

4<sup>th</sup> September 2012 Australian Securities Exchange Limited Via Electronic Lodgement

# DRILLING FURTHER EXTENDS GLENBURGH GOLD MINERALISATION

#### **HIGHLIGHTS:**

- Diamond drilling extends Icon Deposit by approximately 130m below the current resource. Intersections include:
  - o 12.4m @ 2.3 g/t gold incl. 3m @ 6.8 g/t gold
  - o 1m @ 24.8 g/t gold
  - o 5m @ 1.7 g/t gold
  - o 15m @ 1.3 g/t gold
  - o 18m @ 1.0 g/t gold incl. 7m @ 1.9 g/t
- Diamond drilling down plunge of the high grade shoot at Zone 126, extends the mineralised lodes. Intersections up to:
  - o 15.45m @ 3.9 g/t incl. 4m @ 13.0 g/t gold
- Plunging shoot identified in RC drilling at the Zone 102 Deposit, with intersections including:
  - o 6m @ 4.5 g/t gold (incl. 3m @ 8.0g/t)
  - o 4m @ 3.1 g/t gold
  - o 6m @ 1.9 g/t gold
  - o 6m @ 1.8 g/t gold
- 4 diamond drill holes below Apollo Deposit completed with results expected within two weeks
- Resource estimation underway with completion expected in approximately three weeks

Gascoyne Resources Limited is pleased to announce positive extensional diamond drilling at the Icon and Zone 126 gold deposits has resulted in the mineralisation being traced a further  $\sim 130$  metres below the current resource models at the Company's 100% owned Glenburgh gold project in Western Australia. Glenburgh hosts a JORC Indicated and Inferred Resource of 703,000 ounces of gold.

Four deep extensional diamond drill holes have been drilled approximately 130m below the 220,000 ounce Icon Deposit (see table 3 for resource details), which up until now has only been modelled to a depth of approximately 140m below surface. Intersections include 12.4m @ 2.3 g/t gold including 3m @ 6.8 g/t gold from 318.6m in GBD041, 18m @ 1.0 g/t gold including 7m @ 1.9g/t gold from 233m in GBD039, 1m @ 24.8 g/t gold from 205m, 5m @ 1.7 g/t gold from 232m, 15m @ 1.3 g/t gold from 271m and in GBD040. It is expected that inclusion of this new information will lead to a significant increase to the Icon resource.

Three deep diamond holes have also been drilled below the high grade Zone 126 deposit. One of the holes (GBD011) originally ended in mineralisation, as a result the hole was extended a further 30m. This extension intersected very significant results of **up to 37.8 g/t gold** within an overall interval of **15.45m** @ **3.9 g/t gold** from 318.55m including **4.0m** @ **13.0 g/t gold** from 330m. Two additional holes were drilled targeting the plunging shoot a further 150 metres down plunge of the previous high



grade intersections. These holes intersected the three interpreted lodes, however, the grades were not as high as expected with the best developed lode intersected returning 5m @ 1.2 g/t gold. The intersection of very wide zones (up to 70 metres wide) of anomalous gold strengthens the interpretation that the system remains open down plunge.

RC drilling at the Zone 102 deposit has identified an interpreted east plunging shoot within the overall mineralised envelopes. Recent drilling intersected zones of mineralisation including **6m** @ **4.5g/t gold** (including **3m** @ **8.0 g/t gold**) from 66m in VRC789, **4m** @ **3.1 g/t gold** from 74m (including **grades up to 7.7 g/t**) and **6m** @ **1.8 g/t gold** (including 3m @ 3.1 g/t) from 166m in VRC790 and **6m** @ **1.9 g/t gold** from 151m in VRC791. This drilling was extensional and as a result is expected to increase the resource at Zone 102.

See table one for significant recent drill intersections, and table two for drill hole collar details.

These results are currently being incorporated into an updated resource estimate that is expected to be completed within the next three weeks.

# **Forward Program**

The 40,000 metre drill program is progressing ahead of schedule. To date around 30,000 metres have been completed, with the remaining 10,000m RAB / Aircore drill programme scheduled to commence in two weeks.

Results from the four diamond drill holes below the Apollo Deposit are currently in the laboratory in Perth, with results expected within two weeks and will be included in the updated resource estimate.

In addition to the priority targets outlined in the text above, the following activities are either planned or underway.

- Detailed infill geochemical sampling of historical soil anomalies along strike from the Zone 126 deposit that remain untested
- Exploration drilling of a number of priority geochemical anomalies
- Shallow geochemical RAB / Aircore drilling to test historical targets
- Resource modeling
- Pit optimizations and associated mine designs

Further results and updates on the Feasibility Study will be provided as they become available.

On behalf of the Board of Gascoyne Resources Ltd

Michael Dunbar Managing Director

**Table 1:** Significant New Intersections (>0.5 g/t gold) from Recent Drilling at Icon, Zone 126, Zone 102 and Tuxedo

Hole ID	From (m)	To (m)	Interval (m)	Au Grade g/t	Comment
1101012			sional Diamond		Comment
		•			Extends previous
GBD011	318.55	334	15.45	3.9	EOH intersection
inc	330	334	4	13.0	
GBD036	398	401	3	0.6	
	419	422	3	1.3	
	436	445	9	0.5	
GBD037	182	183	1	3.5	
	366	370	4	0.8	
	377	379	2	1.1	
	384	389	5	1.2	
	lcon	Deposit Extension	onal Diamond Dri	lling	_
GBD039	218	225	7	0.8	
	233	251	18	1.0	
inc	244	251	7	1.9	
	256	274	18	0.8	
inc	268	271	3	1.9	
GBD040	205	206	1	24.8	
	223	224	1	1.9	
	232	237	5	1.7	
	244	260	16	0.9	
	271	286	15	1.3	
GBD041	318.6	331	12.4	2.3	
inc	324	327	3	6.8	
	358	367	9	1.1	
			rilling Results		I
VRC786	21	27	6	0.7	
VRC787	4	5	1	0.9	
	30	36	6	0.6	
			Drilling Results		-1
VRC789	8	10	2	0.9	
	24	31	7	1.2	
	66	72	6	4.5	
inc	67	70	3	8	
	96	99	3	0.5	
	126	127	1	5.6	
VRC790	74	78	4	3.1	
inc	76	78	2	5.5	
IIIC	92	93	1	0.7	
	~ —				
	108	110	2	().9	
	108 120	110 143	2 23	0.9	
inc	120	143	23	0.7	
inc and				<b>†</b>	

Hole ID	From (m)	To (m)	Interval (m)	Au Grade g/t	Comment				
Zone 102 Deposit RC Drilling Results (cont)									
VRC790	180	181	1	1.4					
VRC791	106	107	1	2.1					
	130	131	1	1.6					
	151	157	6	1.9					
	162	168	6	0.6					

**Table 2:** Drill Hole Locations and Details

Hole Number	MGA Easting	MGA Northing	Local Easting	Local Northing	RL	Depth	Dip	MGA Azimuth	Local Azimuth	Prospect
VRC786	408969	7190807	10225	9805	293	60	-60	155	180	Tuxedo
VRC787	408964	7190756	10200	9760	290	50	-60	155	180	Tuxedo
VRC788	410290	7191522	11725	9902	296	70	-60	155	180	Apollo
VRC789	414065	7193457	15963	10080	312	130	-60	155	180	Zone 102
VRC790	413979	7193465	15888	10124	314	198	-60	155	180	Zone 102
VRC791	414121	7193557	16056	10148	312	180	-60	155	180	Zone 102
GBD011	414566	7193743	16538	10132	321	366.5	-60	155	180	Zone 126
GBD036	414506	7193812	16512	10219	321	501.5	-60	155	180	Zone 126
GBD037	414455	7193793	16457	10223	317	510.5	-60	155	180	Zone 126
GBD038	409346	7191480	10849	10258	295	351.6	-60	155	180	Icon
GBD039	409625	7191587	11148	10238	296	349.6	-60	155	180	Icon
GBD040	409527	7191561	11047	10256	295	358.05	-60	155	180	Icon
GBD041	409413	7191557	10942	10300	295	402.6	-60	155	180	Icon

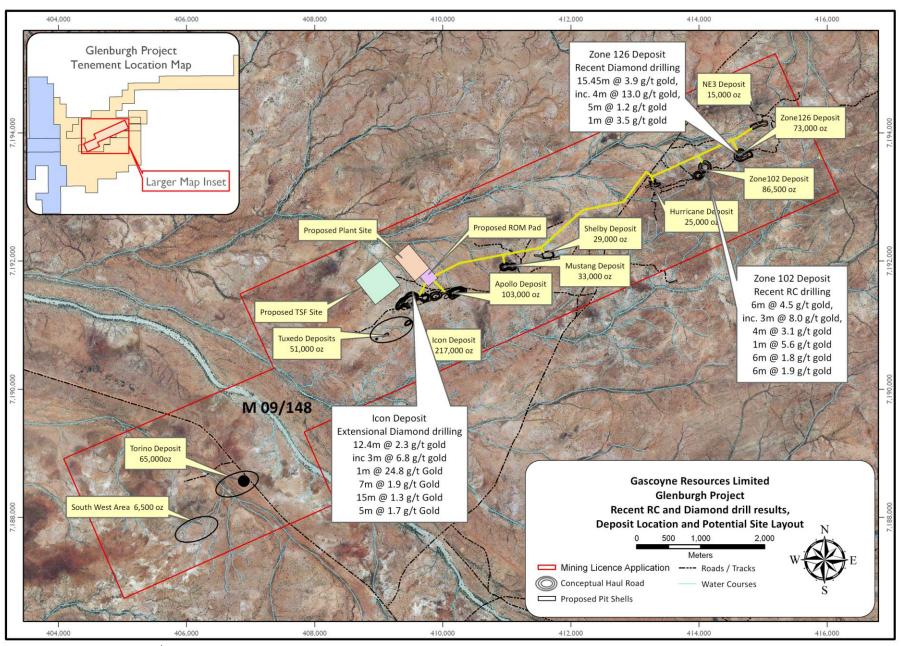


Figure One: Glenburgh Project Deposit Overview and Recent Drill Intersections.

### **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 owns two main gold projects which contain a combined +1.0 million ounces of contained gold: GLENBURGH (100% GCY):

The Glenburgh Project in the Gascoyne region of Western Australia, has an Indicated and Inferred resource of: 17.4 Mt @ 1.3g/t Au for 703,000oz gold from several prospects within a 20km long shear zone (see Table 3)

Following a positive Scoping Study completed in late 2011, the Company has commenced a Feasibility Study on the project. The study has included approximately 30,000m of resource drilling, metallurgical drilling and testwork, geotechnical, hydro geological and environmental assessments. Resource and mining studies as well as engineering studies and evaluations are underway with completion expected within the next 6 months.

#### DALGARANGA (80% GCY):

The Dalgaranga project is located approximately 70km 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 with reported cash costs of less than \$350/oz.

The project contains a depleted JORC Measured and Indicated resource of 7.5 Mt @ 1.6g/t Au for 380,000 ounces of contained gold (see table 4). Given the increase in the gold price since mining operations ceased in 2000, there is significant potential to extract significantly more of the know resource.

Significant exploration also remains outside the known resource with exploration drill results of 22m @ 6g/t gold (including 6m @ 19g/t gold) and 6m @ 10.2 g/t gold and 7m @ 10.8 g/t gold that have not been adequately followed up and are yet to be included in the resource.

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.

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

## Competent Persons Statement

Information in this announcement relating to mineral resources and exploration results is based on data compiled by Gascoyne's Managing Director Mr Michael Dunbar who is a member of The Australasian Institute of Mining and Metallurgy. Mr Dunbar has 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 consents to the inclusion of the data in the form and context in which it appears.

The resources quoted for the Dalagranga project have been sourced from Equigold NL annual reports, and other publicly available reports which have undergone a number of peer reviews by qualified consultants, that conclude that the resources comply with the JORC code and are suitable for public reporting. Resources quoted for the Glenburgh Project have been estimated for Gascoyne Resources Limited by Runge Pty Ltd, an international and independent resource consultancy.

The drilling was conducted using RC and diamond drilling with samples being collected at one metre intervals and a riffle split subsample of approximately 2-4 kg was sent to MinAnalytical Laboratory Services in Perth or the core being cut and sampled at Genalysis in Perth. The sample was fully pulverized and analysed for gold using a 50 gram lead collection fire assay digest and an atomic absorption spectrometry finish to a 0.01ppm Au detection limit. Full analytical quality assurance – quality control (QA/QC) is achieved using a suite of certified standards, laboratory standards, field duplicates, laboratory duplicate, repeats, blanks and grind size analysis.

The spatial location of the samples is derived using surveyed local grid co-ordinates, GPS collar survey pickups, and Reflex single shot downhole surveys taken every 30m down hole.

Intersections have been reported using a 0.5g/t cutoff and allowance for up to 4m of internal waste. Some +0.5g/t intersections have not been reported if they are single metre intersections or are not considered to be significant due to their isolated position compared to other intersections.

True widths have not been determined as the level of detail needed to calculate accurate true widths is not yet available, as a result down hole widths have been reported, however true widths are not expected to significantly change from the down hole widths.

	Table 3: Glenburgh Deposits Mineral Resource 2012 (0.5g/t Au Cut-off)								
	I			Inferred			Total		
Deposit	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au
	Mt	g/t	Ounces	Mt	g/t	Ounces	Mt	g/t	Ounces
Icon	0.8	1.3	33,500	5.6	1.0	183,200	6.4	1.1	216,700
Apollo	0.6	2.0	37,600	1.6	1.3	65,200	2.2	1.5	102,800
Tuxedo				1.8	0.9	50,900	1.8	0.9	50,900
Mustang				1.1	0.9	32,700	1.1	0.9	32,700
Shelby				0.9	1.0	29,300	0.9	1.0	29,300
Hurricane				0.6	1.3	24,800	0.6	1.3	24,800
Zone 102				1.5	1.8	86,500	1.5	1.8	86,500
Zone 126	0.2	4.5	32,300	0.8	1.6	40,500	1.0	2.2	72,800
NE3				0.5	0.9	15,000	0.5	0.9	15,000
Torino				1.3	1.5	65,000	1.3	1.5	65,000
SW Area				0.1	3.8	6,200	0.1	3.8	6,200
Total	1.6	2.0	103,500	15.8	1.2	600,000	17.4	1.3	703,000

Note: Discrepancies in totals are a result of rounding

	Table 4: Dalgaranga Deposits Mineral Resource (0.7g/t Au Cut-off)									
	Measured				Indicated			Total		
Deposit	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au	
	Mt	g/t	Ounces	Mt	g/t	Ounces	Mt	g/t	Ounces	
Gilbeys	0.598	1.4	26,700	6.888	1.6	354,000	7.486	1.6	380,700	
Golden Wings										
Laterite	0.039	0.8	1,000				0.039	0.8	1,000	
Vickers Laterite	0.016	1.2	600				0.016	1.2	600	
Total	0.653	1.3	28,300	6.888	1.6	354,000	7.541	1.6	382,300	

Note: Discrepancies in totals are a result of rounding