



TSX-V: MEX

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**GOLD ZONES WITH STRIKE LENGTHS
OF 1.8 KM AND 1.6 KM DELINEATED ON SIAN - GHANA**

- **The previously announced “Atonsu Anomalous Zone” has been extended from 850 metres to 1.6 kilometres south and remains open to the south;**
- **A second gold zone 1.8 kilometres by 200 meters wide has been delineated on Sian;**
- **A 600 metre strike length gold anomaly on Sian is open and extends into contiguous Praso property;**
- **Interpretation of VTEM Airborne results to be completed in two weeks.**

TORONTO, CANADA, Thursday, May 27th, 2010: Midlands Minerals Corporation (“Midlands” or the “Company”) is pleased to announce two very promising gold anomalous zones have been delineated on Sian with strike lengths of 1.6 kilometres, and 1.8 kilometres, and both zones remain open, indicating potential for extending the strike lengths. A third zone with a 600 metre strike length which also remains open, extends into the contiguous Praso gold project.

“Soil results continue to be received from SGS Laboratories with the most recent results just in. We expect these very encouraging results, together with the geology and the interpretation of the VTEM Airborne survey, to provide new drill targets. We plan to accelerate our current drilling with the objective of achieving the initial goal of a one million ounce resource on the Sian and Praso properties”, said Derek McBride, P.Eng. and VP Exploration.

The previously announced “Atonsu Anomalous Zone” has been extended from 850 metres to 1.6 kilometres, south into the area of the Atonsu artisanal workings. It remains open to the south. Assay results are as high as 720 ppb and the delineated zones are in the 370 ppb, 380 ppb, 420 ppb, and 450 ppb range. At the north end of the Sian Property, a new anomaly has been defined over a length of 600 metres, remaining open and extending onto the contiguous Kwahu Praso property. Follow up sampling will be undertaken to further delineate these anomalies and to extend the strike length.

Please click here to view map:

http://www.midlandsminerals.com/press_releases/images/Sian_Praso_Gold_in_Soil_100526.pdf

A second anomaly lies southeast of the tailings pond and was detected in four MMI samples. Soil geochemistry results indicate an anomalous zone 1.8 kilometres long by 200 metres in width.

The Company has an initial target of one million ounces of gold, which they plan to achieve with this initial 20,000 metre infill drilling program on Sian and Praso. About 25% of the program has been completed thus far, and drilling is ongoing. “We expect the interpretation and compilation of the VTEM Airborne results to be completed within the next two weeks. We are excited about the prospects on Sian, Praso, and Kaniago, given what we are seeing in the soil results”, said Kim Harris, President and Chief Executive Officer.

The soil sampling was conducted along lines spaced at 200 metres with samples taken at 40 metre stations. A total of 8,630 samples and duplicate samples for laboratory and field sampling verification were sent to the SGS Laboratory at Tarkwa in Ghana. Preparation of each sample consisted of drying and sieving at - 80 mesh, from which a split of at least 1000 g of the sample was pulverized to - 200 mesh in a homogenizing mill. 50 g portions of each sample were analyzed for gold by Fire Assay.

The Company will be reporting on results from Sian, Praso, and Kaniago separately as drill results and compilations become available. Updates on soil surveys in Tanzania will also be reported as results become available.

The technical information in this news release has been reviewed by Dr. Derek McBride, P.Eng., who is a Qualified Person under National Instrument 43-101.

ABOUT MIDLANDS MINERALS

Midlands is a growth oriented and value based gold exploration company operating in Ghana and Tanzania, two stable countries with a history of gold mining. Midlands' top priority project is the fully permitted Sian gold project in Ghana. The Sian property contains Esaase and Ampeha, two previously producing open pit mines with a resource with significant growth potential. Midlands' contiguous Kwahu Praso project, which was once part of Sian, contains extensions of the Esaase and Ampeha trends. Sian and Praso are just 30 kilometres northeast of Newmont Mining's +8.7 million ounce Akyem gold deposit. Midlands also holds highly prospective licences for gold and diamonds in the Lake Victoria Goldfields in Tanzania.

The Company has a highly qualified management and technical team with broad African experience and extensive experience in the countries in which the Company operates. For more information on the Company, please visit Midlands' website at www.midlandsminerals.com.

On behalf of the Board

Kim Harris
President and Chief Executive Officer

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The TSX Venture Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of the content of this news release.

Certain statements contained in this news release constitute forward-looking statements. Such forward-looking statements involve a number of known and unknown risks, uncertainties and other factors, which may cause the actual results, performance or achievements of the Company to be materially different from

actual results and achievements expressed or implied by such forward-looking statements. Forward-looking statements consist of statements that are not purely historical, including any statements regarding beliefs, plans, expectations or intentions regarding the future. No assurance can be given that any of the events anticipated by the forward-looking statements will occur or, if they do occur, what benefits the Company will obtain from them. These forward-looking statements reflect management's current views and are based on certain expectations, estimates and assumptions which may prove to be incorrect.

The Company adds a cautionary statement to the effect that the potential quantity and grades referred to in this press release are conceptual in nature. There has been sufficient exploration to evaluate a mineral resource. However, the Company is uncertain if further exploration will result in a mineral reserve. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statements were made. Readers are also advised to consider such forward-looking statements while considering the risks inherent in the business of mineral exploration. For more information, investors should review the Company's filings that are available at www.sedar.com.