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| --- | --- | --- | --- | --- | --- | --- |
| **Supplementary Table 2: Modeling parameter** | | | | | | |
|  | | |  | |  | |
|  | Mantle Wedge beneath Colville Ridge1 | | Subducting  Sediment1 | Three Kings Ridge shoshonitic lava2 | |
|  |  | |  |  | |
| Sr (ppm) | 12 | | 300 | 768 | |
| 87Sr/86Sr | 0.70260 | | 0.709 | 0.70457 | |
|  |  | |  |  | |
| Nd (ppm) | 1.2 | | 21.6 | 20.0 | |
| 143Nd/144Nd | 0.51311 | | 0.5125 | 0.51276 | |
|  |  | |  |  | |
| Pb (ppm) | 0.2 | | 10.0 | 11.0 | |
| 206Pb/204Pb | 18.45 | | 18.80 | 18.84 | |
| 207Pb/204Pb | 15.50 | | 15.64 | 15.61 | |
| 208Pb/204Pb | 38.17 | | 38.70 | 38.70 | |
|  |  | |  |  | |
| Th (ppm) | 0.01 | | 8.0 | 18.0 | |
| Zr (ppm) | 15 | | 127 | 187 | |
| 1Depleted mantle wedge endmember and subducting sediment compositions are similar to those presented in Todd et al. (2011) and 2Three Kings Ridge data are from Mortimer et al. (1998). | | | | | | |
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