

January 19th, 2016 Australian Securities Exchange Limited Via Electronic Lodgement

# **DALGARANGA PRE-FEASIBILITY UPDATE**

PFS Pit optimisations indicate a production target far larger than anticipated in the 2015 Scoping Study

- Production Target of between 584,000 and 712,000 ounces of contained gold
- Projected Project Life of between 6-7 years
- Average Annual Production of between 80,000 and 115,000 ounces is sustainable
- Optimal production rate of ~100,000 ozpa through a 2.5Mtpa processing facility
- The Dalgaranga Pre-Feasibility Study is continuing on schedule for completion in Q1 2016.

Gascoyne Resources Limited (**"Gascoyne" or "Company"**) is pleased to advise on progress of the Pre-Feasibility Study for the Company's 80% owned Dalgaranga Gold Project in the Murchison region of Western Australia. The Dalgaranga Gold Project contains a recently upgraded (ASX announcement November 4<sup>th</sup>, 2015) Measured, Indicated and Inferred Resource of **23.0Mt @ 1.4 g/t gold for 1.02 million ounces of contained gold** (see Figure 1&2).

Following the positive Scoping Study completed for Dalgaranga in June 2015 (See the Detailed Scoping Study ASX announcement 23rd June 2015), a Pre-Feasibility study commenced on the project. Substantial progress has been made on a number of key aspects of the project including pit optimisations and process plant design.

## Pit Optimisation Update:

CSA Global Pty Ltd (CSA Global), an independent mining consultancy, has undertaken a number of pit optimisations to determine the prefered production rate as well as to provide a guide for overall project economics.

The opimisation study has identified that the project can sustain a substantially larger production rate than the 1.5Mtpa throughput originally anticipated in the Scoping Study, which supports the Company's belief that Dalgaranga could produce between 80,000 and 100,000 ounces per annum for between 6 and 7 years.

As expected, with larger production rates the operating costs and cutoff grades decrease, which in turn increases the amount of the resource that falls within the optimised pit shell and increases the returns. See Table 1 and Figures 3-4 for a breakdown of the optimisation results.

The optimisations were run at 2.0, 2.5, 3.0 and 3.5 Mtpa using a A\$1,500 gold price and preliminary costs adjusted for scale, based on the recently updated Gilbeys Resource and the existing (soon to be updated) Golden Wings Resource. The optimisations have also taken into account the geotechnical data recently obtained from the historical Dalgaranga mine and historical production records.

The optimisations indicate that the project can sustain a production rate of between 2.0 and 3.0Mtpa, which results in between 584,000 and 712,000 ounces falling within the A\$1,470 pit shell, with projected production betweeen 80,000 and 115,000 ounces per annum for between 6.0 and 7.0 years.

Although on first glance it appears that a 3.5Mtpa process plant produces greater returns at a lower cost, it is CSA Global's belief that this production rate is too rapid, with the mining sequence and vertical advance required to achieve this production rate above what is considered best practice.

A production rate around 2.5Mtpa is considered by CSA Global to be most appropriate for the project.



## Table 1 Summary of Dalgaranga Pit Optimisation Results

	Production Rate	Resource in Pit Optimisation (Mt)	Grade G/t Gold	Contained Ounces	Strip Ratio	Projected Mine Life	Annual Production Target	Discounted Cash Flow (A\$M)	Measured Resource in Optimisation	Indicated Resource Within Optimisation	Inferred Resource Within Optimisation
	Scoping Study (1.5Mtpa)	7.5	1.4	330,000	6.9	6.0	60,000	142	-	80%	20%
	2.0 MTPA	13.6	1.3	584,000	6.2	6.8	80,000	210	20%	65%	15%
C	2.5 MTPA	15.5	1.3	646,000	6.4	6.2	100,000	266	18%	60%	22%
22	3.0 MTPA	17.6	1.3	712,000	6.6	5.9	115,000	312	16%	56%	28%
$( \subset$	3.5 MTPA	19.6	1.2	773,000	6.8	5.6	130,000	356	15%	53%	32%

Note: The resources for Scoping Study contained no Measured Resources, Discounted cash flow based on an 8% discount rate and excludes project establishment costs

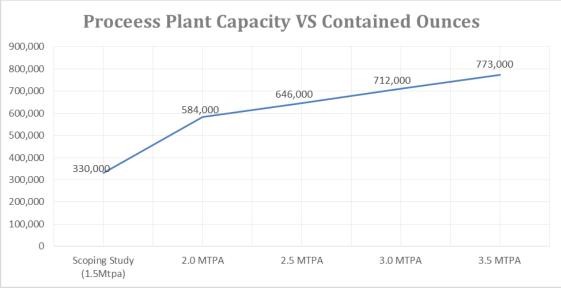


Figure 3: Contained Ounces within Pit Optimisation Vs Process Plant Capacity

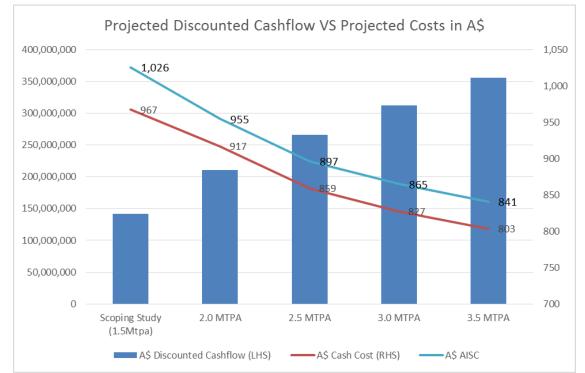


Figure 4: Change in Projected Discounted Cashflow and Projected Costs with Process Plant Capacity

## **Process Plant Studies**

The Company has also appointed Mintrex as process plant engineers for the Pre Feasibility Study. Mintrex are working on the design as well as the capital and operating cost models for the project.

Mintrex has a history with Dalgaranga with a number of the key team members being involved in modifications to the original 1990's process plant design and its move to Kirkalocka. Additionally Mintrex has a history of designing simple process plants that have proven themselves to operate efficiently while also being considerably less capital intensive than other designs. As evidenced by the design and construction of the process plants for Regis Resources. Mintrex have designed all three of Regis' process plants with a combined capacity of around 10Mtpa.

The plant design for Dalgaranga will be based on Regis' Moolart Well and Rosemount processing plants.

## Future Programme:

In addition to the process plant design work that is ongoing, open pit mine designs and mine schedules (based on the pit optimisations outlined above) as well as a hydrogeological assessment, tailings storage studies and work on additional site infrastructure requirements are all underway.

Results from the recent Golden Wings Resource drilling are also expected to be received within two weeks. These will then be fed into an updated Golden Wings Resource model which will be included in the PFS which remains on scheule for completion in the current quarter.

In addition to the PFS activities, exploration results are still pending with around 50% of the aircore drilling results yet to be received. These are expected within two weeks.

For further information please refer to the Company's website or contact the Company directly.

On behalf of the board of Gascoyne Resources Limited

Michael Dunbar Managing Director

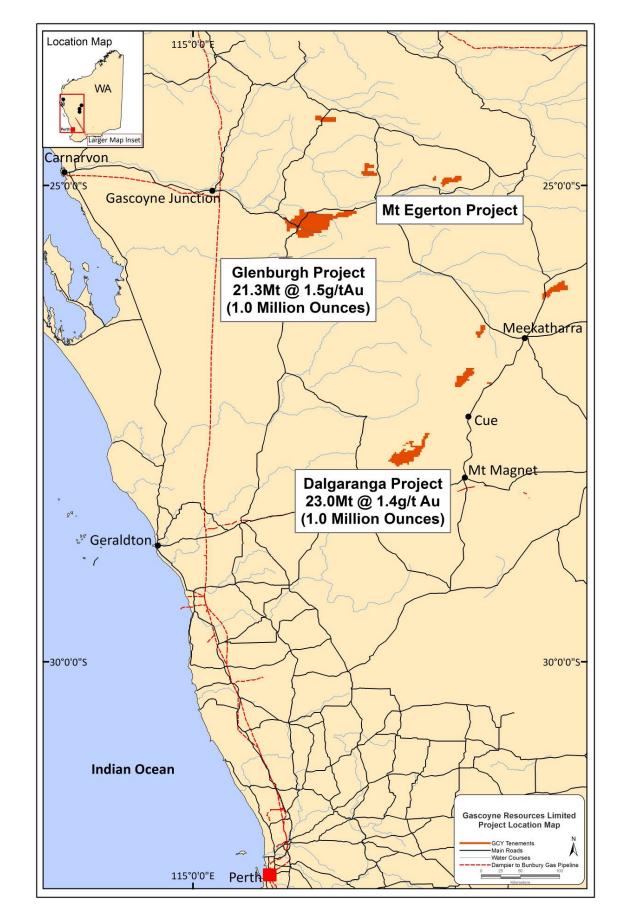


Figure One: Gascoyne Resources Project Locations in the Gascoyne and Murchison Regions

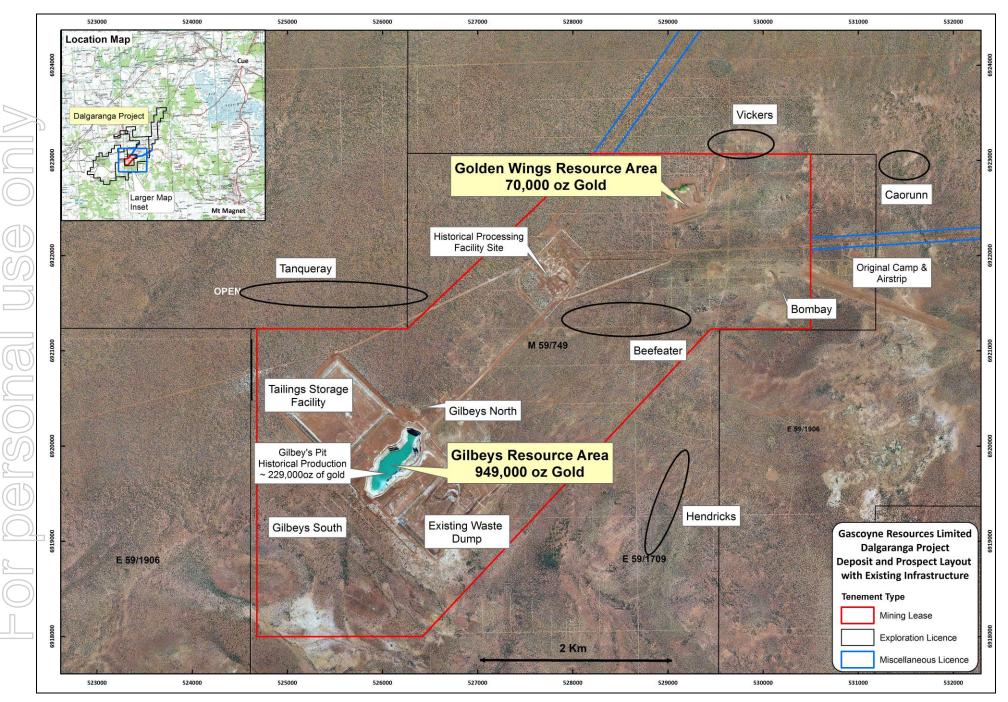


Figure 2: Plan of Dalgaranga Deposits and Prospect Location

## BACKGROUND ON GASCOYNE RESOURCES

Gascoyne Resources Limited was listed on the ASX in December 2009 and is focused on exploration and development of a number of gold projects in Western Australia.

The Company's two main gold projects combined have 2.0 million ounces of contained gold on granted Mining Leases:

#### DALGARANGA (80% GCY):

The Dalgaranga project is located approximately 65km by road NW of Mt Magnet in the Murchison gold mining region of Western Australia and covers the majority of the Dalgaranga greenstone belt. After discovery in the early 1990's, the project was developed and from 1996 to 2000 produced 229,000 oz's of gold with reported cash costs of less than \$350/oz.

The project contained a JORC Measured, Indicated and Inferred resources of 23.0 Mt @ 1.4g/t Au for 1,019,000 ounces of contained gold (see Table 1).

A positive Scoping Study has recently been completed, that outlined a project that could produce 60,000 ounces of gold for between 6 and 10 years, with <u>low costs and high margins</u> (C1 Cash costs \$813, and AISC of \$1,025) and relatively low capital costs. (See ASX announcement released 23<sup>rd</sup> June 2015 titled "Dalgaranga Scoping Study Outlines Low Cost / High Margin Development" for full details). A Pre-Feasibility study is currently underway further evaluating the development options for the project.

Significant exploration potential also remains outside the known resource with numerous historical geochemical prospects only partly tested. The Golden Wings deposit is also open along strike and at depth.

Mineral Resource Estimate												
)(	Measured			Indicated			Inferred			Total		
/ Type	tonnes	Au	Au	tonnes	Au	Au	tonnes	Au	Au	tonnes	Au	Au
90	Mt	g/t	Ounces	Mt	g/t	Ounces	Mt	g/t	Ounces	Mt	g/t	Ounces
Golden Wings				0.85	2.0	52,400	0.35	1.5	17,400	1.2	1.8	70,000
Gilbeys	2.4	1.4	108,000	8.1	1.3	349,000	11.2	1.4	492,000	21.8	1.4	949,000
Total	2.4	1.4	108,000	9.0	1.4	401,000	11.6	1.4	509,000	23.0	1.4	1,019,000

# Table One: Dalgaranga Deposits

Note: Totals may differ due to rounding Mineral Resources reported on a dry basis

Gilbeys Resource – October 2015 (0.5g/t and 1.0g/t cut-off) and Golden Wings Resource June 2015 (1.0 g/t cut-off)

#### GLENBURGH (100% GCY):

The Glenburgh Project in the Gascoyne region of Western Australia, has a Measured, Indicated and Inferred resource of: 21.3 Mt @ 1.5g/t Au for 1.0 million oz gold from several prospects within a 20km long shear zone (see Table 2)

A preliminary feasibility study on the project has been completed (see announcement 5<sup>th</sup> of August 2013) that showed a viable project exists, with a production target of 4.9mt @ 2.0g/t for 316,000oz (70% Indicated and 30% Inferred resources) within 12 open pits and one underground operation. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. The study showed attractive all in operating costs of under A\$1,000/oz and indicated a strong return with an operating surplus of ~ A\$160M over the 4+ year operation. The study included approximately 40,000m of resource drilling, metallurgical drilling and testwork, geotechnical, hydro geological and environmental assessments. Importantly the study has not included the drilling completed during 2013, which intersected significant shallow high grade zones at a number of the known deposits.

# Table Two:Glenburgh Deposits - Area Summary2014 Mineral Resource Estimate (0.5g/t Au Cut-off)

	N	leasur	ed				Tota	I				
Area	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au
	Mt	g/t	Ounces	Mt	g/t	Ounces	Mt	g/t	Ounces	Mt	g/t	Ounces
lcon	1.7	1.5	82,500	1.7	1.4	77,000	4.1	1.3	168,000	7.6	1.3	328,000
Apollo	0.9	2.4	67,400	0.3	1.3	14,000	1.5	1.4	67,000	2.7	1.7	149,000
Tuxedo				0.7	1.2	29,000	1.2	1.0	37,000	1.9	1.1	66,000
Mustang				0.2	1.3	7,000	1.0	1.1	35,000	1.1	1.2	42,000
Shelby				0.2	1.4	10,000	0.6	1.1	21,000	0.8	1.2	32,000
Hurricane				0.1	1.6	3,000	0.5	1.1	16,000	0.5	1.2	19,000
Zone 102				0.9	1.9	56,000	1.2	1.3	50,000	2.1	1.6	106,000
Zone 126	0.2	4.0	30,500	0.4	2.9	35,000	1.4	2.2	101,000	2.0	2.5	166,000
NE3							0.2	1.5	11,000	0.2	1.5	11,000
Torino							1.6	1.3	64,000	1.6	1.3	64,000
SW Area							0.6	1.0	20,000	0.6	1.0	20,000
Total	2.9	2.0	180,500	4.6	1.6	232,000	13.9	1.3	591,000	21.3	1.5	1,003,000

Note: Discrepancies in totals are a result of rounding

#### EGERTON (100% GCY)

The project includes the high grade Hibernian deposit which contains a resource of **116,400 tonnes** @ **6.4 g/t gold for 24,000 ounces** in the Measured, Indicated and Inferred JORC categories (Table 3). The deposit lies on a granted mining lease and previous drilling includes high grade intercepts, **2m** @ **147.0 g/t gold**, **5m** @ **96.7 g/t gold** and **5m** @ **96.7 g/t gold** associated with quartz veining in shallow south-west plunging shoots. The Hibernian deposit has only been drill tested to 70m below surface and there is strong potential to expand the current JORC Resource with drilling testing deeper extensions to known shoots and targeting new shoot positions.

Classification	Tonnes	Au g/t	Au Ounces		
Measured Resource	32,100	9.5	9,801		
Indicated Resource	46,400	5.3	7,841		
Inferred Resource	37,800	5.1	6,169		
Total	116,400	6.4	23,811		

Gascoyne is continuing to evaluate the Glenburgh gold deposits to delineate meaningful increases in the resource base and progress project permitting, while also continuing to explore the Dalgaranga project with the view to moving towards a low capital cost development as rapidly as possible. The Company also has 100% ownership of the high grade Egerton project; where the focus has been to assess the economic viability of trucking high grade ore to either Glenburgh or to another processing facility for treatment and exploration of the high grade mineralisation within the region.

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

#### Competent Persons Statement

Information in this announcement relating to the Dalgaranga project is based on data compiled by Gascoyne's Managing Director Mr Mike Dunbar and Mr Karl van Olden, a full-time employee of CSA Global Pty Ltd, who are members of The Australasian Institute of Mining and Metallurgy. Mr Dunbar and Mr van Olden 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 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Dunbar and Mr van Olden consent to the inclusion of the data in the form and context in which it appears.

The Gilbeys Mineral Resource at the Dalgaranga and Glenburgh Projects have been estimated by RungePincockMinarco Limited, an external consultancy, and are reported under the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves (see GCY-ASX announcement 4<sup>th</sup> November 2015 titled: Dalgaranga Mineral Resource Grows to Over One Million Ounces and ASX announcement 24<sup>th</sup> July 2014 titled: High Grade Domains Identified Within Updated Glenburgh Gold Mineral Resource). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimate in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not materially modified from the original market announcements.

The Golden Wings resources have been estimated by Elemental Geology Pty Ltd, an external consultancy, and are reported under the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves (see GCY - ASX announcement 23<sup>rd</sup> June 2015 titled: Dalgaranga Scoping Study Outlines low cost / high margin development). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimate in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not materially modified from the original market announcements.

The Glenburgh 2004 JORC resource (released to the ASX on April 29<sup>th</sup> 2013) which formed the basis for the preliminary Feasibility Study was classified as Indicated and Inferred and as a result, is not sufficiently defined to allow conversion to an ore reserve; the financial analysis in the preliminary Feasibility Study is conceptual in nature and should not be used as a guide for investment. It is uncertain if additional exploration will allow conversion of the Inferred resource to a higher confidence resource (Indicated or Measured) and hence if a reserve could be determined for the project in the future. Production targets referred to in the preliminary Feasibility Study and in this report are conceptual in nature and include areas where there has been insufficient exploration to define an Indicated mineral resource. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. This information was prepared and first disclosed under the JORC Code 2004, the resource has now been updated to conform with the JORC 2012 guidelines. This new JORC 2012 resource, reported above, will form the basis for any future studies.

The Egerton Resource estimate and Gaffney's Find prospect historical exploration results have been sourced from Externa Resources annual reports and other publicly available reports which have undergone a number of peer reviews by qualified consultants, who conclude that the resources comply with the JORC code and are suitable for public reporting. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.