Supplementary Materials

Provenance and Tectonic Implications of Sedimentary Rocks of the Paleozoic Chiron Basin, Eastern Transbaikalia, Russia, Based on Whole-Rock Geochemistry and Detrital Zircon U–Pb Age and Hf Isotopic Data

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**Table S1.** Chemical composition of the sedimentary rocks of the Chiron Basin.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample** | **Khara-Shibir Formation** | | | | | | | | |
| **Sandstone** | | | | | | | | |
| **Y−92** | **Y−92−2** | **Y−92−3** | **Y−92−5** | **Y−92−6** | **Y−92−7** | **Y−98** | **Y−98−1** | **Y−98−2** |
| Major elements (wt.%) | | | | | | | | | |
| SiO2 | 73.30 | 75.09 | 73.96 | 73.53 | 67.31 | 72.89 | 74.46 | 73.15 | 72.86 |
| TiO2 | 0.39 | 0.44 | 0.39 | 0.34 | 0.45 | 0.41 | 0.29 | 0.21 | 0.24 |
| Al2O3 | 12.71 | 11.85 | 12.35 | 12.32 | 13.71 | 12.57 | 12.09 | 13.01 | 12.81 |
| Fe2O3\* | 2.33 | 1.39 | 1.69 | 1.30 | 3.26 | 2.50 | 1.53 | 1.65 | 1.50 |
| MnO | 0.03 | 0.02 | 0.03 | 0.06 | 0.05 | 0.05 | 0.03 | 0.04 | 0.04 |
| MgO | 0.75 | 0.55 | 0.65 | 0.63 | 1.24 | 0.82 | 0.67 | 0.63 | 0.79 |
| CaO | 1.03 | 0.89 | 0.90 | 0.80 | 0.95 | 0.97 | 0.84 | 0.85 | 0.87 |
| Na2O | 4.38 | 5.60 | 5.36 | 6.15 | 6.43 | 5.01 | 6.39 | 5.73 | 6.70 |
| K2O | 3.18 | 2.94 | 3.29 | 3.39 | 3.49 | 3.04 | 2.73 | 3.27 | 2.97 |
| P2O5 | 0.11 | 0.08 | 0.10 | 0.09 | 0.13 | 0.09 | 0.05 | 0.06 | 0.05 |
| LOI | 1.19 | 0.84 | 0.87 | 1.01 | 2.70 | 1.15 | 0.62 | 0.81 | 0.88 |
| Total | 99.40 | 99.69 | 99.59 | 99.62 | 99.72 | 99.50 | 99.70 | 99.41 | 99.71 |
| CIA | 50 | 46 | 47 | 45 | 46 | 49 | 45 | 47 | 45 |
| CIW | 58 | 52 | 54 | 52 | 53 | 56 | 50 | 54 | 50 |
| WIP | 72 | 80 | 81 | 89 | 95 | 77 | 86 | 84 | 91 |
| STI | 88 | 88 | 88 | 88 | 86 | 88 | 89 | 89 | 89 |
| Rare Earth Element (ppm) | | | | | | | | | |
| La | 12.09 | 21.71 | 25.55 | 22.98 | 20.74 | 19.89 | 19.10 | 12.42 | 10.48 |
| Ce | 37.79 | 47.27 | 67.26 | 47.15 | 51.52 | 58.61 | 40.95 | 24.88 | 20.67 |
| Pr | 3.02 | 4.74 | 5.23 | 4.54 | 4.52 | 4.32 | 4.11 | 2.66 | 2.26 |
| Nd | 11.18 | 16.81 | 18.78 | 16.54 | 15.97 | 15.84 | 15.02 | 9.80 | 8.27 |
| Sm | 1.94 | 2.94 | 3.15 | 2.78 | 2.74 | 2.71 | 2.49 | 1.72 | 1.50 |
| Eu | 0.43 | 0.57 | 0.60 | 0.53 | 0.53 | 0.54 | 0.54 | 0.50 | 0.43 |
| Gd | 1.59 | 2.35 | 2.56 | 2.30 | 2.28 | 2.34 | 2.10 | 1.54 | 1.31 |
| Tb | 0.26 | 0.33 | 0.37 | 0.34 | 0.35 | 0.36 | 0.29 | 0.22 | 0.18 |
| Dy | 1.64 | 1.81 | 2.04 | 1.95 | 2.09 | 2.10 | 1.61 | 1.26 | 1.03 |
| Ho | 0.32 | 0.31 | 0.35 | 0.34 | 0.38 | 0.38 | 0.28 | 0.23 | 0.19 |
| Er | 1.09 | 1.00 | 1.08 | 1.05 | 1.28 | 1.24 | 0.89 | 0.72 | 0.58 |
| Tm | 0.17 | 0.14 | 0.15 | 0.14 | 0.18 | 0.18 | 0.12 | 0.10 | 0.08 |
| Yb | 1.27 | 1.04 | 1.07 | 1.02 | 1.38 | 1.31 | 0.88 | 0.72 | 0.61 |
| Lu | 0.19 | 0.15 | 0.15 | 0.14 | 0.21 | 0.19 | 0.13 | 0.10 | 0.09 |
| [La/Yb]n | 6.48 | 14.15 | 16.19 | 15.37 | 10.19 | 10.31 | 14.81 | 11.74 | 11.71 |
| Eu/Eu\* | 0.73 | 0.64 | 0.62 | 0.62 | 0.63 | 0.64 | 0.70 | 0.91 | 0.92 |
| ΣREE | 73 | 101 | 128 | 102 | 104 | 110 | 88 | 57 | 48 |
| Trace Element (ppm) | | | | | | | | | |
| Li | 16.74 | 5.90 | 7.19 | 7.25 | 29.02 | 15.63 | 7.65 | 8.33 | 8.88 |
| Rb | 119 | 83 | 94 | 99 | 114 | 99 | 89 | 113 | 81 |
| Sr | 241 | 158 | 158 | 176 | 231 | 224 | 190 | 208 | 249 |
| Ba | 797 | 621 | 586 | 541 | 702 | 693 | 658 | 779 | 817 |
| Y | 27.00 | 24.00 | 25.00 | 26.00 | 26.00 | 26.00 | 24.00 | 25.00 | 23.00 |
| Th | 9.38 | 11.02 | 8.28 | 6.43 | 10.74 | 8.49 | 5.94 | 4.68 | 4.88 |
| U | 1.22 | 1.05 | 0.92 | 0.76 | 1.70 | 1.13 | 0.77 | 0.65 | 0.82 |
| Zr | 227 | 254 | 233 | 157 | 297 | 237 | 106 | 84 | 103 |
| Hf | 1.92 | 1.81 | 1.54 | 1.07 | 2.25 | 1.87 | 0.90 | 0.82 | 0.85 |
| Nb | 11.00 | 12.00 | 13.00 | 11.00 | 11.00 | 13.00 | 9.00 | 9.00 | 9.00 |
| Ta | 0.63 | 0.99 | 0.73 | 0.52 | 0.79 | 0.82 | 0.46 | 0.41 | 0.39 |
| Zn | 70.30 | 47.14 | 51.39 | 50.04 | 73.75 | 53.32 | 40.06 | 56.95 | 51.97 |
| Co | 7.00 | 6.00 | 6.00 | 6.00 | 11.00 | 8.00 | 6.00 | 5.00 | 6.00 |
| Ni | 19.00 | 23.00 | 17.00 | 22.00 | 18.00 | 19.00 | 22.00 | 25.00 | 18.00 |
| Sc | 4.14 | 2.62 | 2.73 | 1.56 | 4.71 | 3.77 | 2.06 | 1.86 | 2.03 |
| V | 33.00 | 26.00 | 35.00 | 28.00 | 34.00 | 34.00 | 16.00 | 19.00 | 16.00 |
| Cr | 76.00 | 97.00 | 74.00 | 88.00 | 58.00 | 64.00 | 100.00 | 84.00 | 94.00 |
| Pb | 12.98 | 8.19 | 9.57 | 8.46 | 13.48 | 11.81 | 10.94 | 13.21 | 12.88 |

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| **Sample** | **Khara-Shibir Formation** | | | | | | |
| **Sandstone** | | | | | | |
| **Y−98−3** | **Y−98−4** | **Y−98−5** | **Y−98−6** | **Y−98−7** | **Y−98−8** | **Y−98−9** |
| Major elements (wt.%) | | | | | | | |
| SiO2 | 71.77 | 73.09 | 73.57 | 73.50 | 74.70 | 73.47 | 73.17 |
| TiO2 | 0.22 | 0.29 | 0.21 | 0.22 | 0.28 | 0.21 | 0.22 |
| Al2O3 | 13.38 | 12.70 | 12.68 | 13.39 | 12.68 | 12.99 | 13.66 |
| Fe2O3\* | 1.21 | 1.74 | 1.56 | 1.60 | 1.76 | 1.39 | 1.19 |
| MnO | 0.02 | 0.04 | 0.03 | 0.03 | 0.05 | 0.02 | 0.02 |
| MgO | 0.57 | 0.73 | 0.57 | 0.59 | 0.49 | 0.56 | 0.49 |
| CaO | 0.76 | 0.87 | 0.85 | 0.93 | 0.99 | 0.87 | 0.89 |
| Na2O | 6.96 | 5.95 | 5.82 | 4.61 | 4.46 | 5.64 | 5.30 |
| K2O | 3.48 | 2.97 | 3.15 | 3.44 | 2.89 | 3.23 | 3.34 |
| P2O5 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 |
| LOI | 1.02 | 1.10 | 0.90 | 1.13 | 1.08 | 0.87 | 0.93 |
| Total | 99.45 | 99.54 | 99.40 | 99.50 | 99.44 | 99.30 | 99.26 |
| CIA | 45 | 46 | 47 | 51 | 51 | 48 | 50 |
| CIW | 51 | 53 | 53 | 59 | 58 | 54 | 57 |
| WIP | 97 | 84 | 84 | 76 | 70 | 83 | 81 |
| STI | 88 | 88 | 89 | 89 | 89 | 89 | 88 |
| Rare earth element (ppm) | | | | | | | |
| La | 9.50 | 16.09 | 13.37 | 15.89 | 10.57 | 10.12 | 11.09 |
| Ce | 17.55 | 52.23 | 29.04 | 30.02 | 41.82 | 17.98 | 23.36 |
| Pr | 2.02 | 3.67 | 2.78 | 3.28 | 2.62 | 2.28 | 2.38 |
| Nd | 7.44 | 13.00 | 10.30 | 11.86 | 9.40 | 8.32 | 8.84 |
| Sm | 1.30 | 2.22 | 1.80 | 2.06 | 1.68 | 1.47 | 1.54 |
| Eu | 0.38 | 0.49 | 0.50 | 0.53 | 0.37 | 0.43 | 0.44 |
| Gd | 1.13 | 1.82 | 1.58 | 1.86 | 1.30 | 1.25 | 1.32 |
| Tb | 0.16 | 0.28 | 0.23 | 0.26 | 0.20 | 0.18 | 0.18 |
| Dy | 0.91 | 1.58 | 1.34 | 1.46 | 1.19 | 1.02 | 1.05 |
| Ho | 0.17 | 0.29 | 0.24 | 0.26 | 0.22 | 0.19 | 0.20 |
| Er | 0.53 | 0.90 | 0.76 | 0.82 | 0.70 | 0.59 | 0.63 |
| Tm | 0.08 | 0.13 | 0.11 | 0.11 | 0.10 | 0.08 | 0.09 |
| Yb | 0.54 | 0.91 | 0.75 | 0.76 | 0.72 | 0.58 | 0.65 |
| Lu | 0.08 | 0.13 | 0.11 | 0.11 | 0.10 | 0.08 | 0.10 |
| [La/Yb]n | 11.96 | 11.97 | 12.14 | 14.16 | 9.91 | 11.86 | 11.54 |
| Eu/Eu\* | 0.94 | 0.72 | 0.88 | 0.81 | 0.74 | 0.94 | 0.92 |
| ΣREE | 42 | 94 | 63 | 69 | 71 | 45 | 52 |
| Trace element (ppm) | | | | | | | |
| Li | 7.20 | 9.34 | 6.78 | 6.87 | 6.07 | 6.77 | 5.40 |
| Rb | 103 | 100 | 111 | 120 | 107 | 118 | 122 |
| Sr | 215 | 207 | 208 | 172 | 222 | 202 | 203 |
| Ba | 811 | 697 | 711 | 753 | 626 | 721 | 775 |
| Yb | 0.54 | 0.91 | 0.75 | 0.76 | 0.72 | 0.58 | 0.65 |
| Y | 22.00 | 25.00 | 24.00 | 24.00 | 24.00 | 26.00 | 23.00 |
| Th | 4.41 | 7.81 | 4.96 | 4.84 | 5.74 | 4.71 | 4.65 |
| U | 0.59 | 0.80 | 0.65 | 0.36 | 0.66 | 0.71 | 0.69 |
| Zr | 85 | 117 | 91 | 81 | 116 | 87 | 86 |
| Hf | 0.84 | 0.99 | 0.82 | 0.81 | 0.77 | 0.80 | 0.84 |
| Nb | 7.00 | 9.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| Ta | 0.36 | 0.89 | 0.34 | 0.37 | 0.35 | 0.31 | 0.31 |
| Zn | 44.26 | 72.30 | 41.11 | 44.48 | 45.37 | 41.10 | 43.27 |
| Co | 5.00 | 6.00 | 6.00 | 6.00 | 6.00 | 5.00 | 5.00 |
| Ni | 24.00 | 24.00 | 20.00 | 19.00 | 22.00 | 23.00 | 21.00 |
| Sc | 1.64 | 2.26 | 1.76 | 1.84 | 1.62 | 1.61 | 1.65 |
| V | 17.00 | 26.00 | 23.00 | 21.00 | 20.00 | 18.00 | 25.00 |
| Cr | 78.00 | 89.00 | 89.00 | 62.00 | 80.00 | 73.00 | 64.00 |
| Pb | 11.86 | 12.30 | 12.17 | 11.90 | 10.59 | 12.15 | 12.89 |

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| **Sample** | **Shazagaitui Formation** | | | | | | | | | | | | |
| **Sandstone** | | | | **Silty sandstone** | | | | | | | | **Siltstone** |
| **Y−96−3** | **Y−97** | **Y−97−7** | **Y−97−11** | **Y−96** | **Y−96−1** | **Y−96−4** | **Y−96−5** | **Y−97−1** | **Y−97−2** | **Y−97−3** | **Y−97−4** | **Y−96−2** |
| Major Elements (wt.%) | | | | | | | | | | | | | |
| SiO2 | 66.25 | 70.21 | 71.27 | 71.03 | 68.30 | 69.39 | 66.70 | 62.56 | 63.00 | 65.45 | 60.43 | 65.35 | 59.48 |
| TiO2 | 0.54 | 0.44 | 0.47 | 0.48 | 0.54 | 0.39 | 0.53 | 0.40 | 0.59 | 0.61 | 0.47 | 0.67 | 0.40 |
| Al2O3 | 12.80 | 13.98 | 13.24 | 13.37 | 12.92 | 10.87 | 13.19 | 10.98 | 13.08 | 14.07 | 12.26 | 13.99 | 11.03 |
| Fe2O3\* | 4.58 | 3.14 | 2.82 | 3.32 | 4.37 | 3.39 | 3.57 | 4.12 | 6.51 | 5.34 | 3.04 | 4.70 | 2.29 |
| MnO | 0.10 | 0.03 | 0.04 | 0.03 | 0.06 | 0.06 | 0.11 | 0.22 | 0.11 | 0.06 | 0.19 | 0.06 | 0.21 |
| MgO | 1.51 | 1.03 | 0.97 | 0.93 | 1.18 | 1.03 | 1.28 | 1.11 | 1.37 | 1.57 | 1.01 | 1.87 | 1.08 |
| CaO | 3.57 | 0.96 | 0.95 | 1.01 | 2.78 | 4.83 | 3.16 | 8.00 | 4.28 | 2.52 | 8.54 | 2.18 | 10.85 |
| Na2O | 3.00 | 4.66 | 5.10 | 4.43 | 2.99 | 1.68 | 3.82 | 2.91 | 2.28 | 2.86 | 3.86 | 4.38 | 3.95 |
| K2O | 2.60 | 3.11 | 3.14 | 3.25 | 2.56 | 2.47 | 2.59 | 2.11 | 2.94 | 3.15 | 2.00 | 2.86 | 1.85 |
| P2O5 | 0.15 | 0.13 | 0.14 | 0.15 | 0.15 | 0.10 | 0.16 | 0.13 | 0.16 | 0.16 | 0.14 | 0.22 | 0.16 |
| LOI | 4.28 | 1.90 | 1.40 | 1.52 | 3.36 | 4.82 | 4.14 | 6.85 | 4.70 | 3.53 | 7.27 | 3.03 | 7.91 |
| Total | 99.38 | 99.59 | 99.54 | 99.52 | 99.21 | 99.03 | 99.25 | 99.39 | 99.02 | 99.32 | 99.21 | 99.31 | 99.21 |
| CIA | 47 | 52 | 50 | 51 | 50 | 43 | 47 | 34 | 47 | 53 | 34 | 50 | 28 |
| CIW | 53 | 60 | 57 | 59 | 56 | 48 | 52 | 36 | 53 | 60 | 36 | 56 | 30 |
| WIP | 63 | 75 | 79 | 74 | 60 | 52 | 69 | 68 | 61 | 64 | 77 | 75 | 83 |
| STI | 86 | 86 | 87 | 86 | 86 | 88 | 86 | 87 | 85 | 85 | 86 | 84 | 86 |
| Rare Earth Element (ppm) | | | | | | | | | | | | | |
| La | 35.31 | 29.53 | 27.31 | 36.50 | 35.83 | 25.24 | 40.95 | 30.68 | 41.60 | 42.92 | 32.10 | 50.10 | 30.36 |
| Ce | 70.26 | 62.36 | 57.12 | 74.39 | 69.87 | 49.30 | 73.01 | 62.18 | 86.07 | 88.48 | 60.07 | 101.70 | 57.22 |
| Pr | 7.47 | 6.51 | 6.59 | 7.69 | 7.36 | 5.03 | 8.35 | 6.55 | 9.07 | 9.51 | 6.83 | 10.73 | 6.13 |
| Nd | 28.64 | 24.16 | 24.81 | 28.22 | 27.74 | 18.77 | 31.92 | 25.13 | 35.87 | 37.14 | 26.28 | 41.23 | 23.24 |
| Sm | 5.01 | 3.95 | 4.23 | 4.64 | 4.84 | 3.22 | 5.66 | 4.31 | 6.48 | 6.68 | 4.58 | 7.06 | 4.04 |
| Eu | 1.08 | 0.75 | 0.80 | 0.85 | 1.04 | 0.71 | 1.24 | 0.96 | 1.24 | 1.32 | 1.11 | 1.29 | 0.89 |
| Gd | 4.36 | 3.02 | 3.48 | 3.66 | 4.27 | 2.70 | 5.08 | 3.78 | 5.65 | 6.07 | 4.20 | 5.94 | 3.60 |
| Tb | 0.60 | 0.40 | 0.46 | 0.48 | 0.60 | 0.39 | 0.70 | 0.54 | 0.82 | 0.86 | 0.62 | 0.82 | 0.49 |
| Dy | 3.23 | 2.10 | 2.43 | 2.54 | 3.38 | 2.18 | 3.98 | 3.06 | 4.79 | 5.10 | 3.78 | 4.50 | 2.74 |
| Ho | 0.58 | 0.37 | 0.42 | 0.46 | 0.62 | 0.40 | 0.73 | 0.56 | 0.88 | 0.94 | 0.73 | 0.79 | 0.50 |
| Er | 1.79 | 1.19 | 1.30 | 1.44 | 1.88 | 1.27 | 2.23 | 1.76 | 2.80 | 2.99 | 2.35 | 2.45 | 1.58 |
| Tm | 0.23 | 0.16 | 0.17 | 0.19 | 0.25 | 0.17 | 0.28 | 0.23 | 0.36 | 0.39 | 0.31 | 0.31 | 0.20 |
| Yb | 1.57 | 1.12 | 1.19 | 1.36 | 1.72 | 1.20 | 1.87 | 1.60 | 2.57 | 2.70 | 2.21 | 2.09 | 1.37 |
| Lu | 0.22 | 0.16 | 0.17 | 0.20 | 0.25 | 0.17 | 0.26 | 0.22 | 0.36 | 0.37 | 0.31 | 0.29 | 0.19 |
| [La/Yb]n | 15.24 | 17.90 | 15.60 | 18.26 | 14.10 | 14.29 | 14.89 | 13.04 | 10.99 | 10.93 | 9.87 | 16.31 | 15.09 |
| Eu/Eu\* | 0.69 | 0.64 | 0.62 | 0.61 | 0.68 | 0.72 | 0.69 | 0.71 | 0.61 | 0.62 | 0.76 | 0.59 | 0.70 |
| ΣREE | 160 | 136 | 130 | 163 | 160 | 111 | 176 | 142 | 199 | 205 | 146 | 229 | 133 |
| Trace Element (ppm) | | | | | | | | | | | | | |
| Li | 22.20 | 14.28 | 11.78 | 13.72 | 19.30 | 21.07 | 20.33 | 24.87 | 33.57 | 33.84 | 20.70 | 30.89 | 15.03 |
| Rb | 97 | 94 | 99 | 101 | 107 | 124 | 104 | 73 | 120 | 125 | 79 | 108 | 61 |
| Sr | 469 | 152 | 173 | 177 | 519 | 469 | 539 | 554 | 359 | 293 | 572 | 277 | 867 |
| Ba | 906 | 791 | 738 | 821 | 913 | 779 | 881 | 691 | 844 | 872 | 571 | 848 | 748 |
| Y | 29.00 | 24.00 | 26.00 | 28.00 | 34.00 | 29.00 | 35.00 | 26.00 | 37.00 | 38.00 | 28.00 | 33.00 | 23.00 |
| Th | 8.73 | 10.73 | 9.69 | 12.37 | 10.59 | 8.40 | 8.89 | 8.58 | 15.08 | 14.05 | 10.70 | 18.67 | 6.70 |
| U | 1.55 | 1.44 | 1.25 | 1.30 | 2.11 | 1.76 | 1.64 | 3.18 | 2.50 | 2.32 | 1.41 | 2.12 | 1.55 |
| Zr | 210 | 209 | 227 | 235 | 212 | 166 | 215 | 229 | 198 | 225 | 212 | 194 | 242 |
| Hf | 1.91 | 1.86 | 1.99 | 2.10 | 2.28 | 1.96 | 2.01 | 2.17 | 2.77 | 3.02 | 2.22 | 2.24 | 1.75 |
| Nb | 12.00 | 12.00 | 11.00 | 10.00 | 11.00 | 10.00 | 10.00 | 10.00 | 14.00 | 14.00 | 12.00 | 13.00 | 9.00 |
| Ta | 0.61 | 0.34 | 0.45 | 0.55 | 0.77 | 0.54 | 0.65 | 0.71 | 1.08 | 1.08 | 1.54 | 0.84 | 0.54 |
| Zn | 104.22 | 70.41 | 51.31 | 69.69 | 99.23 | 72.26 | 95.87 | 95.59 | 124.87 | 126.37 | 71.30 | 105.14 | 87.93 |
| Co | 11.00 | 10.00 | 9.00 | 9.00 | 9.00 | 9.00 | 10.00 | 10.00 | 13.00 | 13.00 | 9.00 | 13.00 | 8.00 |
| Ni | 23.00 | 26.00 | 23.00 | 22.00 | 27.00 | 16.00 | 26.00 | 20.00 | 25.00 | 27.00 | 24.00 | 27.00 | 17.00 |
| Sc | 6.54 | 4.73 | 4.57 | 5.65 | 6.39 | 4.71 | 5.92 | 5.20 | 10.22 | 9.94 | 8.39 | 10.12 | 4.11 |
| V | 56.00 | 58.00 | 45.00 | 53.00 | 60.00 | 32.00 | 46.00 | 47.00 | 81.00 | 87.00 | 61.00 | 84.00 | 26.00 |
| Cr | 43.00 | 67.00 | 78.00 | 66.00 | 40.00 | 33.00 | 42.00 | 45.00 | 49.00 | 45.00 | 44.00 | 52.00 | 33.00 |
| Pb | 13.72 | 10.92 | 12.73 | 14.11 | 18.29 | 16.36 | 17.16 | 13.18 | 23.46 | 22.95 | 16.98 | 24.92 | 13.26 |

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| **Sample** | **Zhipkhoshi Formation** | | | | | | | | |
| **Sandstone** | | | | | | | | |
| **Y−93** | **Y−94** | **Y−94−1** | **Y−94−5** | **Y−94−7** | **Y−94−8** | **Y−95** | **Y−95−1** | **Y−95−2** |
| Major elements (wt.%) | | | | | | | | | |
| SiO2 | 77.22 | 55.81 | 71.12 | 69.87 | 69.12 | 68.44 | 78.00 | 77.87 | 77.81 |
| TiO2 | 0.34 | 0.38 | 0.54 | 0.50 | 0.49 | 0.50 | 0.30 | 0.27 | 0.27 |
| Al2O3 | 11.29 | 10.10 | 13.03 | 13.39 | 13.29 | 11.94 | 10.53 | 11.04 | 10.55 |
| Fe2O3\* | 1.62 | 1.47 | 2.72 | 2.86 | 3.32 | 2.56 | 1.05 | 1.18 | 1.03 |
| MnO | 0.03 | 0.52 | 0.07 | 0.04 | 0.04 | 0.07 | 0.01 | 0.03 | 0.03 |
| MgO | 0.53 | 0.83 | 1.02 | 1.28 | 1.41 | 1.01 | 0.54 | 0.55 | 0.46 |
| CaO | 0.91 | 14.71 | 1.07 | 1.70 | 1.88 | 4.48 | 0.82 | 0.92 | 0.85 |
| Na2O | 4.14 | 3.73 | 5.82 | 5.08 | 5.04 | 5.15 | 6.85 | 5.82 | 7.16 |
| K2O | 2.48 | 1.73 | 1.70 | 2.72 | 2.72 | 1.51 | 0.96 | 1.05 | 0.67 |
| P2O5 | 0.06 | 0.14 | 0.16 | 0.19 | 0.17 | 0.14 | 0.07 | 0.07 | 0.08 |
| LOI | 0.98 | 10.03 | 2.23 | 1.85 | 2.03 | 3.59 | 0.60 | 0.79 | 0.78 |
| Total | 99.60 | 99.45 | 99.48 | 99.48 | 99.51 | 99.39 | 99.73 | 99.59 | 99.69 |
| CIA | 50 | 22 | 49 | 48 | 48 | 40 | 43 | 47 | 43 |
| CIW | 57 | 24 | 53 | 54 | 53 | 42 | 45 | 50 | 44 |
| WIP | 63 | 89 | 74 | 78 | 78 | 74 | 75 | 66 | 75 |
| STI | 89 | 87 | 86 | 86 | 86 | 86 | 90 | 90 | 90 |
| Rare earth element (ppm) | | | | | | | | | |
| La | 25.52 | 24.96 | 30.00 | 40.04 | 41.11 | 28.92 | 19.05 | 17.57 | 15.36 |
| Ce | 52.26 | 52.40 | 57.83 | 84.44 | 83.28 | 59.04 | 42.53 | 39.93 | 34.22 |
| Pr | 5.34 | 5.54 | 6.58 | 8.31 | 8.49 | 6.13 | 4.19 | 3.927 | 3.45 |
| Nd | 19.22 | 21.39 | 25.47 | 31.98 | 32.62 | 23.52 | 15.56 | 14.74 | 12.95 |
| Sm | 3.14 | 3.68 | 4.27 | 5.47 | 5.51 | 4.04 | 2.47 | 2.41 | 2.14 |
| Eu | 0.61 | 0.90 | 0.94 | 1.24 | 1.21 | 0.98 | 0.58 | 0.58 | 0.52 |
| Gd | 2.52 | 3.24 | 3.45 | 4.75 | 4.68 | 3.38 | 1.83 | 1.93 | 1.70 |
| Tb | 0.35 | 0.45 | 0.47 | 0.67 | 0.66 | 0.49 | 0.23 | 0.25 | 0.23 |
| Dy | 1.90 | 2.54 | 2.61 | 3.81 | 3.69 | 2.68 | 1.15 | 1.34 | 1.20 |
| Ho | 0.33 | 0.47 | 0.47 | 0.68 | 0.68 | 0.49 | 0.19 | 0.23 | 0.22 |
| Er | 1.06 | 1.46 | 1.56 | 2.09 | 2.13 | 1.54 | 0.62 | 0.72 | 0.70 |
| Tm | 0.15 | 0.19 | 0.21 | 0.28 | 0.28 | 0.20 | 0.09 | 0.10 | 0.10 |
| Yb | 1.04 | 1.30 | 1.45 | 1.93 | 1.96 | 1.40 | 0.62 | 0.69 | 0.66 |
| Lu | 0.15 | 0.19 | 0.21 | 0.28 | 0.28 | 0.20 | 0.09 | 0.10 | 0.10 |
| [La/Yb]n | 16.60 | 13.00 | 14.10 | 14.08 | 14.24 | 14.04 | 21.00 | 17.24 | 15.73 |
| Eu/Eu\* | 0.64 | 0.78 | 0.72 | 0.73 | 0.71 | 0.78 | 0.80 | 0.79 | 0.81 |
| ΣREE | 114 | 119 | 136 | 186 | 187 | 133 | 89 | 84 | 74 |
| Trace element (ppm) | | | | | | | | | |
| Li | 7.81 | 12.07 | 15.62 | 16.16 | 19.48 | 15.41 | 6.41 | 9.88 | 10.14 |
| Rb | 92 | 52 | 67 | 91 | 85 | 57 | 39 | 46 | 30 |
| Sr | 204 | 662 | 335 | 406 | 403 | 545 | 173 | 170 | 151 |
| Ba | 589 | 789 | 593 | 1362 | 1379 | 622 | 271 | 318 | 181 |
| Y | 26.00 | 20.00 | 22.00 | 34.00 | 33.00 | 23.00 | 16.00 | 17.00 | 15.00 |
| Th | 6.22 | 6.13 | 7.31 | 9.00 | 8.73 | 6.66 | 3.83 | 3.73 | 3.56 |
| U | 1.14 | 1.45 | 1.46 | 1.47 | 1.41 | 1.41 | 0.76 | 0.70 | 0.72 |
| Zr | 230 | 230 | 231 | 389 | 341 | 252 | 113 | 106 | 99 |
| Hf | 1.96 | 1.88 | 2.19 | 2.58 | 2.56 | 2.00 | 1.05 | 1.00 | 0.99 |
| Nb | 11.00 | 10.00 | 10.00 | 14.00 | 14.00 | 12.00 | 10.00 | 9.00 | 9.00 |
| Ta | 0.58 | 0.62 | 0.60 | 0.75 | 0.76 | 0.51 | 0.32 | 0.28 | 0.33 |
| Zn | 62.91 | 59.62 | 81.28 | 118.11 | 99.17 | 61.35 | 51.70 | 36.53 | 25.76 |
| Co | 6.00 | 6.00 | 8.00 | 9.00 | 10.00 | 8.00 | 5.00 | 5.00 | 5.00 |
| Ni | 18.00 | 16.00 | 28.00 | 21.00 | 22.00 | 24.00 | 21.00 | 26.00 | 25.00 |
| Sc | 2.47 | 4.73 | 5.55 | 5.70 | 6.00 | 4.83 | 1.64 | 2.02 | 1.70 |
| V | 27.00 | 42.00 | 50.00 | 50.00 | 43.00 | 40.00 | 22.00 | 19.00 | 21.00 |
| Cr | 83.00 | 44.00 | 65.00 | 57.00 | 58.00 | 59.00 | 108.00 | 89.00 | 86.00 |
| Pb | 10.01 | 12.22 | 15.35 | 14.06 | 14.87 | 12.85 | 7.65 | 9.75 | 8.51 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample** | **Zhipkhoshi Formation** | | | | | | | | |
| **Sandstone** | | | | | | **Siltstone** | | |
| **Y−95−3** | **Y−95−5** | **Y−95−6** | **Y−95−7** | **Y−95−8** | **Y−95−9** | **Y−94−2** | **Y−94−4** | **Y−94−6** |
| Major Elements (wt.%) | | | | | | | | | |
| SiO2 | 77.51 | 77.44 | 79.07 | 78.94 | 77.66 | 72.68 | 69.90 | 66.34 | 65.94 |
| TiO2 | 0.26 | 0.29 | 0.29 | 0.30 | 0.43 | 0.16 | 0.51 | 0.52 | 0.48 |
| Al2O3 | 10.36 | 10.99 | 10.26 | 10.23 | 10.85 | 13.78 | 12.22 | 12.76 | 13.11 |
| Fe2O3\* | 1.14 | 1.21 | 1.01 | 1.08 | 1.43 | 1.61 | 2.61 | 3.49 | 2.50 |
| MnO | 0.01 | 0.03 | 0.02 | 0.01 | 0.02 | 0.03 | 0.08 | 0.07 | 0.07 |
| MgO | 0.48 | 0.44 | 0.51 | 0.47 | 0.52 | 0.49 | 1.01 | 1.44 | 1.30 |
| CaO | 0.77 | 0.83 | 0.86 | 0.83 | 1.04 | 1.03 | 3.11 | 3.95 | 4.37 |
| Na2O | 7.51 | 6.66 | 6.04 | 6.52 | 4.69 | 5.10 | 5.07 | 2.75 | 5.23 |
| K2O | 0.60 | 0.64 | 0.59 | 0.53 | 1.75 | 3.67 | 1.73 | 3.00 | 2.63 |
| P2O5 | 0.27 | 0.07 | 0.06 | 0.33 | 0.11 | 0.06 | 0.14 | 0.14 | 0.20 |
| LOI | 0.63 | 0.84 | 0.72 | 0.51 | 0.96 | 0.82 | 3.10 | 4.89 | 3.82 |
| Total | 99.54 | 99.44 | 99.43 | 99.75 | 99.46 | 99.43 | 99.48 | 99.35 | 99.65 |
| CIA | 42 | 46 | 46 | 44 | 48 | 49 | 44 | 46 | 40 |
| CIW | 43 | 47 | 47 | 46 | 53 | 57 | 47 | 52 | 44 |
| WIP | 78 | 70 | 64 | 68 | 62 | 82 | 72 | 65 | 85 |
| STI | 90 | 90 | 90 | 90 | 88 | 89 | 86 | 86 | 86 |
| Rare Earth Element (ppm) | | | | | | | | | |
| La | 17.45 | 16.56 | 19.81 | 20.10 | 27.73 | 14.49 | 29.84 | 41.27 | 40.24 |
| Ce | 39.41 | 37.23 | 44.93 | 43.29 | 61.83 | 30.32 | 59.44 | 81.14 | 81.78 |
| Pr | 4.02 | 3.78 | 4.54 | 4.65 | 6.42 | 3.12 | 6.56 | 8.48 | 8.24 |
| Nd | 14.90 | 14.28 | 16.76 | 17.52 | 23.89 | 11.62 | 24.86 | 32.12 | 30.91 |
| Sm | 2.49 | 2.40 | 2.83 | 2.99 | 3.91 | 1.96 | 4.26 | 5.40 | 5.12 |
| Eu | 0.58 | 0.54 | 0.64 | 0.67 | 0.80 | 0.57 | 1.02 | 1.13 | 1.07 |
| Gd | 1.91 | 1.83 | 2.19 | 2.40 | 3.08 | 1.61 | 3.63 | 4.68 | 4.31 |
| Tb | 0.24 | 0.23 | 0.28 | 0.32 | 0.42 | 0.23 | 0.51 | 0.64 | 0.62 |
| Dy | 1.21 | 1.17 | 1.38 | 1.65 | 2.18 | 1.31 | 2.86 | 3.66 | 3.48 |
| Ho | 0.21 | 0.21 | 0.23 | 0.28 | 0.37 | 0.24 | 0.52 | 0.67 | 0.64 |
| Er | 0.71 | 0.68 | 0.74 | 0.88 | 1.14 | 0.80 | 1.64 | 2.13 | 2.07 |
| Tm | 0.10 | 0.09 | 0.10 | 0.12 | 0.15 | 0.11 | 0.22 | 0.28 | 0.28 |
| Yb | 0.75 | 0.70 | 0.75 | 0.86 | 1.06 | 0.79 | 1.49 | 1.92 | 1.90 |
| Lu | 0.11 | 0.10 | 0.11 | 0.12 | 0.15 | 0.12 | 0.21 | 0.27 | 0.27 |
| [La/Yb]n | 15.72 | 16.06 | 18.02 | 15.84 | 17.72 | 12.39 | 13.60 | 14.57 | 14.39 |
| Eu/Eu\* | 0.78 | 0.76 | 0.75 | 0.74 | 0.68 | 0.95 | 0.77 | 0.67 | 0.67 |
| ΣREE | 84 | 80 | 95 | 96 | 133 | 67 | 137 | 184 | 181 |
| Trace Element (ppm) | | | | | | | | | |
| Li | 5.44 | 16.19 | 7.38 | 7.94 | 10.94 | 5.29 | 16.18 | 21.69 | 14.89 |
| Rb | 30 | 27 | 30 | 26 | 65 | 113 | 67 | 116 | 84 |
| Sr | 117 | 193 | 127 | 107 | 216 | 348 | 479 | 427 | 407 |
| Ba | 148 | 344 | 155 | 123 | 655 | 1322 | 720 | 1453 | 1049 |
| Y | 16.00 | 14.00 | 15.00 | 15.00 | 25.00 | 22.00 | 26.00 | 36.00 | 29.00 |
| Th | 3.78 | 3.71 | 4.06 | 4.28 | 7.41 | 3.73 | 7.17 | 9.22 | 8.76 |
| U | 0.81 | 0.73 | 0.78 | 0.89 | 1.10 | 0.74 | 1.50 | 1.64 | 1.49 |
| Zr | 100 | 115 | 112 | 118 | 234 | 108 | 266 | 259 | 319 |
| Hf | 1.18 | 1.06 | 1.18 | 1.26 | 1.64 | 0.93 | 2.17 | 2.46 | 2.55 |
| Nb | 9.00 | 8.00 | 10.00 | 12.00 | 10.00 | 9.00 | 10.00 | 13.00 | 14.00 |
| Ta | 0.36 | 0.35 | 0.37 | 0.37 | 0.52 | 0.37 | 0.58 | 0.69 | 0.73 |
| Zn | 16.45 | 31.20 | 15.46 | 21.44 | 61.45 | 61.86 | 80.88 | 132.52 | 82.55 |
| Co | 5.00 | 5.00 | 4.00 | 5.00 | 6.00 | 6.00 | 8.00 | 10.00 | 8.00 |
| Ni | 24.00 | 22.00 | 21.00 | 20.00 | 22.00 | 18.00 | 23.00 | 28.00 | 24.00 |
| Sc | 1.69 | 1.70 | 1.76 | 1.64 | 2.46 | 1.62 | 5.36 | 7.47 | 6.33 |
| V | 13.00 | 23.00 | 20.00 | 17.00 | 41.00 | 16.00 | 59.00 | 69.00 | 47.00 |
| Cr | 143.00 | 122.00 | 81.00 | 158.00 | 88.00 | 66.00 | 97.00 | 50.00 | 48.00 |
| Pb | 7.58 | 8.55 | 7.43 | 6.60 | 9.86 | 15.18 | 14.21 | 16.26 | 12.52 |

Notes: major element oxides in weight percent (wt.%); trace elements and rare earth element in parts per million (ppm); LOI—loss on ignition; Fe2O3\*–total iron expressed as Fe2O3. Eu/Eu\*=EuN/Sqrt(SmN×GdN); subscript N, chondrite normalized value [1]. CIA = 100\*(Al2O3/(Al2O3 + CaO + Na2O + K2O)) [2,3]; CIW = 100\*((Al2O3/(Al2O3 + CaO + Na2O)) [4]; WIP = 100\*((2\*Na2O/0.35) + (MgO/0.9) + (2\*K2O/0.25) + (CaO/0.7) [5]; STI = 100\*((SiO2/TiO2)/((SiO2/TiO2) + (SiO2/Al2O3) + (Al2O3/TiO2))) [6].

**Table S2.** U-Th-Pb LA-ICP-MS data for zircons from metasedimentary rocks of the Chiron Basin.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Analysis** | **Th, ppm** | **U, ppm** | **206Pb/204Pb** | **U/Th** | **Isotope  Ratios\*** |  |  |  |  |  |  | **Ages, Ma** |  |  |  |  |  |  |  | **D** |
|  |  |  |  |  |  | 206Pb/207Pb | ±1s, % | 207Pb/235U | ±1s, % | 206Pb/238U | ±1s, % | Rho | 206Pb/238U | ±1s | 207Pb/235U | ±1s | 207Pb/206U | ±1s | CA | ±2s |  |
| *Sample Y−99: a shale of the Aga–Borshchovochnyi metamorphic Formation* | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Y−99 Spot 1 | 101 | 188 | 41469 | 1.9 | 17.4719 | 1.1 | 0.6381 | 1.9 | 0.0809 | 1.6 | 0.82 | 501.5 | 7.6 | 501.2 | 7.6 | 499.7 | 24.2 | 501 | 14 | 0.366320545 |
| 2 | Y−99 Spot 2 | 33 | 392 | 49717 | 12.1 | 14.8459 | 0.9 | 1.3537 | 1.7 | 0.1458 | 1.4 | 0.84 | 877.5 | 11.5 | 869.1 | 9.7 | 848.0 | 18.8 | 869 | 19 | 3.474379744 |
| 3 | Y−99 Spot 3 | 46 | 114 | 5542 | 2.5 | 17.6895 | 1.0 | 0.7285 | 1.6 | 0.0935 | 1.2 | 0.78 | 576.2 | 6.7 | 555.7 | 6.7 | 472.3 | 21.8 |  |  |  |
| 4 | Y−99 Spot 4 | 158 | 379 | 39440 | 2.4 | 17.4388 | 0.9 | 0.6773 | 1.5 | 0.0857 | 1.3 | 0.83 | 530.1 | 6.5 | 525.1 | 6.3 | 503.8 | 19.0 | 527 | 12 | 5.20694766 |
| 5 | Y−99 Spot 5 | 29 | 136 | 67881 | 4.7 | 8.2839 | 0.7 | 5.7439 | 1.5 | 0.3452 | 1.3 | 0.88 | 1911.9 | 21.7 | 1938.0 | 12.9 | 1966.0 | 12.6 | 1952 | 22 | −2.7557455 |
| 6 | Y−99 Spot 6 | 15 | 13 | 20690 | 0.9 | 6.7517 | 2.0 | 8.6816 | 2.4 | 0.4253 | 1.3 | 0.55 | 2284.5 | 25.0 | 2305.2 | 21.5 | 2323.5 | 33.9 | 2298 | 41 | −1.67726314 |
| 7 | Y−99 Spot 7 | 189 | 262 | 17863 | 1.4 | 15.2561 | 1.1 | 1.1989 | 1.7 | 0.1327 | 1.3 | 0.76 | 803.3 | 10.0 | 800.1 | 9.6 | 791.0 | 23.5 | 801 | 18 | 1.553223151 |
| 8 | Y−99 Spot 8 | 71 | 91 | 46017 | 1.3 | 6.1203 | 1.1 | 10.8345 | 1.8 | 0.4811 | 1.5 | 0.81 | 2532.2 | 30.8 | 2509.0 | 16.9 | 2490.3 | 17.9 | 2501 | 31 | 1.683890434 |
| 9 | Y−99 Spot 10 | 116 | 175 | 11122 | 1.5 | 16.3859 | 2.8 | 0.6776 | 3.1 | 0.0806 | 1.3 | 0.42 | 499.5 | 6.2 | 525.4 | 12.7 | 639.3 | 60.6 | 500 | 12 | −21.8657048 |
| 10 | Y−99 Spot 11 | 91 | 449 | 68375 | 5.0 | 17.0345 | 0.9 | 0.7885 | 1.8 | 0.0975 | 1.5 | 0.86 | 599.5 | 8.7 | 590.3 | 7.9 | 555.2 | 19.3 | 592 | 16 | 7.976343352 |
| 11 | Y−99 Spot 12 | 99 | 376 | 1190739 | 3.8 | 16.9652 | 0.9 | 0.8029 | 1.5 | 0.0988 | 1.2 | 0.80 | 607.6 | 7.0 | 598.5 | 6.8 | 564.1 | 19.5 | 602 | 13 | 7.716341765 |
| 12 | Y−99 Spot 13 | 59 | 122 | 214241 | 2.1 | 6.0873 | 1.0 | 10.3828 | 1.4 | 0.4586 | 0.9 | 0.67 | 2433.3 | 19.3 | 2469.5 | 13.0 | 2499.4 | 17.5 | 2469 | 26 | −2.64314437 |
| 13 | Y−99 Spot 14 | 75 | 124 | 90418 | 1.7 | 15.1347 | 1.1 | 1.2144 | 2.0 | 0.1334 | 1.6 | 0.84 | 807.0 | 12.5 | 807.2 | 11.0 | 807.8 | 22.5 | 807 | 22 | −0.0991228 |
| 14 | Y−99 Spot 15 | 23 | 154 | 20158 | 6.8 | 14.9611 | 1.3 | 1.3190 | 1.9 | 0.1432 | 1.4 | 0.74 | 862.6 | 11.4 | 854.1 | 11.0 | 831.9 | 26.7 | 858 | 21 | 3.696826385 |
| 15 | Y−99 Spot 16 | 188 | 683 | 211926 | 3.6 | 17.3792 | 1.1 | 0.6570 | 1.8 | 0.0828 | 1.5 | 0.81 | 513.1 | 7.2 | 512.8 | 7.3 | 511.3 | 23.4 | 513 | 14 | 0.34541054 |
| 16 | Y−99 Spot 17 | 21 | 21 | 6833 | 1.0 | 8.8092 | 1.2 | 5.4619 | 2.2 | 0.3491 | 1.8 | 0.82 | 1930.4 | 29.5 | 1894.6 | 18.5 | 1855.7 | 22.3 | 1883 | 36 | 4.02560287 |
| 17 | Y−99 Spot 18 | 25 | 65 | 24582 | 2.6 | 13.1726 | 1.1 | 1.7449 | 1.6 | 0.1668 | 1.2 | 0.76 | 994.3 | 11.5 | 1025.3 | 10.6 | 1092.0 | 21.4 |  |  |  |
| 18 | Y−99 Spot 19 | 77 | 165 | 66448 | 2.2 | 16.6853 | 1.0 | 0.7731 | 1.7 | 0.0936 | 1.4 | 0.83 | 576.8 | 7.9 | 581.6 | 7.6 | 600.2 | 20.9 | 580 | 15 | −3.89825448 |
| 19 | Y−99 Spot 21 | 113 | 243 | 7266 | 2.2 | 17.6759 | 1.3 | 0.6392 | 2.0 | 0.0820 | 1.5 | 0.75 | 507.9 | 7.4 | 501.8 | 8.0 | 474.0 | 29.6 | 506 | 14 | 7.157161245 |
| 20 | Y−99 Spot 22 | 25 | 114 | 49243 | 4.5 | 16.8279 | 1.4 | 0.7849 | 2.0 | 0.0958 | 1.4 | 0.71 | 589.9 | 7.9 | 588.3 | 8.8 | 581.8 | 30.0 | 589 | 15 | 1.404530867 |
| 21 | Y−99 Spot 23 | 239 | 291 | 31508 | 1.2 | 16.9011 | 1.0 | 0.7445 | 1.6 | 0.0913 | 1.3 | 0.80 | 563.2 | 7.0 | 565.0 | 7.1 | 572.3 | 21.3 | 564 | 13 | −1.58879061 |
| 22 | Y−99 Spot 25 | 36 | 92 | 204094 | 2.6 | 16.9383 | 1.2 | 0.7682 | 1.8 | 0.0944 | 1.4 | 0.77 | 581.6 | 7.8 | 578.7 | 8.0 | 567.6 | 25.1 | 580 | 15 | 2.472651774 |
| 23 | Y−99 Spot 26 | 26 | 14 | 48764 | 0.6 | 6.0074 | 1.2 | 10.9960 | 1.8 | 0.4793 | 1.3 | 0.76 | 2524.2 | 28.1 | 2522.8 | 16.5 | 2521.6 | 19.4 | 2522 | 32 | 0.101990467 |
| 24 | Y−99 Spot 27 | 181 | 365 | 26021 | 2.0 | 17.0698 | 0.8 | 0.7560 | 1.3 | 0.0936 | 1.0 | 0.79 | 577.0 | 5.7 | 571.7 | 5.7 | 550.7 | 17.5 | 574 | 11 | 4.77839338 |
| 25 | Y−99 Spot 28 | 122 | 245 | 31966 | 2.0 | 16.9705 | 1.2 | 0.7756 | 1.9 | 0.0955 | 1.4 | 0.78 | 588.0 | 8.1 | 583.0 | 8.3 | 563.4 | 25.6 | 586 | 15 | 4.375147975 |
| 26 | Y−99 Spot 29 | 236 | 154 | 50667 | 0.7 | 9.4110 | 1.0 | 4.3532 | 1.5 | 0.2973 | 1.2 | 0.77 | 1677.7 | 17.0 | 1703.5 | 12.4 | 1735.4 | 17.5 | 1705 | 25 | −3.32350845 |
| 27 | Y−99 Spot 30 | 3 | 254 | 74853 | 94.8 | 14.5370 | 1.0 | 1.4590 | 1.6 | 0.1539 | 1.2 | 0.77 | 922.7 | 10.3 | 913.6 | 9.4 | 891.5 | 20.7 | 916 | 18 | 3.500200708 |
| 28 | Y−99 Spot 31 | 36 | 96 | 3031135 | 2.7 | 16.6641 | 1.0 | 0.7858 | 1.5 | 0.0950 | 1.2 | 0.77 | 585.1 | 6.6 | 588.8 | 6.9 | 603.0 | 21.4 | 587 | 13 | −2.95963923 |
| 29 | Y−99 Spot 32 | 32 | 269 | 133030 | 8.5 | 17.1390 | 0.8 | 0.6718 | 1.4 | 0.0835 | 1.1 | 0.81 | 517.3 | 5.5 | 521.8 | 5.6 | 541.8 | 17.6 | 519 | 11 | −4.53623503 |
| 30 | Y−99 Spot 33 | 26 | 117 | 34787 | 4.5 | 17.2128 | 1.3 | 0.6510 | 1.8 | 0.0813 | 1.3 | 0.71 | 503.9 | 6.2 | 509.1 | 7.2 | 532.4 | 27.4 | 505 | 12 | −5.35654151 |
| 31 | Y−99 Spot 34 | 86 | 260 | 50176 | 3.0 | 16.6590 | 1.0 | 0.8211 | 1.5 | 0.0992 | 1.1 | 0.73 | 610.0 | 6.5 | 608.6 | 7.0 | 603.6 | 22.7 | 610 | 12 | 1.05871797 |
| 32 | Y−99 Spot 35 | 152 | 302 | 14989 | 2.0 | 16.8892 | 1.2 | 0.8281 | 1.9 | 0.1015 | 1.5 | 0.77 | 623.1 | 8.9 | 612.6 | 9.0 | 573.8 | 27.0 | 618 | 17 | 8.586390301 |
| 33 | Y−99 Spot 36 | 26 | 83 | 6797 | 3.1 | 16.6388 | 1.2 | 0.8750 | 1.9 | 0.1056 | 1.5 | 0.77 | 647.4 | 9.0 | 638.3 | 9.0 | 606.2 | 26.3 | 643 | 17 | 6.782632723 |
| 34 | Y−99 Spot 37 | 65 | 157 | 10704 | 2.4 | 16.8575 | 1.1 | 0.7440 | 1.7 | 0.0910 | 1.2 | 0.75 | 561.5 | 6.7 | 564.7 | 7.2 | 578.0 | 23.9 | 563 | 13 | −2.85664139 |
| 35 | Y−99 Spot 38 | 55 | 82 | 19292 | 1.5 | 5.8481 | 1.0 | 11.7475 | 1.7 | 0.4985 | 1.4 | 0.81 | 2607.3 | 29.1 | 2584.5 | 15.6 | 2566.7 | 16.3 | 2577 | 29 | 1.582785821 |
| 36 | Y−99 Spot 39 | 55 | 152 | 10587 | 2.8 | 17.1304 | 1.7 | 0.7603 | 2.1 | 0.0945 | 1.2 | 0.59 | 582.1 | 6.8 | 574.2 | 9.1 | 542.9 | 36.6 | 581 | 13 | 7.208374877 |
| 37 | Y−99 Spot 40 | 137 | 244 | 44144 | 1.8 | 15.3186 | 1.1 | 1.2171 | 1.6 | 0.1353 | 1.2 | 0.75 | 817.9 | 9.5 | 808.4 | 9.2 | 782.4 | 22.9 | 812 | 17 | 4.530735959 |
| 38 | Y−99 Spot 41 | 33 | 96 | 147982 | 2.9 | 14.0348 | 1.2 | 1.5974 | 1.8 | 0.1627 | 1.3 | 0.73 | 971.6 | 11.5 | 969.2 | 11.0 | 963.8 | 24.7 | 970 | 21 | 0.813206368 |
| 39 | Y−99 Spot 42 | 56 | 185 | 47702 | 3.3 | 16.7177 | 1.2 | 0.7684 | 1.6 | 0.0932 | 1.2 | 0.71 | 574.5 | 6.3 | 578.8 | 7.2 | 596.0 | 24.9 | 576 | 12 | −3.60733574 |
| 40 | Y−99 Spot 43 | 95 | 207 | 9674 | 2.2 | 17.2025 | 1.7 | 0.7549 | 2.5 | 0.0942 | 1.8 | 0.73 | 580.5 | 10.1 | 571.1 | 10.9 | 533.7 | 37.5 | 577 | 19 | 8.756978843 |
| 41 | Y−99 Spot 44 | 81 | 161 | 38539 | 2.0 | 17.3819 | 1.1 | 0.6530 | 1.6 | 0.0824 | 1.2 | 0.72 | 510.1 | 5.8 | 510.3 | 6.6 | 511.0 | 25.0 | 510 | 11 | −0.16961437 |
| 42 | Y−99 Spot 45 | 113 | 231 | 68018 | 2.0 | 6.0284 | 0.9 | 10.7497 | 1.4 | 0.4702 | 1.1 | 0.75 | 2484.4 | 21.8 | 2501.7 | 13.0 | 2515.8 | 15.4 | 2505 | 26 | −1.24574097 |
| 43 | Y−99 Spot 46 | 54 | 67 | 13054 | 1.3 | 14.8083 | 1.2 | 1.2446 | 1.7 | 0.1337 | 1.1 | 0.68 | 809.1 | 8.5 | 821.0 | 9.3 | 853.3 | 25.3 | 813 | 16 | −5.1748679 |
| 44 | Y−99 Spot 47 | 31 | 46 | 9891 | 1.5 | 16.7614 | 1.8 | 0.6933 | 2.3 | 0.0843 | 1.4 | 0.62 | 521.9 | 7.2 | 534.8 | 9.7 | 590.4 | 39.7 | 524 | 14 | −11.6064551 |
| 45 | Y−99 Spot 48 | 61 | 180 | 38678 | 2.9 | 16.4721 | 1.2 | 0.7899 | 1.8 | 0.0944 | 1.3 | 0.73 | 581.6 | 7.1 | 591.1 | 7.9 | 628.0 | 26.2 | 584 | 14 | −7.38698658 |
| 46 | Y−99 Spot 49 | 3 | 73 | 58527 | 29.1 | 16.6052 | 1.0 | 0.8305 | 1.7 | 0.1001 | 1.4 | 0.81 | 614.8 | 8.2 | 613.9 | 8.0 | 610.6 | 22.2 | 614 | 15 | 0.682827595 |
| 47 | Y−99 Spot 50 | 611 | 316 | 20882 | 0.5 | 17.4235 | 0.9 | 0.6601 | 1.3 | 0.0834 | 1.0 | 0.75 | 516.7 | 4.9 | 514.7 | 5.3 | 505.8 | 19.0 | 516 | 9.5 | 2.158810407 |
| 48 | Y−99 Spot 51 | 58 | 115 | 36255 | 2.0 | 16.7702 | 1.0 | 0.7779 | 1.6 | 0.0947 | 1.3 | 0.80 | 583.0 | 7.2 | 584.3 | 7.2 | 589.2 | 21.0 | 584 | 14 | −1.05736954 |
| 49 | Y−99 Spot 52 | 99 | 144 | 51754 | 1.5 | 9.0875 | 1.1 | 4.4832 | 1.9 | 0.2956 | 1.5 | 0.81 | 1669.5 | 22.5 | 1727.9 | 15.7 | 1799.3 | 20.2 |  |  |  |
| 50 | Y−99 Spot 53 | 32 | 276 | 133318 | 8.6 | 6.0066 | 1.0 | 11.0416 | 1.7 | 0.4812 | 1.4 | 0.80 | 2532.6 | 28.3 | 2526.6 | 15.7 | 2521.9 | 17.0 | 2525 | 29 | 0.42517263 |
| 51 | Y−99 Spot 54 | 130 | 147 | 91783 | 1.1 | 14.4406 | 1.1 | 1.4196 | 1.8 | 0.1487 | 1.4 | 0.76 | 893.9 | 11.3 | 897.2 | 10.6 | 905.3 | 23.7 | 896 | 20 | −1.25266973 |
| 52 | Y−99 Spot 55 | 29 | 695 | 562836 | 23.6 | 13.9364 | 0.9 | 1.5254 | 1.7 | 0.1542 | 1.4 | 0.83 | 924.7 | 12.1 | 940.6 | 10.4 | 978.1 | 19.3 | 939 | 21 | −5.45480743 |
| 53 | Y−99 Spot 56 | 91 | 180 | 31888 | 2.0 | 16.6352 | 1.1 | 0.7572 | 1.8 | 0.0914 | 1.5 | 0.81 | 563.8 | 7.9 | 572.4 | 7.9 | 606.7 | 23.0 | 568 | 15 | −7.07746502 |
| 54 | Y−99 Spot 57 | 198 | 615 | 168684 | 3.1 | 17.0510 | 1.0 | 0.6749 | 1.9 | 0.0835 | 1.6 | 0.84 | 517.0 | 7.8 | 523.7 | 7.7 | 553.1 | 22.1 | 521 | 15 | −6.52138599 |
| 55 | Y−99 Spot 58 | 96 | 271 | 3290074 | 2.8 | 5.9722 | 0.9 | 10.9343 | 1.7 | 0.4738 | 1.4 | 0.85 | 2500.3 | 29.7 | 2517.6 | 15.7 | 2531.5 | 14.8 | 2525 | 27 | −1.23281312 |
| 56 | Y−99 Spot 59 | 27 | 57 | 20213 | 2.1 | 14.7543 | 1.3 | 1.3861 | 2.2 | 0.1484 | 1.7 | 0.80 | 891.9 | 14.5 | 883.0 | 12.9 | 860.8 | 27.4 | 885 | 26 | 3.614592053 |
| 57 | Y−99 Spot 60 | 54 | 125 | 86362 | 2.3 | 9.5220 | 1.0 | 4.1321 | 1.8 | 0.2855 | 1.5 | 0.83 | 1618.9 | 21.1 | 1660.7 | 14.6 | 1713.8 | 18.4 |  |  |  |
| 58 | Y−99 Spot 61 | 113 | 170 | 144760 | 1.5 | 5.6832 | 1.0 | 11.3912 | 1.8 | 0.4697 | 1.5 | 0.83 | 2482.4 | 30.8 | 2555.7 | 16.9 | 2614.4 | 17.0 |  |  |  |
| 59 | Y−99 Spot 62 | 173 | 283 | 96182 | 1.6 | 9.1466 | 0.9 | 4.5962 | 1.5 | 0.3050 | 1.2 | 0.79 | 1716.2 | 17.8 | 1748.6 | 12.5 | 1787.5 | 16.9 | 1753 | 25 | −3.98708683 |
| 60 | Y−99 Spot 63 | 193 | 445 | 22182 | 2.3 | 17.4632 | 0.9 | 0.6454 | 1.7 | 0.0818 | 1.5 | 0.86 | 506.7 | 7.2 | 505.6 | 6.8 | 500.7 | 18.9 | 506 | 13 | 1.198952025 |
| 61 | Y−99 Spot 64 | 93 | 295 | 37619 | 3.2 | 16.6932 | 1.1 | 0.7744 | 1.9 | 0.0938 | 1.5 | 0.81 | 578.0 | 8.4 | 582.3 | 8.3 | 599.2 | 23.5 | 580 | 16 | −3.53717068 |
| 62 | Y−99 Spot 65 | 25 | 58 | 54924 | 2.3 | 16.2592 | 1.4 | 0.8190 | 1.9 | 0.0966 | 1.3 | 0.69 | 594.6 | 7.5 | 607.5 | 8.7 | 656.0 | 29.6 | 598 | 15 | −9.36344982 |
| 63 | Y−99 Spot 66 | 34 | 123 | 8837 | 3.7 | 17.0507 | 1.4 | 0.7494 | 2.0 | 0.0927 | 1.4 | 0.72 | 571.5 | 7.8 | 567.9 | 8.6 | 553.1 | 30.1 | 570 | 15 | 3.330192142 |
| 64 | Y−99 Spot 67 | 137 | 82 | 27381 | 0.6 | 6.2239 | 0.9 | 9.9317 | 1.8 | 0.4485 | 1.6 | 0.86 | 2388.6 | 31.0 | 2428.5 | 16.7 | 2462.0 | 15.8 | 2447 | 28 | −2.97865433 |
| 65 | Y−99 Spot 68 | 38 | 145 | 53879 | 3.8 | 17.2140 | 1.4 | 0.7630 | 2.0 | 0.0953 | 1.5 | 0.73 | 586.8 | 8.3 | 575.7 | 8.9 | 532.3 | 30.3 | 583 | 16 | 10.23382823 |
| 66 | Y−99 Spot 69 | 17 | 19 | 8067 | 1.1 | 5.0502 | 1.0 | 15.4486 | 1.8 | 0.5661 | 1.4 | 0.82 | 2891.8 | 33.5 | 2843.3 | 16.8 | 2809.1 | 16.6 | 2826 | 30 | 2.940956301 |
| 67 | Y−99 Spot 70 | 232 | 349 | 56488 | 1.5 | 9.3951 | 0.9 | 4.4646 | 1.5 | 0.3044 | 1.1 | 0.79 | 1712.9 | 17.2 | 1724.4 | 12.1 | 1738.5 | 16.5 | 1726 | 24 | −1.47334893 |
| 68 | Y−99 Spot 71 | 46 | 89 | 7456 | 1.9 | 17.1791 | 1.2 | 0.7694 | 2.0 | 0.0959 | 1.6 | 0.81 | 590.3 | 9.1 | 579.4 | 8.8 | 536.7 | 25.9 | 584 | 17 | 9.988531621 |
| 69 | Y−99 Spot 72 | 73 | 214 | 24217 | 2.9 | 17.1877 | 1.3 | 0.6666 | 2.1 | 0.0831 | 1.6 | 0.78 | 514.8 | 8.0 | 518.6 | 8.4 | 535.7 | 28.5 | 516 | 15 | −3.8998198 |
| 70 | Y−99 Spot 73 | 87 | 59 | 474447 | 0.7 | 7.2254 | 1.1 | 7.8585 | 1.7 | 0.4120 | 1.3 | 0.75 | 2224.0 | 23.6 | 2214.9 | 15.0 | 2206.5 | 19.0 | 2214 | 30 | 0.792452327 |
| 71 | Y−99 Spot 74 | 93 | 168 | 14104 | 1.8 | 17.7546 | 1.0 | 0.6196 | 1.6 | 0.0798 | 1.3 | 0.78 | 495.0 | 6.1 | 489.6 | 6.4 | 464.2 | 22.9 | 493 | 12 | 6.64095403 |
| 72 | Y−99 Spot 75 | 133 | 314 | 47389 | 2.4 | 16.3261 | 1.0 | 0.8401 | 1.9 | 0.0995 | 1.6 | 0.83 | 611.6 | 9.1 | 619.2 | 8.6 | 647.2 | 22.1 | 616 | 17 | −5.49678385 |
| 73 | Y−99 Spot 76 | 125 | 148 | 15523 | 1.2 | 17.9306 | 1.1 | 0.6149 | 1.7 | 0.0800 | 1.4 | 0.79 | 496.1 | 6.6 | 486.6 | 6.7 | 442.3 | 23.8 | 492 | 13 | 12.17218582 |
| 74 | Y−99 Spot 78 | 4 | 122 | 32843 | 32.9 | 16.6784 | 0.9 | 0.8279 | 1.9 | 0.1002 | 1.7 | 0.89 | 615.5 | 10.1 | 612.4 | 8.9 | 601.1 | 19.0 | 612 | 18 | 2.396051296 |
| 75 | Y−99 Spot 79 | 43 | 88 | 10079 | 2.1 | 15.3491 | 1.4 | 1.1969 | 1.8 | 0.1333 | 1.2 | 0.65 | 806.7 | 9.0 | 799.2 | 10.1 | 778.3 | 29.2 | 804 | 17 | 3.650994239 |
| 76 | Y−99 Spot 80 | 140 | 139 | 93702 | 1.0 | 4.8098 | 0.7 | 16.0129 | 1.4 | 0.5588 | 1.2 | 0.85 | 2861.8 | 26.7 | 2877.6 | 13.0 | 2888.6 | 11.7 | 2884 | 22 | −0.92571728 |
| 77 | Y−99 Spot 81 | 158 | 323 | 122936 | 2.0 | 17.2017 | 0.9 | 0.6715 | 1.4 | 0.0838 | 1.1 | 0.78 | 518.8 | 5.5 | 521.6 | 5.7 | 533.9 | 19.2 | 520 | 11 | −2.81883991 |
| 78 | Y−99 Spot 82 | 135 | 394 | 187570 | 2.9 | 8.6204 | 1.0 | 5.4144 | 1.7 | 0.3387 | 1.4 | 0.82 | 1880.2 | 22.8 | 1887.1 | 14.7 | 1894.7 | 17.8 | 1889 | 28 | −0.76564205 |
| 79 | Y−99 Spot 83 | 61 | 162 | 21697 | 2.7 | 8.4696 | 1.2 | 5.6208 | 1.9 | 0.3454 | 1.4 | 0.77 | 1912.7 | 24.0 | 1919.3 | 16.2 | 1926.4 | 21.4 | 1920 | 32 | −0.71063019 |
| 80 | Y−99 Spot 84 | 70 | 120 | 59421 | 1.7 | 14.9460 | 1.2 | 1.2793 | 1.8 | 0.1387 | 1.3 | 0.76 | 837.5 | 10.6 | 836.5 | 10.1 | 834.0 | 24.0 | 837 | 19 | 0.419386463 |
| 81 | Y−99 Spot 85 | 54 | 89 | 13001 | 1.7 | 18.1165 | 1.4 | 0.6173 | 1.9 | 0.0811 | 1.3 | 0.69 | 502.9 | 6.2 | 488.1 | 7.3 | 419.3 | 30.5 | 499 | 12 | 19.95503223 |
| 82 | Y−99 Spot 86 | 97 | 379 | 85483 | 3.9 | 8.8304 | 0.8 | 5.1333 | 1.6 | 0.3289 | 1.3 | 0.84 | 1833.1 | 21.0 | 1841.6 | 13.2 | 1851.3 | 15.2 | 1845 | 25 | −0.98569359 |
| 83 | Y−99 Spot 88 | 31 | 48 | 28762 | 1.5 | 5.8645 | 1.1 | 11.9078 | 1.9 | 0.5067 | 1.6 | 0.82 | 2642.5 | 33.9 | 2597.2 | 17.9 | 2562.0 | 18.3 | 2881 | 33 | 3.142434212 |
| 84 | Y−99 Spot 89 | 65 | 180 | 150090 | 2.8 | 14.9520 | 1.0 | 1.2062 | 1.6 | 0.1309 | 1.3 | 0.77 | 792.8 | 9.3 | 803.5 | 9.0 | 833.2 | 21.5 | 799 | 17 | −4.84638321 |
| 85 | Y−99 Spot 90 | 62 | 245 | 53015 | 3.9 | 16.8562 | 1.2 | 0.7731 | 1.6 | 0.0946 | 1.2 | 0.71 | 582.5 | 6.5 | 581.6 | 7.3 | 578.1 | 25.2 | 582 | 13 | 0.746598766 |
| 86 | Y−99 Spot 91 | 150 | 180 | 47744 | 1.2 | 8.4022 | 0.9 | 5.5439 | 1.4 | 0.3380 | 1.0 | 0.77 | 1877.0 | 17.1 | 1907.4 | 11.8 | 1940.7 | 15.7 | 1911 | 23 | −3.2855563 |
| 87 | Y−99 Spot 92 | 61 | 128 | 53099 | 2.1 | 8.8494 | 1.0 | 4.6785 | 1.8 | 0.3004 | 1.5 | 0.84 | 1693.3 | 22.6 | 1763.4 | 15.2 | 1847.4 | 18.0 |  |  |  |
| 88 | Y−99 Spot 93 | 42 | 115 | 22620 | 2.7 | 17.2485 | 1.1 | 0.7819 | 1.9 | 0.0979 | 1.5 | 0.80 | 601.9 | 8.6 | 586.6 | 8.3 | 527.9 | 24.3 | 593 | 16 | 14.00408964 |
| 89 | Y−99 Spot 94 | 77 | 208 | 18080 | 2.7 | 15.9242 | 1.2 | 1.0441 | 2.0 | 0.1206 | 1.6 | 0.80 | 734.2 | 11.3 | 725.9 | 10.6 | 700.5 | 26.1 | 729 | 21 | 4.817533778 |
| 90 | Y−99 Spot 95 | 40 | 207 | 15997 | 5.2 | 17.2925 | 1.0 | 0.7536 | 1.8 | 0.0946 | 1.5 | 0.82 | 582.4 | 8.1 | 570.3 | 7.7 | 522.3 | 22.0 | 575 | 15 | 11.51529969 |
| 91 | Y−99 Spot 96 | 88 | 219 | 74524 | 2.5 | 16.7604 | 1.1 | 0.8240 | 1.7 | 0.1002 | 1.3 | 0.77 | 615.6 | 7.9 | 610.3 | 8.0 | 590.5 | 24.2 | 613 | 15 | 4.261300075 |
| 92 | Y−99 Spot 97 | 111 | 196 | 130163 | 1.8 | 8.7568 | 1.0 | 5.3892 | 1.6 | 0.3424 | 1.2 | 0.76 | 1898.3 | 19.7 | 1883.1 | 13.4 | 1866.4 | 18.3 | 1881 | 27 | 1.707018295 |
| 93 | Y−99 Spot 98 | 31 | 64 | 38925 | 2.1 | 15.2282 | 1.6 | 1.1873 | 2.1 | 0.1312 | 1.4 | 0.66 | 794.6 | 10.2 | 794.7 | 11.4 | 794.9 | 32.6 | 795 | 20 | −0.03079656 |
| 94 | Y−99 Spot 99 | 117 | 304 | 35818 | 2.6 | 17.4803 | 1.1 | 0.6744 | 1.7 | 0.0855 | 1.3 | 0.74 | 529.1 | 6.4 | 523.4 | 6.9 | 498.6 | 25.1 | 527 | 12 | 6.123174374 |
| 95 | Y−99 Spot 101 | 102 | 295 | 70678 | 2.9 | 17.1313 | 1.1 | 0.6693 | 1.6 | 0.0832 | 1.2 | 0.73 | 515.2 | 5.9 | 520.3 | 6.6 | 542.8 | 24.5 | 517 | 11 | −5.0961774 |
| 96 | Y−99 Spot 102 | 31 | 97 | 80419 | 3.1 | 8.8257 | 1.0 | 5.1979 | 1.8 | 0.3329 | 1.5 | 0.82 | 1852.2 | 23.6 | 1852.3 | 15.3 | 1852.3 | 18.8 | 1852 | 30 | −0.00266349 |
| 97 | Y−99 Spot 103 | 60 | 166 | 22417 | 2.8 | 17.3257 | 1.2 | 0.6876 | 1.8 | 0.0864 | 1.3 | 0.73 | 534.4 | 6.6 | 531.3 | 7.3 | 518.1 | 26.3 | 533 | 13 | 3.155813688 |
| 98 | Y−99 Spot 104 | 87 | 164 | 89540 | 1.9 | 8.7181 | 1.0 | 5.2948 | 1.7 | 0.3349 | 1.4 | 0.82 | 1862.2 | 22.4 | 1868.0 | 14.4 | 1874.4 | 17.2 | 1870 | 28 | −0.64993347 |
| 99 | Y−99 Spot 105 | 89 | 184 | 7347 | 2.1 | 17.3849 | 0.9 | 0.7386 | 1.5 | 0.0932 | 1.2 | 0.80 | 574.3 | 6.7 | 561.6 | 6.6 | 510.6 | 20.2 | 567 | 13 | 12.47206457 |
| 100 | Y−99 Spot 106 | 22 | 42 | 3428 | 1.9 | 18.1145 | 1.7 | 0.7830 | 2.4 | 0.1029 | 1.6 | 0.69 | 631.5 | 9.9 | 587.2 | 10.7 | 419.5 | 38.9 |  |  |  |
| 101 | Y−99 Spot 107 | 32 | 122 | 48837 | 3.8 | 17.7219 | 1.3 | 0.6538 | 1.8 | 0.0841 | 1.3 | 0.71 | 520.4 | 6.4 | 510.8 | 7.2 | 468.2 | 28.1 | 517 | 12 | 11.13527666 |
| 102 | Y−99 Spot 108 | 87 | 94 | 116834 | 1.1 | 14.9782 | 1.1 | 1.2280 | 1.7 | 0.1335 | 1.3 | 0.75 | 807.6 | 9.7 | 813.4 | 9.5 | 829.5 | 23.4 | 811 | 18 | −2.63948819 |
| 103 | Y−99 Spot 109 | 46 | 154 | 13268 | 3.3 | 16.9489 | 1.2 | 0.7729 | 2.0 | 0.0950 | 1.6 | 0.79 | 585.3 | 8.7 | 581.4 | 8.7 | 566.2 | 26.5 | 583 | 16 | 3.372434885 |
| 104 | Y−99 Spot 110 | 42 | 211 | 27267 | 5.0 | 10.9577 | 1.2 | 2.8661 | 2.2 | 0.2279 | 1.8 | 0.83 | 1323.4 | 22.0 | 1373.1 | 16.6 | 1451.2 | 23.1 |  |  |  |
| 105 | Y−99 Spot 111 | 41 | 115 | 50572 | 2.8 | 17.0000 | 1.3 | 0.7724 | 1.9 | 0.0953 | 1.4 | 0.73 | 586.7 | 7.9 | 581.1 | 8.5 | 559.6 | 28.5 | 585 | 15 | 4.8296308 |
| 106 | Y−99 Spot 112 | 61 | 66 | 8379 | 1.1 | 10.4531 | 1.0 | 2.7985 | 1.8 | 0.2123 | 1.5 | 0.84 | 1240.8 | 17.2 | 1355.1 | 13.5 | 1540.4 | 18.2 |  |  |  |
| 107 | Y−99 Spot 113 | 139 | 355 | 115276 | 2.5 | 16.8309 | 1.0 | 0.8112 | 1.9 | 0.0991 | 1.6 | 0.86 | 608.9 | 9.6 | 603.1 | 8.7 | 581.4 | 21.0 | 604 | 17 | 4.734956998 |
| 108 | Y−99 Spot 114 | 67 | 175 | 54902 | 2.6 | 6.0034 | 0.9 | 10.7289 | 1.7 | 0.4673 | 1.5 | 0.86 | 2471.9 | 30.4 | 2499.9 | 16.0 | 2522.8 | 14.9 | 2513 | 27 | −2.01525989 |
| 109 | Y−99 Spot 115 | 84 | 130 | 7593 | 1.6 | 17.3954 | 1.0 | 0.7376 | 1.8 | 0.0931 | 1.5 | 0.84 | 573.8 | 8.2 | 561.0 | 7.7 | 509.3 | 21.4 | 565 | 15 | 12.67395737 |
| 110 | Y−99 Spot 117 | 45 | 100 | 10754 | 2.2 | 17.0286 | 1.3 | 0.7770 | 1.9 | 0.0960 | 1.4 | 0.72 | 590.9 | 7.9 | 583.8 | 8.6 | 555.9 | 29.3 | 588 | 15 | 6.298538823 |
| 111 | Y−99 Spot 118 | 65 | 139 | 333499 | 2.1 | 8.7503 | 1.2 | 5.4078 | 2.0 | 0.3433 | 1.6 | 0.80 | 1902.7 | 25.9 | 1886.1 | 16.8 | 1867.8 | 21.2 | 1882 | 33 | 1.870524095 |
| 112 | Y−99 Spot 120 | 16 | 53 | 14764 | 3.3 | 15.2996 | 1.5 | 1.1978 | 2.0 | 0.1330 | 1.4 | 0.69 | 804.8 | 10.5 | 799.6 | 11.1 | 785.1 | 30.7 | 803 | 20 | 2.51144864 |
| 113 | Y−99 Spot 121 | 40 | 110 | 11178 | 2.8 | 17.2499 | 1.1 | 0.7587 | 1.7 | 0.0950 | 1.2 | 0.74 | 584.8 | 6.8 | 573.3 | 7.3 | 527.7 | 24.6 | 580 | 13 | 10.81381406 |
| 114 | Y−99 Spot 122 | 30 | 108 | 76364 | 3.6 | 16.7990 | 1.1 | 0.8146 | 1.9 | 0.0993 | 1.5 | 0.82 | 610.2 | 9.0 | 605.0 | 8.6 | 585.5 | 23.6 | 607 | 17 | 4.222189722 |
| 115 | Y−99 Spot 123 | 35 | 30 | 10619 | 0.8 | 18.0523 | 1.6 | 0.7224 | 2.1 | 0.0946 | 1.3 | 0.63 | 582.8 | 7.4 | 552.1 | 9.0 | 427.2 | 36.5 |  |  |  |
| 116 | Y−99 Spot 124 | 66 | 154 | 33836 | 2.3 | 16.4127 | 1.3 | 0.8789 | 1.7 | 0.1047 | 1.1 | 0.67 | 641.7 | 6.8 | 640.4 | 8.0 | 635.8 | 26.9 | 641 | 13 | 0.930746255 |
| 117 | Y−99 Spot 125 | 55 | 135 | 178085 | 2.5 | 8.4851 | 1.0 | 5.6588 | 1.8 | 0.3484 | 1.5 | 0.83 | 1926.9 | 25.5 | 1925.1 | 15.9 | 1923.1 | 18.4 | 1924 | 30 | 0.196735678 |
| 118 | Y−99 Spot 126 | 69 | 162 | 25135 | 2.4 | 16.8195 | 1.4 | 0.7818 | 1.9 | 0.0954 | 1.3 | 0.69 | 587.5 | 7.5 | 586.5 | 8.6 | 582.8 | 30.3 | 587 | 15 | 0.797800933 |
| 119 | Y−99 Spot 127 | 110 | 153 | 24994 | 1.4 | 14.4978 | 1.0 | 1.4068 | 1.6 | 0.1480 | 1.2 | 0.77 | 889.7 | 10.2 | 891.8 | 9.5 | 897.1 | 20.9 | 891 | 18 | −0.83093015 |
| 120 | Y−99 Spot 128 | 146 | 203 | 16598 | 1.4 | 16.5954 | 1.1 | 0.8513 | 1.7 | 0.1025 | 1.3 | 0.76 | 629.1 | 7.7 | 625.4 | 7.9 | 611.9 | 23.6 | 627 | 15 | 2.814811628 |
| 121 | Y−99 Spot 129 | 30 | 136 | 47668 | 4.6 | 5.3571 | 1.7 | 11.8035 | 4.9 | 0.4588 | 4.6 | 0.94 | 2434.3 | 92.5 | 2588.9 | 45.5 | 2712.3 | 27.6 | 2692 | 49 | −10.2500461 |
| 122 | Y−99 Spot 130 | 115 | 398 | 31578 | 3.5 | 17.0445 | 1.1 | 0.7885 | 1.6 | 0.0975 | 1.2 | 0.74 | 599.8 | 6.6 | 590.3 | 7.0 | 553.9 | 23.2 | 596 | 13 | 8.286559408 |
| Chiron Basin | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Sample Y−98: a sandstone of the Khara–Shibir Formation* | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Y−98 Spot 1 | 170 | 425 | 72554 | 2.5 | 18.3448 | 0.8 | 0.4630 | 1.4 | 0.0616 | 1.1 | 0.80 | 385.5 | 4.1 | 386.3 | 4.4 | 391.2 | 18.3 | 385.8 | 8 | −1.46784921 |
| 2 | Y−98 Spot 2 | 116 | 182 | 151337 | 1.6 | 18.7056 | 1.1 | 0.4094 | 1.7 | 0.0556 | 1.2 | 0.74 | 348.6 | 4.2 | 348.5 | 4.9 | 347.4 | 25.2 | 348.6 | 8.3 | 0.367084069 |
| 3 | Y−98 Spot 3 | 99 | 180 | 4104 | 1.8 | 19.9122 | 1.4 | 0.3831 | 1.8 | 0.0553 | 1.2 | 0.66 | 347.3 | 4.0 | 329.3 | 5.1 | 204.2 | 31.4 |  |  |  |
| 4 | Y−98 Spot 4 | 237 | 484 | 69505 | 2.0 | 18.4393 | 0.9 | 0.4595 | 1.5 | 0.0615 | 1.2 | 0.80 | 384.6 | 4.5 | 383.9 | 4.8 | 379.7 | 20.6 | 384.3 | 8.7 | 1.281459328 |
| 5 | Y−98 Spot 5 | 221 | 495 | 183632 | 2.2 | 18.6953 | 0.8 | 0.4120 | 1.3 | 0.0559 | 1.1 | 0.80 | 350.5 | 3.7 | 350.3 | 4.0 | 348.6 | 18.2 | 350.5 | 7.2 | 0.542124358 |
| 6 | Y−98 Spot 6 | 240 | 513 | 62909 | 2.1 | 18.9387 | 1.0 | 0.4146 | 1.8 | 0.0570 | 1.5 | 0.84 | 357.2 | 5.4 | 352.2 | 5.5 | 319.3 | 22.4 | 355 | 10 | 11.86741323 |
| 7 | Y−98 Spot 7 | 94 | 199 | 137863 | 2.1 | 18.4164 | 1.1 | 0.4140 | 1.8 | 0.0553 | 1.4 | 0.80 | 347.1 | 4.9 | 351.7 | 5.4 | 382.5 | 24.4 | 348.3 | 9.6 | −9.25898948 |
| 8 | Y−98 Spot 8 | 359 | 793 | 53501 | 2.2 | 18.7815 | 0.7 | 0.4127 | 1.6 | 0.0562 | 1.5 | 0.90 | 352.7 | 5.1 | 350.8 | 4.9 | 338.2 | 15.9 | 351.3 | 9.7 | 4.290286527 |
| 9 | Y−98 Spot 9 | 189 | 351 | 26180 | 1.9 | 18.3733 | 1.0 | 0.4687 | 1.5 | 0.0625 | 1.1 | 0.74 | 390.7 | 4.1 | 390.3 | 4.8 | 387.7 | 22.4 | 390.6 | 8.1 | 0.766468769 |
| 10 | Y−98 Spot 10 | 70 | 137 | 4556 | 2.0 | 19.0719 | 1.4 | 0.4585 | 1.9 | 0.0634 | 1.3 | 0.69 | 396.5 | 5.0 | 383.2 | 6.0 | 303.4 | 31.3 | 393.5 | 9.8 | 30.72049889 |
| 11 | Y−98 Spot 11 | 77 | 164 | 9441 | 2.1 | 19.2668 | 1.2 | 0.4189 | 1.6 | 0.0586 | 1.0 | 0.66 | 366.9 | 3.7 | 355.3 | 4.7 | 280.2 | 26.8 | 364.8 | 7.2 | 30.95324187 |
| 12 | Y−98 Spot 12 | 295 | 318 | 17182 | 1.1 | 18.7228 | 0.9 | 0.4446 | 1.4 | 0.0604 | 1.1 | 0.76 | 378.1 | 3.9 | 373.5 | 4.4 | 345.3 | 20.7 | 376.8 | 7.6 | 9.49009904 |
| 13 | Y−98 Spot 13 | 171 | 193 | 19624 | 1.1 | 18.8670 | 1.3 | 0.4021 | 1.7 | 0.0550 | 1.2 | 0.68 | 345.4 | 4.0 | 343.2 | 5.0 | 327.9 | 28.7 | 345.1 | 7.9 | 5.33134656 |
| 14 | Y−98 Spot 14 | 306 | 550 | 20593 | 1.8 | 16.9863 | 1.3 | 0.6598 | 1.9 | 0.0813 | 1.3 | 0.70 | 504.0 | 6.3 | 514.5 | 7.5 | 561.4 | 28.9 | 506 | 12 | −10.2241603 |
| 15 | Y−98 Spot 15 | 219 | 869 | 8485 | 4.0 | 17.0863 | 1.7 | 0.4561 | 2.1 | 0.0565 | 1.3 | 0.59 | 354.6 | 4.4 | 381.5 | 6.8 | 548.6 | 37.8 |  |  |  |
| 16 | Y−98 Spot 16 | 242 | 494 | 60231 | 2.0 | 18.9100 | 1.0 | 0.3872 | 1.7 | 0.0531 | 1.3 | 0.79 | 333.7 | 4.3 | 332.4 | 4.8 | 322.8 | 23.6 | 333.4 | 8.5 | 3.394252726 |
| 17 | Y−98 Spot 17 | 746 | 636 | 38836 | 0.9 | 18.7672 | 1.0 | 0.4068 | 1.9 | 0.0554 | 1.6 | 0.83 | 347.6 | 5.3 | 346.6 | 5.5 | 340.0 | 23.8 | 347 | 10 | 2.237151019 |
| 18 | Y−98 Spot 18 | 88 | 155 | 6882 | 1.8 | 17.5664 | 2.2 | 0.4181 | 2.7 | 0.0533 | 1.5 | 0.56 | 334.7 | 4.8 | 354.7 | 8.0 | 487.7 | 49.0 | 335.4 | 9.7 | −31.3772999 |
| 19 | Y−98 Spot 19 | 54 | 132 | 56254 | 2.4 | 18.4174 | 1.2 | 0.4165 | 1.7 | 0.0557 | 1.2 | 0.71 | 349.1 | 4.1 | 353.5 | 5.0 | 382.4 | 26.7 | 349.8 | 8.1 | −8.68804821 |
| 20 | Y−98 Spot 20 | 579 | 757 | 101760 | 1.3 | 18.6085 | 0.8 | 0.4004 | 1.5 | 0.0541 | 1.2 | 0.84 | 339.4 | 4.1 | 341.9 | 4.2 | 359.1 | 17.9 | 340.3 | 8 | −5.49515804 |
| 21 | Y−98 Spot 21 | 192 | 283 | 15431 | 1.5 | 18.7243 | 1.0 | 0.4065 | 1.5 | 0.0552 | 1.2 | 0.78 | 346.6 | 4.0 | 346.4 | 4.5 | 345.1 | 21.6 | 346.5 | 7.8 | 0.423314312 |
| 22 | Y−98 Spot 22 | 125 | 333 | 8040 | 2.7 | 19.1116 | 1.5 | 0.4344 | 2.1 | 0.0602 | 1.4 | 0.67 | 377.0 | 5.0 | 366.3 | 6.3 | 298.6 | 34.8 | 375 | 9.9 | 26.27319783 |
| 23 | Y−98 Spot 23 | 394 | 544 | 35578 | 1.4 | 18.8173 | 0.8 | 0.4122 | 1.5 | 0.0563 | 1.2 | 0.82 | 353.0 | 4.1 | 350.5 | 4.3 | 333.9 | 18.7 | 352 | 8 | 5.722331208 |
| 24 | Y−98 Spot 24 | 181 | 263 | 35575 | 1.5 | 18.7042 | 1.1 | 0.4053 | 1.8 | 0.0550 | 1.5 | 0.80 | 345.2 | 4.9 | 345.5 | 5.4 | 347.5 | 25.2 | 345.2 | 9.7 | −0.68270187 |
| 25 | Y−98 Spot 25 | 144 | 260 | 30242 | 1.8 | 18.3782 | 1.0 | 0.4665 | 1.5 | 0.0622 | 1.1 | 0.74 | 389.0 | 4.2 | 388.7 | 4.9 | 387.2 | 22.9 | 388.9 | 8.3 | 0.476460504 |
| 26 | Y−98 Spot 26 | 63 | 167 | 25129 | 2.7 | 18.5983 | 1.0 | 0.4205 | 1.5 | 0.0567 | 1.1 | 0.74 | 355.8 | 4.0 | 356.4 | 4.6 | 360.4 | 23.2 | 355.9 | 7.8 | −1.26661112 |
| 27 | Y−98 Spot 27 | 44 | 165 | 10930083 | 3.7 | 18.3002 | 1.1 | 0.4280 | 1.5 | 0.0568 | 1.1 | 0.71 | 356.4 | 3.8 | 361.8 | 4.7 | 396.7 | 24.3 | 357.2 | 7.5 | −10.1681953 |
| 28 | Y−98 Spot 28 | 229 | 425 | 144916 | 1.9 | 18.4974 | 1.1 | 0.4175 | 1.9 | 0.0560 | 1.5 | 0.80 | 351.5 | 5.2 | 354.3 | 5.6 | 372.6 | 25.3 | 352 | 10 | −5.67530608 |
| 29 | Y−98 Spot 29 | 217 | 408 | 108702 | 1.9 | 18.4455 | 0.8 | 0.4376 | 1.7 | 0.0586 | 1.5 | 0.88 | 366.9 | 5.3 | 368.6 | 5.2 | 378.9 | 17.8 | 368 | 10 | −3.17658236 |
| 30 | Y−98 Spot 30 | 151 | 203 | 189769 | 1.3 | 18.3550 | 0.9 | 0.4570 | 1.4 | 0.0609 | 1.1 | 0.78 | 380.8 | 4.2 | 382.1 | 4.6 | 390.0 | 20.5 | 381.2 | 8.2 | −2.34595421 |
| 31 | Y−98 Spot 31 | 244 | 255 | 35996 | 1.0 | 18.3937 | 0.9 | 0.4659 | 1.4 | 0.0622 | 1.1 | 0.77 | 388.9 | 4.2 | 388.4 | 4.6 | 385.3 | 20.5 | 388.7 | 8.2 | 0.940928838 |
| 32 | Y−98 Spot 32 | 189 | 359 | 45228 | 1.9 | 18.8085 | 1.0 | 0.4130 | 1.8 | 0.0564 | 1.4 | 0.82 | 353.4 | 5.0 | 351.0 | 5.2 | 335.0 | 22.9 | 352.6 | 9.7 | 5.515887718 |
| 33 | Y−98 Spot 33 | 166 | 308 | 19061 | 1.9 | 18.4116 | 1.3 | 0.4298 | 1.9 | 0.0574 | 1.4 | 0.72 | 359.9 | 4.8 | 363.0 | 5.8 | 383.1 | 29.2 | 360.4 | 9.5 | −6.05297878 |
| 34 | Y−98 Spot 34 | 225 | 355 | 50824 | 1.6 | 18.4989 | 0.9 | 0.4770 | 1.6 | 0.0640 | 1.3 | 0.82 | 400.0 | 4.9 | 396.0 | 5.1 | 372.4 | 20.2 | 398.3 | 9.6 | 7.408955471 |
| 35 | Y−98 Spot 35 | 128 | 201 | 6881 | 1.6 | 19.2844 | 1.2 | 0.3975 | 1.8 | 0.0556 | 1.3 | 0.72 | 348.9 | 4.4 | 339.8 | 5.1 | 278.1 | 28.0 | 346.8 | 8.6 | 25.47232044 |
| 36 | Y−98 Spot 36 | 63 | 97 | 44855 | 1.5 | 18.1843 | 1.3 | 0.4614 | 1.8 | 0.0609 | 1.4 | 0.73 | 381.0 | 5.0 | 385.2 | 5.9 | 410.9 | 28.1 | 381.8 | 9.9 | −7.29121914 |
| 37 | Y−98 Spot 37 | 134 | 187 | 11636 | 1.4 | 18.9040 | 1.4 | 0.4075 | 1.9 | 0.0559 | 1.3 | 0.68 | 350.6 | 4.4 | 347.0 | 5.5 | 323.5 | 31.5 | 350 | 8.6 | 8.382802608 |
| 38 | Y−98 Spot 38 | 127 | 220 | 22131 | 1.7 | 18.7391 | 0.9 | 0.4365 | 1.5 | 0.0594 | 1.3 | 0.81 | 371.7 | 4.5 | 367.8 | 4.7 | 343.3 | 20.2 | 370.2 | 8.8 | 8.256008756 |
| 39 | Y−98 Spot 39 | 123 | 328 | 21851 | 2.7 | 18.3861 | 1.0 | 0.4229 | 1.6 | 0.0564 | 1.3 | 0.79 | 353.8 | 4.4 | 358.1 | 4.9 | 386.2 | 22.5 | 354.9 | 8.7 | −8.39086096 |
| 40 | Y−98 Spot 40 | 164 | 484 | 25580 | 2.9 | 18.9953 | 0.9 | 0.4174 | 1.6 | 0.0575 | 1.3 | 0.82 | 360.6 | 4.7 | 354.2 | 4.9 | 312.5 | 21.5 | 358 | 9.1 | 15.37582752 |
| 41 | Y−98 Spot 41 | 69 | 249 | 39171 | 3.6 | 18.3808 | 1.3 | 0.4156 | 1.8 | 0.0554 | 1.3 | 0.72 | 347.8 | 4.4 | 352.9 | 5.4 | 386.8 | 28.1 | 348.6 | 8.7 | −10.0928785 |
| 42 | Y−98 Spot 42 | 1729 | 1172 | 548 | 0.7 | 7.1668 | 13.9 | 0.9171 | 14.0 | 0.0477 | 1.6 | 0.11 | 300.3 | 4.7 | 660.8 | 68.3 | 2220.6 | 242.9 |  |  |  |
| 43 | Y−98 Spot 43 | 131 | 257 | 6525 | 2.0 | 19.3219 | 1.1 | 0.3758 | 1.5 | 0.0527 | 1.1 | 0.72 | 331.0 | 3.5 | 324.0 | 4.2 | 273.6 | 24.3 | 329.6 | 6.9 | 20.99991634 |
| 44 | Y−98 Spot 44 | 122 | 229 | 6338 | 1.9 | 18.9559 | 0.9 | 0.4028 | 1.6 | 0.0554 | 1.3 | 0.83 | 347.6 | 4.4 | 343.7 | 4.6 | 317.2 | 19.8 | 346 | 8.6 | 9.58151379 |
| 45 | Y−98 Spot 45 | 135 | 360 | 18499 | 2.7 | 18.6913 | 1.0 | 0.4136 | 1.6 | 0.0561 | 1.2 | 0.78 | 351.8 | 4.2 | 351.4 | 4.7 | 349.1 | 22.3 | 351.7 | 8.3 | 0.776343394 |
| 46 | Y−98 Spot 46 | 63 | 98 | 34300 | 1.6 | 17.9213 | 1.3 | 0.5288 | 1.8 | 0.0688 | 1.2 | 0.67 | 428.7 | 5.0 | 431.0 | 6.3 | 443.4 | 29.9 | 429.1 | 9.8 | −3.31172274 |
| 47 | Y−98 Spot 47 | 204 | 372 | 8350 | 1.8 | 19.0352 | 0.9 | 0.4079 | 1.6 | 0.0563 | 1.3 | 0.81 | 353.3 | 4.4 | 347.3 | 4.7 | 307.7 | 21.5 | 351.2 | 8.6 | 14.80414339 |
| 48 | Y−98 Spot 48 | 146 | 281 | 63240 | 1.9 | 18.3053 | 1.1 | 0.4190 | 1.5 | 0.0557 | 1.1 | 0.71 | 349.1 | 3.6 | 355.3 | 4.5 | 396.1 | 23.9 | 350 | 7.2 | −11.8534861 |
| 49 | Y−98 Spot 49 | 54 | 143 | 23973 | 2.6 | 18.7721 | 1.1 | 0.3982 | 1.7 | 0.0542 | 1.3 | 0.75 | 340.5 | 4.2 | 340.3 | 4.8 | 339.4 | 24.8 | 340.4 | 8.2 | 0.322448785 |
| 50 | Y−98 Spot 50 | 136 | 214 | 3861 | 1.6 | 19.2159 | 1.8 | 0.4712 | 2.2 | 0.0657 | 1.2 | 0.53 | 410.1 | 4.6 | 392.0 | 7.1 | 286.2 | 42.3 | 408.1 | 9.1 | 43.30679982 |
| 51 | Y−98 Spot 51 | 121 | 342 | 2516 | 2.8 | 14.3724 | 2.1 | 0.5482 | 2.6 | 0.0572 | 1.5 | 0.58 | 358.4 | 5.2 | 443.8 | 9.3 | 915.0 | 43.2 |  |  |  |
| 52 | Y−98 Spot 52 | 104 | 121 | 94127 | 1.2 | 18.1367 | 1.1 | 0.4298 | 1.8 | 0.0566 | 1.4 | 0.78 | 354.7 | 4.8 | 363.0 | 5.4 | 416.8 | 24.9 | 356.4 | 9.4 | −14.900708 |
| 53 | Y−98 Spot 53 | 326 | 361 | 85855 | 1.1 | 18.5027 | 1.1 | 0.4198 | 1.5 | 0.0564 | 1.1 | 0.71 | 353.5 | 3.7 | 355.9 | 4.5 | 372.0 | 24.1 | 353.9 | 7.3 | −4.97435934 |
| 54 | Y−98 Spot 54 | 242 | 470 | 41153 | 1.9 | 18.2805 | 0.7 | 0.5003 | 1.6 | 0.0664 | 1.4 | 0.89 | 414.2 | 5.8 | 411.9 | 5.5 | 399.1 | 16.4 | 412 | 11 | 3.771817715 |
| 55 | Y−98 Spot 55 | 202 | 372 | 33212 | 1.8 | 18.3381 | 0.7 | 0.4701 | 1.4 | 0.0626 | 1.1 | 0.85 | 391.1 | 4.4 | 391.3 | 4.4 | 392.1 | 16.1 | 391.2 | 8.4 | −0.23416816 |
| 56 | Y−98 Spot 56 | 60 | 136 | 26590 | 2.3 | 18.4119 | 1.0 | 0.4197 | 1.5 | 0.0561 | 1.1 | 0.75 | 351.7 | 3.9 | 355.8 | 4.6 | 383.0 | 22.6 | 352.5 | 7.7 | −8.1873504 |
| 57 | Y−98 Spot 57 | 270 | 605 | 45073 | 2.2 | 18.5215 | 0.9 | 0.4157 | 1.8 | 0.0559 | 1.5 | 0.86 | 350.4 | 5.3 | 352.9 | 5.3 | 369.7 | 20.3 | 352 | 10 | −5.21576818 |
| 58 | Y−98 Spot 58 | 280 | 574 | 26572 | 2.1 | 19.0757 | 1.0 | 0.4146 | 1.5 | 0.0574 | 1.2 | 0.77 | 359.7 | 4.1 | 352.2 | 4.5 | 302.9 | 21.8 | 357.4 | 8 | 18.7474517 |
| 59 | Y−98 Spot 59 | 198 | 319 | 12063 | 1.6 | 18.9683 | 1.1 | 0.4530 | 1.7 | 0.0624 | 1.3 | 0.77 | 389.9 | 4.9 | 379.4 | 5.3 | 315.7 | 24.5 | 386.4 | 9.5 | 23.49427853 |
| 60 | Y−98 Spot 60 | 152 | 495 | 96403 | 3.3 | 18.2991 | 1.0 | 0.4598 | 1.8 | 0.0611 | 1.6 | 0.85 | 382.0 | 5.8 | 384.1 | 5.8 | 396.8 | 21.6 | 383 | 11 | −3.72872773 |
| 61 | Y−98 Spot 61 | 317 | 511 | 37330 | 1.6 | 18.8517 | 0.9 | 0.4158 | 1.7 | 0.0569 | 1.5 | 0.85 | 356.6 | 5.1 | 353.0 | 5.2 | 329.7 | 20.7 | 354.9 | 9.9 | 8.129509267 |
| 62 | Y−98 Spot 62 | 65 | 123 | 29376 | 1.9 | 18.6012 | 1.4 | 0.4440 | 1.9 | 0.0599 | 1.3 | 0.68 | 375.1 | 4.7 | 373.0 | 5.9 | 360.0 | 31.4 | 374.8 | 9.3 | 4.202147266 |
| 63 | Y−98 Spot 63 | 109 | 180 | 6654 | 1.7 | 19.1144 | 2.2 | 0.3972 | 2.6 | 0.0551 | 1.3 | 0.51 | 345.7 | 4.4 | 339.6 | 7.4 | 298.3 | 50.5 | 345.3 | 8.7 | 15.90760491 |
| 64 | Y−98 Spot 64 | 231 | 326 | 15357 | 1.4 | 18.9479 | 1.0 | 0.4257 | 1.4 | 0.0585 | 1.0 | 0.71 | 366.7 | 3.7 | 360.1 | 4.4 | 318.2 | 23.0 | 365.3 | 7.2 | 15.24185222 |
| 65 | Y−98 Spot 65 | 81 | 126 | 32902 | 1.6 | 18.2385 | 1.1 | 0.4238 | 1.7 | 0.0561 | 1.3 | 0.75 | 351.8 | 4.5 | 358.8 | 5.3 | 404.3 | 25.6 | 353.1 | 8.9 | −12.9845866 |
| 66 | Y−98 Spot 66 | 55 | 113 | 23688 | 2.1 | 18.5373 | 1.0 | 0.4161 | 1.6 | 0.0560 | 1.2 | 0.77 | 351.0 | 4.1 | 353.2 | 4.7 | 367.8 | 22.9 | 351.5 | 8.2 | −4.54824574 |
| 67 | Y−98 Spot 67 | 423 | 538 | 28935 | 1.3 | 17.7325 | 1.0 | 0.4821 | 1.6 | 0.0620 | 1.3 | 0.81 | 387.9 | 5.0 | 399.5 | 5.4 | 466.9 | 21.3 |  |  |  |
| 68 | Y−98 Spot 68 | 203 | 647 | 16772 | 3.2 | 17.9847 | 0.9 | 0.4666 | 1.7 | 0.0609 | 1.4 | 0.84 | 381.0 | 5.3 | 388.9 | 5.4 | 435.5 | 20.0 | 384 | 10 | −12.5132804 |
| 69 | Y−98 Spot 69 | 71 | 95 | 4819 | 1.3 | 19.5334 | 1.2 | 0.3958 | 1.7 | 0.0561 | 1.2 | 0.71 | 351.9 | 4.0 | 338.6 | 4.8 | 248.6 | 27.1 |  |  |  |
| 70 | Y−98 Spot 70 | 216 | 493 | 15161 | 2.3 | 19.0089 | 0.9 | 0.4113 | 1.6 | 0.0567 | 1.3 | 0.82 | 355.7 | 4.6 | 349.8 | 4.8 | 310.9 | 21.1 | 353.5 | 8.9 | 14.43178717 |
| 71 | Y−98 Spot 71 | 138 | 386 | 20107 | 2.8 | 18.7829 | 0.9 | 0.4187 | 1.5 | 0.0571 | 1.2 | 0.81 | 357.7 | 4.3 | 355.1 | 4.6 | 338.0 | 20.4 | 356.8 | 8.3 | 5.821556608 |
| 72 | Y−98 Spot 72 | 122 | 206 | 13571 | 1.7 | 18.5189 | 1.1 | 0.4272 | 1.7 | 0.0574 | 1.2 | 0.74 | 359.8 | 4.3 | 361.2 | 5.1 | 370.0 | 25.1 | 360.1 | 8.5 | −2.76250568 |
| 73 | Y−98 Spot 73 | 236 | 524 | 38467 | 2.2 | 18.4391 | 0.8 | 0.4177 | 1.4 | 0.0559 | 1.2 | 0.83 | 350.6 | 4.0 | 354.4 | 4.3 | 379.7 | 18.1 | 351.8 | 7.9 | −7.67559726 |
| 74 | Y−98 Spot 74 | 171 | 295 | 10781 | 1.7 | 18.8622 | 0.9 | 0.4202 | 1.6 | 0.0575 | 1.3 | 0.83 | 360.4 | 4.7 | 356.2 | 4.9 | 328.5 | 20.7 | 358.7 | 9.1 | 9.70982389 |
| 75 | Y−98 Spot 75 | 244 | 187 | 3618 | 0.8 | 19.5434 | 1.1 | 0.4221 | 1.5 | 0.0599 | 1.0 | 0.65 | 374.7 | 3.6 | 357.5 | 4.5 | 247.4 | 26.1 |  |  |  |
| 76 | Y−98 Spot 76 | 240 | 495 | 52489 | 2.1 | 17.5970 | 0.9 | 0.4346 | 1.6 | 0.0555 | 1.4 | 0.85 | 348.1 | 4.7 | 366.4 | 5.1 | 483.9 | 19.0 |  |  |  |
| 77 | Y−98 Spot 77 | 199 | 301 | 22648 | 1.5 | 18.4157 | 1.2 | 0.4551 | 1.8 | 0.0608 | 1.3 | 0.73 | 380.6 | 4.7 | 380.9 | 5.6 | 382.6 | 27.0 | 380.6 | 9.3 | −0.5195997 |
| 78 | Y−98 Spot 78 | 279 | 541 | 142775 | 1.9 | 18.4639 | 0.9 | 0.4161 | 1.6 | 0.0557 | 1.4 | 0.85 | 349.7 | 4.7 | 353.2 | 4.9 | 376.7 | 19.2 | 351.1 | 9.3 | −7.17177949 |
| 79 | Y−98 Spot 79 | 291 | 377 | 35394 | 1.3 | 18.5207 | 0.6 | 0.4182 | 1.5 | 0.0562 | 1.3 | 0.90 | 352.4 | 4.5 | 354.7 | 4.4 | 369.8 | 14.5 | 353.9 | 8.7 | −4.68792751 |
| 80 | Y−98 Spot 80 | 158 | 262 | 7496 | 1.7 | 18.7991 | 1.2 | 0.4423 | 1.8 | 0.0603 | 1.3 | 0.73 | 377.7 | 4.8 | 371.9 | 5.6 | 336.1 | 27.7 | 376.3 | 9.5 | 12.3650484 |
| 81 | Y−98 Spot 81 | 66 | 147 | 5434 | 2.2 | 19.9384 | 1.5 | 0.3892 | 2.0 | 0.0563 | 1.3 | 0.67 | 353.1 | 4.6 | 333.8 | 5.7 | 201.1 | 34.5 |  |  |  |
| 82 | Y−98 Spot 82 | 221 | 608 | 1559 | 2.8 | 13.3000 | 5.1 | 0.6304 | 5.3 | 0.0608 | 1.5 | 0.27 | 380.7 | 5.4 | 496.4 | 21.0 | 1072.7 | 103.3 |  |  |  |
| 83 | Y−98 Spot 83 | 187 | 269 | 7689 | 1.4 | 19.2371 | 1.8 | 0.3967 | 2.3 | 0.0554 | 1.4 | 0.61 | 347.4 | 4.8 | 339.2 | 6.7 | 283.7 | 42.1 | 346.4 | 9.5 | 22.46247702 |
| 84 | Y−98 Spot 84 | 219 | 319 | 212682 | 1.5 | 18.5287 | 1.1 | 0.4353 | 1.6 | 0.0585 | 1.1 | 0.71 | 366.6 | 4.1 | 366.9 | 4.9 | 368.8 | 25.4 | 366.7 | 8 | −0.59883948 |
| 85 | Y−98 Spot 85 | 212 | 367 | 35750 | 1.7 | 18.2663 | 0.9 | 0.4839 | 1.6 | 0.0641 | 1.3 | 0.82 | 400.7 | 5.2 | 400.8 | 5.4 | 400.8 | 20.7 | 401 | 10 | −0.02552995 |
| 86 | Y−98 Spot 86 | 115 | 114 | 5842 | 1.0 | 19.1620 | 1.3 | 0.4528 | 1.7 | 0.0630 | 1.2 | 0.70 | 393.6 | 4.6 | 379.3 | 5.5 | 292.6 | 28.6 |  |  |  |
| 87 | Y−98 Spot 87 | 68 | 132 | 14552 | 2.0 | 17.8726 | 1.2 | 0.5046 | 1.6 | 0.0654 | 1.0 | 0.65 | 408.6 | 4.2 | 414.8 | 5.5 | 449.5 | 27.0 | 409.5 | 8.2 | −9.08573484 |
| 88 | Y−98 Spot 88 | 127 | 281 | 3542 | 2.2 | 20.0165 | 4.3 | 0.3892 | 4.5 | 0.0565 | 1.2 | 0.26 | 354.5 | 4.0 | 333.8 | 12.8 | 192.1 | 100.9 | 354 | 8.1 | 84.5385385 |
| 89 | Y−98 Spot 89 | 166 | 215 | 32444 | 1.3 | 18.0624 | 0.9 | 0.4606 | 1.6 | 0.0604 | 1.3 | 0.84 | 377.8 | 4.8 | 384.7 | 5.0 | 425.9 | 19.3 | 380.3 | 9.4 | −11.2945343 |
| 90 | Y−98 Spot 90 | 246 | 938 | 99420 | 3.8 | 18.4036 | 0.9 | 0.4606 | 1.6 | 0.0615 | 1.3 | 0.82 | 384.8 | 4.8 | 384.7 | 5.1 | 384.1 | 20.5 | 384.8 | 9.4 | 0.197380937 |
| 91 | Y−98 Spot 91 | 117 | 348 | 10940 | 3.0 | 18.8386 | 1.1 | 0.4085 | 1.7 | 0.0558 | 1.3 | 0.77 | 350.3 | 4.5 | 347.8 | 5.0 | 331.4 | 24.7 | 349.6 | 8.8 | 5.704222893 |
| 92 | Y−98 Spot 92 | 249 | 450 | 31872 | 1.8 | 18.2398 | 0.9 | 0.4601 | 1.4 | 0.0609 | 1.1 | 0.80 | 381.1 | 4.2 | 384.3 | 4.5 | 404.1 | 19.2 | 382 | 8.2 | −5.70099828 |
| 93 | Y−98 Spot 93 | 70 | 138 | 25943 | 2.0 | 18.8119 | 1.2 | 0.4100 | 1.8 | 0.0560 | 1.3 | 0.74 | 351.0 | 4.5 | 348.8 | 5.2 | 334.5 | 27.2 | 350.5 | 8.8 | 4.914250528 |
| 94 | Y−98 Spot 94 | 240 | 339 | 12906 | 1.4 | 18.7003 | 1.0 | 0.4079 | 1.6 | 0.0553 | 1.3 | 0.80 | 347.2 | 4.3 | 347.3 | 4.7 | 348.0 | 21.7 | 347.3 | 8.5 | −0.22837126 |
| 95 | Y−98 Spot 95 | 132 | 204 | 27110 | 1.6 | 18.6282 | 1.1 | 0.4712 | 1.5 | 0.0637 | 1.1 | 0.72 | 398.0 | 4.3 | 392.0 | 5.0 | 356.7 | 24.2 | 396.6 | 8.5 | 11.57503063 |
| 96 | Y−98 Spot 96 | 89 | 228 | 22578 | 2.6 | 17.5076 | 1.4 | 0.4454 | 1.9 | 0.0566 | 1.3 | 0.67 | 354.8 | 4.4 | 374.1 | 5.9 | 495.2 | 30.8 |  |  |  |
| 97 | Y−98 Spot 97 | 333 | 1258 | 140931 | 3.8 | 18.3437 | 0.8 | 0.4321 | 1.5 | 0.0575 | 1.2 | 0.84 | 360.5 | 4.3 | 364.7 | 4.5 | 391.4 | 18.1 | 362 | 8.5 | −7.88515987 |
| 98 | Y−98 Spot 98 | 143 | 267 | 23971 | 1.9 | 18.4701 | 1.0 | 0.4500 | 1.6 | 0.0603 | 1.2 | 0.77 | 377.5 | 4.4 | 377.3 | 5.0 | 375.9 | 22.7 | 377.4 | 8.7 | 0.40846048 |
| 99 | Y−98 Spot 99 | 94 | 151 | 5627 | 1.6 | 19.0816 | 1.3 | 0.4099 | 1.7 | 0.0568 | 1.1 | 0.66 | 355.9 | 3.9 | 348.8 | 5.0 | 302.2 | 28.9 | 354.7 | 7.7 | 17.77392019 |
| 100 | Y−98 Spot 100 | 51 | 131 | 7134 | 2.6 | 19.3307 | 1.5 | 0.4092 | 1.9 | 0.0574 | 1.1 | 0.60 | 359.7 | 4.0 | 348.3 | 5.6 | 272.5 | 34.9 | 358.2 | 7.9 | 32.00296858 |
| 101 | Y−98 Spot 101 | 252 | 557 | 30966 | 2.2 | 18.4717 | 0.8 | 0.4204 | 1.7 | 0.0564 | 1.5 | 0.89 | 353.4 | 5.1 | 356.4 | 5.0 | 375.7 | 17.0 | 355.2 | 9.9 | −5.94538924 |
| 102 | Y−98 Spot 102 | 153 | 306 | 5912 | 2.0 | 19.3786 | 1.0 | 0.3923 | 1.7 | 0.0552 | 1.4 | 0.80 | 346.2 | 4.6 | 336.1 | 5.0 | 266.9 | 24.0 | 342.5 | 9 | 29.71142269 |
| 103 | Y−98 Spot 103 | 152 | 350 | 25627 | 2.3 | 18.7362 | 0.9 | 0.4172 | 1.5 | 0.0567 | 1.2 | 0.82 | 355.6 | 4.3 | 354.1 | 4.5 | 343.7 | 19.3 | 355.1 | 8.4 | 3.48554072 |
| 104 | Y−98 Spot 104 | 225 | 501 | 97817 | 2.2 | 18.5349 | 0.9 | 0.4176 | 1.6 | 0.0562 | 1.4 | 0.84 | 352.2 | 4.7 | 354.3 | 4.9 | 368.1 | 20.0 | 353 | 9.1 | −4.29772837 |
| 105 | Y−98 Spot 105 | 98 | 146 | 84132 | 1.5 | 18.7135 | 1.0 | 0.4410 | 1.6 | 0.0599 | 1.2 | 0.77 | 374.9 | 4.5 | 371.0 | 5.0 | 346.4 | 22.9 | 373.8 | 8.8 | 8.229282787 |
| 106 | Y−98 Spot 106 | 56 | 163 | 6323 | 2.9 | 19.1982 | 1.0 | 0.4112 | 1.8 | 0.0573 | 1.4 | 0.81 | 359.1 | 5.0 | 349.7 | 5.2 | 288.3 | 23.7 | 355.3 | 9.7 | 24.56101051 |
| 107 | Y−98 Spot 107 | 96 | 214 | 4205 | 2.2 | 17.8340 | 2.1 | 0.4498 | 2.5 | 0.0582 | 1.3 | 0.53 | 364.7 | 4.7 | 377.1 | 7.9 | 454.3 | 47.1 | 365.3 | 9.4 | −19.7226588 |
| 108 | Y−98 Spot 108 | 175 | 323 | 39595 | 1.8 | 18.4301 | 1.0 | 0.4153 | 1.6 | 0.0555 | 1.3 | 0.79 | 348.4 | 4.3 | 352.7 | 4.8 | 380.8 | 22.0 | 349.5 | 8.5 | −8.50541502 |
| 109 | Y−98 Spot 109 | 907 | 1307 | 28640 | 1.4 | 17.8036 | 1.0 | 0.4679 | 1.6 | 0.0604 | 1.3 | 0.79 | 378.3 | 4.7 | 389.7 | 5.2 | 458.1 | 21.7 |  |  |  |
| 110 | Y−98 Spot 110 | 109 | 240 | 13069 | 2.2 | 18.6782 | 1.1 | 0.4511 | 1.6 | 0.0611 | 1.3 | 0.77 | 382.5 | 4.7 | 378.1 | 5.2 | 350.7 | 23.8 | 381.2 | 9.2 | 9.080690116 |
| 111 | Y−98 Spot 111 | 199 | 377 | 37475 | 1.9 | 18.2232 | 1.0 | 0.4655 | 1.4 | 0.0615 | 0.9 | 0.69 | 385.0 | 3.5 | 388.1 | 4.5 | 406.1 | 22.5 | 385.5 | 7 | −5.1984512 |
| 112 | Y−98 Spot 112 | 104 | 161 | 31971 | 1.5 | 16.6350 | 1.4 | 0.5083 | 1.8 | 0.0614 | 1.1 | 0.62 | 383.8 | 4.2 | 417.3 | 6.2 | 606.7 | 30.6 |  |  |  |
| 113 | Y−98 Spot 113 | 123 | 285 | 6453 | 2.3 | 19.0978 | 2.3 | 0.4144 | 2.7 | 0.0574 | 1.4 | 0.52 | 359.9 | 4.8 | 352.0 | 7.9 | 300.3 | 52.1 | 359.3 | 9.6 | 19.86210358 |
| 114 | Y−98 Spot 114 | 237 | 648 | 227872 | 2.7 | 18.2801 | 1.1 | 0.4592 | 1.9 | 0.0609 | 1.5 | 0.82 | 381.2 | 5.6 | 383.7 | 5.9 | 399.2 | 24.0 | 382 | 11 | −4.50655091 |
| 115 | Y−98 Spot 115 | 89 | 194 | 483505 | 2.2 | 18.6473 | 0.7 | 0.4280 | 1.6 | 0.0579 | 1.5 | 0.89 | 362.9 | 5.2 | 361.8 | 5.0 | 354.4 | 16.6 | 362.2 | 9.8 | 2.399941042 |
| 116 | Y−98 Spot 116 | 143 | 184 | 3522 | 1.3 | 20.1448 | 1.5 | 0.3940 | 2.0 | 0.0576 | 1.2 | 0.61 | 361.0 | 4.2 | 337.3 | 5.6 | 177.2 | 36.0 |  |  |  |
| 117 | Y−98 Spot 117 | 73 | 177 | 112494 | 2.4 | 18.7000 | 1.1 | 0.4296 | 1.9 | 0.0583 | 1.6 | 0.82 | 365.2 | 5.5 | 362.9 | 5.8 | 348.1 | 24.7 | 364 | 11 | 4.927564111 |
| 118 | Y−98 Spot 118 | 102 | 267 | 22573 | 2.6 | 18.7243 | 1.2 | 0.4147 | 1.6 | 0.0563 | 1.1 | 0.70 | 353.3 | 3.9 | 352.2 | 4.9 | 345.1 | 26.4 | 353.1 | 7.8 | 2.375086528 |
| 119 | Y−98 Spot 119 | 262 | 668 | 27186 | 2.6 | 18.8159 | 0.8 | 0.4251 | 1.4 | 0.0580 | 1.2 | 0.84 | 363.6 | 4.2 | 359.7 | 4.2 | 334.1 | 17.3 | 361.9 | 8 | 8.844514001 |
| 120 | Y−98 Spot 120 | 302 | 495 | 90098 | 1.6 | 18.7633 | 0.9 | 0.3981 | 1.7 | 0.0542 | 1.5 | 0.85 | 340.2 | 4.9 | 340.3 | 5.0 | 340.4 | 20.3 | 340.2 | 9.5 | −0.05762863 |
| 121 | Y−98 Spot 121 | 220 | 190 | 218407 | 0.9 | 18.1699 | 0.9 | 0.4700 | 1.7 | 0.0620 | 1.4 | 0.84 | 387.6 | 5.2 | 391.2 | 5.4 | 412.7 | 20.4 | 389 | 10 | −6.0903373 |
| 122 | Y−98 Spot 122 | 71 | 157 | 7807 | 2.2 | 18.7632 | 1.4 | 0.4705 | 2.0 | 0.0641 | 1.4 | 0.71 | 400.2 | 5.4 | 391.5 | 6.4 | 340.4 | 31.7 | 398 | 11 | 17.56324879 |
| 123 | Y−98 Spot 123 | 147 | 394 | 5463 | 2.7 | 15.5605 | 3.5 | 0.5087 | 3.9 | 0.0574 | 1.6 | 0.42 | 360.0 | 5.7 | 417.6 | 13.3 | 749.4 | 74.4 |  |  |  |
| 124 | Y−98 Spot 124 | 23 | 78 | 20263 | 3.3 | 18.3628 | 1.5 | 0.4616 | 2.4 | 0.0615 | 1.9 | 0.77 | 384.8 | 6.9 | 385.4 | 7.7 | 389.0 | 34.4 | 385 | 14 | −1.10001699 |
| 125 | Y−98 Spot 125 | 50 | 115 | 20625 | 2.3 | 18.5046 | 1.2 | 0.4194 | 1.7 | 0.0563 | 1.3 | 0.73 | 353.2 | 4.3 | 355.7 | 5.2 | 371.7 | 26.7 | 353.6 | 8.6 | −4.98998475 |
| 126 | Y−98 Spot 126 | 108 | 164 | 27306 | 1.5 | 18.4762 | 1.4 | 0.4265 | 1.8 | 0.0572 | 1.1 | 0.62 | 358.4 | 3.9 | 360.7 | 5.6 | 375.2 | 32.6 | 358.6 | 7.8 | −4.47776498 |
| 127 | Y−98 Spot 127 | 116 | 242 | 37346 | 2.1 | 18.7014 | 1.0 | 0.3961 | 1.5 | 0.0537 | 1.2 | 0.78 | 337.5 | 3.9 | 338.8 | 4.4 | 347.9 | 21.6 | 337.8 | 7.8 | −2.98478731 |
| 128 | Y−98 Spot 128 | 116 | 303 | 33103 | 2.6 | 18.7104 | 1.0 | 0.4354 | 1.5 | 0.0591 | 1.2 | 0.77 | 370.2 | 4.2 | 367.0 | 4.6 | 346.8 | 21.7 | 369.3 | 8.2 | 6.736153267 |
| 129 | Y−98 Spot 129 | 216 | 334 | 14212 | 1.5 | 18.6066 | 1.0 | 0.4580 | 1.6 | 0.0618 | 1.3 | 0.78 | 386.8 | 4.7 | 382.9 | 5.1 | 359.4 | 22.5 | 385.5 | 9.2 | 7.633143984 |
| 130 | Y−98 Spot 130 | 130 | 138 | 6240 | 1.1 | 19.0371 | 1.3 | 0.3922 | 2.1 | 0.0542 | 1.6 | 0.78 | 340.1 | 5.4 | 336.0 | 6.0 | 307.5 | 30.3 | 339 | 11 | 10.61103787 |
| *Sample Y−97: a sandstone of the Shazagaitui Formation* | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Y−97 Spot 2 | 12 | 50 | 46752 | 4.0 | 5.9595 | 1.2 | 10.4667 | 2.2 | 0.4526 | 1.8 | 0.84 | 2406.8 | 36.6 | 2477.0 | 20.2 | 2535.1 | 20.1 | 2506 | 35 | −5.06122027 |
| 2 | Y−97 Spot 3 | 624 | 906 | 55030 | 1.5 | 17.7750 | 0.8 | 0.4227 | 1.6 | 0.0545 | 1.3 | 0.85 | 342.2 | 4.5 | 358.0 | 4.8 | 461.6 | 18.7 |  |  |  |
| 3 | Y−97 Spot 4 | 374 | 1400 | 176153 | 3.7 | 6.7870 | 1.3 | 6.9328 | 2.4 | 0.3414 | 2.1 | 0.85 | 1893.4 | 33.8 | 2102.9 | 21.5 | 2314.5 | 22.1 |  |  |  |
| 4 | Y−97 Spot 5 | 115 | 281 | 130140 | 2.4 | 8.5531 | 0.8 | 5.4246 | 1.4 | 0.3367 | 1.2 | 0.83 | 1870.5 | 19.0 | 1888.8 | 12.1 | 1908.8 | 14.3 | 1895 | 23 | −2.00568663 |
| 5 | Y−97 Spot 6 | 119 | 545 | 135454 | 4.6 | 7.9988 | 0.7 | 6.1982 | 1.3 | 0.3597 | 1.0 | 0.81 | 1980.9 | 17.7 | 2004.2 | 11.2 | 2028.3 | 13.2 | 2011 | 21 | −2.33444357 |
| 6 | Y−97 Spot 7 | 367 | 559 | 3943 | 1.5 | 5.4406 | 2.3 | 11.5384 | 2.6 | 0.4555 | 1.2 | 0.45 | 2419.6 | 24.0 | 2567.7 | 24.5 | 2686.8 | 38.6 |  |  |  |
| 7 | Y−97 Spot 8 | 58 | 165 | 2100077 | 2.9 | 4.7679 | 0.7 | 16.3029 | 1.2 | 0.5640 | 0.9 | 0.78 | 2883.1 | 21.3 | 2894.7 | 11.3 | 2902.8 | 12.0 | 2898 | 22 | −0.67626493 |
| 8 | Y−97 Spot 9 | 255 | 669 | 68583 | 2.6 | 8.1290 | 0.8 | 5.4598 | 1.5 | 0.3220 | 1.2 | 0.83 | 1799.6 | 19.2 | 1894.3 | 12.7 | 1999.6 | 14.8 |  |  |  |
| 9 | Y−97 Spot 10 | 160 | 266 | 65613 | 1.7 | 17.7619 | 0.8 | 0.4596 | 1.5 | 0.0592 | 1.3 | 0.84 | 370.9 | 4.6 | 383.9 | 4.9 | 463.3 | 18.7 |  |  |  |
| 10 | Y−97 Spot 11 | 87 | 106 | 42224 | 1.2 | 8.7501 | 0.9 | 5.2396 | 1.4 | 0.3327 | 1.1 | 0.77 | 1851.2 | 17.1 | 1859.1 | 11.7 | 1867.8 | 15.8 | 1860 | 23 | −0.88741553 |
| 11 | Y−97 Spot 12 | 450 | 1232 | 230022 | 2.7 | 8.3091 | 0.8 | 5.7093 | 1.3 | 0.3442 | 1.0 | 0.78 | 1906.9 | 16.6 | 1932.8 | 11.1 | 1960.6 | 14.4 | 1937 | 22 | −2.74104941 |
| 12 | Y−97 Spot 13 | 161 | 371 | 6895437 | 2.3 | 8.4018 | 0.8 | 5.8841 | 1.3 | 0.3587 | 1.1 | 0.81 | 1976.1 | 18.6 | 1958.9 | 11.7 | 1940.8 | 14.0 | 1954 | 23 | 1.817011515 |
| 13 | Y−97 Spot 14 | 35 | 665 | 235828 | 19.2 | 8.4713 | 0.8 | 5.5733 | 1.3 | 0.3426 | 1.0 | 0.80 | 1899.0 | 16.8 | 1912.0 | 11.0 | 1926.1 | 13.9 | 1915 | 22 | −1.40279698 |
| 14 | Y−97 Spot 15 | 268 | 770 | 133134 | 2.9 | 7.8376 | 0.9 | 6.6859 | 1.6 | 0.3802 | 1.3 | 0.82 | 2077.3 | 23.8 | 2070.8 | 14.4 | 2064.3 | 16.4 | 2069 | 27 | 0.632013754 |
| 15 | Y−97 Spot 16 | 372 | 552 | 62508 | 1.5 | 18.7677 | 0.9 | 0.4004 | 1.5 | 0.0545 | 1.1 | 0.78 | 342.2 | 3.8 | 341.9 | 4.3 | 339.9 | 20.8 | 342.1 | 7.5 | 0.678150865 |
| 16 | Y−97 Spot 17 | 256 | 303 | 494096 | 1.2 | 8.5040 | 0.8 | 5.5115 | 1.4 | 0.3401 | 1.1 | 0.82 | 1887.0 | 18.3 | 1902.4 | 11.7 | 1919.2 | 13.8 | 1907 | 22 | −1.67278086 |
| 17 | Y−97 Spot 18 | 85 | 829 | 62177 | 9.7 | 7.9549 | 0.7 | 5.8511 | 1.3 | 0.3377 | 1.1 | 0.83 | 1875.7 | 18.0 | 1954.0 | 11.5 | 2038.0 | 13.0 |  |  |  |
| 18 | Y−97 Spot 19 | 122 | 436 | 256615 | 3.6 | 6.5620 | 0.8 | 8.8424 | 1.3 | 0.4210 | 1.0 | 0.81 | 2265.1 | 19.9 | 2321.9 | 11.7 | 2372.2 | 12.8 |  |  |  |
| 19 | Y−97 Spot 20 | 613 | 1502 | 40690 | 2.5 | 7.2935 | 0.9 | 6.3778 | 1.7 | 0.3375 | 1.5 | 0.86 | 1874.7 | 23.8 | 2029.2 | 15.0 | 2190.2 | 15.2 |  |  |  |
| 20 | Y−97 Spot 21 | 125 | 119 | 469244 | 1.0 | 8.6251 | 1.0 | 5.3564 | 1.5 | 0.3352 | 1.1 | 0.77 | 1863.6 | 18.3 | 1877.9 | 12.7 | 1893.7 | 17.1 | 1879 | 25 | −1.59116849 |
| 21 | Y−97 Spot 22 | 195 | 640 | 265803 | 3.3 | 8.4756 | 0.8 | 5.6068 | 1.3 | 0.3448 | 1.0 | 0.81 | 1909.7 | 16.9 | 1917.1 | 10.9 | 1925.2 | 13.5 | 1919 | 21 | −0.80150086 |
| 22 | Y−97 Spot 23 | 577 | 1430 | 34457 | 2.5 | 8.5364 | 1.0 | 4.4366 | 1.9 | 0.2748 | 1.6 | 0.84 | 1565.1 | 21.9 | 1719.2 | 15.5 | 1912.3 | 18.1 |  |  |  |
| 23 | Y−97 Spot 24 | 121 | 574 | 237855 | 4.7 | 7.9870 | 0.9 | 5.8746 | 1.5 | 0.3404 | 1.3 | 0.82 | 1888.8 | 20.7 | 1957.5 | 13.4 | 2030.9 | 15.7 |  |  |  |
| 24 | Y−97 Spot 25 | 498 | 1299 | 802185 | 2.6 | 8.4189 | 0.7 | 5.7818 | 1.4 | 0.3532 | 1.3 | 0.89 | 1949.8 | 21.6 | 1943.7 | 12.5 | 1937.2 | 11.9 | 1940 | 21 | 0.651979978 |
| 25 | Y−97 Spot 26 | 173 | 737 | 2817117 | 4.3 | 8.5961 | 0.8 | 5.1983 | 1.3 | 0.3242 | 1.1 | 0.80 | 1810.3 | 17.1 | 1852.3 | 11.5 | 1899.8 | 14.5 |  |  |  |
| 26 | Y−97 Spot 27 | 40 | 481 | 4087384 | 12.1 | 8.4821 | 0.8 | 5.6016 | 1.9 | 0.3447 | 1.7 | 0.92 | 1909.5 | 28.7 | 1916.3 | 16.3 | 1923.8 | 13.6 | 1921 | 25 | −0.74353473 |
| 27 | Y−97 Spot 28 | 62 | 92 | 25200 | 1.5 | 18.4254 | 1.3 | 0.4588 | 1.8 | 0.0613 | 1.3 | 0.71 | 383.7 | 4.7 | 383.4 | 5.7 | 381.4 | 28.2 | 383.7 | 9.3 | 0.619150174 |
| 28 | Y−97 Spot 30 | 51 | 704 | 310934 | 13.9 | 6.3410 | 0.7 | 9.8395 | 1.3 | 0.4527 | 1.1 | 0.83 | 2407.3 | 22.3 | 2419.9 | 12.3 | 2430.4 | 12.5 | 2425 | 22 | −0.95179948 |
| 29 | Y−97 Spot 31 | 190 | 310 | 806756 | 1.6 | 18.3433 | 1.2 | 0.4441 | 1.7 | 0.0591 | 1.2 | 0.68 | 370.2 | 4.2 | 373.1 | 5.3 | 391.4 | 27.9 | 370.6 | 8.2 | −5.42605872 |
| 30 | Y−97 Spot 32 | 331 | 360 | 33557 | 1.1 | 18.2931 | 0.8 | 0.4642 | 1.3 | 0.0616 | 1.0 | 0.77 | 385.4 | 3.6 | 387.2 | 4.1 | 397.6 | 18.2 | 385.9 | 7.1 | −3.05532885 |
| 31 | Y−97 Spot 33 | 314 | 797 | 578006 | 2.5 | 8.7319 | 0.6 | 5.2052 | 1.5 | 0.3298 | 1.4 | 0.91 | 1837.4 | 22.3 | 1853.5 | 13.1 | 1871.6 | 11.6 | 1864 | 21 | −1.82961625 |
| 32 | Y−97 Spot 34 | 221 | 481 | 154196 | 2.2 | 8.1842 | 0.9 | 5.9061 | 1.5 | 0.3507 | 1.2 | 0.81 | 1938.0 | 20.5 | 1962.1 | 13.1 | 1987.6 | 15.8 | 1969 | 25 | −2.49411554 |
| 33 | Y−97 Spot 36 | 59 | 90 | 39760 | 1.5 | 8.8350 | 0.9 | 5.1348 | 1.5 | 0.3292 | 1.2 | 0.81 | 1834.4 | 19.3 | 1841.9 | 12.7 | 1850.4 | 16.0 | 1844 | 25 | −0.8654049 |
| 34 | Y−97 Spot 37 | 100 | 113 | 148081 | 1.1 | 8.9144 | 0.7 | 5.1421 | 1.4 | 0.3326 | 1.2 | 0.86 | 1851.0 | 19.8 | 1843.1 | 12.1 | 1834.2 | 13.0 | 1839 | 22 | 0.913546925 |
| 35 | Y−97 Spot 38 | 58 | 793 | 340347 | 13.7 | 8.4869 | 0.8 | 5.5719 | 1.4 | 0.3431 | 1.1 | 0.83 | 1901.6 | 18.7 | 1911.8 | 11.8 | 1922.8 | 13.8 | 1915 | 23 | −1.09800567 |
| 36 | Y−97 Spot 39 | 440 | 695 | 213256 | 1.6 | 18.6647 | 0.8 | 0.3943 | 1.2 | 0.0534 | 1.0 | 0.79 | 335.3 | 3.2 | 337.5 | 3.6 | 352.4 | 17.2 | 335.9 | 6.3 | −4.82649921 |
| 37 | Y−97 Spot 40 | 365 | 674 | 312558 | 1.8 | 8.3738 | 0.8 | 5.7038 | 1.6 | 0.3466 | 1.4 | 0.86 | 1918.1 | 23.1 | 1931.9 | 14.0 | 1946.8 | 14.7 | 1938 | 25 | −1.47222832 |
| 38 | Y−97 Spot 41 | 189 | 497 | 587935 | 2.6 | 6.4398 | 0.8 | 9.1779 | 1.5 | 0.4288 | 1.3 | 0.87 | 2300.5 | 25.9 | 2355.9 | 14.1 | 2404.2 | 12.9 |  |  |  |
| 39 | Y−97 Spot 42 | 269 | 283 | 115215 | 1.0 | 8.5373 | 0.9 | 5.5353 | 1.6 | 0.3429 | 1.4 | 0.84 | 1900.5 | 22.7 | 1906.1 | 14.1 | 1912.1 | 16.1 | 1908 | 27 | −0.60781579 |
| 40 | Y−97 Spot 43 | 176 | 229 | 72271 | 1.3 | 14.6311 | 1.0 | 1.3702 | 1.9 | 0.1455 | 1.6 | 0.86 | 875.5 | 13.2 | 876.3 | 11.0 | 878.2 | 19.7 | 876 | 22 | −0.30651507 |
| 41 | Y−97 Spot 44 | 344 | 897 | 170073 | 2.6 | 7.1416 | 0.7 | 6.7799 | 1.6 | 0.3513 | 1.4 | 0.89 | 1940.9 | 23.2 | 2083.1 | 13.7 | 2226.7 | 12.1 |  |  |  |
| 42 | Y−97 Spot 45 | 90 | 112 | 75310 | 1.2 | 8.7934 | 0.9 | 5.4762 | 1.5 | 0.3494 | 1.2 | 0.80 | 1931.7 | 20.1 | 1896.9 | 13.0 | 1858.9 | 16.4 | 1888 | 26 | 3.918181119 |
| 43 | Y−97 Spot 46 | 142 | 136 | 60610 | 1.0 | 8.7249 | 0.7 | 5.4476 | 1.2 | 0.3449 | 1.1 | 0.84 | 1910.0 | 17.4 | 1892.4 | 10.7 | 1873.0 | 12.0 | 1886 | 20 | 1.974985816 |
| 44 | Y−97 Spot 47 | 70 | 773 | 201396 | 11.1 | 6.7992 | 0.8 | 7.5483 | 1.8 | 0.3724 | 1.6 | 0.91 | 2040.6 | 28.8 | 2178.7 | 16.3 | 2311.4 | 13.0 |  |  |  |
| 45 | Y−97 Spot 49 | 114 | 214 | 28919 | 1.9 | 18.5797 | 1.0 | 0.4425 | 1.6 | 0.0597 | 1.2 | 0.79 | 373.6 | 4.5 | 372.0 | 4.9 | 362.6 | 22.1 | 373.1 | 8.9 | 3.0152216 |
| 46 | Y−97 Spot 50 | 24 | 63 | 75449 | 2.6 | 6.4301 | 0.7 | 9.6428 | 1.3 | 0.4499 | 1.1 | 0.84 | 2394.8 | 21.0 | 2401.3 | 11.5 | 2406.7 | 11.6 | 2404 | 21 | −0.49674851 |
| 47 | Y−97 Spot 51 | 105 | 175 | 25305 | 1.7 | 18.2197 | 0.9 | 0.4600 | 1.5 | 0.0608 | 1.2 | 0.81 | 380.5 | 4.4 | 384.2 | 4.7 | 406.6 | 19.6 | 381.7 | 8.6 | −6.40513647 |
| 48 | Y−97 Spot 52 | 209 | 258 | 13274 | 1.2 | 8.0409 | 0.9 | 5.9876 | 1.5 | 0.3493 | 1.2 | 0.80 | 1931.4 | 20.0 | 1974.0 | 13.1 | 2019.0 | 16.2 |  |  |  |
| 49 | Y−97 Spot 53 | 90 | 219 | 108011 | 2.4 | 6.0550 | 0.5 | 11.3238 | 1.1 | 0.4975 | 1.0 | 0.90 | 2603.0 | 21.2 | 2550.2 | 10.3 | 2508.4 | 8.0 |  |  |  |
| 50 | Y−97 Spot 54 | 96 | 168 | 92117 | 1.8 | 6.3417 | 0.8 | 9.7533 | 2.4 | 0.4488 | 2.3 | 0.95 | 2389.9 | 46.1 | 2411.8 | 22.4 | 2430.3 | 12.9 | 2427 | 25 | −1.66169136 |
| 51 | Y−97 Spot 55 | 39 | 178 | 2675621 | 4.6 | 15.0095 | 1.0 | 1.1737 | 1.5 | 0.1278 | 1.2 | 0.76 | 775.5 | 8.4 | 788.4 | 8.3 | 825.2 | 20.3 | 782 | 16 | −6.02335533 |
| 52 | Y−97 Spot 56 | 182 | 367 | 26883 | 2.0 | 18.0196 | 1.3 | 0.5030 | 2.7 | 0.0658 | 2.3 | 0.87 | 410.6 | 9.2 | 413.7 | 9.1 | 431.2 | 29.3 | 412 | 18 | −4.79295145 |
| 53 | Y−97 Spot 57 | 287 | 419 | 516660 | 1.5 | 6.0411 | 0.8 | 10.6330 | 1.7 | 0.4661 | 1.6 | 0.90 | 2466.3 | 32.0 | 2491.6 | 16.1 | 2512.2 | 12.7 | 2506 | 24 | −1.82702255 |
| 54 | Y−97 Spot 59 | 133 | 292 | 145743 | 2.2 | 8.7765 | 0.8 | 5.4599 | 1.5 | 0.3477 | 1.3 | 0.85 | 1923.6 | 21.3 | 1894.3 | 12.9 | 1862.4 | 14.3 | 1882 | 24 | 3.284389827 |
| 55 | Y−97 Spot 60 | 221 | 382 | 69460 | 1.7 | 18.5956 | 0.9 | 0.3874 | 1.5 | 0.0523 | 1.2 | 0.80 | 328.5 | 3.9 | 332.5 | 4.3 | 360.7 | 20.8 | 329.4 | 7.7 | −8.92876694 |
| 56 | Y−97 Spot 61 | 73 | 139 | 85541 | 1.9 | 8.8626 | 1.0 | 5.2465 | 1.8 | 0.3374 | 1.5 | 0.84 | 1874.1 | 25.2 | 1860.2 | 15.6 | 1844.8 | 17.8 | 1855 | 29 | 1.588449013 |
| 57 | Y−97 Spot 62 | 96 | 601 | 837151 | 6.3 | 8.4632 | 0.7 | 5.5662 | 1.5 | 0.3418 | 1.3 | 0.88 | 1895.4 | 22.2 | 1910.9 | 13.2 | 1927.8 | 13.2 | 1919 | 23 | −1.68185581 |
| 58 | Y−97 Spot 65 | 452 | 340 | 11377 | 0.8 | 16.4284 | 0.9 | 0.5114 | 1.5 | 0.0610 | 1.2 | 0.78 | 381.4 | 4.4 | 419.4 | 5.3 | 633.7 | 20.4 |  |  |  |
| 59 | Y−97 Spot 66 | 81 | 1153 | 376448 | 14.2 | 7.9985 | 0.8 | 5.9913 | 1.2 | 0.3477 | 0.9 | 0.76 | 1923.7 | 15.4 | 1974.6 | 10.5 | 2028.4 | 13.8 |  |  |  |
| 60 | Y−97 Spot 67 | 162 | 368 | 24960 | 2.3 | 18.7274 | 0.8 | 0.4483 | 1.5 | 0.0609 | 1.2 | 0.82 | 381.2 | 4.5 | 376.1 | 4.6 | 344.7 | 18.9 | 379 | 8.7 | 10.58180115 |
| 61 | Y−97 Spot 68 | 229 | 560 | 1520294 | 2.4 | 6.5704 | 0.7 | 9.1081 | 1.7 | 0.4342 | 1.6 | 0.92 | 2324.7 | 31.1 | 2348.9 | 15.9 | 2370.0 | 11.6 | 2364 | 22 | −1.91057561 |
| 62 | Y−97 Spot 69 | 66 | 59 | 35834 | 0.9 | 19.2521 | 1.8 | 0.3695 | 2.2 | 0.0516 | 1.3 | 0.58 | 324.4 | 4.1 | 319.3 | 6.2 | 281.9 | 41.9 | 324 | 8.2 | 15.08970818 |
| 63 | Y−97 Spot 70 | 117 | 236 | 98587 | 2.0 | 8.7624 | 0.7 | 5.2368 | 1.5 | 0.3329 | 1.3 | 0.88 | 1852.7 | 21.4 | 1858.6 | 12.8 | 1865.3 | 12.8 | 1862 | 22 | −0.67710155 |
| 64 | Y−97 Spot 71 | 17 | 353 | 136709 | 20.3 | 8.8156 | 0.8 | 5.0925 | 1.2 | 0.3257 | 1.0 | 0.77 | 1817.7 | 15.1 | 1834.9 | 10.5 | 1854.4 | 14.3 | 1837 | 21 | −1.97847951 |
| 65 | Y−97 Spot 72 | 158 | 387 | 311497 | 2.4 | 8.6005 | 0.8 | 5.3399 | 1.4 | 0.3332 | 1.1 | 0.82 | 1854.0 | 18.3 | 1875.3 | 11.9 | 1898.9 | 14.4 | 1881 | 23 | −2.36270808 |
| 66 | Y−97 Spot 73 | 98 | 291 | 9147 | 3.0 | 15.1019 | 4.2 | 0.4976 | 4.3 | 0.0545 | 1.3 | 0.29 | 342.2 | 4.2 | 410.1 | 14.6 | 812.3 | 86.8 |  |  |  |
| 67 | Y−97 Spot 75 | 70 | 93 | 72773 | 1.3 | 8.8791 | 0.9 | 5.2687 | 1.5 | 0.3394 | 1.3 | 0.82 | 1884.0 | 20.4 | 1863.8 | 13.0 | 1841.4 | 15.9 | 1858 | 25 | 2.312012377 |
| 68 | Y−97 Spot 76 | 128 | 406 | 2437133 | 3.2 | 6.1840 | 0.8 | 10.1448 | 1.3 | 0.4552 | 1.0 | 0.79 | 2418.3 | 20.3 | 2448.1 | 11.7 | 2472.9 | 13.0 | 2456 | 22 | −2.20532342 |
| 69 | Y−97 Spot 77 | 56 | 125 | 321733 | 2.2 | 5.5906 | 0.7 | 12.4616 | 1.2 | 0.5055 | 1.0 | 0.82 | 2637.4 | 21.7 | 2639.8 | 11.4 | 2641.7 | 11.4 | 2641 | 21 | −0.1643842 |
| 70 | Y−97 Spot 78 | 171 | 610 | 280139 | 3.6 | 8.4266 | 0.7 | 5.6889 | 1.2 | 0.3478 | 1.0 | 0.84 | 1924.2 | 17.2 | 1929.7 | 10.6 | 1935.5 | 11.8 | 1932 | 20 | −0.58235147 |
| 71 | Y−97 Spot 79 | 35 | 86 | 106350 | 2.4 | 8.3458 | 0.8 | 6.0538 | 1.4 | 0.3666 | 1.2 | 0.83 | 2013.4 | 20.5 | 1983.6 | 12.5 | 1952.7 | 14.4 | 1973 | 24 | 3.103726736 |
| 72 | Y−97 Spot 80 | 88 | 165 | 206659 | 1.9 | 6.3570 | 0.6 | 10.4413 | 1.0 | 0.4816 | 0.7 | 0.76 | 2534.3 | 15.7 | 2474.7 | 9.1 | 2426.2 | 10.7 |  |  |  |
| 73 | Y−97 Spot 81 | 90 | 164 | 91994 | 1.8 | 6.3587 | 0.7 | 9.6591 | 1.2 | 0.4456 | 0.9 | 0.81 | 2375.9 | 18.8 | 2402.8 | 10.7 | 2425.7 | 11.4 | 2412 | 20 | −2.05442068 |
| 74 | Y−97 Spot 82 | 81 | 72 | 103076 | 0.9 | 8.6585 | 0.8 | 5.3253 | 1.4 | 0.3346 | 1.1 | 0.78 | 1860.4 | 17.2 | 1872.9 | 11.6 | 1886.8 | 15.2 | 1875 | 23 | −1.39702019 |
| 75 | Y−97 Spot 83 | 225 | 697 | 74450 | 3.1 | 6.4554 | 0.9 | 7.8432 | 1.6 | 0.3674 | 1.3 | 0.82 | 2017.0 | 22.6 | 2213.2 | 14.3 | 2400.1 | 15.4 |  |  |  |
| 76 | Y−97 Spot 84 | 35 | 302 | 601339 | 8.7 | 6.0866 | 0.7 | 10.4320 | 1.3 | 0.4607 | 1.1 | 0.85 | 2442.7 | 22.5 | 2473.9 | 12.1 | 2499.6 | 11.7 | 2487 | 21 | −2.27704277 |
| 77 | Y−97 Spot 85 | 79 | 328 | 16826 | 4.1 | 16.9538 | 0.9 | 0.5081 | 1.7 | 0.0625 | 1.4 | 0.83 | 390.8 | 5.2 | 417.1 | 5.7 | 565.6 | 20.1 |  |  |  |
| 78 | Y−97 Spot 86 | 328 | 401 | 395419 | 1.2 | 6.3674 | 0.6 | 9.6576 | 1.3 | 0.4462 | 1.1 | 0.87 | 2378.3 | 22.6 | 2402.7 | 12.0 | 2423.4 | 10.8 | 2414 | 20 | −1.86134454 |
| 79 | Y−97 Spot 87 | 106 | 157 | 361980 | 1.5 | 6.0328 | 0.7 | 11.2129 | 1.2 | 0.4908 | 1.0 | 0.81 | 2574.2 | 20.8 | 2541.0 | 11.2 | 2514.5 | 11.7 | 2530 | 21 | 2.374761925 |
| 80 | Y−97 Spot 88 | 79 | 194 | 5414800 | 2.5 | 8.7401 | 0.8 | 5.2456 | 1.5 | 0.3327 | 1.3 | 0.84 | 1851.3 | 20.4 | 1860.1 | 12.9 | 1869.9 | 14.9 | 1863 | 24 | −0.99701215 |
| 81 | Y−97 Spot 89 | 164 | 405 | 218252 | 2.5 | 8.3769 | 0.8 | 5.2973 | 1.4 | 0.3220 | 1.1 | 0.82 | 1799.4 | 17.4 | 1868.4 | 11.6 | 1946.1 | 14.0 |  |  |  |
| 82 | Y−97 Spot 90 | 380 | 715 | 63098 | 1.9 | 18.0750 | 0.7 | 0.4585 | 1.4 | 0.0601 | 1.2 | 0.87 | 376.4 | 4.3 | 383.2 | 4.3 | 424.4 | 15.1 | 379.5 | 8.3 | −11.3069694 |
| 83 | Y−97 Spot 93 | 85 | 160 | 65756 | 1.9 | 17.7909 | 1.3 | 0.4295 | 1.9 | 0.0554 | 1.4 | 0.72 | 347.9 | 4.6 | 362.8 | 5.8 | 459.6 | 29.2 |  |  |  |
| 84 | Y−97 Spot 94 | 622 | 1210 | 1222798 | 1.9 | 6.0361 | 0.7 | 11.0435 | 1.4 | 0.4837 | 1.2 | 0.87 | 2543.2 | 25.2 | 2526.8 | 12.8 | 2513.6 | 11.4 | 2519 | 22 | 1.17926089 |
| 85 | Y−97 Spot 95 | 470 | 1087 | 31522 | 2.3 | 6.2949 | 0.8 | 8.4151 | 1.3 | 0.3844 | 1.1 | 0.79 | 2096.6 | 19.1 | 2276.8 | 12.2 | 2442.8 | 13.9 |  |  |  |
| 86 | Y−97 Spot 97 | 39 | 153 | 158133 | 3.9 | 7.4629 | 0.8 | 7.1010 | 1.5 | 0.3845 | 1.3 | 0.83 | 2097.4 | 22.9 | 2124.2 | 13.6 | 2150.2 | 14.7 | 2134 | 25 | −2.458242 |
| 87 | Y−97 Spot 98 | 96 | 185 | 261547 | 1.9 | 8.5582 | 0.9 | 5.5080 | 1.5 | 0.3420 | 1.2 | 0.82 | 1896.4 | 20.3 | 1901.8 | 13.0 | 1907.7 | 15.6 | 1903 | 25 | −0.59256876 |
| 88 | Y−97 Spot 99 | 94 | 291 | 138813 | 3.1 | 8.5550 | 0.7 | 5.5564 | 1.3 | 0.3449 | 1.1 | 0.84 | 1910.2 | 18.5 | 1909.4 | 11.5 | 1908.4 | 13.1 | 1909 | 22 | 0.09528633 |
| 89 | Y−97 Spot 100 | 50 | 95 | 78364 | 1.9 | 16.8559 | 1.6 | 0.4839 | 2.0 | 0.0592 | 1.2 | 0.59 | 370.7 | 4.4 | 400.8 | 6.8 | 578.2 | 35.8 |  |  |  |
| 90 | Y−97 Spot 101 | 305 | 752 | 65982 | 2.5 | 8.6656 | 0.5 | 5.1238 | 1.3 | 0.3222 | 1.1 | 0.90 | 1800.3 | 17.9 | 1840.1 | 10.7 | 1885.3 | 9.8 |  |  |  |
| 91 | Y−97 Spot 102 | 136 | 264 | 59353 | 1.9 | 17.9091 | 0.9 | 0.4678 | 1.6 | 0.0608 | 1.3 | 0.82 | 380.4 | 4.8 | 389.7 | 5.2 | 444.9 | 20.6 | 383.1 | 9.5 | −14.4959753 |
| 92 | Y−97 Spot 103 | 58 | 486 | 69428 | 8.4 | 8.4148 | 0.7 | 5.4386 | 1.5 | 0.3321 | 1.4 | 0.90 | 1848.4 | 21.9 | 1891.0 | 13.0 | 1938.0 | 11.9 |  |  |  |
| 93 | Y−97 Spot 104 | 78 | 151 | 6919 | 1.9 | 15.4643 | 2.7 | 0.5178 | 3.0 | 0.0581 | 1.2 | 0.40 | 364.1 | 4.2 | 423.7 | 10.2 | 762.5 | 57.1 |  |  |  |
| 94 | Y−97 Spot 105 | 477 | 402 | 40657 | 0.8 | 18.7388 | 1.6 | 0.4578 | 2.4 | 0.0622 | 1.8 | 0.75 | 389.3 | 6.7 | 382.7 | 7.5 | 343.4 | 35.5 | 387 | 13 | 13.36942377 |
| 95 | Y−97 Spot 106 | 88 | 140 | 93199 | 1.6 | 17.5419 | 1.0 | 0.5955 | 1.5 | 0.0758 | 1.2 | 0.78 | 471.0 | 5.4 | 474.4 | 5.8 | 490.8 | 21.2 | 472 | 11 | −4.03940111 |
| 96 | Y−97 Spot 107 | 293 | 344 | 284770 | 1.2 | 18.6930 | 0.9 | 0.3916 | 1.4 | 0.0531 | 1.1 | 0.79 | 333.6 | 3.6 | 335.5 | 4.0 | 348.9 | 19.5 | 334.1 | 7.2 | −4.39106458 |
| 97 | Y−97 Spot 108 | 166 | 240 | 766328 | 1.5 | 6.0115 | 0.7 | 10.6643 | 1.5 | 0.4652 | 1.3 | 0.89 | 2462.3 | 26.7 | 2494.3 | 13.6 | 2520.5 | 11.4 | 2511 | 21 | −2.30735949 |
| 98 | Y−97 Spot 109 | 244 | 304 | 127566 | 1.2 | 8.0571 | 0.8 | 5.8814 | 1.6 | 0.3438 | 1.4 | 0.88 | 1905.1 | 23.2 | 1958.5 | 13.9 | 2015.4 | 13.4 |  |  |  |
| 99 | Y−97 Spot 110 | 357 | 460 | 70847 | 1.3 | 19.1245 | 1.0 | 0.3782 | 1.9 | 0.0525 | 1.7 | 0.86 | 329.7 | 5.3 | 325.7 | 5.3 | 297.1 | 21.9 | 328 | 10 | 11.00019598 |
| 100 | Y−97 Spot 112 | 160 | 403 | 244234 | 2.5 | 6.0609 | 0.7 | 10.6263 | 1.2 | 0.4673 | 1.0 | 0.81 | 2471.8 | 20.4 | 2491.0 | 11.3 | 2506.7 | 11.9 | 2497 | 21 | −1.39521859 |
| 101 | Y−97 Spot 113 | 57 | 447 | 82069 | 7.9 | 8.6435 | 0.7 | 4.5182 | 1.4 | 0.2834 | 1.3 | 0.88 | 1608.3 | 18.1 | 1734.3 | 12.0 | 1889.9 | 12.6 |  |  |  |
| 102 | Y−97 Spot 114 | 422 | 279 | 285870 | 0.7 | 18.4358 | 1.0 | 0.4426 | 1.6 | 0.0592 | 1.3 | 0.80 | 370.8 | 4.7 | 372.1 | 5.1 | 380.1 | 22.3 | 371.2 | 9.2 | −2.46058014 |
| 103 | Y−97 Spot 115 | 73 | 99 | 202350 | 1.4 | 6.1350 | 0.8 | 10.9115 | 1.5 | 0.4857 | 1.2 | 0.85 | 2552.1 | 26.2 | 2515.6 | 13.7 | 2486.3 | 13.2 | 2500 | 24 | 2.648685304 |
| 104 | Y−97 Spot 116 | 147 | 1412 | 147084 | 9.6 | 8.4202 | 0.7 | 5.6896 | 1.3 | 0.3476 | 1.1 | 0.85 | 1923.2 | 18.9 | 1929.8 | 11.5 | 1936.9 | 12.6 | 1933 | 21 | −0.70771401 |
| 105 | Y−97 Spot 117 | 146 | 218 | 75861 | 1.5 | 8.7652 | 0.7 | 5.3799 | 1.5 | 0.3422 | 1.3 | 0.88 | 1897.0 | 21.1 | 1881.7 | 12.5 | 1864.7 | 12.7 | 1874 | 22 | 1.733479308 |
| 106 | Y−97 Spot 118 | 143 | 374 | 219678 | 2.6 | 8.8651 | 0.7 | 5.1409 | 1.3 | 0.3307 | 1.1 | 0.83 | 1841.7 | 17.4 | 1842.9 | 11.2 | 1844.2 | 13.3 | 1843 | 21 | −0.13814942 |
| 107 | Y−97 Spot 119 | 79 | 95 | 197776 | 1.2 | 8.7326 | 0.9 | 5.3462 | 1.8 | 0.3387 | 1.5 | 0.86 | 1880.6 | 25.0 | 1876.3 | 15.2 | 1871.4 | 16.3 | 1874 | 28 | 0.490493509 |
| 108 | Y−97 Spot 120 | 387 | 226 | 67347 | 0.6 | 18.3622 | 1.1 | 0.4418 | 1.5 | 0.0589 | 1.1 | 0.70 | 368.7 | 3.8 | 371.5 | 4.7 | 389.1 | 23.9 | 369.1 | 7.5 | −5.24955326 |
| 109 | Y−97 Spot 121 | 48 | 69 | 67065 | 1.4 | 18.3947 | 1.5 | 0.4176 | 2.0 | 0.0557 | 1.3 | 0.67 | 349.7 | 4.5 | 354.4 | 5.9 | 385.1 | 33.1 | 350.2 | 8.9 | −9.20583543 |
| 110 | Y−97 Spot 122 | 53 | 71 | 161238 | 1.3 | 14.6392 | 0.9 | 1.3762 | 1.6 | 0.1462 | 1.3 | 0.83 | 879.5 | 10.7 | 878.8 | 9.2 | 877.1 | 18.2 | 879 | 18 | 0.276937696 |
| 111 | Y−97 Spot 123 | 266 | 417 | 1189520 | 1.6 | 6.0586 | 0.7 | 10.5011 | 1.5 | 0.4616 | 1.3 | 0.87 | 2446.7 | 26.4 | 2480.0 | 13.9 | 2507.4 | 12.6 | 2496 | 23 | −2.41816854 |
| 112 | Y−97 Spot 124 | 443 | 686 | 68757 | 1.5 | 8.4605 | 0.7 | 5.3896 | 1.9 | 0.3309 | 1.7 | 0.93 | 1842.6 | 27.7 | 1883.2 | 16.0 | 1928.3 | 12.4 | 1914 | 23 | −4.44815798 |
| 113 | Y−97 Spot 126 | 178 | 308 | 40336 | 1.7 | 17.5610 | 1.2 | 0.4721 | 1.8 | 0.0602 | 1.3 | 0.73 | 376.6 | 4.7 | 392.6 | 5.7 | 488.4 | 26.5 |  |  |  |
| 114 | Y−97 Spot 127 | 146 | 430 | 233226 | 2.9 | 6.6881 | 0.8 | 8.3649 | 1.4 | 0.4059 | 1.1 | 0.79 | 2196.3 | 20.3 | 2271.4 | 12.4 | 2339.7 | 14.3 |  |  |  |
| 115 | Y−97 Spot 129 | 146 | 303 | 1587224 | 2.1 | 6.5703 | 0.7 | 8.5523 | 1.4 | 0.4077 | 1.3 | 0.89 | 2204.5 | 23.4 | 2291.5 | 12.9 | 2370.0 | 11.2 |  |  |  |
| 116 | Y−97 Spot 130 | 129 | 308 | 400834 | 2.4 | 8.7094 | 0.7 | 5.2825 | 1.3 | 0.3338 | 1.1 | 0.86 | 1856.9 | 17.5 | 1866.0 | 10.8 | 1876.2 | 11.8 | 1870 | 20 | −1.03139139 |
| *Sample Y−94: a sandstone of the Zhipkhoshi Formation* | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Y−94 Spot 1 | 183 | 451 | 113433 | 2.5 | 18.2162 | 0.7 | 0.4895 | 1.2 | 0.0647 | 1.0 | 0.80 | 404.1 | 3.9 | 404.6 | 4.1 | 407.0 | 16.2 | 404.3 | 7.5 | −0.70503874 |
| 2 | Y−94 Spot 2 | 97 | 114 | 118351 | 1.2 | 15.2069 | 0.8 | 1.2123 | 1.4 | 0.1338 | 1.1 | 0.81 | 809.3 | 8.7 | 806.3 | 7.8 | 797.8 | 17.2 | 807 | 15 | 1.443940241 |
| 3 | Y−94 Spot 3 | 46 | 78 | 11947 | 1.7 | 16.9525 | 3.1 | 0.4551 | 3.2 | 0.0560 | 1.1 | 0.33 | 351.1 | 3.6 | 380.8 | 10.3 | 565.7 | 66.8 | 351.3 | 7.2 | −37.937233 |
| 4 | Y−94 Spot 4 | 84 | 142 | 105405 | 1.7 | 18.6831 | 0.8 | 0.3926 | 1.4 | 0.0532 | 1.2 | 0.82 | 334.2 | 3.9 | 336.2 | 4.1 | 350.1 | 18.6 | 334.9 | 7.6 | −4.52786324 |
| 5 | Y−94 Spot 5 | 197 | 342 | 58765 | 1.7 | 17.6932 | 1.3 | 0.4049 | 2.0 | 0.0520 | 1.5 | 0.76 | 326.7 | 4.8 | 345.2 | 5.8 | 471.8 | 28.4 |  |  |  |
| 6 | Y−94 Spot 6 | 68 | 137 | 33458 | 2.0 | 17.9699 | 2.1 | 0.4677 | 2.4 | 0.0610 | 1.3 | 0.52 | 381.6 | 4.7 | 389.6 | 7.9 | 437.4 | 46.6 | 382 | 9.4 | −12.7572689 |
| 7 | Y−94 Spot 7 | 112 | 243 | 41075 | 2.2 | 18.9238 | 0.6 | 0.3682 | 1.1 | 0.0506 | 1.0 | 0.86 | 317.9 | 3.0 | 318.3 | 3.1 | 321.1 | 13.0 | 318.1 | 5.9 | −0.98917764 |
| 8 | Y−94 Spot 9 | 73 | 228 | 105278 | 3.1 | 18.0423 | 1.2 | 0.4575 | 1.8 | 0.0599 | 1.3 | 0.73 | 375.0 | 4.7 | 382.5 | 5.6 | 428.4 | 26.9 | 376.3 | 9.2 | −12.4691523 |
| 9 | Y−94 Spot 10 | 159 | 336 | 111471 | 2.1 | 18.8538 | 0.7 | 0.3949 | 1.3 | 0.0540 | 1.1 | 0.83 | 339.1 | 3.6 | 337.9 | 3.7 | 329.5 | 16.6 | 338.7 | 7 | 2.930633437 |
| 10 | Y−94 Spot 11 | 193 | 270 | 305814 | 1.4 | 19.2742 | 0.8 | 0.3575 | 1.3 | 0.0500 | 1.0 | 0.80 | 314.5 | 3.2 | 310.3 | 3.4 | 279.3 | 17.5 | 313.2 | 6.2 | 12.60368642 |
| 11 | Y−94 Spot 12 | 47 | 162 | 101541 | 3.5 | 18.9474 | 1.0 | 0.3711 | 1.5 | 0.0510 | 1.2 | 0.78 | 320.8 | 3.7 | 320.5 | 4.2 | 318.2 | 21.8 | 320.7 | 7.3 | 0.810056643 |
| 12 | Y−94 Spot 13 | 148 | 136 | 52692 | 0.9 | 17.0967 | 1.5 | 0.6473 | 1.8 | 0.0803 | 1.0 | 0.57 | 497.9 | 5.0 | 506.8 | 7.2 | 547.3 | 32.6 | 498.9 | 9.8 | −9.01482837 |
| 13 | Y−94 Spot 14 | 78 | 109 | 23519 | 1.4 | 19.0442 | 1.0 | 0.4056 | 1.7 | 0.0560 | 1.4 | 0.81 | 351.5 | 4.7 | 345.7 | 4.9 | 306.7 | 22.2 | 349.3 | 9.1 | 14.6143866 |
| 14 | Y−94 Spot 15 | 23 | 53 | 98373 | 2.3 | 8.8209 | 0.7 | 5.1907 | 1.4 | 0.3322 | 1.2 | 0.84 | 1849.1 | 18.6 | 1851.1 | 11.7 | 1853.3 | 13.3 | 1852 | 22 | −0.22381014 |
| 15 | Y−94 Spot 16 | 64 | 101 | 511832 | 1.6 | 18.7747 | 0.9 | 0.4191 | 1.4 | 0.0571 | 1.1 | 0.76 | 357.9 | 3.8 | 355.4 | 4.3 | 339.1 | 20.8 | 357.3 | 7.4 | 5.567076554 |
| 16 | Y−94 Spot 19 | 94 | 204 | 108960 | 2.2 | 17.8451 | 1.0 | 0.4227 | 1.7 | 0.0547 | 1.3 | 0.81 | 343.5 | 4.5 | 358.0 | 5.0 | 452.9 | 21.6 |  |  |  |
| 17 | Y−94 Spot 20 | 82 | 126 | 111489 | 1.5 | 14.7239 | 0.9 | 1.2622 | 1.5 | 0.1348 | 1.2 | 0.80 | 815.5 | 9.4 | 828.9 | 8.7 | 865.1 | 19.0 | 825 | 17 | −5.74228319 |
| 18 | Y−94 Spot 21 | 50 | 123 | 80610 | 2.5 | 18.2325 | 0.8 | 0.5007 | 1.5 | 0.0662 | 1.2 | 0.83 | 413.5 | 4.9 | 412.2 | 5.0 | 405.0 | 18.3 | 412.9 | 9.5 | 2.094837304 |
| 19 | Y−94 Spot 23 | 38 | 46 | 34619 | 1.2 | 15.2956 | 0.9 | 1.1592 | 1.6 | 0.1286 | 1.3 | 0.83 | 780.2 | 9.5 | 781.6 | 8.5 | 785.6 | 18.3 | 781 | 17 | −0.69364126 |
| 20 | Y−94 Spot 24 | 79 | 127 | 620521 | 1.6 | 8.4164 | 0.6 | 5.6721 | 1.2 | 0.3464 | 1.0 | 0.87 | 1917.3 | 17.2 | 1927.1 | 10.2 | 1937.7 | 10.4 | 1932 | 18 | −1.0509604 |
| 21 | Y−94 Spot 25 | 124 | 287 | 81865 | 2.3 | 18.6617 | 0.9 | 0.3863 | 1.4 | 0.0523 | 1.1 | 0.80 | 328.7 | 3.6 | 331.7 | 4.0 | 352.7 | 19.2 | 329.4 | 7.2 | −6.80326246 |
| 22 | Y−94 Spot 26 | 145 | 304 | 93569 | 2.1 | 18.7196 | 0.7 | 0.3849 | 1.4 | 0.0523 | 1.2 | 0.85 | 328.5 | 3.8 | 330.7 | 3.9 | 345.7 | 16.4 | 329.3 | 7.4 | −4.95721981 |
| 23 | Y−94 Spot 29 | 75 | 69 | 37294 | 0.9 | 19.1560 | 1.2 | 0.3816 | 1.6 | 0.0530 | 1.1 | 0.67 | 333.2 | 3.5 | 328.2 | 4.4 | 293.3 | 26.6 | 332.4 | 6.8 | 13.57884572 |
| 24 | Y−94 Spot 30 | 40 | 44 | 93953 | 1.1 | 18.8836 | 1.2 | 0.3829 | 1.6 | 0.0525 | 1.1 | 0.67 | 329.7 | 3.5 | 329.2 | 4.6 | 325.9 | 27.4 | 329.6 | 7 | 1.154958954 |
| 25 | Y−94 Spot 31 | 42 | 127 | 1069440 | 3.0 | 8.7261 | 0.7 | 5.2748 | 1.3 | 0.3340 | 1.1 | 0.86 | 1857.6 | 18.2 | 1864.8 | 11.2 | 1872.8 | 12.0 | 1868 | 20 | −0.81114769 |
| 26 | Y−94 Spot 32 | 11 | 32 | 56373 | 3.0 | 7.6239 | 0.8 | 7.1036 | 1.5 | 0.3930 | 1.2 | 0.84 | 2136.5 | 22.3 | 2124.5 | 13.0 | 2112.9 | 13.8 | 2120 | 24 | 1.118622927 |
| 27 | Y−94 Spot 33 | 184 | 188 | 96537 | 1.0 | 19.0757 | 0.9 | 0.3930 | 1.3 | 0.0544 | 1.0 | 0.75 | 341.4 | 3.4 | 336.5 | 3.8 | 302.9 | 20.1 | 340.2 | 6.6 | 12.71826578 |
| 28 | Y−94 Spot 34 | 146 | 131 | 122167 | 0.9 | 18.9967 | 1.0 | 0.3757 | 1.4 | 0.0518 | 0.9 | 0.69 | 325.5 | 3.0 | 323.9 | 3.8 | 312.4 | 22.7 | 325.3 | 5.9 | 4.204880721 |
| 29 | Y−94 Spot 36 | 142 | 434 | 169077 | 3.1 | 18.6523 | 0.7 | 0.4170 | 1.2 | 0.0564 | 1.0 | 0.80 | 353.9 | 3.3 | 353.9 | 3.6 | 353.9 | 16.2 | 353.9 | 6.5 | 0.016097289 |
| 30 | Y−94 Spot 37 | 28 | 87 | 140547 | 3.2 | 5.9459 | 0.8 | 11.4246 | 1.5 | 0.4929 | 1.3 | 0.85 | 2583.1 | 27.2 | 2558.4 | 14.1 | 2538.9 | 13.5 | 2548 | 25 | 1.742303369 |
| 31 | Y−94 Spot 38 | 258 | 296 | 66720 | 1.1 | 18.9747 | 0.8 | 0.3675 | 1.1 | 0.0506 | 0.7 | 0.70 | 318.1 | 2.3 | 317.8 | 2.9 | 315.0 | 17.1 | 318.1 | 4.5 | 1.000072087 |
| 32 | Y−94 Spot 39 | 189 | 246 | 69464 | 1.3 | 19.0462 | 0.7 | 0.3836 | 1.3 | 0.0530 | 1.1 | 0.85 | 333.0 | 3.7 | 329.7 | 3.8 | 306.4 | 15.9 | 331.5 | 7.2 | 8.672236881 |
| 33 | Y−94 Spot 40 | 124 | 184 | 273291 | 1.5 | 8.4989 | 0.6 | 5.6712 | 1.2 | 0.3497 | 1.0 | 0.84 | 1933.3 | 16.6 | 1927.0 | 10.2 | 1920.2 | 11.3 | 1925 | 19 | 0.679807679 |
| 34 | Y−94 Spot 41 | 178 | 249 | 73047 | 1.4 | 18.4649 | 0.9 | 0.4114 | 1.7 | 0.0551 | 1.5 | 0.86 | 345.9 | 5.0 | 349.9 | 5.2 | 376.6 | 20.2 | 347.5 | 9.8 | −8.15829998 |
| 35 | Y−94 Spot 42 | 42 | 74 | 95748 | 1.8 | 8.0436 | 0.6 | 6.3507 | 1.3 | 0.3706 | 1.2 | 0.88 | 2032.4 | 20.4 | 2025.5 | 11.7 | 2018.4 | 11.2 | 2022 | 20 | 0.695699847 |
| 36 | Y−94 Spot 43 | 133 | 370 | 112708 | 2.8 | 18.6062 | 0.6 | 0.4176 | 1.4 | 0.0564 | 1.3 | 0.91 | 353.5 | 4.3 | 354.3 | 4.1 | 359.4 | 13.0 | 354.1 | 8.2 | −1.63395087 |
| 37 | Y−94 Spot 44 | 53 | 150 | 71229 | 2.8 | 17.5885 | 0.8 | 0.6322 | 1.4 | 0.0807 | 1.2 | 0.82 | 500.2 | 5.6 | 497.5 | 5.6 | 485.0 | 18.2 | 499 | 11 | 3.137097124 |
| 38 | Y−94 Spot 45 | 157 | 254 | 108050 | 1.6 | 19.0863 | 0.8 | 0.3823 | 1.6 | 0.0529 | 1.3 | 0.85 | 332.6 | 4.3 | 328.8 | 4.4 | 301.7 | 18.5 | 330.9 | 8.4 | 10.25700767 |
| 39 | Y−94 Spot 46 | 29 | 43 | 12720 | 1.5 | 19.2847 | 1.2 | 0.4027 | 1.9 | 0.0564 | 1.5 | 0.77 | 353.4 | 5.1 | 343.6 | 5.6 | 278.0 | 28.1 | 350.4 | 9.9 | 27.11499178 |
| 40 | Y−94 Spot 47 | 150 | 249 | 45383 | 1.7 | 18.8034 | 0.8 | 0.3990 | 1.4 | 0.0544 | 1.1 | 0.80 | 341.7 | 3.6 | 340.9 | 3.9 | 335.6 | 18.6 | 341.5 | 7 | 1.826702335 |
| 41 | Y−94 Spot 48 | 66 | 167 | 131629 | 2.5 | 17.4181 | 0.8 | 0.6473 | 1.4 | 0.0818 | 1.2 | 0.84 | 506.9 | 5.7 | 506.8 | 5.6 | 506.4 | 16.7 | 507 | 11 | 0.092287384 |
| 42 | Y−94 Spot 49 | 249 | 318 | 166115 | 1.3 | 18.9695 | 0.9 | 0.3680 | 1.4 | 0.0507 | 1.1 | 0.79 | 318.5 | 3.5 | 318.2 | 3.9 | 315.6 | 20.0 | 318.4 | 7 | 0.929072193 |
| 43 | Y−94 Spot 50 | 18 | 27 | 15131 | 1.5 | 19.4171 | 1.8 | 0.3657 | 2.2 | 0.0515 | 1.3 | 0.59 | 323.9 | 4.2 | 316.5 | 6.1 | 262.3 | 41.9 | 323.1 | 8.3 | 23.47911215 |
| 44 | Y−94 Spot 51 | 44 | 105 | 237787 | 2.4 | 8.0482 | 0.6 | 6.3867 | 1.2 | 0.3730 | 1.0 | 0.85 | 2043.3 | 17.5 | 2030.4 | 10.4 | 2017.4 | 11.1 | 2025 | 19 | 1.286444164 |
| 45 | Y−94 Spot 52 | 48 | 157 | 204546 | 3.3 | 8.7982 | 0.8 | 5.1335 | 1.4 | 0.3277 | 1.1 | 0.83 | 1827.3 | 18.1 | 1841.7 | 11.6 | 1857.9 | 13.7 | 1847 | 22 | −1.64863967 |
| 46 | Y−94 Spot 53 | 299 | 382 | 1362650 | 1.3 | 18.8549 | 0.7 | 0.3648 | 1.5 | 0.0499 | 1.3 | 0.88 | 313.9 | 3.9 | 315.8 | 4.0 | 329.4 | 15.9 | 314.8 | 7.6 | −4.68523273 |
| 47 | Y−94 Spot 54 | 109 | 294 | 763355 | 2.7 | 16.4145 | 1.3 | 0.4779 | 2.1 | 0.0569 | 1.6 | 0.77 | 356.8 | 5.6 | 396.6 | 6.8 | 635.6 | 28.1 |  |  |  |
| 48 | Y−94 Spot 55 | 76 | 176 | 94365 | 2.3 | 18.5773 | 0.9 | 0.4032 | 1.6 | 0.0543 | 1.3 | 0.82 | 341.1 | 4.3 | 343.9 | 4.6 | 362.9 | 19.9 | 342 | 8.4 | −5.99996842 |
| 49 | Y−94 Spot 56 | 45 | 59 | 54482 | 1.3 | 8.8866 | 0.9 | 5.2401 | 1.4 | 0.3379 | 1.0 | 0.75 | 1876.5 | 16.7 | 1859.2 | 11.7 | 1839.8 | 16.6 | 1858 | 24 | 1.990082908 |
| 50 | Y−94 Spot 57 | 236 | 186 | 116299 | 0.8 | 18.8854 | 1.0 | 0.3872 | 1.7 | 0.0531 | 1.3 | 0.81 | 333.2 | 4.4 | 332.3 | 4.7 | 325.7 | 22.0 | 332.9 | 8.6 | 2.303721029 |
| 51 | Y−94 Spot 58 | 53 | 66 | 17458 | 1.2 | 18.7748 | 0.8 | 0.4590 | 1.4 | 0.0625 | 1.2 | 0.84 | 391.0 | 4.6 | 383.6 | 4.6 | 339.0 | 17.7 | 387.3 | 8.8 | 15.31471066 |
| 52 | Y−94 Spot 59 | 81 | 98 | 276358 | 1.2 | 18.9658 | 1.1 | 0.3755 | 1.6 | 0.0517 | 1.2 | 0.76 | 324.8 | 3.9 | 323.7 | 4.6 | 316.0 | 24.6 | 324.6 | 7.8 | 2.774298819 |
| 53 | Y−94 Spot 60 | 104 | 157 | 70239 | 1.5 | 19.1095 | 0.7 | 0.3741 | 1.3 | 0.0519 | 1.1 | 0.85 | 326.0 | 3.5 | 322.7 | 3.5 | 298.8 | 15.3 | 324.6 | 6.7 | 9.089336785 |
| 54 | Y−94 Spot 61 | 67 | 121 | 51477 | 1.8 | 18.9460 | 0.9 | 0.4086 | 1.5 | 0.0562 | 1.1 | 0.77 | 352.3 | 3.9 | 347.9 | 4.3 | 318.4 | 21.2 | 351.1 | 7.6 | 10.64300342 |
| 55 | Y−94 Spot 64 | 49 | 134 | 353445 | 2.8 | 8.7353 | 0.6 | 5.3726 | 1.3 | 0.3405 | 1.2 | 0.87 | 1889.2 | 18.8 | 1880.5 | 11.3 | 1870.9 | 11.5 | 1876 | 20 | 0.978146014 |
| 56 | Y−94 Spot 65 | 46 | 105 | 1418050 | 2.3 | 6.5182 | 0.6 | 9.3076 | 1.3 | 0.4402 | 1.2 | 0.90 | 2351.6 | 23.3 | 2368.8 | 12.1 | 2383.6 | 9.9 | 2378 | 19 | −1.34422256 |
| 57 | Y−94 Spot 66 | 17 | 45 | 293444 | 2.7 | 15.1169 | 1.0 | 1.2477 | 1.5 | 0.1369 | 1.2 | 0.77 | 826.9 | 9.1 | 822.4 | 8.6 | 810.3 | 20.6 | 824 | 17 | 2.048917231 |
| 58 | Y−94 Spot 68 | 34 | 56 | 88251 | 1.6 | 18.6298 | 1.0 | 0.4356 | 1.5 | 0.0589 | 1.1 | 0.73 | 368.8 | 3.9 | 367.1 | 4.5 | 356.5 | 22.7 | 368.4 | 7.6 | 3.43803923 |
| 59 | Y−94 Spot 69 | 33 | 80 | 99420 | 2.4 | 18.8206 | 1.0 | 0.3994 | 1.7 | 0.0545 | 1.3 | 0.78 | 342.3 | 4.3 | 341.2 | 4.8 | 333.5 | 23.3 | 342 | 8.5 | 2.651164842 |
| 60 | Y−94 Spot 70 | 25 | 73 | 78584 | 3.0 | 12.2612 | 0.7 | 1.9929 | 1.3 | 0.1773 | 1.0 | 0.82 | 1052.2 | 10.2 | 1113.1 | 8.7 | 1234.1 | 14.6 |  |  |  |
| 61 | Y−94 Spot 71 | 64 | 217 | 374237 | 3.4 | 14.8081 | 0.9 | 1.3335 | 1.7 | 0.1433 | 1.4 | 0.84 | 863.2 | 11.3 | 860.4 | 9.6 | 853.3 | 18.6 | 861 | 19 | 1.155495028 |
| 62 | Y−94 Spot 72 | 150 | 548 | 702259 | 3.6 | 18.1136 | 0.7 | 0.5254 | 1.4 | 0.0691 | 1.2 | 0.84 | 430.4 | 4.8 | 428.7 | 4.8 | 419.6 | 16.5 | 429.6 | 9.3 | 2.577444726 |
| 63 | Y−94 Spot 73 | 16 | 62 | 26776 | 3.8 | 18.9168 | 1.0 | 0.4529 | 1.5 | 0.0622 | 1.1 | 0.71 | 388.8 | 4.0 | 379.3 | 4.7 | 322.0 | 23.5 | 386.5 | 7.8 | 20.75934002 |
| 64 | Y−94 Spot 74 | 9 | 17 | 3482 | 1.9 | 20.2217 | 1.8 | 0.3688 | 2.2 | 0.0541 | 1.3 | 0.60 | 339.7 | 4.4 | 318.8 | 6.0 | 168.3 | 41.0 |  |  |  |
| 65 | Y−94 Spot 75 | 183 | 277 | 92816 | 1.5 | 18.9902 | 0.8 | 0.3768 | 1.3 | 0.0519 | 1.0 | 0.78 | 326.3 | 3.2 | 324.7 | 3.6 | 313.1 | 18.6 | 325.9 | 6.3 | 4.188457695 |
| 66 | Y−94 Spot 76 | 79 | 128 | 33640 | 1.6 | 18.6850 | 1.1 | 0.4093 | 1.7 | 0.0555 | 1.3 | 0.77 | 348.1 | 4.3 | 348.4 | 4.9 | 349.9 | 24.0 | 348.2 | 8.5 | −0.50048561 |
| 67 | Y−94 Spot 77 | 133 | 181 | 195686 | 1.4 | 18.7971 | 0.8 | 0.3880 | 1.5 | 0.0529 | 1.2 | 0.82 | 332.4 | 3.9 | 332.9 | 4.1 | 336.3 | 18.9 | 332.5 | 7.6 | −1.17133451 |
| 68 | Y−94 Spot 78 | 26 | 67 | 207717 | 2.6 | 8.8433 | 0.6 | 5.1737 | 1.3 | 0.3320 | 1.2 | 0.88 | 1847.9 | 18.6 | 1848.3 | 11.2 | 1848.7 | 11.3 | 1848 | 20 | −0.04166782 |
| 69 | Y−94 Spot 80 | 74 | 109 | 89464 | 1.5 | 18.8360 | 0.9 | 0.3803 | 1.4 | 0.0520 | 1.1 | 0.79 | 326.6 | 3.6 | 327.3 | 4.0 | 331.7 | 19.7 | 326.8 | 7 | −1.51311607 |
| 70 | Y−94 Spot 81 | 36 | 81 | 93449 | 2.2 | 18.9985 | 1.1 | 0.3800 | 1.8 | 0.0524 | 1.4 | 0.77 | 329.2 | 4.4 | 327.1 | 5.0 | 312.2 | 25.6 | 328.6 | 8.7 | 5.447506613 |
| 71 | Y−94 Spot 82 | 35 | 106 | 514146 | 3.0 | 15.4309 | 0.9 | 1.1775 | 1.4 | 0.1318 | 1.0 | 0.76 | 798.3 | 7.8 | 790.1 | 7.5 | 767.1 | 18.7 | 794 | 14 | 4.075738882 |
| 72 | Y−94 Spot 83 | 256 | 366 | 145252 | 1.4 | 18.8353 | 0.7 | 0.3713 | 1.3 | 0.0507 | 1.1 | 0.85 | 319.1 | 3.4 | 320.6 | 3.5 | 331.7 | 15.1 | 319.7 | 6.6 | −3.81770575 |
| 73 | Y−94 Spot 84 | 47 | 76 | 165104 | 1.6 | 7.9917 | 0.7 | 6.3882 | 1.5 | 0.3704 | 1.3 | 0.88 | 2031.4 | 22.5 | 2030.7 | 12.9 | 2029.8 | 12.4 | 2030 | 22 | 0.078602632 |
| 74 | Y−94 Spot 85 | 83 | 147 | 967913 | 1.8 | 19.0429 | 0.6 | 0.4018 | 1.1 | 0.0555 | 0.9 | 0.81 | 348.3 | 3.1 | 342.9 | 3.3 | 306.8 | 14.8 | 346.3 | 6 | 13.51312823 |
| 75 | Y−94 Spot 86 | 43 | 193 | 458370 | 4.5 | 17.1839 | 0.7 | 0.6463 | 1.5 | 0.0806 | 1.3 | 0.88 | 499.6 | 6.4 | 506.2 | 6.0 | 536.1 | 15.8 | 504 | 12 | −6.81710815 |
| 76 | Y−94 Spot 87 | 56 | 270 | 118821 | 4.9 | 17.5739 | 0.7 | 0.6209 | 1.4 | 0.0792 | 1.1 | 0.84 | 491.2 | 5.4 | 490.4 | 5.3 | 486.8 | 16.3 | 491 | 10 | 0.899778783 |
| 77 | Y−94 Spot 88 | 56 | 154 | 83196 | 2.8 | 19.0572 | 0.8 | 0.4046 | 1.5 | 0.0559 | 1.2 | 0.83 | 350.9 | 4.2 | 345.0 | 4.3 | 305.1 | 18.9 | 348.5 | 8.1 | 15.00599729 |
| 78 | Y−94 Spot 89 | 71 | 330 | 206799 | 4.6 | 18.6179 | 0.8 | 0.4297 | 1.2 | 0.0581 | 0.9 | 0.75 | 363.8 | 3.2 | 363.0 | 3.7 | 358.0 | 18.4 | 363.6 | 6.3 | 1.615868138 |
| 79 | Y−94 Spot 91 | 1440 | 558 | 151737 | 0.4 | 18.4467 | 0.5 | 0.4643 | 1.2 | 0.0621 | 1.0 | 0.88 | 388.7 | 3.9 | 387.2 | 3.8 | 378.8 | 12.2 | 387.7 | 7.4 | 2.60411106 |
| 80 | Y−94 Spot 92 | 108 | 171 | 96322 | 1.6 | 18.2535 | 0.7 | 0.4531 | 1.4 | 0.0600 | 1.2 | 0.85 | 375.7 | 4.2 | 379.5 | 4.3 | 402.4 | 15.7 | 377.4 | 8.2 | −6.63651624 |
| 81 | Y−94 Spot 94 | 61 | 87 | 27120 | 1.4 | 19.0284 | 1.0 | 0.3871 | 1.4 | 0.0534 | 1.0 | 0.72 | 335.6 | 3.3 | 332.2 | 4.0 | 308.6 | 22.2 | 335 | 6.4 | 8.762844533 |
| 82 | Y−94 Spot 95 | 20 | 73 | 118942 | 3.7 | 8.8607 | 0.7 | 5.3464 | 1.3 | 0.3437 | 1.1 | 0.82 | 1904.6 | 17.5 | 1876.3 | 11.0 | 1845.1 | 13.3 | 1868 | 21 | 3.22175975 |
| 83 | Y−94 Spot 96 | 38 | 84 | 261316 | 2.2 | 5.1442 | 0.7 | 14.5731 | 1.3 | 0.5440 | 1.1 | 0.84 | 2800.0 | 25.4 | 2787.8 | 12.6 | 2779.0 | 11.8 | 2783 | 22 | 0.755796774 |
| 84 | Y−94 Spot 97 | 95 | 186 | 45730 | 2.0 | 18.6265 | 1.2 | 0.3998 | 1.8 | 0.0540 | 1.4 | 0.76 | 339.2 | 4.6 | 341.5 | 5.3 | 356.9 | 26.4 | 339.7 | 9 | −4.95727324 |
| 85 | Y−94 Spot 98 | 23 | 46 | 362742 | 2.0 | 8.5670 | 0.7 | 5.6753 | 1.4 | 0.3528 | 1.2 | 0.85 | 1947.9 | 19.8 | 1927.6 | 12.0 | 1905.9 | 13.1 | 1919 | 22 | 2.202293087 |
| 86 | Y−94 Spot 99 | 87 | 183 | 75435 | 2.1 | 18.9621 | 0.9 | 0.3738 | 1.4 | 0.0514 | 1.0 | 0.76 | 323.3 | 3.3 | 322.5 | 3.8 | 316.5 | 20.4 | 323.1 | 6.5 | 2.149191263 |
| 87 | Y−94 Spot 101 | 50 | 82 | 91530 | 1.6 | 14.5246 | 0.6 | 1.4186 | 1.2 | 0.1495 | 1.1 | 0.86 | 898.2 | 8.9 | 896.8 | 7.4 | 893.3 | 13.2 | 897 | 15 | 0.543029421 |
| 88 | Y−94 Spot 102 | 23 | 60 | 87894 | 2.6 | 9.0987 | 0.7 | 3.9282 | 1.4 | 0.2593 | 1.2 | 0.87 | 1486.4 | 15.9 | 1619.5 | 11.1 | 1797.0 | 12.2 |  |  |  |
| 89 | Y−94 Spot 103 | 44 | 94 | 146288 | 2.1 | 18.1831 | 0.8 | 0.5108 | 1.6 | 0.0674 | 1.4 | 0.88 | 420.4 | 5.8 | 419.0 | 5.6 | 411.1 | 17.4 | 419 | 11 | 2.272410594 |
| 90 | Y−94 Spot 104 | 17 | 45 | 57776 | 2.6 | 15.1850 | 0.9 | 1.2071 | 1.4 | 0.1330 | 1.1 | 0.79 | 805.0 | 8.3 | 803.9 | 7.7 | 800.8 | 18.0 | 804 | 15 | 0.516480304 |
| 91 | Y−94 Spot 105 | 75 | 191 | 189198 | 2.5 | 18.9661 | 0.8 | 0.3646 | 1.4 | 0.0502 | 1.1 | 0.80 | 315.6 | 3.4 | 315.6 | 3.7 | 316.0 | 18.8 | 315.6 | 6.7 | −0.13069068 |
| 92 | Y−94 Spot 106 | 316 | 394 | 219525 | 1.2 | 19.0204 | 0.9 | 0.3747 | 1.3 | 0.0517 | 0.9 | 0.69 | 325.0 | 2.8 | 323.1 | 3.6 | 309.5 | 21.2 | 324.7 | 5.5 | 5.013977631 |
| 93 | Y−94 Spot 107 | 59 | 219 | 2569080 | 3.7 | 8.3419 | 0.7 | 5.7969 | 1.5 | 0.3509 | 1.3 | 0.86 | 1938.8 | 21.3 | 1946.0 | 12.8 | 1953.6 | 13.4 | 1949 | 23 | −0.75839642 |
| 94 | Y−94 Spot 108 | 135 | 315 | 57846 | 2.3 | 18.4306 | 0.8 | 0.4447 | 1.3 | 0.0595 | 1.1 | 0.82 | 372.4 | 3.9 | 373.5 | 4.1 | 380.8 | 16.9 | 372.8 | 7.6 | −2.20518382 |
| 95 | Y−94 Spot 109 | 63 | 74 | 105668 | 1.2 | 8.7856 | 0.7 | 5.3438 | 1.4 | 0.3407 | 1.2 | 0.85 | 1889.8 | 19.7 | 1875.9 | 12.0 | 1860.5 | 13.2 | 1870 | 22 | 1.574198382 |
| 96 | Y−94 Spot 110 | 119 | 172 | 100002 | 1.4 | 16.2056 | 2.9 | 0.4869 | 3.1 | 0.0573 | 1.0 | 0.31 | 358.9 | 3.3 | 402.8 | 10.3 | 663.1 | 62.8 |  |  |  |
| 97 | Y−94 Spot 111 | 128 | 191 | 121774 | 1.5 | 18.0848 | 0.7 | 0.4916 | 1.3 | 0.0645 | 1.1 | 0.84 | 403.0 | 4.3 | 406.0 | 4.4 | 423.2 | 16.2 | 404.3 | 8.4 | −4.7672276 |
| 98 | Y−94 Spot 112 | 172 | 317 | 167919 | 1.8 | 17.4655 | 0.8 | 0.5933 | 1.1 | 0.0752 | 0.9 | 0.75 | 467.3 | 3.9 | 472.9 | 4.3 | 500.5 | 16.8 | 468.9 | 7.6 | −6.62621203 |
| 99 | Y−94 Spot 113 | 40 | 79 | 85425 | 2.0 | 18.4532 | 0.9 | 0.4186 | 1.4 | 0.0561 | 1.1 | 0.78 | 351.6 | 3.7 | 355.1 | 4.2 | 378.0 | 19.6 | 352.4 | 7.4 | −6.99174443 |
| 100 | Y−94 Spot 114 | 22 | 54 | 81300 | 2.4 | 15.3166 | 0.7 | 1.2151 | 1.4 | 0.1350 | 1.2 | 0.86 | 816.6 | 9.4 | 807.5 | 8.0 | 782.7 | 15.7 | 807 | 16 | 4.323797245 |
| 101 | Y−94 Spot 116 | 18 | 59 | 58053 | 3.3 | 18.6387 | 1.1 | 0.3922 | 1.6 | 0.0530 | 1.3 | 0.76 | 333.1 | 4.1 | 335.9 | 4.7 | 355.5 | 23.9 | 333.7 | 8.1 | −6.28477761 |
| 102 | Y−94 Spot 117 | 54 | 275 | 98261 | 5.1 | 18.5536 | 0.8 | 0.4271 | 1.5 | 0.0575 | 1.3 | 0.86 | 360.4 | 4.5 | 361.1 | 4.5 | 365.8 | 17.4 | 360.7 | 8.7 | −1.47843019 |
| 103 | Y−94 Spot 118 | 133 | 241 | 13557 | 1.8 | 16.1656 | 2.8 | 0.4719 | 3.0 | 0.0553 | 1.2 | 0.41 | 347.3 | 4.2 | 392.5 | 9.9 | 668.4 | 59.2 |  |  |  |
| 104 | Y−94 Spot 119 | 35 | 84 | 117774 | 2.4 | 15.0979 | 0.9 | 1.2668 | 1.5 | 0.1388 | 1.1 | 0.76 | 837.7 | 8.7 | 830.9 | 8.3 | 812.9 | 19.8 | 834 | 16 | 3.051475577 |
| 105 | Y−94 Spot 120 | 163 | 251 | 459381 | 1.5 | 18.6889 | 0.9 | 0.3851 | 1.2 | 0.0522 | 0.8 | 0.70 | 328.2 | 2.7 | 330.8 | 3.4 | 349.4 | 19.5 | 328.5 | 5.4 | −6.07838072 |
| 106 | Y−94 Spot 121 | 53 | 73 | 46645 | 1.4 | 19.1535 | 0.8 | 0.3793 | 1.3 | 0.0527 | 1.0 | 0.75 | 331.2 | 3.1 | 326.5 | 3.6 | 293.6 | 19.3 | 330.1 | 6.1 | 12.78302434 |
| 107 | Y−94 Spot 122 | 126 | 169 | 26325 | 1.3 | 17.2459 | 1.8 | 0.4118 | 2.1 | 0.0515 | 1.0 | 0.50 | 323.9 | 3.3 | 350.2 | 6.1 | 528.3 | 39.1 |  |  |  |
| 108 | Y−94 Spot 123 | 92 | 221 | 120522 | 2.4 | 18.1728 | 0.9 | 0.5228 | 1.6 | 0.0689 | 1.3 | 0.82 | 429.8 | 5.3 | 427.1 | 5.4 | 412.3 | 19.9 | 429 | 10 | 4.229003016 |
| 109 | Y−94 Spot 124 | 55 | 146 | 162047 | 2.7 | 19.1382 | 0.8 | 0.3690 | 1.4 | 0.0512 | 1.1 | 0.80 | 322.1 | 3.6 | 318.9 | 3.9 | 295.4 | 19.4 | 321.1 | 7 | 9.031547644 |
| 110 | Y−94 Spot 125 | 100 | 170 | 63882 | 1.7 | 14.3115 | 0.8 | 1.4314 | 1.5 | 0.1486 | 1.3 | 0.86 | 893.4 | 10.6 | 902.2 | 8.8 | 923.7 | 15.5 | 903 | 18 | −3.28922282 |
| 111 | Y−94 Spot 126 | 72 | 138 | 130549 | 1.9 | 18.7401 | 0.9 | 0.4140 | 1.4 | 0.0563 | 1.1 | 0.77 | 353.0 | 3.6 | 351.7 | 4.1 | 343.2 | 19.7 | 352.7 | 7.1 | 2.856616927 |
| 112 | Y−94 Spot 127 | 49 | 100 | 291635 | 2.0 | 15.2141 | 0.7 | 1.2152 | 1.2 | 0.1342 | 1.0 | 0.79 | 811.5 | 7.3 | 807.6 | 6.8 | 796.8 | 15.6 | 809 | 13 | 1.844468538 |
| 113 | Y−94 Spot 128 | 35 | 226 | 584485 | 6.4 | 5.9676 | 0.7 | 10.8330 | 1.4 | 0.4691 | 1.2 | 0.85 | 2479.4 | 23.9 | 2508.9 | 12.7 | 2532.8 | 12.2 | 2521 | 22 | −2.10649723 |
| 114 | Y−94 Spot 129 | 79 | 268 | 97174 | 3.4 | 18.6348 | 0.8 | 0.3840 | 1.3 | 0.0519 | 1.0 | 0.79 | 326.3 | 3.2 | 330.0 | 3.6 | 355.9 | 17.8 | 327.2 | 6.4 | −8.32917588 |

\* - isotope ratios corrected for common Pb. \*\* - ages used in calculations. Rho - correlation coefficient between the errors of the 207Pb/235U–206Pb/238U ratios. CA-Concordia age [7]. D-discordance.

**Table S3.** Hf isotopic data for zircons from metasedimentary rocks of the Chiron Basin.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Analysis** | **(176Yb + 176Lu) / 176Hf, (%)** | **176Lu/177Hf** | **176Hf/177Hf** | **±1s, %** | **Age, Ma** | **ɛHf(t)** | **±** | **tHf(DM), Ga** | **tHf(С), Ga** |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| ***Chiron Basin*** | |  |  |  |  |  |  |  |  |  |
| *Sample Y-99: a shale of the Aga–Borshchovochnyi metamorphic Formation* | | | | |  |  |  |  |  |  |
| 1 | Y-99 Spot 1 | 11.9 | 0.000718 | 0.282369 | 0.000018 | 501.5 | -3.47 | 0.61 | 1.24 | 1.44 |
| 2 | Y-99 Spot 31 | 18.7 | 0.001249 | 0.282546 | 0.000017 | 585.1 | 4.41 | 0.57 | 1.01 | 1.11 |
| 3 | Y-99 Spot 37 | 9.4 | 0.000746 | 0.282563 | 0.000019 | 561.5 | 4.71 | 0.65 | 0.97 | 1.07 |
| 4 | Y-99 Spot 43 | 8.4 | 0.000573 | 0.282402 | 0.000018 | 580.5 | -0.50 | 0.61 | 1.19 | 1.35 |
| 5 | Y-99 Spot 44 | 10.3 | 0.000613 | 0.282315 | 0.000014 | 510.1 | -5.16 | 0.47 | 1.31 | 1.53 |
| 6 | Y-99 Spot 45 | 14.5 | 0.001004 | 0.281150 | 0.000022 | 2515.8 | -2.62 | 0.74 | 2.93 | 2.98 |
| 7 | Y-99 Spot 50 | 74.7 | 0.003622 | 0.282585 | 0.000020 | 516.7 | 3.54 | 0.69 | 1.01 | 1.10 |
| 8 | Y-99 Spot 74 | 12.4 | 0.000916 | 0.282517 | 0.000019 | 495 | 1.60 | 0.68 | 1.04 | 1.18 |
| 9 | Y-99 Spot 75 | 20.8 | 0.001266 | 0.282323 | 0.000022 | 611.6 | -2.91 | 0.76 | 1.32 | 1.50 |
| 10 | Y-99 Spot 81 | 17.0 | 0.001041 | 0.282424 | 0.000018 | 518.8 | -1.24 | 0.64 | 1.17 | 1.34 |
| 11 | Y-99 Spot 84 | 22.6 | 0.001530 | 0.282482 | 0.000017 | 837.5 | 7.42 | 0.59 | 1.10 | 1.15 |
| 12 | Y-99 Spot 95 | 8.4 | 0.000702 | 0.282460 | 0.000019 | 582.4 | 1.52 | 0.66 | 1.11 | 1.25 |
| 13 | Y-99 Spot 105 | 14.3 | 0.000860 | 0.282596 | 0.000015 | 574.3 | 6.12 | 0.54 | 0.92 | 1.01 |
| 14 | Y-99 Spot 107 | 9.1 | 0.000580 | 0.282359 | 0.000017 | 520.4 | -3.36 | 0.59 | 1.25 | 1.45 |
| 15 | Y-99 Spot 111 | 9.6 | 0.000749 | 0.282465 | 0.000018 | 586.7 | 1.78 | 0.64 | 1.11 | 1.24 |
| 16 | Y-99 Spot 117 | 17.8 | 0.001181 | 0.282393 | 0.000021 | 590.9 | -0.84 | 0.74 | 1.22 | 1.38 |
| 17 | Y-99 Spot 120 | 0.4 | 0.000021 | 0.282391 | 0.000018 | 804.8 | 4.30 | 0.61 | 1.19 | 1.29 |
| *Sample Y-98: a sandstone of the Khara–Shibir Formation* | | | |  |  |  |  |  |  |  |
| 1 | Y-98 Spot 2 | 12.8 | 0.000830 | 0.282380 | 0.000016 | 348.6 | -6.39 | 0.54 | 1.23 | 1.47 |
| 2 | Y-98 Spot 5 | 15.3 | 0.000968 | 0.282314 | 0.000021 | 350.5 | -8.70 | 0.75 | 1.32 | 1.59 |
| 3 | Y-98 Spot 12 | 14.0 | 0.000948 | 0.282173 | 0.000015 | 378.1 | -13.10 | 0.54 | 1.52 | 1.83 |
| 4 | Y-98 Spot 19 | 11.4 | 0.000681 | 0.282547 | 0.000021 | 349.1 | -0.44 | 0.74 | 0.99 | 1.17 |
| 5 | Y-98 Spot 38 | 21.6 | 0.001319 | 0.282571 | 0.000015 | 371.7 | 0.76 | 0.52 | 0.97 | 1.13 |
| 6 | Y-98 Spot 41 | 20.7 | 0.001401 | 0.282615 | 0.000018 | 347.8 | 1.79 | 0.62 | 0.91 | 1.05 |
| 7 | Y-98 Spot 43 | 10.4 | 0.000718 | 0.281943 | 0.000014 | 331 | -22.19 | 0.49 | 1.83 | 2.25 |
| 8 | Y-98 Spot 59 | 23.0 | 0.001385 | 0.282345 | 0.000017 | 389.9 | -6.87 | 0.60 | 1.29 | 1.53 |
| 9 | Y-98 Spot 61 | 18.3 | 0.001235 | 0.282608 | 0.000017 | 356.6 | 1.76 | 0.60 | 0.92 | 1.06 |
| 10 | Y-98 Spot 63 | 11.8 | 0.000729 | 0.282607 | 0.000015 | 345.7 | 1.62 | 0.51 | 0.91 | 1.06 |
| 11 | Y-98 Spot 68 | 16.5 | 0.001087 | 0.282504 | 0.000013 | 381 | -1.36 | 0.46 | 1.06 | 1.24 |
| 12 | Y-98 Spot 69 | 6.6 | 0.000403 | 0.282368 | 0.000019 | 351.9 | -6.64 | 0.65 | 1.23 | 1.49 |
| 13 | Y-98 Spot 73 | 17.4 | 0.001169 | 0.282340 | 0.000018 | 350.6 | -7.83 | 0.63 | 1.29 | 1.55 |
| 14 | Y-98 Spot 81 | 9.2 | 0.000572 | 0.282632 | 0.000017 | 353.1 | 2.70 | 0.58 | 0.87 | 1.01 |
| 15 | Y-98 Spot 94 | 16.0 | 0.001076 | 0.282594 | 0.000014 | 347.2 | 1.10 | 0.50 | 0.93 | 1.09 |
| 16 | Y-98 Spot 99 | 26.3 | 0.001709 | 0.282693 | 0.000019 | 355.9 | 4.64 | 0.65 | 0.81 | 0.92 |
| 17 | Y-98 Spot 106 | 18.3 | 0.001216 | 0.282579 | 0.000015 | 359.1 | 0.79 | 0.53 | 0.96 | 1.11 |
| 18 | Y-98 Spot 111 | 16.9 | 0.001075 | 0.282297 | 0.000015 | 385 | -8.61 | 0.51 | 1.35 | 1.61 |
| 19 | Y-98 Spot 116 | 22.9 | 0.001460 | 0.282559 | 0.000017 | 361 | 0.05 | 0.59 | 0.99 | 1.15 |
| 20 | Y-98 Spot 130 | 10.9 | 0.000635 | 0.282452 | 0.000020 | 340.1 | -3.98 | 0.70 | 1.12 | 1.34 |
| *Sample Y-97: a sandstone of the Shazagaitui Formation* | | | |  |  |  |  |  |  |  |
| 1 | Y-97 Spot 3 | 17.4 | 0.001142 | 0.282488 | 0.000017 | 342.2 | -2.79 | 0.59 | 1.08 | 1.28 |
| 2 | Y-97 Spot 11 | 8.2 | 0.000515 | 0.281433 | 0.000023 | 1867.8 | -6.35 | 0.78 | 2.51 | 2.66 |
| 3 | Y-97 Spot 16 | 32.8 | 0.001978 | 0.282648 | 0.000024 | 342.2 | 2.71 | 0.85 | 0.88 | 1.00 |
| 4 | Y-97 Spot 18 | 6.2 | 0.000398 | 0.281394 | 0.000018 | 2038 | -3.74 | 0.58 | 2.55 | 2.66 |
| 5 | Y-97 Spot 42 | 6.1 | 0.000350 | 0.281374 | 0.000015 | 1912.1 | -7.25 | 0.50 | 2.58 | 2.74 |
| 6 | Y-97 Spot 43 | 15.7 | 0.001008 | 0.282463 | 0.000020 | 875.5 | 7.85 | 0.67 | 1.12 | 1.16 |
| 7 | Y-97 Spot 60 | 9.6 | 0.000637 | 0.282688 | 0.000018 | 328.5 | 4.11 | 0.65 | 0.79 | 0.92 |
| 8 | Y-97 Spot 61 | 9.9 | 0.000689 | 0.281352 | 0.000019 | 1844.8 | -9.96 | 0.63 | 2.63 | 2.82 |
| 9 | Y-97 Spot 67 | 28.8 | 0.001896 | 0.282187 | 0.000016 | 381.2 | -12.81 | 0.55 | 1.54 | 1.82 |
| 10 | Y-97 Spot 85 | 12.9 | 0.000928 | 0.282146 | 0.000021 | 390.8 | -13.78 | 0.74 | 1.55 | 1.88 |
| 11 | Y-97 Spot 90 | 73.9 | 0.004066 | 0.282395 | 0.000028 | 376.4 | -6.06 | 0.98 | 1.32 | 1.48 |
| 12 | Y-97 Spot 109 | 11.3 | 0.000701 | 0.281446 | 0.000016 | 2015.4 | -2.84 | 0.53 | 2.50 | 2.60 |
| 13 | Y-97 Spot 113 | 12.2 | 0.000731 | 0.281501 | 0.000016 | 1889.9 | -3.73 | 0.53 | 2.43 | 2.55 |
| 14 | Y-97 Spot 114 | 44.9 | 0.002517 | 0.282187 | 0.000019 | 370.8 | -13.15 | 0.66 | 1.56 | 1.83 |
| 15 | Y-97 Spot 115 | 18.0 | 0.001110 | 0.281171 | 0.000023 | 2486.3 | -2.73 | 0.76 | 2.91 | 2.97 |
| 16 | Y-97 Spot 116 | 7.1 | 0.000431 | 0.281673 | 0.000024 | 1936.9 | 3.81 | 0.80 | 2.18 | 2.21 |
| 17 | Y-97 Spot 120 | 37.9 | 0.002223 | 0.282255 | 0.000029 | 368.7 | -10.73 | 1.02 | 1.45 | 1.71 |
| 18 | Y-97 Spot 121 | 11.9 | 0.000766 | 0.282180 | 0.000021 | 349.7 | -13.45 | 0.74 | 1.50 | 1.83 |
| 19 | Y-97 Spot 122 | 10.7 | 0.000672 | 0.282438 | 0.000019 | 879.5 | 7.25 | 0.64 | 1.14 | 1.20 |
| *Sample Y-94: a sandstone of the Zhipkhoshi Formation* | | | |  |  |  |  |  |  |  |
| 1 | Y-94 Spot 1 | 40.3 | 0.002759 | 0.282453 | 0.000041 | 404.1 | -3.12 | 1.43 | 1.18 | 1.35 |
| 2 | Y-94 Spot 3 | 26.5 | 0.001781 | 0.282947 | 0.000030 | 351.1 | 13.52 | 1.06 | 0.44 | 0.46 |
| 3 | Y-94 Spot 33 | 28.2 | 0.001651 | 0.281979 | 0.000017 | 341.4 | -20.91 | 0.61 | 1.82 | 2.19 |
| 4 | Y-94 Spot 34 | 13.1 | 0.000890 | 0.283000 | 0.000023 | 325.5 | 15.04 | 0.80 | 0.36 | 0.36 |
| 5 | Y-94 Spot 38 | 13.3 | 0.001027 | 0.282714 | 0.000021 | 318.1 | 4.73 | 0.75 | 0.76 | 0.88 |
| 6 | Y-94 Spot 48 | 10.9 | 0.000813 | 0.282613 | 0.000022 | 506.9 | 5.27 | 0.76 | 0.90 | 1.00 |
| 7 | Y-94 Spot 53 | 12.4 | 0.001090 | 0.282674 | 0.000026 | 313.9 | 3.21 | 0.90 | 0.82 | 0.96 |
| 8 | Y-94 Spot 64 | 32.7 | 0.002257 | 0.281642 | 0.000020 | 1870.9 | -1.06 | 0.67 | 2.33 | 2.40 |
| 9 | Y-94 Spot 69 | 15.6 | 0.001144 | 0.282734 | 0.000028 | 342.3 | 5.93 | 0.99 | 0.74 | 0.84 |
| 10 | Y-94 Spot 95 | 11.4 | 0.000844 | 0.281621 | 0.000023 | 1845.1 | -0.59 | 0.76 | 2.27 | 2.35 |
| 11 | Y-94 Spot 99 | 10.3 | 0.000769 | 0.282510 | 0.000022 | 323.3 | -2.34 | 0.78 | 1.04 | 1.25 |
| 12 | Y-94 Spot 108 | 33.2 | 0.001919 | 0.282334 | 0.000030 | 372.4 | -7.77 | 1.07 | 1.33 | 1.56 |
| 13 | Y-94 Spot 112 | 24.7 | 0.001825 | 0.282683 | 0.000030 | 467.3 | 6.58 | 1.03 | 0.82 | 0.90 |
| 14 | Y-94 Spot 118 | 13.1 | 0.000837 | 0.282591 | 0.000015 | 347.3 | 1.06 | 0.53 | 0.93 | 1.09 |
| 15 | Y-94 Spot 127 | 32.1 | 0.002349 | 0.282298 | 0.000019 | 811.5 | -0.09 | 0.67 | 1.40 | 1.52 |

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