

**Supplementary Figure S1.** Geology and location of tungsten occurrences in New Brunswick. Numbers in brackets correspond with New Brunswick mineral occurrence database unique reference number (http://dnr-mrn.gnb.ca/mineraloccurrence/). From Stewart et al. [17].

**Supplementary Table ST1.** Whole rock geochemistry included as Excel file titled “Supplementary\_Table\_ST1.xlsx”

**Supplementary Table ST2.** Extended laser ablation data from the analysis of titanite in sample from drill core SB0806 at 63.7m (summary presented in Table 2).

| **Comments** | **Used for Age Calculation** | **U**  **(ppm)\*** | **Th**  **(ppm)\*** | **204Pb cps** | **206Pb**  **204Pb** | **207Pb**  **235U** | **2σ** | **206Pb**  **238U** | **2σ** | **err.**  **cor.** | **207Pb**  **206Pb** | **2σ** | **207Pb**  **235U**  **Age** | **2σ** | **206Pb**  **238U**  **Age** | **2σ** | **% conc** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 63.7m\_ttn3c |  | 273 | 538 | 54 | 811 | 0.514 | 0.057 | 0.0678 | 0.0012 | 0.58 | 0.0526 | 0.0057 | 417 | 38 | 422.9 | 7.3 | 101.4 |
| 63.7m\_ttn2r |  | 281 | 612 | 99 | 466 | 0.452 | 0.052 | 0.0679 | 0.0013 | 0.68 | 0.0477 | 0.0054 | 396 | 35 | 423.5 | 7.8 | 106.9 |
| 63.7m\_ttn8r-2 |  | 226 | 726 | 103 | 368 | 0.460 | 0.059 | 0.0689 | 0.0015 | 0.79 | 0.0493 | 0.0058 | 399 | 41 | 429.8 | 9.4 | 107.7 |
| 63.7m\_tt5c |  | 277 | 652 | 101 | 463 | 0.479 | 0.056 | 0.0694 | 0.0013 | 0.67 | 0.0488 | 0.0055 | 390 | 41 | 432.2 | 7.6 | 110.8 |
| 63.7m\_ttn1r |  | 261 | 729 | 96 | 449 | 0.499 | 0.060 | 0.0681 | 0.0014 | 0.66 | 0.0523 | 0.0058 | 405 | 41 | 424.6 | 8.3 | 104.8 |
| 63.7m\_ttn6r-5 | yes | 334 | 935 | 89 | 621 | 0.502 | 0.062 | 0.0696 | 0.0014 | 0.69 | 0.0522 | 0.0061 | 425 | 42 | 433.6 | 8.5 | 102.0 |
| 63.7m\_ttn4r-3 | yes | 233 | 605 | 87 | 448 | 0.515 | 0.067 | 0.0693 | 0.0016 | 0.83 | 0.0533 | 0.0063 | 425 | 45 | 432.1 | 9.7 | 101.7 |
| 63.7m\_ttn5r-2 | yes | 292 | 1049 | 121 | 421 | 0.516 | 0.052 | 0.0688 | 0.0011 | 0.56 | 0.0544 | 0.0053 | 413 | 37 | 428.8 | 6.8 | 103.8 |
| 63.7m\_ttn4r | yes | 164 | 437 | 82 | 341 | 0.519 | 0.086 | 0.0685 | 0.0016 | 0.76 | 0.0544 | 0.0083 | 407 | 61 | 427.0 | 9.8 | 104.9 |
| 63.7m\_ttn6r-3 | yes | 362 | 913 | 93 | 640 | 0.522 | 0.050 | 0.0690 | 0.0014 | 0.72 | 0.0547 | 0.0049 | 432 | 34 | 429.8 | 8.5 | 99.5 |
| 63.7m\_ttn2c | yes | 284 | 742 | 71 | 655 | 0.527 | 0.051 | 0.0689 | 0.0013 | 0.63 | 0.0536 | 0.0050 | 418 | 35 | 429.2 | 7.6 | 102.7 |
| 63.7m\_ttn3r | yes | 248 | 686 | 75 | 551 | 0.528 | 0.058 | 0.0697 | 0.0015 | 0.74 | 0.0547 | 0.0055 | 424 | 41 | 434.6 | 9.1 | 102.5 |
| 63.7m\_ttn4c | yes | 249 | 884 | 85 | 504 | 0.529 | 0.069 | 0.0698 | 0.0015 | 0.76 | 0.0538 | 0.0068 | 434 | 48 | 435.1 | 9.0 | 100.3 |
| 63.7m\_ttn5r | yes | 240 | 623 | 83 | 487 | 0.530 | 0.073 | 0.0697 | 0.0014 | 0.72 | 0.0531 | 0.0071 | 423 | 52 | 434.3 | 8.6 | 102.7 |
| 63.7m\_ttn6c | yes | 342 | 834 | 68 | 814 | 0.532 | 0.046 | 0.0685 | 0.0014 | 0.69 | 0.0554 | 0.0044 | 434 | 31 | 427.2 | 8.6 | 98.4 |
| 63.7mttn1c | yes | 295 | 836 | 74 | 679 | 0.532 | 0.050 | 0.0700 | 0.0014 | 0.66 | 0.0540 | 0.0047 | 426 | 34 | 436.1 | 8.4 | 102.4 |
| 63.7m\_ttn11r | yes | 392 | 843 | 78 | 817 | 0.534 | 0.039 | 0.0690 | 0.0013 | 0.68 | 0.0565 | 0.0036 | 436 | 26 | 430.1 | 7.8 | 98.6 |
| 63.7m\_ttn9r-2 | yes | 261 | 722 | 70 | 613 | 0.534 | 0.060 | 0.0700 | 0.0015 | 0.72 | 0.0534 | 0.0057 | 433 | 40 | 436.0 | 9.1 | 100.7 |
| 63.7m\_ttn7r | yes | 256 | 800 | 88 | 475 | 0.536 | 0.054 | 0.0697 | 0.0013 | 0.56 | 0.0545 | 0.0055 | 438 | 37 | 434.3 | 7.6 | 99.2 |
| 63.6m\_ttn6r | yes | 189 | 525 | 77 | 405 | 0.537 | 0.088 | 0.0688 | 0.0016 | 0.78 | 0.0535 | 0.0090 | 410 | 64 | 428.8 | 9.8 | 104.6 |
| 63.7\_ttn8c |  | 206 | 438 | 60 | 574 | 0.539 | 0.068 | 0.0700 | 0.0015 | 0.75 | 0.0551 | 0.0063 | 429 | 47 | 435.9 | 8.7 | 101.6 |
| 63.7m\_ttn6r-2 |  | 313 | 1193 | 84 | 608 | 0.540 | 0.052 | 0.0692 | 0.0014 | 0.68 | 0.0558 | 0.0050 | 434 | 35 | 431.5 | 8.3 | 99.4 |
| 63.7m\_ttn10c |  | 257 | 555 | 53 | 789 | 0.569 | 0.051 | 0.0697 | 0.0012 | 0.70 | 0.0598 | 0.0051 | 462 | 34 | 434.2 | 7.4 | 94.0 |
| 63.7m\_ttn8r-1 |  | 202 | 426 | 44 | 753 | 0.604 | 0.070 | 0.0691 | 0.0016 | 0.78 | 0.0623 | 0.0065 | 485 | 44 | 430.9 | 9.5 | 88.8 |
| 63.7m\_ttn11r-2 |  | 274 | 680 | 75 | 608 | 0.532 | 0.049 | 0.0701 | 0.0012 | 0.56 | 0.0547 | 0.0047 | 424 | 33 | 436.8 | 7.2 | 103.0 |
| 63.7m\_ttn4r-2 |  | 306 | 886 | 80 | 631 | 0.540 | 0.049 | 0.0701 | 0.0013 | 0.67 | 0.0549 | 0.0046 | 434 | 32 | 436.9 | 8.0 | 100.7 |
| 63.7m\_ttn11r-3 |  | 251 | 593 | 82 | 499 | 0.533 | 0.056 | 0.0703 | 0.0012 | 0.71 | 0.0546 | 0.0058 | 432 | 40 | 437.7 | 7.3 | 101.3 |
| 63.7m\_ttn9r |  | 342 | 853 | 81 | 693 | 0.541 | 0.046 | 0.0703 | 0.0013 | 0.72 | 0.0543 | 0.0043 | 433 | 30 | 438.2 | 7.9 | 101.2 |
| 63.7m\_ttn6r-4 |  | 274 | 534 | 65 | 702 | 0.534 | 0.054 | 0.0703 | 0.0014 | 0.76 | 0.0546 | 0.0049 | 428 | 35 | 437.8 | 8.7 | 102.3 |
| 63.7m\_ttn7c |  | 325 | 707 | 89 | 604 | 0.598 | 0.052 | 0.0703 | 0.0011 | 0.67 | 0.0603 | 0.0052 | 468 | 35 | 438.1 | 6.6 | 93.6 |
| 63.7m\_ttn7r-3 |  | 253 | 569 | 61 | 694 | 0.542 | 0.055 | 0.0709 | 0.0015 | 0.75 | 0.0541 | 0.0052 | 431 | 38 | 441.3 | 9.2 | 102.4 |

\*U and Th concentrations are semi-quantitative.