



## **Starfield Reports Results Of Ferguson Lake Geological Mapping – Petrological Study**

**Toronto, Ontario – May 28, 2007 – Starfield Resources Inc.** (TSX: SRU / OTCBB: SRFDF) has received a 2007 report from Dr. Allan Miller about the Company's Ferguson Lake property in Nunavut, Canada. The report integrates his 2005-2006 observations from mapping-petrography-ore microscopy-geochemistry and petrology studies on the property.

Dr. Miller is a professional geologist with Kishar Research Inc. of Ottawa. His report clarifies that the Ferguson Lake Intrusive Complex (FLIC) is a deformed lopolith comprised of layered mafic-ultramafic rocks and related plutons that formed through fractional crystallization and differentiation processes. The layered series and related discordant layered plutons are interpreted as cogenetic and consanguineous.

The report defines important implications for current resource evaluation and ongoing exploration. The FLIC has an iron-enrichment tholeiitic differentiation trend similar to famous Duluth and Skaergaard complexes. Geochemistry-petrogenesis evaluation suggests there are different sub-units that may represent different pulses or mega-cycles within the FLIC. "These subsets may represent distinct magmatic events or cycles within the FLIC and have critically important implications for ongoing exploration, delineation of mineralized zones and evaluation of the FLIC resource," the document says.

The report further states "the FLIC is Archean and is the only layered mafic-ultramafic complex in the Western Churchill Province, Canada. It outcrops for a distance of approximately 17.0 km along strike (east to southwest strike) and is exposed across 6.0 km in the northeast and 1.5 km in the southwest."

The northern and southern margins of the FLIC are defined by sub parallel layered intrusions. Massive and disseminated sulphide accumulations have been recrystallized and remobilized and best developed in basal hornblendite and adjacent gabbros while low sulphide, PGE-bearing gabbro occur within the layered sequence. Magmatic layering in mafic to ultramafic rocks is well preserved in layered intrusions, while discordant mafic layered plutons in the northeastern part of the complex area vary in composition from medium- to coarse-grained anorthositic gabbro to plagioclase porphyritic gabbro.

Of particular note are the following:

A) On the west side of Ferguson Lake, Dr. Miller has mapped the South Discovery – West Zone South (SDWZS) Intrusion as a narrow, maximum 50 metres, layered mafic-

ultramafic intrusion that extends northeastward to easterly for a distance of approximately 6 km. This is an important addition to the Complex, as it is associated with a nearly continuous VTEM airborne geophysical survey anomalous conductivity trend over the same distance. As compared to the FLIC West Zone, which hosts inferred and indicated resources and which outcrops 500 meters to the north of this intrusion, the SDWZS Intrusion has only 6 shallow drill holes exploring its entire strike length. The SDWZS intrusion is comprised of three lithologies: 1) gabbroic rocks, 2) ultramafic rocks that include hornblende and feldspathic hornblende and 3) gossan which include sulphide-bearing hornblende, less commonly gabbro and tectonized equivalents.

B) On the east side of the Ferguson Lake, mapping by Dr. Miller identified an anorthositic gabbro pluton which is intrusive into and east of the layered mafic-ultramafic rocks that host the East Zone magmatic Cu-Ni-PGE sulphide mineralization. Near the northwestern side of this pluton, subtle spotty or patchy sulphide-bearing zones are linear and parallel to the magmatic layering of the anorthositic gabbro body. Anomalous PGE concentrations, 144ppb-364 ppb Pd, 93 ppb Pt with anomalous Cu, 1615ppm – 2472 ppm, were obtained from disseminated sulphide-bearing cumulate textured grab samples. The intercumulus sulphide assemblage includes pyrrhotite with exsolved flame pentlandite+chalcopyrite+pyrite, the latter inferred to be metamorphic. The mafic plutons east of the East Zone Cu-Ni-PGE sulphide mineralization are part of the FLIC based upon magmatic layering that formed mafic-ultramafic rocks similar to the layered rocks, anomalous PGE abundances in sulphide-bearing anorthositic gabbro and rare earth distribution patterns that are identical to the layered mafic-ultramafic rocks.

C) Electron microprobe mineral analyses of hornblende from the layered series and discordant layered plutons returned trace amounts of fluorine (0.1-0.2 wt %) and rare chlorine (0.11-0.13 wt %). This may be a petrochemical link to primary PGE concentrations found within massive sulphide mineralization and remobilization of PGE contents in low-sulphide gabbro-hosted mineralization within the FLIC.

D) In 2005, Miller mapped the NUB 42-49 gossan discovery. This gossan is approximately 8 km south of the South Discovery Zone and is located within a prominent linear east-west trending magnetic low and a coincident string of VTEM conductive anomalies. In 2005, limited soil and till sampling in the area resulted in a palladium (Pd) in soil anomaly. Miller re-examined this paragneiss belt and recognized an exposure of anorthositic gabbro which upon petrographic and geochemical study is equivalent to the more aerially extensive and texturally similar anorthositic gabbro pluton which he described on the east side of Ferguson Lake. The recognition of this pluton, 8Km south of the FLIC, implies that the FLIC magmatic event has a larger aerial distribution than previously understood. The Pd soil anomaly may be related to the NUB anorthositic gabbro which is similar to the pluton that hosts disseminated PGE –bearing sulphides east of the East Zone.

“Starfield plans to further drill test the unique low sulphide PGE bearing gabbro of the West Zone during phase one of the 2007 field season,” said André J. Douchane, President and CEO of Starfield Resources. “Simultaneously, we will be systematically collecting

samples across the magmatic layering of the South Discovery – West Zone South Intrusion and across the layered and gossanous mafic plutons on the east side of Ferguson Lake. We believe that as a result of the Miller study, the potential for discovery of disseminated PGE mineralization at surface along the extensive strike length of the FLIC needs evaluation.”

### **About Starfield**

Starfield Resources Inc. is an advanced exploration and emerging early stage development company focused on its Ferguson Lake Palladium-Platinum-Nickel-Cobalt-Copper property located in Nunavut, Canada. The property covers more than 1.3 million acres and is 100% owned by the Company. Since 1999, Starfield has completed 132,000 metres of diamond drilling in 359 holes. A National Instrument 43-101 technical report dated May 15, 2006 prepared by N.C. Carter PhD., P.Eng. was filed on SEDAR and on Starfield’s website on May 25, 2006. A developing feature of this mineral district is the significant discovery of high-grade platinum and palladium mineralization found in the footwall to the massive sulphide deposit. Starfield’s Ferguson Lake Project is emerging as Nunavut’s largest ongoing base and precious metal project.

Starfield has developed a novel, environmentally friendly and energy-efficient hydrometallurgical flowsheet to recover platinum, palladium, cobalt, nickel and copper from Ferguson Lake massive sulphides, under the direction of its metallurgical consultant, Dr. Bryn Harris. Additional work is being funded by McGill University under the direction of Professor George Demopoulos (McGill) and Dr. Harris (Starfield). The research is focused on the critical process step of iron precipitation and regeneration of the hydrochloric acid needed for the leaching step.

### **For further information contact:**

Colin Languedoc  
Senior Account Executive  
Barnes McInerney Inc.  
416-367-5000 ext. 225  
[clanguedoc@barnesmcinerney.com](mailto:clanguedoc@barnesmcinerney.com)

André J. Douchane  
President and Chief Executive Officer  
Starfield Resources Inc.  
416-860-0400 ext. 222  
[adouchane@starfieldres.com](mailto:adouchane@starfieldres.com)

This news release has been prepared under the supervision of Dr. Allan Miller, P.Geo., and a Qualified Person as defined by National instrument 43-101.

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