GASCOYNE RESOURCES LIMITED

ACN: 139 522 900

11th February 2011

Australian Stock Exchange Limited
Via Electronic Lodgement

POSITIVE PIT OPTIMISATION STUDY RESULTS

- **Three options assessed, all showed potential positive cash flows**
- **Resource drilling scheduled for March 2011**

Gascoyne Resources Limited is pleased to announce that a preliminary pit optimisation study* has been completed on the recently updated Glenburgh gold project's Inferred Resource of 7.2MT at 1.6g/t Au for 360,000oz gold.

The pit optimisation was completed using assumed metallurgical recoveries, mining, process options and costs and a gold price of A$1,400 per ounce. The assumptions were compiled from industry benchmarking for similar size and grade deposits.

Three distinct process paths were assessed in the pit optimisation study these were:

1. A CIL process plant with assumed recoveries and costs using gas power generation
2. A CIL process plant with assumed recoveries and costs using diesel power generation
3. A Heap Leach processing option with the associated costs and recoveries with diesel power generation

The reason for running three very different options was to determine the preferred flowsheet for the project. As a result, the project has two "end members" for the development options; one being a low capital cost and low recovery option and the other a higher capital cost but higher recovery path.

The preliminary optimisations include the following tonnages and grades extracted from the global Inferred resource estimate that are included within the modelled open pits. **

* An optimisation study involves the use of specialist mining software to simulate the mining of mineral resources using estimated mining and treatment parameters, costs, metal (gold) price and the like to estimate which portion of a resource could be economically extracted and the likely cash surplus that would be returned from such a mining operation. It is a theoretical evaluation of a deposit and limited by the assumptions used and does not include an allowance for capital costs.

** The pit optimisation was completed on the Glenburgh Inferred resource and assumed costs. It cannot be assumed that with additional exploration that the Inferred resource will be converted to a higher resource category allowing conversion into a reserve or that the assumed recoveries and costs would be achieved.

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CIL Plant option – Gas Power:

5.5 Mt @ 1.4 g/t Au for 254,000 ounces contained (234,000 ounces recovered).

This optimisation results in an ore to waste strip ration of 4.5 and provides a theoretical positive operating cash flow (undiscounted and excluding capital costs) of approximately $120M.

CIL Plant option – Diesel Power:

4.4 Mt @ 1.6 g/t Au for 223,000 ounces contained (205,000 ounces recovered).

This optimisation results in an ore to waste strip ration of 4.8 and provides a theoretical positive operating cash flow (undiscounted and excluding capital costs) of approximately $95M.

Heap Leach Option:

5.4Mt @ 1.4 g/t Au for 241,000 contained gold ounces (157,000 ounces recovered).

This optimisation results in an ore to waste strip ration of 4.0 and provides a theoretical positive operating cash flow (undiscounted and excluding capital costs) of approximately $80M.

Comment

This study is the first step in moving the Glenburgh Project forward from an exploration project into a development opportunity. It is not a definitive mining study or feasibility study, but a guide to the direction of further studies needed to assess the viability of project.

As the resource model is restricted in depth and strike around the deposits, there is significant potential to increase the resources with additional drilling. This could provide significant additional resources within the existing pit optimisations.

As a result additional drilling is being planned to extend the depth of the resources, to test the strike potential of deposits that remain open and to fully evaluate the extents of the mineralisation within the current preliminary pit shells.

FORWARD PROGRAM

While it is still not clear which processing option will be preferred, it is evident that metallurgical testwork is needed to evaluate the options in more detail as well as preliminary geotechnical studies to determine the optimum pit wall angles.

Additional resource evaluation is also required within and immediately adjacent to the currently defined resources as well as additional regional exploration to expand the resource base.

RC drilling is scheduled to recommence on the 1st of March 2011, with an initial program of 5,000 metres planned.

A proposal for a scoping study is being prepared for consideration by the board.

Further results and information will be provided as they become available.

On behalf of the Board of
Gascoyne Resources Ltd

Michael Dunbar
General Manager

Information in this announcement relating to mineral resources and exploration results is based on data compiled by Gascoyne's General Manager Mr Mike Dunbar and Mr Linton Putland, of LJ Putland and Associates, a consultant to the company. Both Mr Dunbar and Mr Putland are members of The Australasian Institute of Mining and Metallurgy and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons under the 2004 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Dunbar and Mr Putland consent to the inclusion of the data in the form and context in which it appears.

BACKGROUND ON GASCOYNE RESOURCES

Gascoyne Resources Limited was listed on the ASX in December 2009 following the amalgamation of the gold assets of Helix Resources Limited and Giralia Resources NL in the Gascoyne Region and a capital raising.

Gascoyne Resources is endowed with

- The Glenburgh Project that has an inferred resource estimate of: 7.2Mt @ 1.6g/t Au for 360,000oz gold from several prospects within a 20km long shear zone.
- Untested soil geochemical anomalies and number of mineralised quartz veins at Bassit Bore ready to be drilled.
- Advanced exploration projects at Mt James and at Bustler Well.
- A number of exploration tenements that are expected to be granted during 2011

Gascoyne Resources' immediate focus is to continue the evaluation of the Glenburgh gold deposits to delineate meaningful increases in the resource base and to identify and test additional targets in the Glenburgh mineralised system and to explore for additional gold resources on the exploration properties. Success in these activities could to lead to the development of a gold project based on the Glenburgh gold deposits.

Further information is available at www.gascoyneresources.com.au

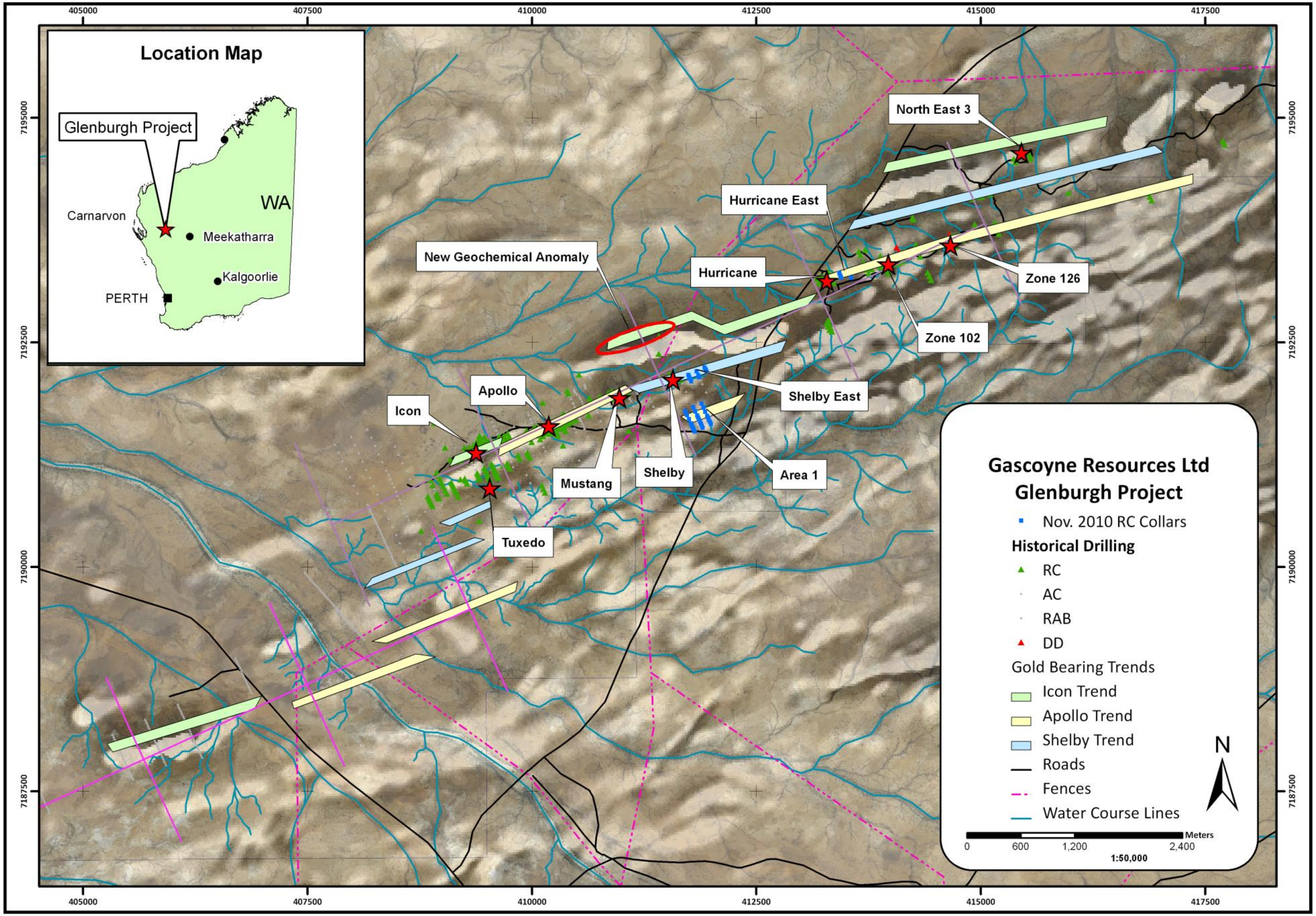

Figure 1: Deposit locations within the Glenburgh gold Project.