# **SEPTEMBER 2016 QUARTERLY REPORT**



#### **SUMMARY OF OPERATIONS**

#### **DALGARANGA PROJECT:**

During the quarter significant progress was made on the Feasibility study, as well as an aggressive exploration and resource drilling programme on the project.

Three drill rigs were active at Dalgaranga for most of the quarter targeting resource extensions and infilling the Inferred Resources as well as regional exploration. RC and diamond resource drilling intersections include:

- 28m @ 3.5 g/t gold from 105m, including 16m @ 5.1 g/t gold
- o 17m @ 3.2 g/t gold from 73m, including 6m @ 7.0 g/t gold
- 35m @ 1.2 g/t gold from 94m
- 21m @ 1.4 g/t gold from 117m and 15m @ 1.3 g/t gold from 149m
- o 29m @ 1.0 g/t gold from 146m and 8m @ 2.0 g/t gold from 192m
- o 43m @ 1.0 g/t gold from 262m
- 22m @ 1.2 g/t gold from 182m and 14m @ 1.3 g/t gold from 215m
- o 13.54m @ 1.4 g/t gold from 256

As a result of the resource drilling, the Golden Wings and Gilbeys Resource estimates were updated during the quarter. The new resource estimate resulted in a 40% increase in the Measured and Indicated Mineral Resource at Dalgaranga. The highlights of the resource estimate include:

- The total Dalgaranga Mineral Resource has grown to 25.7Mt @ 1.4 g/t gold for 1,116,000 ounces
- Dalgaranga Measured and Indicated Mineral Resource increased to 708,000 ounces of gold (16.4Mt
   @ 1.34 g/t gold)
- Over 95% of the Resource within PFS pit designs is now classified as Measured and Indicated

Exploration drilling on the project has intersected numerous significant intersections on the project. Of particular note are the high grade intersections at Gilbeys South, where significant extensions to the main Gilbeys ore zone have been discovered. Intersections include:

- 22m @ 5.7 g/t gold, including 6m @ 18 g/t gold
- o 5m @ 10.7 g/t gold
- 12m @ 1.9 g/t gold, including 6m @ 3.1g/t gold
- 10m @ 1.5 g/t gold
- o 6m @ 2.6g/t gold
- o 12m @ 2.0 g/t gold, including 4m @ 5.5 g/t gold
- o 8m @ 4.9 g/t gold (Gilbeys North)

The Feasibility study continues to progress well, and remains on schedule for completion in mid Q4 CY2016.

#### **GLENBURGH PROJECT:**

Exploration recommenced on the project after a two year hiatus with a small drill programme completed. The drilling intersected significant mineralisation at the Apollo East prospect including 24m @ 0.8 g/t gold including 12m @ 1.0 g/t gold. Exploration is ongoing on the project with a number of regional surface sampling programmes underway.

#### **CORPORATE:**

During the guarter 700,000 unlisted employee options were exercised.

At the end of the quarter, the Company's cash reserves were \$12.0 million.

#### **CORPORATE DETAILS**

ASX Code: GCY Shares: 253M Share Price: 58.5c Market Cap: \$148 M

#### **ASSETS**

Cash: \$12.0M Glenburgh (100%) 1.0M oz Gold Dalgaranga (80%) 1.12M oz Gold Egerton (100%) 24,000oz Gold

#### **BOARD**

Non-Executive Chairman Mike Joyce

Managing Director Michael Dunbar

Non-Executive Directors
John den Dryver
Gordon Dunbar
Graham Riley
Stan Macdonald

#### CONTACT DETAILS

Telephone: +61 8 9481 3434 Facsimile: +61 8 9481 0411

Email:<u>admin@gascoyneresources.com.au</u>
Web: <u>www.gascoyneresources.com.au</u>

#### **REVIEW OF OPERATIONS**

Details of the exploration progress during the quarter include:

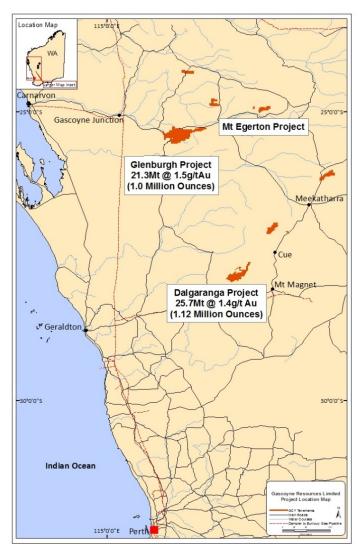


Figure 1: Gascoyne Resources Project Locations in the Gascoyne and Murchison Regions

#### **DALGARANGA PROJECT**

E59/1709, 1904, 1905, 1906, M59/749 & L 59/141, 142, 151 & 153, ELA21/195, LA59/152 - 80% Gascoyne & ELA59/2150 – 100% Gascoyne

Activities at the Dalgaranga gold project have accelerated with three drill rigs active on the project for most of the quarter. This has resulted in a substantial increase to the Mineral Resource, and most importantly a significant increase in the confidence in the resource classification. There has also been a significant exploration effort during the quarter. This has resulted in the discovery of significant widths and grades of gold mineralisation being intersected at the Gilbeys South prospect. The Feasibility study has also progressed smoothly during the quarter, with completion expected midway through the December quarter.

#### **DRILLING UPDATE**

Three drill rigs have been actively drilling at Dalgaranga for most of the quarter with the drilling designed to infill the Inferred Resources, extend the existing Resources, to test known prospects and further regional exploration. As announced on the  $7^{th}$  of July,  $1^{st}$  and  $17^{th}$  of August and the  $7^{th}$  of October, drilling has intersected significant widths and grades of gold mineralisation (see Figure 2 – 10). The drilling is summarised below:

#### **Gilbeys Drilling:**

A substantial amount of resource definition drilling has been completed during the quarter to better define the Inferred portion of the Mineral Resource (to allow conversion to Measured and Indicated). As released to the ASX on 1<sup>st</sup> and 17<sup>th</sup> of August, intersections have included:

- O DGRC089; 28m @ 3.5 g/t gold from 105m, including 16m @ 5.1 g/t gold
- DGRC093; 17m @ 3.2 g/t gold from 73m, including 6m @ 7.0 g/t gold
- O DGRC094; 35m @ 1.2 g/t gold from 94m
- O DGRC095; 21m @ 1.4 g/t gold from 117m
- O DGRC098-DT; 29m @ 1.0 g/t gold from 146m and 8m @ 2.0 g/t gold from 192m
- o DGDH004; 43m @ 1.0 g/t gold from 262m
- O DGDH006; 22m @ 1.2 g/t gold from 182m and 14m @ 1.3 g/t gold from 215m
- O DGDH009; 13.54m @ 1.4 g/t gold from 256.19

As announced to the ASX on 17<sup>th</sup> of August, exploration East of the Gilbeys Deposit also intersected significant shallow mineralisation including:

- o 6m @ 1.1 g/t gold from 8m to EOH in DGAC700
- o 25m @ 0.5 g/t gold from 8m to EOH, including 8m @ 1.0 g/t in DGAC727
- 12m @ 0.6 g/t gold from 16m in DGAC706
- o 11m @ 0.5 g/t gold from 4m to EOH in DGAC685

The exploration and resource drilling results (excluding DGRC098-DT) at the Gilbeys deposit have now been incorporated in an Updated Mineral Resource (see below for details).

In addition to the Gilbeys resource definition drilling, exploration aircore and RC drilling at Gilbeys South has been undertaken to test a 550 metre extension to the Gilbeys Deposit (see ASX announcements dated 7<sup>th</sup> of July, 17<sup>th</sup> of August and 7<sup>th</sup> of October). This drilling has intersected high grade and wide zones of mineralisation.

#### RC drill Intersections include:

- 22m @ 5.7 g/t gold from 102m including 6m @ 18.0 g/t in DGRC139;
- o 2m @ 9.0 g/t gold from 57m in DGRC133;
- 29m @ 1.0 g/t gold from 146m and 8m @ 2.0 g/t gold from 192m in DGRC098 DT;
- 10m @ 1.5 g/t gold from 65m in DGRC138;
- 9m @ 1.3 g/t gold from 21m in DGRC137
- 12m @ 1.9 g/t gold from 19m, including 6m @ 3.1g/t from 25m in DGRC116
- 10m @ 1.5 g/t gold from 58m in DGRC105
- o 16m @ 1.3 g/t gold from 11m and 5m @ 10.7 g/t gold from 33m in DGRC099
- 13m @ 1.4 g/t gold from 8m in DGRC097
- 15m @ 1.3 g/t gold from 149m in DGRC095
- 19m @ 1.1 g/t gold from 87m in DGRC109
- 24m @ 1.0 g/t gold from 26m in DGRC115
- o 6m @ 2.6g/t gold from 21m in DGRC120

The initial discovery at Gilbeys South area was made by aircore drilling. This drilling intersected significant shallow mineralisation, now followed up with RC drilling (above). Discovery aircore intersections included:

- o 12m @ 2.0 g/t gold from 16 metres (incl. 4m @ 5.5 g/t gold) in DGAC513
- 4m @ 3.4 g/t gold from 8m in DGAC520
- 8m @ 1.9 g/t gold from 28m in DGAC504
- o 16m @ 1.2 g/t gold from 4m, including 4m @ 4.2 g/t gold in DGAC547
- o 38m @ 0.9 g/t gold from 12m to EOH including 10m @ 1.5 g/t gold to EOH in DGAC548
- 16m @ 1.1 g/t gold from 32m in DGAC523

In addition to the exploration drilling, a programme of sterilisation drilling has been completed at the proposed process plant site (see Figure 4). This drilling has confirmed that there is no significant mineralisation within the area and the area is considered to be sufficiently sterilised to allow the site to be used for the processing plant.

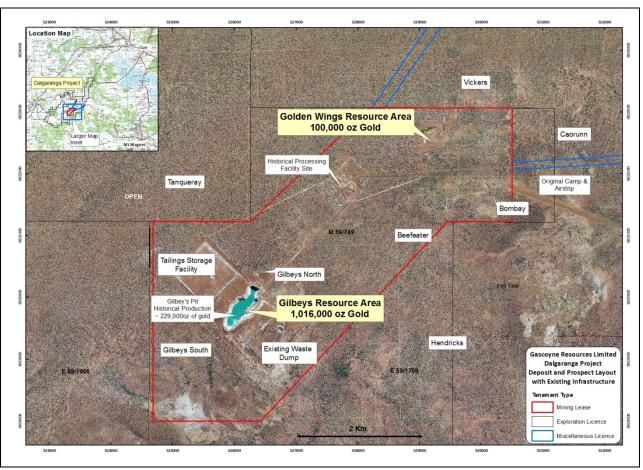


Figure 2: Dalgaranga Site Layout

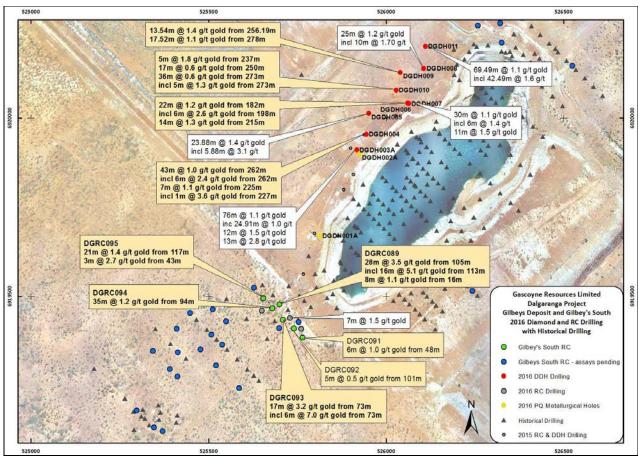


Figure 3: Gilbeys Deposit Recent Resource RC and Diamond Drill Intersections

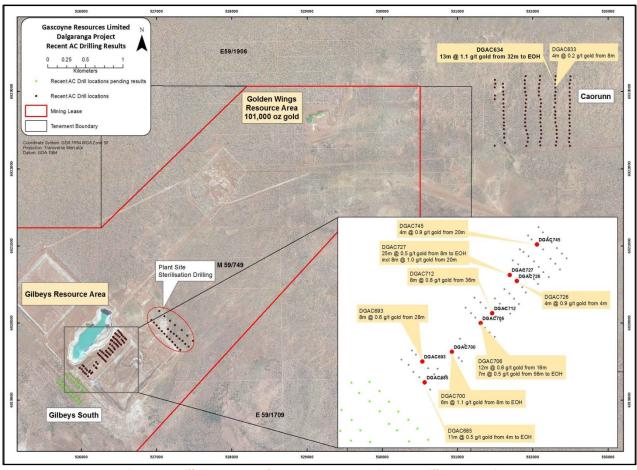


Figure 4: Gilbeys East and Caorunn Recent Aircore Drill Intersections

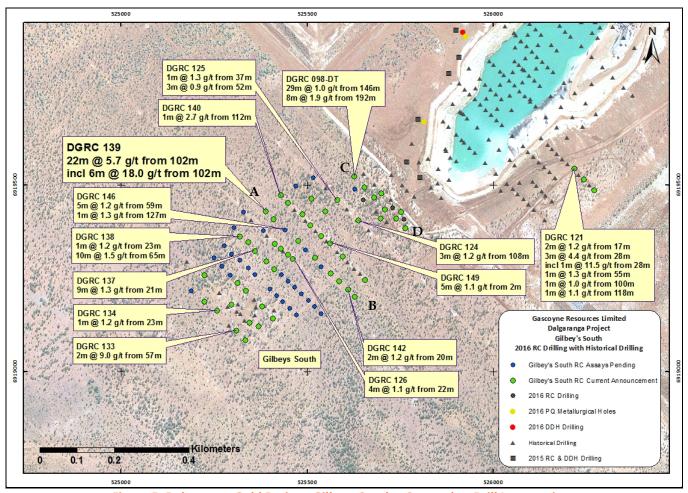


Figure 5: Dalgaranga Gold Project, Gilbeys South – September Drill Intersections

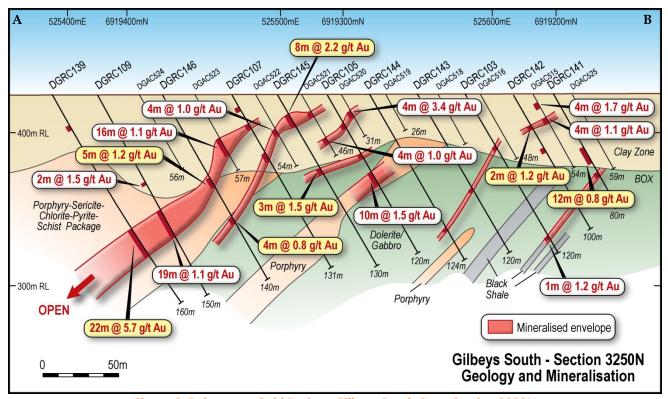


Figure 6: Dalgaranga Gold Project, Gilbeys South Cross Section 3250N

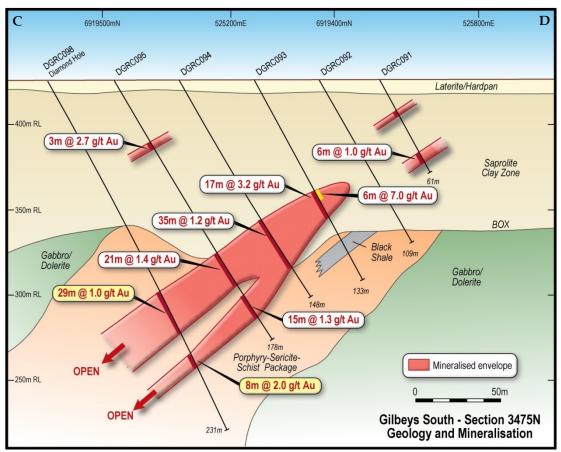


Figure 7: Dalgaranga Gold Project, Gilbeys South Cross Section 3475N

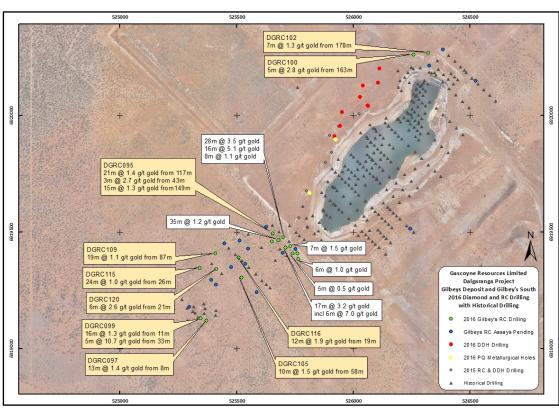


Figure 8: Dalgaranga Gold Project, Gilbeys South July and August RC Drill Intersections

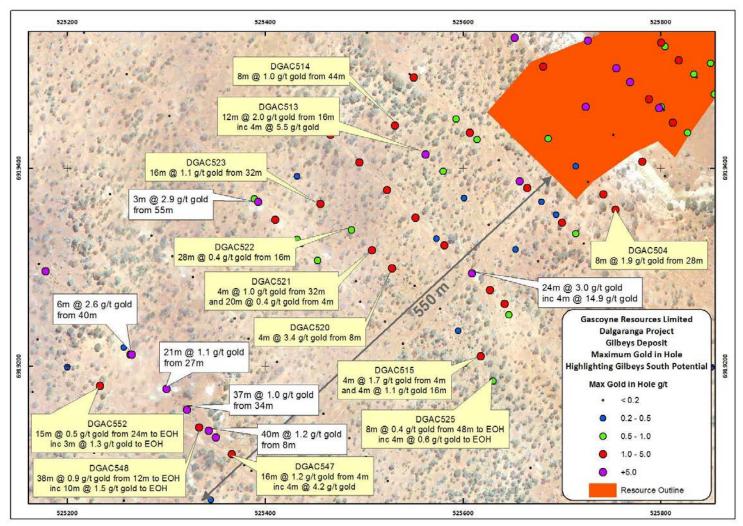


Figure 9: Gilbeys South Aircore Drilling Maximum gold in Hole and current resource outline highlighting potential for growth to the South West (new intersections in yellow, historical intersections in white)

#### **Regional Drilling:**

Following RC drilling at the Hendricks prospect in the previous quarter, follow up diamond drilling was completed during the quarter. A diamond core tail was completed at the Hendricks prospect testing for further gold mineralisation down dip from DGRC072, 15m @ 1.5g/t gold. The core tail intersected a zone grading 6.65m @ 1.8 g/t gold from 166.15m including 1.3m @ 6.5 g/t gold from 169.5m in DGRC136-DT (see Figure 10). The drilling confirmed the geological interpretation and has confirmed that the mineralisation is associated within a series of westerly dipping quartz veins in carbonate, sericite, pyrite altered schists and remains open at depth. See ASX announcement dated the 7<sup>th</sup> of October for full details of the drilling.

Futher drilling is being planned at Hendricks.

As announced to the ASX on the 17<sup>th</sup> of August, wide spaced 200 x 50m shallow aircore drilling in the Caorunn area some 3km East of the Golden Wings deposit intersected shallow significant gold mineralisation in Aircore drillhole **DGAC634**, **13m @ 1.1g/t gold from 32m to the EOH** (See Figure 4). As with Golden Wings and a number of other regional prospects, the mineralisation is associate with sheared and quartz veined mafic rocks

Given the wide spaced nature of this first pass drilling, infill drilling is underway to test the potential of the area.

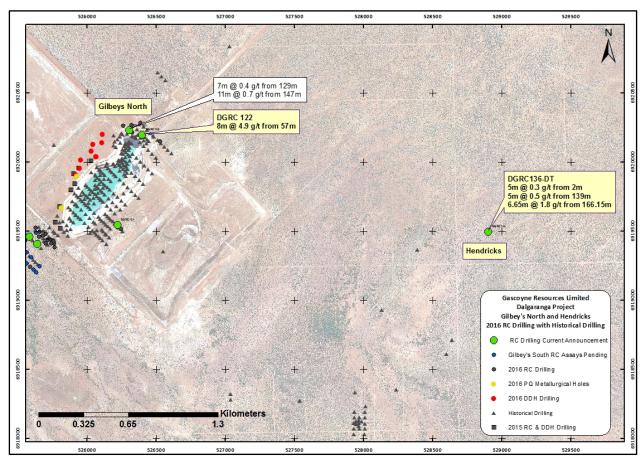


Figure 10: Dalgaranga Gold Project, Hendricks and Gilbeys North Prospect Recent Drill Intersections

#### **MINERAL RESOURCE**

As mentioned above, a substantial amount of resource extensional and infill drilling was completed during the quarter. The drilling has confirmed the geological interpretation and has allowed the Dalgaranga Mineral Resources to be reestimated (see ASX announcement dated 7<sup>th</sup> September 2016 for full details of the resource update)

Mineral Resource updates for the Gilbeys and Golden Wings deposits have been completed to include recent infill drilling as part of the ongoing Feasibility Study (FS). The drilling was a combination of diamond core and RC drilling and was aimed at increasing the confidence in the Mineral Resource to allow conversion to Ore Reserve as part of the Feasibility Study. As previously announced the drilling was successful in identifying extensions to the mineralisation and confirming the width and grade of the mineralisation at the project. The drilling confirmed the continuity and grade of the ore body, allowing a significant amount of the Gilbeys deposit to be converted to Measured and Indicated Mineral Resource status.

The Measured, Indicated and Inferred Mineral Resource now stands at **25.7Mt** @ **1.4** g/t gold for **1,116,000** ounces of gold. The Measured and Indicated portion has increased to **16.4Mt** @ **1.34** g/t gold for **708,000** ounces, comprising an increase of 40% from the previous resource estimate at the Gilbeys deposit to 638,000 ounces and 70,000 ounces at the Golden Wings deposit (unchanged from the previous resource estimate).

This increase in resource confidence is a critical step for the project and for the FS, as higher confidence Mineral Resources are required to allow estimation of an Ore Reserve. The current Ore Reserve for the project is 442,000 ounces and will be updated as part of the FS.

The new resource will form the basis for the FS which is nearing completion. As part of the FS (and from the updated resource) an update to the Ore Reserve will be completed. Importantly, 95% of the Mineral Resource inside the Gilbeys

Pre-Feasibility study ("PFS") pit design, and 91% of the Mineral Resource inside the Golden Wings PFS pit design is now classified as Measured and Indicated and could be (subject to the outcomes of the FS) converted into an Ore Reserve.

Modelling and estimation has been completed by RungePincockMinarco Limited, an external and leading independent global mining consultancy (see Table 1, 2 & 3 for Mineral Resource classification and Figures 11 to 18).

Of particular significance is the fact that the recent aircore and RC drilling results from Gilbeys South are not included in the updated resource. These new results (outlined above) will not be incorporated into the current Feasibility Study. Another resource update will be undertaken prior to the end of the year to include these new results.

Table 1- Dalgaranga September 2016 Mineral Resource Estimate (0.5 g/t Cut-off Above 120 mRL, 1.0 g/t Cut-off Below 120 mRL)

	Measur	ed	Indicate	ed	Inferre	d		Total		
Туре	Tonnes	Au	Tonnes	Au	Tonnes	Au	Tonnes	Au	Au	
	Mt	g/t	Mt	g/t	Mt	g/t	Mt	g/t	Ounces	
Laterite			0.5	1.11	0.1	0.8	0.6	1.1	21,000	
Oxide	0.4	1.69	1.0	1.65	0.6	1.7	2.0	1.7	108,000	
Transitional	0.3	1.83	8.0	1.69	0.3	1.5	1.4	1.7	74,000	
Fresh	2.2	1.31	11.2	1.28	8.3	1.3	21.7	1.3	913,000	
Total	2.9	1.41	13.4	1.33	9.3	1.4	25.7	1.4	1,116,000	

#### Note:

- 1. Totals may differ due to rounding, Mineral Resources reported on a dry in-situ basis.
- 2. The Statement of Estimates of Mineral Resources has been compiled by Mr. Shaun Searle who is a full-time employee of RPM and a Member of the AIG. Mr. Searle has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code (2012).
- 3. All Mineral Resources figures reported in the table above represent estimates at 7<sup>th</sup> September, 2016. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- 4. Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code JORC 2012 Edition).
- 5. Reporting cut-off grades selected based on an upside case Whittle shell generated during the Dalgaranga Gold Project Pre-Feasibility Study announced to the ASX on 31<sup>st</sup> March 2016. The Pre-Feasibility Study indicated that break-even cut-off grades for the combined Dalgaranga Gold Project Mineral Resource are 0.34 g/t, 0.39 g/t and 0.43 g/t Au for oxide, transitional and fresh material respectively; assuming a gold price of AUD\$1,470, a metallurgical recovery of 95 % and an open pit mining method. The cutoff of 1.0g/t for the deeper material (below 120mRL) has been estimated by GCY using an internal cutoff calculator, current spot gold price of AUD\$1,750 and recent open pit mining costs.

Table 2 - Gilbey's September 2016 Mineral Resource Estimate (0.5 g/t Cut-off Above 120 mRL, 1.0 g/t Cut-off Below 120 mRL)

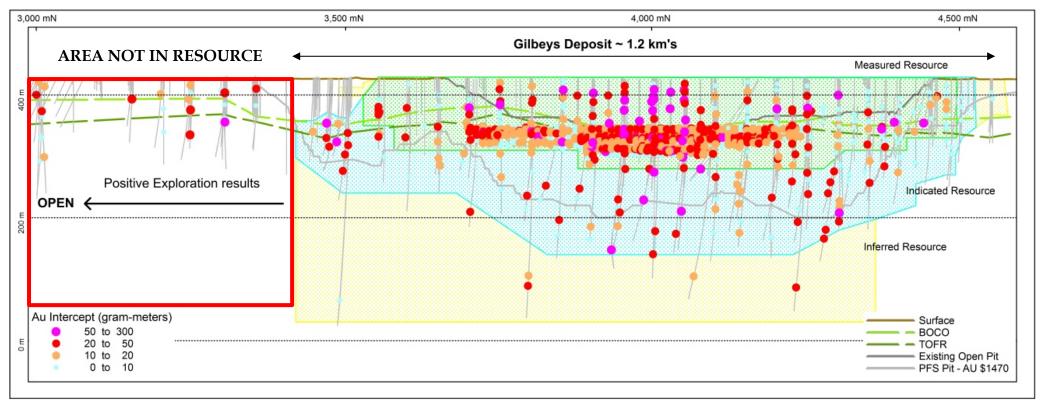
	Measured		li	Indicated			Inferred			Total		
Туре	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au
	Mt	g/t	Ounces	Mt	g/t	Ounces	Mt	g/t	Ounces	Mt	g/t	Ounces
Laterite												
Oxide	0.4	1.69	22,000	0.4	1.48	20,000	0.4	1.7	21,000	1.2	1.6	63,000
Transitional	0.3	1.83	17,000	0.6	1.58	30,000	0.2	1.3	7,000	1.1	1.6	55,000
Fresh	2.2	1.31	94,000	11.1	1.28	454,000	8.1	1.3	350,000	21.4	1.3	898,000
Total	2.9	1.41	133,000	12.1	1.30	505,000	8.6	1.4	377,000	23.7	1.3	1,016,000

Foot notes for Table 1 also apply to Table 2

Table 3 – Golden Wings September 2016 Mineral Resource Estimate (0.5 g/t Cut-off)

	Measured		l:	Indicated			Inferred			Total		
Туре	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	1.14	17,000	0.1	0.8	3,000	0.6	1.1	21,000
Oxide	-	-	-	0.6	1.77	35,000	0.2	1.7	10,000	0.8	1.8	45,000
Transitional	-	-	-	0.2	2.25	12,000	0.1	1.6	7,000	0.3	2.0	19,000
Fresh	-	-	-	0.1	2.41	6,000	0.2	1.5	10,000	0.3	1.7	15,000
Total	-	-	-	1.3	1.64	70,000	0.6	1.4	30,000	2.0	1.6	100,000

Foot notes for Table 1 also apply to Table 3



**Figure 11: Gilbeys Deposit Long Section** 

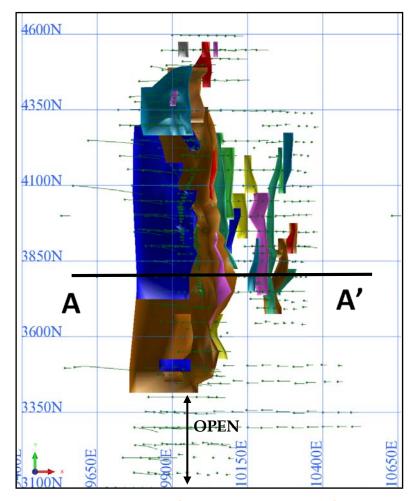
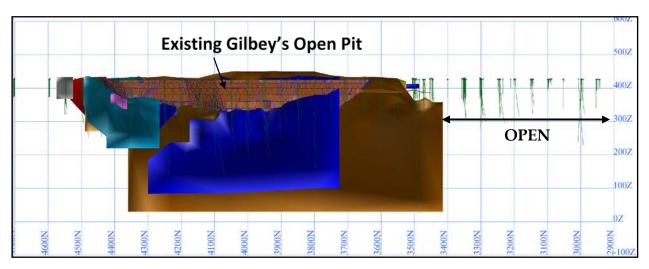


Figure 12: Plan View of Gilbeys Deposit and Wireframes



**Figure 13: Long Section of Gilbeys Deposit and Wireframes** 

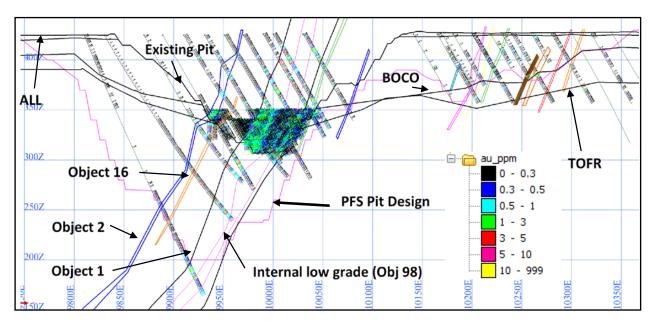


Figure 14: Cross Section through the Gilbeys Deposit (section A – A')

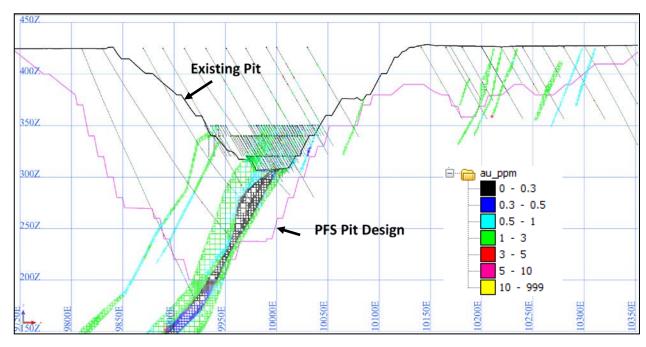


Figure 15: Cross Section through the Gilbeys Deposit Block Model (section A – A')

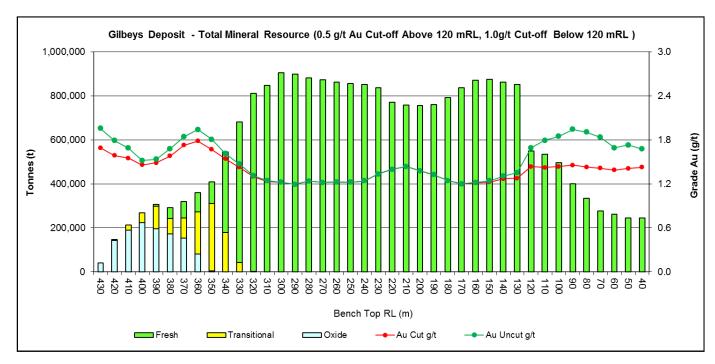


Figure 16: Gilbeys Mineral Resource per 10m bench, showing grade and Material Type

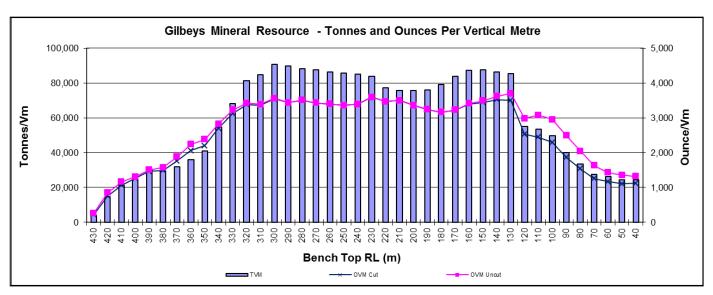


Figure 17: Gilbeys Mineral Resource Tonnes and Ounces per vertical metre

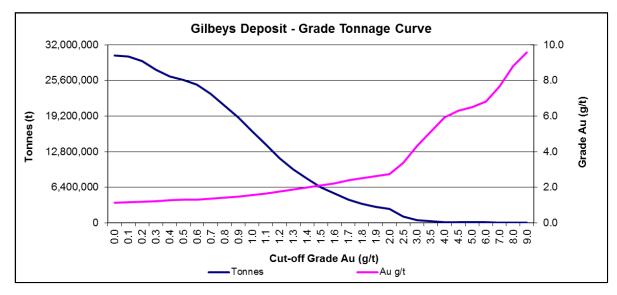


Figure 18: Tonnage Grade Curve – Gilbeys Mineral Resource

#### **FEASIBILITY STUDY**

The Dalgaranga Feasibility Study (FS) remains on schedule for completion mid Q4 2016.

Progress on key aspects of the Feasibility Study are summarised below:

- Metallurgical testwork completed
- Geotechnical assessment completed
- Hyrdogeological assessment completed
- Tailings Storage designs completed
- Environmental studies completed
- Regulatory permitting advanced
- Resource update completed
- Mining studies advanced
- Mining cost estimates received
- Operating cost model nearing completion
- Capital cost estimate nearing completion
- Study report documentation advanced

In general, to date the FS is confirming the results of the PFS. The mining costs are slightly lower than anticipated in the PFS, while the capital cost estimate is likely to increase slightly and the metallurgical recovery will fall slightly as a result of a study of trade offs between capital cost / operating cost and recovery, which concluded the additional costs associated with a finer grind were not justified by the minor increase in metallurgical recovery.

In addition to the Feasibility Study, the statutory approvals are also progressing as scheduled with the Mining Proposal, Mine Closure Plan and the Works Approvals expected to be submitted to the Department of Mines and Petroleum in the next few weeks.

#### **GLENBURGH PROJECT**

#### M 09/148, E09/1325, 1764, 1865, 1866, 2025 & 2148, L09/56 & 62 -100% Gascoyne

A short RC drill program has been completed at Glenburgh; this is the first drilling for some time at project and was focussed on first pass testing soil anomaly targets NE of the known gold deposits and targets north of the Central Resource area. Of note is the discovery of mineralisation in the Apollo East area some 300m East of the Apollo deposit (149,000 ounces of gold) with the intersection of **24m @ 0.8 g/t gold (including 12m @ 1.0 g/t)** in 4 metre composite samples from 44m in VRC902 (See Figure 6). See ASX announcement 17<sup>th</sup> of August for additional details.

This intersection has highlighted the potential for a new zone of mineralisation close to the two largest deposits at Glenburgh (the Icon and Apollo deposits) which combined, host 477,000 ounces of gold.

An initial review of previous exploration completed over the project has highlighted a number of regional +1.0 g/t gold soil anomalies which require further investgation. Ground truthing and confirmation sampling is planned over a number of these targets in the next few months with a view to undertaking a drilling programme in the current field season (See Figure 7).

In addition to the soil anomalies, a number of stream sediment gold anomalies have been identified which are yet to be followed up. Some of these anomalies are larger than the original stream sediment anomaly that resulted in the discovery of the +1.0 million ounce Glenburgh system. Follow up stream sediment sampling and soil sampling is expected to be ongoing for the next six months. It is anticipated that these exploration activities will lead to identifying drill targets for testing in the 2017 field season.

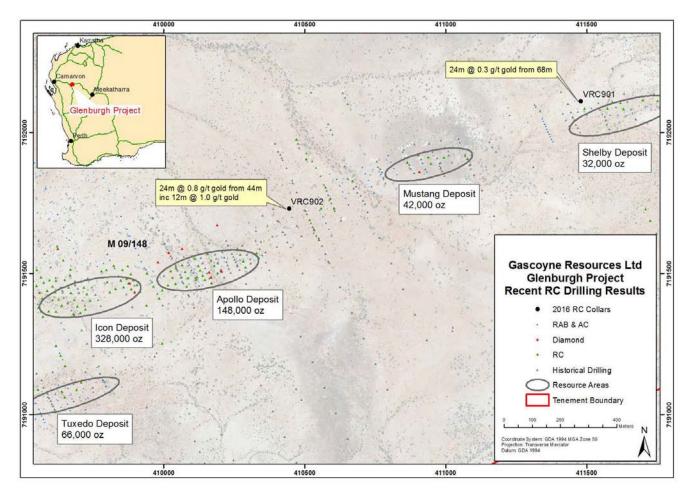


Figure 19: Glenburgh Location of Recent RC holes

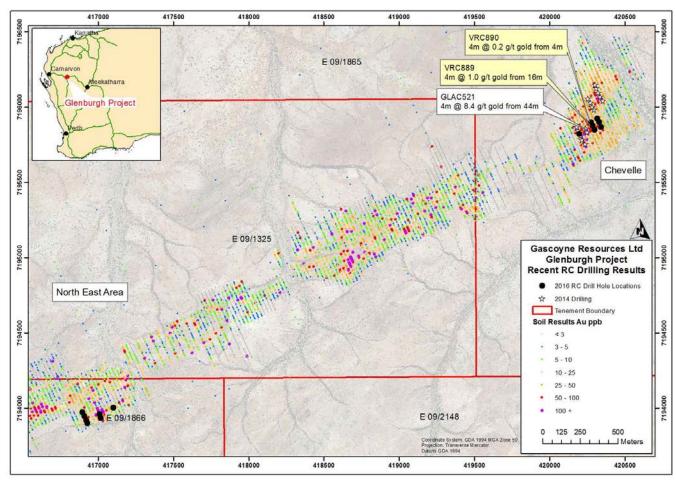


Figure 20: Glenburgh Gold Project, Location of recent RC holes NE of resource area

#### **CORPORATE**

During the quarter 700,000 unlisted employee options were excersised. As a result, the company currently has 253 million shares on issue and 3 million unlisted employee staff options outstanding.

The Company's cash reserves were \$12 million at the end of September, which fully funds the Company to complete the Dalgaranga Feasibility Study, as well as run aggressive exploration campaigns at each of the Dalgaranga and Glenburgh Projects. These funds are also sufficent to allow the Company to secure a number of the long lead time items for the development of the Dalgaranga Project.

### Mining Tenements held at 30th September 2016

All the company's tenements are within Western Australia

Tanamant	An the company s te			
Tenement	Location	Name	Mineral	Ownership
ELA09/2142	Gascoyne Region	Bassit Bore	Gold	100% Gascoyne Resources
ELA21/195	Murchison Region	Dalgaranga	Gold	80% Gascoyne Resources
EL59/1709	Murchison Region	Dalgaranga	Gold	80% Gascoyne Resources
EL59/1904	Murchison Region	Dalgaranga	Gold	80% Gascoyne Resources
EL59/1905	Murchison Region	Dalgaranga	Gold	80% Gascoyne Resources
EL59/1906	Murchison Region	Dalgaranga	Gold	80% Gascoyne Resources
L59/141	Murchison Region	Dalgaranga	N/A	80% Gascoyne Resources
L59/142	Murchison Region	Dalgaranga	N/A	80% Gascoyne Resources
L59/151	Murchison Region	Dalgaranga	N/A	80% Gascoyne Resources
LA59/152	Murchison Region	Dalgaranga	N/A	80% Gascoyne Resources
L59/153	Murchison Region	Dalgaranga	N/A	80% Gascoyne Resources
ML59/749	Murchison Region	Dalgaranga	Gold	80% Gascoyne Resources
ELA59/2150	Murchison Region	Dalgaranga	Gold	100% Gascoyne Resources
ELA52/3400	Pilbara Region	Elphin Bore	Gold	100% Gascoyne Resources
EL09/1325	Gascoyne Region	Glenburgh	Gold	100% Gascoyne Resources
EL09/1764	Gascoyne Region	Glenburgh	Gold	100% Gascoyne Resources
EL09/1865	Gascoyne Region	Glenburgh	Gold	100% Gascoyne Resources
EL09/1866	Gascoyne Region	Glenburgh	Gold	100% Gascoyne Resources
EL09/2025	Gascoyne Region	Glenburgh	Gold	100% Gascoyne Resources
EL09/2148	Gascoyne Region	Glenburgh	Gold	100% Gascoyne Resources
L09/62	Gascoyne Region	Glenburgh	N/A	100% Gascoyne Resources
L09/56	Gascoyne Region	Glenburgh	N/A	100% Gascoyne Resources
ML09/148	Gascoyne Region	Glenburgh	Gold	100% Gascoyne Resources
EL51/1648	Murchison Region	Murchison	Gold	100% Gascoyne Resources
EL52/2117	Gascoyne Region	Mt Egerton	Gold	100% Gascoyne Resources
EL52/2515	Gascoyne Region	Mt Egerton	Gold	100% Gascoyne Resources
ML52/343	Gascoyne Region	Mt Egerton	Gold	100% Gascoyne Resources
ML52/567	Gascoyne Region	Mt Egerton	Gold	100% Gascoyne Resources
ELA52/3394	Gascoyne Region	Mt James	Gold	100% Gascoyne Resources
EL20/799	Murchison Region	Murchison	Gold	100% Gascoyne Resources
EL51/1681	Murchison Region	Murchison	Gold	100% Gascoyne Resources

#### Abbreviations and Definitions used in Tenement Schedule:

EL Exploration Licence	ELA Exploration Licence
PL Prospecting Licence	PLA Prospecting Licence
LA Miscellaneous Licence	L Miscellaneous Licence
ML Mining Lease	

#### Competent Persons Statement

Information in this announcement relating to exploration results for the projects is based on data compiled by Gascoyne's Managing Director Mr Mike 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 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 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 7th September 2016 titled: 40% Increase in Gilbeys Measured and Indicated Mineral Resource at Dalgaranga and ASX announcement 24th 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 Gilbeys and Golden Wings Ore Reserves at the Dalgaranga Project have 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 31st March 2016 titled: Dalgaranga Pre-Feasibility Confirms Exceptional Project Economics). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources and 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 29th 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 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.

#### **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 2.14 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 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 3). The Dalgaranga project has an Initial Proved and Probable Ore Reserve of 442,000 ounces of gold (Table 4).

A PFS study has been completed and full FS has commenced The PFS, has highlighted a robust development case for the project. It is expected that the FS will be completed by the end of 2016, with final development decision in early 2017. The PFS investigated the development of two open pits feeding a 2.5Mtpa processing facility resulting in production of around 104,000ozpa for 6 years. Optimisation studies have suggested 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 3 - Dalgaranga September 2016 Mineral Resource Estimate (0.5 g/t Cut-off Above 120 mRL, 1.0 g/t Cut-off Below 120 mRL)

	Measured			I	Indicated			Inferred			Total		
Туре	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	8.0	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 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	1,116,00	

**Table 4: Dalgaranga Ore Reserve** 

Ore Reserve Category	Tonnes (Mt)	Gold Grade (g/t)	Contained Gold Ounces
Proved	2.27	1.34	97,000
Probable	7.81	1.4	345,000
Total Ore Reserve	10.1	1.4	442,000

#### **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 5)

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 5: Glenburgh Deposits - Area Summary** 

2014 Mineral	Pasaurca	Ectimate	(n 5a)	+ A	Cut_off)

	Measured		Indicated			Inferred			Total			
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 (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 6). 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 6: Egerton Project: Hibernian Deposit Mineral Resource (2.0g/t Au Cut-off)

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

+Rule 5.5

## **Appendix 5B**

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

# Name of entity Gascoyne Resources Limited ABN Quarter ended ("current quarter") 57 139 522 900 30 September 2016

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(162)	(162)
	(e) administration and corporate costs	(292)	(292)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	28	28
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other – Income	19	19
	Other - GST	(40)	(40)
1.9	Net cash from / (used in) operating activities	(447)	(447)

<sup>+</sup> See chapter 19 for defined terms

<sup>1</sup> September 2016

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(88)	(88)
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)		
	- Exploration and Evaluation expenditure	(2,519)	(2,519)
2.6	Net cash from / (used in) investing activities	(2,607)	(2,607)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes		
3.3	Proceeds from exercise of share options	182	182
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	(16)	(16)
3.10	Net cash from / (used in) financing activities	166	166

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	14,880	14,880
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(447)	(447)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(2,607)	(2,607)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	166	166
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	11,992	11,992

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	11,992	11,992
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	11,992	11,992

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	169
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

Paid	to	dir	ectors:	\$161k.
------	----	-----	---------	---------

Paid to associates of directors: \$8k (vehicle hire)

1 September 2016

<sup>+</sup> See chapter 19 for defined terms

7.	Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	-
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3	Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

8.	Financing facilities available  Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	-	-
8.3	Other – Credit Card facility	30	9

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

Credit card facility held with Westpac bank which is secured by a right of setoff and "blocked" term deposit account.

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	2,000
9.2	Development	-
9.3	Production	-
9.4	Staff costs	165
9.5	Administration and corporate costs	325
9.6	Other (provide details if material)	-
9.7	Total estimated cash outflows	2,490

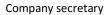
1 September 2016

<sup>+</sup> See chapter 19 for defined terms

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2	Interests in mining tenements and petroleum tenements acquired or increased	L59/151 L59/153 E51/1681 E09/2148	Tenement holder Tenement holder Tenement holder Tenement holder	0% 0% 0% 0%	80% 80% 100% 100%

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.



Date: 24 October 2016

Print name: David Lim

#### Notes

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

1 September 2016

<sup>+</sup> See chapter 19 for defined terms