

# Quarterly Report for the Period Ending 31 December 2014

30 January 2015

### **Emmerson Resources Limited**

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ASX Code: ERM

377.6 million ordinary shares

### Market Cap

~A\$12.5 million (@ \$0.033)

### Available Cash

A\$2.7 million (31-12-14)

### Shares in Evolution Mining Ltd

A\$2.5 million (29-01-15)

### Reserves & Resource\*

900,000 ounces AuEq based on 122,100 t of Cu and 246,000 oz Au \*see page 11 for more details

### **Board of Directors**

Andrew McIlwain Non-executive Chairman

Rob Bills

Managing Director & CEO

Simon Andrew
Non-executive Director

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## Highlights

- 2015 exploration program fully funded through Evolution earn-in agreement.
- Exciting new gold-copper-bismuth anomalies identified from a regional RAB program over the Eastern Project Area – where local prospectors have found gold nuggets.
- High resolution magnetic, radiometric and digital terrain survey completed over the Eastern Project Area – this will be integrated with the RAB geochemistry to identify new undercover mineralisation and fertile structural sites for later drilling.
- The first seismic reflection survey in the Tennant Creek Mineral Field (TCMF) completed with processing now underway this is aimed at delineating a new generation of mineral deposits both at depth and within the extensive ERM tenement package.
- Magnetite-hematite-chlorite ironstones intersected in the majority of drill holes at Eldorado and Chariot, some with highly anomalous gold and copper, highlighting the potential for extending the existing mineralisation – results include:

Chariot – 2m at 1.67% copper, 1m at 3.32% copper (CHRC 293);

0.7m at 11.5g/t gold (CHDD284); 1m at 1.41g/t gold & 1m at 1.72g/t gold (CHDD285) Eldorado – 4m at 1.24% copper (ELDD046)

- New target selection methodology pinpoints a number of very high ranking areas that have similar geological characteristics to some of the major TCMF deposits.
- An aggressive 2015 exploration program now being planned based on a mix of new innovative search technologies and geological concepts plus the application of conventional techniques such as the utilisation of RAB geochemistry and high resolution geophysical surveys.
- These programs are fully funded via the agreement with Evolution Mining where Evolution has a sole fund obligation of A\$15 million over three years to earn 65% interest in Emmerson's Tennant Creek project.
- Evolution has a further option to take its interest to 75% by sole funding an additional A\$10m in exploration over 2 years.

### Overview

A very busy December quarter has provided new data and insights into the formation of high grade gold deposits within the TCMF. These results will feed into the 2015 exploration program which is aimed at:

- 1) rapidly building on the current JORC resources via further brownfields exploration; and
- 2) discovering a new generation of gold-copper deposits that remain undetected by previous explorers. The recent copper-gold discoveries at both Goanna and Monitor by ERM demonstrate the potential of this latter strategy despite being close (100-400m) to

the Gecko mine, Goanna and Monitor went undetected by previous explorers until the application of a new generation of electrical airborne geophysics(HeliTEM) was completed in 2011.

The total drill metres for the quarter were 13,566m, consisting of 10,590m of RAB (Rotary Air Blast), 1,466m of RC (including pre collars) and 1,510m of diamond drilling (Table 6).

Brownfields exploration conducted within the quarter consisted of testing for extensions around the high grade mines at Chariot and Eldorado (Figure 1). The Chariot resource was last updated in 2013 and stands at 170,000t at 17.4g/t gold (as per Table 5, and ASX Announcement, 28 November 2013). Eldorado was one of the more significant historical producers (producing some 122,000 ounces at 17.9g/t gold), closing before the deeper, fault offset mineralisation (Eldorado Deeps) was fully explored.

The intersection of favourable ironstone with chlorite alteration (the host to the majority of the TCMF mineralisation) in most drill holes provides encouragement for undertaking further work, particularly given many of the holes are significant "step outs" from the previously defined JORC resource.

Drilling at Chariot East intersected shallow high grade copper in drill hole CHRC293, and deeper gold in CHDD283 (figure 2 and tables 1 and 2). At Eldorado, drill hole ELDD046 intersected a new shallow zone of copper mineralisation which assayed 4m at 1.24% copper including 1m at 2.99% copper (from 160m down the hole) (figure 3, table 3).

A large regional geochemical RAB survey (269 holes for 10,590m of drilling) over the Billy Boy area in the Eastern Project Area comprised of 7 lines spaced some 1.7km apart and drilled on 80m centres (figure 4) – whilst the results and trends are still being analysed, it is apparent that many of the assays indicate leakage of anomalous gold, copper and bismuth (table 4) – most outside of known prospects and when integrated with the aeromagnetics, will provide some high priority areas for the 2015 exploration program.

A total of 4,091 line km of magnetics, radiometrics and digital terrain was flown over the Eastern Project Area. This will be instrumental in constructing a new structural interpretation of the entire area – in particular, looking for favourable dilational zones that correspond with the above anomalous geochemistry.

Four lines of seismic reflection were collected over Gecko (AN1, K44), Goanna and the Chariot mineralisation. These locations were selected as "orientation" sites where there is good control on the geology, ironstones, and mineralisation. Interpretation of this survey is underway and if successful, may provide a new and innovative tool to map the major faults that control the mineralisation at these prospects and in the best case, directly map the ironstones (which typically host the gold and copper).

Collaboration with Kenex Ltd and based on findings from an ERM supported, PhD on the Tennant Creek Mineralisation has led to a very comprehensive understanding of the key controls and fingerprints of some of the high grade deposits that the TCMF is renown. In addition, this work has identified a number of new target areas that contain all the attributes of the known TCMF deposits, yet appear to have been overlooked by previous explorers. Whilst further work is required, it is anticipated that these targets will form part of the brownfields and greenfields pipeline of drill targets for 2015.

Emmerson's Managing Director, Rob Bills, said, "The Emmerson - Evolution joint venture continues to provide exceptional value to Emmerson shareholders as all of our exploration is fully funded. Our cash balance, puts us in an enviable position relative to most junior explorers and we will be opportunistic in adding value to our portfolio. We are lining up some very high quality targets and anticipate a very active drill season that will likely kick off immediately on cessation of the NT wet season. The continued application of new ideas and "cutting edge" technology such as the seismic geophysics balanced with some more conventional exploration techniques such as that applied to the Billy Boy area will ensure a good balance of targets in 2015 – this combined with the expertise of the joint Evolution/Emmerson team will provide the best chance of discovery in one of Australia's highest grade goldfields".

### **About Tennant Creek and Emmerson Resources**

The Tennant Creek Mineral Field (TCMF) is one of Australia's highest grade gold and copper fields producing over 5.5 Mozs of gold and 470,000 tonnes of copper from a variety of deposits including Gecko, Orlando, Warrego, White Devil, Chariot and Golden Forty, all of which are within Emmerson Resources (ASX: ERM) exploration and joint venture portfolio.

These deposits are considered to be highly valuable exploration targets and, utilising modern exploration techniques, Emmerson has been successful in discovering copper and gold mineralisation at Goanna and Monitor in late 2011, the first discoveries in the TCMF for over a decade. To date, Emmerson has only covered 5.5% of the total tenement package (in area) with these innovative exploration techniques and is confident that, with further exploration, more such discoveries will be made.

Emmerson holds 2,500km<sup>2</sup> of ground in the TCMF, owns the only gold mill in the region and holds a substantial geological database plus extensive infrastructure and equipment. Emmerson has consolidated 95% of the highly prospective TCMF where only 8% of the historical drilling has penetrated below 150m.

Emmerson is led by a board and management group of experienced Australian mining executives including former MIM and WMC mining executive Andrew McIlwain as non-executive chairman, and former senior BHP Billiton and WMC executive Rob Bills as Managing Director and CEO.

### **About Evolution**

Evolution Mining (ASX: EVN www.evolutionmining.com.au) is a leading, growth focused Australian gold company. It owns and operates five gold and silver mines in Queensland and Western Australia. The company holds 100% interest in all of its operations. Group production for the year ended 30 June 2014 totalled 427,703 ounces gold equivalent at an average cash cost of A\$781/oz. Evolution Mining was created in late 2011 to form a mid-tier Australian gold producer through a merger of Catalpa Resources Ltd and Conquest Mining Ltd and the concurrent acquisition of Newcrest Mining's interests in the Cracow and Mt Rawdon mines. Evolution has developed a track record of consistently delivering to production and cash cost guidance. The company has a strong balance sheet which provides the flexibility to fully fund current exploration, development and production activities and also assess value-accretive growth opportunities.

### Announcements since 30 September 2014

17/10/2014: Notice of Annual General Meeting/Proxy Form 30/10/2014: Quarterly Activities and Cashflow Report

18/11/2014: Presentation to Melbourne Mining Club 21/11/2014: Results of Annual General Meeting

05/12/2014: Appendix 3B

05/12/2014: Change of Director's Interest Notice x 3

**Emmerson Resources Limited** 

Mr. Rob Bills

Managing Director and Chief Executive Officer

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### Regulatory Information

The Company does not suggest that economic mineralisation is contained in the untested areas, the information contained relating to historical drilling records have been compiled, reviewed and verified as best as the Company was able. As outlined in this announcement the Company is planning further drilling programs to understand the geology, structure and potential of the Eldorado and Chariot systems. The Company cautions investors against using this announcement solely as a basis for investment decisions without regard for this disclaimer.

### Competency Statement

The information in this report which relates to Exploration Results is based on information compiled by Mr Steve Russell BSc, Applied Geology (Hons), MAIG, MSEG. Mr Russell is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 edition and the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Russell is a full time employee of the Company and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears (attachments: Figures 1, 2, 3 & 4 and Tables 1, 2, 3, 4, 5 & 6). Mr Russell holds an interest in the following securities in the Company: 500,000 Shares and 112,500 Performance Rights.

The information in this report which relates to Mineral Resources is based upon information compiled by Mr Ian Glacken, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Ian Glacken is an employee of Optiro Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 edition and the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ian Glacken consents to the inclusion in this report of a summary based upon his information in the form and context in which it appears (Table 2).

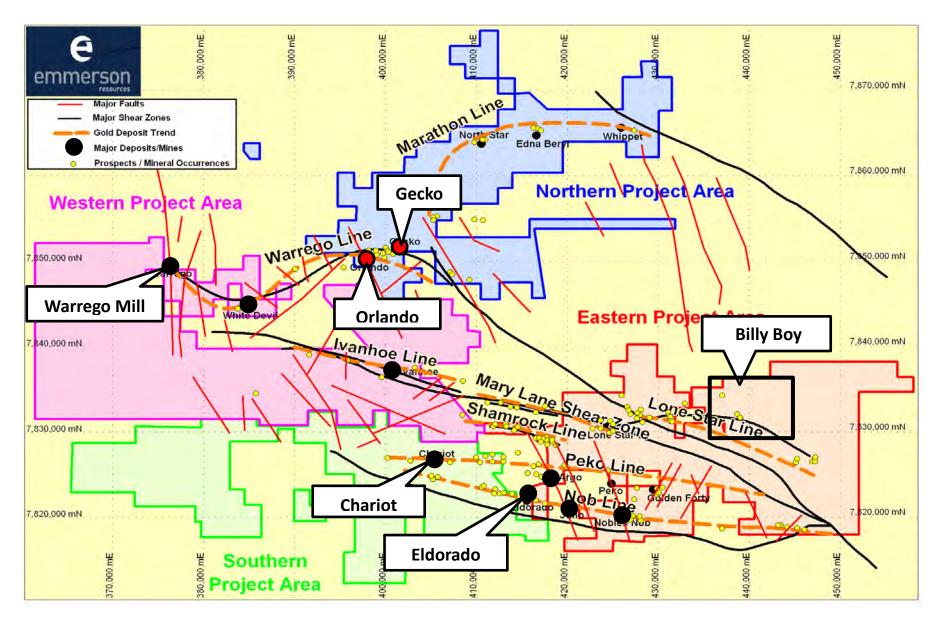


Figure 1: Emmerson's Tennant Creek Project showing the major structures, location of Eldorado, Chariot, Eastern Project and the Warrego Mill

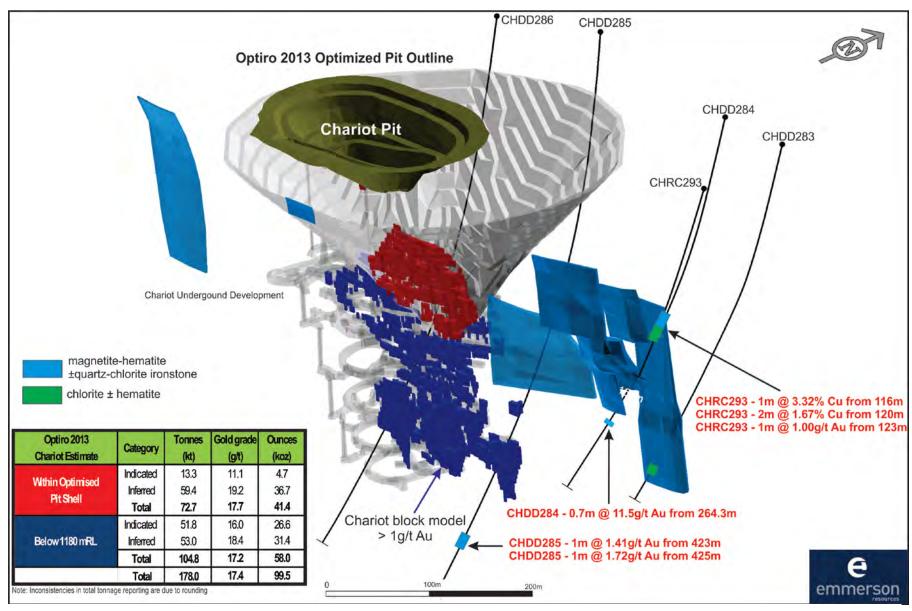


Figure 2: Chariot 3D view showing 2013 Optimised pit outline, open pit resource (red), underground (dark blue) and additional Chariot targets (East, Deeps & Gap) with recent drill intercepts (red text)

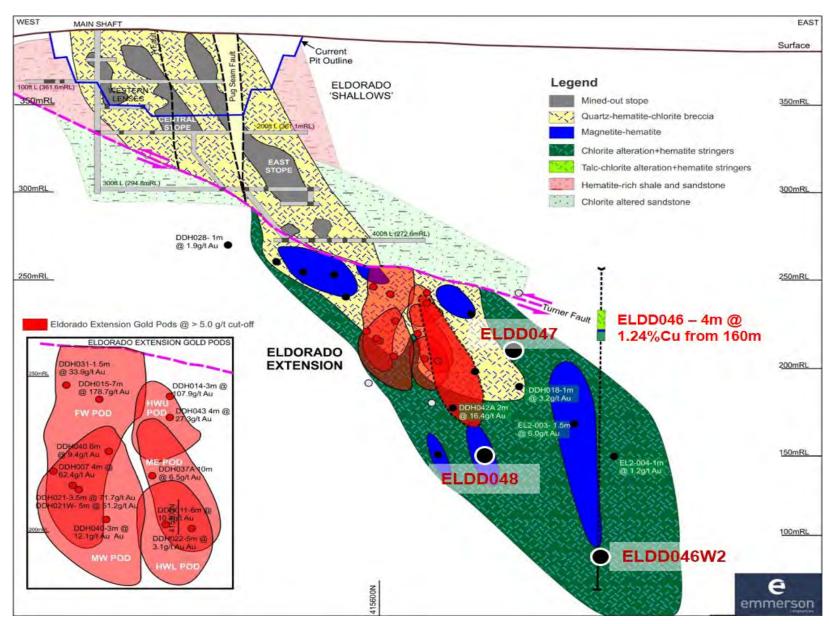


Figure 3: Eldorado Long section showing the "Eldorado Deeps" with recent drill pierce points (ELDD series)

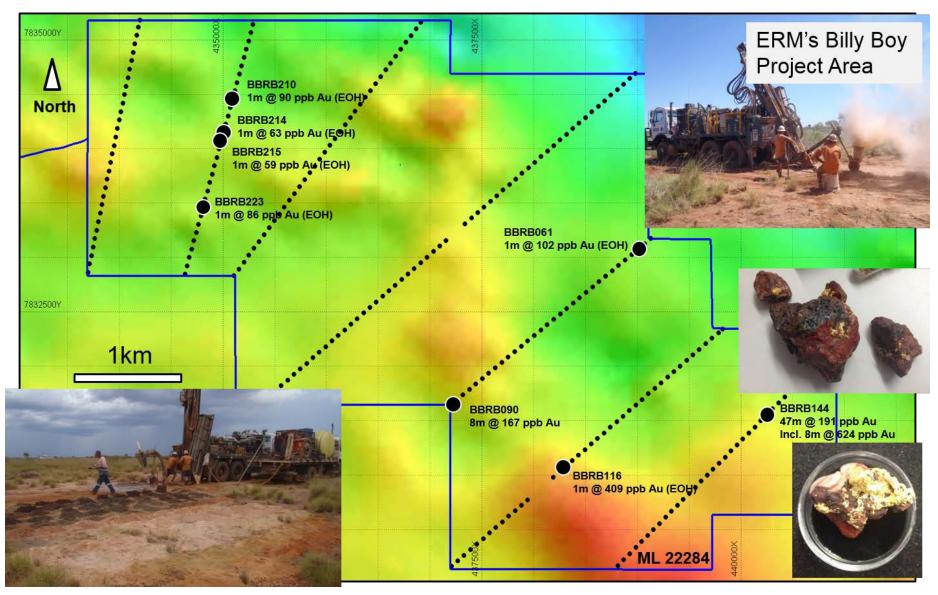


Figure 4: Plan of recently completed regional Billy Boy RAB program with significant gold intersections on a gravity image background

Table 1: Chariot significant RC drill hole intersections

Hole ID	East (MGA94_53)	North (MGA94_53)	RL AHD	Dip (deg)	AZI mag (deg)	From (m)	To (m)	Width (m)	Au (g/t)	Ag (ppm)	Bi (ppm)	Cu (%)	Fe (%)	Pb (ppm)	Zn (ppm)	Sample Type
						116	118	2	0.20	7.32	641	2.00	47	12	91	
					Incl.	116	117	1	0.25	5.76	536	3.32	42	20	106	1m re-
CHRC293	405540.92	7826645.67	337.08	-61	171.5	120	122	2	0.09	1.55	206	1.67	35	9	136	splits
					Incl.	120	121	1	0.10	1.38	152	2.49	48	9	141	
						123	124	1	1.00	3.93	360	0.03	22	20	122	

Note:

- (1) All samples are 1m individual riffle split RC samples.
- (2) Gold and multi element analysis method by 25g Fire Assay & 4 acid digest and ICP-OES, ICP-MS or AAS finish
- (3) Intersections are reported as downhole lengths and not true width.

- (4) Minimum cut-off of 1 g/t Au. No maximum cut-off.
- (5) Minimum cut-off of 0.5% Cu. No maximum cut-off.
- (6) Maximum internal dilution for RC drilling is 2 metres.

Table 2: Chariot significant diamond drill hole intersections

Hole ID	East (MGA94_53)	North (MGA94_53)	RL AHD	Dip (deg)	AZI mag (deg)	From (m)	To (m)	Width (m)	Au (g/t)	Ag (ppm)	Bi (ppm)	Cu (%)	Fe (%)	Pb (ppm)	Zn (ppm)	Sample Type
CHDD283	405529.86	7826739.81	337.12	-64	170.1	174.8	175.1	0.3	0.38	1.57	61.6	0.76	16.2	0.00	13.0	
OHDD203	403327.00	7020737.01	337.12	04	170.1	283.5	283.6	0.1	0.39	3.38	200	0.02	8.44	0.00	423	
						264.3	265.0	0.7	11.5	1.36	125	0.03	16.4	53	14	Half
CHDD284	405459.85	7826744.75	337.09	-65	170.5	275.8	276.4	0.6	0.09	0.35	84.1	0.82	15.2	86	9	NQ2
						280.0	280.7	0.7	0.22	0.21	4.89	0.98	13.5	106	2	core
CHDD285	405272.69	7826787.64	336.71	-75	162.5	423.0	424.0	1.0	1.41	0.14	6.21	0.01	21.4	66	0.00	
CHDD200	403272.09	7020707.04	330.71	-73	102.5	425.0	426.0	1.0	1.72	0.17	23.8	0.02	25.5	45	5	

Note:

- (1) All samples are half NQ<sup>2</sup> diamond core samples.
- (2) Gold and multi element analysis method by 25g Aqua Regia & ICP-OES, ICP-MS or AAS finish.
- (3) Intersections are reported as downhole lengths and not true width.

- (4) Minimum cut-off of 1 g/t Au. No maximum cut-off.
- (5) Minimum cut-off of 0.5% Cu. No maximum cut-off.
- (6) No internal dilution.

Table 3: Eldorado significant diamond drill hole intersections

Hole ID	East (MGA94_53)	North (MGA94_53)	RL AHD	Dip (deg)	AZI mag (deg)	From (m)	To (m)	Width (m)	Au (g/t)	Ag (ppm)	Bi (ppm)	Cu (%)	Fe (%)	Pb (ppm)	Zn (ppm)	Sample Type
EL DD044	415400.00	7022125 (1	274 55	-70	148.5	160.0	164.0	4.0	0.07	6.85	112	1.24	4.76	75.8	82.3	Half NQ2
ELDD046	415699.99	7822125.61	374.55	-70	including	162.0	163.0	1.0	0.14	16.7	180	2.99	4.00	190	63.0	core

Note:

- (1) All samples are half NQ<sup>2</sup> diamond core samples.
- (2) Gold and multi element analysis method by 25g Aqua Regia & ICP-OES, ICP-MS or AAS. finish.
- (3) Intersections are reported as downhole lengths and not true width.

- (4) Minimum cut-off of 1 g/t Au. No maximum cut-off.
- (5) Minimum cut-off of 0.5% Cu. No maximum cut-off.
- (6) No internal dilution.

Table 4: Billy Boy significant regional RAB drill hole intersections (Gold)

Hole ID	East (MGA94_53)	North (MGA94_53)	RL AHD	Dip (deg)	AZI mag (deg)	From (m)	To (m)	Width (m)	Au (ppb)	Ag (ppm)	Bi (ppm)	Cu (ppm)	Fe (%)	Pb (ppm)	Zn (ppm)	Sample Type
BBRB061	439007	7833075	310	-60	45.66	39	40	1.00	102	0.05	0.55	2	3.84	7	55	End of Hole
BBRB090	437191	7831636	310	-60	45.66	20	28	8.00	167	0.06	3.92	63	5.80	30	309	4M comp
BBRB116	438310	7831081	310	-60	45.66	35	36	1.00	409	0.05	3.19	1	5.04	13	125	End of Hole
DDDD144	440240	7021552	310	-60	41.55	0	47	47.00	191	0.10	41.41	94	7.28	7	332	4/3M comp
BBRB144	440249	7831553	310	-00	41.33	8	16	8.00	624	0.06	55.32	141	3.67	7	401	4M comp
BBRB210	435094	7834454	310	-60	11.49	53	54	1.00	90	0.05	0.57	1	3.74	12	45	End of Hole
BBRB214	435006	7834148	310	-60	11.49	38	39	1.00	63	0.05	0.51	7	4.05	9	52	End of Hole
BBRB215	434984	7834071	310	-60	11.49	32	33	1.00	59	0.05	0.99	5	4.50	18	109	End of Hole
BBRB223	434809	7833459	310	-60	11.49	44	45	1.00	86	0.05	0.69	24	3.82	25	94	End of Hole

Note:

- (1) All samples are 4m composite rotary air blast samples, composited using spear method during drilling
- (2) Composite samples Gold and multi element analysis method by 25g Aqua Regia & ICP-MS or ICP-OES finish.
- (3) End of hole samples 1m sample gold & multi element analysis method by 25g Fire Assay & 4 acid digest & ICP-OES, ICP-MS or AAS finish
- (4) Minimum cut-off of 50 ppb Au. No maximum cut-off.
- (5) Intersections are reported as downhole lengths and not true width
- (6) No internal dilution.

Table 5: Global Mineral Resource Inventory

Classification	Tonnes	Gold grade (g/t)	Copper grade (%)	Gold equivalent grade (g/t)	Gold ounces	Copper metal (t)	Gold equivalent ounces
	Gecko - And	maly 3, L25 an	d K44 Lower (ı	reported above a	a 1% copper c	ut-off)	
Indicated	1,400,000	-	2.5	4.2		35,600	190,000
Inferred	80,000	-	1.6	2.7	-	1,300	10,000
Sub-total Gecko	1,480,000	-	2.5	4.1	-	36,900	200,000
Orlando -	- (Lenses 2 & 7	, below open pi	it & 'the gap' -	reported above	a 1.0 g/t gold	equivalent cut-	off)
Indicated	1,710,000	1.9	1.5	4.4	100,000	25,700	240,000
Inferred	510,000	1.7	1.1	3.6	30,000	5,800	60,000
Sub-total Orlando	2,220,000	1.8	1.4	4.2	130,000	31,500	300,000
		Goanna (re	eported above	a 1.0 % Cu cut-	off)		
Indicated		•	•		•		
Inferred	2,918,000	0.16	1.84	3.2	15,000	53,700	300,000
Sub-total Goanna	2,918,000	0.16	1.84	3.2	15,000	53,700	300,000
Chariot	t – Open Pittabl	e& Remnant Ur	nderground (re	eported above a	1.0 g/t gold ed	quivalent cut-of	ff)
Indicated	60,000	15.9	-	15.9	32,000	· -	32,000
Inferred	110,000	18.8	-	18.8	67,000	-	67,000
Sub-total Chariot	170,000	17.4	-	17.4	99,000	-	99,000
TOTAL	6,790,000	1.1	1.8	3.6	246,000	122,100	900,000

### Gold Equivalent Calculation

Gold equivalent results are calculated using a gold price of US\$1,363/oz and a copper price of US\$7,297/t. Copper-rich ore would be processed using a conventional crush, grind and flotation route to a copper concentrate which would then be sold. Benchmarking of this processing route suggests that a copper recovery of 90-92% would be appropriate. Gold would be recovered by an industry standard carbon-in-pulp process leading to the generation of gold bars. No unconventional processing such as roasting or biological leaching is contemplated, therefore typical recoveries for such gold processing plants is in the range of 90-94%. Given the relative recoveries of both gold and copper are essentially identical, the equivalence formula has not been adjusted for recovery. The gold equivalent calculation used is AuEq (g/t) = Au (g/t) + ((Cu(%)\*7297)/43.82), i.e. 1.0%Cu = 1.67g/t Au.

Table 6: Quarterly drill holes and collar co-ordinates

Prospect	Hole Number	GDA Easting	GDA Northing	GDA RL	Dip (Deg)	Magnetic Azimuth (Deg)	RAB Depth (m)	RC Depth (m)	Rock Roller (m)	Pre Collar Depth (m)	Diamond HQ (m)	Diamond NQ (m)	Final Hole Depth (m)	Tenement Number	Number of Samples	Drill Type
01 115 1	OLID ORGO	1055 10 00	700//45/7	007.00		474.5		455.0					455.0	MI 0 47/	5.7	D.O.
Chariot East	CHRC293	405540.92	7826645.67	337.08	-61	171.5		155.0	0.0	407.0	0.0	4/07	155.0	MLC 176	57	RC
Chariot East	CHDD283	405529.86	7826739.81	337.12	-64	170.1			0.0	137.0	0.0	163.7	300.7	MLC176	128	DDH
Eldorado Deeps	ELDD046	415699.99	7822125.61	374.55	-70	148.5			0.0	155.0	0.0	99.2	246.8	MLC581	84	DDH
Eldorado Deeps	ELDD046W1	415699.99	7822125.61	374.55	-70	148.5			0.0	0.00	0.0	15.7	168.9	MLC581	16	DDH
Eldorado Deeps	ELDD046W2	415699.99	7822125.61	374.55	-70	148.5			0.0	0.00	0.0	161.0	351.8	MLC581	27	DDH
Eldorado Deeps	ELDD047	415660.01	7822081.61	376.83	-62	163.5			0.0	143.0	0.0	107.0	249.6	MLC581	82	DDH
Eldorado Deeps	ELDD048	415650.11	7822117.79	376.98	-70	154.5			0.0	131.0	0.0	178.7	309.7	MLC581	157	DDH
Chariot East	CHDD284	405459.85	7826744.75	337.09	-65	170.5			0.0	131.0	0.0	184.7	315.7	MLC176	133	DDH
Chariot East	CHDD285	405272.69	7826787.64	336.71	-75	162.5			0.0	119.0	0.0	346.7	465.7	MLC176	44	DDH
Chariot Main	CHDD286	405189.86	7826755.02	336.50	-70	162.5			0.0	185.0	0.0	253.3	438.3	EL28775	69	DDH
Billy Boy	BBRB001	438979.38	7834688.47	310.00	-60	40.5	39.0						39.0	ML 22284	12	RAB
Billy Boy	BBRB002	438928.18	7834645.51	310.00	-60	40.5	39.0						39.0	ML 22284	10	RAB
Billy Boy	BBRB003	438866.99	7834594.14	310.00	-60	40.5	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB004	438805.79	7834542.78	310.00	-60	40.5	39.0						39.0	ML 22284	12	RAB
Billy Boy	BBRB005	438744.60	7834491.41	310.00	-60	40.5	40.0						40.0	ML 22284	10	RAB
Billy Boy	BBRB006	438683.40	7834440.05	310.00	-60	40.5	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB007	438622.21	7834388.68	310.00	-60	40.5	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB008	438561.01	7834337.32	310.00	-60	40.5	40.0						40.0	ML 22284	11	RAB
Billy Boy	BBRB009	438499.82	7834285.96	310.00	-60	40.5	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB010	438438.63	7834234.60	310.00	-60	40.5	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB011	438377.44	7834183.23	310.00	-60	40.5	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB012	438316.24	7834131.87	310.00	-60	40.5	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB013	438255.05	7834080.51	310.00	-60	40.5	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB014	438193.86	7834029.15	310.00	-60	40.5	39.0						39.0	ML 22284	11	RAB

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Billy Boy	BBRB015	438132.67	7833977.79	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB016	438071.47	7833926.42	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB017	438010.28	7833875.06	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB018	437949.09	7833823.70	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB019	437887.90	7833772.34	310.00	-60	40.5	39.0			39.0	ML 22284	10	RAB
Billy Boy	BBRB020	437826.71	7833720.98	310.00	-60	40.5	39.0			39.0	ML 22284	12	RAB
Billy Boy	BBRB021	437765.51	7833669.62	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB022	437704.32	7833618.26	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB023	437643.13	7833566.90	310.00	-60	40.5	39.0			39.0	ML 22284	10	RAB
Billy Boy	BBRB024	437581.94	7833515.54	310.00	-60	40.5	39.0			39.0	ML 22284	12	RAB
Billy Boy	BBRB025	437520.74	7833464.18	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB026	437459.55	7833412.81	310.00	-60	40.5	40.0			40.0	ML 22284	10	RAB
Billy Boy	BBRB027	437398.36	7833361.45	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB028	437337.17	7833310.09	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB029	437153.59	7833156.01	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB030	437092.40	7833104.64	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB031	437031.20	7833053.28	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB032	436970.01	7833001.92	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Dilly Day	DDDD033	424000 02	7832950.56	210.00	-60	40.5	40.0			40.0	ML 22204	10	RAB
Billy Boy	BBRB033	436908.82	7032930.30	310.00	-00	40.5	40.0			0.0	ML 22284	10	RAB
Billy Boy	BBRB034	436847.63	7832899.20	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB035	436786.43	7832847.84	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB036	436725.24	7832796.48	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB037	436664.05	7832745.12	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB038	436602.86	7832693.76	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB039	436541.66	7832642.40	310.00	-60	40.5	39.0		· · · · · · · · · · · · · · · · · · ·	39.0	ML 22284	11	RAB
Billy Boy	BBRB040	436480.47	7832591.04	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB041	436419.28	7832539.69	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB042	436358.09	7832488.33	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB043	436296.89	7832436.97	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB044	436235.70	7832385.61	310.00	-60	40.5	39.0			39.0	ML 22284	10	RAB

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Billy Boy	BBRB045	436174.51	7832334.25	310.00	-60	40.5	39.0			39.0	ML 22284	12	RAB
Billy Boy	BBRB046	436113.32	7832282.89	310.00	-60	40.5	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB047	436052.13	7832231.53	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB048	435990.93	7832180.17	310.00	-60	40.5	39.0			39.0	ML 22284	10	RAB
Billy Boy	BBRB049	435929.74	7832128.81	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB050	435868.55	7832077.45	310.00	-60	40.5	39.0			39.0	ML 22284	12	RAB
Billy Boy	BBRB051	435807.36	7832026.09	310.00	-60	40.5	39.0			39.0	ML 22284	10	RAB
Billy Boy	BBRB052	435746.16	7831974.73	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB053	435684.97	7831923.37	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB054	435623.78	7831872.01	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB055	435562.58	7831820.65	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB056	435501.38	7831769.29	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB057	435440.18	7831717.93	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB058	435378.98	7831666.57	310.00	-60	40.5	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB059	439131.62	7833173.72	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB060	439069.70	7833124.68	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB061	439007.06	7833075.06	310.00	-60	45.7	40.0			40.0	ML 22284	11	RAB
Billy Boy	BBRB062	438944.42	7833025.45	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB063	438881.79	7832975.83	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB064	438819.14	7832926.22	310.00	-60	45.7	33.0			33.0	ML 22284	9	RAB
Billy Boy	BBRB065	438756.51	7832876.60	310.00	-60	45.7	36.0			36.0	ML 22284	9	RAB
Billy Boy	BBRB066	438693.86	7832826.99	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB067	438631.23	7832777.37	310.00	-60	45.7	30.0			30.0	ML 22284	9	RAB
Billy Boy	BBRB068	438568.58	7832727.76	310.00	-60	45.7	30.0			30.0	ML 22284	9	RAB
Billy Boy	BBRB069	438505.95	7832678.14	310.00	-60	45.7	30.0			30.0	ML 22284	9	RAB
Billy Boy	BBRB070	438443.30	7832628.53	310.00	-60	45.7	33.0			33.0	ML 22284	8	RAB
Billy Boy	BBRB071	438380.67	7832578.91	310.00	-60	45.7	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB072	438318.03	7832529.29	310.00	-60	45.7	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB073	438255.40	7832479.67	310.00	-60	45.7	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB074	438192.76	7832430.05	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB075	438130.13	7832380.43	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB

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Billy Boy	BBRB076	438067.49	7832330.81	310.00	-60	45.7	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB077	438004.86	7832281.19	310.00	-60	45.7	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB078	437942.22	7832231.57	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB079	437879.59	7832181.95	310.00	-60	45.7	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB080	437816.95	7832132.33	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB081	437754.31	7832082.71	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB082	437691.68	7832033.09	310.00	-60	45.7	45.0					45.0	ML 22284	12	RAB
Billy Boy	BBRB083	437629.04	7831983.47	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB084	437566.41	7831933.85	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB085	437503.77	7831884.23	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB086	437441.14	7831834.61	310.00	-60	45.7	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB087	437378.50	7831784.99	310.00	-60	45.7	36.0					36.0	ML 22284	9	RAB
Billy Boy	BBRB088	437315.87	7831735.37	310.00	-60	45.7	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB089	437253.23	7831685.75	310.00	-60	45.7	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB090	437190.60	7831636.13	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB091	439824.29	7832344.03	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB092	439782.48	7832309.13	310.00	-60	45.7	45.0					45.0	ML 22284	12	RAB
Billy Boy	BBRB093	439721.13	7832257.95	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB094	439659.78	7832206.76	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB095	439598.43	7832155.58	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB096	439537.08	7832104.39	310.00	-60	45.7	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB097	439475.73	7832053.21	310.00	-60	45.7	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB098	439414.38	7832002.02	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB099	439353.04	7831950.84	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB100	439291.69	7831899.66	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB101	439230.34	7831848.47	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB102	439168.99	7831797.29	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB103	439107.64	7831746.10	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB104	439046.29	7831694.92	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB105	438984.94	7831643.73	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB106	438923.59	7831592.54	310.00	-60	45.7	39.0					39.0	ML 22284	11	RAB
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Billy Boy	BBRB107	438862.24	7831541.36	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB108	438800.89	7831490.17	310.00	-60	45.7	36.0			36.0	ML 22284	9	RAB
Billy Boy	BBRB109	438739.54	7831438.99	310.00	-60	45.7	36.0			36.0	ML 22284	11	RAB
Billy Boy	BBRB110	438678.20	7831387.80	310.00	-60	45.7	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB111	438616.85	7831336.62	310.00	-60	45.7	36.0			36.0	ML 22284	9	RAB
Billy Boy	BBRB112	438555.50	7831285.43	310.00	-60	45.7	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB113	438494.15	7831234.25	310.00	-60	45.7	45.0			45.0	ML 22284	12	RAB
Billy Boy	BBRB114	438432.80	7831183.06	310.00	-60	45.7	45.0			45.0	ML 22284	12	RAB
Billy Boy	BBRB115	438371.45	7831131.87	310.00	-60	45.7	45.0			45.0	ML 22284	12	RAB
Billy Boy	BBRB116	438310.10	7831080.69	310.00	-60	45.7	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB117	438248.75	7831029.50	310.00	-60	45.7	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB118	438187.40	7830978.32	310.00	-60	45.7	30.0			30.0	ML 22284	9	RAB
Billy Boy	BBRB119	437942.01	7830773.58	310.00	-60	45.7	45.0			45.0	ML 22284	12	RAB
Billy Boy	BBRB120	437880.66	7830722.41	310.00	-60	45.7	42.0			42.0	ML 22284	12	RAB
Billy Boy	BBRB121	437819.31	7830671.23	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB122	437757.96	7830620.05	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB123	437696.61	7830568.87	310.00	-60	45.7	45.0			45.0	ML 22284	12	RAB
Billy Boy	BBRB124	437635.26	7830517.69	310.00	-60	45.7	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB125	437573.91	7830466.51	310.00	-60	45.7	39.0			39.0	ML 22284	10	RAB
Billy Boy	BBRB126	437512.56	7830415.33	310.00	-60	45.7	39.0			39.0	ML 22284	12	RAB
Billy Boy	BBRB127	437451.21	7830364.15	310.00	-60	45.7	42.0			42.0	ML 22284	12	RAB
Billy Boy	BBRB128	437389.86	7830312.97	310.00	-60	45.7	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB129	437328.52	7830261.79	310.00	-60	45.7	39.0			39.0	ML 22284	10	RAB
Billy Boy	BBRB130	437267.17	7830210.61	310.00	-60	45.7	42.0			42.0	ML 22284	13	RAB
Billy Boy	BBRB131	437205.82	7830159.43	310.00	-60	45.7	45.0			45.0	ML 22284	12	RAB
Billy Boy	BBRB132	440920.40	7832199.40	310.00	-60	41.6	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB133	440881.86	7832162.25	310.00	-60	41.6	39.0			39.0	ML 22284	10	RAB
Billy Boy	BBRB134	440824.36	7832106.83	310.00	-60	41.6	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB135	440766.86	7832051.41	310.00	-60	41.6	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB136	440709.36	7831995.99	310.00	-60	41.6	36.0			36.0	ML 22284	10	RAB
Billy Boy	BBRB137	440651.86	7831940.57	310.00	-60	41.6	30.0			30.0	ML 22284	9	RAB
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Billy Boy	BBRB138	440594.36	7831885.15	310.00	-60	41.6	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB139	440536.87	7831829.72	310.00	-60	41.6	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB140	440479.37	7831774.30	310.00	-60	41.6	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB141	440421.87	7831718.88	310.00	-60	41.6	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB142	440364.37	7831663.45	310.00	-60	41.6	36.0					36.0	ML 22284	9	RAB
Billy Boy	BBRB143	440306.87	7831608.03	310.00	-60	41.6	33.0					33.0	ML 22284	9	RAB
Billy Boy	BBRB144	440249.38	7831552.62	310.00	-60	41.6	48.0					48.0	ML 22284	14	RAB
Billy Boy	BBRB145	440191.88	7831497.19	310.00	-60	41.6	40.0					40.0	ML 22284	10	RAB
Billy Boy	BBRB146	440134.38	7831441.77	310.00	-60	41.6	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB147	440076.88	7831386.35	310.00	-60	41.6	30.0					30.0	ML 22284	9	RAB
Billy Boy	BBRB148	440019.38	7831330.92	310.00	-60	41.6	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB149	439961.88	7831275.50	310.00	-60	41.6	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB150	439904.39	7831220.08	310.00	-60	41.6	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB151	439846.89	7831164.66	310.00	-60	41.6	33.0					33.0	ML 22284	8	RAB
Billy Boy	BBRB152	439789.39	7831109.24	310.00	-60	41.6	33.0					33.0	ML 22284	9	RAB
Billy Boy	BBRB153	439731.89	7831053.82	310.00	-60	41.6	30.0					30.0	ML 22284	9	RAB
Billy Boy	BBRB154	439674.39	7830998.39	310.00	-60	41.6	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB155	439616.89	7830942.97	310.00	-60	41.6	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB156	439559.40	7830887.55	310.00	-60	41.6	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB157	439501.90	7830832.12	310.00	-60	41.6	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB158	439444.40	7830776.70	310.00	-60	41.6	30.0					30.0	ML 22284	9	RAB
Billy Boy	BBRB159	439386.90	7830721.29	310.00	-60	41.6	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB160	439329.40	7830665.86	310.00	-60	41.6	42.0					42.0	ML 22284	11	RAB
Billy Boy	BBRB161	439271.90	7830610.44	310.00	-60	41.6	39.0					39.0	ML 22284	12	RAB
Billy Boy	BBRB162	439214.41	7830555.02	310.00	-60	41.6	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB163	439156.91	7830499.59	310.00	-60	41.6	39.0					39.0	ML 22284	10	RAB
Billy Boy	BBRB164	439099.41	7830444.17	310.00	-60	41.6	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB165	439041.91	7830388.75	310.00	-60	41.6	33.0					33.0	ML 22284	9	RAB
Billy Boy	BBRB166	438984.41	7830333.32	310.00	-60	41.6	30.0					30.0	ML 22284	9	RAB
Billy Boy	BBRB167	438926.92	7830277.90	310.00	-60	41.6	37.0					37.0	ML 22284	10	RAB
Billy Boy	BBRB168	438869.42	7830222.47	310.00	-60	41.6	39.0					39.0	ML 22284	11	RAB

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Billy Boy	BBRB169	438811.92	7830167.04	310.00	-60	41.6	39.0					39.0	ML 22284	10	RAB
Billy Boy	BBRB170	434199.14	7835183.24	310.00	-60	7.7	39.0					39.0	ML 22284	12	RAB
Billy Boy	BBRB171	434185.21	7835118.82	310.00	-60	7.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB172	434168.36	7835040.99	310.00	-60	7.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB173	434151.52	7834963.15	310.00	-60	7.7	39.0					39.0	ML 22284	10	RAB
Billy Boy	BBRB174	434134.68	7834885.32	310.00	-60	7.7	42.0					42.0	ML 22284	13	RAB
Billy Boy	BBRB175	434117.84	7834807.48	310.00	-60	7.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB176	434100.99	7834729.65	310.00	-60	7.7	39.0					39.0	ML 22284	10	RAB
Billy Boy	BBRB177	434084.16	7834651.82	310.00	-60	7.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB178	434067.32	7834573.98	310.00	-60	7.7	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB179	434050.47	7834496.15	310.00	-60	7.7	39.0					39.0	ML 22284	12	RAB
Billy Boy	BBRB180	434033.63	7834418.31	310.00	-60	7.7	48.0					48.0	ML 22284	13	RAB
Billy Boy	BBRB181	434016.79	7834340.48	310.00	-60	7.7	39.0					39.0	ML 22284	10	RAB
Billy Boy	BBRB182	433999.95	7834262.64	310.00	-60	7.7	51.0					51.0	ML 22284	15	RAB
Billy Boy	BBRB183	433983.10	7834184.81	310.00	-60	7.7	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB184	433966.26	7834106.98	310.00	-60	7.7	33.0					33.0	ML 22284	8	RAB
Billy Boy	BBRB185	433949.42	7834029.14	310.00	-60	7.7	33.0					33.0	ML 22284	9	RAB
Billy Boy	BBRB186	433932.58	7833951.31	310.00	-60	7.7	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB187	433915.74	7833873.47	310.00	-60	7.7	33.0					33.0	ML 22284	9	RAB
Billy Boy	BBRB188	433898.90	7833795.64	310.00	-60	7.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB189	433882.06	7833717.81	310.00	-60	7.7	34.0					34.0	ML 22284	10	RAB
Billy Boy	BBRB190	433865.21	7833639.97	310.00	-60	7.7	40.0					40.0	ML 22284	10	RAB
Billy Boy	BBRB191	433848.37	7833562.14	310.00	-60	7.7	39.0					39.0	ML 22284	12	RAB
Billy Boy	BBRB192	433831.53	7833484.30	310.00	-60	7.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB193	433814.68	7833406.47	310.00	-60	7.7	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB194	433797.84	7833328.63	310.00	-60	7.7	42.0					42.0	ML 22284	11	RAB
Billy Boy	BBRB195	433780.99	7833250.80	310.00	-60	7.7	42.0					42.0	ML 22284	13	RAB
Billy Boy	BBRB196	433764.14	7833172.97	310.00	-60	7.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB197	433747.30	7833095.13	310.00	-60	7.7	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB198	433730.45	7833017.30	310.00	-60	7.7	42.0					42.0	ML 22284	11	RAB
Billy Boy	BBRB199	433713.60	7832939.46	310.00	-60	7.7	45.0					45.0	ML 22284	13	RAB

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Billy Boy	BBRB200	433696.76	7832861.63	310.00	-60	7.7	51.0					51.0	ML 22284	14	RAB
Billy Boy	BBRB201	435291.44	7835143.40	310.00	-60	11.5	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB202	435269.50	7835066.82	310.00	-60	11.5	39.0					39.0	ML 22284	10	RAB
Billy Boy	BBRB203	435247.55	7834990.26	310.00	-60	11.5	42.0					42.0	ML 22284	13	RAB
Billy Boy	BBRB204	435225.60	7834913.68	310.00	-60	11.5	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB205	435203.65	7834837.12	310.00	-60	11.5	48.0					48.0	ML 22284	13	RAB
Billy Boy	BBRB206	435181.71	7834760.54	310.00	-60	11.5	51.0					51.0	ML 22284	14	RAB
Billy Boy	BBRB207	435159.76	7834683.98	310.00	-60	11.5	45.0					45.0	ML 22284	12	RAB
Billy Boy	BBRB208	435137.82	7834607.40	310.00	-60	11.5	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB209	435115.87	7834530.84	310.00	-60	11.5	54.0					54.0	ML 22284	15	RAB
Billy Boy	BBRB210	435093.93	7834454.27	310.00	-60	11.5	54.0					54.0	ML 22284	16	RAB
Billy Boy	BBRB211	435071.97	7834377.70	310.00	-60	11.5	66.0					66.0	ML 22284	18	RAB
Billy Boy	BBRB212	435050.03	7834301.13	310.00	-60	11.5	51.0					51.0	ML 22284	14	RAB
Billy Boy	BBRB213	435028.08	7834224.56	310.00	-60	11.5	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB214	435006.14	7834148.00	310.00	-60	11.5	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB215	434984.20	7834071.43	310.00	-60	11.5	33.0					33.0	ML 22284	9	RAB
Billy Boy	BBRB216	434962.25	7833994.87	310.00	-60	11.5	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB217	434940.30	7833918.30	310.00	-60	11.5	30.0					30.0	ML 22284	9	RAB
Billy Boy	BBRB218	434918.36	7833841.74	310.00	-60	11.5	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB219	434896.41	7833765.18	310.00	-60	11.5	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB220	434874.47	7833688.61	310.00	-60	11.5	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB221	434852.52	7833612.05	310.00	-60	11.5	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB222	434830.57	7833535.48	310.00	-60	11.5	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB223	434808.62	7833458.92	310.00	-60	11.5	45.0					45.0	ML 22284	12	RAB
Billy Boy	BBRB224	434786.67	7833382.35	310.00	-60	11.5	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB225	434764.72	7833305.79	310.00	-60	11.5	42.0					42.0	ML 22284	11	RAB
Billy Boy	BBRB226	434742.77	7833229.22	310.00	-60	11.5	39.0					39.0	ML 22284	12	RAB
Billy Boy	BBRB227	434720.82	7833152.66	310.00	-60	11.5	42.0					42.0	ML 22284	12	RAB
Billy Boy	BBRB228	434698.87	7833076.10	310.00	-60	11.5	39.0					39.0	ML 22284	11	RAB
Billy Boy	BBRB229	434676.92	7832999.53	310.00	-60	11.5	36.0					36.0	ML 22284	10	RAB
Billy Boy	BBRB230	434654.97	7832922.97	310.00	-60	11.5	36.0					36.0	ML 22284	10	RAB
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Billy Boy	BBRB231	434633.02	7832846.40	310.00	-60	11.5	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB232	436908.96	7835160.40	310.00	-60	33.3	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB233	436863.98	7835102.32	310.00	-60	33.3	36.0						36.0	ML 22284	9	RAB
Billy Boy	BBRB234	436815.11	7835039.24	310.00	-60	33.3	48.0						48.0	ML 22284	14	RAB
Billy Boy	BBRB235	436766.25	7834976.15	310.00	-60	33.3	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB236	436717.39	7834913.06	310.00	-60	33.3	36.0						36.0	ML 22284	9	RAB
Billy Boy	BBRB237	436668.53	7834849.98	310.00	-60	33.3	36.0						36.0	ML 22284	10	RAB
Billy Boy	BBRB238	436619.67	7834786.89	310.00	-60	33.3	36.0						36.0	ML 22284	10	RAB
Billy Boy	BBRB239	436570.81	7834723.80	310.00	-60	33.3	45.0						45.0	ML 22284	12	RAB
Billy Boy	BBRB240	436521.94	7834660.71	310.00	-60	33.3	36.0						36.0	ML 22284	10	RAB
Billy Boy	BBRB241	436473.08	7834597.63	310.00	-60	33.3	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB242	436424.22	7834534.54	310.00	-60	33.3	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB243	436375.35	7834471.45	310.00	-60	33.3	48.0						48.0	ML 22284	13	RAB
Billy Boy	BBRB244	436326.50	7834408.36	310.00	-60	33.3	54.0						54.0	ML 22284	15	RAB
Billy Boy	BBRB245	436277.63	7834345.28	310.00	-60	33.3	48.0						48.0	ML 22284	13	RAB
Billy Boy	BBRB246	436228.78	7834282.19	310.00	-60	33.3	45.0						45.0	ML 22284	13	RAB
Billy Boy	BBRB247	436179.91	7834219.10	310.00	-60	33.3	57.0						57.0	ML 22284	15	RAB
Billy Boy	BBRB248	436131.05	7834156.02	310.00	-60	33.3	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB249	436082.19	7834092.93	310.00	-60	33.3	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB250	436033.32	7834029.84	310.00	-60	33.3	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB251	435984.46	7833966.75	310.00	-60	33.3	42.0						42.0	ML 22284	12	RAB
Billy Boy	BBRB252	435935.60	7833903.67	310.00	-60	33.3	45.0						45.0	ML 22284	12	RAB
Billy Boy	BBRB253	435886.74	7833840.58	310.00	-60	33.3	36.0						36.0	ML 22284	9	RAB
Billy Boy	BBRB254	435837.88	7833777.49	310.00	-60	33.3	37.0						37.0	ML 22284	11	RAB
Billy Boy	BBRB255	435789.02	7833714.41	310.00	-60	33.3	37.0						37.0	ML 22284	10	RAB
Billy Boy	BBRB256	435740.15	7833651.32	310.00	-60	33.3	37.0						37.0	ML 22284	9	RAB
Billy Boy	BBRB257	435691.30	7833588.23	310.00	-60	33.3	31.0						31.0	ML 22284	9	RAB
Billy Boy	BBRB258	435642.43	7833525.14	310.00	-60	33.3	40.0						40.0	ML 22284	11	RAB
Billy Boy	BBRB259	435593.57	7833462.06	310.00	-60	33.3	40.0						40.0	ML 22284	11	RAB
Billy Boy	BBRB260	435544.71	7833398.97	310.00	-60	33.3	39.0						39.0	ML 22284	11	RAB
Billy Boy	BBRB261	435495.84	7833335.88	310.00	-60	33.3	39.0						39.0	ML 22284	11	RAB
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Billy Boy	BBRB262	435446.99	7833272.80	310.00	-60	33.3	48.0			48.0	ML 22284	13	RAB
Billy Boy	BBRB263	435398.12	7833209.71	310.00	-60	33.3	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB264	435349.27	7833146.62	310.00	-60	33.3	48.0			48.0	ML 22284	13	RAB
Billy Boy	BBRB265	435300.40	7833083.53	310.00	-60	33.3	45.0			45.0	ML 22284	12	RAB
Billy Boy	BBRB266	435251.54	7833020.45	310.00	-60	33.3	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB267	435202.68	7832957.36	310.00	-60	33.3	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB268	435153.81	7832894.27	310.00	-60	33.3	39.0			39.0	ML 22284	11	RAB
Billy Boy	BBRB269	435104.95	7832831.19	310.00	-60	33.3	39.0			39.0	ML 22284	11	RAB

Total 10,590.0 155.0 1,311.0 1,510.0 13,566.0

JORC Code, 2012 Compliance
The exploration results contained within the above company release are in accordance with the guidelines of *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the JORC Code, 2012).

	npling Techniques and Data - CHARIOT & BILLY BOY REGIONAL	
Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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 downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>RC chips were riffle split on site to obtain 3m composite samples from which 2.5 – 3.0kg was pulverised (at the laboratory) to produce a 50g charge for analysis by Aqua Regia digestion (Au, Ag, Bi, Cu and Fe).</li> <li>Individual 1m samples are retained on the drill site and may be individually assayed once 3m composite results are returned.</li> <li>Individual 1m samples were pulverised (at the laboratory) to produce a 25g charge for analysis of gold by Fire Assay and selected base metals.</li> <li>Diamond core was used to obtain high quality samples that were logged for lithological, structural, geotechnical, density and other attributes.</li> <li>Diamond core is either HQ or NQ2 size, sampled on geological intervals (0.1 m to 1.4 m), cut into half (NQ2) core to provide sample weights of approximately 3.0kg. Samples were crushed, dried and pulverised (Lab) to produce a 25g sub sample for analysis by aqua regia and fire assay techniques.</li> <li>Rotary Air Blast (RAB) samples were composited at the drill site into 4m samples via spear sampling.</li> <li>4m RAB composite samples from which 2.5 – 3.0kg was pulverised (at the laboratory) to produce a 25g charge for analysis by Aqua Regia digestion, ICP-MS, ICP-OES finish (Au, Ag, Bi, Cu, PB, Zn and Fe).</li> <li>A 1m bottom of hole RAB sample for each hole was also collected and dispatched for Fire Assay gold and comprehensive multielement 4 acid digest, ICP-OES, ICP-MS, or AAS analysis (46 elements).</li> <li>A representative bottom of hole chip sample was also retained in labelled chip trays and dispatched for ASD analysis in Queensland.</li> </ul>
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 and Diamond drilling accounts for 100% of the current drilling at Chariot and Eldorado projects.</li> <li>RAB drilling accounts for 100% of the Billy Boy regional drilling completed by Emmerson and reported within this text.</li> <li>RAB drill hole spacing was of a regional nature and completed on nominal 80m centres along drill lines spaced 1.7km apart.</li> <li>269 angled RAB holes were completed for a total of 10,590m. The deepest hole was 66m and the shallowest 30m with the average hole depth for the program being 39m.</li> <li>All RAB holes were angled at 60 degrees to the west – south - west.</li> <li>Holes and drill lines were designed to optimally test the mineralised shear zones which strike east-north east west and dip steeply to the south.</li> <li>RAB drilling utilises a 4 inch blade bit.</li> <li>RC drilling utilises a 4.5 inch, face sampling bit.</li> <li>NQ2 core diameter is 50.6mm.</li> <li>HQ core diameter is 63.5mm.</li> <li>Drill hole depths (downhole) range from 65m to 500m for Chariot and 300m for the Eldorado Deeps project.</li> <li>DD holes were typically deeper than the RC drill holes</li> <li>All recently collected core was oriented where possible and the accuracy of the orientation tools is considered as good.</li> <li>Depths were routinely checked against the depth given on the core blocks for accuracy by geologists and field assistants.</li> <li>Rod counts are routinely carried out by the drillers.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>RC samples are visually checked for recovery, moisture and contamination.</li> <li>Recoveries were considered good to excellent for both Diamond and RC drilling.</li> <li>Diamond core and RC recoveries are logged and recorded in the database.</li> <li>Overall recoveries are for the Billy Boy RAB drilling is considered</li> </ul>

good and there were no obvious sample loss issues.

Criteria	JORC Code explanation	Commentary
		<ul> <li>Diamond core from Chariot and Eldorado was reconstructed into continuous runs on a 6m long angle-iron cradle for orientation marking.</li> <li>RQD logging of diamond core was completed for selected sections in the DD holes at Chariot and Eldorado projects.</li> <li>Emmerson do not consider that there is evidence for sample bias that may have occurred due to preferential loss/gain of fine/coarse material from either the Chariot or Eldorado drill programs.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Standard logging/operating procedures (SOP's) were employed by Normandy Tennant Creek and Giants Reef Mining for logging RC chip and Diamond core samples at the Chariot and Eldorado projects.</li> <li>Historical records show that all drill core and RC samples were lithologically logged.</li> <li>Logging codes and operating procedures were reviewed by Emmerson geologists and were considered satisfactory.</li> <li>All historical lithological, oxidation, alteration and presence of sulphide information were converted to Emmerson standard lithological naming convention.</li> <li>Previous Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material has been reviewed and considered satisfactory to good.</li> <li>Magnetic susceptibility data is present for approximately 70% all RC samples.</li> <li>Magnetic susceptibility data has been collected for selected diamond core.</li> <li>Approximately 50% of drill core has been photographed.</li> <li>Representative RC chips are stored in trays in 1m intervals, however due to age some are considered to be in poor condition.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Standard Normandy Tennant Creek and Giants Reef Mining operating procedures were used at Chariot and Eldorado targets for sampling RC and diamond core samples. Both company operating procedures are considered satisfactory by Emmerson geologists.</li> <li>Core from Chariot and Eldorado projects was cut in half (NQ2 &amp; HQ) using a standard brick saw.</li> <li>All half core samples were collected from the same side of the core.</li> <li>Half core samples are submitted for analysis, unless a field duplicate was required, in which quarter core samples are submitted.</li> <li>The sample preparation of diamond core for Eldorado and Chariot projects follow industry best practice in sample preparation involving oven drying, coarse crushing of the half core sample down to ~10mm followed by pulverisation of the entire sample (total prep) using LM5 grinding mills to a grind size of 85% passing 75 micron. The sample preparation for RC samples is identical, without the coarse crush stage.</li> <li>Pulverised material not required by the laboratory (pulps) including duplicate samples are returned to the both Normandy Tennant Creek and Giants Reef Mining however could not be located by Emmerson geologists.</li> <li>Coarse rejects are disposed of by the Laboratory.</li> <li>RC samples were collected on the rig using cone (from the drill rig) and then riffle split by the field assistants if dry to obtain a 3 kg sample.</li> <li>If samples were wet, they were left to dry before being riffle split.</li> <li>To the best of our knowledge all RC samples in mineralised zones were dry prior to submission to the laboratory.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias)</li> </ul>	<ul> <li>Field QC procedures undertaken by Normandy Tennant Creek and Giants Reef Mining has been documented and involve the use of certified reference material (CRM's) as assay standards, and include blanks, duplicates.</li> <li>QAQC protocols varied between the two companies essentially consisted of the insertion of blanks at a rate of approximately one in every 40 samples, insertion of standards at a rate of approximately one in every 20 samples and duplicate field sample analysis of at a rate of approximately one in every 20 samples.</li> <li>Insertion of assay blanks was increased when visual mineralisation</li> </ul>

Criteria	JORC Code explanation	Commentary
	and precision have been established.	<ul> <li>was encountered and consists of insertion above and below the mineralised zone.</li> <li>RC field duplicates are collected on the 3m composites samples, using a riffle splitter.</li> <li>Individual 1m RC sample duplicates are also collected using the same technique.</li> <li>Internal Laboratory checks were also included as in-house controls, blanks, splits, and replicates that are analysed with each batch of samples submitted. These QC results are reported along with sample values in the final analytical report.</li> <li>Normandy Tennant Creek sent their samples to Australian Laboratory Services P/L (ALS).</li> <li>Giants Reef Mining sent their samples to North Australian Laboratories Pty Ltd (NAL) based in Pine Creek.</li> <li>The sample sizes are considered to be appropriate to correctly represent the style of mineralisation at Chariot and Billy Boy projects. (Iron oxide copper gold).</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Emmerson geologists have reviewed both the digital and hard copy drilling information for Chariot, Eldorado and Billy Boy projects and consider it to be of good quality and reliable.</li> <li>Original data sheets and files have been retained and were used to validate drilling results and the contents of the digital database against the original logging.</li> <li>No twin drill holes have been completed in any of the 3 project areas.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drill hole collars were surveyed (set out and pick up) using a differential GPS and by a suitably qualified company employee.</li> <li>Collar survey accuracy is +/- 50 mm for easting, northing and elevation coordinates.</li> <li>Co-ordinate system GDA_94, Zone 53.</li> <li>Topography control is considered as excellent.</li> <li>Topographic measurements are collected from the final survey drill hole pick up.</li> <li>Downhole survey measurements were collected during drilling at a minimum of every 30m using a single shot camera for RC drilling of the targets and every 6m for diamond drill holes at Chariot and Eldorado.</li> <li>Where magnetic rocks affected the down-hole camera a GYRO was used to provide accurate measurements.</li> <li>The Billy Boy RAB holes were located in the field by Emmerson field assistants using a hand held GPS unit considered accurate to 3 metres.</li> <li>No down hole surveying was conducted on the RAB holes and it is assumed that the hole dip and azimuth remained constant.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill spacing is not considered appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) for any of the three project areas.</li> <li>Drilling at Chariot, Eldorado and Billy Boy is still considered early and no formalised drill spacing has been established for these three areas. Further drilling for the Chariot and Eldorado projects is to be designed on a 20m x 20m grid once economic mineralisation and continuity is established.</li> <li>Regional drilling in the Billy Boy project area is considered very broad and infill drilling is to be designed prior to the next phase of drilling / exploration.</li> <li>RC sampling is on 1 m intervals that may have originally consisted of 3m composites.</li> <li>Core sampling is generally defined by geological characteristics and controlled by alteration and lithological boundaries.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>All drilling at Chariot and Eldorado has been to the South at a high angle to intersect the steeply North dipping and East – West striking shear zones.</li> <li>The RAB hole traverses at Billy Boy were designed to intersect main structures perpendicular to the region stratigraphic strike.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were selected, bagged and labelled by site geologists.</li> <li>They are placed in sealed bags for transport to the assay</li> </ul>

Criteria	JORC Code explanation	Commentary
		laboratory.  The assay laboratory confirms that all samples have been received and that no damage has occurred during transport.  While samples are being processed in the Lab they are considered to be secure.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Not relevant for the data reported.

Criteria	mpling Techniques and Data – ELDORADO EXPLORATION TARG JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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 downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>The Eldorado exploration targets were sampled using diamond drilling (DD) techniques.</li> <li>Holes have been angled to optimally test the (mineralised zones and geophysical models). Typically, most drill holes have been drilled towards the south and are angled.</li> <li>Diamond core was used to obtain high quality samples that were logged for lithological, structural, geotechnical, density and other attributes. Sampling was carried out under Emmerson's company procedures as per industry best practice.</li> <li>Diamond core is typically NQ and HQ size, sampled on geological intervals and cut into half core to provide sample weights of approximately 3.0kg. Samples were then crushed, dried and pulverised (Lab) to produce a 23g sub sample for analysis by Aqua Regia with ICP-OES,ICP-MS or AAS finish (Au, Cu, Ag, Bi, Fe, Pb, Zn).</li> <li>Genalysis Interteck completed the sample preparation and analytical reporting.</li> </ul>
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 and Diamond drilling accounts for 90% of the known drilling within the Eldorado Group of exploration targets.</li> <li>Minor (&lt;10%), shallow vacuum and RAB drilling is noted in the historical information, however is not considered effective due to the depth of weathering within the areas.</li> <li>Various RC and diamond drill techniques have been employed to test the Eldorado exploration targets with NQ and HQ the most common diamond core diameters used.</li> <li>NQ core diameter is 47.6mm.</li> <li>HQ core diameter is 63.5mm.</li> <li>RC drilling utilises a 4.5 inch, face sampling bit.</li> <li>Angled drill hole depths range from 40m to 500m with the average depth of approximately 300m.</li> <li>The core was oriented using down hole core orientation equipment available at the time.</li> <li>Diamond core and RC recoveries are logged and recorded in the database.</li> <li>Standard inner tube has been used.</li> <li>Overall recoveries are &gt;80% for and there are no core loss or significant sample recovery problems identified.</li> <li>Core from Eldorado exploration targets is stored in core racks in core shed storage in Tennant Creek.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Recoveries are considered satisfactory for both Diamond and RC drilling.</li> <li>RQD measurements and core loss has been recorded on the original diamond logging sheets and retained for reference.</li> <li>Emmerson do not consider that there is evidence for sample bias that may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant</li> </ul>	<ul> <li>Standard operating procedures are employed by Emmerson for logging of the Diamond core samples.</li> <li>All drill core is lithologically logged.</li> <li>Drill hole logging data is directly entered into field tough book computers via Logchief software. Look up codes and real time validations reduce the risk of data entry mistakes.</li> <li>Field computer data (the drill log) are uploaded to Emmerson's</li> </ul>

Criteria	JORC Code explanation	Commentary
	intersections logged.	relational database whereby the data undergoes a further set of validations checks prior to final upload.  Standardised codes are used for lithology, oxidation, alteration and presence of sulphide minerals.  Structural logging of all diamond drill core records orientation of veins, fractures and lithological contacts.  Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure table of the database.  RQD logging records core lengths, recovery, hardness and weathering.  Magnetic susceptibility data for selected diamond core collected as per ERM procedure.  All drill core is photographed and stored in the database.  All diamond drill core is stored in trays and kept on site in Tennant Creek  Representative RC chips and diamond core is available to all geologists (a physical reference set) to ensure consistency of logging.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Core for Eldorado exploration targets was halved. Emmerson have approximately 80% of the historical diamond core drilled in the Eldorado exploration targets and 100% of Emmerson drilled core in core shed storage in Tennant Creek.</li> <li>Areas of geological interest were identified the company geologist and the halved core samples dispatched for assay.</li> <li>Historical sample preparation of diamond core for appears to have followed industry best practice for the time, involving oven drying, coarse crushing followed by pulverisation of the entire sample (total prep).</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Drill hole intersections reported are of historical nature and have not been geochemically validated by modern analytical methods.</li> <li>Assay results for the Eldorado exploration targets appear consistent with geological parameters however caution must be exercised when interpreting results.</li> <li>Insertion of assay blanks and certified reference material (standards) is recorded for drilling completed at AN5, by Normandy however, could not be located for the earlier drilling.</li> <li>It is assumed that many of the earlier assays have been completed at the Noble Nob mine laboratory and contamination is possible however considered unlikely.</li> <li>The Nobles Nob mine laboratory had the ability to assay using both Aqua Regia and Fire Assay techniques.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Original sample data sheets and files have been retained and were used to validate the contents of Emmerson's database against the original assay, down hole survey results and the geological logging.</li> <li>Minor adjustments were made to the geology codes to conform to Emmerson's coding system.</li> <li>No twin drill holes to Emmerson's knowledge have been completed.</li> <li>Selective sampling and re-assay will be undertaken to confirm key assay results during the next round of exploration of these exploration targets.</li> </ul>
Location of data points  Data spacing and	<ul> <li>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul> Data spacing for reporting of Exploration Results.	<ul> <li>Historical drill hole collar positions have been surveyed using a differential GPS and by a suitably qualified company employee.</li> <li>Collar survey accuracy is +/- 30 mm for easting, northing and elevation coordinates.</li> <li>Co-ordinate system GDA_94, Zone 53.</li> <li>Topography measurements are from a detailed Digital Terrane Model created by a suitable qualified staff member.</li> <li>Downhole survey measurements have been located and consist of single shot and etched glass methods.</li> <li>Identified mineralisation within the Eldorado Deeps exploration</li> </ul>

Criteria	JORC Code explanation	Commentary
distribution	<ul> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>target has to date been defined by less than 15 DD holes and spacing has is not considered appropriate for Mineral Resource Estimation or Classification. Emmerson plan to increase the drill density to better define geological and grade continuity with future drilling.</li> <li>An1, An2, An3 and An5 have not been systematically drill tested and do not appear to have been drilled on defined drill lines or sections.</li> <li>RC sampling is on 1 m intervals that may have originally consisted of 3m composites.</li> <li>Core sampling is typically defined by geological characteristics and lithological boundaries.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Review of previous exploration drilling indicates it is at a high angle to the mineralised bodies.</li> <li>Review of previous exploration drilling indicates it is perpendicular to mineralised bodies.</li> </ul>
Sample security	The measures taken to ensure sample security.	Not relevant for the data reported.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>An internal review of the historical sampling techniques, QAQC protocols and data collection was conducted by Emmerson from January to March 2013.</li> </ul>

Section 2 Reporting	of Exploration Results - ELDORADO EXPLORATION TARGET.	S
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Eldorado group of targets are located within granted Mineral Leases (MLC's) as outlined in the attached report figures.</li> <li>Reported drilling in this quarterly occurred exclusively on ML C581.</li> <li>All MLC's are 100% held by Emmerson Resources Limited.</li> <li>All MLC's lie within Aboriginal Freehold Land held by the Warramunga Aboriginal Land Trust.</li> <li>Land Access to the targets is secured through an Agreement with the CLC.</li> <li>Several Heritage surveys have been completed over the area with minor ironstone outcrops identified as exclusion zone - SSCC2008-35 and SSCC2014-134.</li> <li>The Cats Whiskers mine (AN4) is a registered exclusion zone.</li> <li>The Eldorado mine is a registered exclusion zone however, does not affect the planned exploration drilling outlined in this report.</li> <li>The Eldorado group of targets are 100% Emmerson Resources and no Joint Venture exists.</li> <li>The tenements are in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Several exploration and mining companies have explored the Eldorado area over the past 50 years.</li> <li>Exploration campaigns were conducted by Australian Development Limited (ADL), Peko (1966-1980), Poseidon Gold, Normandy (1998-2000) and Giants Reef Mining (2000-2004).</li> <li>All of the above Exploration companies are considered to have been operating within acceptable best practices for the era.</li> <li>The Eldorado mine produced 122,000oz gold and was campaign mined by Peko (1989-1990) and by Normandy (1991-1993).</li> <li>The Cat's Whiskers mine was mined by Giants Reef (2005) however grade and tonnage is unknown.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Mineralisation within the target area consists of hematite-quartz-magnetite ironstone within talc-chlorite-magnetite-bearing sediments of the Warramunga Formation.     Target style for Emmerson is non magnetic ironstone related iron oxide copper gold.     All anomalies (targets) lie within a defined structural corridor

Criteria	JORC Code explanation	Commentary
		with numerous gold – copper occurrences associated with ironstone.  • Very limited drilling has targeted the non magnetic ironstones within this corridor.
Drillhole information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:     easting and northing of the drillhole collar     elevation or RL of the drillhole collar     dip and azimuth of the hole     downhole length and interception depth     hole length.	<ul> <li>A selection of drill hole intercepts are included in this report and must be viewed as indicative only. It is not practicable nor deemed material to report all drill hole positions and at this stage due to the maturity and number of the exploration programs that have historically been undertaken.</li> <li>Further compilation and validation of these drilling data is required and drill intersections reported must be viewed with caution during this stage of exploration.</li> <li>Intersections reported are qualified in the text as the "best intersection" and are not intended to bias or mislead. They are reported to provide the reader with an indication of mineralisation tenor for the various exploration targets.</li> <li>All drilling completed during the quarter are table tabulated within the body of the text and report all summary information.</li> </ul>
Data aggregation methods	<ul> <li>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.</li> <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 should be clearly stated.</li> </ul>	<ul> <li>Mineralised intersections are reported as down hole lengths and are not true widths.</li> <li>Mineralised intersections are not reported as weighted averages.</li> <li>Drill results reported are historical exploration results only and although every attempt to verify the accuracy of the results has been made, Emmerson are cautious and fully aware that further confirmatory drilling will be required.</li> <li>No cut-off grades have been used has been used for reporting of exploration drill results.</li> <li>A 5 g/t Au low cut off applies to Eldorado Deeps mineralised pods outline and no top-cut has been applied.</li> <li>No confirmation down hole survey data has yet been collected</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (eg 'downhole length, true width not known').</li> </ul>	<ul> <li>All drilling within the Eldorado Deeps exploration target is from surface and perpendicular to the mineralised structure. Drill holes are inclined between -65 and -75deg. to the south to allow intersection angles with the mineralised zones approximate to the true width.</li> <li>Mineralised intersections for the Eldorado Deeps exploration target are reported as down hole lengths and are not true widths.</li> <li>An1 – An5 have been historically drill tested using both RC and DD techniques. Drill orientation was based on magnetic modelling and was designed to intersect the modelled magnetic bodies perpendicular to strike and at a high angle to the dip.</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 drillhole collar locations and appropriate sectional views.	Refer to Figures in body of text.
Balanced reporting	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.	A selection of drill hole intercepts are included in this report and must be viewed as indicative only. It is not practicable nor deemed material to report all drill hole positions and at this stage due to the maturity and number of the exploration programs that have historically been undertaken.
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.	Not relevant for the data reported.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations</li> </ul>	<ul> <li>Further work on the reported exploration targets will involve complete validation and field verification for all Eldorado Targets (An1-An5).</li> <li>Field mapping and sampling.</li> </ul>

Criteria	JORC Code explanation	Commentary
	and future drilling areas, provided this information is not commercially sensitive.	<ul> <li>Collection of physical rock property data to assist with future geophysical modelling.</li> <li>RC campaign to test non magnetic targets proximal to the known An1 – An5 magnetic anomalies.</li> <li>Detailed reprocessing of existing gravity data to assist with further drill targeting.</li> <li>Mineral Resource Estimation to validate existing geological and geochemical data for the Eldorado Deeps exploration target.</li> <li>Mineral Resource Estimation to include future drilling results returned from the Eldorado Deeps exploration target.</li> </ul>

Section 2 Reporting of Exploration Results – BILLY BOY REGIONAL TARGETS							
Criteria	JORC Code explanation	Commentary					
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>All regional RAB drilling stated in this report were conducted on granted Mining Licence ML22284 and are located on Tennant Creek PPL NT Portion 495 (Tennant Creek Station).</li> <li>ML22284 is 100% held by Emmerson Resources Limited.</li> <li>Land access is secured through Sacred Site Clearance Certificate 2011-074 signed between Traditional Owners and Emmerson Resources.</li> <li>Small Exclusion Zones exist (isolated ironstone outcrops identified as sacred sites) within the ML exist however they do not impact on any planned drilling</li> <li>All tenements are in good standing and no known impediments exist.</li> </ul>					
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous known exploration within ML22284 was conducted by and Giants Reef Mining (1995-2000).</li> <li>Prior to Giants Reef Mining several other exploration companies held the ground however reliability of data is questionable and is not included in this report.</li> <li>Several early stage exploration targets have been identified with some having been drill tested within the ML.</li> <li>Most advanced exploration target is the Au-Cu occurrence known as Billy Boy located in the central section of the ML.</li> <li>Several gold nuggets have been located within the ML by local prospectors.</li> <li>All recent work in this area has been conducted by Emmerson Resources.</li> </ul>					
Geology	Deposit type, geological setting and style of mineralisation.	Gold mineralisation is hosted by outcropping and buried hematite ironstone. Mineralisation is considered to be Proterozoic Iron Oxide Copper Gold (IOCG) mineralisation of similar style and nature to other mineralisation / deposits in the Tennant Creek Mineral Field.					
Drillhole information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:     easting and northing of the drillhole collar     elevation or RL of the drillhole collar     dip and azimuth of the hole     downhole length and interception depth     hole length.	<ul> <li>Significant historical intersections within this report have been compiled and validated by Emmerson geologist.</li> <li>Original data sheets have been inspected, validated and are included into Emmerson's relational database.</li> <li>A comprehensive drill hole list is included in this quarterly report and a balanced report of results is included in the report body text and within the included diagrams (Table &amp; Figure 4).</li> </ul>					
Data aggregation methods	<ul> <li>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.</li> <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 should be clearly stated.</li> </ul>	<ul> <li>Mineralised intersections are reported as down hole composite drill intervals and not weighted averages.</li> <li>These results are exploration results only and no allowance is made for recovery losses that may occur should mining eventually result, nor metallurgical flow sheet considerations.</li> <li>No cut-off grade has been applied to results reported in this report.</li> <li>It must be noted that RAB drilling by nature can contaminate samples during the drilling process and although considered significant in a regional sense it must be understood that confirmation RC drilling is required to qualify the initial RAB intersections.</li> </ul>					
Relationship between mineralisation widths and	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> </ul>	The RAB hole traverses at Billy Boy were designed to intersect main structures perpendicular to the regional stratigraphic strike.					

Criteria	JORC Code explanation	Commentary
intercept lengths	If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (eg 'downhole length, true width not known').	<ul> <li>All RAB holes were angled at 60 degrees to the west – south - west.</li> <li>Holes and drill lines were designed to optimally test the mineralised shear zones which strike east-north east and dip steeply to the south.</li> <li>All results reported in the text are down-hole lengths and not true widths.</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 drillhole collar locations and appropriate sectional views.	Refer to Figures in body of text.
Balanced reporting	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.	Significant gold results are reported in the text based on criteria clearly stated in the notes of Table 4.
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.	<ul> <li>Previous drilling information collected by Giants Reef has been reviewed and is considered to be of a high standard.</li> <li>Several geophysical data has been collected over the area by Giants Reef and includes air and ground magnetic surveys, course spaced gravity surveying, minor electrical geophysics, soil and rock chipping and associated outcrop mapping has also been conducted.</li> <li>These data are still being assessed however initial observations suggest the data to be of a satisfactory standard.</li> <li>No deleterious or contaminated substances have been identified during Emmerson's the desktop review.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale stepout drilling).</li> <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>	<ul> <li>Extensional and infill drilling is currently being designed to assist with further exploration drilling.</li> <li>Additional geophysics has been conducted and is currently being interpreted to assist in the next round of exploration drilling.</li> <li>Additional soil sampling is being considered.</li> <li>Review of the historic Billy Boy Au-Cu occurrence is underway to assess if additional drilling could improve the target.</li> </ul>

Tenement	Name	Interest	Tenement	Name	Interest	Tenement	Name	Interest
FI 10114	MaDavasil	1000/	LII DO101	Calle Na Nama	1000/	III DCO/	\\/\\\\\\\	1000/
EL10114	McDougall	100%	HLDC101	Sally No Name	100%	HLDC86	Wiso Basin	100%
EL10124	Speedway	100%	HLDC36	Blue Moon	100%	HLDC87	Wiso Basin	100%
EL10313	Kodiak	100%	HLDC37	Warrego, No 1	100%	HLDC88	Wiso Basin	100%
EL10406	Montana	100%	HLDC39	Warrego Min,	100%	HLDC89	Wiso Basin	100%
EL23285	Corridor 2	100%	HLDC40	Warrego, No 2	100%	HLDC90	Wiso Basin	100%
EL23286	Corridor 3	100%	HLDC41	Warrego, No 3	100%	HLDC91	Wiso Basin	100%
EL23905	Jackie	100%	HLDC42	Warrego, S7	100%	HLDC92	Wiso Basin	100%
EL26594	Bills	100%	HLDC43	Warrego , S8	100%	HLDC93	Wiso Basin	100%
EL26595	Russell	100%	HLDC44	Warrego, No.2	100%	HLDC94	Warrego, No.4	100%
EL26787	Rising Ridge	100%	HLDC45	Warrego, No.1	100%	HLDC95	Warrego, No.3	100%
EL27011	Snappy Gum	100%	HLDC46	Warrego, No.1	100%	HLDC96	Wiso Basin	100%
EL27136	Reservoir	100%	HLDC47	Wiso Basin	100%	HLDC97	Wiso Basin	100%
EL27164	Hawk	100%	HLDC48	Wiso Basin	100%	HLDC98	Wiso Basin	100%
EL27408	Grizzly	100%	HLDC49	Wiso Basin	100%	HLDC99	Wiso, No.3 pipe	100%
EL27537	Chappell	100%	HLDC50	Wiso Basin	100%	MA23236	Udall Road	100%
EL27538	Mercury	100%	HLDC51	Wiso Basin	100%	MA27163	Eagle	100%
EL28601	Malbec	100%	HLDC52	Wiso Basin	100%	MCC1032	Metallic Hill	100%
EL28602	Red Bluff	100%	HLDC53	Wiso Basin	100%	MCC1033	Metallic Hill	100%
EL28603	White Devil	100%	HLDC54	Wiso Basin	100%	MCC1034	EXP195	100%
EL28618	Comstock	100%	HLDC55	Warrego, No.4	100%	MCC1038	Rocky Range	100%
EL28760	Delta	100%	HLDC56	Warrego, No.5	100%	MCC1039	Rocky Range	100%
EL28761	Quartz Hill	100%	HLDC58	Wiso Line, No.6	100%	MCC1065	Marathon	100%
EL28775	Trinity	100%	HLDC59	Warrego, No.6	100%	MCC1077	Gecko	100%
EL28776	Whippet	100%	HLDC69	Wiso Basin	100%	MCC1078	Gecko	100%
EL28777	Bishops Creek	100%	HLDC70	Wiso Basin	100%	MCC1079	Gecko	100%
EL28913	Amstel	100%	HLDC71	Wiso Basin	100%	MCC1080	Gecko	100%
EL29012	Tetley	100%	HLDC72	Wiso Basin	100%	MCC1081	Gecko	100%
EL29488	Rocky	100%	HLDC73	Wiso Basin	100%	MCC1082	Gecko	100%
EL30167	Dolomite	100%	HLDC74	Wiso Basin	100%	MCC1083	Gecko	100%
EL30168	Caroline	100%	HLDC75	Wiso Basin	100%	MCC1315	Warrego East	100%
EL30301	Grey Bluff East	100%	HLDC76	Wiso Basin	100%	MCC1316	Warrego East	100%
EL30488	Colombard	100%	HLDC77	Wiso Basin	100%	MCC1317	Warrego East	100%
EL9403	Jess	100%	HLDC78	Wiso Basin	100%	MCC1318	Warrego East	100%
EL9958	Running Bear	100%	HLDC79	Wiso Basin	100%	MCC1319	Warrego East	100%
ELA27539	Telegraph	100%	HLDC80	Wiso Basin	100%	MCC1320	Warrego East	100%
ELA27902	Lynx	100%	HLDC81	Wiso Basin	100%	MCC1321	Warrego East	100%
ELA30123	Mosquito Creek	100%	HLDC82	Wiso Basin	100%	MCC1322	Warrego East	100%
ELA30505	Golden East	100%	HLDC83	Wiso Basin	100%	MCC1323	Warrego East	100%
ELA7809	Mt Samuel	100%	HLDC84	Wiso Basin	100%	MCC1348	Archimedes	100%
HLDC100	Sally No Name	100%	HLDC85	Wiso Basin	100%	MCC1349	Archimedes	100%

Tenement	Name	Interest	Tenement	Name	Interest	Tenement	Name	Interest
MCC1426	Pinnacles South	100%	MCC522	Gibbet	100%	MCC812	Dong Dui	100%
MCC1530	Jacqueline the	100%	MCC523	Gibbet	100%	MCC813	Grenache	100%
MCC167	Comstock	100%	MCC524	Gibbet	100%	MCC9	Eldorado	100%
MCC168	New Hope	100%	MCC55	Mondeuse	100%	MCC907	Troy	100%
MCC169	Plumb	100%	MCC56	Shiraz	100%	MCC908	Troy	100%
MCC174	Mt Samuel	100%	MCC57	Mondeuse	100%	MCC909	Troy	100%
MCC203	Galway	100%	MCC6	The Pup	100%	MCC910	Troy	100%
MCC21	Battery Hill	100%	MCC66	Golden Forty	100%	MCC912	Troy	100%
MCC211	Shamrock	100%	MCC67	Golden Forty	100%	MCC913	Troy	100%
MCC212	Mt Samuel	85%	MCC755	Comstock	100%	MCC914	Rising Star	100%
MCC22	Battery Hill	100%	MCC756	Comstock	100%	MCC915	Rising Star	100%
MCC23	Battery Hill	100%	MCC757	Comstock	100%	MCC925	Brolga	100%
MCC239	West Peko	100%	MCC758	Semillon	100%	MCC926	Brolga	100%
MCC240	West Peko	100%	MCC759	Smelter	100%	MCC969	Pinot	100%
MCC287	Mt Samuel	100%	MCC76	Red Bluff North	100%	MCC970	Pinot	100%
MCC288	Mt Samuel	100%	MCC760	Dark	100%	MCC971	Pinot	100%
MCC308	Mt Samuel	85%	MCC761	Noir	100%	MCC972	Pinot	100%
MCC313	Pedro	100%	MCC762	Noir	100%	MCC981	Franc	100%
MCC314	Pedro	100%	MCC790	Verdelho	100%	MCC982	Franc	100%
MCC316	The Trump	100%	MCC791	Marsanne	100%	ML22284	Billy Boy	100%
MCC317	The Trump	100%	MCC791	Marsanne	100%	ML23216	Chariot	100%
MCC334	Estralita Group	100%	MCC793	Sauvignon	100%	ML23969	Gecko Headframe	100%
MCC338	Black Cat	100%	MCC794	Durif	100%	ML29917	Havelock	100%
MCC339	Black Cat	100%	MCC795	Durif	100%	ML29919	Orlando	100%
MCC340	The Trump	100%	MCC796	Durif	100%	ML30176	Queen of Sheeba	100%
MCC341	The Trump	100%	MCC797	EXP 80	100%	ML30177	North Star	100%
MCC342	True Blue	100%	MCC798	Ivanhoe	100%	ML30322	Verdot	100%
MCC344	Mt Samuel	100%	MCC799	Wolseley	100%	MLA29526	Blue Moon	100%
MCC348	Bomber	100%	MCC800	Wolseley	100%	MLA29527	Wiso	100%
MCC349	Bomber	100%	MCC801	Gris	100%	MLA29528	Wiso	100%
MCC350	Bomber	100%	MCC802	Zinfandel	100%	MLA29529	Wiso	100%
MCC351	Bomber	100%	MCC803	Thurgau	100%	MLA29530	Wiso	100%
MCC354	Scheurber	100%	MCC804	EXP212	100%	MLA29531	Wiso	100%
MCC355	Scheurber	100%	MCC805	Jubilee	100%	MLA29532	Wiso	100%
MCC364	Estralita	100%	MCC806	Jubilee	100%	MLA30096	Malbec	100%
MCC365	Estralita	100%	MCC807	Merlot	100%	MLC100	Warrego	100%
MCC366	Estralita	100%	MCC808	Merlot	100%	MLC101	Warrego	100%
MCC377	Blue Moon	100%	MCC809	The Extension	100%	MLC102	Warrego	100%
MCC461	Gibbet	100%	MCC810	Colombard	100%	MLC107	Warrego	100%
MCC5	The Pup	100%	MCC811	Colombard	100%	MLC108	Warrego	100%
	' 							

Tenement	Name	Interest	Tenement	Name	Interest	Tenement	Name	Interest
MLC120	Cabernet / Nav 7	100%	MLC184	Riesling	100%	MLC346	Rocky Range	100%
MLC121	Cabernet / Nav 7	100%	MLC204	Argo West	100%	MLC347	Tinto	100%
MLC122	Cabernet / Nav 7	100%	MLC205	Argo West	100%	MLC348	Brolga	100%
MLC123	Cabernet / Nav 7	100%	MLC206	Argo West	100%	MLC349	Brolga	100%
MLC127	Peko East Ext 4	100%	MLC207	Argo West	100%	MLC35	Golden Forty	100%
MLC129	Peko Sth- East	100%	MLC208	Argo West	100%	MLC350	Brolga	100%
MLC130	Golden Forty	100%	MLC209	Argo West	100%	MLC351	Brolga	100%
MLC131	Golden Forty	100%	MLC21	Gecko	100%	MLC352	Golden Forty	100%
MLC132	Golden Forty	100%	MLC217	Perserverance	30%	MLC353	Golden Forty	100%
MLC133	Golden Forty	100%	MLC218	Perserverance	30%	MLC354	Golden Forty	100%
MLC134	Golden Forty	100%	MLC219	Perserverance	30%	MLC355	Golden Forty	100%
MLC135	Golden Forty	100%	MLC22	Warrego	100%	MLC36	Golden Forty	100%
MLC136	Golden Forty	100%	MLC220	Perserverance	30%	MLC362	Lone Star	100%
MLC137	Golden Forty	100%	MLC221	Perserverance	30%	MLC363	Lone Star	100%
MLC138	Golden Forty	100%	MLC222	Perserverance	30%	MLC364	Lone Star	100%
MLC139	Golden Forty	100%	MLC223	Perserverance	30%	MLC365	Lone Star	100%
MLC140	Golden Forty	100%	MLC224	Perserverance	30%	MLC366	Lone Star	100%
MLC141	Golden Forty	100%	MLC235	Kia Ora	100%	MLC367	Lone Star	100%
MLC142	Golden Forty	100%	MLC236	Kia Ora	100%	MLC368	Lone Star	100%
MLC143	Golden Forty	100%	MLC237	Kia Ora	100%	MLC369	Lone Star	100%
MLC144	Golden Forty	100%	MLC238	Kia Ora	100%	MLC37	Golden Forty	100%
MLC146	Golden Forty	100%	MLC253	Mulga 1	100%	MLC370	Lone Star	100%
MLC147	Golden Forty	100%	MLC254	Mulga 1	100%	MLC371	Lone Star	100%
MLC148	Golden Forty	100%	MLC255	Mulga 1	100%	MLC372	Lone Star	100%
MLC149	Golden Forty	100%	MLC256	Mulga 2	100%	MLC373	Lone Star	100%
MLC15	Eldorado 4	100%	MLC257	Mulga 2	100%	MLC374	Lone Star	100%
MLC158	Warrego gravel	100%	MLC258	Mulga 2	100%	MLC375	Lone Star	100%
MLC159	Warrego gravel	100%	MLC259	Mulga 2	100%	MLC376	Mulga 1	100%
MLC16	Eldorado 5	100%	MLC260	Mulga 2	100%	MLC377	Mulga 1	100%
MLC160	Warrego gravel	100%	MLC261	Mulga 2	100%	MLC378	Mulga 1	100%
MLC161	Warrego gravel	100%	MLC32	Golden Forty	100%	MLC379	Mulga 1	100%
MLC162	Warrego gravel	100%	MLC323	Gecko	100%	MLC38	Memsahib East	100%
MLC163	Warrego gravel	100%	MLC324	Gecko	100%	MLC380	Mulga 1	100%
MLC164	Warrego gravel	100%	MLC325	Gecko	100%	MLC381	Mulga 1	100%
MLC165	Warrego gravel	100%	MLC326	Gecko	100%	MLC382	Mulga 1	100%
MLC176	Chariot	100%	MLC327	Gecko	100%	MLC383	Mulga 1	100%
MLC177	Chariot	100%	MLC342	Tinto	100%	MLC384	Mulga 2	100%
MLC18	West Gibbet	100%	MLC343	Rocky Range	100%	MLC385	Mulga 2	100%
MLC182	Riesling	100%	MLC344	Rocky Range	100%	MLC386	Mulga 2	100%
MLC183	Riesling	100%	MLC345	Rocky Range	100%	MLC387	Mulga 2	100%

Tenement	Name	Interest	Tenement	Name	Interest	Tenement	Name	Interest
MLC39	Short Range 5	100%	MLC558	New Hope	100%	MLC617	Mt Samuel	50%
MLC4	Peko Extended	100%	MLC559	White Devil	100%	MLC619	True Blue	85%
MLC40	Short Range 5	100%	MLC56	Golden Forty	100%	MLC626	Caroline	100%
MLC406	Comet	100%	MLC560	White Devil	100%	MLC644	Enterprise	100%
MLC407	Comet	100%	MLC57	Perserverence	30%	MLC645	Estralita	100%
MLC408	Comet	100%	MLC575	Blue Moon	100%	MLC654	TC8 Lease	100%
MLC409	Comet	100%	MLC576	Golden Forty	100%	MLC66	Traminer	100%
MLC41	Short Range 5	100%	MLC577	Golden Forty	100%	MLC67	Traminer	100%
MLC432	Mulga 1	100%	MLC581	Eldorado ABC	100%	MLC675	Black Angel	100%
MLC48	Tinto	100%	MLC582	Eldorado ABC	100%	MLC676	Black Angel	100%
MLC49	Mt Samual	100%	MLC583	Eldorado ABC	100%	MLC683	Eldorado	100%
MLC498	Eldorado	100%	MLC584	Golden Forty	100%	MLC69	Gecko	100%
MLC499	Eldorado	100%	MLC585	Golden Forty	100%	MLC692	Warrego Mine	100%
MLC5	Peko Extended	100%	MLC586	Golden Forty	100%	MLC70	Gecko	100%
MLC50	Eldorado Anom	100%	MLC588	Kia Ora	100%	MLC700	White Devil	100%
MLC500	Eldorado	100%	MLC591	TC8 Lease	100%	MLC702	0	100%
MLC501	Eldorado	100%	MLC592	TC8 Lease	100%	MLC705	Apollo 1	100%
MLC502	Eldorado	100%	MLC593	TC8 Lease	100%	MLC71	Warrego	100%
MLC503	Eldorado	100%	MLC594	TC8 Lease	100%	MLC72	Warrego	100%
MLC504	Eldorado	100%	MLC595	TC8 Lease	100%	MLC73	Warrego	100%
MLC505	Eldorado	100%	MLC596	TC8 Lease	100%	MLC74	Warrego	100%
MLC506	Marion Ross	100%	MLC597	TC8 Lease	100%	MLC75	Warrego	100%
MLC51	Eldorado Anom	100%	MLC598	Golden Forty	100%	MLC76	Warrego	100%
MLC518	Ellen, Eldorado	100%	MLC599	Mt Samuel	85%	MLC78	Gecko	100%
MLC52	Muscadel	100%	MLC601	TC8 Lease	100%	MLC83	Warrego	100%
MLC520	<b>Great Northern</b>	100%	MLC602	TC8 Lease	100%	MLC84	Warrego	100%
MLC522	Aga Khan	100%	MLC603	TC8 Lease	100%	MLC85	Gecko	100%
MLC523	Eldorado	100%	MLC604	TC8 Lease	100%	MLC86	Gecko	100%
MLC524	Susan	100%	MLC605	TC8 Lease	100%	MLC87	Gecko	100%
MLC527	Mt Samual	100%	MLC606	Lone Star	100%	MLC88	Gecko	100%
MLC528	Dingo Eldorado	100%	MLC607	Lone Star	100%	MLC89	Gecko	100%
MLC529	Cats Whiskers	100%	MLC608	Lone Star	100%	MLC90	Gecko	100%
MLC53	Golden Forty	100%	MLC609	Lone Star	100%	MLC91	Carraman/Klond	100%
MLC530	Lone Star	100%	MLC610	Lone Star	100%	MLC92	Carraman/Klond	100%
MLC535	Eldorado No 5	100%	MLC611	Lone Star	100%	MLC93	Carraman/Klond	100%
MLC54	Golden Forty	100%	MLC612	Lone Star	100%	MLC94	Carraman/Klond	100%
MLC546	The Mount	100%	MLC613	Lone Star	100%	MLC95	Carraman/Klond	100%
MLC55	Golden Forty	100%	MLC614	Lone Star	100%	MLC96	Osprey	100%
MLC554	White Devil	100%	MLC615	Lone Star	100%	MLC97	Osprey	100%
MLC557	White Devil	100%	MLC616	Lone Star	100%	MLC98	Warrego	100%
						MLC99	Warrego	100%

Rule 5.3

# Appendix 5B

# Mining exploration entity quarterly report

Name of entity

**Emmerson Resources Limited** 

ABN		Quarter ended ("cur	rrent quarter")
53 1	17 086 745	31 December 2	014
Con	asolidated statement of cash flows		
Cash	flows related to operating activities	Current quarter \$A'000	Year to date (6 months) \$A'000
1.1	Receipts from product sales and related debtors		
1.2	Payments for (a) exploration & evaluation (b) development (c) production	(1,634)	(2,568)
	(d) administration	(374)	(866)
1.3	Dividends received	25	25
1.4	Interest and other items of a similar nature received	44	71
1.5	Interest and other costs of finance paid	77	71
1.6	Income taxes paid		
1.7	Other -		
	Management & consulting fees received	68	172
	Exploration costs reimbursed by JV Partner	1,404	2,382
	R & D Tax Incentive	-	36
	Sundry income	3	8
	Net Operating Cash Flows	(464)	(740)
	Cash flows related to investing activities		
1.8	Payment for purchases of:		
	(a) prospects		

(21)

**(21)** 

(485)

(25)

20

**(5)** 

(745)

(b) equity investments(c) other fixed assets

(b) equity investments(c) other fixed assets

(a) prospects

Proceeds from withdrawal of security deposits

Total operating and investing cash flows

(carried forward)

Proceeds from sale of:

Loans to other entities

Loans repaid by other entities

Net investing cash flows

1.9

1.10

1.11

1.12

1.13

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

			I
1.13	Total operating and investing cash flows		
	(brought forward)	(485)	(745)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	-	1,872
1.15	Proceeds from sale of forfeited shares		·
1.16	Proceeds from borrowings		
1.17	Repayment of borrowings		
1.18	Dividends paid		
1.19	Share issue costs	(1)	(10)
		` '	` ,
	Net financing cash flows	(1)	1,862
	Net increase (decrease) in cash held	(486)	1,117
1.20	Cash at beginning of quarter/year to date	3,232	1,629
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	2,746	2,746

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	123
1.24	Aggregate amount of loans to the parties included in item 1.10	

1.25 Explanation necessary for an understanding of the transactions

Amounts in 1.23 are in relation to: Salary and superannuation paid to managing director; and Directors fees and superannuation paid to non-executive directors

### Non-cash financing and investing activities

2.1	Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Exploration expenditure is being incurred by Emmerson and reimbursed by Evolution Mining Limited pursuant to a farm-in agreement whereby Evolution will sole fund exploration expenditure of \$15 million over three years to earn a 65% interest (Stage 1 Farm-in) in Emmerson's Tennant Creek tenement holdings. A further \$10 million sole funded by Evolution over two years following the Stage 1 Farm-in, will allow Evolution to earn an additional 10% (Stage 2 Farm-in) of the tenement holdings. Emmerson is acting as manager during the Stage 1 Farm-in and is receiving a management fee during this period.

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

**Financing facilities available** *Add notes as necessary for an understanding of the position.* 

		Amount available \$A'000	Amount used \$A'000
3.1	Loan facilities		
3.2	Credit standby arrangements		

## **Estimated cash outflows for next quarter**

		\$A'000
4.1	Exploration and evaluation (to be sole funded by JV Partner)	-
4.2	Development	
4.3	Production	
4.4	Administration	300
	Total	300

# Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.		Current quarter \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	20	32
5.2	Deposits at call	2,726	3,200
5.3	Bank overdraft		
5.4	Other (provide details)		
	Total: cash at end of quarter (item 1.22)	2,746	3,232

# Changes in interests in mining tenements

		Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed			-	
6.2	Interests in mining tenements acquired or increased				

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

# **Issued and quoted securities at end of current quarter**Description includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	Preference +securities (description)			note 3) (cents)	note 37 (cents)
7.2	Changes during quarter (a) Increases				
	through issues (b) Decreases through returns of capital, buy-backs,				
	redemptions	255 52 55	255 (25 454		
7.3	<sup>+</sup> Ordinary securities	377,636,454	377,636,454		
7.4	Changes during quarter				
	<ul><li>(a) Increases</li><li>through issues</li><li>(b) Decreases</li></ul>	793,750	793,750		
	through returns of capital, buy-backs				
7.5	+Convertible debt securities				
7.6	(description) Changes during quarter				
	(a) Increases through issues				
	(b) Decreases through securities matured, converted				
7.7	Options	Options:		Exercise price	Expiry date
	(description and conversion factor)	9,000,000 Rights:	-	\$0.0485	31/12/17
		56,250 1,000,000	-	Nil Nil	25/11/16 04/12/17
		237,500	-	Nil	25/11/17
7.8	Issued during quarter	<i>Options:</i> 9,000,000	-	\$0.0485	31/12/17
7.9	Exercised during quarter	Rights: 56,250	-	Nil	25/11/16
		500,000 237,500	-	Nil Nil	04/12/17 25/11/17
7.10	Expired during quarter	Rights: 25,000	_	Nil	25/11/17
		50,000	-	Nil	25/11/17
7.11	Debentures (totals only)				
7.12	Unsecured notes (totals only)				

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

## **Compliance statement**

- This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 5).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here: Date: 30 January 2015

Company Secretary

Print name: Trevor Verran

### **Notes**

- 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 wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 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.
- Accounting Standards ASX will accept, for example, the use of International Financial Reporting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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