|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Plateau complex - 12RH14a | |  |  |  |  | Plateau complex - 12RHES13 | |  |  |  |  | Plateau complex - 11ES15 | |  |  |  |  |
| Phase | opx | cpx | ol | sp (core) | sp (rim) | plag | opx | cpx | ol | sp (core) | sp (rim) | plag | opx | cpx | ol | sp (core) | sp (rim) | plag |
| Wt% oxides |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SiO2 | 55.45 | 52.26 | 40.74 | 0.00 | 0.00 | 45.40 | 55.21 | 52.00 | 40.95 | 0.00 | 0.00 | 44.15 | 55.70 | 51.80 | 40.95 | 0.01 | 0.01 | 44.51 |
| TiO2 | 0.12 | 0.27 |  | 0.26 | 0.21 |  | 0.04 | 0.11 |  | 0.11 | 0.06 |  | 0.05 | 0.12 |  | 0.09 | 0.08 |  |
| Al2O3 | 2.67 | 3.39 | 0.01 | 29.81 | 30.32 | 35.61 | 3.22 | 3.92 | 0.01 | 35.72 | 37.00 | 36.25 | 2.46 | 3.71 | 0.00 | 31.94 | 33.48 | 36.11 |
| Cr2O3 | 0.66 | 1.00 |  | 36.39 | 35.44 |  | 0.71 | 1.09 |  | 31.79 | 29.90 |  | 0.58 | 1.19 |  | 34.24 | 32.04 |  |
| V2O3 |  |  |  | 0.27 | 0.26 |  |  |  |  | 0.18 | 0.18 |  |  |  |  | 0.24 | 0.29 |  |
| Fe2O3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FeO | 6.44 | 2.90 | 10.21 | 19.71 | 20.02 | 0.05 | 5.98 | 2.51 | 9.41 | 16.93 | 17.16 | 0.11 | 6.19 | 2.37 | 9.80 | 19.51 | 19.70 | 0.08 |
| MnO | 0.14 | 0.08 | 0.15 | 0.59 | 0.64 |  | 0.12 | 0.06 | 0.13 | 0.51 | 0.47 |  | 0.14 | 0.06 | 0.14 | 0.46 | 0.49 |  |
| MgO | 32.84 | 17.85 | 48.92 | 12.97 | 12.76 |  | 33.13 | 17.88 | 49.88 | 14.93 | 15.25 |  | 33.30 | 17.74 | 49.60 | 13.75 | 13.83 |  |
| CaO | 1.34 | 21.77 | 0.02 | 0.01 | 0.00 | 17.92 | 1.24 | 22.02 |  | 0.02 | 0.02 | 19.01 | 1.07 | 22.38 | 0.02 | 0.00 | 0.00 | 19.04 |
| NiO | 0.08 | 0.07 | 0.33 | 0.16 | 0.12 |  | 0.08 | 0.06 | 0.01 | 0.16 | 0.10 |  | 0.07 | 0.05 | 0.40 | 0.17 | 0.07 |  |
| Na2O | 0.02 | 0.31 |  |  |  | 1.41 | 0.01 | 0.27 | 0.40 |  |  | 0.67 | 0.02 | 0.28 | 0.00 |  |  | 0.77 |
| Total | 99.76 | 99.91 | 100.38 | 100.16 | 99.76 | 100.38 | 99.74 | 99.91 | 100.80 | 100.36 | 100.14 | 100.19 | 99.58 | 99.70 | 100.91 | 100.40 | 99.98 | 100.50 |
| Atomic units |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Si | 1.93 | 1.89 | 1.00 | 0.00 | 0.00 | 2.09 | 1.91 | 1.88 | 0.99 | 0.00 | 0.00 | 2.04 | 1.93 | 1.88 | 0.99 | 0.00 | 0.00 | 2.05 |
| AlIV | 0.07 | 0.11 | 0.00 | 1.05 | 1.07 |  | 0.09 | 0.12 | 0.00 | 1.21 | 1.25 |  | 0.07 | 0.12 |  | 1.11 | 1.16 |  |
| AlVI | 0.03 | 0.04 | 0.00 | 0.00 | 0.00 | 1.93 | 0.04 | 0.05 | 0.00 | 0.00 | 0.00 | 1.97 | 0.03 | 0.04 | 0.00 |  |  | 1.96 |
| Ti | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 |  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  | 0.00 | 0.00 |  | 0.00 | 0.00 |  |
| Cr | 0.02 | 0.03 | 0.00 | 0.86 | 0.84 |  | 0.02 | 0.03 | 0.00 | 0.72 | 0.68 |  | 0.02 | 0.03 |  | 0.80 | 0.74 |  |
| FeIII | 0.02 | 0.04 | 0.00 | 0.05 | 0.05 |  | 0.02 | 0.05 | 0.00 | 0.03 | 0.05 |  | 0.02 | 0.06 |  | 0.06 | 0.07 |  |
| FeII | 0.17 | 0.04 | 0.21 | 0.44 | 0.45 | 0.00 | 0.15 | 0.02 | 0.19 | 0.37 | 0.36 | 0.00 | 0.16 | 0.01 | 0.20 | 0.41 | 0.41 | 0.00 |
| Mn | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 |  | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 |  | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 |  |
| Ni | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |  | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |  | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |  |
| Mg | 1.70 | 0.96 | 1.78 | 0.58 | 0.57 |  | 1.71 | 0.96 | 1.80 | 0.64 | 0.65 |  | 1.72 | 0.96 | 1.80 | 0.60 | 0.60 |  |
| Ca | 0.05 | 0.85 | 0.00 | 0.00 | 0.00 | 0.88 | 0.05 | 0.85 | 0.00 | 0.00 | 0.00 | 0.94 | 0.04 | 0.87 | 0.00 | 0.00 | 0.00 | 0.94 |
| Na | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.02 |  | 0.00 | 0.00 | 0.06 |
| Total | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 | 5.00 | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 | 5.00 | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 | 5.00 |
| Activity | 0.72 | 0.73 | 0.8 | 0.41 | 0.45 | 0.88 | 0.73 | 0.74 | 0.82 | 0.45 | 0.48 | 0.94 | 0.74 | 0.77 | 0.81 | 0.44 | 0.49 | 0.93 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Plateau complex - 10ES05 | |  |  |  | Plagioclase zone - RH09\_39 | |  |  |  |  | Plagioclase zone - 11ES25 | |  |  |  |  |
| Phase | opx | cpx | ol | sp (core) | sp (rim) | opx | cpx | ol | sp (core) | sp (rim) | plag | opx | cpx | ol | sp (core) | sp (rim) | plag |
| Wt% oxides |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SiO2 | 56.42 | 53.45 | 41.36 | 0.00 | 0.00 | 55.50 | 52.01 | 40.86 | 0.00 | 0.00 | 44.41 | 54.81 | 51.78 | 41.02 | 0.12 | 0.02 | 43.43 |
| TiO2 | 0.02 | 0.05 |  | 0.05 | 0.06 | 0.04 | 0.08 |  | 0.04 | 0.02 |  | 0.06 | 0.14 |  | 0.12 | 0.12 |  |
| Al2O3 | 2.30 | 2.67 | 0.00 | 27.78 | 28.38 | 2.86 | 3.89 | 0.04 | 40.43 | 42.04 | 36.40 | 3.06 | 3.45 | 0.00 | 34.66 | 33.99 | 36.38 |
| Cr2O3 | 0.64 | 0.97 |  | 39.64 | 39.31 | 0.52 | 1.12 |  | 26.99 | 23.81 |  | 0.76 | 1.04 |  | 33.04 | 33.18 |  |
| V2O3 |  |  |  | 0.18 | 0.21 |  |  |  | 0.19 | 0.19 |  |  |  |  | 0.26 | 0.26 |  |
| Fe2O3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FeO | 5.79 | 2.49 | 8.87 | 19.01 | 18.60 | 6.44 | 2.78 | 10.55 | 16.50 | 18.25 | 0.08 | 5.94 | 2.41 | 9.26 | 16.62 | 17.87 | 0.06 |
| MnO | 0.14 | 0.09 | 0.13 | 0.19 | 0.21 | 0.14 | 0.08 | 0.15 | 0.36 | 0.35 |  | 0.14 | 0.09 | 0.14 | 0.36 | 0.43 |  |
| MgO | 33.44 | 18.22 | 49.78 | 13.33 | 13.36 | 33.52 | 17.90 | 49.46 | 16.19 | 15.38 |  | 32.59 | 17.53 | 49.55 | 15.14 | 14.38 |  |
| CaO | 1.37 | 22.57 | 0.02 | 0.01 | 0.01 | 0.78 | 22.14 | 0.02 | 0.00 |  | 19.50 | 1.53 | 23.01 | 0.02 | 0.02 | 0.01 | 19.64 |
| NiO | 0.10 | 0.06 | 0.42 | 0.09 | 0.13 | 0.08 | 0.04 |  | 0.13 | 0.20 |  | 0.09 | 0.05 |  | 0.13 | 0.13 |  |
| Na2O | 0.01 | 0.30 | 0.01 |  |  | 0.01 | 0.23 |  |  |  | 0.56 | 0.01 | 0.15 |  |  |  | 0.61 |
| Total | 100.23 | 100.87 | 100.58 | 100.29 | 100.27 | 99.89 | 100.28 | 101.08 | 100.84 | 100.24 | 100.95 | 98.99 | 99.65 | 99.98 | 100.46 | 100.39 | 100.13 |
| Atomic units |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Si | 1.94 | 1.92 | 1.00 | 0.00 | 0.00 | 1.92 | 1.88 | 0.99 | 0.00 | 0.00 | 2.03 | 1.92 | 1.88 | 1.00 | 0.00 | 0.00 | 2.01 |
| AlIV | 0.06 | 0.08 |  | 0.98 | 1.00 | 0.08 | 0.12 |  | 1.33 | 1.39 |  | 0.08 | 0.12 |  | 1.18 | 1.16 |  |
| AlVI | 0.04 | 0.03 | 0.00 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 1.97 | 0.04 | 0.03 | 0.00 | 0.00 | 0.00 | 1.98 |
| Ti | 0.00 | 0.00 |  | 0.00 | 0.00 | 0.00 | 0.00 |  | 0.00 | 0.00 |  | 0.00 | 0.00 |  | 0.00 | 0.00 |  |
| Cr | 0.02 | 0.03 |  | 0.94 | 0.93 | 0.01 | 0.03 |  | 0.60 | 0.53 |  | 0.02 | 0.03 |  | 0.75 | 0.76 |  |
| FeIII | 0.00 | 0.04 |  | 0.05 | 0.04 | 0.03 | 0.06 |  | 0.04 | 0.05 |  | 0.02 | 0.06 |  | 0.04 | 0.05 |  |
| FeII | 0.17 | 0.03 | 0.18 | 0.42 | 0.43 | 0.16 | 0.02 | 0.21 | 0.34 | 0.37 | 0.00 | 0.15 | 0.01 | 0.19 | 0.36 | 0.38 | 0.00 |
| Mn | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 |  | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 |  |
| Ni | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |  | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |  |
| Mg | 1.72 | 0.97 | 1.80 | 0.60 | 0.60 | 1.73 | 0.96 | 1.79 | 0.67 | 0.64 |  | 1.70 | 0.95 | 1.80 | 0.65 | 0.62 |  |
| Ca | 0.05 | 0.87 | 0.00 | 0.00 | 0.00 | 0.03 | 0.86 | 0.00 | 0.00 | 0.00 | 0.96 | 0.06 | 0.90 | 0.00 | 0.00 | 0.00 | 0.97 |
| Na | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.06 |
| Total | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 | 5.00 | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 | 5.03 |
| Activity |  |  |  |  |  | 0.74 | 0.740 | 0.81 | 0.49 | 0.51 | 0.95 | 0.72 | 0.79 | 0.81 | 0.46 | 0.52 | 0.94 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Plagioclase zone - RH12\_23 | |  |  |  |  | Ellis Stream complex - 11ES27 | |  |  |  | Two tarns harzburgite - 11ES19 | |  |  |  |
| Phase | opx | cpx | ol | sp (core) | sp (rim) | plag | opx | cpx | ol | sp (core) | sp (rim) | opx | cpx | ol | sp (core) | sp (rim) |
| Wt% oxides |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SiO2 | 55.20 | 51.92 | 41.10 | 0.02 | 0.03 | 44.39 | 55.71 | 52.26 | 40.68 | 0.02 | 0.00 | 56.31 | 52.52 | 41.07 | 0.00 | 0.01 |
| TiO2 | 0.12 | 0.27 |  | 0.22 | 0.15 |  | 0.03 | 0.06 |  | 0.04 | 0.04 | 0.03 | 0.06 |  | 0.08 | 0.08 |
| Al2O3 | 2.61 | 3.49 | 0.01 | 30.91 | 33.95 | 35.90 | 2.52 | 3.13 | 0.00 | 31.57 | 36.18 | 2.39 | 2.64 | 0.00 | 26.04 | 27.02 |
| Cr2O3 | 0.65 | 1.20 |  | 35.38 | 33.33 |  | 0.60 | 0.99 |  | 33.95 | 28.85 | 0.79 | 1.07 |  | 41.67 | 40.60 |
| V2O3 |  |  |  | 0.25 | 0.19 |  |  |  |  | 0.18 | 0.26 |  |  |  | 0.20 | 0.22 |
| Fe2O3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FeO | 6.05 | 2.45 | 9.21 | 19.23 | 17.56 | 0.11 | 7.09 | 3.12 | 11.06 | 21.54 | 21.74 | 5.63 | 2.24 | 9.06 | 18.68 | 18.81 |
| MnO | 0.15 | 0.10 | 0.13 | 0.46 | 0.43 |  | 0.17 | 0.11 | 0.17 | 0.53 | 0.43 | 0.14 |  | 0.13 | 0.22 | 0.27 |
| MgO | 33.31 | 18.16 | 49.78 | 13.73 | 14.75 |  | 32.93 | 18.08 | 48.30 | 12.46 | 13.23 | 32.84 | 17.64 | 49.81 | 13.36 | 13.34 |
| CaO | 1.04 | 22.29 | 0.01 | 0.01 | 0.00 | 19.30 | 1.17 | 22.29 | 0.03 | 0.00 | 0.00 | 2.18 | 23.17 | 0.03 | 0.00 | 0.00 |
| NiO | 0.09 | 0.05 | 0.40 | 0.15 | 0.23 |  | 0.08 | 0.05 | 0.34 | 0.10 | 0.12 | 0.10 |  | 0.39 | 0.10 | 0.11 |
| Na2O | 0.01 | 0.16 | 0.00 |  |  | 0.74 | 0.01 | 0.17 | 0.00 |  |  | 0.02 | 0.22 | 0.00 |  |  |
| Total | 99.23 | 100.09 | 100.65 | 100.34 | 100.62 | 100.44 | 100.31 | 100.24 | 100.58 | 100.38 | 100.85 | 100.42 | 99.56 | 100.48 | 100.36 | 100.47 |
| Atomic units |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Si | 1.92 | 1.88 | 1.00 | 0.00 | 0.00 | 2.04 | 1.93 | 1.89 | 1.00 | 0.00 | 0.00 | 1.94 | 1.91 | 1.00 | 0.00 | 0.00 |
| AlIV | 0.08 | 0.12 |  | 1.08 | 1.16 |  | 0.07 | 0.11 |  | 1.10 | 1.23 | 0.06 | 0.09 |  | 0.93 | 0.96 |
| AlVI | 0.03 | 0.03 | 0.00 | 0.00 | 0.00 | 1.95 | 0.03 | 0.02 | 0.00 | 0.00 | 0.00 | 0.04 | 0.02 | 0.00 | 0.00 | 0.00 |
| Ti | 0.00 | 0.01 |  | 0.00 | 0.00 |  | 0.00 | 0.00 |  | 0.00 | 0.00 | 0.00 | 0.00 |  | 0.00 | 0.00 |
| Cr | 0.02 | 0.03 |  | 0.83 | 0.76 |  | 0.02 | 0.03 |  | 0.80 | 0.66 | 0.02 | 0.03 |  | 0.99 | 0.96 |
| FeIII | 0.03 | 0.06 |  | 0.07 | 0.06 |  | 0.03 | 0.07 |  | 0.08 | 0.09 | 0.00 | 0.05 |  | 0.05 | 0.05 |
| FeII | 0.15 | 0.02 | 0.19 | 0.40 | 0.37 | 0.00 | 0.18 | 0.02 | 0.23 | 0.46 | 0.44 | 0.16 | 0.02 | 0.18 | 0.42 | 0.42 |
| Mn | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 |  | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 |  | 0.00 | 0.01 | 0.01 |
| Ni | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 |  | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |  | 0.01 | 0.00 | 0.00 |
| Mg | 1.73 | 0.98 | 1.80 | 0.60 | 0.64 |  | 1.70 | 0.97 | 1.76 | 0.55 | 0.57 | 1.69 | 0.96 | 1.81 | 0.60 | 0.60 |
| Ca | 0.04 | 0.86 | 0.00 | 0.00 | 0.00 | 0.95 | 0.04 | 0.86 | 0.00 | 0.00 | 0.00 | 0.08 | 0.90 | 0.00 | 0.00 | 0.00 |
| Na | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| Total | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 | 5.01 | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 |
| Activity | 0.74 | 0.76 | 0.82 | 0.42 | 0.43 | 0.93 |  |  |  |  |  | 0.71 | 0.81 | 0.82 | 0.33 | 0.34 |

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| --- | --- | --- | --- | --- | --- |
|  | Two tarns harzburgite - RH12ES14 | | |  |  |
| Phase | opx | cpx | ol | sp (core) | sp (rim) |
| Wt% oxides |  |  |  |  |  |
| SiO2 | 55.14 | 52.17 | 41.28 | 0.01 | 0.01 |
| TiO2 | 0.03 | 0.07 |  | 0.03 | 0.02 |
| Al2O3 | 4.09 | 3.81 | 0.00 | 41.94 | 45.34 |
| Cr2O3 | 0.84 | 0.92 |  | 26.89 | 23.58 |
| V2O3 |  |  |  | 0.14 | 0.16 |
| Fe2O3 |  |  |  |  |  |
| FeO | 5.76 | 2.28 | 9.18 | 14.37 | 13.41 |
| MnO | 0.14 |  | 0.13 | 0.14 | 0.10 |
| MgO | 32.16 | 17.31 | 49.47 | 17.13 | 17.78 |
| CaO | 1.83 | 23.38 | 0.03 | 0.01 | 0.01 |
| NiO | 0.10 |  | 0.41 | 0.21 | 0.21 |
| Na2O | 0.01 | 0.06 | 0.01 |  |  |
| Total | 100.10 | 100.00 | 100.53 | 100.87 | 100.62 |
| Atomic units |  |  |  |  |  |
| Si | 1.91 | 1.89 | 1.01 | 0.00 | 0.00 |
| AlIV | 0.09 | 0.11 |  | 1.37 | 1.46 |
| AlVI | 0.07 | 0.05 | 0.00 | 0.00 | 0.00 |
| Ti | 0.00 | 0.00 |  | 0.00 | 0.00 |
| Cr | 0.02 | 0.03 |  | 0.59 | 0.51 |
| FeIII | -0.01 | 0.03 |  | 0.02 | 0.01 |
| FeII | 0.17 | 0.04 | 0.19 | 0.31 | 0.29 |
| Mn | 0.00 |  | 0.00 | 0.00 | 0.00 |
| Ni | 0.00 |  | 0.01 | 0.00 | 0.00 |
| Mg | 1.66 | 0.94 | 1.80 | 0.71 | 0.72 |
| Ca | 0.07 | 0.91 | 0.00 | 0.00 | 0.00 |
| Na | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 |
| Activity | 0.68 | 0.79 | 0.81 | 0.47 | 0.51 |