3	1115	26	8	<0.05	<1	<1	<0.5	1.52	323	0.2	601	94	11.65	0.5	22	8.92	2913	0.04	<5	20.1	35	0.19	<10		89
P7494	257	0.8	11	2	<0.2	3	1610	32	12	<0.05	<1	<1	<0.5	2.42	387	0.2	823	129	17.32	0.5	22	6.35	3834	0.07	<5	20.1	25	0.24	<10		124
P7495	163	0.6	8	2	<0.2	3	1016	27	13	<0.05	<1	<1	<0.5	1.27	273	0.3	2587	124	17.14	0.6	18	8.63	2820	0.08	<5	20.9	60	0.33	45		89
P7496	198	0.6	13	2	<0.2	2	1187	36	17	<0.05	<1	<1	<0.5	2.87	389	0.2	1690	160	21.02	0.8	27	3.54	3534	0.05	15	21.3	40	0.4	45		100
P7497	209	0.8	13	2	<0.2	4	1132	36	13	<0.05	<1	<1	<0.5	2.15	349	0.6	1766	145	18.61	0.6	54	5.8	3852	0.05	<5	18.7	80	0.33	40		95
P7498	235	4.7	9	<1	0.5	4	1048	61	18	0.3	<1	1	1.9	0.17	399	0.4	1565	155	19.13	0.8	31	6.24	4068	0.06	<5	20.4	65	0.34	40		110
P7501	201	1.3	5	<1	<0.2	3	1232	23	11	0.05	<1	<1	<0.5	1.15	287	3.9	1407	89	12.79	0.4	67	7.43	2275	0.07	<5	16.8	149	0.18	<10		59
P7518	168	2.5	18	<1	<0.2	3	444	66	26	0.05	<1	<1	0.8	9.02	1233	2.3	512	89	13.32	0.5	121	7.73	2500	0.04	<5	15.2	388	0.33	50		308
P7522	9.7	0.1	<1	<1	<0.2	<2	25	<2	<2	<0.05	<1	<1	<0.5	8.27	1410	3	566	99	16.06	0.8	103	5.14	2800	0.06	10	16.2	432	0.41	55		278
P7523	185	4.8	13	1	0.3	4	458	20	36	<0.05	<1	2	1.7	6.14	1673	5.5	563	94	14.84	0.7	72	4.97	2586	0.1	<5	16.9	478	0.24	50		314
P7524	194	3.7	13	1	0.3	4	720	30	20	0.17	<1	1	1.6	5.95	1127	3.9	765	112	18.61	0.6	40	5.78	2856	0.08	<5	16.8	333	0.3	60		268
P7525	145	2.5	11	1	0.3	3	598	5	18	0.14	<1	1	1.2	5.5	623	5.7	1216	121	19.68	0.6	84	4.19	2593	0.08	<5	18.2	494	0.37	70		332
P7526	211	2.3	13	2	0.4	5	723	30	20	0.19	<1	1	1.5	4.37	638	5.2	803	130	21.11	0.6	56	4.66	3827	0.05	10	13.7	533	0.37	65		242
P7527	207	2.1	15	1	0.4	4	712	199	25	0.18	<1	1	1.7	4.07	852	4.4	817	148	23.76	0.7	32	3.75	6288	0.11	35	15.2	672	0.45	85		215
P7528	195	2	16	<1	0.4	4	374	553	41	0.22	<1	1	2	3.85	3091	4.1	798	175	>25.00	1	32	2.01	10032	0.13	55	13.6	1366	0.56	125		215
P7529	186	1.4	13	1	0.3	4	641	74	21	0.1	<1	1	1.2	3.54	2642	5.8	938	156	>25.00	0.7	44	3.18	4120	0.1	25	13.6	988	0.57	99		210
P7531	200	1.4	12	1	0.4	5	541	89	25	0.1	<1	<1	1.4	3.53	1736	3.3	1314	165	>25.00	0.8	67	2.12	4371	0.06	15	14	982	0.73	129		179
P7532	206	1.4	12	1	0.3	3	588	204	26	0.08	<1	1	1.5	4.81	1469	2	1360	170	>25.00	0.8	88	3.59	5208	0.06	20	17.6	762	0.73	120		202
P7533	190	1.4	13	2	0.3	3	605	154	24	0.11	<1	<1	1.4	4.83	2859	1.5	1318	152	>25.00	0.8	71	3.12	5303	0.06	25	17.8	466	0.73	109		187
P7534	194	1.5	12	1	0.3	4	714	184	27	0.1	<1	<1	1.3	4.85	2019	1.9	1558	170	>25.00	0.8	79	3.27	6000	0.07	30	19.5	451	0.75	114		228
P7535	189	1.4	12	1	0.2	4	655	164	29	0.05	<1	<1	1.2	4.57	4359	0.9	1331	143	22.9	0.9	75	2.69	4639	0.11	25	20.7	263	0.71	94		139
P7536	177	1.6	12	2	<0.2	3	721	95	27	<0.05	<1	<1	1.2	5.34	4075	1	1244	134	22.79	0.8	80	3.4	5122	0.12	30	20.7	284	0.65	90		184
P7537	210	1.6	14	2	0.2	3	861	114	32	<0.05	<1	<1	1.3	4.3	1537	1	1448	157	>25.00	0.9	44	2.51	7388	0.1	40	20.3	249	0.66	85		219
P7538	246	1.4	10	2	0.2	3	1068	25	32	<0.05	<1	<1	1.2	4.25	695	0.8	2001	152	>25.00	0.9	<10	2.12	5885	0.06	25	20.6	79	0.63	60		188
P7541	242	1.5	9	2	<0.2	3	1189	35	33	<0.05	<1	<1	1.2	4	632	0.8	1950	139	23.03	0.8	68	2.54	5360	0.07	30	22.4	65	0.56	65		179
P7542	252	1.6	11	2	<0.2	3	1246	20	34	<0.05	<1	<1	1.3	4.29	685	0.9	2239	147	>25.00	1	48	2.74	5778	0.08	30	22.6	79	0.6	65		174
P7543	247	1.5	10	2	<0.2	4	1176	40	36	<0.05	<1	<1	1.6	4	734	1.1	2460	152	24.64	1.1	36	2.08	5638	0.06	30	23.3	79	0.59	74		192
P7544	214	1.4	11	2	<0.2	4	1002	25	35	<0.05	<1	<1	1.7	3.79	754	0.8	2237	138	23.51	1	36	1.51	4339	0.1	35	23.6	99	0.61	79		138
P7545	189	10.4	11	2	<0.2	3	1067	25	36	<0.05	<1	<1	2	4.31	653	1.2	2009	139	23.37	0.8	28	3.07	4011	0.11	30	22.5	110	0.57	75		179
P7581	161	3.9	6	1	<0.2	2	1003	30	20	<0.05	<1	<1	0.6	2.24	387	10.9	814	112	15.36	0.6	12	5.53	2954	0.05	<5	14.7	348	0.18	40		147
P7582	202	2.5	7	1	<0.2	3	1312	30	23	<0.05	<1	<1	0.6	2.95	323	5.2	1014	134	20.05	0.8	16	2.86	3731	0.04	10	23.3	427	0.26	55		206
P7583	220	2	7	1	<0.2	2	1243	10	22	<0.05	<1	<1	0.5	3.48	452	4.4	835	134	17.22	0.6	40	2.84	4594	0.04	10	22.5	343	0.28	40		219
P7584	258	1.8	6	2	<0.2	3	1262	15	17	<0.05	<1	<1	0.6	3.92	604	1.7	434	130	17.06	0.7	16	3.23	4922	0.05	<5	21.3	145	0.25	<10		166
P7585	140	1	5	<1	<0.2	<2	1063	30	11	<0.05	<1	<1	<0.5	3.91	589	1.1	349	85	11.73	0.6	12	7.58	2955	0.04	<5	22.9	95	0.11	<10		126
P7586	161	1.6	9	1	<0.2	2	917	<2	27	<0.05	<1	<1	<0.5	7.31	917	1.4	1316	121	18.05	0.9	32	4.89	3073	0.05	<5	20.9	160	0.33	30		188
P7587	162	1.6	9	<1	<0.2	2	1070	15	27	<0.05	<1	<1	<0.5	7.2	861	1.1	1592	112	18.91	1	44	5.07	2964	0.04	<5	19.9	119	0.32	30		179
P7588	148	1.4	8	<1	<0.2	2	854	<2	26	<0.05	<1	<1	<0.5	7.05	1212	0.7	844	98	14.17	0.8	32	5.28	2641	0.04	<5	20.7	84	0.22	15		139
P7589	108	1.4	9	1	<0.2	<2	510	<2	31	<0.05	<1	<1	<0.5	9.73	2158	0.8	1259	94	14.46	1.1	68	6.62	2154	0.05	<5	18.9	210	0.34	30		135
P7591	106	1.4	9	<1	<0.2	3	631	5	32	<0.05	<1	<1	<0.5	9.36	1430	1.4	551	67	10.46	1.1	115	7.05	2060	0.04	<5	18.8	462	0.21	15		125
P7592	119	1.5	10	1	<0.2	3	715	<2	33	<0.05	<1	<1	<0.5	10.58	2617	0.7	988	89	13.26	1.3	52	5.83	2377	0.04	<5	19.4	258	0.32	20		147
P7593	92.8	1	11	<1	<0.2	3	568	5	30	<0.05	<1	<1	<0.5	12.3	2326	0.6	682	76	9.67	1.1	28	2.74	1667	0.05	<5	8.5	40	0.19	<10		85
P7594	137	1.1	12	1	<0.2	3	719	<2	36	<0.05	<1	<1	<0.5	10.4	1711	0.7	1200	89	12.69	1.2	24	3.64	2621	0.05	<5	20.8	50	0.29	20		121
P7595	125	0.9	10	1	<0.2	3	704	<2	26	<0.05	<1	<1	<0.5	10.22	1498	0.8	749	80	10.7	1.1	<10	3.13	2085	0.07	<5	20.3	50	0.26	<10		103
P7596	142	1.2	9	1	<0.2	3	689	15	32	<0.05	<1	<1	<0.5	7.94	1364	1.3	1186	112	11.13	1.2	<10	4.62	2491	0.08	<5	19.4	79	0.25	20		116
P7597	116	1.5	11	<1	<0.2	2	586	25	38	<0.05	<1	<1	<0.5	8.81	1665	1.1	1198	130	13.02	1.3	<10	6.98	2509	0.08	<5	18.4	244	0.36	35		139
P7598	117	1.7	11	1	<0.2	3	591	5	32	<0.05	<1	<1	<0.5	8.85	1809	1.2	785	125	11.33	0.9	<10	6.15	2416	0.08	<5	19.1	268	0.32	25		134

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Appendix Five: Soil F

SAMPLE	Co	Cs	Ga	Ge	In	Mo	Ni	Pb	Rb	Re	Sb	Te	Tl	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	S	Sc	Si	Sr	Ti	V	W	Zn
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg
DETECTION	0.5	0.1	1	1	0.2	2	10	2	2	0.05	1	1	0.5	0.01	10	0.1	20	10	0.01	0.1	10	0.01	10	0.01	5	0.1	10	0.01	10	50	10
P7601	140	0.7	5	<1	<0.2	3	695	<2	18	<0.05	<1	<1	<0.5	3.92	636	8.4	645	89	11.66	0.9	<10	5.39	2494	0.06	<5	15.7	179	0.21	15		80
P7602	100	1.2	11	2	<0.2	3	528	<2	49	<0.05	<1	<1	<0.5	8.72	833	2.4	783	99	11.31	1.3	12	4.74	2136	0.06	15	20.7	100	0.54	35		108
P7603	105	0.9	10	2	<0.2	3	611	<2	44	<0.05	<1	<1	<0.5	6.74	691	3.4	1461	103	13.45	1.1	12	4.85	2362	0.06	10	20.4	134	0.57	55		94
P7604	100	1.2	13	1	<0.2	3	530	<2	54	<0.05	<1	<1	<0.5	8.88	808	2.5	704	116	11.26	1	<10	4.55	2110	0.06	15	20.3	84	0.51	40		107
P7627	217	0.7	10	2	<0.2	3	991	35	22	<0.05	<1	<1	0.6	2.69	322	8.9	1943	156	>25.00	0.9	28	2.61	4103	0.05	25	14.9	917	0.5	84		152
P7628	246	0.7	10	2	<0.2	3	1445	30	18	<0.05	<1	<1	0.6	3.04	432	5.1	1221	143	21.55	0.7	24	3.83	5233	0.06	25	19.5	511	0.39	50		152
P7629	200	0.9	10	2	<0.2	3	1126	30	25	<0.05	<1	<1	0.5	2.9	501	6.4	1250	134	20.66	0.9	20	3.15	4339	0.05	20	10.8	640	0.41	45		147
P7631	268	1.9	8	2	0.4	3	1603	12	10	0.05	<1	1	1.2	2.97	290	1.3	844	114	16.85	0.6	22	8.87	4915	0.02	<5	18.3	123	0.2	<10		132
P7632	244	2.6	28	2	0.5	14	1351	15	26	<0.05	<1	<1	2.7	12.67	434	5.5	1580	166	22.54	1.2	126	2.59	5105	0.05	35	25.8	549	0.65	65		168
P7633	187	1.5	10	1	0.3	4	1023	11	26	<0.05	<1	1	0.9	3.3	372	6	2046	142	21.19	1	18	2.17	3793	0.02	10	13.3	542	0.48	60		157
P7634	209	2.3	13	2	0.3	3	1077	13	26	0.05	<1	<1	0.9	6.63	894	2	333	113	12.34	0.8	18	5.94	4861	0.03	15	18	198	0.25	20		182
P7635	188	2.3	15	1	0.3	3	1067	13	34	<0.05	<1	<1	0.9	7.96	633	2.1	952	123	17.08	1	27	4.22	3804	0.01	15	17.6	213	0.37	40		219
P7636	181	1.8	13	2	0.3	5	1128	11	23	<0.05	<1	<1	0.9	7.79	542	1.5	1158	118	16.38	1.3	40	4.28	3658	0.02	10	18.6	170	0.36	30		167
P7637	222	1.2	9	1	0.2	4	1491	9	16	<0.05	<1	<1	0.7	4.47	319	0.5	1401	123	18.81	0.9	22	4.9	4207	0.02	<5	18.4	57	0.31	<10		142
P7638	204	1	10	1	<0.2	5	1398	9	19	<0.05	<1	<1	0.5	4.21	299	0.4	2910	132	19.88	1	27	3.44	3945	0.02	<5	18.4	38	0.43	20		152
P7641	232	2.9	12	1	0.2	3	1339	11	19	<0.05	<1	<1	0.6	4.8	476	0.3	2302	132	19.2	0.8	18	5.35	4449	0.03	<5	17.9	42	0.41	25		192
P7642	233	1.9	12	1	0.2	4	1259	10	17	<0.05	<1	<1	<0.5	5.77	373	0.3	2254	142	18.46	0.9	27	5.31	4209	0.02	<5	15.9	33	0.42	20		162
P7643	238	1.4	8	1	<0.2	3	1438	9	15	<0.05	<1	<1	<0.5	4.53	357	0.3	1701	137	19.62	1	31	3.84	4380	0.03	10	20.2	33	0.33	15		126
P7644	255	1.2	10	1	<0.2	3	1688	10	14	<0.05	<1	<1	<0.5	5.85	1205	0.2	1125	128	18.48	0.8	18	3.87	4213	0.03	15	15.1	28	0.27	15		132
P7645	192	1.6	13	1	0.2	3	1161	10	20	<0.05	<1	<1	0.6	7.69	689	0.7	1384	160	17.01	1.1	49	4.74	4122	0.04	15	17.7	104	0.47	40		172
P7646	192	1.1	14	2	<0.2	3	1071	10	20	<0.05	<1	<1	<0.5	7.12	605	0.9	2421	156	20.63	1	49	5	4023	0.04	<5	16.5	94	0.72	69		162
P7647	159	1.4	14	1	<0.2	3	948	9	20	<0.05	<1	<1	<0.5	7.24	2021	1	1906	133	17.95	1.1	45	5.32	3573	0.05	<5	17.4	71	0.66	60		560
P7648	136	1	8	<1	<0.2	3	842	8	9	<0.05	<1	<1	<0.5	4	254	8.2	707	114	10.77	0.6	27	9.92	2560	0.06	<5	11.8	147	0.37	20		76
P7668	216	1.3	17	1	0.3	2	687	14	22	<0.05	<1	<1	0.7	4.35	368	9.1	657	137	19.3	0.9	22	5.27	4846	0.05	20	10.9	780	0.44	70		223
P7669	244	1.3	15	2	0.3	2	791	16	20	<0.05	<1	<1	0.7	3.84	393	9.6	1393	165	24.27	0.9	27	5.31	5438	0.06	15	11.3	879	0.49	95		274
P7671	181	1.1	11	<1	0.2	3	662	14	19	<0.05	<1	<1	0.5	3.25	408	11	756	132	17.3	1.2	31	5.15	4458	0.03	10	10.6	827	0.4	65		173
P7672	181	1.7	7	<1	<0.2	4	938	10	12	<0.05	<1	<1	<0.5	2.02	442	9.9	452	108	12.02	0.8	31	7.42	3267	0.07	<5	11.6	481	0.38	15		101
P7673	192	1.1	7	<1	<0.2	<2	1212	11	11	<0.05	<1	<1	<0.5	1.63	343	16.8	432	94	14.14	0.7	22	5.65	3446	0.08	<5	7.6	330	0.19	20		96
P7674	239	0.9	12	<1	<0.2	2	1102	14	15	<0.05	<1	<1	0.5	2.8	444	10.8	763	123	17.4	1	31	5.23	5184	0.07	15	11.2	677	0.35	50		173
P7675	204	1.1	15	<1	0.2	<2	749	14	21	<0.05	<1	<1	0.6	3.57	407	11.7	1042	151	21.68	1	18	3.36	5223	0.03	25	11.6	1164	0.45	84		172
P7676	250	0.8	12	<1	0.2	<2	1100	12	17	<0.05	<1	<1	0.6	2.79	378	10.2	1214	151	21.91	0.8	18	3.71	4567	0.07	15	12.1	813	0.42	65		198
P7677	260	1	9	<1	<0.2	3	1463	12	17	<0.05	<1	<1	0.5	2.7	382	5.3	1096	137	19	1	31	4.16	5119	0.05	<5	15.3	391	0.35	30		132
P7678	255	1	12	1	<0.2	3	1294	17	15	<0.05	<1	<1	0.6	2.72	493	5.8	1368	132	18.92	0.7	18	4.99	4567	0.03	<5	13.5	463	0.35	50		152
P7681	198	0.8	10	1	<0.2	<2	947	14	17	<0.05	<1	<1	<0.5	2.87	273	6.8	2083	151	22.93	1.1	27	3.62	3725	0.02	<5	14.5	589	0.48	69		162
P7682	73.5	1.7	19	1	<0.2	<2	198	12	42	<0.05	<1	<1	0.5	8.45	883	5.7	342	212	7.29	1.8	31	3.3	1994	0.01	20	18.4	646	0.56	124		106
P7683	90.9	1.4	16	<1	<0.2	2	419	10	34	<0.05	<1	<1	<0.5	8.15	952	1.8	563	204	9.64	1	27	5.61	2258	0.05	<5	17.2	137	0.62	35		112
P7684	67.9	1.2	13	1	<0.2	<2	238	10	33	<0.05	<1	<1	<0.5	8.43	953	5.9	645	297	8.76	1.2	36	4.71	1718	0.07	20	17.9	302	0.62	79		91
P7685	50.8	0.9	13	<1	<0.2	<2	188	10	29	<0.05	<1	<1	<0.5	7.54	649	10.1	550	188	7.01	1.1	31	5.02	1427	0.05	30	15.7	231	0.52	59		51
P7686	45.5	1	11	<1	<0.2	<2	180	9	16	<0.05	<1	<1	<0.5	7.34	594	9.6	554	218	6.66	1.2	36	5.58	1238	0.06	25	18.2	199	0.57	45		25
P7687	73.4	0.7	7	<1	<0.2	<2	401	10	10	<0.05	<1	<1	<0.5	4.35	738	15.3	951	146	7.71	0.9	40	5.11	1531	0.05	<5	11.4	127	0.31	30		61
P7688	147	0.8	8	<1	<0.2	<2	774	10	11	<0.05	<1	<1	<0.5	3.11	1086	9.5	1815	151	12.34	0.7	27	5.85	2817	0.02	<5	13.7	99	0.36	40		91
P7689	114	1	12	<1	<0.2	<2	539	11	13	<0.05	<1	<1	0.6	4.69	1038	8.4	2021	171	12.35	0.8	49	8	2754	0.07	<5	13.2	204	0.6	70		112
P7691	142	0.8	10	<1	<0.2	<2	574	10	10	<0.05	<1	<1	<0.5	5.19	1628	7.9	574	152	11.45	0.6	18	5.07	2547	0.06	10	14.7	57	0.38	30		102
P7692	113	0.6	7	<1	<0.2	<2	422	10	9	<0.05	<1	<1	<0.5	4.08	972	10.1	541	80	9.72	0.6	27	6.94	2500	0.03	<5	13.5	137	0.2	20		86
P7693	158	0.3	5	<1	<0.2	<2	695	8	7	<0.05	<1	<1	<0.5	2.6	1311	4.7	397	127	10.98	0.6	36	8.39	3034	0.03	<5	13.2	236	0.14	<10		71
P7694	125	0.7	7	<1	<0.2	<2	542	10	10	<0.05	<1	<1	<0.5	6.98	2063	2.6	860	90	11.46	0.7	36	8.04	3067	0.05	<5	17.2	104	0.23	15		101
P7695	153	0.6	6	<1	<0.2	<2	784	10	9	<0.05	<1	<1	<0.5	3.87	1195	7	962	118	11.79	0.7	27	7.88	2713	0.03	<5	14.3	94	0.16	<10		86
P7722	62.6	0.9	13	1	<0.2	<2	120	11	22	<0.05	<1	<1	<0.5	5.82	369	8	384	265	6.99	1.3	36	4.48	1816	0.06	50	18.8	564	0.51	90		71
P7723	73.7	1.2	18	1	<0.2	<2	189	11	29	<0.05	<1	<1	0.5	8.51	452	5.5	368	434	8.41	1.4	27	4.23	1640	0.04	30	19.2	241	0.61	94		81
P7724	125	0.8	11	<1	<0.2	<2	444	11	19	<0.05	<1	<1	<0.5	5.46	638	5.5	1391	251	12.47	1	31	6.29	3260	0.04	10	18.3	322	0.63	110		107
P7725	77.8	2.4	6	1	<0.2	2	437	40	4	0.07	<1	<1	1.2	2.29	195	14.7	744	95	8.43	0.3	23	6.47	1319	0.06	<5	9.4	115	0.16	25		60
P7726	82.6	1.7	5	<1	<0.2	2	403	11	6	<0.05	<1	<1	0.7	1.97	558	9.7	623	80	8.72	0.4	28	7.47	1713	0.05	<5	12.1	120	0.18	20		115
P7769	126	2	15	2	<0.2	4	683	48	24	<0.05	<1	<1	0.9	8.29	1196	0.6	683	75	10.73	0.8	30	9.92	2238	0.02	<5	17.4	75	0.27	20	<50	110
P7771	131	1.7	12	2	0.2	4	690	47	17	<0.05	<1	<1	0.9	8.07	1044	0.7	544	90	10.58	0.6	20	10.15	2413	0.03	<5	16.6	70	0.23	20	<50	90
P7772	56.6	1.9	11	2	<0.2	4	295	36	19	<0.05	<1	<1	0.7	10.17	1557	0.2	244	40	5.62	1.2	<10	13.27	1244	0.03	<5	17.5	60	0.19	15	<50	55
P7773	257	0.8	15	2	<0.2	4	1388	59	10	<0.05	<1	<1	0.8	5.85	491	0.6	769	129	19.74	0.4	20	8.63	4072	0.04	<5	16	50	0.38	15	<50	89
P7774	109	0.8	17	2	<0.2	4	488	30	10	<0.05	<1	<1	0.6	9.74	259	0.2	329	105	11.03	0.5	25	11.69	1567	0.01	<5	16.6	30	0.38	25	<50	60
P7775	107	2.3	14	1	<0.2	4	522	38	46	<0.05	<1	<1	0.8	9.88	2734	0.2	508	90	10.78	1.7	30	10.28	1843	0.01	<5	18.2	100	0.37	30	<50	129
P7776	100	1.8	13	2	<0.2	4	474	36	26	<0.05	<1	<1	0.7	8.45	1404	0.2	769	94	13.21	0.8	35	8.89	2411	<0.01	<5	18.5	79	0.47	35	<50	79

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Appendix Five: Soil F

SAMPLE	Co	Cs	Ga	Ge	In	Mo	Ni	Pb	Rb	Re	Sb	Te	Tl	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	S	Sc	Si	Sr	Ti	V	W	Zn
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg
DETECTION	0.5	0.1	1	1	0.2	2	10	2	2	0.05	1	1	0.5	0.01	10	0.1	20	10	0.01	0.1	10	0.01	10	0.01	5	0.1	10	0.01	10	50	10
P7777	90.2	2	15	2	<0.2	4	462	33	32	<0.05	<1	<1	0.7	9.45	1275	0.2	453	80	10.48	1	40	10.2	2380	0.02	<5	19.2	80	0.38	25	<50	75
P7778	72.1	2.2	13	2	<0.2	4	393	29	43	<0.05	<1	<1	0.7	9.82	2911	0.3	573	60	8.84	1.5	50	10.24	1795	<0.01	<5	18.4	174	0.33	25	<50	75
P7781	55	1.7	13	1	<0.2	4	279	27	25	<0.05	<1	<1	0.6	9.98	2495	0.7	249	45	6.64	0.8	50	10.49	1461	0.02	<5	18	263	0.25	20	<50	55
P7782	77.9	8.1	11	1	<0.2	4	399	31	26	<0.05	<1	<1	0.7	8.82	909	0.4	660	74	10.94	0.7	55	9.89	2200	<0.01	<5	19.3	154	0.39	30	<50	74
P7783	83.6	4	12	2	<0.2	4	482	32	21	<0.05	<1	<1	0.6	8.06	2017	0.6	792	90	11.28	0.6	60	8.78	2500	0.02	<5	20	164	0.42	25	<50	65
P7784	74	3.3	12	1	<0.2	4	381	28	26	<0.05	<1	<1	0.6	8.81	4104	0.9	672	159	8.97	1	45	8.43	1990	0.01	<5	19.7	239	0.4	25	<50	30
P7785	82.3	1.9	13	2	<0.2	4	545	25	21	<0.05	<1	<1	<0.5	7.3	823	1.7	892	150	10.52	0.7	35	7.45	2677	0.02	<5	21.1	115	0.41	50	<50	85
P7786	90.5	1.8	15	2	<0.2	3	525	25	33	<0.05	<1	<1	<0.5	6.79	637	2.3	637	164	10.11	0.8	30	6.23	2697	0.01	<5	21.3	179	0.41	80	<50	50
P7787	46.5	1.6	17	2	<0.2	4	296	27	51	<0.05	<1	<1	<0.5	9.45	900	3.9	333	154	7.42	1.2	35	3.62	1537	0.01	10	22.4	269	0.46	109	<50	70
P7788	29.2	1.7	22	2	<0.2	3	155	26	88	<0.05	<1	<1	0.5	9.54	748	3	224	199	8.68	2.5	40	1.93	1271	<0.01	15	23.8	354	0.63	239	<50	40
P7789	43.5	1.1	20	2	<0.2	4	158	27	54	<0.05	<1	<1	<0.5	7.14	595	5.2	233	332	10.35	1.1	35	2.2	1736	0.01	30	21.7	526	0.57	293	<50	60
P7791	31.6	0.9	14	3	<0.2	3	344	29	30	<0.05	<1	<1	<0.5	8.39	844	5.7	435	215	6.24	0.7	25	4.15	1239	0.01	45	24	180	0.53	90	<50	40
P7792	24.7	0.8	17	2	<0.2	3	129	23	30	<0.05	<1	<1	<0.5	11.86	1426	2.8	120	184	6.04	1	40	2.54	1052	<0.01	50	23.1	169	0.55	65	<50	15
P7793	23.4	0.8	18	3	<0.2	3	135	31	49	<0.05	<1	<1	<0.5	9.17	622	3.6	408	393	8.82	1.2	50	2.42	1149	<0.01	75	23	284	0.79	154	<50	80
P7794	21.6	0.5	15	4	<0.2	3	102	30	40	<0.05	<1	<1	<0.5	10.26	804	3.6	90	290	7.88	1.1	50	2.13	984	0.01	85	23.7	180	0.72	110	<50	70
P7795	29.2	0.9	14	3	<0.2	3	113	57	77	<0.05	<1	<1	0.5	8.65	629	5.2	210	429	7.03	2.1	50	2.54	1472	0.07	45	23.9	379	0.73	115	<50	70
P7796	19	0.7	14	3	<0.2	3	92	32	42	<0.05	<1	<1	<0.5	8.09	654	6.3	65	783	7.94	1.1	70	2.35	1173	0.02	30	21.1	564	0.54	125	<50	70
P7797	25	1.3	17	3	<0.2	3	92	40	77	<0.05	<1	<1	0.7	8.7	559	3	110	279	7.95	2.2	20	1.48	1352	<0.01	75	24.6	269	0.71	120	<50	55
P7798	19.5	0.8	14	3	<0.2	3	102	39	47	<0.05	<1	<1	0.6	7.73	447	4	149	204	9.55	1.5	30	2.11	1168	<0.01	144	24.4	199	0.67	159	<50	55
P7801	31.3	0.9	15	2	<0.2	3	92	44	69	<0.05	<1	<1	0.6	6.79	612	6.2	134	254	8.41	2.4	40	1.82	1721	0.03	70	23	547	0.81	179	<50	75
P7802	49.3	0.7	13	2	<0.2	3	101	57	48	<0.05	<1	<1	<0.5	5.09	599	6.6	95	544	13.02	1.5	35	2.08	3448	0.02	85	21.1	524	0.62	359	<50	80
P7815	196	3.1	4	1	<0.2	3	1011	18	6	<0.05	<1	<1	1.1	1.37	229	8.2	672	114	10.42	0.4	36	11.2	2308	0.04	<5	14.5	85	0.17	30		75
P7816	114	2.1	5	<1	<0.2	3	582	16	7	<0.05	<1	<1	1	1.69	330	15.2	699	130	8.33	0.3	31	5.39	1628	0.08	<5	9.5	160	0.21	50		80
P7817	67.6	1.4	3	<1	<0.2	3	411	18	5	<0.05	<1	<1	0.7	1.21	579	24.2	439	95	5.82	0.3	31	4.39	1028	0.06	<5	7.8	140	0.12	20		<10
P7818	95.9	1.2	5	<1	<0.2	3	550	17	7	<0.05	<1	<1	0.7	1.65	264	22.3	629	115	7.82	0.4	40	3.12	1417	0.09	<5	6.5	90	0.25	15		55
P7821	83.1	1.5	10	1	<0.2	2	415	21	16	<0.05	<1	<1	0.7	5.74	1204	11.5	1005	224	8.54	0.6	36	4.33	1567	0.1	10	17.1	249	0.45	90		65
P7822	87.2	1.1	12	2	<0.2	3	432	21	23	<0.05	<1	<1	0.6	8.52	1276	3.9	601	357	9.38	0.8	40	3.07	1723	0.09	20	19.9	333	0.53	129		104
P7823	119	1.3	14	2	<0.2	3	415	25	51	<0.05	<1	<1	0.7	7.38	927	1.9	813	294	14.04	1	45	3.36	2517	0.05	20	19.6	204	0.66	130		105
P7824	45	1	14	2	<0.2	2	148	23	53	<0.05	<1	<1	0.7	10.01	779	4.9	180	514	8.22	1.2	45	1.8	1454	0.1	35	21.5	405	0.65	155		55
P7825	36.1	1.2	16	2	<0.2	2	133	26	61	<0.05	<1	<1	0.7	8.36	420	5.2	260	485	9.34	1.3	45	1.42	1229	0.08	45	20.8	400	0.86	195		35
P7826	27.9	1.1	18	3	<0.2	3	149	27	46	<0.05	<1	<1	0.6	9.95	398	3.4	194	618	11	1	45	1.24	966	0.08	55	21.6	239	0.91	219		85
P7827	33.6	1.1	18	3	<0.2	3	147	27	49	<0.05	<1	<1	0.6	9.69	508	3.6	155	613	10.69	1.1	58	1.31	1147	0.07	25	20.1	239	0.98	219		45
P7828	44.8	1.3	20	2	<0.2	3	107	32	93	<0.05	<1	<1	0.7	9.08	609	3.6	155	614	10.42	2.2	45	1.14	1522	0.07	30	23.6	334	0.82	225		55
P7829	40.3	1.8	22	2	<0.2	3	113	33	99	<0.05	<1	<1	0.8	10.04	594	2.5	130	504	9.21	2.3	49	0.88	1314	0.09	30	23.6	255	0.76	175		50
P7831	52.9	1.7	22	2	<0.2	3	125	34	117	<0.05	<1	<1	0.8	9.13	696	2.4	219	363	10.27	2.3	45	0.94	1764	0.05	30	23.8	263	0.82	229		80
P7832	47.3	1.5	23	2	<0.2	4	122	38	134	<0.05	<1	<1	0.9	10.01	903	1.9	215	245	8.86	2.9	49	0.98	1866	0.04	30	25.5	230	0.82	185		35
P7869	123	1	3	<1	<0.2	5	830	20	6	0.06	2	<1	0.9	0.78		7.8	442	60	8.57	0.5	29	12.35	2038	0.05	<5	12.2	65	0.15	<10		75
P7871	280	1.2	7	1	<0.2	6	1698	19	8	<0.05	3	<1	0.7	1.86		0.1	1590	139	21.83	0.5	29	6.76	5273	0.05	<5	10.6	20	0.33	<10		104
P7872	158	0.9	4	<1	<0.2	7	943	20	11	<0.05	2	<1	0.5	1.42		4.5	1375	99	14.16	0.6	29	7.97	2517	0.05	<5	13.5	169	0.19	15		99
P7873	286	0.9	11	2	<0.2	6	1419	98	19	<0.05	3	<1	0.9	2.89		0.8	1665	165	24.89	0.7	68	7.14	5872	0.04	10	18	70	0.47	40		160
P7874	215	1.1	7	1	<0.2	5	1179	34	13	<0.05	3	<1	0.8	1.53		0.5	879	104	15.39	0.5	39	8.53	4394	0.05	<5	17	99	0.26	15		99
P7875	199	0.9	8	2	<0.2	6	1168	45	16	<0.05	2	<1	0.5	2.46		0.5	999	135	18.76	0.7	29	7.14	4535	0.03	<5	17.6	60	0.38	20		130
P7876	234	0.8	10	2	0.2	5	1280	41	17	<0.05	2	<1	0.6	3.24		0.4	1019	155	20.03	0.6	<10	5.49	5430	0.03	<5	5.6	30	0.38	<10		175
P7877	208	0.8	11	2	<0.2	5	937	22	15	<0.05	2	<1	<0.5	3.65		0.3	2223	145	20.32	0.6	20	6.35	4407	0.03	<5	15.6	40	0.53	40		199
P7878	157	0.7	3	2	<0.2	5	993	16	8	<0.05	2	<1	<0.5	0.69		0.2	504	85	10.36	0.5	44	10.08	2645	0.04	<5	10.5	20	0.1	<10		60
P7881	193	0.9	6	3	<0.2	5	448	25	8	<0.05	2	<1	<0.5	2.11		0.2	234	120	16.14	0.6	54	8.83	5568	0.04	<5	16.6	<10	0.25	<10		115
P7882	176	0.8	10	2	<0.2	4	764	42	12	<0.05	2	<1	<0.5	3.37		0.4	773	104	13.52	0.5	58	10.61	4381	0.03	<5	16.1	50	0.29	<10		164
P7883	103	0.5	8	2	<0.2	4	483	24	8	<0.05	1	<1	<0.5	5.82		0.3	441	64	8.1	0.5	78	11.99	2175	0.03	<5	15.3	55	0.14	<10		119
P7884	203	0.7	5	3	<0.2	5	1233	14	10	<0.05	1	<1	<0.5	1.82		<0.1	900	114	15.2	0.5	49	9.01	3473	0.05	<5	14.5	<10	0.18	<10		95
P7885	238	0.6	6	2	<0.2	6	1278	13	9	<0.05	1	<1	<0.5	2.24		<0.1	1260	149	20.41	0.4	29	5.29	4936	0.03	<5	16.1	<10	0.23	<10		99
P7886	196	0.7	10	2	<0.2	5	1033	17	16	<0.05	1	<1	<0.5	3.7		0.1	1803	140	19.28	0.6	44	4.54	4226	0.04	10	15.6	20	0.41	20		115
P7887	262	0.7	9	3	<0.2	5	1286	23	14	<0.05	1	<1	<0.5	3.24		0.3	1793	294	18.99	0.5	54	4.87	4437	0.04	<5	16.2	45	0.25	<10		120
P7888	228	0.6	7	2	0.4	5	1101	15	10	<0.05	3	2	<0.5	0.18		<0.1	1173	155	20.94	0.5	64	3.14	4556	0.04	<5	16.4	<10	0.2	<10		95
P7912	241	0.7	13	2	<0.2	5	854	24	23	<0.05	1	<1	<0.5	4.08		0.4	2355	165	>25.00	0.7	20	4.58	5604	0.05	<5	19.8	30	0.92	40		200
P7913	190	0.6	10	2	<0.2	5	777	22	17	<0.05	1	<1	<0.5	3.75		1.8	1682	115	17.85	0.8	73	8.2	4112	0.03	<5	15.2	55	0.48	30		145
P7914	222	1	15	2	<0.2	6	920	49	30	<0.05	<1	<1	<0.5	5.34		0.4	2859	170	>25.00	1.1	49	4.24	5220	0.04	15	14.4	60	0.82	60		235
P7915	288	0.5	7	3	<0.2	6	1415	23	9	<0.05	<1	<1	<0.5	2.57		0.1	1184	155	19.84	0.6	49	6.31	5235	0.03	<5	15.4	<10	0.27	<10		130
P7916	185	0.4	6	3	<0.2	5	854	15	8	<0.05	1	<1	<0.5	2.01		<0.1	608	100	14.28	0.5	49	9.54	4153	0.04	<5	16.3	<10	0.23	<10		90
P7917	291	0.7	13	2	<0.2	6	1161	52	20	<0.05	1	<1	<0.5	4.49		0.1	3605	223	>25.00	0.9	34	3.02	6564	0.03	10	13.2	30	0.82	65		223

For personal use only

Appendix Five: Soil F

SAMPLE	Co	Cs	Ga	Ge	In	Mo	Ni	Pb	Rb	Re	Sb	Te	Tl	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	S	Sc	Si	Sr	Ti	V	W	Zn
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg
DETECTION	0.5	0.1	1	1	0.2	2	10	2	2	0.05	1	1	0.5	0.01	10	0.1	20	10	0.01	0.1	10	0.01	10	0.01	5	0.1	10	0.01	10	50	10
P7918	296	0.8	13	2	<0.2	5	1334	26	16	<0.05	<1	<1	<0.5	4.49		0.3	1628	160	22.28	0.7	59	6.14	5280	0.04	10	14.5	25	0.43	30		220
P7921	201	0.8	13	3	<0.2	5	898	29	19	<0.05	<1	<1	<0.5	5.37		0.2	1740	139	17.89	0.8	73	6.25	4235	<0.01	<5	15.3	35	0.46	35		179
P7922	217	0.6	10	3	<0.2	6	1031	30	14	<0.05	<1	<1	<0.5	3.78		0.2	1244	144	17.68	0.6	44	4.85	4657	0.02	<5	16.9	25	0.35	20		139
P7923	230	1.1	12	3	<0.2	5	983	59	19	<0.05	<1	<1	0.8	3.28		0.9	537	129	17.27	0.8	68	5.42	5875	0.06	20	16.2	109	0.35	15		159
P7924	115	0.5	9	3	<0.2	5	542	21	11	<0.05	<1	<1	<0.5	5.88		0.3	639	70	9.88	0.7	127	10.69	2470	0.04	<5	14.7	30	0.25	<10		80
P7925	164	0.5	4	3	<0.2	5	866	14	10	<0.05	<1	<1	<0.5	1.61		0.1	734	80	11.99	0.6	64	7.43	3169	0.04	<5	19.5	15	0.16	<10		90
P7926	230	0.7	9	3	<0.2	4	906	16	14	<0.05	<1	<1	<0.5	4.63		0.4	1252	119	17.79	0.8	68	4.69	4299	0.04	<5	17.3	104	0.3	<10		144
P7927	211	0.8	15	3	<0.2	5	809	21	20	<0.05	<1	<1	0.6	6.08		1.3	1421	119	17.95	0.8	78	5.72	4130	0.06	<5	13.5	209	0.53	30		164
P7928	293	0.7	14	3	<0.2	5	962	22	21	<0.05	<1	<1	<0.5	4.48		5.6	2927	220	22.98	0.9	44	3.55	4945	0.03	15	11.3	569	0.67	50		280
P7929	189	2.6	6	2	<0.2	5	1050	25	17	<0.05	<1	<1	<0.5	2.07		0.2	1139	105	15.45	0.7	64	5.68	3606	0.07	<5	18.2	<10	0.26	<10		80
P7931	223	1.1	8	2	<0.2	6	1130	12	20	<0.05	<1	<1	<0.5	2.83		0.2	2135	139	18.61	0.7	54	4.72	4062	0.04	<5	15.9	20	0.33	<10		139
P7949	241	0.7	13	2	<0.2	5	1068	21	20	<0.05	<1	<1	<0.5	5.4		0.3	3466	149	21.4	0.8	78	5.13	4161	0.03	<5	13.3	40	0.61	45		248
P7952	256	0.5	7	3	<0.2	5	1121	17	8	<0.05	<1	<1	<0.5	2.9		<0.1	714	130	20.1	0.4	59	8.37	4805	0.05	<5	11.2	<10	0.17	<10		115
P7953	185	0.7	12	2	<0.2	5	806	21	19	<0.05	<1	<1	<0.5	5.49		0.3	2418	168	18.72	0.8	83	5.79	3479	0.04	<5	13.7	45	0.5	40		164
P7954	168	0.4	4	2	<0.2	5	1013	10	11	<0.05	<1	<1	<0.5	1.82		0.2	850	89	14.11	0.7	68	8.74	3047	0.06	<5	16.2	15	0.2	<10		84
P7955	117	0.4	5	2	<0.2	4	655	12	9	<0.05	<1	<1	<0.5	1.93		3.1	717	80	10.72	0.7	49	11.54	2181	0.06	<5	15.5	75	0.18	<10		80
P7956	113	0.3	4	2	<0.2	4	679	15	13	<0.05	<1	<1	<0.5	1.19		6.9	1788	105	11.52	0.8	44	8.9	2258	0.06	<5	12.5	115	0.23	<10		90
P7957	131	6.2	5	1	1.1	4	870	27	9	<0.05	<1	<1	2.5	1.25	159	3.7	2012	139	11.24	0.4	15	9.99	2097	0.05	<5	17.4	55	0.23	20	<50	70
P7958	150	4.5	5	2	0.6	4	921	22	12	<0.05	<1	<1	2	1.5	214	4.4	1754	129	13.15	0.6	15	9.68	2699	0.05	<5	17.1	94	0.25	20	<50	70
P7961	161	2.3	8	1	0.3	4	1175	23	17	<0.05	<1	<1	1.2	2.05	269	1.3	2069	125	15.11	0.6	30	8.1	2822	0.03	<5	19.9	60	0.31	30	<50	75
P7962	171	1.6	8	2	0.2	4	1135	22	15	<0.05	<1	<1	1	2.13	254	1.6	2383	124	14.7	0.6	30	9.34	3050	0.03	<5	20.5	65	0.31	35	<50	95
P7963	170	1.6	13	2	0.2	4	1252	28	29	<0.05	<1	<1	1	4.18	425	1.5	3506	170	18.37	0.9	40	3.82	3432	0.03	25	21.8	105	0.61	80	<50	105
P7964	111	1.7	14	2	<0.2	4	886	28	26	<0.05	<1	<1	0.9	4.69	478	2.9	1628	169	12.85	0.8	45	3.64	2181	<0.01	40	23.2	254	0.55	95	<50	70
P7965	111	1.8	15	3	<0.2	4	629	32	31	<0.05	<1	<1	0.8	5.02	521	5.6	1236	288	10.9	0.7	50	2.59	2413	<0.01	25	21.5	482	0.77	144	<50	55
P7966	69.5	1.8	15	2	<0.2	5	341	29	41	<0.05	<1	<1	0.8	5.69	434	7.2	957	354	9.29	1	45	1.94	1959	0.03	30	21.2	683	0.7	169	<50	55
P7967	70.9	1.8	15	2	<0.2	4	368	29	37	<0.05	<1	<1	0.8	6.68	444	6.2	758	404	9.92	0.8	35	1.59	1886	0.04	25	20.8	599	0.57	180	<50	55
P7968	142	1.6	17	2	<0.2	4	682	32	62	<0.05	<1	<1	0.8	6.96	888	2.3	704	238	11.15	1.1	40	3.5	3219	0.02	20	21.2	243	0.49	79	<50	89
P7969	46.3	2.1	23	2	<0.2	4	130	38	110	<0.05	<1	<1	1.1	8.18	569	3.2	140	399	7.58	2.2	30	1.02	1582	0.01	30	23.1	319	0.92	150	<50	55
P7991	73.5	0.5	6	2	<0.2	4	560	18	4	<0.05	<1	<1	<0.5	2.89	120	1.7	513	50	5.87	0.3	15	13.45	1594	0.02	<5	17.9	70	0.12	<10	<50	60
P7992	173	1	15	2	<0.2	4	1348	23	14	<0.05	<1	<1	0.7	6.24	533	0.5	1260	105	14.92	0.7	30	5.18	3401	0.01	25	19.9	45	0.33	25	<50	125
P7993	181	1.2	14	2	<0.2	4	1315	24	16	<0.05	<1	<1	0.6	8.26	4916	0.4	1028	109	13.93	0.8	35	4.32	3451	0.03	<5	19.5	60	0.24	<10	<50	99
P7994	193	1	9	2	<0.2	3	1236	6	13	<0.05	<1	<1	0.6	4.67	497	0.5	1764	109	17.04	0.6	23	6.91	3718	0.05	<5	14.5	55	0.32	20		104
P7995	186	1.2	9	2	<0.2	3	1241	8	15	<0.05	<1	<1	0.6	6.48	899	0.5	1189	120	15.7	0.6	19	5.14	3766	0.05	10	15.8	70	0.28	20		784
P7996	204	0.5	7	2	<0.2	3	1482	<2	11	0.05	<1	<1	0.5	3.34	492	0.3	1685	114	16.38	0.7	14	6.31	3062	0.04	<5	13.9	35	0.22	15		84
P7997	194	0.5	7	2	<0.2	2	1277	<2	7	<0.05	<1	<1	<0.5	3.79	382	0.3	1503	114	17.78	0.5	<10	7.31	3373	0.05	<5	13.8	25	0.18	<10		69
P7998	194	0.3	6	2	<0.2	4	1588	<2	10	<0.05	<1	<1	<0.5	2.46	223	0.4	1888	99	16.27	0.6	14	7.83	3484	0.06	<5	15.4	59	0.23	<10		79
U7001	173	0.3	9	2	<0.2	3	1259	<2	8	<0.05	<1	<1	<0.5	2.88	244	0.8	1630	120	14.77	0.5	19	9.57	2991	0.06	<5	15.7	60	0.34	20		100
U7002	256	0.2	6	2	<0.2	3	1875	<2	9	<0.05	<1	<1	<0.5	1.83	253	0.3	1465	154	21.45	0.5	14	6.98	4573	0.04	<5	15.8	25	0.2	<10		99
U7003	154	<0.1	3	1	<0.2	3	1097	<2	7	<0.05	<1	<1	<0.5	0.82	140	0.9	1530	65	10.86	0.6	<10	11.14	2193	0.05	<5	17.3	25	0.14	<10		50
U7004	184	0.2	7	2	<0.2	4	1335	<2	13	<0.05	<1	<1	<0.5	1.87	209	0.8	3380	109	15.01	0.6	14	8.48	2758	0.06	<5	14.9	35	0.35	20		89
U7005	134	0.3	5	1	<0.2	2	911	<2	8	<0.05	<1	<1	<0.5	1.29	160	0.8	1528	65	10.99	0.6	14	10.8	2188	0.06	<5	16.7	35	0.19	15		45
U7006	141	0.2	6	1	<0.2	3	1124	18	11	<0.05	<1	<1	<0.5	2.06	234	1.2	1968	99	13.51	0.5	28	9.52	3191	0.06	<5	15.8	169	0.26	25		60
U7007	132	0.2	10	1	<0.2	3	837	<2	11	<0.05	<1	<1	<0.5	3.69	269	2.5	1791	115	12.96	0.6	23	8.84	2176	0.06	<5	10.7	65	0.38	45		70
U7008	118	0.9	12	2	<0.2	4	757	7	25	<0.05	<1	<1	<0.5	5.17	647	4.6	1682	114	10.9	0.8	23	5.18	2035	0.06	<5	15.2	144	0.56	55		80
U7009	96.6	1.7	15	2	<0.2	2	488	7	59	<0.05	<1	<1	<0.5	7.08	1326	3	1296	189	10.28	1	18	2.19	2185	0.04	45	17.3	154	0.71	114		65
U7031	191	0.2	5	2	<0.2	2	1245	8	8	<0.05	<1	<1	<0.5	1.68	210	0.3	1044	90	15.4	0.6	23	7.58	3442	0.06	<5	18.7	20	0.16	<10		80
U7032	179	0.3	12	2	<0.2	4	1311	21	15	<0.05	<1	<1	<0.5	3.44	278	1.6	2510	109	15.93	0.7	23	7.91	3150	0.05	<5	15.3	109	0.37	35		139
U7033	231	0.2	6	2	<0.2	3	1847	<2	10	<0.05	<1	<1	<0.5	2.01	189	0.2	1261	110	16.79	0.6	23	6.26	3375	0.03	<5	17.9	15	0.16	<10		80
U7034	238	0.1	8	2	<0.2	3	1623	10	13	<0.05	<1	<1	<0.5	3.35	329	0.2	2166	139	19.89	0.5	28	3.86	4004	0.04	<5	13.3	<10	0.26	<10		100
U7035	205	0.4	11	2	<0.2	3	1455	9	27	<0.05	<1	<1	<0.5	4.01	253	0.4	3191	119	18.72	0.9	28	5	3583	0.04	15	17.9	45	0.38	35		119
U7036	281	0.3	6	2	<0.2	3	1973	15	13	<0.05	<1	<1	<0.5	2.6	193	0.2	2646	139	22.3	0.8	28	3.9	4217	0.03	15	10.2	20	0.22	<10		89
U7037	220	0.4	8	2	<0.2	2	1588	3	19	<0.05	<1	<1	<0.5	3.8	293	0.3	2140	154	19.76	0.8	23	4.51	3818	0.03	<5	19.4	30	0.28	15		114
U7038	218	0.2	6	2	<0.2	3	1652	5	14	<0.05	<1	<1	<0.5	3.18	354	0.2	997	150	18.39	0.8	23	3.86	3679	0.04	<5	18.6	20	0.17	<10		90
U7041	177	<0.1	6	1	<0.2	<2	1342	<2	16	<0.05	<1	<1	<0.5	2.24	220	0.3	3002	115	16.36	0.6	14	7.01	3052	0.04	<5	19.7	25	0.25	15		110
U7042	219	0.2	6	2	<0.2	3	1636	3	18	<0.05	<1	<1	<0.5	2.42	269	0.3	2695	115	17.48	0.8	23	5.01	3194	0.04	<5	11.8	25	0.23	<10		80
U7043	215	0.1	7	1	<0.2	4	1596	3	17	<0.05	<1	<1	<0.5	2.9	260	0.3	2807	120	17.86	0.6	42	5.73	3277	0.04	<5	17.2	<10	0.25	<10		90
U7044	274	0.1	9	2	<0.2	3	2047	21	18	<0.05	<1	<1	<0.5	3.03	229	0.3	2306	159	23.93	0.6	23	2.89	4243	0.04	20	16.7	25	0.25	15		105
U7045	184	0.3	7	2	<0.2	2	1428	4	16	<0.05	<1	<1	<0.5	2.62	304	0.3	1466	90	14.76	0.6	32	8.11	2996	0.04	<5	17.8	25	0.26	15		60
U7046	246	0.1	8	2	<0.2	3	1725	6	14	<0.05	<1	<1	<0.5	2.49	315	0.3	2298	145	23.94	0.6	28	4.43	4491	0.04	15	13.8	25	0.31	20		115

For personal use only

Appendix Five: Soil F

SAMPLE	Co	Cs	Ga	Ge	In	Mo	Ni	Pb	Rb	Re	Sb	Te	Tl	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	S	Sc	Si	Sr	Ti	V	W	Zn
DESCRIPTION	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg
DETECTION	0.5	0.1	1	1	0.2	2	10	2	2	0.05	1	1	0.5	0.01	10	0.1	20	10	0.01	0.1	10	0.01	10	0.01	5	0.1	10	0.01	10	50	10
U7047	108	<0.1	7	2	<0.2	3	828	10	9	<0.05	<1	<1	<0.5	1.87	204	1	1441	55	9	0.5	37	12.52	3061	0.05	<5	17	130	0.22	15		45
U7048	215	<0.1	3	1	<0.2	3	1483	4	7	<0.05	<1	<1	<0.5	0.93	140	0.3	584	90	15.2	0.5	33	9.58	3357	0.04	<5	15.9	<10	0.1	<10		85
U7049	131	<0.1	7	2	<0.2	<2	1064	6	13	<0.05	<1	<1	<0.5	2.35	160	0.6	1753	100	14.64	0.5	46	7.71	2597	0.04	<5	17.9	45	0.26	25		95
U7051	154	8.6	6	2	<0.2	<2	1213	9	51	<0.05	<1	<1	0.6	1.07	159	0.5	1486	80	13.36	0.4	83	9.56	2987	0.05	<5	18.3	30	0.16	<10		65
U7052	155	2.2	7	3	<0.2	<2	1281	25	13	<0.05	<1	<1	<0.5	2.02	164	0.5	2046	94	15.62	0.6	51	8.39	3198	0.04	<5	17.1	35	0.23	15		74
U7074	28.5	2.8	21	3	<0.2	<2	132	21	91	0.06	<1	<1	0.7	9.09	432	2.4	179	378	8.15	1.5	60	0.9	1322	0.03	40	17.9	179	0.96	149		50
U7075	21.8	2.2	20	3	<0.2	<2	121	22	88	<0.05	<1	<1	0.6	8.83	440	3	195	400	8.71	2	60	0.91	1119	0.03	45	19.4	250	1.13	175		65
U7076	45.4	1.5	16	3	<0.2	<2	142	37	57	<0.05	<1	<1	<0.5	6.95	375	3.3	170	445	10.79	1.5	46	1.5	2103	0.04	75	19.4	200	0.94	215		70
U7077	25.7	2.1	21	3	<0.2	9	162	15	89	<0.05	<1	<1	0.6	9.97	428	2.7	209	513	9.49	1.2	23	1.08	1091	0.03	45	18.4	184	0.94	189		85
U7078	38.8	1.2	21	3	<0.2	10	126	16	95	<0.05	<1	<1	0.6	8.04	544	4	150	644	8.65	1.9	46	0.91	1578	0.03	10	17.9	340	1.51	210		65
U7081	34.8	0.8	23	3	<0.2	<2	122	23	51	<0.05	<1	<1	<0.5	8.46	574	3	70	714	10.6	1.2	56	1.05	1327	0.03	30	17.2	220	1.18	235		45
U7082	97.8	0.9	20	3	<0.2	<2	139	45	60	<0.05	<1	<1	0.6	6.98	574	3.3	105	958	16.18	1.3	37	0.75	3523	0.04	35	14.3	269	1.4	519		65
U7083	33.9	1.6	24	3	<0.2	<2	123	29	136	<0.05	<1	<1	0.7	9.38	739	1.8	135	499	7.93	3.4	46	0.5	1477	0.04	10	18.7	230	1.23	200		35
U7094	54.5	3	10	3	<0.2	10	273	21	51	<0.05	<1	<1	0.6	5.95	524	4.2	679	333	9.64	0.6	<10	2.12	1532	0.03	55	18.7	309	0.73	165		60
U7095	46	2.2	10	3	<0.2	3	193	22	62	<0.05	<1	<1	0.5	7.02	538	5.2	637	328	8.14	1	22	2.2	1370	0.03	50	4.1	354	0.77	149		35
U7096	69.6	1.8	10	3	<0.2	3	292	20	48	<0.05	<1	1	<0.5	5.34	487	5	909	313	8.95	0.8	22	2.57	1797	0.04	50	7.7	367	0.74	164		94
U7097	124	1.9	10	2	<0.2	3	582	23	56	<0.05	<1	1	<0.5	6.29	836	1.9	627	220	10.81	0.9	35	3.54	3124	0.03	20	17.8	224	0.52	75		100
U7098	89.5	2	12	2	<0.2	4	397	29	71	<0.05	<1	1	0.5	7.03	809	2.2	526	242	9.17	1.2	22	2.99	2376	0.03	20	18.4	213	0.58	94		109
U7101	52.6	2.8	21	4	<0.2	3	128	35	189	<0.05	<1	<1	0.9	11.85	897	3.4	302	242	8.35	4	48	1.58	1903	0.04	69	>30.0	263	1.36	159		64
U7102	45.9	2.9	22	4	<0.2	3	133	33	168	<0.05	<1	<1	0.7	12.01	665	0.2	228	257	8.51	3.1	44	1.48	1495	0.04	70	27.4	169	1.13	154		74
U7103	25.9	2.4	18	3	<0.2	3	101	26	160	<0.05	<1	<1	0.7	10.06	621	1.1	189	145	6.33	2.9	48	0.79	954	0.02	50	23	104	0.89	109		35
U7104	31.4	2.3	18	3	<0.2	3	105	28	201	<0.05	<1	3	0.8	9.67	759	1	213	117	5.43	3.7	17	0.6	1131	0.01	25	17	104	1.01	99		45
U7105	25.1	2.8	20	2	<0.2	2	82	34	218	<0.05	<1	<1	1	10.41	857	0.8	160	122	4.78	4.4	39	0.5	872	<0.01	40	22.9	130	0.86	95		45
U7106	20.8	3	22	2	<0.2	3	83	33	255	<0.05	<1	<1	1	10.93	1057	0.6	154	98	4.43	5.6	35	0.43	883	0.02	30	25.4	169	1	94		50
U7107	20.2	3	22	2	<0.2	3	82	34	277	<0.05	<1	<1	1.1	10.18	1188	0.7	235	94	4.4	5.9	22	0.46	978	0.03	10	25.3	240	0.93	105		60
U7108	14.6	3.2	23	2	<0.2	3	77	36	311	<0.05	<1	<1	1.1	10.61	1106	0.5	198	56	3.61	6.8	35	0.3	848	0.02	<5	28.5	169	0.81	79		30
U7138	161	1.1	13	3	<0.2	4	694	12	20	<0.05	<1	1	<0.5	7.73	1781	0.3	1025	131	15.2	0.4	18	5.51	3080	0.03	<5	4.6	25	0.23	35		204
U7141	222	1.1	11	3	<0.2	3	1131	13	21	<0.05	<1	<1	<0.5	6.21	457	0.5	1168	140	17.7	0.4	13	5.04	3772	0.03	20	14.8	40	0.25	40		134
U7142	137	0.8	9	2	<0.2	2	553	16	18	<0.05	<1	<1	<0.5	5.06	405	0.9	954	127	14.97	0.4	<10	7.97	3452	0.01	10	16.3	125	0.25	40		115
U7143	124	0.4	5	2	<0.2	4	687	7	12	<0.05	<1	5	<0.5	2.63	215	4.3	859	85	10.12	0.2	<10	7.58	2183	0.03	<5	11.7	45	0.12	<10		60
U7144	84.6	0.5	7	2	<0.2	<2	356	11	15	<0.05	<1	<1	<0.5	4.81	204	0.3	367	89	9.47	0.5	26	11.76	2294	0.01	<5	15.7	70	0.14	20		40
U7145	82.2	0.3	4	1	<0.2	<2	406	8	11	<0.05	<1	<1	<0.5	1.74	205	6	350	61	5.78	0.2	<10	11.89	1494	0.02	<5	12.1	80	0.16	<10		30
U7146	62.5	1.1	15	2	<0.2	3	275	15	87	<0.05	<1	1	<0.5	6.99	1530	2.7	543	141	8.79	2.2	31	2.17	1924	0.01	10	15	494	0.5	90		60
U7147	34.9	1.9	18	2	<0.2	2	114	19	129	<0.05	<1	1	<0.5	8.74	1519	2.3	179	145	7.11	3.1	22	1.03	1409	0.02	<5	21.2	543	0.64	115		55
U7161	161	0.8	6	2	<0.2	2	1053	20	20	<0.05	<1	5	<0.5	2.45	308	0.6	1163	112	13.74	0.4	13	6.86	3683	0.02	<5	18.3	40	0.26	<10		114
U7162	173	0.8	5	2	<0.2	2	1082	24	16	<0.05	<1	<1	<0.5	2.43	364	0.5	573	103	14.27	0.3	13	6.87	4173	0.02	<5	21.4	50	0.18	<10		115
U7163	119	0.5	3	2	<0.2	2	785	11	8	<0.05	<1	<1	<0.5	1.59	298	1.2	501	70	8.44	0.2	<10	13.16	2046	0.04	<5	16.8	35	0.14	<10		74
U7164	218	6.5	4	2	<0.2	3	1321	11	36	<0.05	<1	2	<0.5	1.86	189	0.3	1122	108	15.69	0.2	<10	9.26	3729	0.03	<5	4.1	15	0.15	<10		85
U7165	104	2.8	9	2	<0.2	5	672	20	44	<0.05	<1	6	<0.5	4.64	647	1.7	776	150	9.81	0.9	<10	6.15	2393	0.02	<5	17.4	174	0.36	40		70
U7166	84.3	2	9	2	<0.2	2	504	18	46	<0.05	<1	<1	<0.5	4.34	569	3.7	1128	122	8.1	1.2	31	6.65	2016	0.02	<5	15.4	319	0.38	60		65
U7167	97.9	1.5	8	2	<0.2	3	582	17	36	<0.05	<1	<1	<0.5	3.16	556	5.2	918	103	7.6	0.8	35	8.19	2024	0.02	<5	15.2	233	0.27	45		60
U7168	95.3	1.2	7	2	<0.2	3	617	15	30	<0.05	<1	2	<0.5	2.81	373	3.7	1252	89	8.43	0.8	13	8.99	2053	0.04	<5	12.5	249	0.3	40		50
U7177	56	1.5	13	2	<0.2	3	193	17	87	<0.05	<1	4	<0.5	6.27	664	5.4	334	417	8.39	1.8	18	2.4	1751	0.03	<5	7.2	449	0.66	200		35
U7178	49.4	1.5	14	2	<0.2	3	164	18	90	<0.05	<1	5	<0.5	7.71	810	4.4	293	280	7.44	1.8	<10	1.71	1635	0.03	<5	13.1	417	0.66	144		75
U7181	36.9	1.4	13	2	<0.2	4	168	16	68	<0.05	<1	<1	<0.5	7.99	1081	4.1	254	183	5.97	1.4	31	1.72	1111	0.04	45	17.7	349	0.45	139		55
U7182	32.1	1.5	11	2	<0.2	4	184	12	59	<0.05	<1	<1	<0.5	10.31	1548	3.6	190	169	5.79	0.9	<10	1.82	854	0.03	35	17.9	220	0.39	100		90
U7183	44.7	1.6	13	2	<0.2	3	180	18	90	<0.05	<1	<1	<0.5	7.6	6998	3.8	358	150	5.98	1.7	<10	2.61	1287	0.02	45	21.6	308	0.61	99		45
U7184	132	0.7	7	2	<0.2	3	727	13	24	<0.05	<1	<1	<0.5	4.21	1747	2.7	594	117	11.36	0.5	13	7.64	3084	0.03	<5	18.3	205	0.27	55		75
U7185	164	1.1	7	2	<0.2	3	920	19	36	<0.05	<1	<1	<0.5	3.5	1162	1.1	648	150	12.28	0.6	22	4.91	3440	0.04	15	19.4	95	0.28	45		110
U7194	53.8	1.2	12	2	<0.2	3	194	23	65	<0.05	<1	3	<0.5	5.76	734	6	310	390	8.13	1.6	22	2.6	1643	0.04	15	5.7	634	0.66	205		50
U7195	53.4	1.9	13	3	<0.2	3	210	17	75	<0.05	<1	4	<0.5	5.13	768	5.2	339	267	7.45	1.7	18	2.99	1532	0.03	15	10.3	449	0.69	135		40
U7196	127	0.8	4	2	<0.2	3	714	7	22	<0.05	<1	<1	<0.5	1.94	1037	<0.1	1416	117	10.69	0.6	26	7.87	2617	0.04	<5	16.3	130	0.28	65		75
U7197	92.9	0.6	4	2	<0.2	3	578	11	17	<0.05	<1	<1	<0.5	2.54	1306	2.8	1048	107	8.32	0.4	31	5.82	1728	0.06	<5	11.1	338	0.23	55		74
U7198	124	0.7	7	2	<0.2	3	759	20	27	<0.05	<1	<1	<0.5	2.31	398	0.2	2749	183	12.41	0.6	22	5.16	2241	0.04	10	13.9	289	0.52	105		1335
U7201	164	0.9	7	2	<0.2	3	869	27	24	<0.05	<1	<1	<0.5	3.27	2131	5	2291	201	15.85	0.7	<10	4.62	3157	0.06	10	16.7	199	0.51	90		85
U7202	78.4	0.4	3	1	<0.2	2	521	15	11	<0.05	<1	<1	<0.5	1.26	675	7.8	531	84	6.75	0.3	<10	10.53	1316	0.03	<5	14.8	174	0.17	25		40

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