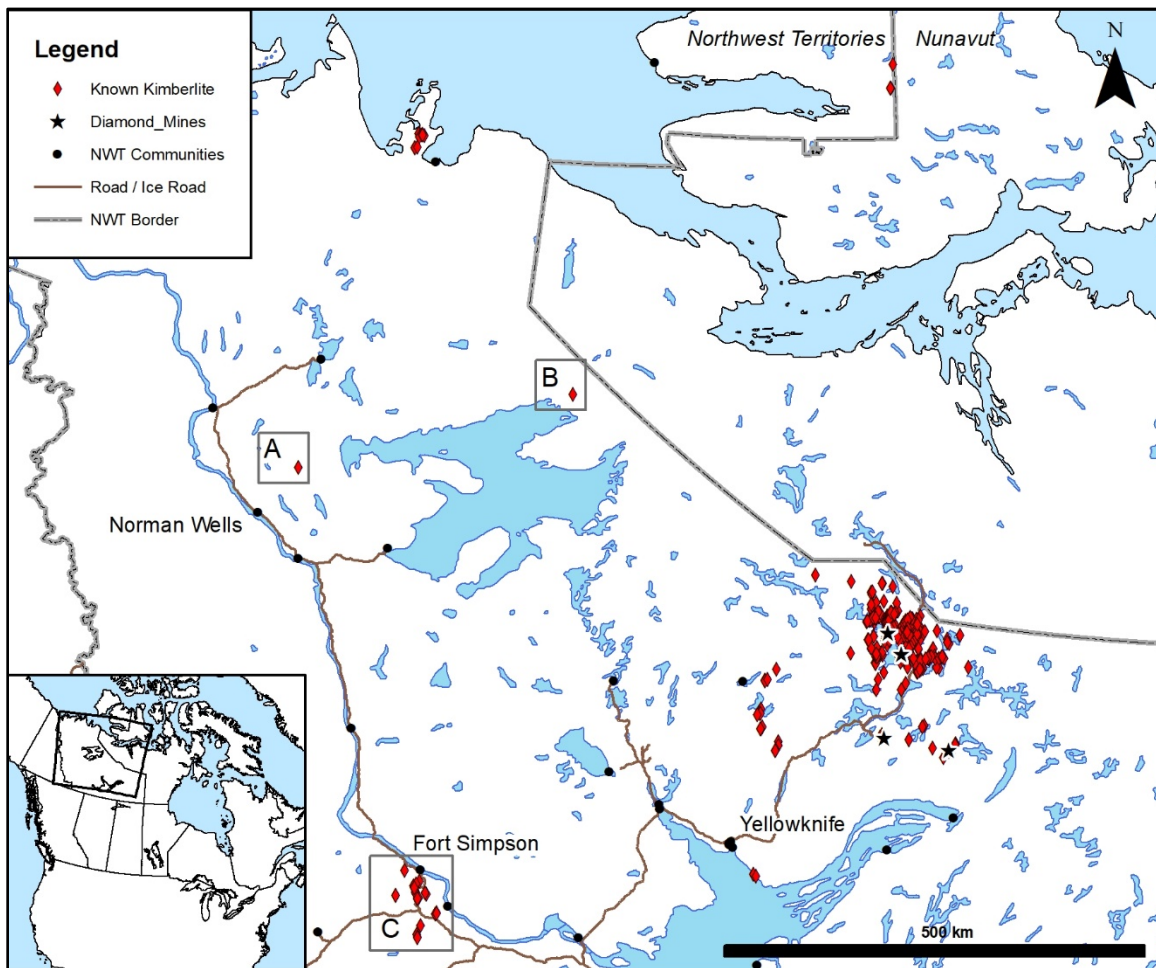


## Updated Northwest Territories Kimberlite Compilation

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In 2023 an updated compilation of known kimberlites in the Northwest Territories (NWT) was generated from a variety of sources, including the “Bedrock Geology of the Slave Craton, Northwest Territories and Nunavut” (Stubley and Irwin 2019), the Northwest Territories Geological Survey’s (NTGS) Kimberlite Anomaly and Drill Hole Data database (KANDD), multiple recently released assessment and technical reports, as well as communications with diamond mining and exploration companies.



**Figure 1:** General location of known NWT kimberlites. Several new additions to the database are highlighted A) the Hillside kimberlite, B) the Dharma kimberlite and C) the Fort Simpson kimberlite field.

This poster highlights the 423 known kimberlites in the NWT, a significant increase from the 143 currently in KANDD. Three of the new additions to the list of NWT kimberlites from outside the Slave Craton are highlighted in Figure 1.

The Hillside Kimberlite (Figure 1 A) was discovered by Patrician Diamonds Inc. in 2008 and yielded six microdiamonds from 111.5 kg of core. Magnetic data suggests an interpreted kimberlite diameter of 300+ meters (Craigie, 2010). The Dharma kimberlite (Figure 1 B) was discovered by Sanatana Diamonds Inc. in late 2007 and consists of volcanoclastic blows up to 100 m x 25 m with associated coherent sills and dikes. It is also diamondiferous, with 1,457.4 kg of drill core returning 763 diamonds over 0.106 mm (Gill, 2010). The Fort Simpson kimberlite field (Figure 1 C) was discovered by Olivut Resources Ltd. in 1998 as part of an extensive exploration program, and by 2011 they had discovered 28 kimberlites. These are described as tuffisitic kimberlite, tuffisitic kimberlite breccias and coherent kimberlite, some of which are diamondiferous (Pitman, 2012).

A full version of this compilation is available as an Open File publication from the NTGS (Elliott, 2024), which contains the geospatial data from this poster along with a full list of references and available age dates to accompany these mapping products.

## References

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