

Appendix 4

Summary statistics of the regolith chemistry grouped by primary regolith codes

| | | Alluvium | | | | | Colluvium | | | |
|--------------------------------|------|----------|-------|--------|-------|--|-----------|-------|--------|-------|
| Element | unit | Min | Mean | Median | Max | | Min | Mean | Median | Max |
| SiO ₂ | % | 52.2 | 81.4 | 83.7 | 95.1 | | 49.7 | 80.2 | 83.1 | 96.2 |
| TiO ₂ | % | 0.17 | 0.52 | 0.41 | 4.10 | | 0.17 | 0.53 | 0.43 | 1.3 |
| Al ₂ O ₃ | % | 1.97 | 7.11 | 5.79 | 18.82 | | 1.52 | 7.3 | 6.1 | 18.3 |
| Fe ₂ O ₃ | % | 1.01 | 5.91 | 4.76 | 22.92 | | 0.76 | 6.3 | 5.5 | 15.1 |
| MnO | % | 0.005 | 0.035 | 0.020 | 0.730 | | 0.005 | 0.051 | 0.020 | 0.180 |
| MgO | % | 0.06 | 0.38 | 0.16 | 2.24 | | 0.07 | 0.52 | 0.22 | 2.83 |
| CaO | % | 0.005 | 0.11 | 0.05 | 2.77 | | 0.020 | 0.40 | 0.05 | 7.82 |
| Na ₂ O | % | 0.01 | 0.13 | 0.05 | 2.08 | | 0.03 | 0.24 | 0.09 | 2.67 |
| K ₂ O | % | 0.18 | 1.18 | 0.64 | 6.48 | | 0.31 | 1.26 | 1.03 | 4.33 |
| P ₂ O ₅ | % | 0.02 | 0.05 | 0.04 | 0.13 | | 0.02 | 0.04 | 0.04 | 0.07 |
| SO ₃ | % | 0.005 | 0.009 | 0.005 | 0.060 | | 0.005 | 0.008 | 0.005 | 0.030 |
| LOI | % | 0.58 | 3.02 | 2.74 | 8.61 | | 0.68 | 3.02 | 2.52 | 6.0 |
| Total | % | 99.3 | 99.9 | 100.0 | 100.5 | | 99.4 | 100.0 | 99.9 | 100.5 |
| | | | | | | | | | | |
| Au | ppb | 0.50 | 0.56 | 0.50 | 3.00 | | 0.50 | 0.60 | 0.50 | 2.00 |
| Pd | ppb | 0.50 | 0.52 | 0.50 | 2.00 | | 0.50 | 0.61 | 0.50 | 3.00 |
| Pt | ppb | 0.50 | 0.63 | 0.50 | 6.00 | | 0.50 | 0.93 | 0.50 | 7.00 |
| Ag | ppm | 0.025 | 0.030 | 0.025 | 0.140 | | 0.025 | 0.037 | 0.025 | 0.230 |
| As | ppm | 0.80 | 7.50 | 5.00 | 86.50 | | 0.80 | 8.38 | 4.20 | 57.30 |
| Ba | ppm | 38.7 | 211 | 144 | 823 | | 72.1 | 269 | 197 | 1038 |
| Be | ppm | 0.17 | 0.89 | 0.58 | 3.40 | | 0.17 | 0.90 | 0.72 | 3.38 |
| Bi | ppm | 0.05 | 0.26 | 0.17 | 1.17 | | 0.05 | 0.19 | 0.17 | 0.68 |
| Cd | ppm | 0.01 | 0.02 | 0.01 | 0.17 | | 0.01 | 0.02 | 0.01 | 0.17 |
| Ce | ppm | 18.16 | 44.28 | 35.73 | 123 | | 17.41 | 47.06 | 40.77 | 105 |
| Co | ppm | 1.00 | 8.37 | 4.60 | 73.90 | | 1.40 | 12.44 | 7.00 | 52.80 |
| Cr | ppm | 8.00 | 64.42 | 59.50 | 215 | | 2.50 | 68.99 | 55.00 | 236 |
| Cs | ppm | 0.50 | 3.07 | 1.70 | 19.20 | | 0.50 | 2.71 | 1.75 | 11.70 |
| Cu | ppm | 0.50 | 13.55 | 8.00 | 180 | | 2.00 | 19.33 | 11.00 | 87 |
| Dy | ppm | 1.22 | 3.06 | 2.69 | 8.97 | | 1.29 | 3.27 | 2.88 | 8.99 |
| Er | ppm | 0.69 | 1.82 | 1.57 | 6.07 | | 0.79 | 1.93 | 1.66 | 6.02 |
| Eu | ppm | 0.22 | 0.67 | 0.56 | 1.64 | | 0.26 | 0.81 | 0.70 | 2.14 |
| Ga | ppm | 2.40 | 10.05 | 8.30 | 26.10 | | 2.00 | 10.38 | 8.65 | 25.20 |
| Gd | ppm | 1.16 | 2.98 | 2.58 | 8.08 | | 1.12 | 3.27 | 2.87 | 7.72 |
| Ge | ppm | 0.34 | 1.17 | 0.92 | 2.92 | | 0.46 | 1.16 | 0.90 | 4.48 |
| Hf | ppm | 4.30 | 9.26 | 8.60 | 19.40 | | 4.80 | 9.06 | 8.40 | 20.90 |
| Ho | ppm | 0.24 | 0.62 | 0.54 | 2.01 | | 0.25 | 0.67 | 0.57 | 1.96 |
| In | ppm | 0.005 | 0.041 | 0.030 | 0.35 | | 0.01 | 0.04 | 0.03 | 0.16 |
| La | ppm | 9.51 | 21.60 | 17.67 | 58.85 | | 9.42 | 22.72 | 19.16 | 49.37 |
| Li | ppm | 3.20 | 12.96 | 7.80 | 68.00 | | 3.30 | 13.35 | 9.65 | 42.50 |
| Lu | ppm | 0.11 | 0.30 | 0.26 | 0.97 | | 0.13 | 0.31 | 0.27 | 1.05 |
| Mo | ppm | 0.05 | 0.68 | 0.60 | 4.20 | | 0.10 | 0.81 | 0.50 | 4.40 |
| Nb | ppm | 2.90 | 7.81 | 6.80 | 21.70 | | 3.00 | 7.66 | 6.60 | 30.70 |
| Nd | ppm | 7.22 | 17.79 | 14.37 | 51.47 | | 6.77 | 19.70 | 18.30 | 40.33 |
| Ni | ppm | 2.00 | 15.11 | 10.00 | 91.00 | | 2.00 | 23.03 | 12.50 | 157 |
| Pb | ppm | 3.80 | 14.50 | 9.40 | 95.70 | | 3.20 | 13.94 | 10.15 | 43.60 |
| Pr | ppm | 2.05 | 4.87 | 3.96 | 14.30 | | 1.91 | 5.29 | 4.91 | 11.12 |
| Rb | ppm | 16.20 | 58.70 | 36.25 | 262 | | 13.10 | 57.36 | 44.40 | 177 |
| Sb | ppm | 0.07 | 0.53 | 0.36 | 5.68 | | 0.08 | 0.57 | 0.45 | 2.49 |
| Sc | ppm | 1.00 | 6.68 | 5.00 | 35.00 | | 1.00 | 7.92 | 6.00 | 27.00 |
| Se | ppm | 0.25 | 0.61 | 0.50 | 2.20 | | 0.25 | 0.45 | 0.25 | 2.00 |
| Sm | ppm | 1.33 | 3.32 | 2.70 | 9.75 | | 1.29 | 3.64 | 3.22 | 7.62 |
| Sn | ppm | 0.50 | 2.15 | 1.40 | 10.00 | | 0.60 | 1.63 | 1.30 | 5.80 |
| Sr | ppm | 7.10 | 23.81 | 17.65 | 164 | | 5.70 | 44.07 | 20.35 | 682 |
| Ta | ppm | 0.22 | 0.68 | 0.56 | 1.71 | | 0.24 | 0.62 | 0.51 | 2.06 |
| Tb | ppm | 0.19 | 0.50 | 0.44 | 1.32 | | 0.20 | 0.53 | 0.46 | 1.38 |
| Te | ppm | 0.03 | 0.05 | 0.03 | 0.26 | | 0.03 | 0.05 | 0.03 | 0.18 |
| Th | ppm | 3.79 | 10.72 | 8.98 | 34.67 | | 3.79 | 9.06 | 8.03 | 19.18 |
| Tl | ppm | 0.07 | 0.31 | 0.18 | 1.56 | | 0.05 | 0.29 | 0.23 | 0.89 |
| Tm | ppm | 0.11 | 0.28 | 0.25 | 0.96 | | 0.12 | 0.30 | 0.26 | 0.99 |
| U | ppm | 0.87 | 2.23 | 1.90 | 8.76 | | 0.89 | 1.93 | 1.74 | 3.60 |
| V | ppm | 10.00 | 94.04 | 77.50 | 940 | | 13 | 103 | 82 | 319 |
| W | ppm | 0.40 | 1.93 | 1.25 | 38.40 | | 0.50 | 1.51 | 1.25 | 4.60 |
| Y | ppm | 6.30 | 16.93 | 14.80 | 58.30 | | 7.00 | 17.84 | 15.40 | 50.00 |
| Yb | ppm | 0.74 | 1.95 | 1.69 | 6.65 | | 0.86 | 1.99 | 1.71 | 6.77 |
| Zn | ppm | 3.00 | 22.59 | 9.00 | 133 | | 3.00 | 21.97 | 9.50 | 98 |
| Zr | ppm | 152.0 | 333 | 311 | 722 | | 182 | 332 | 302 | 802 |

| Exposed sedimentary | | | |
|---------------------|-------|--------|-------|
| Min | Mean | Median | Max |
| 52.2 | 81.4 | 83.7 | 95.1 |
| 0.17 | 0.52 | 0.41 | 4.10 |
| 1.97 | 7.11 | 5.79 | 18.82 |
| 1.01 | 5.91 | 4.76 | 22.92 |
| 0.005 | 0.035 | 0.020 | 0.730 |
| 0.06 | 0.38 | 0.16 | 2.24 |
| 0.005 | 0.11 | 0.05 | 2.77 |
| 0.01 | 0.13 | 0.05 | 2.08 |
| 0.18 | 1.18 | 0.64 | 6.48 |
| 0.02 | 0.05 | 0.04 | 0.13 |
| 0.005 | 0.009 | 0.005 | 0.060 |
| 0.58 | 3.02 | 2.74 | 8.61 |
| 99.3 | 99.9 | 100.0 | 100.5 |
| | | | |
| 0.50 | 0.56 | 0.50 | 3.00 |
| 0.50 | 0.52 | 0.50 | 2.00 |
| 0.50 | 0.63 | 0.50 | 6.00 |
| 0.025 | 0.030 | 0.025 | 0.140 |
| 0.80 | 7.50 | 5.00 | 86.50 |
| 38.7 | 211 | 144 | 823 |
| 0.17 | 0.89 | 0.58 | 3.40 |
| 0.05 | 0.26 | 0.17 | 1.17 |
| 0.01 | 0.02 | 0.01 | 0.17 |
| 18.16 | 44.28 | 35.73 | 123 |
| 1.00 | 8.37 | 4.60 | 73.90 |
| 8.00 | 64.42 | 59.50 | 215 |
| 0.50 | 3.07 | 1.70 | 19.20 |
| 0.50 | 13.55 | 8.00 | 180 |
| 1.22 | 3.06 | 2.69 | 8.97 |
| 0.69 | 1.82 | 1.57 | 6.07 |
| 0.22 | 0.67 | 0.56 | 1.64 |
| 2.40 | 10.05 | 8.30 | 26.10 |
| 1.16 | 2.98 | 2.58 | 8.08 |
| 0.34 | 1.17 | 0.92 | 2.92 |
| 4.30 | 9.26 | 8.60 | 19.40 |
| 0.24 | 0.62 | 0.54 | 2.01 |
| 0.005 | 0.041 | 0.030 | 0.35 |
| 9.51 | 21.60 | 17.67 | 58.85 |
| 3.20 | 12.96 | 7.80 | 68.00 |
| 0.11 | 0.30 | 0.26 | 0.97 |
| 0.05 | 0.68 | 0.60 | 4.20 |
| 2.90 | 7.81 | 6.80 | 21.70 |
| 7.22 | 17.79 | 14.37 | 51.47 |
| 2.00 | 15.11 | 10.00 | 91.00 |
| 3.80 | 14.50 | 9.40 | 95.70 |
| 2.05 | 4.87 | 3.96 | 14.30 |
| 16.20 | 58.70 | 36.25 | 262 |
| 0.07 | 0.53 | 0.36 | 5.68 |
| 1.00 | 6.68 | 5.00 | 35.00 |
| 0.25 | 0.61 | 0.50 | 2.20 |
| 1.33 | 3.32 | 2.70 | 9.75 |
| 0.50 | 2.15 | 1.40 | 10.00 |
| 7.10 | 23.81 | 17.65 | 164 |
| 0.22 | 0.68 | 0.56 | 1.71 |
| 0.19 | 0.50 | 0.44 | 1.32 |
| 0.03 | 0.05 | 0.03 | 0.26 |
| 3.79 | 10.72 | 8.98 | 34.67 |
| 0.07 | 0.31 | 0.18 | 1.56 |
| 0.11 | 0.28 | 0.25 | 0.96 |
| 0.87 | 2.23 | 1.90 | 8.76 |
| 10.00 | 94.04 | 77.50 | 940 |
| 0.40 | 1.93 | 1.25 | 38.40 |
| 6.30 | 16.93 | 14.80 | 58.30 |
| 0.74 | 1.95 | 1.69 | 6.65 |
| 3.00 | 22.59 | 9.00 | 133 |
| 152.0 | 333 | 311 | 722 |

| Exposed mafic | | | |
|---------------|-------|--------|-------|
| Min | Mean | Median | Max |
| 35.5 | 64.7 | 63.9 | 94.7 |
| 0.23 | 1.49 | 0.95 | 12.0 |
| 1.84 | 12.2 | 12.9 | 20.0 |
| 1.29 | 10.9 | 10.6 | 37.7 |
| 0.005 | 0.164 | 0.160 | 0.470 |
| 0.09 | 1.45 | 1.15 | 4.97 |
| 0.020 | 1.17 | 0.71 | 5.14 |
| 0.02 | 0.99 | 0.72 | 4.38 |
| 0.31 | 1.26 | 0.99 | 3.89 |
| 0.02 | 0.06 | 0.05 | 0.13 |
| 0.005 | 0.014 | 0.010 | 0.130 |
| 0.84 | 5.41 | 5.70 | 10.0 |
| 99.3 | 100.0 | 100.0 | 100.7 |
| | | | |
| 0.50 | 1.35 | 0.50 | 14.00 |
| 0.50 | 1.16 | 0.50 | 5.00 |
| 0.50 | 2.11 | 0.50 | 10.00 |
| 0.025 | 0.044 | 0.025 | 0.350 |
| 0.60 | 4.31 | 3.80 | 11.10 |
| 72.1 | 389 | 349 | 1608 |
| 0.15 | 0.99 | 0.86 | 2.24 |
| 0.04 | 0.12 | 0.10 | 0.44 |
| 0.01 | 0.05 | 0.04 | 0.26 |
| 22.60 | 56.46 | 50.02 | 185 |
| 1.20 | 36.94 | 37.00 | 77.60 |
| 7.00 | 76.36 | 68.00 | 281 |
| 0.40 | 2.55 | 1.60 | 10.00 |
| 5.00 | 65.23 | 58.00 | 430 |
| 1.78 | 4.19 | 4.11 | 6.67 |
| 1.04 | 2.47 | 2.44 | 4.08 |
| 0.42 | 1.17 | 1.17 | 1.86 |
| 2.50 | 16.81 | 17.60 | 28.50 |
| 1.72 | 4.13 | 4.04 | 6.94 |
| 0.41 | 1.56 | 1.46 | 2.92 |
| 4.20 | 8.40 | 8.10 | 16.60 |
| 0.36 | 0.86 | 0.85 | 1.38 |
| 0.01 | 0.06 | 0.06 | 0.12 |
| 10.74 | 23.74 | 21.24 | 85.95 |
| 3.60 | 20.63 | 19.50 | 57.40 |
| 0.15 | 0.39 | 0.38 | 0.67 |
| 0.10 | 0.44 | 0.30 | 1.60 |
| 3.80 | 9.46 | 8.50 | 32.20 |
| 9.56 | 22.31 | 21.64 | 61.87 |
| 4.00 | 62.30 | 45.00 | 181 |
| 4.10 | 13.41 | 12.10 | 69.70 |
| 2.61 | 5.81 | 5.53 | 17.59 |
| 8.20 | 60.54 | 46.20 | 173 |
| 0.03 | 0.29 | 0.22 | 1.61 |
| 1.00 | 20.82 | 21.00 | 43.00 |
| 0.25 | 0.37 | 0.25 | 0.90 |
| 1.84 | 4.39 | 4.23 | 9.20 |
| 0.70 | 1.69 | 1.50 | 4.00 |
| 9.10 | 66.26 | 47.90 | 388 |
| 0.28 | 0.76 | 0.68 | 2.10 |
| 0.28 | 0.69 | 0.67 | 1.13 |
| 0.03 | 0.03 | 0.03 | 0.08 |
| 3.49 | 7.71 | 6.69 | 17.39 |
| 0.07 | 0.29 | 0.25 | 0.77 |
| 0.16 | 0.38 | 0.36 | 0.63 |
| 0.70 | 1.69 | 1.60 | 4.04 |
| 19 | 247 | 173 | 3358 |
| 0.20 | 1.40 | 0.90 | 12.00 |
| 10.30 | 22.29 | 22.10 | 35.00 |
| 1.09 | 2.56 | 2.49 | 4.49 |
| 3.00 | 56.74 | 43.00 | 279 |
| 146 | 300 | 290 | 571 |