|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Analytical settings and standards used for WDX analysis by EPMA | | | | |
|  | CAMECA SX100, Accelerating voltage: 15 kV, Current: 40 nA | | | | |
|  | Element | X-ray Line | analysing crystal | Standard | On Peak Time |
|  |
|  | F | Kα | PC0 | fluorite | 240 |
|  | Na | Kα | TAP | albite | 10 |
|  | Mg | Kα | TAP | spinel | 10 |
|  | Al | Kα | TAP | Y-Al-garnet | 10 |
|  | Si | Kα | TAP | REE glass | 10 |
|  | P | Kα | TAP | monazite | 10 |
|  | S | Kα | LPET | baryte | 10 |
|  | Cl | Kα | LPET | tugtupite | 10 |
|  | K | Kα | LPET | K feldspar | 10 |
|  | Ca | Kα | LPET | REE glass | 10 |
|  | Ti | Kα | LPET | rutile | 10 |
|  | Mn | Kα | LLIF | rhodonite | 10 |
|  | Fe | Kα | LLIF | magnetite | 10 |
|  | Co | Kα | LLIF | cobaltite | 10 |
|  | Ni | Kα | LLIF | pentlandite | 10 |
|  | As | La | TAP | synthetic GaAs | 60 |
|  | Sr | Lα | TAP | celestine | 90 |
|  | Y | Lα | TAP | Y-Al-garnet | 30 |
|  | Zr | Lα | TAP | metal | 10 |
|  | Nb | Lα | LPET | metal | 20 |
|  | Ba | Lα | LLIF | baryte | 20 |
|  | La | Lα | LLIF | monazite | 10 |
|  | Ce | Lα | LLIF | monazite | 20 |
|  | Pr | Lβ | LLIF | REE glass | 20 |
|  | Nd | Lα | LLIF | monazite | 10 |
|  | Sm | Lβ | LLIF | REE glass | 30 |
|  | Eu | Lβ | LLIF | REE glass | 40 |
|  | Gd | Lβ | LLIF | REE glass | 30 |
|  | Tb | Lα | LLIF | REE glass | 20 |
|  | Dy | Lβ | LLIF | REE glass | 40 |
|  | Ho | Lβ | LLIF | REE glass | 30 |
|  | Er | Lα | LLIF | REE glass | 20 |
|  | Tm | Lβ | LLIF | REE glass | 50 |
|  | Yb | Lα | LLIF | REE glass | 20 |
|  | Lu | Lα | LLIF | REE glass | 30 |
|  | Ta | Lα | LLIF | metal | 20 |
|  | W | Lβ | LLIF | metal | 30 |
|  | Pb | Mα | LPET | galena | 60 |
|  | Th | Mα | LPET | monazite | 50 |
|  | U | Mα | LPET | metal | 60 |
|  |  |  |  |  |  |
|  | counting times on each background were half the on-peak time | | | | |
|  | for analysis of burbankite | | |  |  |