



## UPDATE ON MIDLAND'S ACTIVITIES AND PROJECTS IN PARTNERSHIP

Montreal, April 14, 2011. Midland Exploration Inc. ("**Midland**") (TSX-V: **MD**) is pleased to provide an update on its numerous exploration activities, including many drilling programs with its partners, among which Agnico-Eagle Mines Limited, Osisko Mining Corporation, North American Palladium Limited, Aurizon Mines Limited, Zincore Metals Inc., and Japan Oil, Gas and Metals National Corporation. Overall, more than 15,000 metres of drilling will be completed on these six projects in partnership during the first half of 2011.

### **Gold Projects (Abitibi and James Bay, Quebec)**

#### Maritime Cadillac Project - JV with Agnico-Eagle Mines Limited ("**Agnico-Eagle**")

Agnico-Eagle resumed drilling on Maritime Cadillac, to test the extensions of two new major gold discoveries made in 2010 in the north part of the property. The drilling program currently underway consists of four (4) drill holes for a total of about 2,200 metres. Readers may recall that the two new discoveries graded 8.6 g/t Au over 5.50 metres including 13.8 g/Au over 3.0 metres in drill hole 141-10-26 (V4 West zone), and 1.7 g/t Au over 37.85 metres including 4.8 g/t Au over 6.0 metres in drill hole 141-10-23 (Dyke East-V3 zone). The Maritime Cadillac Project is immediately adjacent to the south of the Lapa gold mine (800,000 gold ounces in proven and probable reserves, with 3.2 million tonnes at 8.2 g/t Au), in commercial production since May 2009 (*Source: Agnico-Eagle Financial Statements released February 17, 2010*).

The Maritime Cadillac Project is currently a 50/50 joint venture with Agnico-Eagle, who is now working to increase its interest in the project by fully funding ongoing exploration expenditures on the project, earning 1% additional interest for every \$1,000,000 in exploration expenditures, to a maximum of 15% additional interest.

#### Dunn Project - Optioned to Osisko Mining Corporation ("**Osisko**")

Midland recently resumed drilling on the Dunn Property, in partnership with Osisko. Following encouraging results obtained from the 2010 drilling program, which identified potassic alteration zones and intense silicification in sediments and pyritized porphyry intrusions in the Lac Caste Formation, six (6) additional drill holes for a total of about 1,000 metres were undertaken in the central part of the property, to test several frequency-domain induced polarization anomalies.

The Dunn Project is currently in its second year of an option agreement, whereby Osisko may earn 50% interest by spending a total of \$1,300,000 over three years and making payments totalling \$140,000.

#### Laflamme Project - Optioned to North American Palladium Limited ("**North American Palladium**")

Near the end of 2010, North American Palladium launched a drilling campaign totalling about 3,600 metres in ten (10) holes, to test several new airborne electromagnetic VTEM-type anomalies, as well as several gold targets on the Laflamme Property, located 25 kilometres west of the town of Lebel-sur-Quévillon. The airborne electromagnetic survey was flown in the fall of 2010 to cover an area where regional gold and copper anomalies were delineated in tills by the Ministère des

Ressources Naturelles et de la Faune (MRNF). Preliminary drill results indicate the presence of a new felsic volcanic centre with anomalous gold, copper and zinc, which until now was completely unknown. Ground-based and airborne geophysical surveys as well as diamond drilling are still ongoing and results are pending.

The Laflamme Project is currently in its second year of an option agreement, whereby North American Palladium may earn 50% interest by spending a total of \$1,000,000 over four years and making payments totalling \$100,000.

#### Patris Project - Optioned to Aurizon Mines Limited ("Aurizon")

Midland recently began an important drilling program totalling 2,500 metres in partnership with Aurizon on the Patris Project, located about 35 kilometres northeast of Rouyn-Noranda. This Phase 1 program, consisting of twelve (12) drill holes, will mainly test frequency-domain induced polarization anomalies located near the La Pause Fault, a southeastward extension of the Destor-Porcupine Fault.

The option agreement with Aurizon for the Patris Project, currently in its first year, states that Aurizon shall spend a total of \$3,000,000 in exploration expenditures over four years and make payments totalling \$230,000 to acquire 50% interest in the project.

#### Casault Project - 100% Midland

The Casault Project is located about 40 kilometres east of the Detour Lake deposit, along the major Sunday Lake Deformation Zone. This major ore deposit contains an aggregate 20.5 million gold ounces in measured and indicated resources, based on a cut-off grade of 0.5 g/t Au, including 14.9 million gold ounces in near-surface mineral reserves, and commercial production is expected to begin in early 2013 (*Source: Detour Gold Corporation website and press release dated January 31, 2011*).

With its latest acquisitions, Midland now controls more than 20 kilometres of prospective land along this structure. Midland recently received the results of a helicopter-borne magnetic survey, based on which several drill targets were defined, commonly associated with induced polarization phase anomalies. Many of these targets are located along the extension of a structure previously drill-tested by Queenston, who reported historical drill results up to 4.3 g/t Au over 12.2 metres and 3.7 g/t Au over 4.0 metres (*Source: MRNF SIGEOM NTS sheets 32E14 and 32E15*). The Casault Property is also adjacent to the west of the Martinière property held by Balmoral Resources Ltd, where drill intersections grading 2.4 g/t Au over 72.0 metres, including a high-grade interval at 11.18 g/t Au over 12.0 metres, were recently reported (*Source: Balmoral Resources Ltd press release dated March 2, 2011*).

#### James Bay and Eleonore Projects - 100% Midland

Midland is planning to conduct geological and prospecting work this summer on all of its gold projects in the James Bay area, including the James Bay Gold and Eleonore projects. Readers may recall that Midland holds a series of well-positioned claim blocks near the Eleonore deposit held by Goldcorp Inc., which contains, as at December 31, 2010, 3.03 million gold ounces in probable reserves in addition to 440,000 gold ounces in indicated resources and 4.17 million gold ounces in inferred resources (*Source: Goldcorp Inc. website*).

## **Rare Earth Project (Quebec-Labrador)**

### Ytterby Project - Optioned to Japan Oil, Gas and Metals National Corporation ("JOGMEC")

The year 2010 was a very successful one for Midland and its partner JOGMEC on the Ytterby rare earth project, located south of the Strange Lake project and Zone-B. The Ytterby 1 property is located less than 5 kilometres south of the Zone-B deposit, where a new NI 43-101 compliant resource estimate released by Quest Rare Minerals determined indicated resources of 36.4 million tonnes grading 1.16% total rare earth oxides ("TREO"), 2.17% zirconium oxide, 0.24% niobium pentoxide, 0.05% hafnium oxide, and 0.12% beryllium oxide (see *Quest Rare Minerals press release dated April 11, 2011*). Several rare earth elements ("REE") targets have yet to be investigated and explained on the Ytterby 1 property and will be the focus of prospecting work during the summer 2011 field campaign.

Airborne geophysical surveys and geological prospecting carried out in the summer of 2010 enabled field crews to identify two new major alkaline systems enriched in rare earth elements on the Ytterby 2 and Ytterby 3 properties. To date on Ytterby 2, 29 mineral occurrences were discovered in 2010, with values for total rare earth oxides plus yttrium oxide ("TREO + Y<sub>2</sub>O<sub>3</sub>") ranging from 0.3 to 18.0%. The proportion of heavy rare earth oxides and yttrium oxide ("HREO + Y<sub>2</sub>O<sub>3</sub>") represents 1.43 to 83.7% of values for TREO+Y<sub>2</sub>O<sub>3</sub>. All of the new mineral prospects remain open in all directions. On Ytterby 3, 63 new mineral occurrences were discovered, grading between 1.03% and 7.94% TREO+Y<sub>2</sub>O<sub>3</sub>, for an average grade of 2.72% TREO+Y<sub>2</sub>O<sub>3</sub>. The proportion of HREO + Y<sub>2</sub>O<sub>3</sub> represents 2.4% to 15.4% of values for TREO+Y<sub>2</sub>O<sub>3</sub>. All of the new mineral prospects remain open in all directions. Mineralogy studies are currently underway to identify the various REE-bearing minerals. Midland Exploration is currently planning a drilling program totalling more than 2,500 metres for the summer of 2011, to determine the extent of these two systems.

JOGMEC may earn 50% interest in the Ytterby Project by March 31, 2012, by funding \$2,500,000 in exploration expenditures, including \$1,000,000 during the first year. Midland will be project operator, as long as its interest in the project is equal to or greater than 50%. JOGMEC also has the right to transfer its interest in the Ytterby Project, in whole or in part, to one or more Japanese companies or to a consortium of Japanese companies.

## **Base Metal Projects (Grenville and Appalachians, Quebec)**

### Gatineau Zn Project - Optioned to Zincore Metals Inc. ("Zincore")

An important drilling campaign totalling about 2,000 metres in ten (10) holes is currently underway on the Gatineau Zn Project in partnership with Zincore. Targets to be tested mainly consist of airborne VTEM anomalies located near the Bouchette, Leitch, and Lafontaine zinc prospects. Channel sampling performed last fall in two trenches on the Leitch and Lafontaine deposits respectively returned grades of 24.1% zinc over 3.0 metres, including 32.5% zinc over 2.0 metres, and 21.0% zinc over 2.0 metres.

The Gatineau Zn Project is in the first year of an option agreement with Zincore, whereby Zincore may earn 50% interest by spending a total of \$3,500,000 in exploration expenditures over four years and making payment totalling \$180,000.

### Weedon Cu-Zn Project - 100% Midland

The Weedon Project covers more than 20 kilometres strike length along the Ascot-Weedon belt, which hosts the former Weedon, Cupra-d'Estrie, and Solbec Cu-Zn mines and the Lingwick deposit. Midland recently completed extensive gravity surveys in these areas and preliminary results are very promising, indicating the presence of new gravity targets strategically positioned along the prospective horizon.

Midland is currently seeking a new partner to proceed with the testing of these targets as well as other geological and electromagnetic (VTEM) targets on this project.

### **About Midland Exploration**

Midland targets the excellent mineral potential and the favourable investment climate of Quebec to make the discovery of new world-class deposits of gold, base metals and rare earth elements. Midland is proud to count on reputable partners such as Agnico-Eagle Mines Limited, Osisko Mining Corporation, Aurizon Mines Limited, North American Palladium Limited, Japan Oil, Gas and Metals National Corporation, Zincore Metals Inc. and SOQUEM Inc. Midland prefers to work in partnership and intends to quickly conclude additional agreements in regard to newly acquired properties. Midland is currently evaluating new opportunities and other projects in order to increase the portfolio of the Company.

This press release was prepared by Mario Masson, VP Exploration for Midland, certified geologist and Qualified Person as defined by NI 43-101. For further information, please consult Midland's website or contact:

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