BARBROOK MINE

TECHNICAL STATEMENT - JANUARY 2007

CALEDONIA MINING CORPORATION

KEY FEATURES:

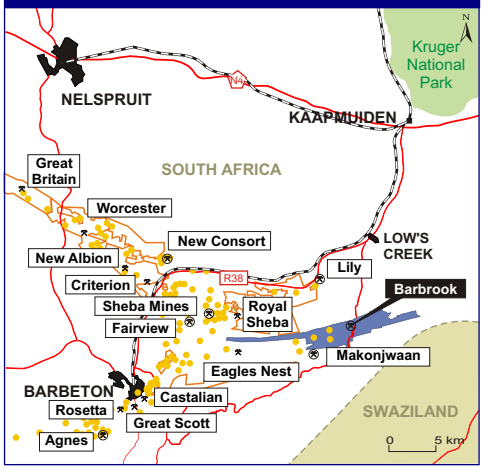
Location:	Barberton, Mpumalanga Province, South Africa and is located 25º 43' S latitude and 31º 17' E longitude
Comprises:	Archaean greenstone gold deposit
Management:	Barbrook Mines Limited, 100% owned by Caledonia Mining Corporation
Estimates:	Mineral Resources have been estimated as at 31st December 2006 based largely on data gained during previous periods of operation, mining and exploration. Mineral Resources are presented in this statement but can be summarised as between 11.209mts at an in situ grade of 5.56 g/t (2.004m oz) to 1000m below current workings and 6.769mt at an in-situ grade of 5.17g/t (1.126m oz) to 400m below current workings.
Project Status:	Placed on care and maintenance after industrial action in October 2006. In the process of being disposed of by ABSA for Caledonia
Licence Status:	Mining Authorization held by Barbrook Mines Limited
Qualified Person:	Dr Trevor Pearton
Independent Consultant:	Venmyn Rand

INTRODUCTION

Caledonia intends disposing of its entire interest in Barbrook following a decision by the company to rationalise its gold interests. In recent months, the mine has been hit by industrial action which is unfortunate since this is at the time when a new capital programme had just been completed by the company and significant metallurgical process modifications were about to be undertaken by the company. This forced the company to cease operations and this has been considered a *force majeur.*

As a result of the labour unrest Barbrook was placed on care-and maintenance in December 2006; and Caledonia decided to dispose of the mine and to focus its efforts on its other mining projects.

GENERAL LOCALITY



BRIEF HISTORY AND LOCATION

Barbrook is a consolidation of numerous, small mines and claims in the historically renowned Barberton gold mining district of South Africa. Mining in the Barbrook area commenced in the 1880's and the hills throughout the region are honeycombed with old shafts, adits and trenches which have been, and continue to be, re-investigated in the light of new developments in the exploration of fracture-controlled gold deposits in South Africa.

In 1996 exploration significantly improved the definition of main ore zones. Treatment of refractory ores in July 1996 and continued until July 1997. A total of 166 400t of sulphide ore was treated at an average rate of 14 464tpm, and 311kg of gold was produced at a recovered grade of 1.87 g/t.

Both the head grade and the metallurgical recovery achieved over this period (~40%) were below target and the mine was again put on care and maintenance pending a re-evaluation of the mining method and metallurgical process.

PROSPECTS

Various metallurgical test work took place between 1997-2007 which showed that improvements to gold recoveries could be achieved on the sulphide ores from Barbrook;

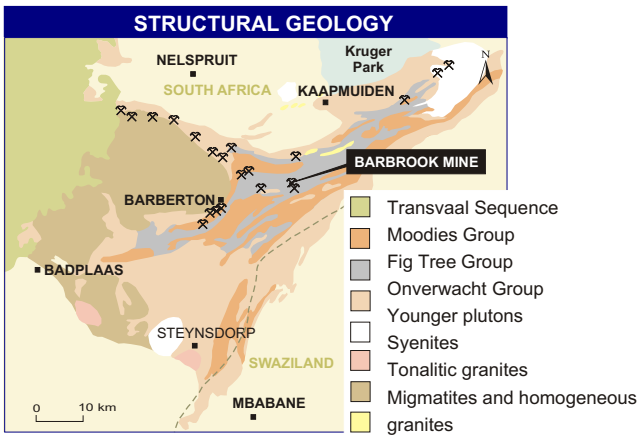
A complete re-evaluation was undertaken at French Bob (the main ore zone) in 2002. At that date, this led to an estimate of Proven and Probable Ore Reserves amounting to 167, 000 tonnes at an *in situ* grade of 6.0g/t gold.

GEOLOGICAL SETTING

The Barberton Mountain Land (BML) geological setting, within which the Barbrook mine is situated, is legendary in geological and earth science circles and has received an enormous amount of scientific attention since it represents a uniquely preserved sliver of the early earths crust.

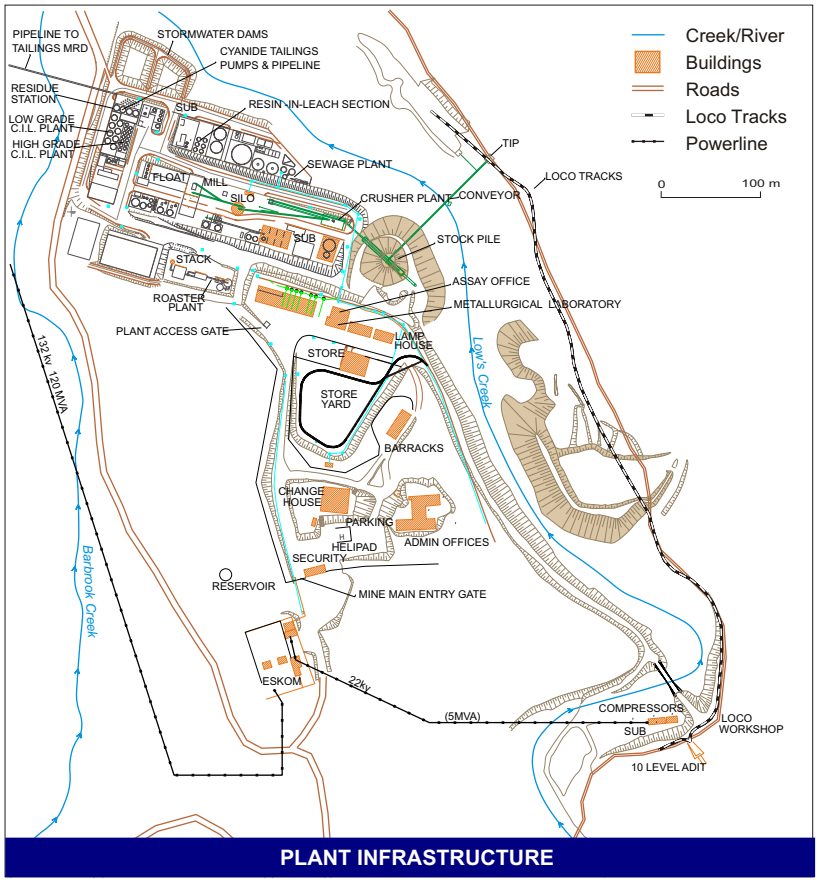
The well know komatiite-dominant Onverwacht Group volcanic rocks are dated as early as 3 500Ma and they are considered to be the primary source of the gold and sulphide mineralisation in the BML. The Barbrook Line is an important structural feature as it appears to represent the southern most limit of gold mineralisation.

STRUCTURAL GEOLOGY



HISTORIC PRODUCTION FIGURES FOR BARBROOK MINE

Period	Operator	Ore Type	Tonnage Treated tonnes	Ave Monthly Throughput tpm	Gold Produced kg	Recovered Grade g/t
Oct '89 - Jan '91	Rand Mines	Sulphide ores	220,630	13,789	500	2.31
Nov '93 - Jan '95	Maid O' Mist	Oxidized ores	490,533	32,702	645	1.31
Feb '95 - May '95	Caledonia	Oxidized ores	81,130	20,283	131	1.62
Jul '96 - Jul '97	Caledonia	Sulphide ores	166,397	12,800	311	1.87
2006	Caledonia	Sulphide ores	74,904		224	4.64
Total Production			**1,033,594**		**1,711**	**1.66**



PLANT INFRASTRUCTURE

MODIFYING FACTORS

The numbers quoted are asat 31st December 2006.

- In Situ S.G. of 2.9
- Inferred continuity of gold bearinglodes to 1000m metres below10 Level (400m bmsl) andalso 400m.
- Tonnesare metric (1000 kg).
- All tonnages calculated in situ
- Gold Price: USD 650/oz
- Exchange Rate: ZAR: USD 7.18

Mineral Reserves and Resourceshave been estimated as at31 December 2003 based largelyon data gained duringprevious periods of operation.

OTHER ASSETS: PLANT

At the outset, itshould be noted that extensive metallurgical test workhas been conducted on theBarbrook ores and all ofthis test work isavailable in the Caledonia management's archives.The main elements ofthe current gold extractionprocess are:

- crushing and grinding to 80%minus 75 µm;
- pre float to removeorganic carbon;
- production of gold-bearing sulphideconcentrate by flash flotationand flotation;
- regrind of the float concentrate(FC) to 80% minus 38µm;
- aeration and mild oxygenation ofthe FC in three agitated tanks ;
- addition of paraffin tomask any remaining organic carbon;
- addition of cyanide and loadingof gold onto active resin resign in leach circuit;
- elution of resin and electrowinning of gold;
- smelting of high purity dorè bars; and
- pumping of tailings totailings dam.

COMPLIANCE CODES

- The content of this statement was taken froma report that complies withCanadian National Instrument 43-101, forthe 'Standards ofDisclosure for Mineral Projects' ofFebruary 2001 (the Instrument).
- The report has also beenprepared in accordance withthe 'Code and Guidelines forAssessment and Valuation of Mineral Assets and Mineral Securities for Independent Expert Reports' of 1998 (the Valmin Code) as accepted by the South African Institute of Mining and Metallurgy (SAIMM).
- In case of conflict, Instrument43-101 applies.
- All monetary figures expressedin this report are inSouth African Rand(ZAR) unless otherwise stated.

	Average unit Statistics			Mineral Resources to 1 000m as at 31st December 2006															
	Face	Channel	Channel	MEASURED				INDICATED				INFERRED				TOTAL			
SECTION	Length (m)	Width (cm)	Value (g/t)	Tonnes	Grade g/t	Gold (kg)	Gold (oz)	Tonnes	Grade g/t	Gold (kg)	Gold (oz)	Tonnes	Grade g/t	Gold (kg)	Gold (oz)	Tonnes	Grade g/t	Gold (kg)	Gold (oz)
OXIDES	n.a.	n.a.	n.a.	285,000	2.29	653	20,994	383,617	2.95	1,130	36,345	840,000	1.85	1,555	49,994	1,508,617	2.21	3,338	107,334
ABOVE 7-LEVEL	1,785	167.61	6.58	106,235	4.51	479	15,400	429,462	6.58	2,825	90,829	338,270	5.35	1,808	58,134	873,967	5.85	5,112	164,362
10-7 LEVEL	2,059	165.85	5.77	261,279	5.19	1,357	43,634	266,702	7.14	1,904	61,228	563,719	6.11	3,447	110,810	1,091,700	6.14	6,708	215,671
BELOW 10 LEVEL	1,718	156.81	6.08	113,700	5.24	596	19,155	220,461	4.81	1,059	34,062	7,400,867	6.15	45,529	1,463,788	7,735,028	6.10	47,184	1,517,006
GRAND TOTAL	**5561**	**164**	**6.13**	**766,214**	**4.03**	**3,085**	**99,183**	**1,300,242**	**5.32**	**6,919**	**222,464**	**9,142,855**	**5.72**	**52,339**	**1,682,726**	**11,209,312**	**5.56**	**62,343**	**2,004,373**

	Average unit Statistics			Mineral Resources to 400m as at 31st December 2006															
	Face	Channel	Channel	MEASURED				INDICATED				INFERRED				TOTAL			
SECTION	Length (m)	Width (cm)	Value (g/t)	Tonnes	Grade g/t	Gold (kg)	Gold (oz)	Tonnes	Grade g/t	Gold (kg)	Gold (oz)	Tonnes	Grade g/t	Gold (kg)	Gold (oz)	Tonnes	Grade g/t	Gold (kg)	Gold (oz)
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GRAND TOTAL	**5561**	**164**	**6.13**	**766,214**	**4.03**	**3,085**	**99,183**	**1,300,242**	**5.32**	**6,919**	**222,464**	**4,702,335**	**5.32**	**25,021**	**804,453**	**6,768,792**	**5.17**	**35,026**	**1,126,100**