Ganajur Gold Project – highlights of Feasibility Study

Bangalore, India May 12, 2017

Deccan Gold Mines Limited – "DGML" (BSE Scrip Code: 512068) is pleased to report on the highlights of a positive Feasibility Study (FS) for the Flagship Ganajur Main Gold Deposit (the Project) of its wholly-owned subsidiary viz., Deccan Exploration Services Private Limited (DESPL). The Australasian Code for Reporting of Exploration Results ('the JORC Code') 2012 Edition was used to identify economic Mineral Resources and Ore Reserves, and the FS prepared by Snowden Mining Industry Consultants Pty Ltd (Snowden), headquartered in Perth, Western Australia.

A feasibility study is an evaluation of a proposed mining project to determine whether the mineral deposit can be mined economically and whether to definitively proceed with the project.

Snowden has demonstrated the economic viability and identified Mineral Resources and Ore Reserves.

DESPL has concluded that based on study inputs and outcomes, the Ganajur Gold mine is an economically attractive and robust project that can be developed into a viable gold producing operation.

DESPL is seeking to establish an open pit gold mine and 0.3 million tonnes per annum (Mtpa) processing plant at Ganajur in Haveri District in Karnataka.

HIGHLIGHTS OF FS:

Financial Analysis:

The financial model demonstrates net cash flows of USD 133 million (M) before tax over the life of the mine (LOM). The Net Present Value (NPV) at 5% DCF is USD 91.6 M and USD 61.4 M before and after tax respectively. The Internal Rate of Return (IRR) is a very healthy 39.1% and 29.6% before and after tax respectively, and the payback period for the Project is 2.7 years. The gold price used for the above calculations is USD 1250 per ounce (oz).

The key inputs and the results of the financial analysis are presented in the following Tables 1-4.

Table 1 - Economic model inputs

Item	Unit	Value
Pre-production	years	1.75
Life of process production	years	8.35
Project life	years	10.1
LOM ore mined	Kilo tones	2,506
	(kt)	
LOM waste mined	kt	9,237
LOM total material mined	kt	11,743
Strip ratio Waste : Ore		3.68
LOM ore processed	kt	2,506
LOM average Au grade	%	3.38
LOM average Au recovery sulphide ore	%	79.0
LOM average Au recovery oxide ore	%	90.0
LOM average gold recovery	%	81.7
LOM contained ounces	Kilo ounze	273
	(koz)	
LOM recovered ounces	koz	221
Average annual gold produced	koz	27
Plant throughput (average)	Mtpa	0.30
LOM Au price	USD/oz	1,250

Table 2 - Summary of total Life of Mine costs

Item	Unit	Value
Pre-production capital	USD M	46.6
Production sustaining capital	USD M	3.1
Total Capital Costs	USD M	49.7
Total Mining	USD M	21.6
Total Processing	USD M	55.8
Onsite Labour	USD M	1.2
Total Operating Costs	USD M	78.5
Royalties	USD M	14.9
Taxation	USD M	39.8
TOTAL ALL COSTS	USD M	183.0

Table 3 - Economic model headline results before taxation

Item	Unit	Value at USD 1,250/oz Au
Net cash flow	USD M	133.0
NPV ₅	USD M	91.6
IRR	%	39.1

Table 4 - Economic model headline results after taxation

		Value at	
Item	Unit	USD 1,250/oz Au	
Net cash flow	USD M	93.1	
NPV ₅	USD M	61.4	
IRR	%	29.6	

Upgradation of Mineral Resources to Ore Reserves:

Snowden has estimated 2.14 million tonnes (Mt) @ 3.63 grams per tonne (g/t) gold as Proved Ore Reserves, and 0.37 Mt @ 1.98 g/t gold as Probable Ore Reserves for the Ganajur Main Gold Deposit (Table 5), thereby identifying the maiden mining inventory on the new Mineral Resource Estimates of August 2016 (please refer to DGML's BSE release dated September 23, 2016). It is to be noted that out of 300,000 ozs of gold estimated under Measured and Indicated Resource categories, 273,000 ozs are now placed under Proved and Probable Ore Reserves; Measured Resource has been upgraded to Proved Ore Reserves, while Indicated Resource has been upgraded to Probable Ore Reserves. Proved Ore Reserves account for 85% of the total Ore Reserves, which is a significant milestone for Ganajur Gold Project.

Table 5 - Summary of Ore Reserves

		Tonnes	Au
Classification	Deposit	(Mt)	(g/t)
Duarrad One December	Oxide	0.568	2.76
Proved Ore Reserve	Sulphide	1.567	3.94
Total Proved Ore Reserve		2.135	3.63
Probable Ore Reserve	Oxide	0.122	1.78
	Sulphide	0.250	2.08
Total Probable Ore Reserve		0.372	1.98
Total Ore Reserve		2,506	3.38

Capital cost:

The total pre-production capital cost for the Project is USD 46.6 M and this is below our fund raising target of USD 50 M. CPC Project Design Pty Ltd (CPC), Perth, completed the engineering design for the processing plant and related infrastructure. CPC also estimated the total capital cost for the Project. Summary of significant capital costs have been noted in the table below (Table 6).

Table 6 – Significant capital cost summary

Description	USD M
Mining	0.874
Process plant	19.028
Process plant infrastructure	5.043
Infrastructure plant and equipment	4.284
Construction indirects	2.153
Indirect costs	14.961

Break Even:

A break even analysis after taxation was undertaken on the gold price and gold grade for NPV (Table 7). The analysis shows that the Project breaks even at a gold price of USD 701/oz of gold as compared to the current market price of USD 1220/oz, and gold grade of 1.90 g/t as compared to the average gold grade of 3.4 g/t at Ganajur Main Gold deposit.

Table 7 - Break even analysis

Item	Unit	Breakeven
Gold price	USD/oz Au	701
Gold grade	g/t Au	1.90

Earlier Scoping study:

The FS is a major improvement in terms of Project economics over the scoping studies completed in 2012 and demonstrates the potential for even better results.

Mining:

The mining method is conventional open pit mining with load, haul and drill blast activities performed by an experienced mining contractor. It is planned that the mining contractor will buy back the waste for use in their civil operations elsewhere, subject to an off take agreement with DESPL. Explosives and diesel fuel will be sourced locally in the city of Haveri and the costs covered by the mining contractor.

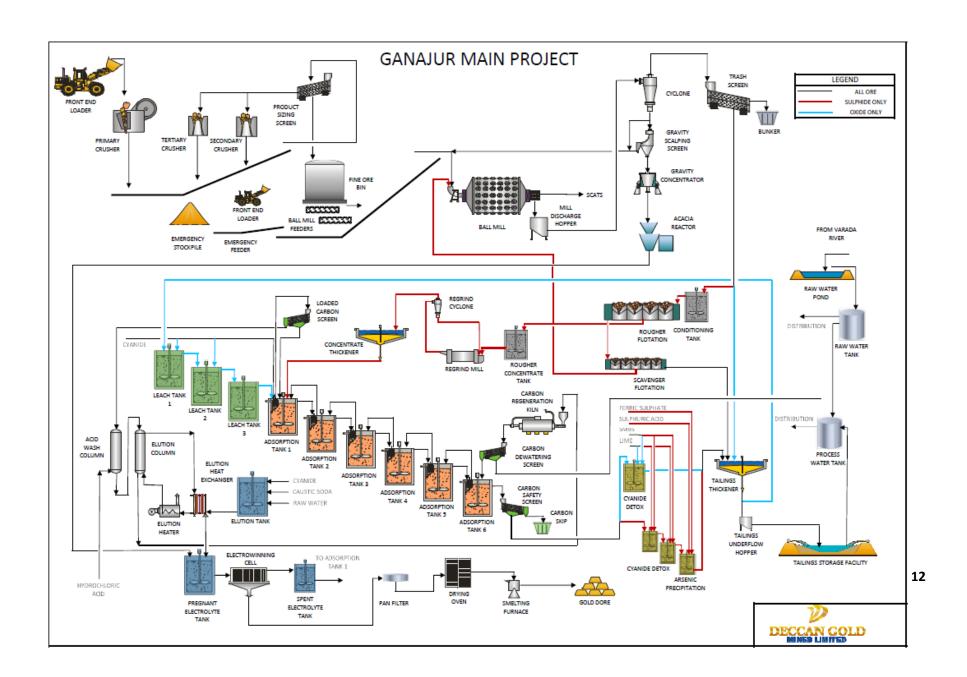
The Ganajur gold ore comprises layers of Oxide Ore followed by Sulphide Ore and will be mined at the rate of 0.3 Mtpa. The proposed mining plan envisages the Oxide and Sulphide Ores being mined separately. The projected life of mine (LOM) average process operating cost for the 0.3 Mtpa Ganajur Gold recovery plant is USD 18.36/tonne (t) or USD 243/oz of Oxide ore processed and USD 23.53/t or USD 249.31/oz for the Sulphide ore processed.

Ore Processing:

The FS metallurgical test work program focused on developing a gold recovery route on the predominant sulphide mineralization via a process flowsheet that involved flotation followed by the ultrafine grinding (UFG) and Carbon in Leach (CIL) on the sulphide concentrates. This flowsheet was assessed as the most likely process route that would provide the maximum NPV for the Ganajur Project. The process plant will treat 0.3 Mtpa of gold-bearing ore with a crushing availability of 70% on a single shift and an overall plant availability of 91.3%.

The complete flow sheet of the process route is furnished as Figure 1.

Figure 1 – Process Flow Sheet



Metallurgy:

As part of the FS significant amount of metallurgical test work was carried out at various laboratories such as AMTEL in Canada, ASL Perth, Brisbane in Australia and Shiva Analyticals in India. Flotations test results on the sulphide ore has indicated a sulphide sulphur recovery of 97% and gold recovery of 95%. However, overall gold recovery after UFG and CIL leaching for the Sulphide Ore has been estimated to be 79%, whereas Oxide Ore indicated 90% over all gold recovery.

Geology and Mineral Resource estimate:

Snowden carried out the Mineral Resource estimate for the Ganajur Main Gold Deposit Project during August 2016 on behalf of DESPL (Table 8)

Pursuant to this estimate, the overall gold Mineral Resource under Measured and Indicated Resource categories was 300,000 ozs, with an increase in the Inferred Resource category by about 9,000 oz of gold, as compared to the scoping study Mineral Resource estimates provided by SRK (Geological & Mining Consultants) in 2012. Snowden has expressed its satisfaction at the overall QA/QC procedures adopted by DESPL. Please refer to the paragraph headed "Upgradation of Mineral Resources to Ore Reserves" wherein the quantum of upgradation has been provided.

Table 8 - Mineral Resource estimate

Classification	Deposit	Tonnes	Au
Measured	Oxide	0.580	2.8
	Sulphide	1.700	4.0
	Total Measured	2.300	3.7
Indicated	Oxide	0.130	1.9
	Sulphide	0.320	2.1
	Total Indicated	0.450	2.1
Measured + Indicated	Total	2,700	3.4
Inferred	Oxide	100	2.3
	Sulphide	110	2.3
	Total Inferred	210	2.3

Tailings Storage Facility (TSF):

The Ganajur Gold Project infrastructure will include a TSF, a return water dam and storm dam, and other surface water management measures. The TSF is proposed to be located immediately north of the Processing Plant.

Prime Resources (Pty) Ltd, who specialise in environmental engineering and TSF design and are based in South Africa, issued a final recommendation for the selection of an upstream TSF design. The key criteria for the selection of the TSF construction and operation methodologies included a cost-effective solution, environmentally acceptable practices, maximum water conservation and minimum land use.

The site selection was influenced by the required storage capacity and footprint, construction and development methods, local structural geology and topography, land ownership, rehabilitation requirements and existing significant surface infrastructures and features. In addition, detailed geo-mechanical laboratory testing and geotechnical investigations were undertaken in the infrastructure and TSF area that supported the TSF design criteria.

The TSF is designed to store a total dry tailings tonnage of 2.59 million tonnes (Mt) over the 8.4 year LOM, requiring a volume capacity of 1.63 million cubic metres (Mm³) and footprint of 15.7 hectares (ha). The facility reaches maximum height of 19 m at a final rate of rise of 1.95 m per year and overall slope of 1V:3H.

About the FS:

The FS has taken approximately 11 months to prepare. The document encompasses an elaborate study of every discipline required to take the Ganajur Gold Mine into production. The following disciplines will be reported upon in the FS in detail:

- Introduction to the Project
- Geology and Mineral Resource estimates
- Metallurgical testing and recovery
- Process and plant description

- Mining engineering and Ore Reserve estimates
- Surface geotechnical and tailings disposal
- Project infrastructure (including roads, power supply and distribution, water supply and storage, buildings)
- Marketing information on gold production
- Geochemistry
- Hydrogeology and Hydrology
- Environmental studies, permitting and social or community impact
- Cost analysis
- Economic analysis
- Risks and Opportunities
- Recommendations
- Interpretation, development and conclusions

Detailed reports on the above topics will be uploaded on our website as and when released by Snowden.

PROGRESS MADE ON THE INFRASTRUCTURE FRONT

Land Acquisition:

As per the land use pattern of the various facilities of the Project, a total of 255 acres of land will be required. The Karnataka State Government, through a Government Order (GO), has also approved acquisition of 200 acres of land for the proposed mine and processing plant. DESPL will also be submitting application for an additional 55 acres of land after obtaining approval from Karnataka Udyog Mitra and State High Level Clearance Committee (SHLCC). Most of the land is private agricultural land, with the remainder being government land. DESPL has obtained consent of more than 85% of the landowners, which complies with the land acquisition procedure. DESPL's long term lease agreement with landowners of the proposed gold mine will be an added advantage in the land acquisition process. Recently, Karnataka Industrial Area Development Board (KIADB) processed the application for 200 acres of land and then issued a

demand letter asking DESPL to remit 40% of the land cost. After payment of this deposit, KIADB will issue primary notification under Sections 3(1), 1(3) and 28(1) of the KIADB Act.

Water for Plant and Mine:

The Varada River flows at a distance of 6.5 km north of the gold ore process plant area. It is proposed to pump water from the Varada River for the water requirement of the Project. The Karnataka State High Level Clearance Committee has approved the drawing of 3000 KLD of water from the Varada River for the Project from the Kollur-Kalasur barrage. The abandoned quarry near the process plant area will be part of the raw water storage facility.

DESPL has since submitted a proposal to the Secretary, Water Resource Department, Government of Karnataka in Bangalore for pumping around 1.08 million cubic metres (Mm³) of water per annum. We have received a letter from the Irrigation Water Investigation Department (WID), Dharwad, dated 4th April 2017, to submit a checklist along with our proposal and this has been submitted. Accordingly, the Assistant Executive Engineer of WID visited the Project site recently to consider the proposal.

Power for Plant and Mine:

A high tension 110 kilovolt-amperes (kVa) power line located just 300 m south of the proposed processing plant will provide 5 megawatt (MW) power from Basavaakatti substation at a distance of around 7 km from the plant. DESPL's application for obtaining 5 MW power from this substation has been sanctioned by Karnataka Power Transmission Corporation Limited (KPTCL) and is now awaiting further processes.

Railways:

DESPL has filed an application with the Divisional Railway Manager, South Western Railway, Mysore for obtaining permission for laying a water pipe line below the under-bridge being constructed by the Railways near Ganajur village. This water pipe will be for drawing water from Varada River to the Project site. The South Western Railway authority will carry out field verification and feasibility of the proposal shortly.

The Ganajur Gold Project layout is furnished as Figure 2.

HANUMAN TEMPLE DIVERSION ROAD DIVERSION ROAD EXISTING ROAD/HAUL ROAD
UPGRADED TO 7.5m WIDE SITE AREA
PERIMETER FENCE - RETURN WATER/ STORMWATER DAM CONTRACTORS DIVERSION DRAIN MINE INFRASTRUCTURE / AREA BOUNDARY MINING AREA -PERIMETER FENCE DIVERSION ROAD - EXISTING ROAD

Figure 2 - Ganajur Gold Project- Lay out

Managing Director's Comments:

Sandeep Lakhwara, Managing Director of DGML commented "I congratulate the DGML team, ably led by S.C.R Peshwa, our Exploration Director and all our Consultants based in India, Australia and South Africa notably Snowden; Prime Resources, Environmental Consultants and TSF Specialists; CPC Engineering, Process Design & Engineering Consultants; John Fodor, Metallurgical Consultant; M.C. Reddy and B. Jayakumar, Hydrogeology Consultants; EI Technologies Private Limited, Hydrology Consultants; B.S. Envitech Private Limited, Environmental Consultants and Sarathy Geotech & Engineering Services Private Limited, Geotechnical Engineering Consultants, for their efforts towards the FS Report preparation and for the excellent outcome of the same.

This is a significant milestone for DGML to establish its first operating gold project at Ganajur and a major step towards increase of indigenous gold production in India".