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Australian Securities Exchange Limited
Via Electronic Lodgement

# EXCELLENT METALLURGICAL TESTWORK RESULTS FROM GILBEYS SOUTH AT DALGARANGA GOLD PROJECT

- Excellent total metallurgical recovery of 93.3% confirmed by initial metallurgical testwork on the Gilbeys South prospect
- High gravity gold recovery of 36.5%
- Very low cyanide consumption of only 0.34kg/t (less than at the Gilbeys deposit) expected to result in low processing costs for Gilbeys South
- This testwork confirms that the Gilbeys South discovery can be recovered through the proposed Dalgaranga process plant

Gascoyne Resources Limited ("Gascoyne" or "Company") is pleased to advise that it has completed initial metallurgical testwork at the Gilbeys South prospect at the 100% owned Dalgaranga Gold Project. The Dalgaranga Gold Project already contains a Measured, Indicated and Inferred Resource of 25.7Mt @ 1.4 g/t gold for 1.12 million ounces of contained gold including Proved and Probable Ore Reserve of 552,000 ounces of gold (see Figures 1 & 2 & Tables 4 & 5 below). The Company expects to report an update to Resources and Reserves later this quarter once further assay results are received from recent drilling. The initial metallurgical testwork results reported herein confirms that the Gilbeys South prospect can be recovered through the proposed Dalgaranga process plant.

### **Gilbeys South Metallurgical Testwork Summary**

Four composite samples have been tested to confirm the metallurgical characteristics of the Gilbeys South prospect. Samples were collected from different geological domains (oxide, transition and fresh) as well as testing the total strike length of the prospect (see Figure 4). The samples were composited from the RC drilling that has been completed at the prospect and the results confirm excellent total recovery not only in the oxide but also from the transitional and fresh mineralisation.

The tests have demonstrated very rapid leaching kenetics for each of the samples, and overall recovery of between 90.1% and 95.1% (average of 93.3%) after 24 hours, and very high gravity gold recovery of between 24% and 45% (average of 36.5%). These recoveries and leaching kenetics are comparable to the Gilbeys Deposit (see Tables 1 - 3 and Figure 3 below).

Another favourale outcome of the testwork is confirmation of very low reagent consumption required to achive the high recoveries outlined above. The cyanide consumption from the tests ranged from 0.26kg/t to 0.39kg/t (average consumption of 0.34kg/t). This consumption rate is slightly lower than historically used in the original process plant and adopted in the recently completed Feasibility Study, which assumed 0.4kg/t would be required. Cyanide is one of the highest reagent costs in the process plant, so confirmation of low cyanide consumption from the Gilbeys South prospect is expected to have a postive impact on processing costs for the Gilbeys South prospect.

### **Significant Newsflow over the Coming Months**

As announced to the ASX on the 25<sup>th</sup> November, 2016 the Gascoyne Board has approved the Dalgaranga Feasibility Study and subject to obtaining a suitable financing arrangement, has approved the project to proceed to construction.

Whilst financing is progressed over the coming months, the Company expects to deliver significant and regular news flow as it continues to make strong progress on early development activities at Dalgaranga and continues to progress an extensive exploration programme, with key news flow to be reported including:



- Completion of project permitting and securing of long lead time items required for construction of the plant;
- Release of a large number of drill results that are pending, including:
  - o More than 40 RC holes from Gilbeys South and
  - o Approximately 300 Aircore holes from regional and sterilisation drilling
- Release of results from ongoing drilling at near-resource drill targets and regional drill targets at Dalgaranga;
- Mineral Resource update at Gilbeys, including a maiden resource in respect of Gilbeys South; and
- An update to the Ore Reserve, Open Pit Mine Designs and Mine Schedule.

All of these activities will be completed with the Company's existing funds as well as continuing to maintain an aggressive exploration programme over the coming months.

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

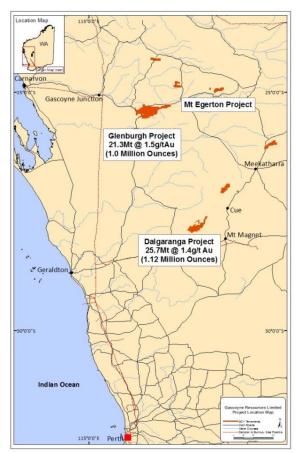


Figure One: Gascoyne Resources Project Locations in the Gascoyne and Murchison Regions

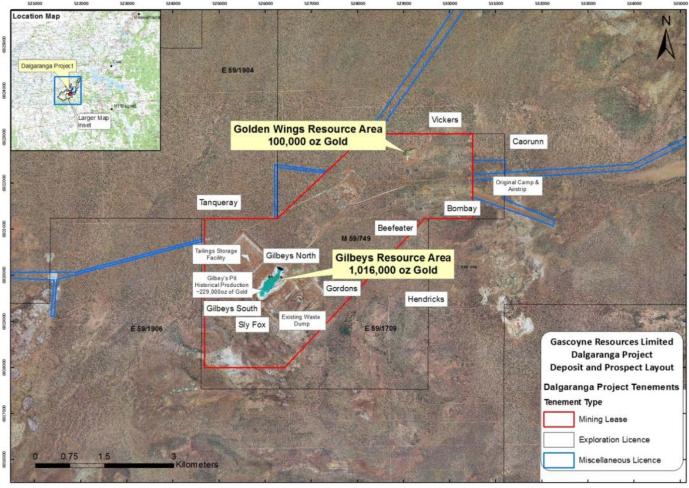
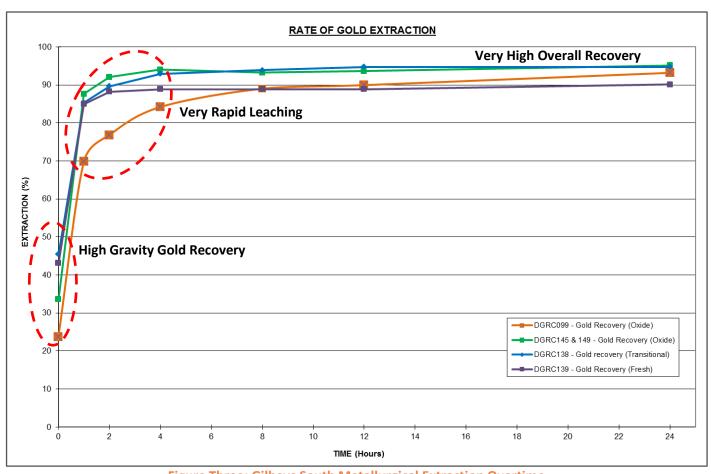
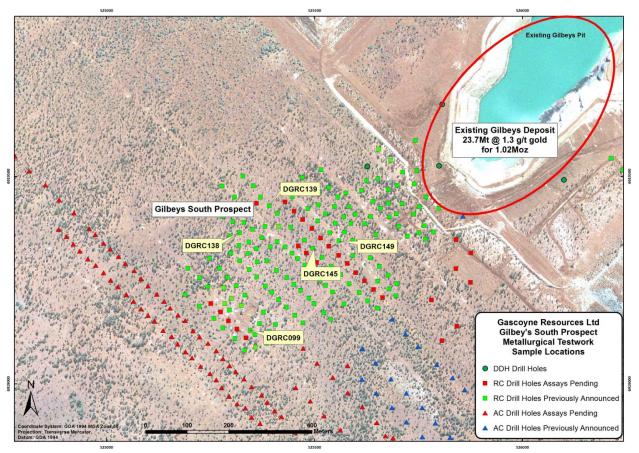


Figure Two: Dalgaranga Gold Project Deposit and Prospect Layout



**Figure Three: Gilbeys South Metallurgical Extraction Overtime** 



**Figure Four: Gilbeys South Metallurgical Testwork Sample Locations** 

Table 1: Gilbeys South Metallurgical Composite Sample Results at 90µm

Composite #	Gold Grade (g/t)	Gravity Gold Recovery	Gold Recovery after 12hrs	Gold Recovery after 24hrs	Gold Tail Grade (g/t)	Cyanide Consumption kg/t	Lime Consumption kg/t
WH7324	1.52	45.5%	94.8%	94.8%	0.08	0.37	1.97
WH7325	1.11	43.1%	88.9%	90.1%	0.11	0.39	0.52
WH7326	1.83	33.6%	93.6%	95.1%	0.09	0.26	2.48
WH7327	1.47	23.7%	90.0%	93.2%	0.10	0.33	2.82

**Table 2: Gilbeys South Metallurgical Composite Sample Details** 

Table 21 Gibeys South Metalia Blad Composite Sample Setalis								
Composite #	Hole ID	From (m)	To (m)	Total Weight (kg)	Weight Used	Sample Type		
WH7327	DGRC099	12	26	28.5	8	Oxide		
WH7326	DGRC145	13	21	29.3	8	Oxide		
WH/320	DGRC149	2	7	8.8	3	Oxide		
WH7325	DGRC139	103	122	75.6	17	Fresh		
WH7324	DGRC138	65	74	46	9	Transitional		

Prospect	Hole ID	Hole Type	Depth	Easting	Northing	RL	Dip	Azimuth
Gilbeys South	DGRC099	RC	77	525346	6919132	425	-60	135
Gilbeys South	DGRC138	RC	120	525319	6919362	425	-60	135
Gilbeys South	DGRC139	RC	160	525389	6919430	425	-60	135
Gilbeys South	DGRC145	RC	130	525495	6919327	425	-60	135
Gilbeys South	DGRC149	RC	130	525561	6919345	425	-60	135

#### **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 100% owned gold projects combined have 2.1 million ounces of contained gold on granted Mining Leases:

#### **DALGARANGA:**

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 contains a JORC Measured, Indicated and Inferred Resources of **25.7 Mt @ 1.4g/t Au for 1,116,000 ounces** of contained gold (Table 4). The Dalgaranga project has a **Proved and Probable Ore Reserve of 552,000 ounces of gold** (Table 5).

The FS study that has been completed has highlighted a robust development case for the project.

The FS investigated the development of two open pits feeding a 2.5Mtpa processing facility resulting in production of around 100,000ozpa for 6 years and concluded that the operation would be a low cost, high margin and long life operation with high operating margins.

Significant exploration potential also remains outside the known resources with numerous historical geochemical prospects only partly tested.

Table 4: Dalgaranga September 2016 Mineral Resource Estimate (0.5 g/t Cut-off Above 120 mRL, 1.0 g/t Cut-off Below 120 mRL)

	N	/leasure	ed	I	ndicate	d	ı	nferre	d		Tota	ı
Type	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
Laterite				0.5	1.11	17,000	0.1	0.8	3,000	0.6	1.1	21,000
Oxide	0.4	1.69	22,000	1.0	1.65	55,000	0.6	1.7	31,000	2.0	1.7	108,000
Transitional	0.3	1.83	17,000	0.8	1.69	42,000	0.3	1.5	14,000	1.4	1.7	74,000
Fresh	2.2	1.31	94,000	11.2	1.28	460,000	8.3	1.3	360,000	21.7	1.3	913,000
Total	2.9	1.41	133,000	13.4	1.33	574,000	9.3	1.4	408,000	25.7	1.4	1,116,000

Table 5: Ore Reserve Statement - Dalgaranga Project November 2016

Ore Reserves	Tonnes	Gold Grade	Contained ounces
	(M tonnes)	(g/t)	(oz)
Proven	3.1	1.28	129,000
Probable	10.2	1.29	423,000
Ore Reserves Total	13.3	1.29	552,000

Note: Rounding errors may occur

#### **GLENBURGH:**

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 6)

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 6: Glenburgh Deposits - Area Summary
2014 Mineral Resource Estimate (0.5g/t Au Cut-off)

	IV	leasur	ed	Ir	ndicate	ed	ı	nferre	ed .		Tota	l
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
North East	0.2	4.0	31,000	1.4	2.1	94,000	3.3	1.7	178,000	4.9	1.9	303,000
Central	2.6	1.8	150,000	3.2	1.3	137,000	8.4	1.2	329,000	14.2	1.3	616,000
South West							2.2	1.2	84,000	2.2	1.2	84,000
Total	2.9	2.0	181,000	4.6	1.6	231,000	13.9	1.3	591,000	21.3	1.5	1,003,000

Note: Discrepancies in totals are a result of rounding

#### **EGERTON:**

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 7). 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.

Table 7: Egerton Project: Hibernian Deposit Mineral Resource (2.0g/t Au Cut-off)

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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 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 2012 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 Gilbeys and Golden Wings Mineral Resources 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 7<sup>th</sup> September 2016 titled: 40% Increase in Gilbeys Measured and Indicated Mineral Resource at Dalgaranga 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 Dalgaranga Ore Reserve has been estimated by CSA Global 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 24<sup>th</sup> November 2016 titled: Feasibility confirms Dalgaranga as a low cost/high margin project). 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 Ore Reserves 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 to 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 Exterra 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.

# JORC Code, 2012 Edition – Table 1 Section 1 Sampling Techniques and Data Dalgaranga project (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The deposits and prospects has been drilled using Rotary Air Blast (RAB), Air Core (AC), Reverse Circulation (RC) and Diamond drilling over numerous campaigns by several companies and currently by Gascoyne Resources Ltd. The majority of holes are on a 25m grid either infilling or extending known prospects. The exploration areas have wider spaced drilling. The majority of drill holes have a dip of 60°but the azimuth varies.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sample procedures followed by historic operators are assumed to be in line with industry standards at the time. Current QAQC protocols include the analysis of field duplicates and the insertion of appropriate commercial standards. Based on statistical analysis of these results, there is no evidence to suggest the samples are not representative.
	Aspects of the determination of mineralisation that are Material to the Public Report.  In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	<ul> <li>RC drilling was used to obtain 1m samples which were split by either cone or riffle splitter at the rig to produce a 3 – 5 kg sample. In some cases a 4m composite sample of approximately 3 – 5 kg was also collected from the top portion of the holes considered unlikely to host significant mineralisation. The samples were shipped to the laboratory for analysis via 25g Fire Assay. Where anomalous results were detected, the single metre samples were collected for subsequent analysis, also via 25g Fire Assay. A 4m composite sample of approximately 3 – 5 kg was collected for all AC drilling. This was shipped to the laboratory for analysis via a 25g Aqua Regia digest with reading via a mass spectrometer. Where anomalous results were detected, single metre samples will be collected for subsequent analysis via a 25g Fire Assay. The diamond drilling was undertaken as diamond tails to the recently completed RC holes. One of the holes was HQ (to allow metallurgical samples to be collected) the last two are NQ. The NQ holes will be sampled by ½ core sampling while the HQ hole will be ¼ core sampled. The samples are assayed using 50g charge fire assay with an AAS finish.</li> <li>The metallurgical samples have been collected from the mineralised zones of the Gilbeys South Prospect. Samples have been taken from the oxide, transitional and fresh portions of the potential resource. The samples have also been taken from the entire strike length of the Prospect (see Figure 4 and Tables 1-3 for sample details)</li> </ul>

Criteria	JORC Code explanation	Commentary
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>RC drilling used a nominal 5 ½ inch diameter face sampling hammer.         AC drilling used a conventional 3 ½ inch face sampling blade to         refusal or a 4 ½ inch face sampling hammer to a nominal depth. The         diamond drilling was undertaken as diamond tails to the recently         completed RC holes. One of the holes was HQ (to allow metallurgical         samples to be collected) the last three are NQ.</li> </ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul> <li>RC and AC sample recovery is visually assessed and recorded where significantly reduced. Very little sample loss has been noted.</li> <li>The diamond drilling recovery has been excellent with very little no core loss identified.</li> </ul>
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>RC samples were visually checked for recovery, moisture and contamination. A cyclone and splitter were used to provide a uniform sample and these were routinely cleaned. AC samples were visually checked for recovery moisture and contamination. A cyclone was used and routinely cleaned. 4m composites were speared to obtain the most representative sample possible.</li> <li>Diamond drilling was undertaken and the core measured and orientated to determine recovery, which was generally 100%</li> </ul>
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	<ul> <li>Sample recoveries are generally high. No significant sample loss has been recorded with a corresponding increase in Au present. Field duplicates produce consistent results. No sample bias is anticipated, and no preferential loss/gain of grade material has been noted.</li> <li>The diamond core has been consistently sampled with the left hand side of the NQ hole sampled, while for the HQ, the left hand side of the left hand half was sampled.</li> </ul>
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	<ul> <li>Detailed logging exists for most historic holes in the data base.         Current RC and AC chips are geologically logged at 1 metre intervals and to geological boundaries respectively. RC chip trays and end of hole chips from AC drilling have been stored for future reference.     </li> <li>Diamond drill holes have all been geologically, structurally and geotechnically logged.</li> </ul>
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	<ul> <li>RC and AC chip logging recorded the lithology, oxidation state, colour, alteration and veining.</li> <li>The Diamond core photographed tray by tray wet and dry.</li> </ul>
	The total length and percentage of the relevant intersections logged.	All current drill holes are logged in full.
Sub- sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond drilling completed by Gascoyne Resources on the tenement has been ½ core (for NQ) or ¼ core (for HQ) sampled. Previous companies have conducted diamond drilling, it is unclear whether ½

Criteria	JORC Code explanation	Commentary
and sample		core or ¼ core was taken by previous operators.
preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	<ul> <li>RC chips were riffle or cone split at the rig. AC samples were collected as 4m composites (unless otherwise noted) using a spear of the drill spoil. Samples were generally dry. 1m AC resamples are riffle split or speared.</li> <li>The metallurgical samples have been collected from the mineralised zones from the recent RC drill samples. A 1kg split of each RC metre of the composite was used in the creation of the metallurgical composite samples. Composite samples have been taken from the oxide, transitional and fresh portions of the Gilbeys South Prospect. (see Figure 4 and Tables 1-3 for sample details)</li> </ul>
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<ul> <li>RC and AC samples are dried. If the sample weight is greater than 3kg, the sample is riffle split.</li> <li>Samples are pulverised to a grind size where 85% of the sample passes 75 micron.</li> <li>The metallurgical composite samples were mixed to ensure that the composites are representative. The composite samples have been taken from the oxide, transitional and fresh portions of the Gilbeys South Prospect.</li> <li>The metallurgical samples were milled to a nominal 80% passing 90 micron to simulate the target grind size in the proposed Dalgaranga processing plant.</li> </ul>
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	<ul> <li>Field QAQC procedures included the insertion of 4% certified reference 'standards' and 2% field duplicates for RC and AC drilling.</li> <li>Diamond drilling has 4% certified standards included.</li> </ul>
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	<ul> <li>Field duplicates were collected during RC and AC drilling. Further sampling (lab umpire assays) will be conducted if it is considered necessary.</li> <li>The diamond core has been consistently sampled with the left hand side of the NQ hole sampled, while for the HQ, the left hand side of the left hand half was sampled.</li> </ul>
	Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul> <li>A sample size of between 3 and 5 kg was collected. This size is considered appropriate and representative of the material being sampled given the width and continuity of the intersections, and the grain size of the material being collected.</li> <li>The metallurgical composite samples from the bench scale tests are considered to be representative of the oxide, transitional and fresh portions of the Gilbeys South Prospect. (see Figure 4 and Tables 1-3 for sample details)</li> </ul>

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	<ul> <li>All RC samples were analysed using a 25g charge Fire Assay with an AAS finish which is an industry sample for gold analysis. A 25g aqua regia digest with an MS finish has been used for AC samples. Aqua regia can digest many different mineral types including most oxides, sulphides and carbonates but will not totally digest refractory or silicate minerals. Historically the samples have been analysed by both aqua regia digest and a leachwell process. Significant differences were recorded between these analytical techniques.</li> <li>The diamond sampling will be assayed using fire assay with a 50g charge and an AAS finish, additional quartz washes of the grinding mills is undertaken by the lab, before and after samples which contain visible gold</li> <li>The metallurgical samples have been tested by 1kg bench scale direct cyanide extraction to simulate a carbon in leach (CIL) process. This process is industry standard.</li> <li>A gravity concentrate was extracted to determine the proportion of gravity extractable gold.</li> <li>After the gravity concentrate was removed, the extraction of gold over time is determined by assaying the solution after 1, 2, 4, 8, 12 and 24 hours (see Figure 4 and Tables 1-3 for sample details).</li> <li>The metallurgical testwork has determined the percentage of cyanide extractable gold, the amount of gravity gold and the amount of gold that remains in the tailings and is not extractable through a CIL flowsheet.</li> </ul>
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools etc. have been used at Dalgaranga.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Field QAQC procedures include the insertion of both field duplicates and certified reference 'standards'. Assay results have been satisfactory and demonstrate an acceptable level of accuracy and precision. Laboratory QAQC involves the use of internal certified reference standards, blanks, splits and replicates. Analysis of these results also demonstrates an acceptable level of precision and accuracy.
Verification of sampling	The verification of significant intersections by either independent or alternative company personnel.	At least 3 company personnel verified the metallurgical results.
and assaying	The use of twinned holes.	No twinned holes have been drilled to date by Gascoyne Resources.
	Documentation of primary data, data entry procedures, data	Field data is collected using Field Marshal software on tablet

Criteria	JORC Code explanation	Commentary
	verification, data storage (physical and electronic) protocols.	computers. The data is sent to Mitchell River Group for validation and compilation into an SQL database server
	Discuss any adjustment to assay data.	No adjustments have been made to assay data apart from values below the detection limit which are assigned a value of negative the detection limit
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	At this stage drill collars have been surveyed by hand held GPS to an accuracy of about 3m. The RC and diamond drill holes will be picked up by DGPS in the future. A down hole survey was taken at least every 30m in RC holes by electronic multishot tool by the drilling contractors. Gyro surveys have been undertaken on selected holes to validate the multi shot surveys
	Specification of the grid system used.	The grid system is MGA_GDA94 Zone 50
	Quality and adequacy of topographic control.	The topographic surface has been sourced from historic data used during the operation of the mine. It is considered to be of sufficient quality to be valid for this stage of exploration.
Data spacing and distribution	Data spacing for reporting of Exploration Results	<ul> <li>Initial exploration by Gascoyne Resources is targeting discrete areas that may host mineralisation. Consequently current drilling is not grid based, however when viewed with historic data, the drill holes generally lie on existing grid lines and within 25m – 100m of an existing hole.</li> <li>The metallurgical samples have been collected from the mineralised zones of the Gilbeys South Prospect. Samples have been taken from the oxide, transitional and fresh portions of the potential resource. The samples have also been taken from the entire strike length of the Prospect (see Figure 4 and Tables 1-3 for sample details)</li> </ul>
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The mineralised domains have sufficient continuity in both geology and grade to be considered appropriate for the Mineral Resource and Ore Reserve estimation procedures and classification applied under the 2012 JORC Code.
	Whether sample compositing has been applied.	<ul> <li>In some cases 4m composite samples were collected from the upper parts of RC drill holes where it was considered unlikely for significant gold mineralisation to occur. Where anomalous results were detected, the single metre riffle split samples were collected for subsequent analysis. 4m composite samples were collected during AC drilling and where anomalous results were detected single metre riffle split or speared samples were collected for subsequent analyses.</li> <li>Metallurgical samples have been composited from 5 separate RC drill holes, see Figure 4 and Tables 1-3 for sample details</li> </ul>

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Drilling sections are orientated perpendicular to the strike of the mineralised host rocks at Dalgaranga. This varies between prospects and consequently the azimuth of the drill holes also varies to reflect this. The drilling is angled at -60° which is close to perpendicular to the dip of the stratigraphy.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based sampling bias has been identified in the data at this point.
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by Gascoyne Resources. RC Samples are delivered daily to the Toll depot in Mt Magnet by Gascoyne Resources personnel. Toll delivers the samples directly to the assay laboratory in Perth. In some cases company personnel have deliver the samples directly to the lab. Diamond drill core is transported directly to Perth for cutting and dispatch to the assay lab for analysis.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Data is validated by Mitchell River Group whilst loading into database. Any errors within the data are returned to Gascoyne Resources for validation.

# Section 2 Reporting of Exploration Results: Dalgaranga Project (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Dalgaranga project is situated on Mining Lease M59/749. The tenement is 100% owned by Gascoyne Resources.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The tenement areas has been previously explored by numerous companies including BHP, Newcrest and Equigold. Mining was carried out by Equigold in a JV with Western Reefs NL from 1996 – 2000.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Regionally, the Dalgaranga project lies in the Archean aged Dalgaranga Greenstone Belt in the Murchison Province of Western Australia. Gold mineralisation at the Gilbeys deposit is associated with quartz-pyrite-carbonate veins within a sheared porphyry-shale package and also occurs in the overlying weathered profile. At Golden Wings gold mineralisation is associated with sericite-chlorite-quartz schist after mafic rocks or sediments and quartz-pyrite-arsenopyrite plunging lodes within biotite-sericite-carbonate-pyrite schist.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul> </li> </ul>	The recent metallurgical samples (being reported in this announcement) have been collected from recent RC drill holes from the Gilbeys South Prospect. See body of the text for sample results, collar coordinates and survey (azimuth, RL and dip) information in tables
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	The metallurgical samples have been composited from the mineralized zones of the Gilbeys South Prospect. Samples have been taken from the oxide, transitional and fresh portions of the potential resource. The grades of the individual composite samples are reported. No top cuts or lower cuts have been applied, with each of the individual metre samples used for creation of the composite

Criteria	JORC Code explanation	Commentary
		samples. See the body of the text for sample details
	<ul> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values</li> </ul>	<ul> <li>High grade Au intervals lying within broader zones of Au mineralisation are reported as included intervals. In calculating the zones of mineralisation a maximum of 4 metres of internal dilution is allowed unless otherwise noted.</li> <li>No metal equivalent values have been used.</li> </ul>
Relationship between mineralisatio n widths and intercept lengths	<ul> <li>should be clearly stated.</li> <li>These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>The mineralised zones at Dalgaranga vary in strike between prospects, but all are relatively steeply dipping. Drill hole orientation reflects the change in strike of the rocks and consequently the downhole intersections quoted are believed to approximate true width.</li> <li>The Gilbeys South Prospect strikes around 45° to the North East and dips west at approximately 45-60°</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to figures within body of text.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	Results from all of the metallurgical composite samples are included in this announcement.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	This announcement refers to the recent metallurgical testwork from the Gilbeys South Prospect. A significant amount of exploration has been completed on the Dalgaranga Project, including a Feasibility Study for the Project that concluded that an economically viable project can be developed at the Project. See Gascoyne's ASX announcement dated 24 <sup>th</sup> November 2016 for more details.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	<ul> <li>Dalgaranga will continue to be drilled to extend the current resource at Gilbeys and delineate further resources at Golden Wings and other prospects including following up the significant results from the Hendricks prospect.</li> </ul>
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Refer to figures in body of text.