



**MIDLAND EXPLORATION INC.
MIDLAND ACQUIRES KEY ZINC PROPERTIES**

Montréal, August 14, 2007. Midland Exploration Inc. ("Midland") (TSX-V: MD) is pleased to announce the acquisition of a large land position including 19 new properties covering 347.6 km² distributed in the Gatineau Area, approximately 200 kilometres northwest of the city of Montreal. The property selection was made following a comprehensive geological and geochemical compilation. The area is known to host many significant zinc occurrences and prospects in metamorphosed Middle-Proterozoic marbles of the Grenville Supergroup. The interest for this area is that those zinc occurrences share many similarities with significant zinc deposits, also hosted in Grenville metamorphosed limestones. The most prolific zinc deposits of this type are those of the Balmat-Edwards district in the United States located only 60 kilometres south of the Gatineau properties area. The district in production since 1915 is presently operated by HudBay Minerals Inc. and is known to host a combined 43 million tonnes at near 10% zinc including other commodities.

The new Midland properties are either associated with first order, discrete or combined, zinc, lead and silver stream sediment anomalies, zinc soil geochemical anomalies or known zinc mineralized occurrences or prospects. Known occurrences associated with strong zinc soil geochemical anomalies on properties acquired by Midland include the following: Aumond with 18% Zn in grab samples and 4.4% Zn over 2.1 m in channel samples; Route 107 with 20% Zn in grab samples and 5.1% Zn over 2.45 m in channel samples; Blue Sea, Zone A, Parker, Lafontaine, Davis and Kilmar with 7%, 3%, 31%, 14%, 1.48% and 11.3% Zn respectively from grab samples.

The Gatineau area has more than 40 Zn, Zn-Fe and Fe showings and prospects that are mainly concentrated in the west part of the Grenville metasedimentary belt. The Zn and Zn-Fe occurrences are hosted in dolomitic marbles and found occasionally in association with overlying iron formation, those being sulfide-rich, iron oxide-rich and/or carbonate-rich. Semi-massive to massive sulfide mineralization have also been documented in the Gatineau area in seven different locations so far; namely the Bouchette-DesNègres horizon, Leitch-Lafontaine-Parker horizon and Lemieux, Blue Sea, Route 107 and Kilmar horizons respectively. Most of these showings were discovered by Noranda and Soquem in the 1990's and St-Joe in the 1970's.

In the Balmat-Edwards district, these ore types were recently reclassified by Balmat geologists as "Parent" and "Daughter" deposits respectively (deLorraine, 2001). Since 1996, resulting from this new concept, surface and underground drilling has added an additional 11 million tonnes of mineral resources at the Balmat No. 4 Mine. This most recent development in the evolution of the Balmat-Edwards district-wide exploration model has provided the additional impetus required to trigger Midland's interest to explore for new high grade, large tonnage Balmat-Type deposits in the underexplored Gatineau Area.

Midland is confident that the Gatineau Area has an excellent potential to host new high grade, large tonnage Zn-Pb Sedex deposits as in the Balmat-Edwards District and looks forward to the start of its next exploration program. Depending on how advanced the properties are, the program will include either detailed stream sediment and soil geochemical surveys, geological mapping and prospecting and/or detailed mapping, trenching and drilling.

About Midland

Midland's strategy to discover new gold and base metal deposits is based on Quebec's excellent mineral potential and favourable investment climate. Midland further intends to be pro-active in 2007 in the acquisition of new mineral exploration properties in Quebec. The Company recently acquired 100% interest in 6 new gold properties with Eleonore-type targets and 6 new properties over strong unexplained Molybdenum anomalies in the James Bay region. Management is currently considering other opportunities and other projects in order to expand the Company's portfolio. Midland prefers to work in partnership and intends to quickly secure new agreements to this effect for its properties acquired in 2007.

Gino Roger, P.Eng., is the qualified person who has reviewed the content of this news release.

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