

### Corporate Details:

As at 31 December 2014

ASX code: SAR

### Issued capital:

792.8m ordinary shares

4.3m unvested employee performance rights

#### Substantial Shareholders:

Wroxby Pty Ltd/ Seven Group Holdings Ltd 63.5m (8.0%)

Paradice Investment Management 54.6m (6.9%)

Van Eck Associates Corporation 51.3m (6.5%)

Eley Griffiths Group 40 3m (5.1%)

#### Registered Office:

Level 4 89 St Georges Terrace Perth WA 6000 Telephone: (61 8) 6229 9100 Facsimile: (61 8) 6229 9199

#### Directors:

Mr Geoff Clifford Non-Executive Chairman

Mr Raleigh Finlayson Managing Director

Mr Barrie Parker Non-Executive

Mr Martin Reed Non-Executive

Ms Samantha Tough Non-Executive

For further details contact:

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# SARACEN MINERAL HOLDINGS LIMITED

ACN: 009 215 347

# **QUARTERLY REPORT: DECEMBER 2014**

# **Record Quarter Gold Production**

- Record Quarter Gold Production 42,894 oz, 16% above guidance of 37,000 oz;
- Record Quarter Mine Production from Red October 21,511 oz;
- All in Sustaining Cash Costs (AISC) for December 2014 Quarter of A\$1,191/oz, a fall of A\$257/oz (18%) from the previous quarter;
- Record Operational Cashflow of A\$16.4m for the Quarter;
- On track to achieve the upper end of full year guidance range of 145,000 155,000 oz and AISC of A\$1,150/oz;
- Significant ore stockpile growth with 18,548 oz @ 1.39g/t added during the Quarter. Closing stockpile of 56,400 oz, equivalent to approx' A\$900/oz AISC or \$30 million deferred free cashflow;
- Cash and equivalents of A\$37.2m;
- Gold hedging of 185,743 oz at an average price of A\$1,539/oz;
- Significantly increased exploration activity during the Quarter on the back of strong operational cashflow;
- Karari exploration decline commenced in November 2014, with the first ore drive intersected, returning 7.0m width @ 8.95g/t;
- Continued exceptional exploration results from Red October, including a potential new lode discovery returning 3.7m @ 120.8g/t (RORD067);
- Thunderbox Feasibility Study advancing well, with completion remaining on track for March 2015.

### Comment from Managing Director, Raleigh Finlayson:

"It is with great pleasure that we report our best ever quarter, not just in terms of record gold production of 42,894 ounces, or record mine production from Red October of 21,511 ounces, or record operational cashflow generation of \$16.4 million, but also in terms of our safety performance with 292 days elapsing since our last LTI resulting in our LTIFR falling 16% to 2.1.

On the back of record operational cashflow generation we have been able to aggressively pursue our extensive exploration and development programs across our operations. We are very encouraged by the early indications from these efforts, with 3.7m @ 120.8g/t pointing to a potential new lode discovery at Red October, our inaugural exploration drilling program at Thunderbox progressing ahead of schedule and the intersection of first ore at Karari, with a 7.0m wide ore zone grading 8.95g/t exceeding expectations, only one month into the project's life."

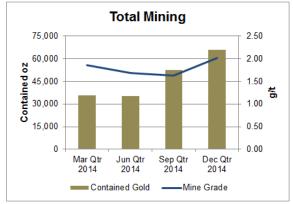
# Summary

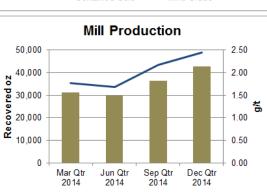
Operations	Units	Mar Qtr 2014	Jun Qtr 2014	Sep Qtr 2014	Dec Qtr 2014
Open Pit Mining					
Total Mining	BCM	1,749,000	1,921,000	1,840,000	1,422,000
Ore Mined	t	525,000	587,000	920,000	937,130
Mine Grade	g/t	1.13	1.25	1.23	1.48
Contained Gold	oz	19,062	23,614	36,420	44,515
Underground Mining					
Ore Mined	t	75,000	63,000	79,000	79,000
Mine Grade	g/t	6.96	5.82	6.23	8.43
Contained Gold	oz	16,888	11,761	15,963	21,511
Total Mining					
Ore Mined	t	600,000	650,000	999,000	1,017,000
Mine Grade	g/t	1.86	1.69	1.63	2.02
Contained Gold	oz	35,950	35,375	52,383	66,026
Mill Production					
Ore Milled	t	616,000	621,000	587,000	602,000
Mill Grade	g/t	1.77	1.68	2.17	2.45
Contained Gold	oz	35,055	33,543	40,861	47,478
Recovery	%	89.1%	89.0%	89.4%	90.3%
Recovered Gold	oz	31,242	29,912	36,525	42,894

Table 1 – Carosue Dam Operations Statistics









Recovered Gold

-Mill Grade

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Figures 1 - 4 – Operations Statistics

## Health & Safety

- No Lost Time Injuries ("LTI's") were recorded during the December Quarter;
- 292 days have passed since the last LTI;
- The LTIFR has fallen to 2.1, 16% below the industry average;
- Saracen's mines rescue team attended the Mine Emergency Response Competition in Perth and ranked 5th overall (out of 12 teams), with 1st place rankings in the Confined Space and Overall Breathing Apparatus events.

# Projects

- Liquefied Natural Gas ("LNG") plant at Carosue Dam has been installed with commissioning nearing completion. First LNG supply to the power station is scheduled for January 2015;
- The \$5.9m, 10.8 million tonne capacity, Tailings Storage Facility at Carosue Dam was completed and all relevant approvals obtained. First tailings discharge is scheduled for February 2015.

## Thunderbox Operations

- Thunderbox Feasibility Study is on track to be completed by March 2015;
- Focus is on the Thunderbox deposit during phase 1, with supplementary feed from Bannockburn, Mangilla, North Well and Rainbow;
- The latest schedule delivers open pit ore from Thunderbox during phase 1, followed by a large scale underground development. This is the subject of current resource extension drilling (refer to the "Exploration" section of this report for additional detail).

## **Exploration**

- Potential new lode discovery at Red October, returning:
  - o 3.7m @ 120.8g/t (RORD067)
- Exploration drilling commenced at Thunderbox, with 9,300m completed, highlights include:
  - o 8m @ 7.5g/t (TBRC003) and
  - o 12m @ 1.7g/t (TBRC002)
  - Assay results from only 3 holes received to date, 20 holes await assay results;
- Bannockburn resource infill drilling program completed, results pending;
- Karari Exploration Decline commenced with first ore intersected, returning:
  - o 7.0m width @ 8.95g/t.

## <u>Finance</u>

- Cash at bank at Quarter end totalled A\$37.2 million, comprising A\$33.9 million held in cash and 2,292 ounces of gold in transit (approx. A\$3.3 million at A\$1,444/oz). Closing cash equivalents of A\$37.2 million (including gold in transit) less debt of A\$12.0 million leaves the Company with a net positive cash position of A\$25.2 million;
- Debt remains unchanged at A\$12.0 million;
- Total gold hedging in place of 185,743 ounces at an average price of A\$1,539/oz.

# **Carosue Dam Operations**

## **Processing**

Carosue Dam	Units	Mar Qtr 2014	Jun Qtr 2014	Sep Qtr 2014	Dec Qtr 2014
Mill Production					
Ore Milled	t	616,000	621,000	587,000	602,000
Mill Grade	g/t	1.77	1.68	2.17	2.45
Contained Gold	oz	35,055	33,543	40,861	47,478
Recovery	%	89.1%	89.0%	89.4%	90.3%
Recovered Gold	oz	31,242	29,912	36,525	42,894

Table 2 – Carosue Dam Operations Processing Statistics

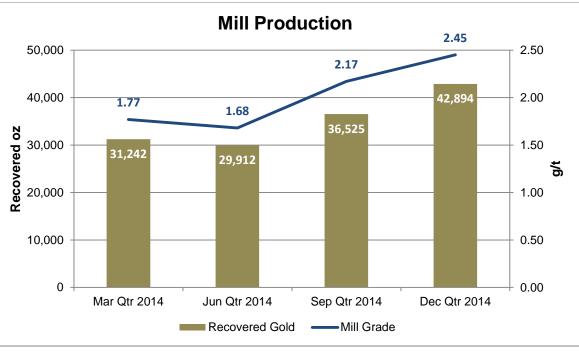


Figure 5 – Carosue Dam Mill Production by quarter

Gold production increased by 17% to 42,894 ounces relative to the previous quarter, which was up by 22% on the June 2014 quarter. The main driver for the increased production over the past 6 months has been a 46% increase in the headgrade from 1.68g/t to 2.45g/t, which is a reflection of the exceptionally high grades being delivered from the Red October underground mine and the increasing grade profile from the Whirling Dervish open pit.

A record 17,829 ounces were produced during the month of December 2014 at an average grade of 2.89g/t from 210,000 tonnes of ore milled at a recovery of 91.3%.

The closing ore stockpile available for processing at the end of the December Quarter was 1.67mt @ 1.05g/t for 56,400 oz. The increase in the closing ore stockpile is due to 1.0mt of ore being mined against 602kt milled during the Quarter due primarily to the declining strip ratio at Whirling Dervish. No deferred mining costs have been allocated to the ore stockpile for cash cost reporting purposes, therefore, once processed in FY2016, these ounces will only incur processing, administration and corporate costs, which is equivalent to approx' A\$900/oz AISC or A\$30 million deferred free cashflow using latest costs and a gold price of A\$1,500/oz.

## **Open Pit Mining**

Operations	Units	Mar Qtr 2014	Jun Qtr 2014	Sep Qtr 2014	Dec Qtr 2014
Open Pit Mining					
Total Mining	BCM	1,749,000	1,921,000	1,840,000	1,422,000
Ore Mined	t	525,000	587,000	920,000	937,130
Mine Grade	g/t	1.13	1.25	1.23	1.48
Contained Gold	oz	19,062	23,614	36,420	44,515

Table 3 – Carosue Dam Operations Open Pit Mining Statistics

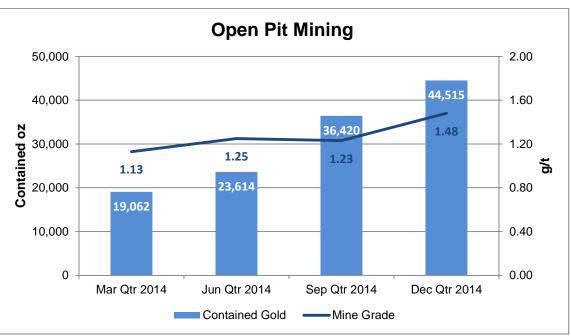


Figure 6 – Carosue Dam Open Pit Mining (Whirling Dervish)

During the Quarter, 1.42 million BCM's were mined from the Whirling Dervish open pit, down 23% or 418,000 BCM's from the previous quarter due to the off hiring of the large excavator fleet (EX2600) on 1 December 2014 as planned.

Total cash expenditure for open pit mining has fallen from \$21.1 million in the September Quarter to \$18.2 million during the December Quarter. Further reductions in cash expenditure will continue in the March and June quarters with the remainder of the pit to be mined utilising one fleet.

Figure 7 shows that mining has advanced to the 210mRL where the strip ratio is currently 2.4:1 and the average grade is 1.60g/t. The average strip ratio will continue to fall in a linear fashion to the base of the pit where the strip ratio is zero. The average grade will jump to ~2.0g/t (at the 175mRL).

The ore stockpile available for milling (currently 1.67mt @ 1.05g/t for 56,400 ounces) will grow substantially over the next 6 months as the Whirling Dervish strip ratio continues to fall. Importantly the average grade will continue to increase. During the December Quarter, 415,000 tonnes at an average grade of 1.39g/t for 18,548 ounces from Whirling Dervish production was added to the ore stockpile. This represents 32% of the current ore stockpile available for processing. These stockpiled ounces have an AISC of approx' A\$700/oz and represent deferred free cashflow of approx' A\$13 million using a spot gold price of A\$1,500/oz.

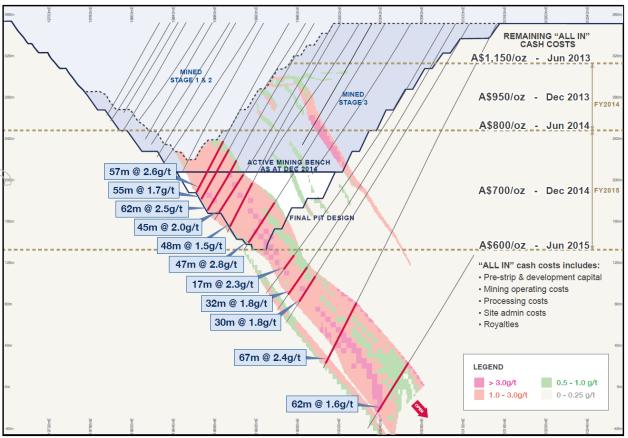


Figure 7 – Cross section of the Whirling Dervish open pit

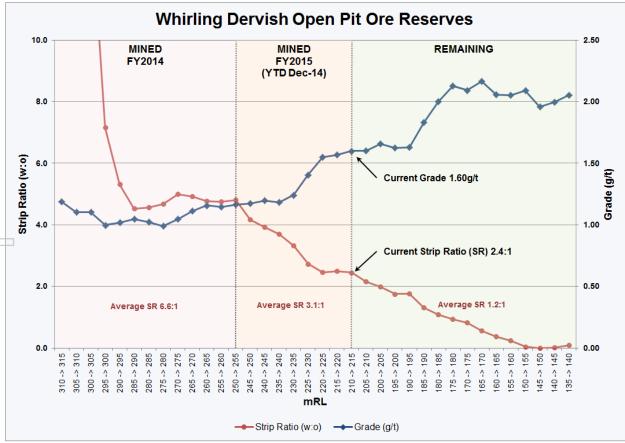


Figure 8 – Whirling Dervish Remaining strip ratio & grade



Figure 9 – Mining at Whirling Dervish – December 2014



Figure 10 – Mining at Whirling Dervish – September 2014

## <u>Underground</u>

Red October	Units	Mar Qtr 2014	Jun Qtr 2014	Sep Qtr 2014	Dec Qtr 2014
Underground Mining					
Ore Mined	t	75,000	63,000	79,000	79,000
Mine Grade	g/t	6.96	5.82	6.23	8.43
Contained Gold	OZ	16,888	11,761	15,963	21,511

Table 4 – Carosue Dam Operations Underground Mining Statistics (Red October)

Red October delivered an exceptional Quarter with ore mined remaining constant relative to the September Quarter at 79,000 tonnes, however the grade increased by 35% to 8.43g/t, resulting in 21,511 contained ounces being mined, eclipsing the previous record of 16,326 ounces set in December 2013 by 31%.

In the first half of FY2015, 37,474 ounces at an average grade of 7.4g/t have been mined from Red October, comfortably ahead of the half year guidance of 30,000 ounces at 6.9g/t.

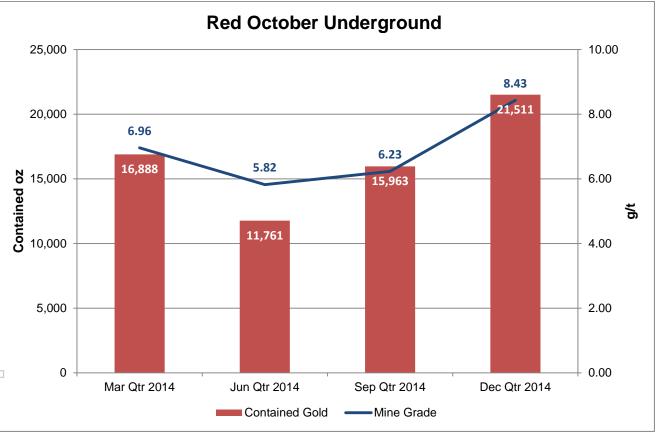


Figure 11 – Carosue Dam Underground Mining (Red October)

Figure 11 highlights the increase in gold production over the past 3 quarters. This is primarily a function of higher grades being mined from the lower levels of the mine, specifically from the 1042, 1022 and 1002 levels. Recent drilling results highlight that very high grades continue with some of the deepest drill holes recording very high grades, including RORD067 returning 3.7m @ 120.8g/t (received during the Quarter), approx. 100m below the current mining level.

## **Projects**

## LNG Update

In September 2014 Saracen announced that it had reached an agreement with Kleenheat Gas' Evol LNG to supply liquified natural gas (LNG) to our Carosue Dam Operations. Saracen is pleased to announce that construction of the new LNG storage and vaporisation facility was completed in January 2015. First gas is scheduled to be supplied to the power station in January 2015.



Figure 12 – LNG storage and vaporisation facility in the foreground of the power station

### Tailings Storage Facility

The new \$5.9 million tailings storage facility (TSF3) at the Carosue Dam operations was completed during the Quarter with regulatory approval received in December 2014. TSF3 has been designed to hold 10.8 million tonnes of discharged tailings. At the annual treatment rate of 2.4 million tonnes, this new facility will hold approximately 4.5 years of tailings, hence no additional capital for a new tailings storage facility will be required before 2019. This represents a reduction in sustaining costs for tailings storage from \$1.33/t of placed tailings down to \$0.51/t. Discharge into the new facility will commence in February 2015.



Figure 13 – New Tailings Storage Facility

# **Thunderbox Operations**

## Feasibility Study

The Thunderbox Feasibility Study remains on track to be completed by March 2015. An exploration drilling program commenced during the Quarter targeting potential extensions to the bulk mineralisation at depth and along strike. Further information on this drilling program is provided in the Exploration section of this report.

The key focus during the Quarter in relation to the Thunderbox feasibility study has been:

- Detailed mine design, scheduling, equipment selection and costings for the initial phase of open pit mining at Thunderbox;
- Evaluation of a large scale underground operation into the bulk A & C Zones at depth. This area is the subject of potential extension from the current drilling program;
- Detailed geotechnical drilling, logging and evaluation for both open pit and underground mining methods;
- Metallurgical testwork for confirmation and feasibility purposes;
- Finalise processing plant refurbishment capital costs and schedule;
- Environmental and regulatory approvals for the phase 1 development of Thunderbox;
- Financial modelling of the mining schedules, including latest operating and capital costs.

The latest Life of Mine Plan ("LOMP") indicates that the development of an open pit at Thunderbox would be followed by a large scale underground mine. Open pit mining at Bannockburn, North Well, Mangilla and Rainbow would then provide supplementary ore supply (subject to positive feasibility study results).

All relevant approvals remain on track to enable a smooth transition from feasibility into development and production. The Office of State Revenue ("OSR") has given a final assessment for stamp duty on the Thunderbox transaction of \$2.26m. Duty will be paid during the March Quarter 2015.

A targeted process has commenced for the potential divestment of the Waterloo Nickel Mine. The assets, despite having near production potential and being highly prospective for further exploration success, have been determined to be non-core, with Saracen to remain focused on gold. Saracen is currently seeking expressions of interest for a potential partial or outright sale.

# **Exploration**

## Thunderbox Drilling Update

During the Quarter, an extensive RC and Diamond drilling program commenced. This drilling program was aimed at increasing resource confidence, extending the known resource and improving the geotechnical knowledge of key areas. The outcome of the drilling will provide valuable information for the final stages of the feasibility study. A total of 3,200m of diamond drilling and 6,100m of RC drilling were completed in the December Quarter. The program is continuing and is expected to be completed in February 2015.

Assay results from the first three holes have been received and returned values in line with, or better than, resource expectations, which further confirms the consistency and robustness of the deposit.

Results include: 8m @ 7.5g/t and 12m @ 1.7g/t.

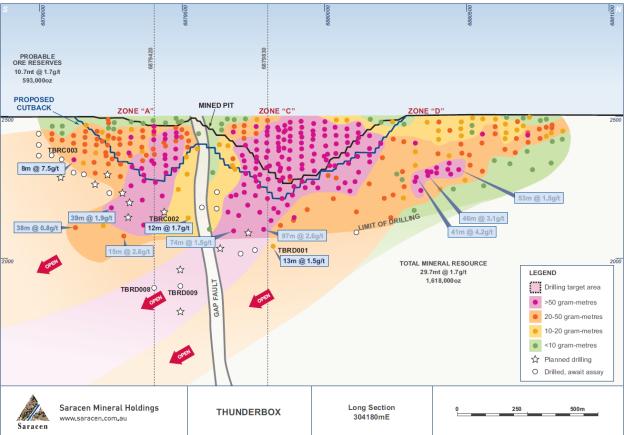


Figure 14 – Thunderbox Long section illustrating recent drilling results

An additional 20 holes have already been drilled, with assay results expected during the March Quarter. A separate announcement will be made following receipt of those results.

### Red October Drilling Update

Underground drilling at Red October continued to focus on resource extensions as outlined in the Exploration Update released on 26 November 2014. Following that update, some encouraging results have been returned including **3.7m** @ **120.8g/t** and **5.8m** @ **8.3g/t**. Both results are located in the footwall position and extend the known, high grade areas.

A separate announcement will be made during the March Quarter once further assay results have been received from the ongoing underground diamond drilling program.

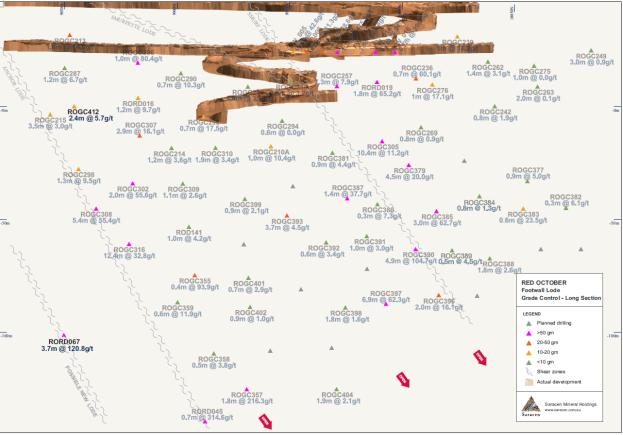


Figure 15 – Red October Long section illustrating recent drilling results

## Karari Exploration Decline Update

Underground development commenced at Karari as planned with the cutting of the main decline portal on 18 November 2014. The exploration decline portal cut was fired on 15 December 2014 and is progressing on schedule with development focused on establishing the first drilling platforms. Exploration diamond drilling is scheduled to commence in February 2015. A total of 298.5m of development (both declines) was completed during the Quarter.

The exploration decline has already passed through the first ore drive level with first ore (**315t @ 8.04g/t**) having been delivered to the ROM. The ore was intersected in the planned position and displayed the characteristic sericite pyrite alteration associated with quartz veining as expected. The mineralised zone was **7m wide at an average grade of 8.95g/t**. Significant attention is being placed on the structural understanding of these higher grade shoots to effectively prioritise the exploration program and subsequent mining.

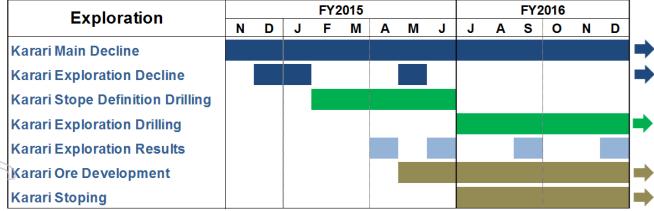


Figure 16 – Karari Exploration Decline development schedule



Figure 17 – Karari Portals – December 2014

# Finance

# Cash Position

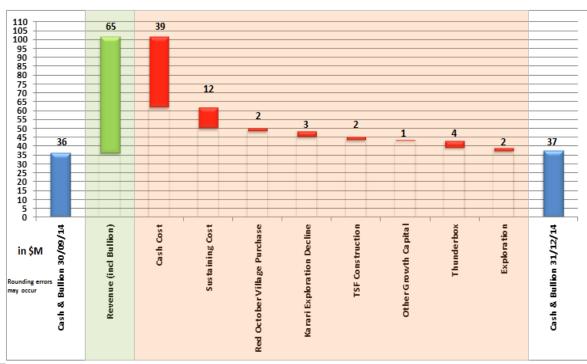
As at 31 December 2014, Saracen's total cash position was A\$37.2 million, comprising A\$33.9 million held in cash and 2,292 ounces of gold in transit (approx. A\$3.3 million at A\$1,444/oz). Closing cash equivalents of A\$37.2 million (including gold in transit) less debt of A\$12.0 million leaves the Company with a net positive cash position of A\$25.2 million.

## **Gold Sales**

Gold sales for the quarter were 42,698 ounces at an average sale price of A\$1,518/oz for total revenue of A\$64.8 million. Of these sales, 33,730 ounces were delivered into hedging at an average price of A\$1,532/oz.

## **Cashflows**

Figure 18 below shows the cash flow movement over the December Quarter. Exploration includes all regional exploration and the Red October underground drilling program. Thunderbox includes all feasibility study costs and exploration activity at Thunderbox and Bannockburn.



### Figure 18 – December 2014 quarter cash movements

- **Revenue**: Revenue from gold sales. Includes gold in transit.
- **Cash Costs**: Cash outflows for mining, ore cartage, processing, administration and ore purchase.
- Sustaining Costs: Cash outflows for royalties, capital works, open pit development, underground development, active mine exploration & corporate expenses (including loan interest).
- **Red October Village Purchase**: One off cash expenditure to purchase the Red October village.
- Karari Exploration Decline: Cash outflows for the development of the Karari exploration decline.
- **TSF Construction**: One off cash expenditure for the construction of the Tailings Storage Facility at Carosue Dam.
- Other Growth Capital: Capital expenditure on new projects, excluding the new TSF.
- **Thunderbox**: Includes expenditure on feasibility study, care & maintenance and exploration.
- **Exploration**: Cash outflows for regional exploration and Red October exploration but excludes Thunderbox.

Operational cash flow generated for the Quarter was \$16.4 million after taking into account all open pit and underground mining costs, ore haulage, processing and site administration expenses as well as royalties, sustaining capital and underground development and drilling at Red October.

It's important to note in Figure 18 that the Red October Village acquisition was a one off expenditure and will result in indefinite savings in operating costs associated with infrastructure costs at Red October. The construction of the TSF at Carosue Dam was completed during the Quarter with only residual payments remaining outstanding during the March Quarter. The bulk of the expenditure on the exploration drilling program at Thunderbox was incurred during the December Quarter, with the entire drilling program at Thunderbox planned to be completed during the March Quarter 2015.

The total cash expenditure on the abovementioned one-off items amounted to approximately \$6m.

# <u>Debt</u>

The Company has outstanding debt of A\$12.0 million at the end of the Quarter under its finance facility with Macquarie Bank Limited. Saracen intends to repay its outstanding debt over the course of the next three quarters on the back of increasing cashflow generation.

## Cash Costs

C1 Cash Costs for the December Quarter were A\$913/oz, a fall of A\$254/oz, or 22%, from the previous quarter's A\$1,167/oz, whilst All-in Sustaining Cash Costs were A\$1,191/oz, a fall of A\$257/oz, or 18%, from the previous quarter's A\$1,448/oz.

"All in" Cash expenditure fell \$2 million to \$51 million due to the off hiring of the larger excavator fleet at Whirling Dervish at the end of November 2014, with total open pit mining costs falling from \$21.1 million to \$18.2 million. The full benefits of reducing open pit expenditure will be seen during the March and June 2015 Quarters with further cash expenditure reductions planned.

All-in Sustaining Cash Costs are forecast to continue to fall to A\$975/oz by June 2015, as declining strip ratios and higher grades from the Whirling Dervish open pit facilitate significantly falling cash cost and increasing cashflow generation.

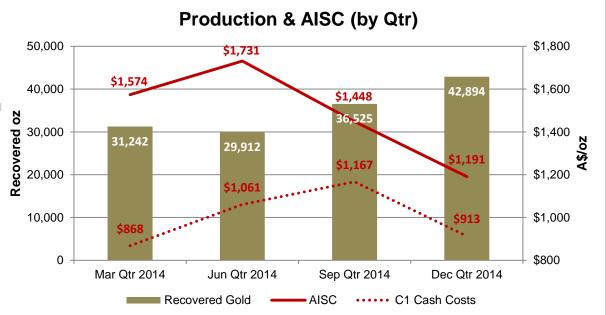


Figure 19 – Production & Cash Costs per ounce by Quarter

Cash Costs	Mar-14 Qtr	Jun-14 Qtr	Sep-14 Qtr	Dec-14 Qtr
Mining - Open Pit	4.8	11.3	20.6	18.2
Mining - Underground	7.2	6.0	6.8	5.1
Ore Cartage	1.3	1.0	1.2	1.6
Processing	11.9	11.6	12.1	12.0
Site Administration	1.9	1.8	2.0	2.3
Ore Purchase	-	-	-	-
Cash Costs	\$27	\$32	\$43	\$3
Royalities	2.3	1.6	2.2	2.9
Capital Works (Inc TSF)	0.3	2.0	0.6	0.5
Open Pit Development	11.2	8.2	0.5	-
Underground Development	4.8	3.9	4.6	6.0
Active Mine Exploration	0.9	0.5	-	-
Corporate	2.7	3.8	2.4	2.6
"All in" Cash Costs	<i>\$49</i>	<i>\$52</i>	<i>\$53</i>	<i>\$5</i> .
Growth Capital	-	2.8	3.8	10.9
Exploration	0.9	1.4	3.0	2.0
Production	31,242	29,912	36,525	42,894
Mining - Open Pit	154	379	564	424
Mining - Underground	230	202	186	119
Ore Cartage	42	34	34	38
Processing	380	387	330	279
Site Administration	62	60	54	53
Ore Purchase	0	0	0	-
Cash Costs	\$868	\$1,061	\$1,167	<b>\$91</b> .
Royalities	74	54	61	67
Capital Works	8	66	16	11
Open Pit Development	357	274	13	-
Underground Development	153	131	126	140
Active Mine Exploration	27	17	0	-
Corporate	86	127	66	59
"All in" Cash Costs	\$1,574	\$1,731	\$1,448	\$1,19

### Table 5 – Cash Costs

Saracen continues to report cash costs using an actual cashflow methodology (as opposed to the depreciation & amortisation method which is commonly used in the industry) as it provides better reconciliation with actual cashflow movements, thereby providing increased transparency of costs to the market. No accounting adjustment for ore stockpile movements or deferred waste is applied.

### <u>Hedging</u>

As at 31 December 2014, Saracen had gold hedging in place covering 185,743 ounces at an average price of A\$1,539/oz. These ounces are to be delivered over the period from January 2015 to June 2016 (inclusive). The mark to market value of the hedge book at 31 December 2014 was A\$15.2 million based on a spot gold price of A\$1,444/oz. Refer to Table 6 for the complete details of the hedge book.

### Raleigh Finlayson Managing Director

Contact: r.finlayson@saracen.com.au

Month	Ounces	Price A\$
Spot Deferred	107,143	\$ 1,412.88
30/01/2015	5,000	\$ 1,690.00
27/02/2015	5,000	\$ 1,690.00
31/03/2015	5,000	\$ 1,690.00
30/04/2015	5,000	\$ 1,690.00
29/05/2015	5,000	\$ 1,700.00
30/06/2015	5,000	\$ 1,700.00
31/07/2015	4,500	\$ 1,700.00
28/08/2015	4,500	\$ 1,700.00
30/09/2015	4,500	\$ 1,710.00
30/10/2015	3,900	\$ 1,710.00
30/11/2015	3,900	\$ 1,720.00
31/12/2015	3,900	\$ 1,720.00
29/01/2016	3,900	\$ 1,720.00
29/02/2016	3,900	\$ 1,730.00
31/03/2016	3,900	\$ 1,730.00
29/04/2016	3,900	\$ 1,740.00
31/05/2016	3,900	\$ 1,740.00
30/06/2016	3,900	\$ 1,750.00
Total	185,743	Avg \$ 1,539.00

### Table 6 – Details of Hedging Contracts

### Competent Persons Statements

The information in the report to which this statement is attached that relates to Exploration Results and Mineral Resources is based upon information compiled by Mr Daniel Howe, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Daniel Howe is a full-time employee of the company. Daniel Howe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore reserves'. Daniel Howe consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

The information on Mineral Resources and Ore Reserves has been extracted from the ASX announcement titled "2014 Mineral Resources and Ore Reserves" dated 9 October 2014. The report is available to view on the ASX Website at <u>www.asx.com.au</u> and on the Company's website at <u>www.saracen.com.au</u>. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources and Ore Reserves, that all market assumptions and technical assumptions underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

### About Saracen

Saracen Mineral Holdings Limited (ASX:SAR) owns 100% of the Carosue Dam operations, 120 km NE east of Kalgoorlie, in the South Laverton region of WA, home to many other gold mines and deposits including Sunrise Dam, Granny Smith, and Wallaby.

Carosue Dam's 2.4 million tonne per annum processing plant produced 133,492 ounces of gold in FY2014 and is forecast to produce approximately 145-155,000oz in FY2015.

Gold production is from the Whirling Dervish open pit mine, supplemented by high grade underground operations at the Red October underground mine.

As at 30 June 2014, the Carosue Dam Operations Mineral Resources was 4.1 million ounces of gold and Ore Reserves 0.9 million ounces of gold.

In May 2014, Saracen completed the acquisition of the Thunderbox Operations, located approx. 45 kms south of Leinster in WA. The Thunderbox Operations are on care and maintenance and include the Thunderbox and Bannockburn gold mines as well as the Waterloo and Amorac nickel mines. There is also a 2.5 million tonne per annum CIL processing plant and associated infrastructure.

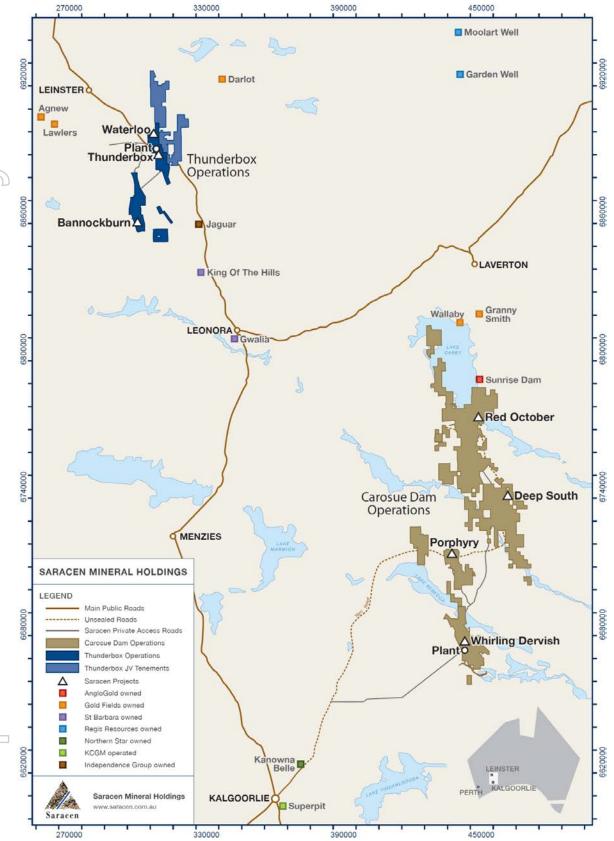
The Thunderbox Deposit was discovered in 1999. Gold production totalled 805,000 ounces when processing operations ended in December 2007. Thunderbox produced at an average cash cost of US\$290/oz with a cash cost in the final year of operation of US\$481/oz.

As at 30 June 2014, the Thunderbox Operations Mineral Resources were at 2.8 million ounces of gold, while Ore Reserves stand at 0.8 million ounces of gold.

As at 30 June 2014, total Mineral Resources for Saracen stands at 6.9 million ounces of gold and 1.7 million ounces of Ore Reserves.

The Waterloo and Amorac deposits have Mineral Resources of 15,000 tonnes of contained Nickel.

For the location of Saracen's projects, refer to the map below.



### Thunderbox

THUNDERBOX	DRILLING DECEN	1BER 2014								Downhole	
Hole	Easting	Northing R	RL	Depth	Azimuth	Dip		rom (m)	To (m)	Width (m)	
TBDD0087	304235	6879435	492.6	150	270	-60	Assays not	yet received			
TBDD0088	304530	6879520	490.8	200.2	90	-60	Assays not	yet received			
TBDD0089	304262.388	6879238.505	491.5	320	90	-50	Assays not	yet received			
TBRC001	304189.5	6879674.9	492.8	446	90	-63.6	Assays not	yet received			
TBRC002	304189.5	6879671.9	492.8	404	110	-63.8		342	354	12	1.6
							and	365	368	3	3.6
							and	374	375	1	1.0
TBRC003	304357.2	6879279.4	487.5	219	90	-60.2		166	5 174	8	7.4
							and	196	5 198	2	1.5
TBRC004	304296.2	6879274.9	491.7	300	90	-60.1	Assays not	yet received			
TBRC005	304420.9	6879161.3	489.0	206	90	-55	Assays not	yet received			
TBRC006	304400	6879160	489.4	220	90	-60.2	Assays not	yet received			
TBRC007	304360	6879160	489.4	315	90	-65.2	Assays not	yet received			
TBRC008	304320	6879240	493.0	260	90	-53	Assays not	yet received			
TBRC009	304232.7	6879374.9	491.7	386	97.5	-62.5	Assays not	yet received			
TBRD001	304104.628	6879880.005	494.8	607.11	90	-59.9		490	491	1	1.
							and	513	514	1	2.2
							and	522	527	5	1.1
							and	531	. 544	13	1.
							and	562	564	2	1.5
TBRD002	304119.655	6879838.081	495.2	573.6	90	-62.6		319	320	1	1.3
TBRD003	304009.6	6879640	495.9	152	90	-59.9	Assays not	yet received			
TBRD004	304138.705	6879798.71	494.0	562.2	90	-62.8	Assays not	yet received			
TBRD005	304183.171	6879739.985	493.7	485.3	90	-53.3	Assays not	yet received			
TBRD006	304299.2	6879320	491.1	318.9	90	-60.4		141	. 142	1	1.
TBRD007	304380	6879200	489.6	250	90	-60	Assays not	yet received			
TBRD008	303959.5	6879470	494.3	721	100	-54.5	Assays not	yet received			
TBRD009	304008.1	6879637	495.9	651.8	110	-60	Assays not	yet received			
TBRD010	304084.4	6880180	493.6	526	110	-60.2	Assays not	yet received			
TBRD011	304138.705	6879795.71	494.0	490.3	110			, yet received			
TBRD012	303949.7	6879560	496.3	194	110	-70	Assays not	yet received			
TBRD013	303959.5	6879470	495.3	62	110			yet received			

RED OCTOBER	R DRILLING DEC	EMBER 2014								Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	
ROEN005	443006.1	6767724.199	228.776	90.1	36.67	-74	no signifi	cant results			
ROEN006	443025.01	6767746.47	136.903	121.1	350.39	-63.7	no signifi	cant results			
ROEN007	443023.67	6767745.658	136.55	126	346.77	-60.7		42.2	42.8	0.6	17.2
							and	64.15	64.45	0.3	4.6
							and	121.2	121.6	0.4	3.7
ROEX029	442845.25	6767983.535	45		210.07	-14.5	in progre	SS			
ROGC409	442924.01	6767921.613	43.756	98.7	132.57	-22.1	no signifi	cant results			
ROGC410	442924.41	6767922.075	43.739	97	124.29		-	82.5	83	0.5	3.5
ROGC411	442924.61	6767922.238	43.607	147	117.50	-25.2		78.9	79.3	0.4	4.0
							and	83.1	83.4	0.3	45.4
ROGC412	442922.47	6767919.521	43.613	170.4	187.64	-19		59.1	59.9	0.8	4.9
						-	and	66			2.6
							and	156.55			5.7
ROGC413	442923.3	6767921.018	43.473	150	161.11	-38		101.2			13.3
ROGC414	442923.21		43.421	173.9				133.6			3.9
ROGC415	442982.6		-4.506					cant results	155.1	1.5	5.5
ROGC416	442982.94		-4.703					cant results			
ROGC417	442982.66		-4.619	182.9				cant results			
RORD054	443033.06		10.314			-		103.4	104.4	1	7.3
RORD055	442872.24		46.768		-			266.6			5.0
NonDoss	112072.21	0700000.500	40.700	554.5	05.21	0.57	and	315.65			2.8
							and	333.5			32.4
RORD056	442872.6	6768006.137	46.589	350.98	103.46	-3.53		314.6			7.4
NonDoso	112072.0	0,00000.137	-10.505	330.30	105.40	5.55	and	341.2			19.9
RORD057	442872.44	6768006.169	46.102	354	105.39	-12.6		199.3			12.3
NOND037	442072.44	0708000.109	40.102	554	105.55	-12.0	and	274.05			2.6
RORD058	442872.26	6768006.254	45.7	378	103.29	-25.2		86			3.1
NOND038	442072.20	0708000.234	43.7	570	105.25	-25.2	and	192.85			17.1
							and	276.9			19.3
							and	309.7			2.8
							and	340.35			8.3
RORD059	443033.81	6767846.506	130.309	159	44.29	-11.2		92.4			4.0
RORD059	443033.81		130.309					cant results	52.9	0.5	4.0
RORD061	443034.44		130.119				0	cant results			
RORD061	443035.33		130.129				0	40.6	40.9	0.3	60.3
KUKDU62	445055.52	0707844.044	150.129	105	74.99	-55.9	and	62.8			3.6
								66.4			
RORD063	443035.6	6767844.235	130.18	125.9	85.27	າວ ⊏	and	cant results	67.2	0.8	3.8
								1	255.05	0.05	2.4
RORD064	442872.53	6768006.004	46.596	300	99.13	-0.38		255			3.4
							and	264.9			2.8
DODDOCE	442076.24	6760006 460	46 205	400	04.40	-	and	317.5			3.8
RORD065	442871.31		46.205	428				402.3			2.7
RORD066	442982.79	6767727.923	-5.2	138	279.39	-21.5		120.5			6.7
							and	127.7			2.6
RORD067	442983.2	6767728.664	-5.149	174	301.26	-37		149.3	153	3.7	120.7

# JORC 2012 Table 1 – Thunderbox

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.).	Sampling methods undertaken at Thunderbox by previous owners have included rotary air blast (RAB), reverse circulation (RC), diamond drillholes (DD) and RC drilling and blast hole sampling within the pit. Limited historical data has been provided by previous owners. Saracen has not carried out any sampling activities at the Thunderbox deposit as the acquisition of the project has not yet been finalised.
	These examples should not be taken as limiting the broad meaning of sampling.Include reference to measures taken to ensure sample representivity and the appropriate calibration	RC, RAB, and DD core drilling is assumed to have been completed by previous holders to industry standard at that time (1999- 2007).
20	of any measurement tools or systems used Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was	All RAB, RC and DD and sampling is assumed to have been carried out to industry standard at that time RC grade control drilling was used to obtain 1m samples or 2m composite samples from which 3 kg was pulverised to create a 50g charge for fire assay, while blast hole samples were composited into 2.5m before a 3kg sample was obtained for pulverising to a final 50g charge for fire assay.
	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 (e.g. submarine nodules) may warrant disclosure of detailed information	
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	The deposit was initially sampled by 470 RAB holes. Further drilling included 306 RC holes (assumed standard 5 ¼ ''bit size), 216 HQ, NQ and PQ diamond drillholes, approximately 15,400 blast holes and 2,400 RC grade control holes. Some diamond drilling carried out for geotechnical studies was oriented (the method is unknown), it is unknown if other core was oriented.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed Measures taken to maximise sample recovery and	Recoveries for some grade control drilling and blast hole sampling have been recorded based on a visu weight estimate. No other recoveries have been provided, it is unknown if they were recorded It is unknown what, if any, measures were taken to ensure sample recovery and representivity.
$\supset$	ensure representative nature of the samples 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.	Any historical relationship is not known.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in	Logging of diamond drill core, RAB, RC and blast hole chips record lithology, mineralogy, texture, mineralisation, weathering, alteration and veining. Some diamond drilling has been photographed and geotechnically logged to provide data for geotechnic studies. it is unknown if all diamond core was photographed.

Criteria	JORC Code Explanation	Commentary
	nature.	
	Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant	All drillholes appear to have been logged in full.
<u>&gt;</u>	intersections logged	
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half	The sampling method for drill core is unknown.
and sample preparation	or all core taken.	
	If non-core, whether riffled, tube sampled, rotary split,	The sampling method for exploration RAB and RC drilling is unknown.
6	etc and whether sampled wet or dry.	Grade control RC drilling has been cone split while blast hole sampling has been riffle split. Wet drilling
2		was rarely encountered, and extra care was taken to clean the splitter after encountering wet samples.
		Drillholes in puggy, wet clays were abandoned and redrilled once dewatering of the pit had commenced.
5		Care was taken to adjust the splitter orifice for grade control drilling to ensure the sample weight did not
$\mathcal{D}$		exceed 3kg, meaning no subsampling was needed at the preparation stage.
6	For all sample types, the nature, quality and	The sampling techniques for exploration RAB, RC and DD drilling are unknown, best practice is assume
Ð	appropriateness of the sample preparation technique.	The sample preparation of RC grade control drilling and blast hole sampling involved oven drying, coars
l K		crushing and total grinding in an LM5.
J	Quality control procedures adopted for all sub-	Best practice is assumed at the time of historic RAB, DD and RC sampling.
	sampling stages to maximise representivity of	Procedures adopted to ensure sample representivity for RC grade control and blast hole sampling
	samples.	included weight analysis to determine split ratio (at least 2 holes per program) and sizing analysis of eve
T	Management to keep to another that the compliant is	25 <sup>th</sup> sample, with an expected return of 90% passing 75um.
	Measures taken to ensure that the sampling is representative of the in situ material collected,	It is unknown if duplicate sampling was performed on exploration RAB, RC and DD drilling. Field duplicates were carried out on RC grade control drilling at a rate of one per hole, collected from the
	including for instance results for field	second sample port on the cone splitter. Duplicates were carried out at a rate of 1 in 20 for blast hole
	duplicate/second half sampling.	sampling.
	Whether sample sizes are appropriate to the grain	Analysis of data determined sample sizes were considered to be appropriate.
D	size of the material being sampled.	Analysis of data determined sample sizes were considered to be appropriate.
Quality of assay data and		A 50 gram fire assay with AAS finish was used to determine the gold concentration for all grade control
aboratory tests	assaying and laboratory procedures used and	samples. This method is considered suitable for determining gold concentrations in rock and is a total
	whether the technique is considered partial or total.	digest method.
5		Methods for exploration RC, RAB and DD drilling included fire assay with AAS finish, BAAS and unknow
D		methods.
	For geophysical tools, spectrometers, handheld XRF	The clay mineralogy of the deposit was investigated using PIMA (Portable Infra-red Microscopic Analyse
	instruments, etc, the parameters used in determining	analysis to assist with geological interpretation. This data was not used in the estimation process.
	the analysis including instrument make and model,	
	reading times, calibrations factors applied and their	
5	derivation, etc.	
$\bigcirc$	Nature of quality control procedures adopted (e.g.	Historic RAB, DD and RC drilling is assumed to have been carried out to industry standard regarding
	standards, blanks, duplicates, external laboratory	QAQC procedures.
	checks) and whether acceptable levels of accuracy	A comprehensive QAQC protocol was established for Grade control RC and blast hole sampling.
	(i.e. lack of bias) and precision have been	Standards (certified reference materials of known grade supplied by Geostats), Blanks and field duplicat
	established.	were carried out at a rate of 1 in 20 samples. Approximately 10% of analyses were repeated by the
		laboratory based on grade of original assays. The laboratory also carried out an internal QAQC program
		utilising its own blanks and standards.
		Approximately 5% of pulps from RC drilling were retrieved and submitted to an external laboratory as a

Criteria	JORC Code Explanation	Commentary
		further check.
		Analysis of QAQC data determined acceptable levels of accuracy with no bias existing in the dataset.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	It is unknown if historic intercepts were verified by alternative company personnel.
	The use of twinned holes.	A number of exploration RC holes were drilled to twin original RAB holes and verify results.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols	Limited documentation of this nature has been provided. Logging of RC grade control drilling was completed on computer before validation and loading into the database. Limited drilling data has been supplied in an Access database. RC grade control holes were chip trayed for future reference
	Discuss any adjustment to assay data.	It appears no adjustment was made to assay data.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Spectrum Surveys were contracted to survey in a base line through the central area of the deposit after initial discovery. Holes were then located using DGPS. The accuracy of the instrument used is unknown Drilling within the pit was surveyed by company personnel using a Geodimeter 600 robotic total station with an accuracy of +/- 10 mm. Downhole surveys for exploration RC and DD drilling were carried out using an Eastman single shot camera at regular intervals, while approximately 10% of grade control RC drillholes were surveyed using an Eastman single shot camera.
	Specification of the grid system used.	MGA Zone 51 grid coordinate system is used
	Quality and adequacy of topographic control.	Kevron Geomatic Services flew and processed aerial photography and provided ortho images at 1:5000 scale over the Thunderbox deposit and environs.
Data spacing and	Data spacing for reporting of Exploration Results.	No exploration results reported in this release
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The drilling is distributed and spaced such that geological and grade continuity can be established to estimate the mineral resource and ore reserve appropriately. The mineralisation is continuous over a 2km strike length, therefore the 80m x 80m exploration drill spacing effectively defines the continuity.
Orientation of data in relation to geological structure	Whether sample compositing has been applied.	Historic RAB drilling was sampled with 4m composite samples. Grade control RC drilling was carried out on 2m composite samples, while blast hole sampling was carried out on 2.5m composites.
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The bulk of the drilling has been oriented to the east in order to provide the best intersection angles possible for the steeply west dipping orebody.
	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.	All drilling from surface has been drilled as close to perpendicular as possible. This has reduced the risk of introducing a sampling bias as far as possible.
Sample security	The measures taken to ensure sample security.	Information on sample security measures has not been provided
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No evidence of external reviews has been supplied. QAQC procedures appear to have been regularly internally reviewed and updated.

Criteria	of Exploration Results JORC Code Explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical 	M36/504, M36/512 and M36/542 form part of the Thunderbox project currently being acquired by Saracen and are in good standing. There are no native title claims over the Thunderbox deposit. A number of heritage surveys have been undertaken with Aboriginal groups with no sites of significance identified. In addition a detailed archaeological survey has been conducted with no sites of significance identified The tenements are in good standing and the license to operate already exists.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Extensive nickel exploration was undertaken in the area during the 1960s and 1970s. Grassroots gold and PGE exploration was undertaken during and since the 1980s by BHP, Dominion, Dalrymple Resources and Forrestania Gold. Thunderbox was discovered in 1999.
Geology	Deposit type, geological setting and style of mineralisation.	Thunderbox is a mesothermal lode gold deposit located at the southern end of the Yandal greenstone belt in an area where several major shear zones converge and join with the Perseverance Fault. The shear zone dips at 30° to 60° WSW, with the exception in the vicinity of the mineralisation, where the shear is vertical to steeply dipping. Mineralisation is hosted by strongly deformed, silicified and carbonate altered albite-quartz porphyry in the hangingwall of the shear zone. The shear juxtaposes foliated basalts and intrusive porphyries in the hangingwall against sedimentary rocks in the footwall. The zone of shearing is over 200m wide. An ultramafic unit occurs within the shear, in the footwall of the deposit and is attenuated along the shear. The main gold related hydrothermal alteration assemblage comprises quartz-ankerite-arsenopyrite- pyrrhotite-galena and gold. This assemblage has been overprinted by a retrograde chlorite-epidote-white mica-biotite-quartz and pyrite assemblage. Syn-mineralisation veins have a continuum of vein textures ranging from laminated to pseudo-breccias.
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 drill holes: - easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation	A total of 412 holes have been used in the mineral resource and are deemed to be material. It is not practical to summarise all of the holes here in this release. Future drill hole data will be periodically released or when a results materially change the economic value of the project.
	<ul> <li>above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	Exclusion of the drilling information will not detract from the reader's view of the report.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	No exploration results are reported in this release.

Criteria	JORC Code Explanation	Commentary
	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.	No exploration results are reported in this release.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	There are no metal equivalents reported in this release.
Relationship between mineralisation widths an Intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to	Saracen has not previously reported exploration results nor are any included in this release. The geometry of the mineralisation is well known and true thickness can be calculated.
	the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Drilling intersects the mineralisation perpendicular and at an average intersection angle of 45 degrees.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Included in this release is an appropriately orientated longsection of the mineralisation, illustrating the centroids of the intercept point projected to a plane. Included also in this release are cross section views of the mineralisation which provides the visual perspective of the typical drilling angle.
Balanced Reporting	Where comprehensive reporting of all Exploration Results are not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Saracen has not previously reported exploration results nor are any included in this release.
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>Historic activities have included drilling to obtain samples for metallurgical test work, bulk density analyses and geotechnical analyses.</li> <li>A number of geophysical surveys including dipole-dipole IP, Gradient array IP and TEM were carried out over known mineralisation to determine effectiveness in delineating mineralisation/alteration. None were deemed effective.</li> <li>An environmental survey investigated the erosional characteristics of the soil, surface hydrology and groundwater and identified no issues.</li> <li>A partial leach soil sampling program carried out over the deposit was deemed effective in identifying anomalous gold values associated with the deposit.</li> </ul>
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Saracen is currently working on establishing exploration opportunities which will extend the known mineralisation at depth. This will primarily focus on understanding the key geological relationships and critical continuity directions to target depth extensions.

# JORC 2012 Table 1 – Red October

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Sampling activities conducted at Red October by Saracen include reverse circulation (RC), surface and underground diamond drilling (DD) and underground face chip sampling. Historic sampling methods conducted since 1989 have included aircore (AC), rotary air blast (RAB), RC and surface and underground DD holes.
0	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Sampling for RC, DD and face chip sampling is carried out as specified within Saracen sampling and QAQC procedures as per industry standard. RC chips and NQ diamond core provide high quality representative samples for analysis. RC, RAB, AC and surface DD drilling completed by previous holders is assumed to adhere to industry standard at that time (1989- 2004).
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information	Saracen sampling activities have been carried out to industry standard. Reverse circulation drilling is used to obtain 1m samples, diamond core is sampled to geological intervals (0.2m to 1.2m) and cut into half core and UG faces are chip sampled to geological intervals (0.2 to 1m), with all methods producing representative samples weighing less than 3kg. Samples are selected to weigl less than 3 kg to ensure total sample inclusion at the pulverisation stage. Saracen core and chip samples are crushed, dried and pulverised to a nominal 90% passing 75µm to produce a 40 g sub sample for analysis by FA/AAS. Visible gold is occasionally encountered in drillcore and face samples. Historical AC, RAB, RC and diamond sampling is assumed to have been carried out to industry standard at that time. Analysis methods include fire assay, aqua regia and unspecified methods.
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	The deposit was initially sampled by 495 AC holes, 73 RAB holes, 391 RC holes (assumed standard 5 ¼' bit size) and 159 surface diamond NQ and HQ core holes. 5 RC holes were drilled using a 143mm diameter bit with a face sampling hammer. The rig was equipped with an external auxiliary/ booster. Saracen has previously completed 6 reverse circulation drillholes, 9 surface HQ and NQ diamond drillholes, 258 underground NQ diamond drill holes and sampled 622 underground faces. All diamond drill core has been oriented using an Ezi-mark tool. Some historic surface diamond drill core appears to have been oriented by unknown methods.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed	RC chip recoveries are recorded in the database as a percentage based on a visual weight estimate. Underground and surface diamond core recoveries are recorded as percentages calculated from measured core versus drilled metres, and intervals are logged and recorded in the database. Diamond core recoveries average >90%. Limited historic surface sampling and surface diamond recoveries have been recorded.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	During RC drilling daily rig inspections are carried out to check splitter condition, general site and address general issues. Ground condition concerns led to extensive hole conditioning meaning contamination was minimised and particular attention was paid to sample recovery. Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking.

Criteria	JORC Code Explanation	Commentary
		Depths are checked against depth given on the core blocks. UG faces are sampled left to right across the face allowing a representative sample to be taken due to the vertical nature of the orebody. Historical AC, RAB, RC and diamond drilling to industry standard at that time.
	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.	There is no known relationship between sample recovery and grade for RC drilling. Diamond drilling has high recoveries due to the competent nature of the ground meaning loss of material is minimal. Any historical relationship is not known.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of all RC chips and diamond drill core is carried out. Logging records lithology, mineralogy, texture, mineralisation, weathering, alteration and veining. Logging is both qualitative and quantitative in nature. Geotechnical and structural logging is carried out on all diamond core holes to record recovery, RQD, defect number, type, fill material, shape and roughness and alpha and beta angles. Core is photographed in both dry and wet state. All faces are photographed and mapped. Qualitative and quantitative logging of historic data varies in its completeness. Some surface diamond dril photography has been preserved.
Ŭ	The total length and percentage of the relevant intersections logged	All RC and diamond drillholes are logged in full and all faces are mapped. Historical logging is approximately 95% complete, some AC, RAB and RC pre-collar information is unavailable.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	All diamond core is cut in half onsite using an automatic core saw. Samples are always collected from the same side.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC drilling has been cone split and was dry sampled. UG faces are chip sampled using a hammer. AC, RAB and RC drilling has been sampled using spear, grab, riffle and unknown methods.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation of RC chips, diamond core and UG face chips adhere to industry best practice. It is conducted by a commercial laboratory and involves oven drying, coarse crushing then total grinding using an LM5 to a grind size of 90% passing 75 microns. Best practice is assumed at the time of historic sampling.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	All subsampling activities are carried out by commercial laboratory and are considered to be satisfactory. Sampling by previous holders is assumed to adhere to industry standard at the time.
	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.	RC field duplicate samples are carried out at a rate of 1:20 and are sampled directly from the on-board splitter on the rig. These are submitted for the same assay process as the original samples and the laboratory are unaware of such submissions. No duplicates have been taken of UG diamond core or face samples. Sampling by previous holders assumed to be industry standard at the time.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes of 3kg are considered to be appropriate given the grain size (90% passing 75 microns) of the material sampled.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	A 40 gram fire assay with AAS finish is used to determine the gold concentration for RC chip, UG diamone core and face chip samples. This method is considered one of the most suitable for determining gold concentrations in rock and is a total digest method.

Criteria	JORC Code Explanation	Commentary
		Historic sampling includes fire assay, aqua regia and unknown methods.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were utilised for reporting gold mineralisation.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Certified reference material (standards and blanks) with a wide range of values are inserted into every RC diamond drillhole and UG face to assess laboratory accuracy and precision and possible contamination. These are not identifiable to the laboratory. QAQC data returned are checked against pass/fail limits with the SQL database and are passed or failed on import. A report is generated and reviewed by the geologist as necessary upon failure to determine further action.
		QAQC data is reported monthly and demonstrates sufficient levels of accuracy and precision. Sample preparation checks for fineness are carried out to ensure a grind size of 90% passing 75 microns. The laboratory performs a number of internal processes including standards, blanks, repeats and checks. Industry best practice is assumed for previous holders. Historic QAQC data is stored in the database bur not reviewed.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intercepts are verified by the Geology Manager and corporate personnel.
) J	The use of twinned holes.	No specific twinned holes have been drilled at Red October but underground diamond drilling has confirmed the width and grade of previous exploration drilling.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols	Primary data is collated in a set of excel templates utilising lookup codes. This data is forwarded to the Database Administrator for entry into a secure acQuire database with inbuilt validation functions. Chips from RC drillholes are stored in chip trays for future reference. Remaining half core is stored in core trays and archived on site Hard copies of face mapping and sampling records are kept on site. Data from previous owners was taken from a database compilation and was validated as much as
5	Discuss any adjustment to assay data.	practicable before entry into the Saracen acQuire database. No adjustments have been made to assay data. First gold assay is utilised for resource estimation. Reassays carried out due to failed QAQC will replace original results, though both are stored in the database.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	All drillhole collar s are picked up by company surveyors using a Leica TS15i (total station) with an expected accuracy of +/-2mm. Underground faces are located using a Leica D5 disto with and accuracy of +/- 1mm from a known survey point. Exploration RC holes have been gyroscopically downhole surveyed by ABIMS where possible once drilling is completed. Surveys are carried out every 30m downhole during RC and diamond drilling using an Eastman single shot camera.
	Specification of the grid system used.	A Lastman single shot camera.         Previous holders' survey accuracy and quality is generally unknown.         A local grid system (Red October) is used. It is rotated 44.19 degrees east of MGA_GDA94.         The two point conversion to MGA_GDA94 zone 51 is         ROEast       RONorth         RL         Point 1       5890.71         10826.86       0         444223.25       6767834.66

Criteria	JORC Code Explanation	Commentary
	•	Point 2 3969.83 9946.71 0 442233.31 6768542.17 0
		Historic data is converted to Red October local grid on export from the database.
	Quality and adequacy of topographic control.	DGPS survey has been used to establish a topographic surface.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The nominal spacing for the reported results are not uniform and therefore a definitive drill spacing will not be quoted
	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.	Not all data reported meets the required continuity measures to be considered for inclusion in a resource estimate. Holes reported inside or with in 40m of the resource will be incorporated into the resource model, or if sufficient density of data confirms continuity, it will be considered for inclusion in the resource.
Orientation of data in relation to geological structure	Whether sample compositing has been applied.	RC drillholes are sampled to 1m intervals and underground core and faces are sampled to geological intervals; compositing is not applied until the estimation stage. Some historic RAB and RC sampling was composited into 3-4m samples with areas of interest re-sampled to 1m intervals. It is unknown at what threshold this occurred.
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	RC drilling was carried out at the most appropriate angle possible. The mineralisation is intersected as closely as possible to perpendicular. The steeply dipping nature of the mineralisation means that most holes pass through mineralisation at lower angles than ideal. Production reconciliation and underground observations indicate that there is limited sampling bias. Underground diamond drilling is designed to intersect the orebody in the best possible orientation given the constraints of underground drill locations. UG faces are sampled left to right across the face allowing a representative sample to be taken due to the vertical nature of the orebody
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No significant sampling bias has been recognised due to orientation of drilling in regards to mineralised structures
Sample security	The measures taken to ensure sample security.	Samples are prepared on site under supervision of Saracen geological staff. Samples are selected, bagged into tied numbered calico bags then grouped into larger secured bags and delivered to the laboratory by Saracen personnel.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	An internal review of companywide sampling methodologies was conducted to create the current sampling and QAQC procedures. No external audits or reviews have been conducted.

p -	Section 2: Reporting of Exploration Results		
	Criteria	JORC Code Explanation	Commentary
	Mineral tenement and	Type, reference name/number, location and	Red October is wholly located within Mining Lease M39/412.
$\Pi$	land tenure status	ownership including agreements or material issues	Mining Lease M39/412 is held 100% by Saracen Gold Mines Pty Ltd a wholly owned subsidiary of
		with third parties such as joint ventures, partnerships,	Saracen Mineral Holdings Limited.
		overriding royalties, native title interests, historical	Mining Lease M39/412 has a 21 year life (held until 2019) and is renewable for a further 21 years on a
		sites, wilderness or national park and environmental	continuing basis.
		settings.	There is one Registered Native Title Claim over M39/412 for the Kurrku group (WC10/18), lodged
			December 2010. Mining Lease M39/412 was granted prior to registration of the Claim and is not affected
			by the Claim. Aboriginal Heritage sites within the tenement (Site Numbers WO 2442, 2447, 2448, 2451,

Criteria	JORC Code Explanation	Commentary
	The security of the tenure held at the time of reporting along with any known impediments to	<ul> <li>2452 and 2457) are not affected by current mining practices.</li> <li>Third party royalties are payable on the tenement: <ul> <li>A Royalty is payable under Royalty Deed M39/411, 412, 413 based on a percentage of deemed revenue (minus allowable costs) on gold produced in excess of 160,000 ounces</li> <li>A Royalty is payable based on a percentage of proceeds of sale or percentage of mineral value.</li> </ul> </li> <li>All production is subject to a Western Australian state government NSR royalty of 2.5%.</li> <li>The tenement is in good standing and the licence to operate already exists.</li> </ul>
	obtaining a licence to operate in the area.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Mount Martin carried out exploration including RAB and RC drilling in 1989. This along with ground magnetics was used to delineate a number of anomalies on islands to the immediate north and south of Red October. Mount Burgess Gold Mining identified a north east trending magnetic anomaly on Lake Carey between the islands considered analogous to Sunrise Dam in 1993. Aircore and RC drilling was carried out to define what would become the Red October pit. Sons of Gwalia entered into a joint venture with Mount Burgess, carrying out RC and diamond drilling to define a pittable reserve before purchasing Mount Burgess' remaining equity. Extension RC and diamond drilling from within and around the pit defined the potential underground resource.
Geology	Deposit type, geological setting and style of mineralisation.	Red October gold mine is situated within an Archaean greenstone belt of the Laverton Tectonic Zone. The stratigraphic sequence consists of footwall tholeiitic basalts, mineralised shale (containing ductile textures defined by pyrite mineralisation) and a hangingwall dominated by ultramafic flows interbedded with high-Mg basalts. Prehnite- pumpellyite facies are evident within both the tholeiitic basalts and komatiite flows. Sulphide mineralisation is hypothesised to have been caused from interaction with an auriferous quartz vein, which has caused the intense pyrite-defined ductile textures of the shale in the upper levels. The fluid is believed to have been sourced from the intruding granitoid to the south of the deposit
Prillhole information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> <li>easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	All material data is periodically released on the ASX: 16/01/2014, 14/10/2013, 23/07/2013, 17/04/2013, 25/01/2013, 14/06/2012, 27/04/2012, 28/07/2011, 03/06/2011
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off	All significant intercepts have been length weighted with a lower cut-off Au grade of 1ppm. No high grade cut is applied

Criteria	JORC Code Explanation	Commentary
	grades are usually Material and should be stated. 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	Intercepts are aggregated with minimum width of 1m and maximum width of 3m for internal dilution. Where stand out higher grade zone exist with in the broader mineralised zone, the higher grade interval is reported also.
	aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents are reported
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	No exploration results have been reported in this release. The geometry of the mineralisation is highly variable and the complex nature of the ore bodies makes the definitive calculation of true thickness difficult. Drilling has been orientated to intersect the various ore bodies at most optimum angle where possible.
0	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	This has not always been achieved. Where holes have drilled parallel to or within a lode, additional holes have been drilled at a more suitable orientation to account for the poor angle.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	No diagrams are referenced in this release.
Balanced Reporting	Where comprehensive reporting of all Exploration Results are not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All results from the recent campaign have been reported.
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.	Dr John McLellan from GMEX Pty Ltd was contracted to carry out a stress modelling study on the Red October deposit. A data set of structural observations from core and field mapping was compiled and user to create a three dimensional mesh of the deposit. A series of regional scale stress fields of varying deformational stages and strengths were applied to the mesh to predict the behaviour of the Red October deposit and highlight areas of increased stress and strain and thus likely mineralisation. Two targets were drilled in the recent RC campaign with results supporting John's findings.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	The exploration effort continues at Red October. The focus remains in the near mine scale areas to extend and build the resource base.