



STARFIELD RESOURCES INC.

NEWS

Starfield Resources Plans Detailed Airborne Survey of Moonlight Copper Project

Data to guide geochemical sampling, geologic mapping, exploration drilling

Toronto, Ontario – April 7, 2010 – Starfield Resources Inc. (“Starfield” or the “Company”) (TSX: SRU) today announced that Fugro Airborne Surveys has been contracted to fly a detailed airborne DIGHEM electromagnetic (EM) and aeromagnetic survey of the Company’s entire Moonlight copper project in the Lights Creek Mining District of Plumas County, California.

The survey, totaling 412 line kilometers, is to be undertaken in late April. The information it generates will provide the basis for further geochemical sampling, detailed geologic mapping and exploration drilling.

The Moonlight project, located 167 kilometres northwest of Reno, Nevada, consists of 419 unpatented claims and 36 patented claims. Previous exploration and/or production on the project has defined three advanced exploration targets: Moonlight Valley, Superior and Engels, as well as five early stage copper targets: Blue Copper, Sulfide Ridge, Copper Mountain, Osmeyer Ridge and Ruby mine.

The DIGHEM survey will focus in particular on the historic Engels and Superior mining district due to its tremendous exploration potential. These historic mines, which are covered by a large number of patented mining claims, reportedly produced 161.5 million pounds of copper and 1.9 million ounces of silver from 4.7 million tons of ore.

At the Engels mine, Starfield completed a three-hole drilling program in November 2009 that confirmed the presence of strong copper mineralization over broad intervals. Two holes were targeted in an area of a previous discovery, with one hole being an infill hole and the other hole being a step-out hole. As summarized in a news release dated November 25, 2009, both holes intersected significant copper values with intersections grading 3.26% copper over 74.3 feet with other intervals up to 11.25% copper over 9.7 feet. The third hole was drilled nearby, but in the opposite direction, and was stopped when it encountered old mine workings. Historical underground data, including a diamond drill hole collared 1748 feet below the surface that intersected 32.5 feet of 4.1% Cu, indicates that high grade structurally controlled copper mineralization continues to depth. Compilation of historical underground data for the Engels mine is in progress, and there are some preliminary indications that this mineralized structural zone may remain open along strike, as well as at depth.

In the Moonlight Valley and the Superior Mine, prior exploration drilling and/or underground development has respectively defined sulphide resources of 250 million tons averaging 0.31% Cu and 43 million tons averaging 0.56% Cu. Based on the information currently available, both resources are believed to be open to expansion with continued exploration drilling.

The technical information in this news release has been reviewed by Ray Irwin, BSc, P.Geo, a Qualified Person in accordance with National Instrument 43-101.

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.

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. 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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