# 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 and 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.**

- **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

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%.

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.

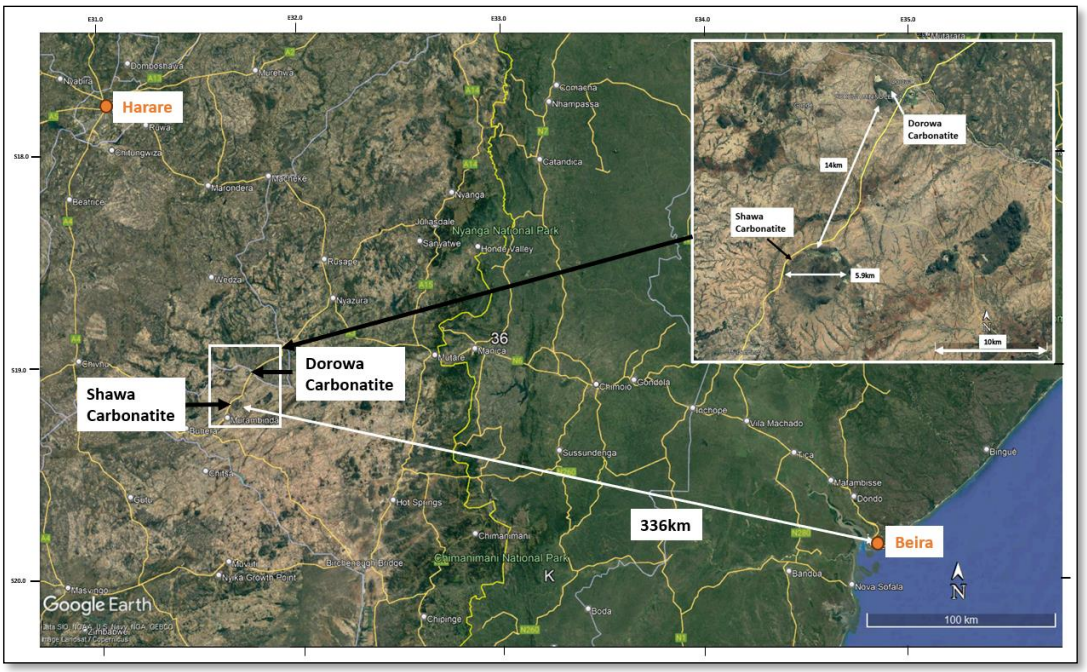



***Figure 1:*** *Shawa Carbonatite in relation to Harare and the Mozambican Beira Port shown on Google Earth image, yellow roads national tar roads. Insert of Shawa and adjacent Dorowa carbonatites.*

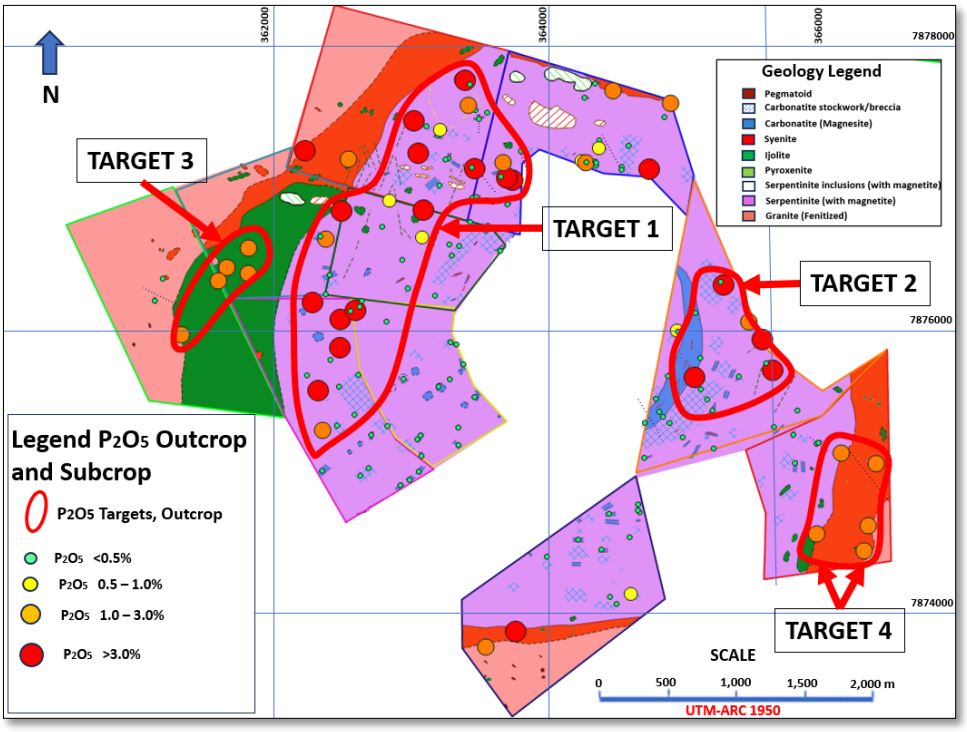



***Figure 2:*** *Outcrop / subcrop $P_2O_5$ assay results, as well as the hard-rock $P_2O_5$ targets generated within the 10 Wickbury Mining Claims.*

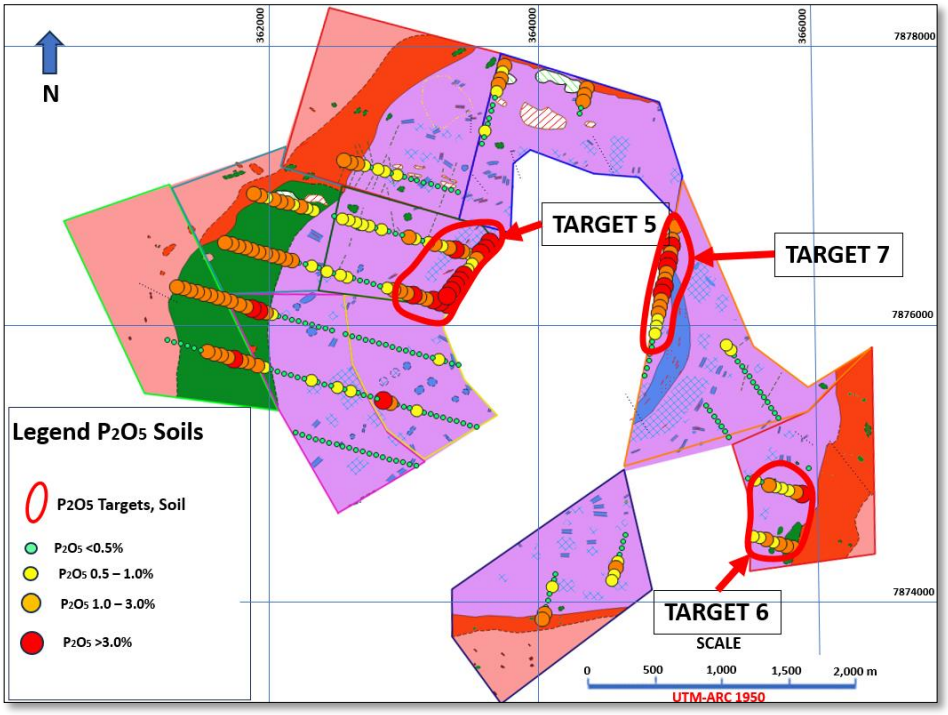
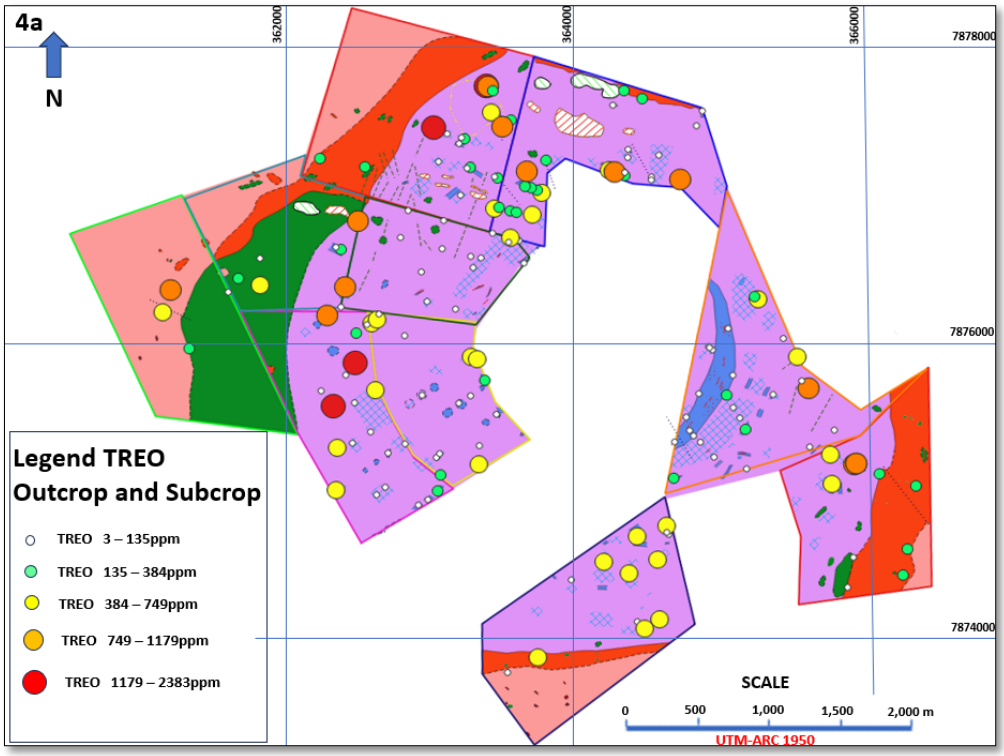



***Figure 3:*** *Soil $P_2O_5$ assay results, as well as the hard-rock $P_2O_5$ targets generated within the 10 Wickbury Mining Claims.*



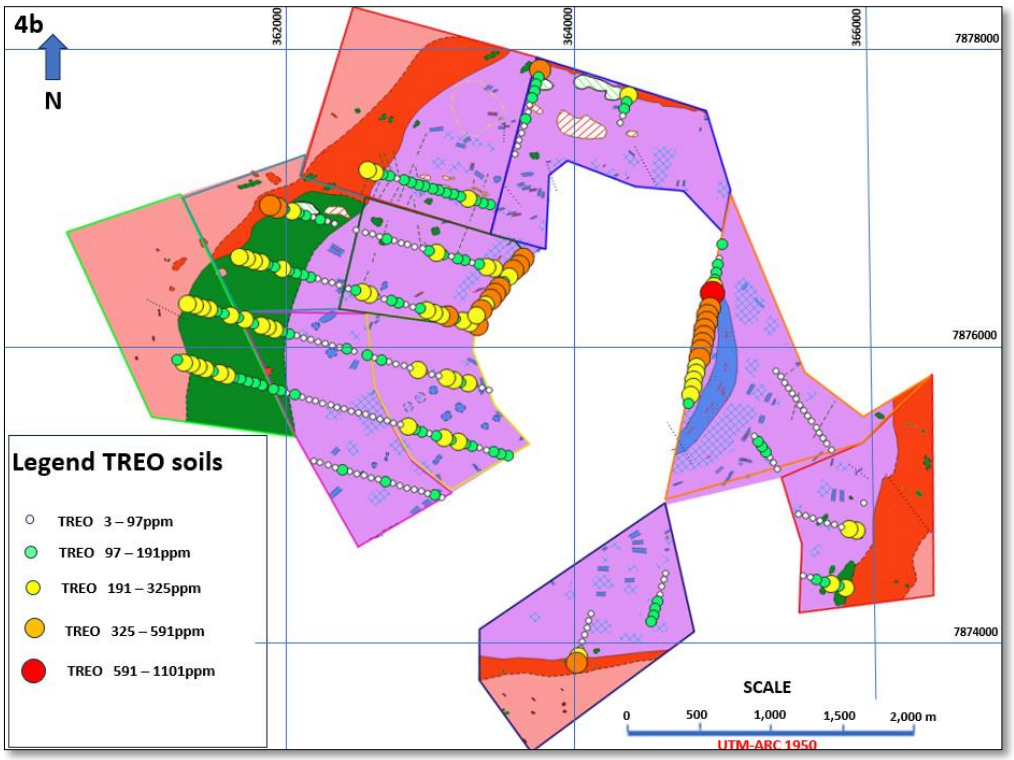
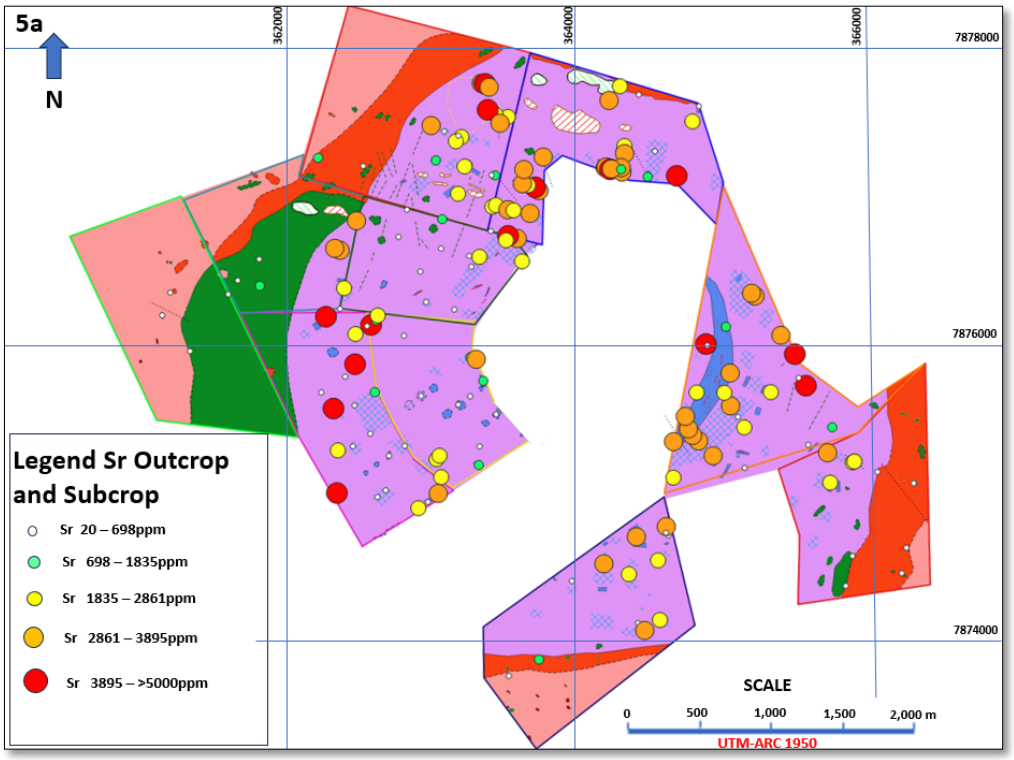



***Figure 4:*** *a) Total rare earth oxide (TREO) assay results from outcrop / subcrop samples; b) TREO assay results from soil samples in the Wickbury claims.*



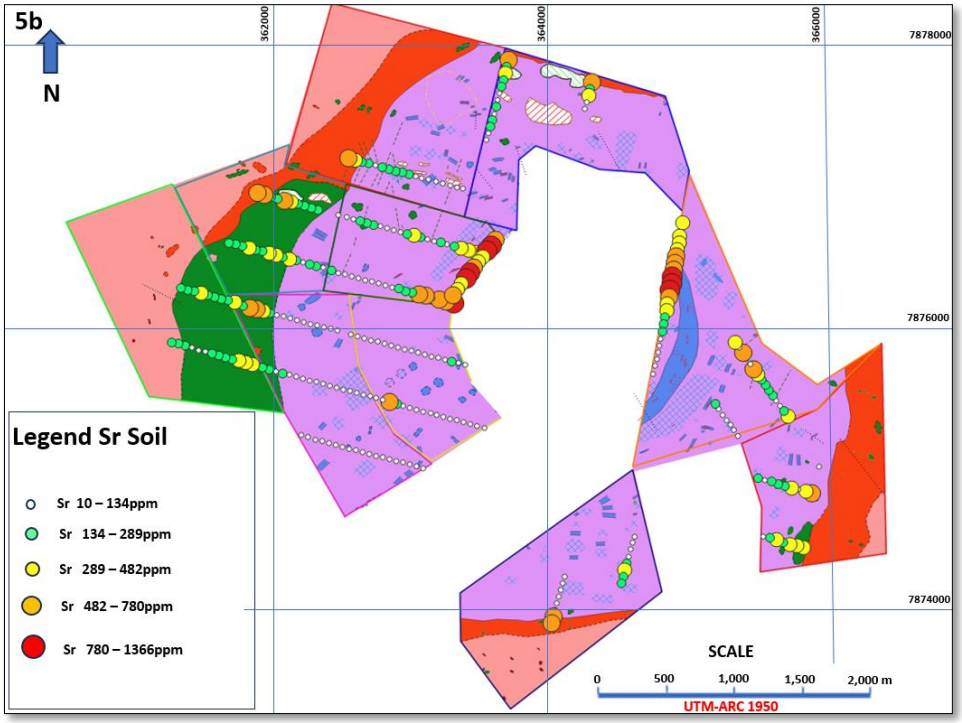



***Figure 5:*** *a) Strontium (Sr) assay results from outcrop and subcrop samples; b) Strontium (Sr) assay results from soil samples in the Wickbury claims.*

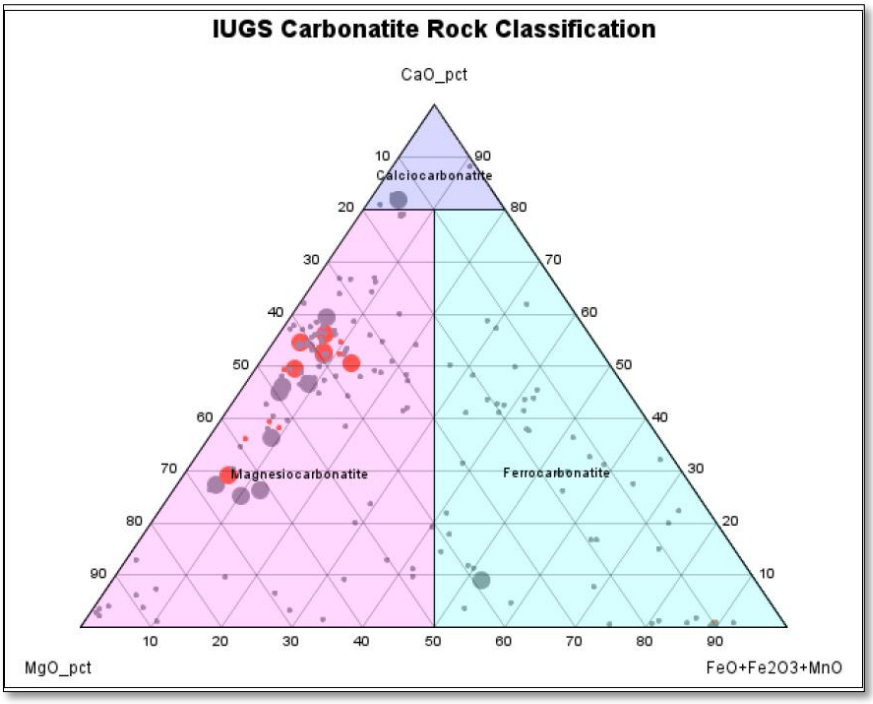



***Figure 6:*** *Standard carbonatite plot with all data shown in orange as the >90% Mn (very limited in terms of occurrence and all within the same population) and the size of the point is >90% Nd (Nd >113 ppm).*

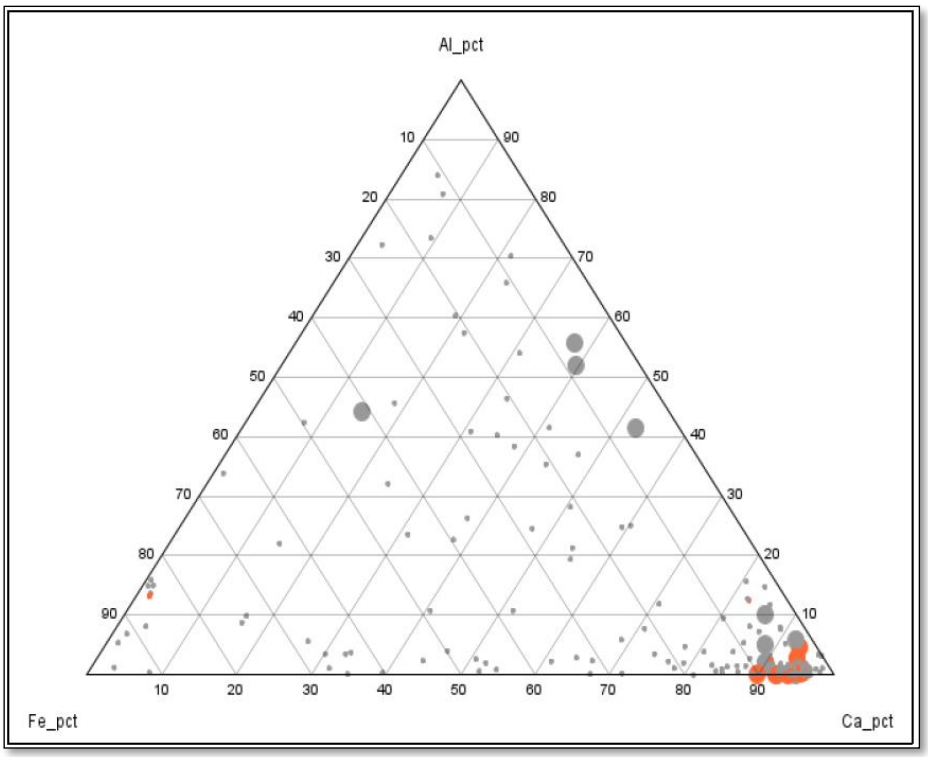



***Figure 7:*** *Plot showing clear control of REE (using Nd as large circle) with Ca enriched lithologies as well as importantly Mn enrichment (orange coloured points).*

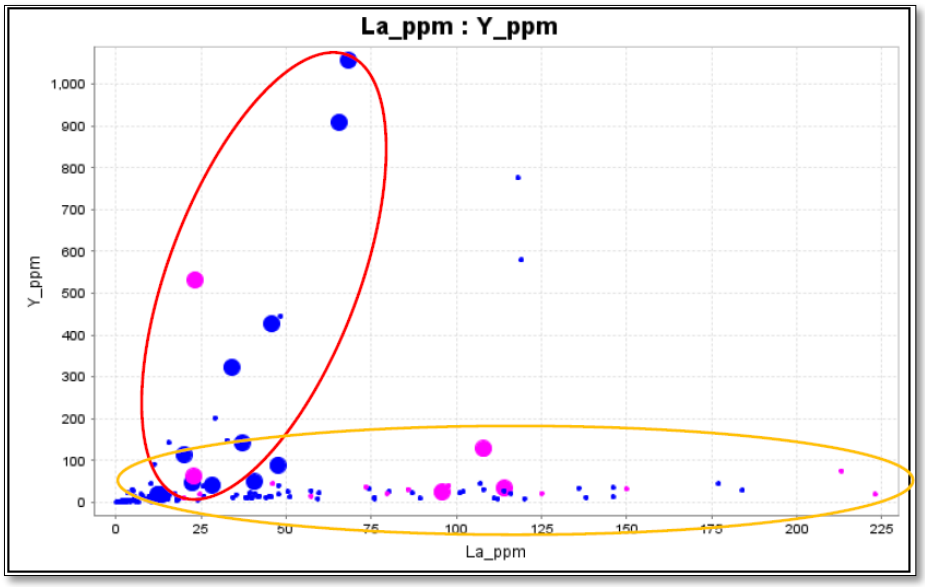



***Figure 8:*** *In this LREE vs. HREE (La vs. Y) plot colour is Th and size is Dy; showing two mineralogical controls. These are regarded to indicate the presence of monazite (indicated in orange) and xenotime (indicated in red).*

## 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 |

| 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 |

| 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)**

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

| SAMPLE | TREO | MREO | NdPr oxides | TbDy oxides | P2O5 | Nb2O5 | Ba | Fe | Mg | Sr |
|---|---|---|---|---|---|---|---|---|---|---|
| DESCRIPTION | ppm | ppm | ppm | ppm | % | mg/kg | mg/kg | % | % | 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 |

| 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 |

| 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 |

| 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 |

| SAMPLE | TREO | MREO | NdPr oxides | TbDy oxides | P2O5 | Nb2O5 | Ba | Fe | Mg | Sr |
|---|---|---|---|---|---|---|---|---|---|---|
| DESCRIPTION | ppm | ppm | ppm | ppm | % | mg/kg | mg/kg | % | % | 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

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.

**For more Information please contact:**

**MRG Metals**
Andrew Van Der Zwan
Chairman
M: +61 (0) 400 982 987
E: andrew@mrgmetals.com.au

**Investor Relations**
Ben Creagh
NWR Communications
M: +61 (0) 417 464 233
E: benc@nwrcommunications.com.au

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.*<br><br>*Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br><br>*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***<br>• *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.*<br>• *Rock samples were pulverized at Performance Laboratory in Zimbabwe, an accredited preparatory laboratory, soil samples sieved to -80#.*<br>• *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).*<br>• *Results from the pXRF reported were used to define which samples were submitted for full analytical work at an accredited laboratory.*<br>• *163 Of the outcrop and subcrop samples (from shallow pitting), and 292 of the grid soil samples were sent to SGS* |

| 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.*<br><br>*Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br><br>*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* |

| 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.*<br><br>*Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br><br>*The total length and percentage of the relevant intersections logged.* | • *All outcrop, subcrop and soil samples are geologically logged.*<br>• *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.*<br>• *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.*<br>• *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.*<br><br>*If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br><br>*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br><br>*Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br><br>*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.*<br>• *Soil samples are sun dried and sieved at -80# for analyses.*<br>• *Handheld pXRF was then used for analyses on sieved soil and pulverized outcrop samples.*<br>• *Reference samples (AMIS sourced standards and blanks, as well as duplicates for analyses) were added to the sample stream.*<br>• *Samples were analysed at the accredited SGS analytical laboratory in Johannesburg, South Africa.* |

| Criteria | Explanation | Comment |
|---|---|---|
| | *including for instance results for field duplicate/second-half sampling.*<br><br>*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.*<br><br>*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.*<br><br>*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.*<br>• *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.*<br>• *For the analytical program, an ICP/MS method was used to generate multi element analyses.*<br>• *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.* |

| Criteria | Explanation | Comment |
|---|---|---|
| *Verification of sampling and assaying* | *The verification of significant intersections by either independent or alternative company personnel.*<br><br>*The use of twinned holes.*<br><br>*Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br><br>*Discuss any adjustment to assay data.* | • *The assay data was checked by a Carbonatite expert, Pete Siegfried.*<br>• *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.*<br><br>*Specification of the grid system used.*<br><br>*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.*<br><br>*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.* |

| Criteria | Explanation | Comment |
|---|---|---|
| | *continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br><br>*Whether sample compositing has been applied.* | • *Outcrop and subcrob sampling was done where outcrop was present, or subcrop was close to surface.*<br>• *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.*<br><br>*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.*<br>• *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.*<br>• *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.* |

| 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.*<br><br>*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").*<br>• *Validity of licences checked by registered Zimbabwean pegger.*<br>• *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.*<br>• *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.*<br>• *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.*<br>• *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.*<br>• *Dodd (1971) supplied resource estimation figures in 1971 for the phosphate mineralisation* |

| 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.*<br>• *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.*<br>*Mozambique*<br>• *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:*<br>- *easting and northing of the drill hole collar*<br>- *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>- *dip and azimuth of the hole*<br>- *down hole length and interception depth*<br>- *hole length.*<br>*If the exclusion of this information is justified on the basis that the* | *N/A* |

| 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.*<br><br>*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.*<br><br>*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.* |

| Criteria | Explanation | Comment |
|---|---|---|
| *Relationship between mineralisation widths and intercept lengths* | *These relationships are particularly important in the reporting of Exploration Results.*<br><br>*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br><br>*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.* |

| 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).*<br><br>*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:*<br>○ *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;*<br>○ *Trenching of the phosphate-rich outcrop and soil targets, as well as other targets;*<br>○ *Reverse Circulation (RC) drilling to follow.* |
| | | |

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 |

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 | | | |

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 |

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 |
| 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 (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 |
| 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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 |

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 | 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 |

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 | 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 |

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 | 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 |