



**STARFIELD** RESOURCES INC.

**NEWS**

## **Starfield Resources Provides Update On Diamond Exploration At Ferguson Lake**

*Exploration drilling finds kimberlitic dike; narrows diamond search area*

**Toronto, Ontario – April 28, 2010 – Starfield Resources Inc.** (TSX: SRU / OTCBB: SRFDF) (“the Company”) is pleased to provide an update on the diamond exploration program being conducted by joint venture partner Thanda Resources Inc. at the Company’s Ferguson Lake Project in Nunavut, Canada.

Thanda completed an initial phase of diamond exploration in the Y Lake area of Ferguson Lake during October and November 2009. The work consisted of a re-examination of the 14 possible kimberlite anomalies identified by Fugro Airborne Surveys during a helicopter survey in April 2009. Thanda, in conjunction with Mountain Valley Geophysics Corp., conducted ground magnetic surveys over 13 selected geophysical anomalies.

Following completion of the ground magnetic surveys, Thanda drilled seven of the anomalies (M2, M3E, M4, M4N, M8, M10 and M11). Five vertical and two angled core holes totaling 570.9 metres were completed. Results showed the rocks comprising the background geology of the Ferguson Lake property record a complex magnetic history. The drilling also found that the rounded, highly magnetic targets identified by the Fugro airborne survey do not necessarily represent kimberlite pipes, but are associated with a wide variety of magnetite and/or pyrrhotite-bearing rocks.

Drilling on the M2 anomaly did, however, intersect a thin kimberlitic dike at a depth of 6.3 metres. A 2.5 kilogram core sample was shipped to SGS Canada Inc. to establish whether it was diamondiferous. “This rock proved to be barren, but it is common to discover barren kimberlitic dikes close to highly diamondiferous kimberlites,” said Dr. Matthew Field, head of exploration for Thanda. “This pattern has been demonstrated at the world-class Ekati diamond mine in the Northwest Territories, the Victor mine in Ontario and the Orapa diamond mine in Botswana.”

The identification of this kimberlitic dike provides evidence that dikes of this type do occur on the property. However, this dike was not the cause of the rounded M2 anomaly and does not explain the presence of the kimberlite and diamond indicator minerals (KIM/DIM) found on the property. It was also not the source of the previously reported diamond found in till sample TDS5-126 in 2008. The remaining rounded magnetic targets chosen by Fugro will not be followed up by drilling, due to their apparent size or

belief by Thanda that they are the result of magnetite bearing rocks rather than kimberlitic bodies.

As a result of this work, the search for kimberlites has now been narrowed to a 30 kilometre by 10 kilometre block located on the 625,000 acre property.

“Thanda’s further analysis of the existing geophysical data has revealed subtle magnetic anomalies similar to the magnetic signatures of the diamondiferous kimberlites already discovered in the neighboring Churchill Province,” said Sheila Ogilvie-Harris, President of Thanda. “We will use the combined geophysical datasets, together with the enhanced resolution of the mineral trains, to explore for diamond-bearing kimberlites on the Ferguson Lake property.”

The 2010 diamond exploration program will use the judicious application of ultra-high-resolution aerial and ground geophysical surveys on this selected block. A more closely spaced till sampling program for KIM/DIM will also be undertaken. The next drilling program will be conducted when coincident geophysical and KIM/DIM targets have been defined.

Matthew Field, PhD., MGSSA, FGS, Pr.Sci.Nat., is a Qualified Person in accordance with National Instrument 43-101 and is responsible for the technical content in this release.

### **About Starfield**

Starfield Resources Inc. is an exploration and development stage company exploring for copper, nickel, and platinum group elements (PGE) in North America. The Company has three main projects: a PGE project in Montana’s Stillwater District; a copper project in California’s historic Moonlight Copper Mining District; and a copper/nickel/cobalt/PGE project in Ferguson Lake, Nunavut. Additional assets include a diamond joint venture in Nunavut, additional copper/nickel/chrome projects in Montana, and a portfolio of eight gold properties in Nevada that are currently under joint venture agreement. Starfield is also funding the development of a novel, environmentally friendly and energy efficient hydrometallurgical process to recover metals from massive sulphides.

### **About Thanda**

Thanda Resources Inc. is a private exploration company primarily focused in the diamond industry. The company's main project is in Nunavut, Canada where it has the sole diamond exploration rights to Starfield Resources Inc.'s Ferguson Lake property. In December 2008, a diamond was discovered in a till sample and since October 2009 Thanda has been conducting exploration work that has yielded exciting confirmatory results. The exploration team is led by Dr. Matthew Field, a world renowned diamond geologist with 25 years of industry experience. For further information about Thanda, please contact Sheila Ogilvie-Harris President, Thanda Resources Inc. at 416 231 4195.

**Forward-Looking Statements**

This news release may contain certain information that constitutes forward-looking statements. Forward-looking statements are frequently characterized by words such as "plan," "expect," "project," "intend," "believe," "anticipate" and other similar words, or statements that certain events or conditions "may" or "will" occur. Forward-looking statements are based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. These factors include the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drilling results and other geological data, fluctuating metal prices and other factors described above and in the Company's most recent annual information form under the heading "Risk Factors" which has been filed electronically by means of the Canadian Securities Administrators' website located at [www.sedar.com](http://www.sedar.com). The Company disclaims any obligation to update or revise any forward-looking statements if circumstances or management's estimates or opinions should change. The reader is cautioned not to place undue reliance on forward-looking statements.

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