

PRESS RELEASE

TSX Venture: MAT

Enlarged Mineralized System at Depth on Matamec's Matheson JV Gold Property

Montreal, September 23, 2008 - Matamec Explorations Inc. ("Matamec") is pleased to announce some preliminary information on MM08-12 and MM08-13 on Target B at depth of the Mill Creek/Colbert Zone. The measured true thickness of altered North Mafic Volcanics are approximately 58 and 110 metres respectively, compared to an average measured true thickness of 48 metres (minimum 16 metres and maximum 68 metres) for all drill-holes completed to date on Target A (Figure 1). The significant increase in the measured true thickness of the North Mafic Volcanics is encouraging in that there is the potential to host substantial mineralization over a wider area.

The wider intersections of North Mafic Volcanics in the Target B drilling is encouraging as they indicate that the ultramafic volcanics are dipping at a steeper angle than the North Mafic Volcanic/Sediment contact and confirms the presence of an angular unconformity on the property (Figure 2). Angular unconformities which are present at Hoyle Pond Mine (1.7 kilometres West of the property), act as fluid channel-ways that can introduce mineralized solutions into the stratigraphy. The presence of gold mineralization has been documented in Target A in the Mill Creek/Colbert Zone and the thickening of the North Mafic Volcanics at depth on Target B is very encouraging.

The drilling on the Target A area confirmed the continuity of the mineralized system between surface and 350 metres and the deeper Target B drilling confirmed the continuation of the system to a depth of at least 650 metres vertically. Matamec is presently awaiting assay results for holes MM08-04 and MM08-11 in Target A, and MM08-12 and MM08-13 in Target B. We expect most of these results to be available by the fourth week of September and they will be released as results for complete holes are received.

The two drill-holes (MM08-12 and MM08-13) with unreported assay results and testing below 350 metres, were drilled to vertical depths of 532 metres and 651 metres:

- Drill-hole MM08-12 intersected the North Mafic Volcanics at 491.00 metres down-hole, strong to weak grey zone to 498.05 metres and silicified/sericitized altered mafic volcanics to 562.25 metres. At 496.20 metres a narrow quartz/carbonate stringer in weak grey zone material contained several flakes of visible gold. The altered mafic volcanic unit contained up to 1% fine pyrite and occasional occurrences of arsenopyrite. The measured true thickness of drill-hole MM08-12 is approximately 58 metres.
- Drill-hole MM08-13 intersected the North Mafic Volcanics at 515.00 metres down-hole followed by strong to weak grey zone to 542.10 metres and silicified/sericitized altered mafic volcanics to 657.50 metres. The altered mafic volcanics contain up to 2% disseminated pyrite and 5% quartz/carbonate stringers. The measured true thickness of drill-hole MM08-13 is approximately 110 metres.

The last two drill-holes (MM08-04 and MM08-11) with unreported assay results on Target A were drilled to vertical depths of 185 metres and 255 metres:

- Drill-Hole MM08-04 ended at 191.00 metres in ultramafic volcanics. In the Porcupine sediments at 111.20 metres down-hole, a 0.40 metre quartz vein with 1.5% pyrite and trace sphalerite was encountered. The North Mafic Volcanics were encountered from 132.20 metres to 166.95 metres. The grey zone alteration was intense to weak with up to 3% pyrite from 132.20 metres to 144.55 metres. A silicified and sericitized pillowed mafic volcanic unit from 156.25 metres to 166.95 metres contained up to 2% pyrite.
- Drill-hole MM08-11 was drilled to 281.00 metres with the North Mafic Volcanics intersected from 203.60 to 238.55 metres. The hole contained an intense grey zone from 203.60 metres to 213.85 followed by a moderate to weak grey zone to 238.55 metres.

The geological data of this Press Release was prepared by Bill MacRae, VP Exploration (Ontario) for Matamec and a Qualified Person as defined by NI 43-101.

About Matamec

Matamec is a mining exploration company which is exploring for significant gold deposits in Ontario, and uranium and base metals deposits in Québec. For gold, it has mainly targeted the East Timmins mining camp, in particular properties that are underexplored or have only been explored near-surface. Matamec's numerous uranium and base metals properties are located throughout the province of Québec.

The TSX Venture Exchange does not accept responsibility for the adequacy or accuracy of this press release.

For further information please contact:

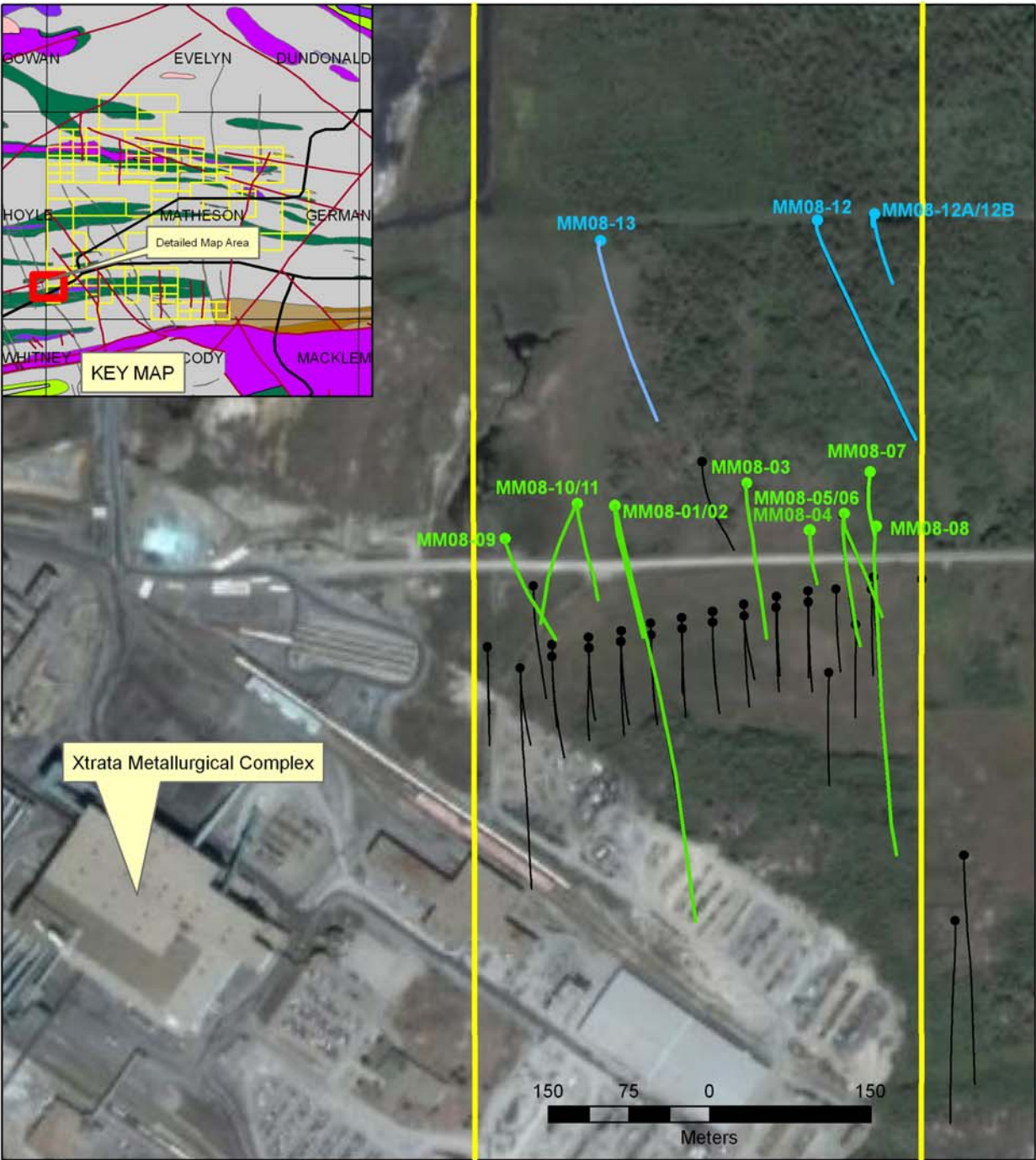
André Gauthier
President
Head Office
Tel: (514) 844-5252

Michael D'Amico
Investor Relations
East Region
Tel.: (647) 500-6023

Barry Bergstrom
Investor Relations
West Region
Tel.: (604) 609-6164

Email: info@matamec.com

Website: www.matamec.com



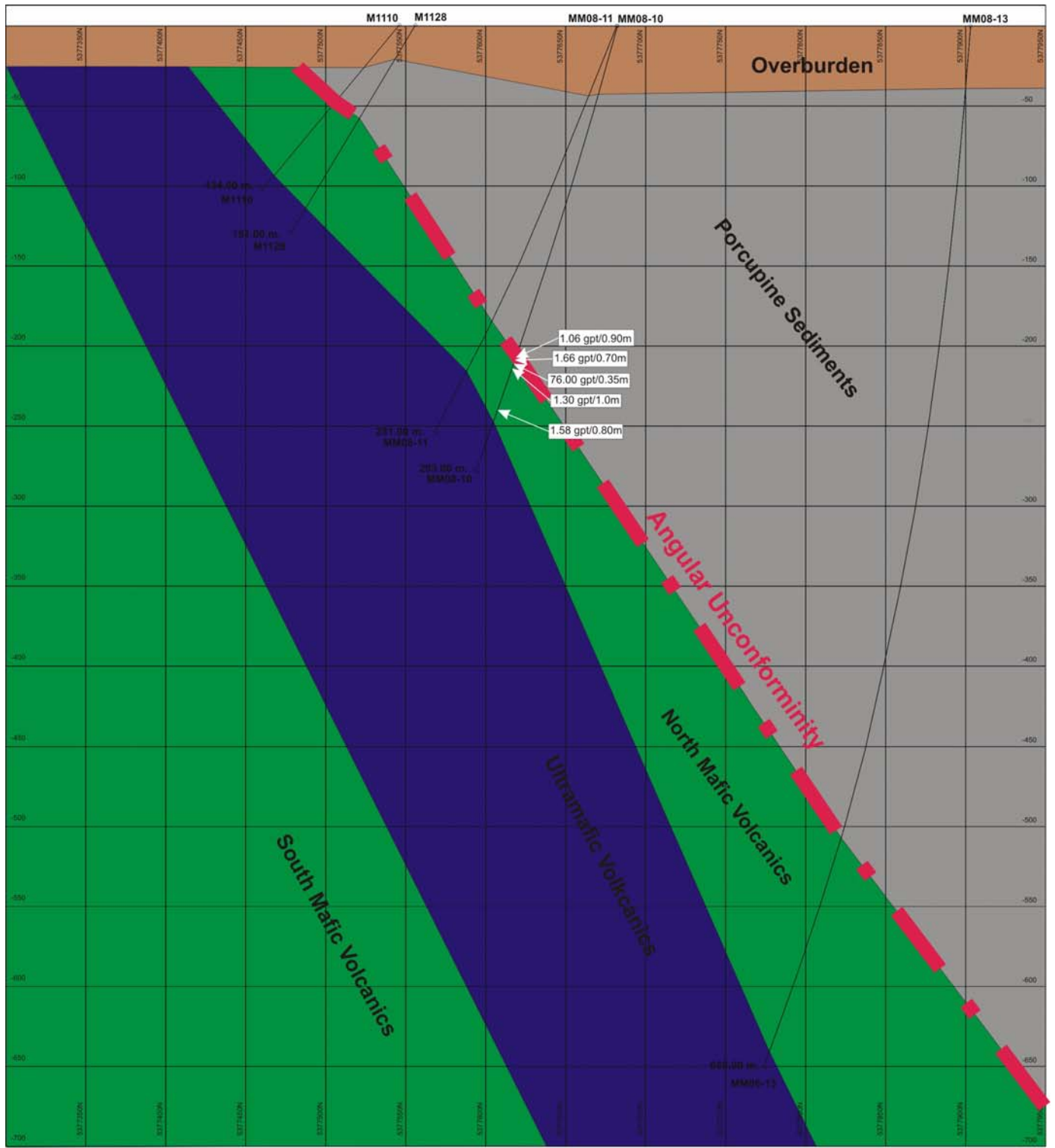
- Historic Drill Hole
- MM08-13
Hole Attempted or Completed on Target B
- MM08-01
Hole Completed on Target A
- Property Boundary for Matheson JV

Matamec Explorations Inc.

Matheson JV

2008 Drilling Program

Figure 1.



Angular Unconformity similar to that documented at Hoyle Pond

Schematic Section 494600E (Looking West)

Figure 2.