



PRESS RELEASE

NEW GOLD PROSPECT IDENTIFIED ALONG THE CADILLAC BREAK

Toronto, Ontario – September 1, 2011 – Wesdome Gold Mines Ltd (WDO: TSX) is pleased to announce new gold occurrences identified during the 2011 winter drill program along the prolific “Cadillac Break” located approximately 3.5 kilometres south west of Wesdome’s Kiena Mine in Val-d’Or, Quebec.

The purpose of this “first pass” surface drill program was to evaluate the previously underexplored 4.5 kilometre long stretch of the “Cadillac Break” area for potential gold mineralization in the southwest portion of the claims. This target area lies immediately along strike with the new Canadian Malartic Project of Osisko currently in production and situated midway between the neighbouring Malartic Gold Fields Mine (2.0 million ounces former production) and the Quebec Explorers gold deposit (see attached map).

A drill program consisting of thirteen (13) holes was initiated during early November, 2010 and resumed from March to May, 2011 with a total of 3930 metres drilled. Encouraging results from drill hole S613 prompted a follow-up exploration towards the south east sector accessible only during the winter months. The winter drill program was completed with three (3) drill holes located approximately one kilometre towards the northwest just prior to the retreat for the spring thaw.

HIGHLIGHTS INCLUDE

- **101.03 gAu/tonne over 1.0 m**
- **29.38 gAu/tonne over 0.9 m**
- **10.93 gAu/tonne over 1.5 m**

Follow-up drilling will be required to determine the continuity and size potential of these new occurrences.

G. Mannard, VP Exploration, states “These results demonstrate some high grade, narrow intervals and some broader anomalous sections. These serve to confirm the potential of this underexplored structure on our property. We will continue to evaluate targets along the break, including the down-dip and along strike projections of the Quebec Explorers deposit”.

The drill hole locations and assay results are appended in the accompanying tables. Drawings include a regional geological map (Figure 1) and the “Cadillac Break” area (Figure 2) illustrating the drill hole locations and assay highlights.

Table 1: Drill Hole Locations

Hole No.	Easting (UTM)	Northing (UTM)	Azimuth (degrees)	Dip (degrees)	Length (metres)
S613	280259	5331602	179	-49	333
S671	280750	5331332	178	-50	264
S672	280752	5331436	180	-50	309
S673	280660	5331498	180	-50	267
S674	280661	5331501	360	-50	267
S675	280838	5331398	180	-50	270
S676	280839	5331406	360	-54	252
S677	280827	5331281	180	-50	294
S678	280661	5331389	180	-50	268
S679	280265	5331713	180	-50	473
S680	279372	5332108	180	-50	255
S681	279377	5332218	180	-50	261
S682	279385	5332315	180	-50	417

Table 2: Drill Hole Results

Hole No.	From (metres)	To (metres)	Core length (metres)	Grade (gAu/tonne)	Cut Grade ** (gAu/tonne)	Remarks
S613	160.5	162.0	1.5	10.93	10.93	
	307.8	309.0	1.2	0.41	0.41	
S671	26.0	36.0	10.0	0.25	0.25	
S672	148.9	151.0	2.1	0.64	0.64	
S673	255.0	256.0	1.0	0.45	0.45	
S674					NSA	
S675	137.3	142.4	5.1	0.10	0.10	
S676					NSA	
S677	143.3	145.2	1.9	0.67	0.67	
S678	91.5	99.0	7.5	0.16	0.16	
	110.0	112.5	2.5	0.23	0.23	
	205.0	207.8	2.8	0.25	0.25	
S679	202.3	204.1	1.8	0.16	0.16	
	263.1	264.1	1.0	0.22	0.22	
S680	242.8	244.8	2.0	0.60	0.60	
S681	214.4	215.3	0.9	29.38	29.38	Visible gold
S682	78.9	79.9	1.0	101.03	34.28	
	122.0	128.7	6.7	1.25	1.25	
Incl.	125.2	128.7	2.5	2.16	2.16	

** An upper grade cutting limit of 34.28 gAu/tonne was applied. NSA= No Significant Assay

GEOLOGICAL CONTEXT

The area is characterized by the northwest – southeast trending Piché group volcanics dominantly composed of ultramafic rocks with some mafic volcanics, and minor gabbroic and/or diorite dikes. The Piché group is bounded to the north by the Timiskaming group sediments composed mainly of volcanic sediments and/or turbidites and to the south by the Pontiac group sediments composed mainly of meta-

greywackes with some interbedded volcanic rocks. Gold mineralization is associated with quartz-carbonate-chlorite veinlets or stockworks in proximity to sheared greywacke, basalts and gabbroic dikes.

TECHNICAL DISCLOSURE

The technical content of this press release has been verified by Marc Ducharme, P.Geo. OGQ, Chief Exploration Geologist, Kiena mine in his capacity as a “Qualified Person” as per requirements of National Instrument 43-101. Assaying was done by fire assay methods at the Kiena mine assay office. In addition to internal duplicate, standards and blanks, the geology department inserts blind standards and blanks into the sample stream at a frequency of one in twenty to monitor quality control.

ABOUT WESDOME

Wesdome is an established Canadian gold producer with wholly-owned mining and milling complexes located in Wawa, Ontario and Val d’Or, Québec. Wesdome has been producing gold continually for more than 20 years on an unhedged basis and to date has produced in excess of 1.2 million ounces. The Company has 101.9 million shares issued and outstanding and trades on the Toronto Stock Exchange under the symbol “WDO”.

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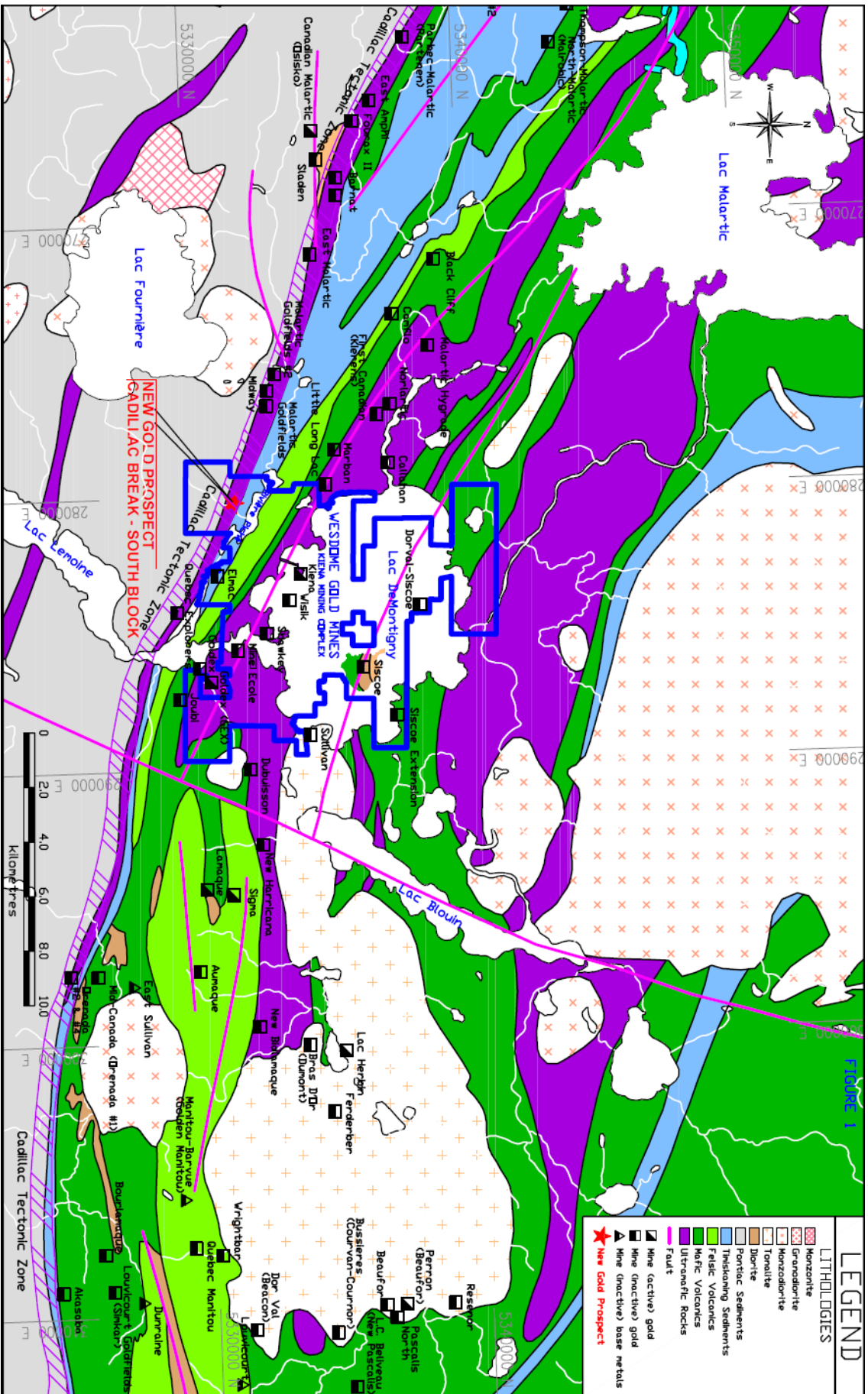


Figure 1 – Regional Geological Map

