Saracen

27 October 2015

**ASX RELEASE**

# ROBUST FIVE-YEAR OUTLOOK - REVISED

Following is a revised version of the ASX Announcement "Robust Five-Year Outlook" released to the ASX on 15 October 2015.

This revision removes all references to 'Mining Inventory' which is not a JORC compliant term.

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# SARACEN MINERAL HOLDINGS LIMITED

ACN: 009 215 347

# Detailed studies enhance Carosue Dam's robust five-year outlook

***Average annual production ~165,000oz at AISC ~A$1075/oz***

## Key Points

- Latest studies enhance Saracen's five-year outlook for its Carosue Dam gold project in WA
- High grade drilling results from Carosue Dam further enhance the prospectivity and mine life potential of the project
- Technical and financial assessments show Carosue Dam can meet a production outlook of **~165,000ozpa at AISC of ~A$1,075/oz** over five years
- Carosue Dam five-year outlook underpinned by current JORC **Ore Reserves of 587,000oz** and **Mineral Resources of 4.1Moz**
- **Low technical risk** with production dominated by shallow, low-cost underground mines with good metallurgical performance
- Strong scope to grow resources and mine life with all deposits open at depth and along strike
- Carosue Dam combined with Thunderbox project will double Saracen's total production to **~300,000ozpa at AISC of ~A$1075/oz**
- Thunderbox development being funded from internal cashflow meaning Saracen is set to be significant Australian mid-tier producer with low costs, no debt and long life

Saracen Mineral Holdings **(ASX: SAR)** is pleased to advise that extensive technical studies on its Carosue Dam gold project in WA have confirmed that the Company is firmly on track to meet the key performance targets contained in this five-year plan.

The studies, which encompass the geology, mining, engineering, processing and financial facets of Carosue Dam, demonstrate that the operation will meet the five-year production and cost outlook.

Under this plan, Carosue Dam will produce ~165,000ozpa at an All-in Sustaining Cost (AISC) of ~A$1,075/oz over five years.

### *Corporate Details:*

*27th October 2015*

***ASX code*:** SAR

***Corporate Structure:***

Ordinary shares on issue: 792.8m

Unvested employee performance rights: 7.1m

Market Capitalisation: A$444m
(share price A$0.56)

Cash & Bullion (30 September): A$44.9m

Debt: Nil

***Directors:***

Mr Geoff Clifford
Non-Executive Chairman

Mr Raleigh Finlayson
Managing Director

Mr Mark Connelly
Non-Executive

Mr Barrie Parker
Non-Executive

Mr Martin Reed
Non-Executive

Ms Samantha Tough
Non-Executive

***Substantial Shareholders*:**

Wroxby Pty Ltd 8.2%

Paradice Investment Management 7.9%

Karara Capital Pty Ltd 6.2%

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## Mineral Resources & Ore Reserves

The technical studies and five-year outlook are underpinned by the updated JORC 2012 compliant Mineral Resources at Carosue Dam of 79.6 million tonnes at 1.6g/t for 4.1Moz and Ore Reserves of 9.0 million tonnes at 2.0g/t for 587,000oz ounces[1]. The details of the studies are outlined below.

## Recent Drilling Results include:

Karari:

- **KRRC350 – 12m @ 6.3g/t from 272.0m**
- **KRRD068 – 16m @ 4.3g/t from 285.0m**
- **KRGC217 – 26m @ 3.5g/t from 73.0m**
- **KRGC218 – 13m @ 4.1g/t from 56.0m**
- **KRGC221 – 27m @ 5.2g/t from 49.4m**
- **KRGC223 – 19m @ 3.7g/t from 64.3m**
- **KRGC224 – 34m @ 3.7g/t from 64.0m**
- **KRSD026 – 12m @ 6.7g/t from 58.0m**
- **KRSD028 – 7m @ 5.3g/t from 50.0m**
- **KRSD029 – 9m @ 9.1g/t from 21.0m**

Red October:

- **RORD079 – 1.1m @ 47.1g/t from 125.1m**
- **ROGC508 – 0.4m @ 132.0g/t from 74.6m**
- **ROGC514 – 2.8m @ 21.3g/t from 129.8m**
- **ROGC515 – 2.1m @ 15.7g/t from 108.7m**
- **ROGC535 – 0.3m @ 99.3/t from 215.8m**
- **ROGC537 – 0.5m @ 105.0g/t from 182.2m**
- **ROGC539 – 0.3m @ 103.0g/t from 137.6m**
- **ROGC542 – 0.3m @ 90.3g/t from 140.7m**
- **ROGC554 – 0.5m @ 61.1g/t from 138.8m**
- **ROGC559 – 0.6m @ 42.7g/t from 5.8m**
- **ROGC565 – 0.7m @ 162.1g/t from 79.6m**
- **ROGC566 – 1.9m @ 58.0g/t from 16.3m**
- **ROGC567 – 0.7m @ 841.6g/t from 16.6m**

Saracen Managing Director Raleigh Finlayson said the studies confirmed that the Company could meet the key performance targets contained in its five-year outlook for Carosue Dam.

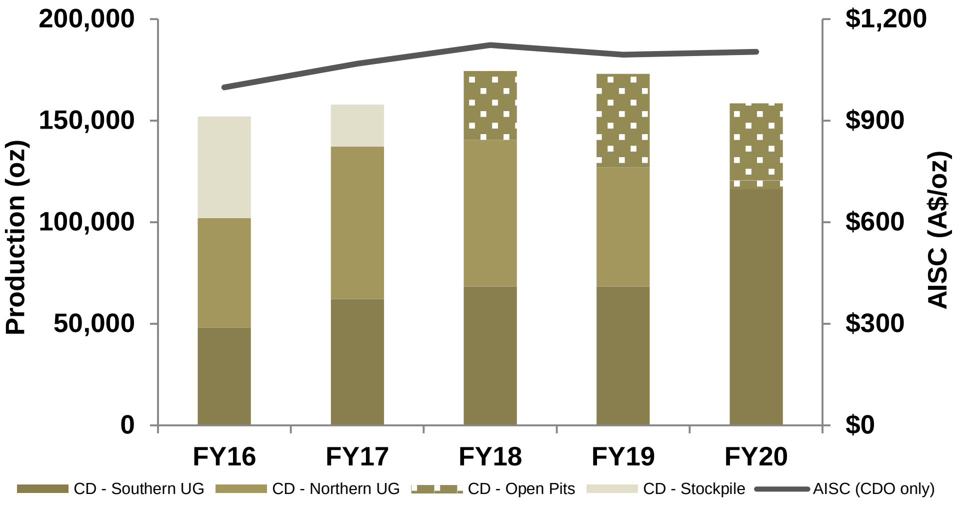
“These studies underpin our five-year outlook for Carosue Dam,” Mr Finlayson said. “The results show that the five-year outlook is technically and operationally well founded, confirming Carosue Dam’s role in Saracen becoming a 300,000ozpa producer with low costs, no debt and long life.

“We are confident we can deliver our five-year outlook, not only on the basis of the technical work done to date, but also on the back of an excellent track record, with our operations performing at or better than guidance on production and costs over the past 3 years.

“With development of our Thunderbox project running ahead of schedule and Carosue Dam’s outlook confirmed by these studies, it is clear we have a long, sustainable future as a significant Australian gold producer with strong cashflow, robust margins and a conservative balance sheet.”

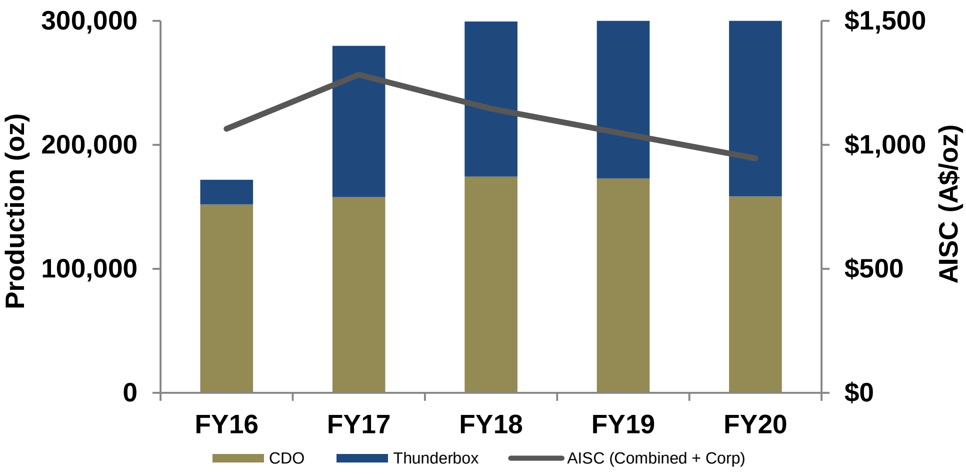
The **Carosue Dam five-year outlook**[2] is presented below:

**Figure 1 – Carosue Dam five-year outlook**




Saracen is on track to double total gold production to a targeted annualised rate of ~300,000ozpa with the development of its second processing centre at Thunderbox resulting in the following **five-year group production outlook**[2]:

**Figure 2 – Saracen Group five-year outlook**




75% of the Group five-year outlook is classified as Ore Reserves, giving a high confidence level. Of the remainder, 2% is classified as Measured and Indicated Resources and 23% is classified as Inferred Resources[2].

**For further information please contact:**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***Notes:***

[1] *These estimates are as at 30 June 2015 (refer ASX announcement "2015 Mineral Resources & Ore Reserves" released 15/10/15).*

[2] *The five-year production and cost outlook is based on: CD Stockpile – Ore Reserves (100%); CD Open Pits – Ore Reserves (100%); CD Northern UG – Ore Reserve (57%), Measured and Indicated Resources (10%) and Inferred Resources (33%); CD Southern UG – Ore Reserves (41%) and Inferred Resources (59%); Thunderbox – Open Pit Ore Reserves (100%) and "Thunderbox Project Feasibility and Development Approval" dated 23/3/15*

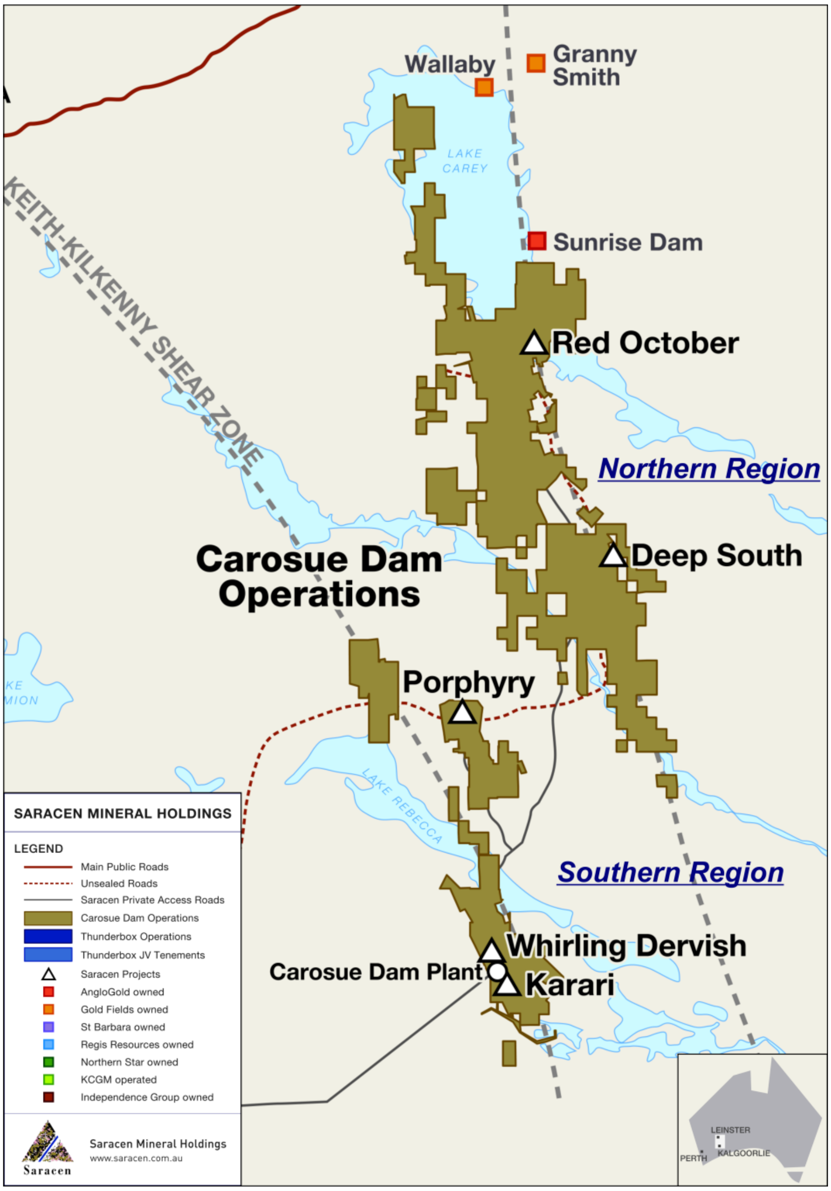
## CAROSUE DAM - OVERVIEW

Saracen owns 100% of the Carosue Dam Operations (CDO), located 120km north east of Kalgoorlie, in the South Laverton region of WA, home to many, significant gold mines and deposits including Sunrise Dam (AngloGold Ashanti), Granny Smith and Wallaby (Goldfields).

CDO's 2.4 million tonne per annum processing plant achieved record production in FY15, delivering 167,531oz at an all-in sustaining cash costs (AISC) of A$1,139/oz, The FY16 production and cost outlook is 150-160,000oz at an AISC of A$1,025-1,075/oz.

CDO is divided into two regions – Southern and Northern (refer Figure 3).

**Figure 3 – Carosue Dam Operations map**




Key assets in the Southern Region include the CDO processing plant and the Karari and Whirling Dervish mines.

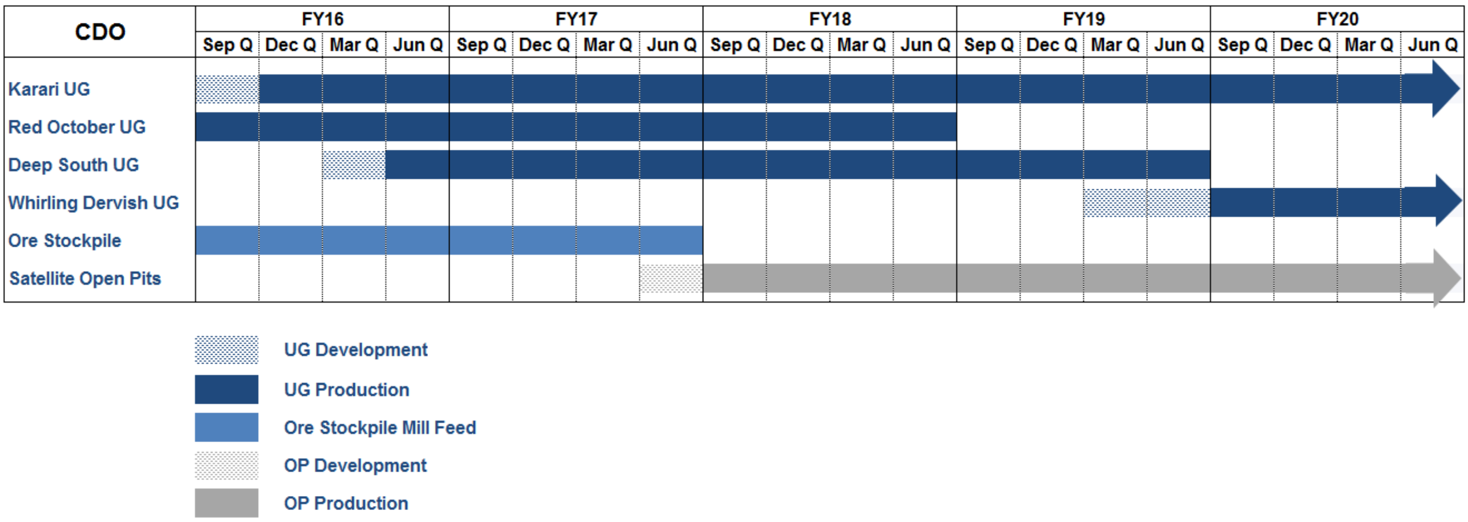
Key assets in the Northern Region include the high grade Red October and Deep South mines.

## CAROSUE DAM 5 YEAR PLAN – STRATEGY

The over-arching mining strategy at CDO is:

- Disciplined approach to project execution, whereby new mines are funded internally from CDO operating cash flows
- The aim is for CDO to remain cash flow positive every quarter, including after allowing for growth capital expenditure. For example, development of Deep South only commences once steady state production and positive cash flow is attained at Karari (December Quarter 2015)
- An organic pipeline of projects with production steadily increasing from ~150kozpa to >170kozpa over next two years as the operations transition to higher grade underground mines
- Karari development completed at the end of the September Quarter 2015, with an initial ~2 year ore reserve, followed by a further ~2 year life already defined (currently in inferred resources)
- Ongoing drilling at Karari designed to prove up a +5 year mine life that will provide a base load ore feed 500m from the CDO processing plant
- Deep South development set to commence during the December Quarter 2015 which will see production increase significantly from the Northern Region
- Red October set to transition to a higher grade/lower volume mine with overheads and resources to be shared with Deep South
- Whirling Dervish Underground is a drilled, technically assessed, de-risked, dewatered, permitted mine – in the development pipeline ready to bring into production later in the 5 year plan
- Pipeline of underground and open pit projects to be systematically ranked, evaluated and de-risked for further optimisation in and beyond the 5 year Plan.
- Large, low grade stockpile volume which can be used to "top up" production to take advantage of excess mill capacity (incurs only processing and administration costs which is equivalent to 0.5g/t cut off), or alternatively utilise this capacity (approximately 500ktpa) for ore purchase agreements if this delivers superior cash flow
- High priority exploration targets, including a combination of greenfields and brownfields opportunities, to provide longevity to CDO beyond the current 5 year plan
- The production profiles outlined in Figures 1 and 2 are based on the production timeline depicted in Figure 4 below. The production profiles for Red October and Deep South are based on currently defined ore reserves and inferred resources. Any additional resources defined with drilling over the 2 years will extend the mines lives of these projects beyond the end of FY18 and FY19 respectively

**Figure 4 – Carosue Dam 5 year production profile**



## SOUTHERN REGION

### Karari

The Karari underground is a rapidly emerging underground mine, located approximately 500m from the Carosue Dam mill. Although drilling only commenced in the March Quarter 2015, Karari is fast becoming a key driver of future growth at CDO.

Multiple lodes, impressive gram-metre intercepts and productive mining characteristics support a shallow, potentially long life, high margin operation which underpins the Carosue Dam 5 year plan.

The current mining method is conventional longhole open stoping. Ore Reserves have been determined based on this method. The next 18 months of production from the northern mining areas (Resurrection, A1 and Hangingwall Lodes) is de-risked from a planning point of view (Ore Reserve status). This provides positive cash flow generation whilst allowing for the establishment of the southern mining area (Dhoni Lode). The Dhoni Lode is highly amenable to low cost, bulk mining methods, which will be assessed over the coming months.

Drilling will continue on the southern areas to facilitate further resource growth, in conjunction with mining and geotechnical studies to evaluate potential bulk mining methods within the Dhoni Lode. A review of bulk mining methods is advanced, given existing in-house expertise and the work completed for the Thunderbox underground feasibility study (including visits to several sites employing bulk mining methods).

**Resource Drilling**

Drilling over the past 3 months has been predominately focused on infill grade control drilling in the upper portion of the project. The purpose was to improve the resource estimate confidence from inferred to indicated and enable a maiden underground Ore Reserves to be stated for Karari.

Drilling highlights include:

- KRRC350 – 12m @ 6.3g/t from 272.0m
- KRRD068 – 16m @ 4.3g/t from 285.0m
- KRGC217 – 26m @ 3.5g/t from 73.0m
- KRGC218 – 13m @ 4.1g/t from 56.0m
- KRGC221 – 27m @ 5.2g/t from 49.4m
- KRGC223 – 19m @ 3.7g/t from 64.3m
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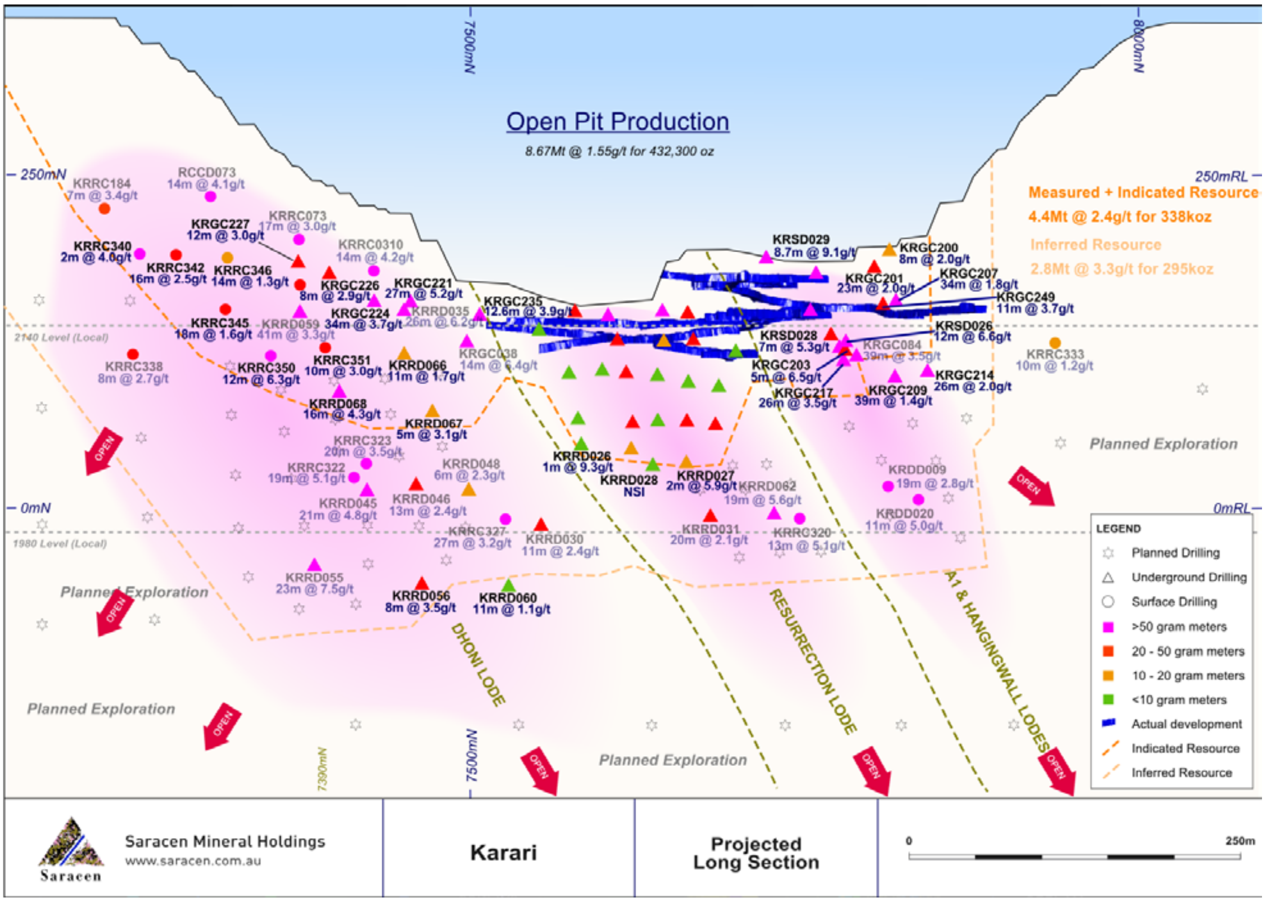
- KRSD028 – 7m @ 5.3g/t from 50.0m
- KRSD029 – 9m @ 9.1g/t from 21.0m

The next phase of drilling at Karari will consist of a combination of resource infill drilling (into the inferred portion of the resource for ore reserve conversion purposes) and a surface exploration drilling program (south of the existing resource). The surface work will target extensions to the high grade mineralisation including previous results of 23m @ 7.5g/t, 21m @ 4.8g/t, 19m @ 5.1g/t and 12m @ 6.3g/t, some of the southern-most holes drilled to date.

Figure 5 highlights past and planned drilling.

Figure 5 - Karari Long Section




## Mineral Resources

Total Mineral Resources at Karari have doubled from 311koz @ 1.6g/t to 633koz @ 2.7g/t following the completion of the stage 1 underground exploration drilling program (28,000m). Importantly, the underground portion of the Mineral Resource has increased by in excess of 0.5Moz @ 2.8g/t.

Table 1 - Karari Total Mineral Resource

| Karari | Measured | | | Indicated | | | Inferred | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Karari O/P | | | | 136,000 | 1.2 | 5,000 | 191,000 | 1.5 | 9,000 | 327,000 | 1.3 | 14,000 |
| Karari U/G | 26,000 | 2.7 | 2,000 | 4,234,000 | 2.4 | 331,000 | 2,602,000 | 3.4 | 286,000 | 6,862,000 | 2.8 | 619,000 |
| ***Karari -Total*** | ***26,000*** | ***2.7*** | ***2,000*** | ***4,370,000*** | ***2.4*** | ***336,000*** | ***2,793,000*** | ***3.3*** | ***295,000*** | ***7,189,000*** | ***2.7*** | ***633,000*** |

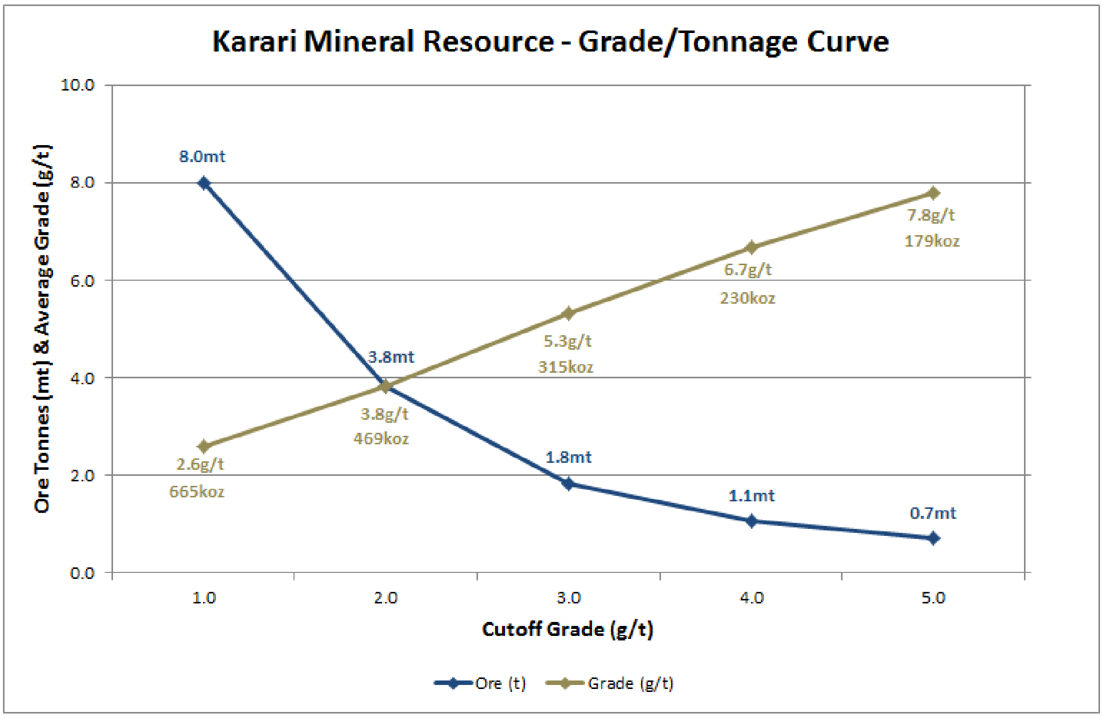
There is a noticeable increase in the grade of the Inferred Mineral Resource (295koz @ 3.3g/t) relative to the Indicated Resource (336koz @ 2.4g/t). This is due to the presence of some of the best drill intercepts to date occurring in the lower portions of the Mineral Resource, which can be clearly seen in Figure 9.

The total Mineral Resource of 633koz at Karari extends vertically over ~250m (refer to Figure 5). Therefore the total endowment runs at ~2,500 ounces per vertical metre.

Conversion of the current inferred resource to indicated, and then to ore reserves, will occur over the next 6-9 months. Given drilling only commenced during the March Quarter 2015, over 320koz of Mineral Resources have been added in just 9 months. The bottom of the Inferred Resource is currently only 450m below surface and remains open at depth and along strike to the south.

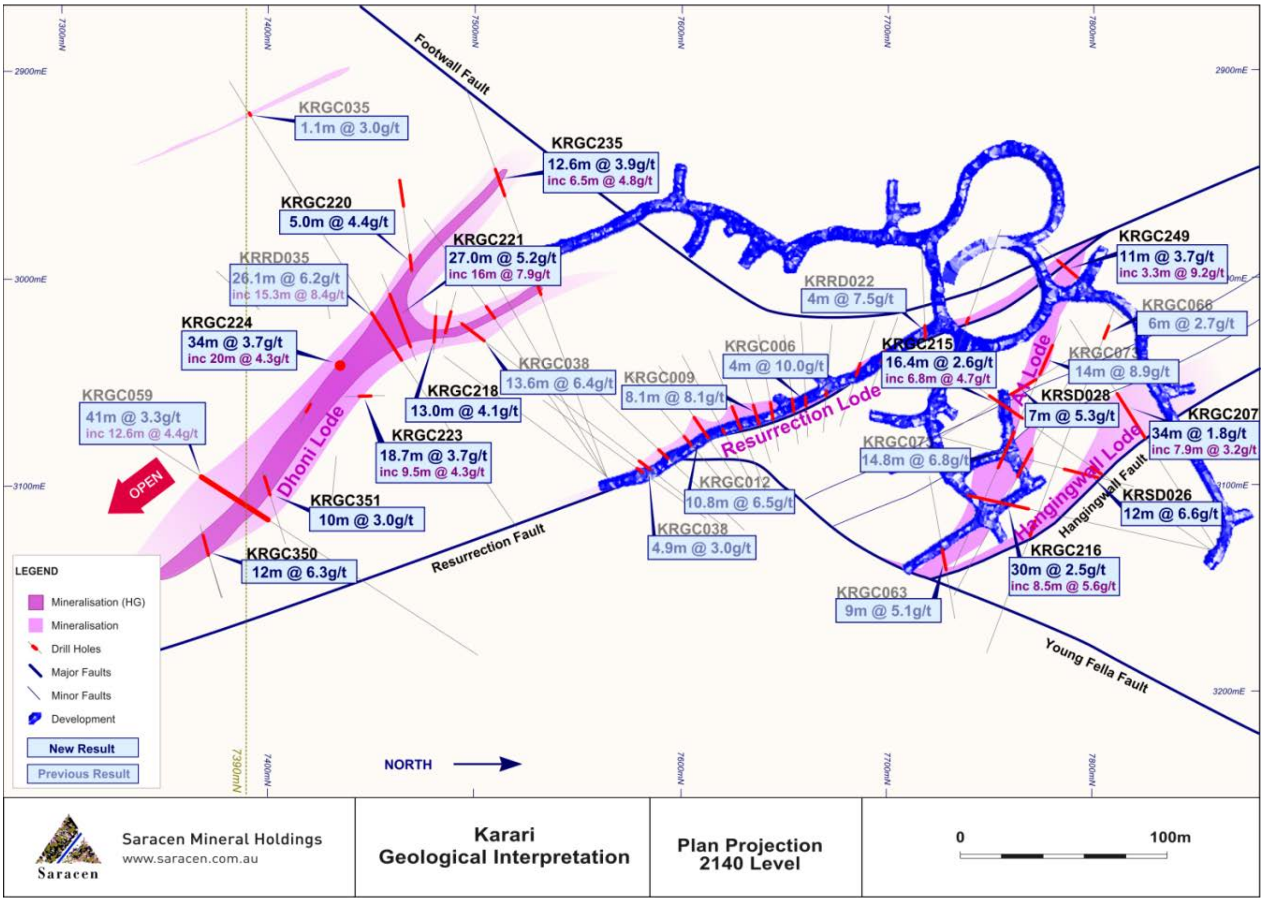
The grade/tonnage curve for the Karari Mineral Resources is shown in Figure 6 below.

**Figure 6 – Karari Grade / Tonnage Curve**




The higher grade material persists predominately in the Dhoni and A1 Lodes and in most cases is encapsulated by a halo of +2g/t material (refer Figure 7) that has better geological and grade continuity along strike and down dip.

**Figure 7 - Karari Plan View**

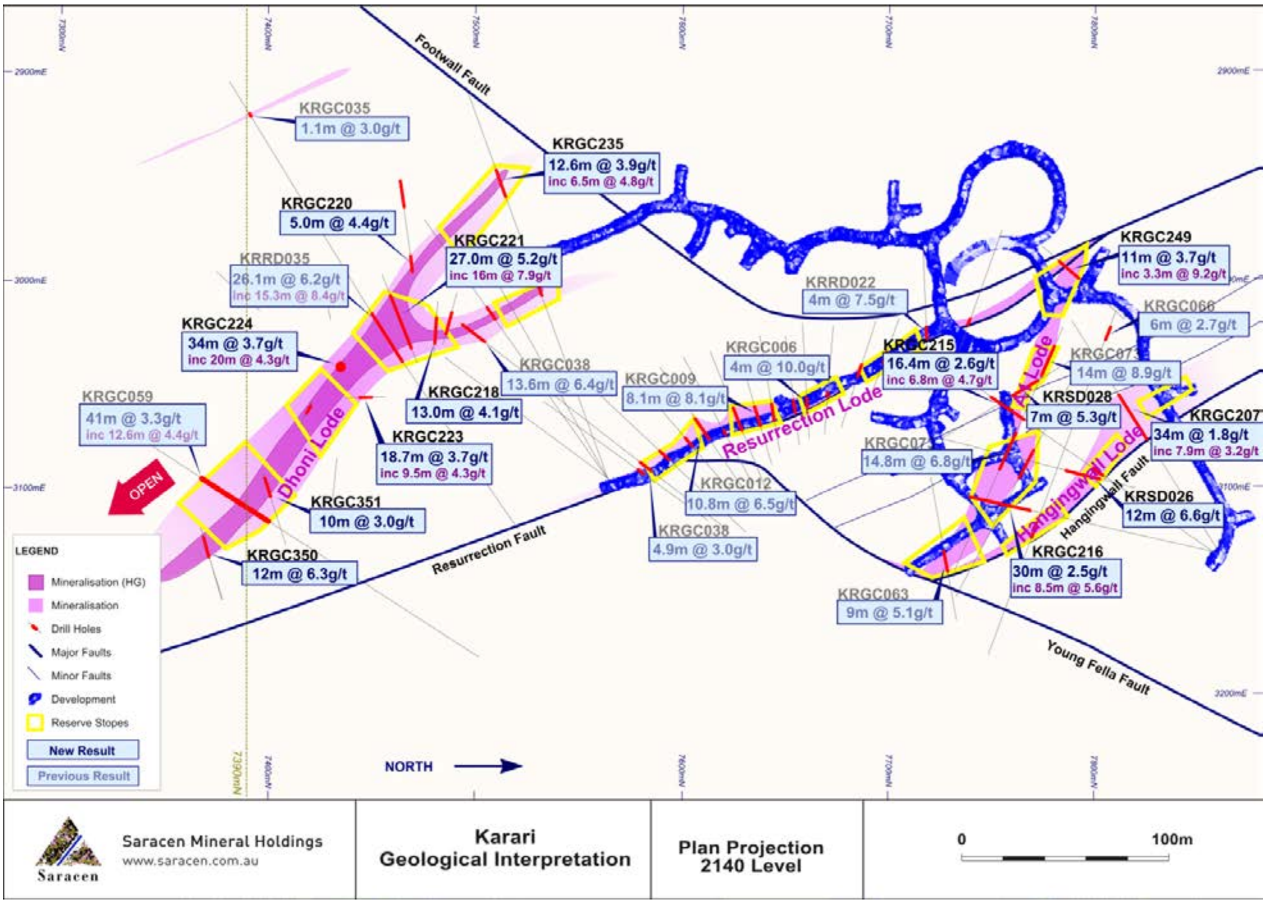


The mining method adopted extracts the high grade core and the +2g/t halo (refer Figure 8) on the basis that:

- The stope shapes honour the geology and not the modelled grade boundaries
- This strategy de-risks the high grade core variability and interpretation
- It reduces the mining costs unit rate ($/t)
- The +2g/t economically viable halo material displaces low grade stockpile ore grading 1.1g/t in FY16 & FY17
- Cash flow from the project is maximised by taking advantage of the prevailing A$/oz gold price and low mining cost environment
- All additional halo ore mined remains above the economic cut-off grade

It's important to note that the deposit exhibits selectivity characteristics. This enables the cut-off grade to be elevated should the gold price fall and/or costs increase to the extent that extracting the +2g/t halo material is no longer economically viable.

**Figure 8 - Karari Plan View illustrating Reserve Stopes with internal selectivity options**



## Underground Ore Reserves

**Table 2 - Karari Ore Reserves**

| Deposit | Mine Type | Proved Reserves | | | Probable Reserves | | | Total Ore Reserves | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Karari | UG | | | | 1,025,000 | 3.0 | 98,000 | **1,025,000** | **3.0** | **98,000** |

The maiden underground Ore Reserves for Karari of 1.0mt @ 3.0g/t for 98koz are shown in Table 2 and depicted in Figure 9 (yellow stope shapes). The blue stope shapes in Figure 8 represent an additional inferred resource of approximately 1.2mt @ 4.0g/t for 152koz (Table 1). This will be the subject of an infill drilling program over the next 6-9 months aiming to convert this portion of the resource into Ore Reserves. It should be noted that, in general, there is a lower level of geological confidence associated with Inferred Mineral Resources (in this case due to limited current density of drilling). There is no certainty that further exploration work will result in the determination of Measured or Indicated Mineral Resources or that the production target will be realised.

**Figure 9 - Karari Long Section highlighting the Ore Reserve and Inferred Resource**

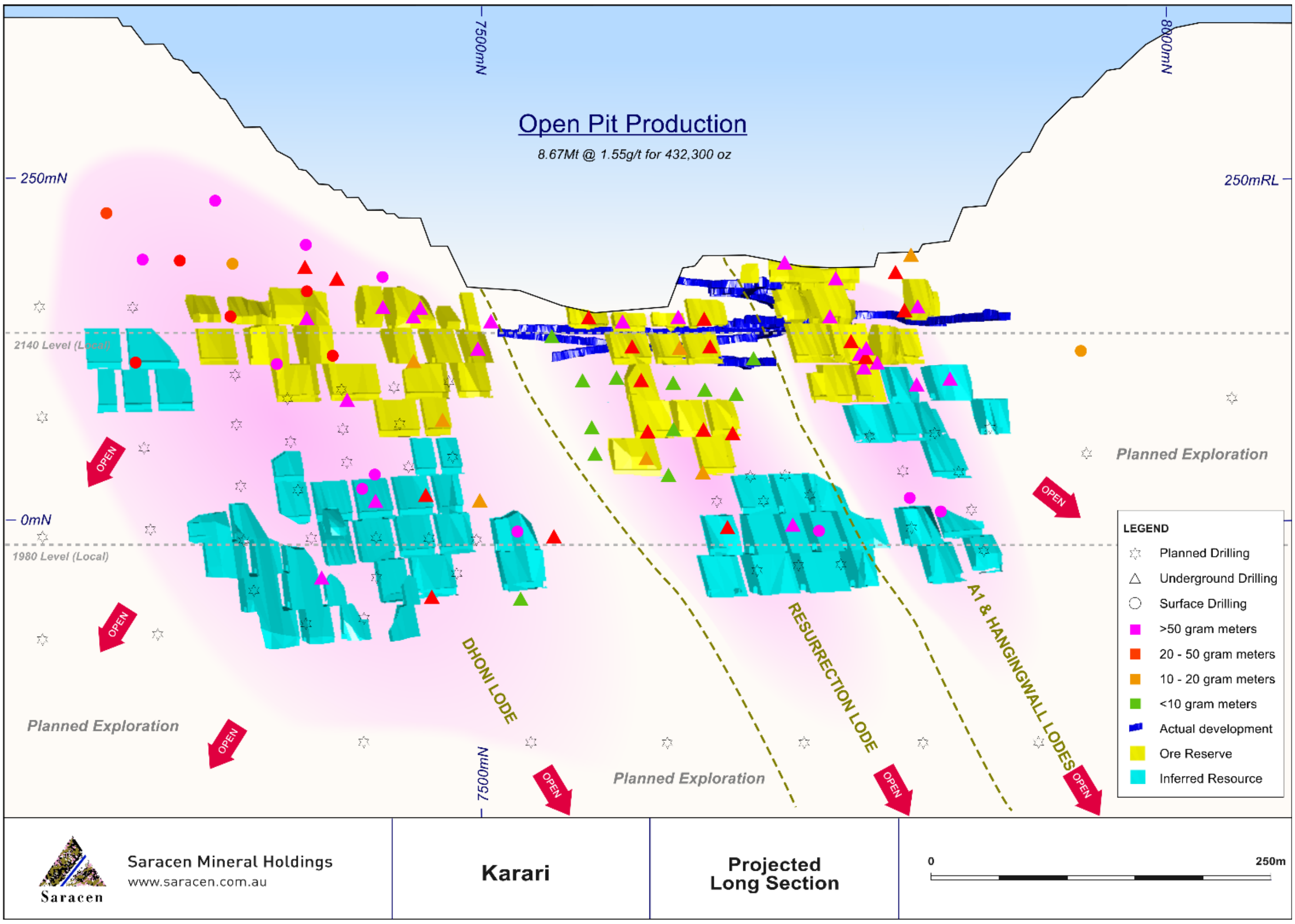



**Table 3 - Karari (Ore Reserve + Inferred Resource)**

| Deposit | Mine Type | Ore Reserve | | | Inferred Resource ^ | | | Total * | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Karari | UG | 1,025,000 | 3.0 | 98,000 | 1,190,000 | 4.0 | 152,000 | **2,215,000** | **3.5** | **250,000** |

*^ portion of the inferred resource that will be the target of exploration aimed at converting into ore reserve*

** 61% of the Karari Total is from Ore Reserves, 39% is sourced from Inferred Resources*

It is anticipated that production from Karari in FY16 will be ~50-55kozpa (~550ktpa @ 3.0g/t, based on Ore Reserves). Annual production for FYs 2017-2020 is planned to increase to ~60-70kozpa based on a combination of higher tonnage and higher grades.

Further exploration will be conducted in the short to medium term targeting mine life extensions beyond 5 years. Key goals will be to extend the resource envelope along strike to the south (via a surface exploration drilling program in FY16) and down dip of the Dhoni, Resurrection, A1 and Hangingwall Lodes below the deepest existing drilling (only ~450m below surface), that will target extending mine life to in excess of 5 years.

## Financial Analysis

Economic analysis has been completed on the Karari and is shown in Table 4. The pre-production capital cost of $9.2m has already been incurred during the period to September 2015. Karari has now attained steady state production and will be cash flow positive from October 2015 and is now classified as being in “commercial production”.

This financial analysis is based on longhole open stoping. The total mining cost per tonne is an all in mining cost and includes direct mining costs, sustaining development, grade control and extensional resource drilling.

**Table 4 - Karari Financial Analysis**

| Description | Units | |
|---|---|---|
| Pre-production Capital costs (sunk) | A$m | 9.2 |
| Total Mining Cost per tonne | A$/t ore | 69.4 |
| Processing Costs per tonne | A$/t ore | 20.5 |
| Administration Costs per tonne | A$/t ore | 4.5 |
| Royalty | A$/t ore | 5.6 |
| Total All in Costs per tonne | A$/t ore | 100 |
| AISC | A$/oz | 1,065 |

**Table 5 – Karari Physicals**

| Mine Physicals | | |
|---|---|---|
| Ore Mined | kt | 2,215 |
| Grade | g/t | 3.5 |
| Gold Produced | koz | 250 |
| Recovery | % | 92 |
| Recovered Gold | koz | 230 |

## Underground Mining

Stoping commenced in September, with the first production blast in the 2190 Hangingwall north (refer Figure 10). Production activities are progressing rapidly, with stopes opened up on the 2190, 2165 and production drilling on the 2140 level. All stoping activities to date have been on the Hangingwall and A1 lodes. The first intersection of ore in the Dhoni Lode on the 2140 level is anticipated in October.

Key infrastructure including secondary means of egress ladder ways, extension of the high voltage electrical power reticulation and a primary ventilation network were established in the September Quarter.

Whilst the northern mining areas (A1, Hangingwall and Resurrection Lodes) are expected to be mined utilising longhole open stoping, the southern mining area (Dhoni Lode) lends itself to a high productivity, bulk mining method. Technical investigations will continue over the next six months to optimise the mining method for the Dhoni Lode. Potential methods include sublevel open stoping or sublevel shrinkage. Both have been successfully employed in WA for many years, and Saracen has extensive in-house expertise with such methods.

Longhole open stoping has been assumed as the base case for economic analysis to date. Bulk mining methods will only improve the overall economics of the project. Adoption of a bulk method in the Dhoni Lode could facilitate a step change in production from 700ktpa to in excess of 1mtpa (subject to detailed feasibility work). This has the added benefit of deferring the capital expenditure associated with the commencement of the Whirling Dervish underground, as the additional production from Karari would compensate for the volume that would otherwise be mined from Whirling Dervish.

**Figure 10 - Stope Charging Karari Underground 2190 Hangingwall lode**

## Whirling Dervish

Whirling Dervish is a technically advanced and permitted underground mining opportunity located within 500m from the Carosue Dam mill.

The proposed underground development is a depth extension of the highly successful Whirling Dervish open pit which was completed in June 2015. Total open pit production totalled 7.38Mt @ 1.49g/t for 352,800oz and performed very well relative to the estimated Mineral Resource and Ore Reserves.

Whirling Dervish underground can be brought into production when required. The pit is being maintained in a dewatered state, with high voltage power lines and electric pumps already established. Minimal infrastructure is required to commence underground mining. An underground Pre-Feasibility Study has been completed, with a final Feasibility Study due for completion in 2H FY16. The project requires minimal additional regulatory approval (Project Management Plan from the Department of Mines and Petroleum) to commence mining (approximate 8 week lead time).

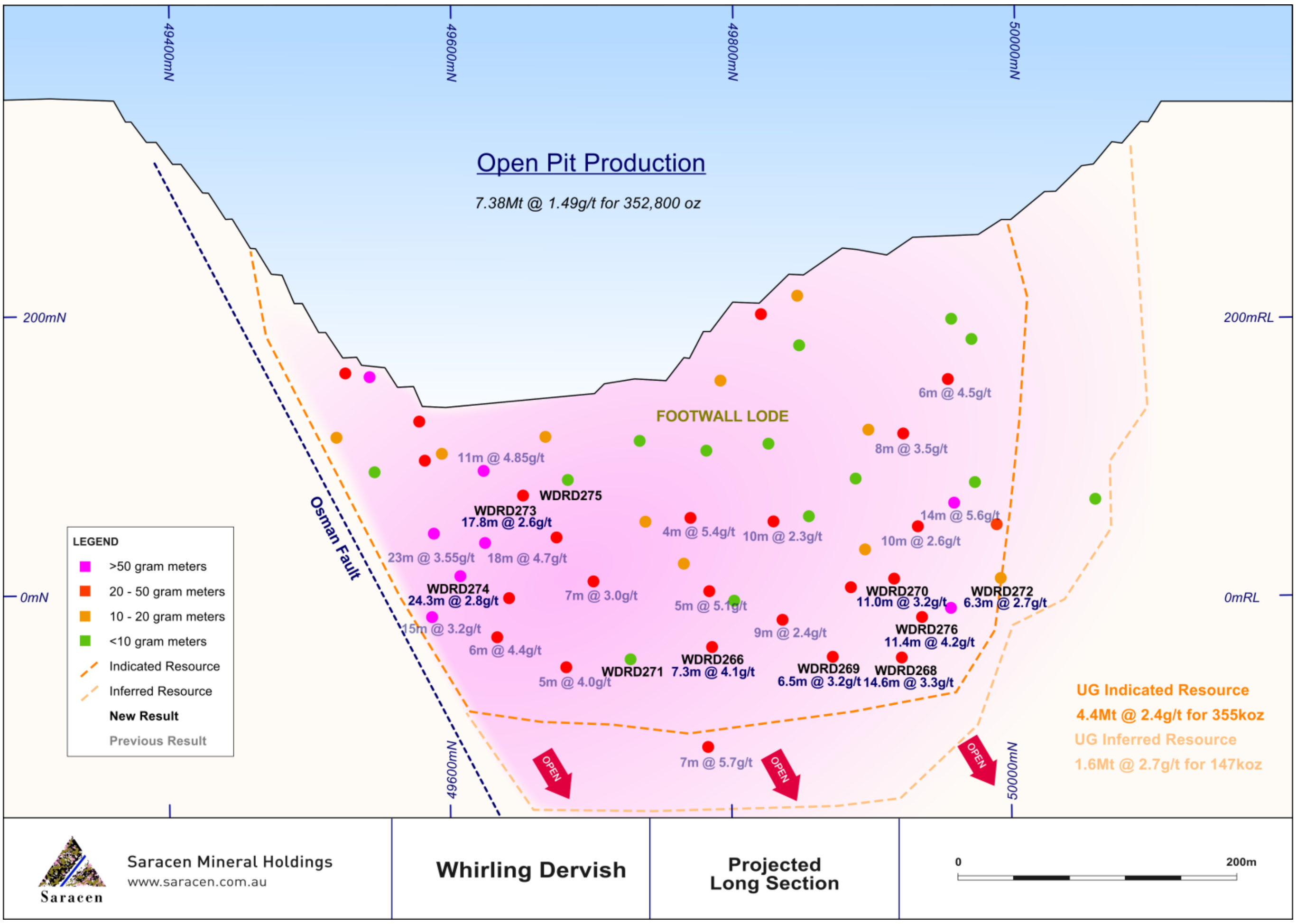
**Figure 11 – Whirling Dervish Open Pit (looking north) showing proposed Portal location and general infrastructure**


### Resource Drilling

An 11 hole resource definition drill program was completed at Whirling Dervish in June 2015. The program was designed to enhance confidence in the underground resource.

The next drilling program for Whirling Dervish is likely to take place from an underground drill drive to be established in the Hangingwall near the base of the open pit, similar to the drill platform established at Karari in late 2014. The Whirling Dervish drill drive will likely be established the year preceding that of the mines development, which will allow for grade control drilling to be conducted ahead of mine development.

**Figure 12 - Whirling Dervish Long Section**




## Mineral Resources

The Mineral Resource for Whirling Dervish has been updated taking into account mining depletion during FY15 and including the latest resource definition drilling.

Importantly, when the Whirling Dervish underground Mineral Resource is combined with the underground Mineral Resource of Karari, there is now over 1.4Moz of endowment (2.2 Moz including depletion) between both mineralised systems which are located within 500m of the processing plant, with drilling conducted to a depth of only ~450m below surface. The medium term goal at the Karari-Whirling Dervish camp is to define in excess of 3Moz of gold along the mineralised corridor (refer Figure 15).

**Table 6 - Whirling Dervish Total Mineral Resources**

| Whirling Dervish | Measured | | | Indicated | | | Inferred | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Whirling Dervish O/P | | | | 5,619,000 | 1.5 | 277,000 | 305,000 | 1.1 | 11,000 | 5,924,000 | 1.5 | 288,000 |
| Whirling Dervish U/G | | | | 4,400,000 | 2.4 | 355,000 | 1,624,000 | 2.7 | 147,000 | 6,024,000 | 2.6 | 502,000 |
| ***Whirling Dervish-Total*** | ***0*** | ***0.0*** | ***0*** | ***10,019,000*** | ***2.0*** | ***632,000*** | ***1,929,000*** | ***2.5*** | ***158,000*** | ***11,948,000*** | ***2.1*** | ***790,000*** |

The total Mineral Resource of 790koz at Whirling Dervish extends vertically over ~250m (refer to Figure 12) therefore the total endowment runs at ~3,200 ounces per vertical metre. This exceeds the current Mineral Resource endowment at Karari of 2,500 ounces per vertical metre. This reflects the early stage nature of drilling at Karari which has not yet defined the lateral extent of the mineralisation.

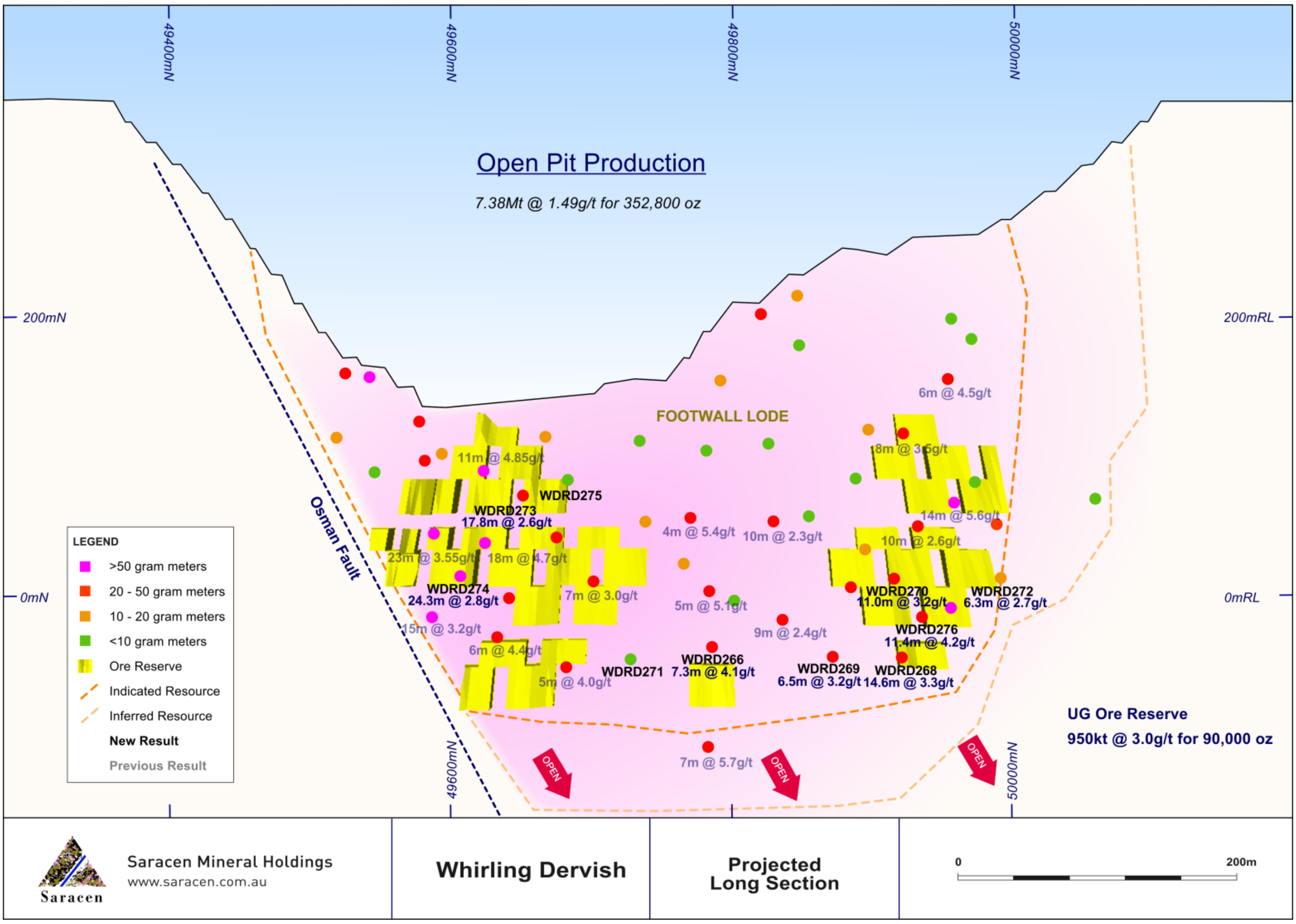
## Underground Ore Reserves

Following the completion of the highly successful Whirling Dervish open pit in FY15, all future mining from the Whirling Dervish deposit is planned to be conducted via underground mining methods. The underground Ore Reserve for Whirling Dervish are detailed in Table 7. Mining methods and cost structures are expected to be similar to Karari.

**Table 7 - Whirling Dervish Underground Ore Reserve**

| Deposit | Mine Type | Proved Reserves | | | Probable Reserves | | | Total Ore Reserves | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Whirling Dervish | UG | | | | 950,000 | 3.0 | 90,000 | **950,000** | **3.0** | **90,000** |

**Figure 13 - Whirling Dervish Long Section highlighting the Ore Reserve**




Proposed underground mining will focus on the southern and northern zones of the footwall mineralisation. The hangingwall drill drive will provide an ideal platform to determine what mining opportunities exist in the 'gap' (between the southern and northern mining areas). The drill drive will also enable the depth potential of the system to be tested with the deepest hole drilled to date returning 7m @ 5.7g/t (refer Figure 13).

## Financial Analysis

Financial analysis and physicals parameters used for the estimation of Ore Reserves are shown in Tables 8 and 9. Direct mining costs are based on rates supplied by the incumbent Karari mining contractor. These costs account for some 80% of the overall mining costs, with assumptions made on the remaining costs such as primary fans and pumping infrastructure. Whilst robust empirical estimates have been used for such items, these will be finalised during the Feasibility Study with formal pricing from vendors.

Table 8 - Whirling Dervish Financial Analysis

| Description | Units | |
|---|---|---|
| Pre-production Capital costs | A$m | 10.3 |
| Total Mining Cost per tonne | A$/t ore | 75 |
| Processing Costs per tonne | A$/t ore | 20.5 |
| Business Services per tonne | A$/t ore | 4.5 |
| Royalty | A$/t ore | 5.3 |
| Total All in Costs per tonne | A$/t ore | 105 |
| AISC | A$/oz | 1,187 |

Table 9 - Whirling Dervish Ore Reserve Physicals

| Mine Physicals | | |
|---|---|---|
| Ore Mined | kt | 950 |
| Grade | g/t | 3.0 |
| Gold Produced | koz | 90 |
| Recovery | % | 92 |
| Recovered Gold | koz | 84 |

## Underground Feasibility Study

The Whirling Dervish underground project has been evaluated to a Pre-Feasibility Study level. Additional technical work is required to advance the Feasibility Study and this will be completed over the course of the next 6 months, well ahead of planned development. Metallurgical and hydrological reviews have been completed and the mine design parameters are based on advice received from geotechnical consultants.

## Underground Development

Ongoing optimisation studies on the southern areas of Karari, and the resultant bulk mining rates will determine the final time frame for commencing Whirling Dervish development. At its earliest, Whirling Dervish will not be required for steady state production until at least FY18, with the opportunity to delay the commencement and the associated capital expenditure until FY20.

Due to the proximity of Whirling Dervish to Karari and the processing plant (refer Figures 14 and 15), there is an opportunity to leverage off resources and infrastructure such as workshops, offices, technical personnel and a shared mining fleet.

**Figure 14 - Whirling Dervish plan view location relative to Karari and Processing Plant**

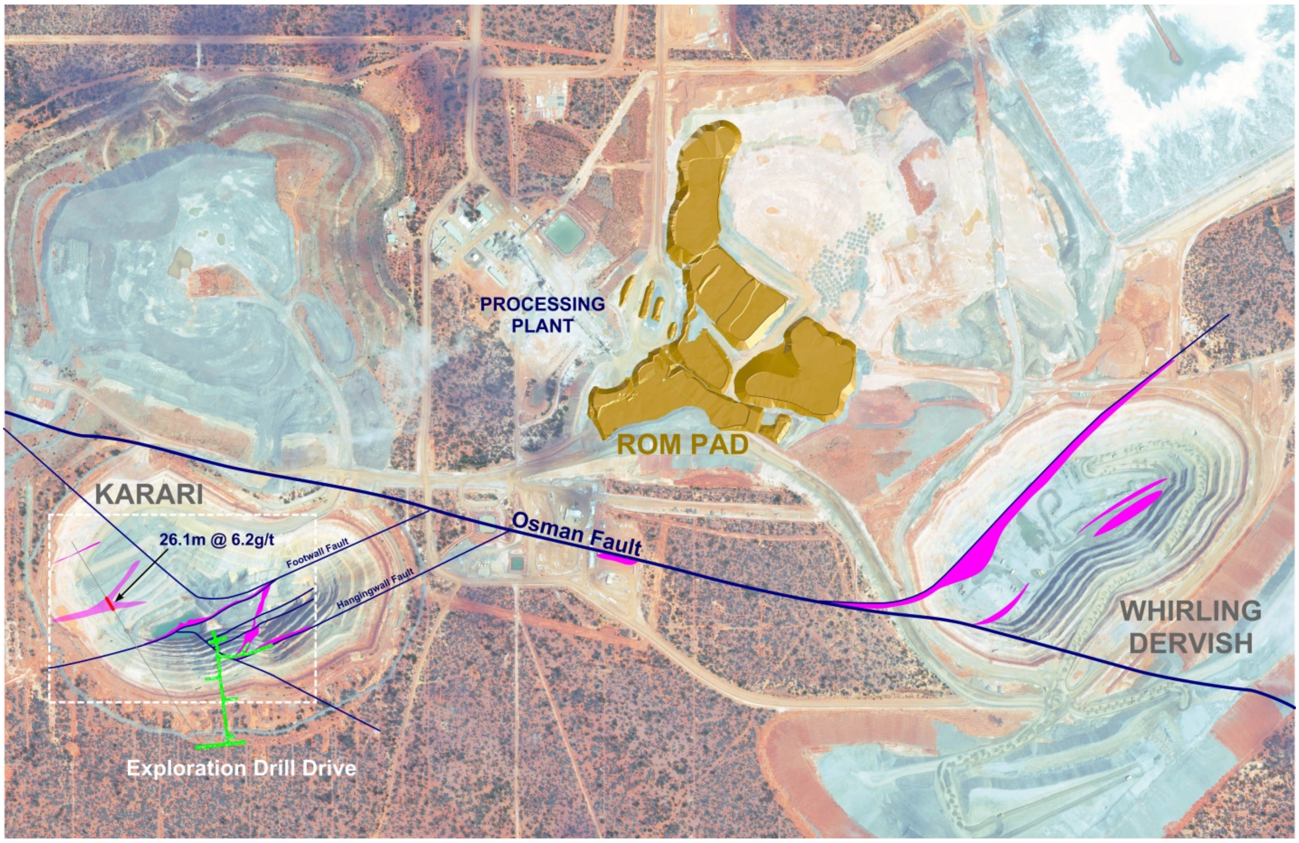
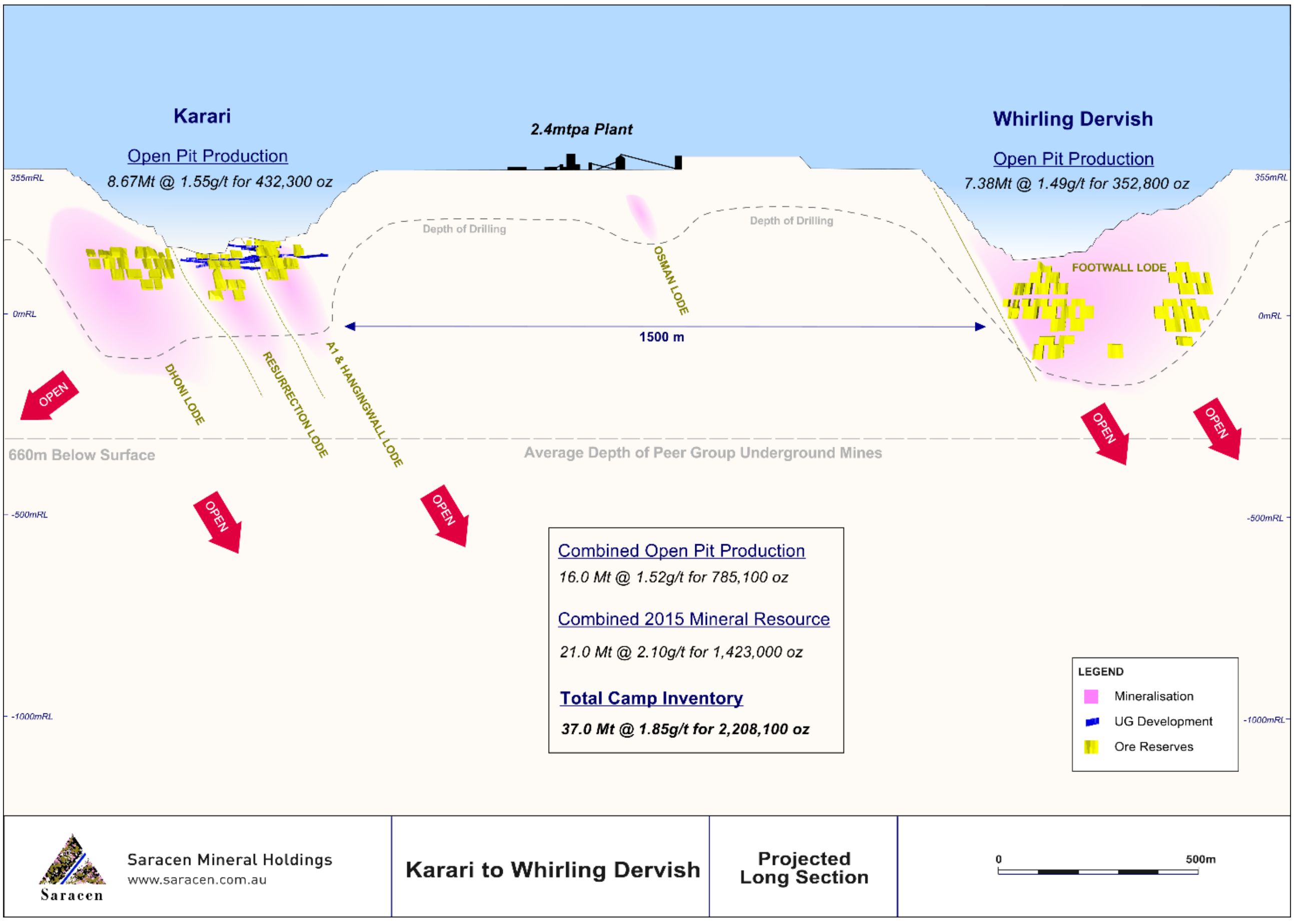



**Figure 15 - Karari to Whirling Dervish Long Section**



## NORTHERN REGION

The Northern strategy involves pairing the very high grade, narrow vein mineralisation at Red October with the broader mineralisation at Deep South.

As a standalone operation, Red October's fixed cost base has to support its own infrastructure (village and mine/administration offices) and overheads. Optimising the rate of return involves a trade-off between productivity (development sizes, stoping geometries and the rate of vertical mine advance) and quality (high grade and lower dilution). Mine development at Red October for FY2014 and 2015 has been in excess of 100 vertical meters per annum.

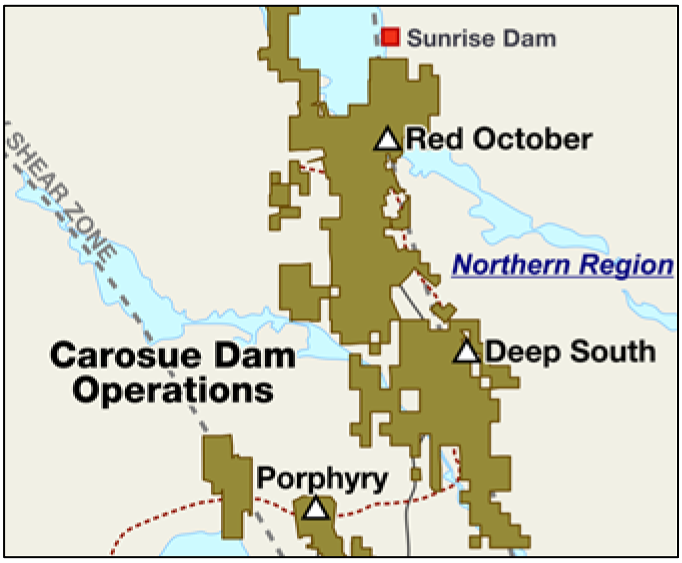
Deep South, with an average ore width of >4 meters (@ 4.0g/t) and a strike length of up to 500 meters, is intended to become the base load feed for the Northern Region. With the base load coming from Deep South, mining activities at Red October can be reconfigured to a lower vertical advance rate enabling higher grade, quality production. This will facilitate the opportunity to explore both vertical and near to infrastructure lateral opportunities.

Deep South and Red October will be treated as one mine sharing management, supervision, equipment and technical staff. This will provide the optimum structure for timely development of Deep South with modest capital expenditure.

Development will commence at Deep South in the December Quarter 2015. Development crews from Red October will be deployed to Deep South with commencement of production activities in the March Quarter 2016. Production will remain ongoing at Red October given the decline and access development are several levels ahead of production (refer to Figure 17).

Capital development at Red October is planned to recommence in the March Quarter 2016. This will also facilitate the opportunity to evaluate alternative narrow vein mining methods at Red October for the continuation of mining into FY17.

**Figure 16 – Location map of the Carosue Dam Operations - Northern Region**



## Red October

Red October is a high grade underground mine located approximately 110km from the Carosue Dam mill and ~12km south of Sunrise Dam (refer Figure 16).

Since first ore development in early 2012, Red October has been a reliable supplier of high grade ore. Annual production has averaged ~300kt @ ~7g/t Au for ~60koz. There is excellent potential for strike extensions and the mine remains open at depth (refer to Figure 18).

### Drilling Results

Drilling at Red October has focused on infill drilling for the FY16 mine plan. This detailed drill out aims to reduce the impact of a highly variable, "nuggety" grade distribution. The improved understanding, of grade distribution and geology translates into confidence and accuracy in mine planning. Recent infill results have been in line with previous broader spaced results, which continue to demonstrate a very high grade, narrow vein theme.

Drilling highlights include:

- RORD079 – 1.1m @ 47.1g/t from 125.1m
- ROGC508 – 0.4m @ 132.0g/t from 74.6m
- ROGC514 – 2.8m @ 21.3g/t from 129.8m
- ROGC515 – 2.1m @ 15.7g/t from 108.7m
- ROGC535 – 0.3m @ 99.3/t from 215.8m
- ROGC537 – 0.5m @ 105.0g/t from 182.2m
- ROGC539 – 0.3m @ 103.0g/t from 137.6m
- ROGC542 – 0.3m @ 90.3g/t from 140.7m
- ROGC554 – 0.5m @ 61.1g/t from 138.8m
- ROGC559 – 0.6m @ 42.7g/t from 5.8m
- ROGC565 – 0.7m @ 162.1g/t from 79.6m
- ROGC566 – 1.9m @ 58.0g/t from 16.3m
- ROGC567 – 0.7m @ 841.6g/t from 16.6m

### Mineral Resources

During the past 12 months, significant drill meters have been directed towards infilling the known Mineral Resource, proximal to current mine development. This has created a solid platform for the Ore Reserves and mine plan. Extensional drilling to grow the Mineral Resource has returned results that demonstrate discrete, high grade mineralisation (e.g. RORD079 – 1.1m @ 47.1g/t).

The decrease in lode width initiated a review on the Mineral Resource cut-off grade which resulted in an increase from 2.0g/t up to 5.0g/t. This increase has reduced the tonnes but has increased the grade substantially, which is more reflective of the Mineral Resource likely to be mined. The decrease in lode width creates an opportunity to review the mining method to enhance future value of the deposit.

**Table 10 - Red October Total Mineral Resources**

| Red October | Measured | | | Indicated | | | Inferred | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Red October O/P | | | | 251,000 | 1.7 | 14,000 | | | | 251,000 | 1.7 | 14,000 |
| Red October U/G | 9,000 | 8.6 | 2,000 | 152,000 | 16.8 | 82,000 | 33,000 | 13.9 | 15,000 | 194,000 | 15.9 | 99,000 |
| ***Red October Total*** | ***9,000*** | ***6.9*** | ***2,000*** | ***403,000*** | ***7.4*** | ***96,000*** | ***33,000*** | ***14.1*** | ***15,000*** | ***445,000*** | ***7.9*** | ***113,000*** |

**Figure 17 – Red October Long Section highlighting recent drilling results and the Ore Reserve**

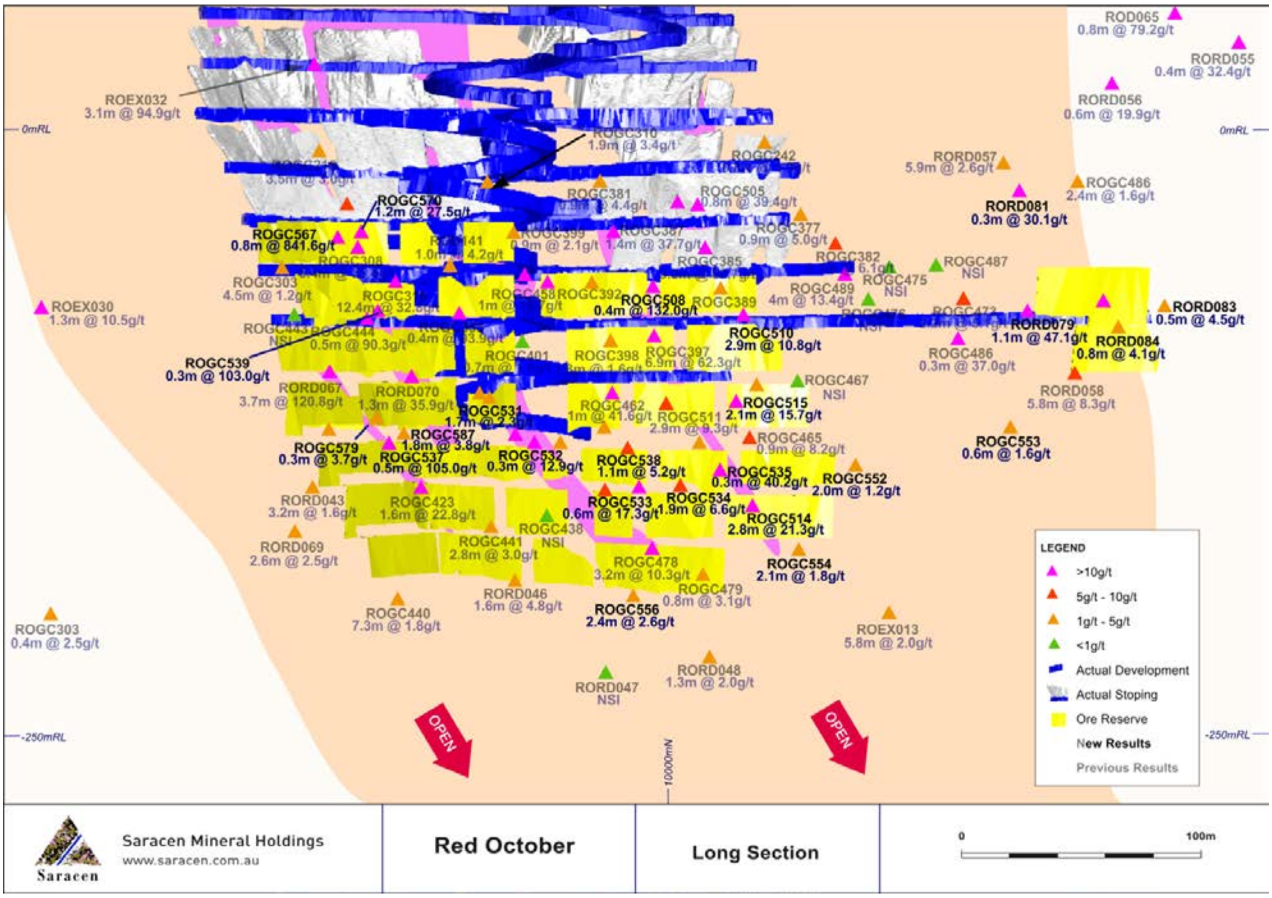
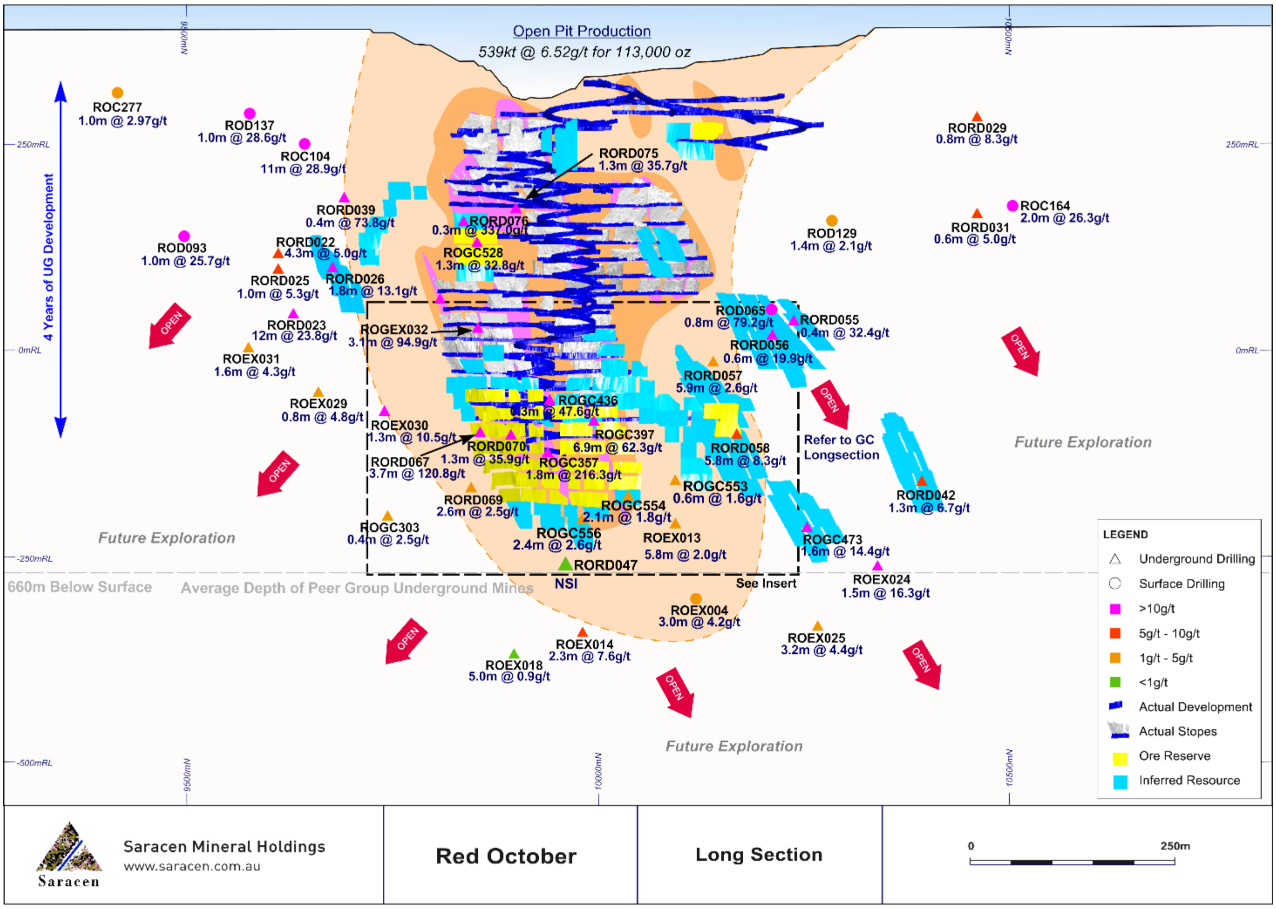



**Figure 18 – Red October Long Section highlighting the exploration potential**



## Underground Ore Reserves

**Table 11 - Red October Ore Reserves**

| Deposit | Mine Type | Proved Reserves | | | Probable Reserves | | | Total Ore Reserves | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Red October | UG | | | | 225,000 | 6.0 | 43,000 | **225,000** | **6.0** | **43,000** |

The Ore Reserves shown in Table 11 represent the current mining plan for Red October. This will be mined during FY16 with mining equipment and personnel set to transition between Deep South and Red October during the development of Deep South.

In addition to the Ore Reserves, there is 29koz at 6.9g/t in indicated and inferred resource as shown in Table 12. It should be noted that, in general, there is a lower level of geological confidence associated with Inferred Mineral Resources (relative to Ore Reserves) and there is no certainty that further exploration work will result in the determination of Measured or Indicated Mineral Resources or that the production target will be realised.

**Table 12 - Red October (Ore Reserve + Indicated & Inferred Resources)**

| Deposit | Mine Type | Ore Reserves | | | Indicated & Inferred Resources ^ | | | Total * | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Red October | UG | 225,000 | 6.0 | 43,000 | 131,000 | 6.9 | 29,000 | **356,000** | **6.3** | **72,000** |

*^ portion of the indicated & inferred resource that will be the target of exploration aimed at converting into ore reserve*
** 60% of the Red October Total is from Ore Reserves, 22% is sourced from Indicated Resources, and 18% is sourced from Inferred Resources*

## Financial Analysis

The financial metrics as presented in Table 13 and 14 are derived from a combination of existing operating data for FY16 and smaller scale mining in FY17 and FY18.

**Table 13 - Red October Financial Analysis**

| Description | Units | |
|---|---|---|
| Total Mining Cost per tonne | A$/t ore | 155 |
| Haulage Cost per tonne | A$/t ore | 12 |
| Processing Costs per tonne | A$/t ore | 21 |
| Administration Costs per tonne | A$/t ore | 3.6 |
| Royalty | A$/t ore | 14.6 |
| Total All in Costs per tonne | A$/t ore | 206 |
| AISC | A$/oz | 1,150 |

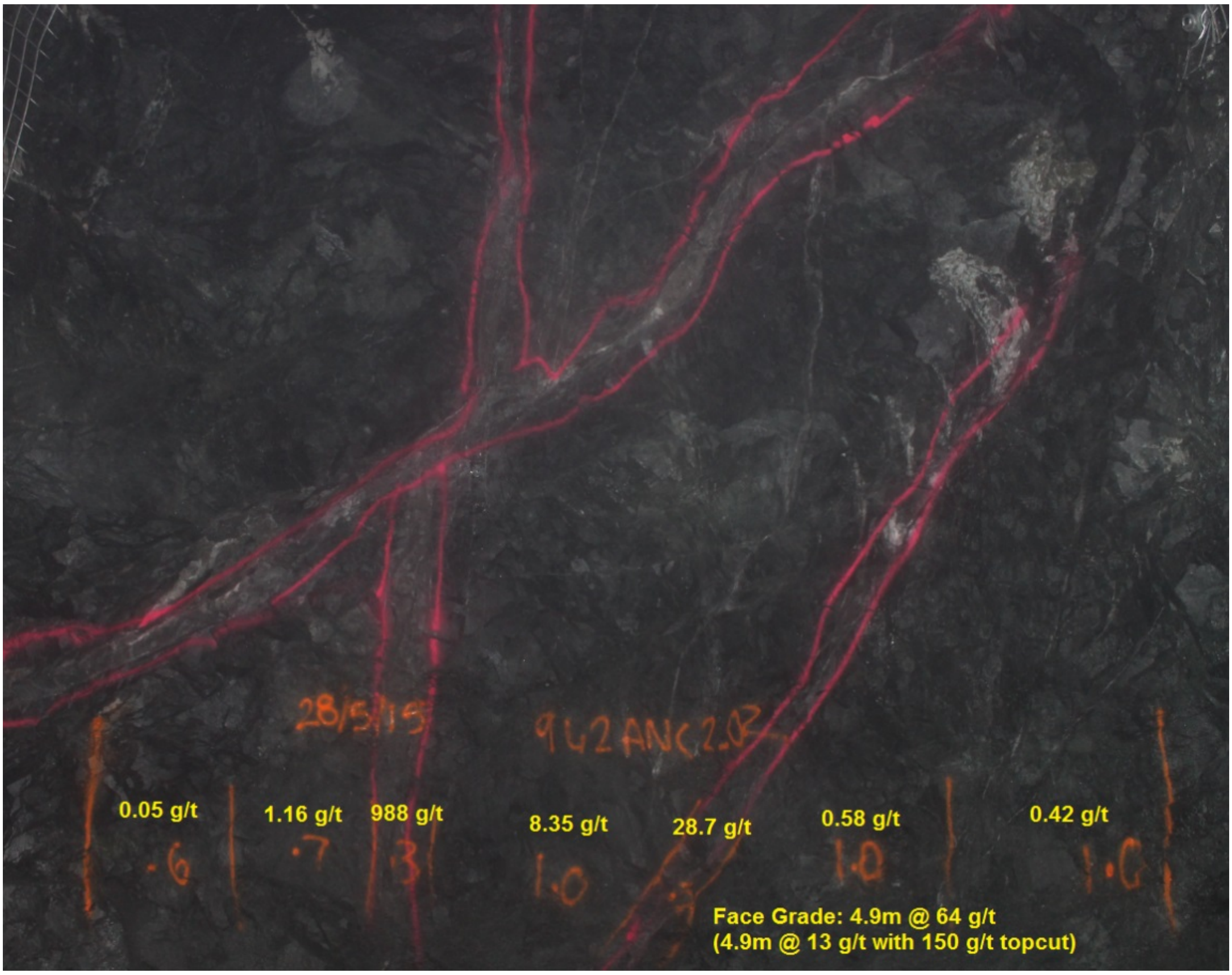
**Table 14 - Red October Physicals**

| Mine Physicals | | |
|---|---|---|
| Ore Mined | kt | 356 |
| Grade | g/t | 6.3 |
| Gold Produced | koz | 72 |
| Recovered Gold | % | 88 |
| Recovered Gold | koz | 64 |

## Underground Mining

Mining studies will be advanced on narrow vein mining methods such as single boom jumbo development and potential hand-held mining methods for mining into FY17 and beyond.

**Figure 19 – Red October Development Face showing grades**



## Deep South

Deep South is a shallow underground mining opportunity located approximately 80km north of the Carosue Dam mill (refer Figure 16). Deep South offers a low capital expenditure, low operating cost development with logistical synergies to Red October.

The mine comprises two high grade parallel lodes below a completed open pit and remains open along strike and at depth.

Deep South was a highly successful open pit mine that delivered a 70% and 65% overcall on grade and ounces relative to the Ore Reserve in FY13. Development of the underground mine is planned to commence in the December Quarter 2015 with steady state production by the end of FY16.

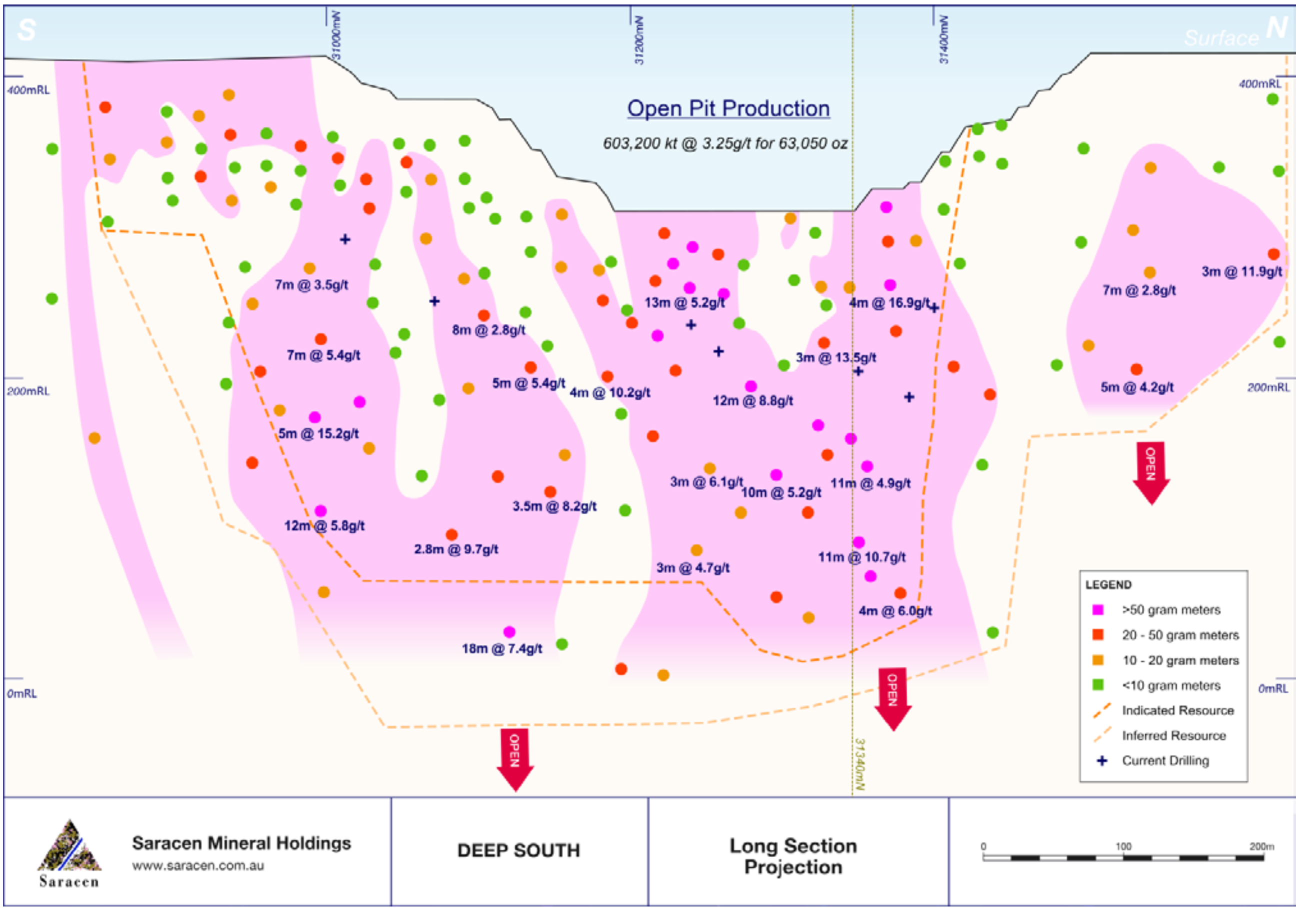
**Drilling Update**

Drilling has re-commenced at Deep South and is a combination of surface RC and Diamond. The aim is to improve confidence in the resource thickness and grade and will also provide additional geotechnical data.

The first levels of the mine will be drilled from surface, taking advantage of the shallow nature of the mineralisation and competitive drilling rates. This will increase confidence in the immediate mine plan and reduce pressure on establishing an underground drill position immediately.

**Figure 20 - Deep South Grade Control Diamond Drilling September 2015**

**Figure 21 - Deep South Long Section**



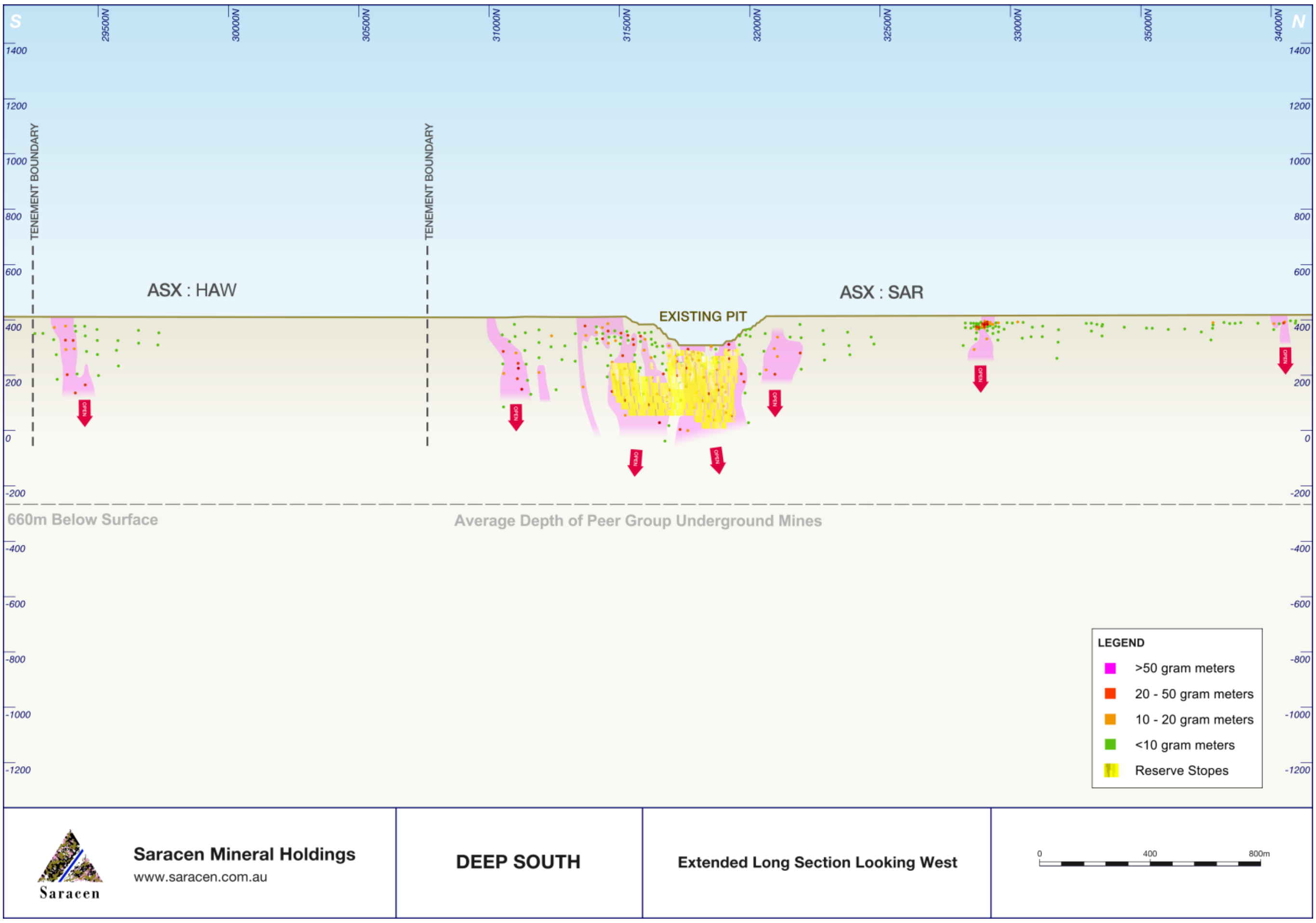

Drilling at Deep South has only advanced to ~400m below surface (refer Figure 21) and remains completely open at depth (highlighted by high grade results including 18m @ 7.4g/t) and along strike.

An underground drill platform will be established in the hangingwall of the mine once steady state production has been achieved. Extensional opportunities will be tested, including depth and near mine laterally to the north which currently sits outside the Ore Reserve. (Previous northern results include 5m @ 4.2g/t and 3m @ 11.9g/t.)

On a regional scale, the mineralised structure remains open over several kilometres along strike, with Saracen's Deep Well deposit located on the same structure to the north and Hawthorn Resource's (ASX: HAW) Deep South project to the south (refer Figure 22).

Surface exploration programs will be undertaken in the future to test for high grade mineralisation proximal to the Deep South mine infrastructure. Mexico, located less than 400m to the south of the mine, has a high grade intercept of 5.7m @ 12.2g/t less than 300m below surface is one of several enticing prospects in the region.

**Figure 22 - Deep South Regional Long Section**




## Mineral Resources

The Deep South mineralisation is constrained to two parallel lodes known as the Butler and Scarlett. Both lodes are discrete, predictable zones that are open along strike and at depth.

Sons of Gwalia first mined a small open pit in 2004 which yielded approximately 392kt at 2.9g/t for 36.6koz.

Saracen extended this pit via a cut back down to 100m in depth in FY13 which confirmed the predictability of the Mineral Resource, and returned a positive mining reconciliation. This cutback had an Ore Reserve of 221kt @ 2.3g/t for 16koz. At the completion of mining the reconciled production totalled 211kt @ 3.9g/t for 26.4koz which was due to over performance of the Mineral Resource and reduced dilution through diligent mining.

**Table 15 - Deep South Mineral Resources**

| Deep South | Measured | | | Indicated | | | Inferred | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Deep South O/P | | | | 355,000 | 2.5 | 29,000 | | | 0 | 355,000 | 2.5 | 29,000 |
| Deep South U/G | | | | 1,256,000 | 4.0 | 163,000 | 430,000 | 4.0 | 55,000 | 1,686,000 | 4.0 | 218,000 |
| ***Deep South Total*** | ***0*** | ***0.0*** | ***0*** | ***1,611,000*** | ***3.7*** | ***192,000*** | ***430,000*** | ***4.0*** | ***55,000*** | ***2,041,000*** | ***3.8*** | ***247,000*** |

## Underground Ore Reserves

The Deep South underground Ore Reserves is 979,000 @ 4.0 for 125,000oz as per Table 16 below.

**Table 16 - Deep South Ore Reserves**

| Deposit | Mine Type | Proved Reserves | | | Probable Reserves | | | Total Ore Reserves | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Deep South | UG | | | | 979,000 | 4.0 | 125,000 | **979,000** | **4.0** | **125,000** |

In addition to the Ore Reserve which is entirely comprised of Indicated Mineral Resource, there is an additional Inferred Resource of 329kt @ 4.6g/t for 48koz (refer Table 17) subject to further drilling and resource conversion. One of the best drill intercepts at Deep South is inside the Inferred Resource (18m @ 7.4g/t). It should be noted that, in general, there is a lower level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Measured or Indicated Mineral Resources or that the production target will be realised.

**Table 17 - Deep South (Ore Reserve & Inferred Resource)**

| Deposit | Mine Type | Ore Reserves | | | Inferred Resource ^ | | | Total * | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | tonnes | g/t | oz | tonnes | g/t | oz | tonnes | g/t | oz |
| Deep South | UG | 979,000 | 4.0 | 125,000 | 329,000 | 4.6 | 48,000 | **1,308,000** | **4.2** | **174,000** |

*^ portion of the indicated & inferred resource that will be the target of exploration aimed at converting into ore reserve*

** 72% of the Deep South Total is from Ore Reserves, 28% is sourced from Inferred Resources*

**Figure 23 - Deep South Long Section**

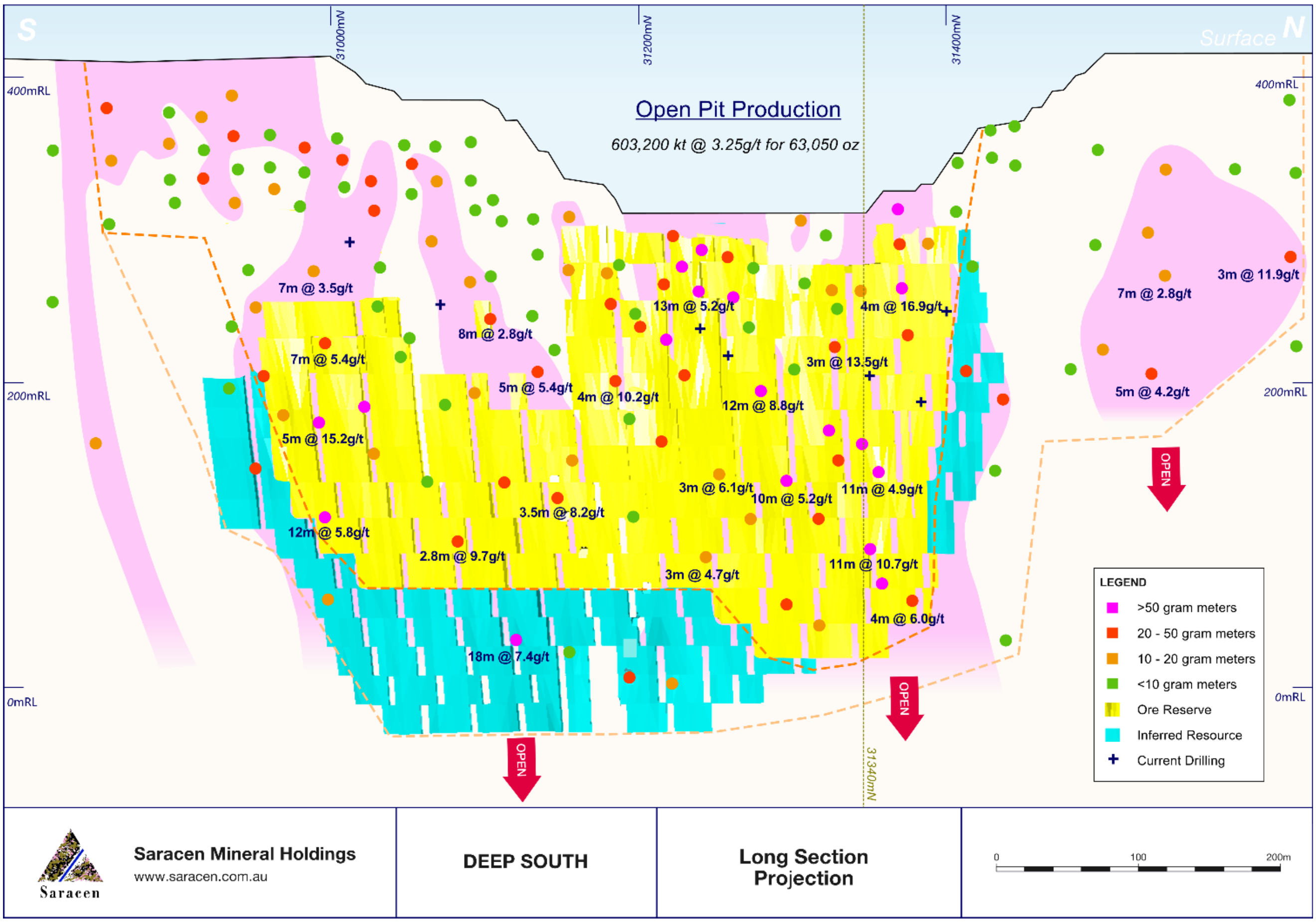
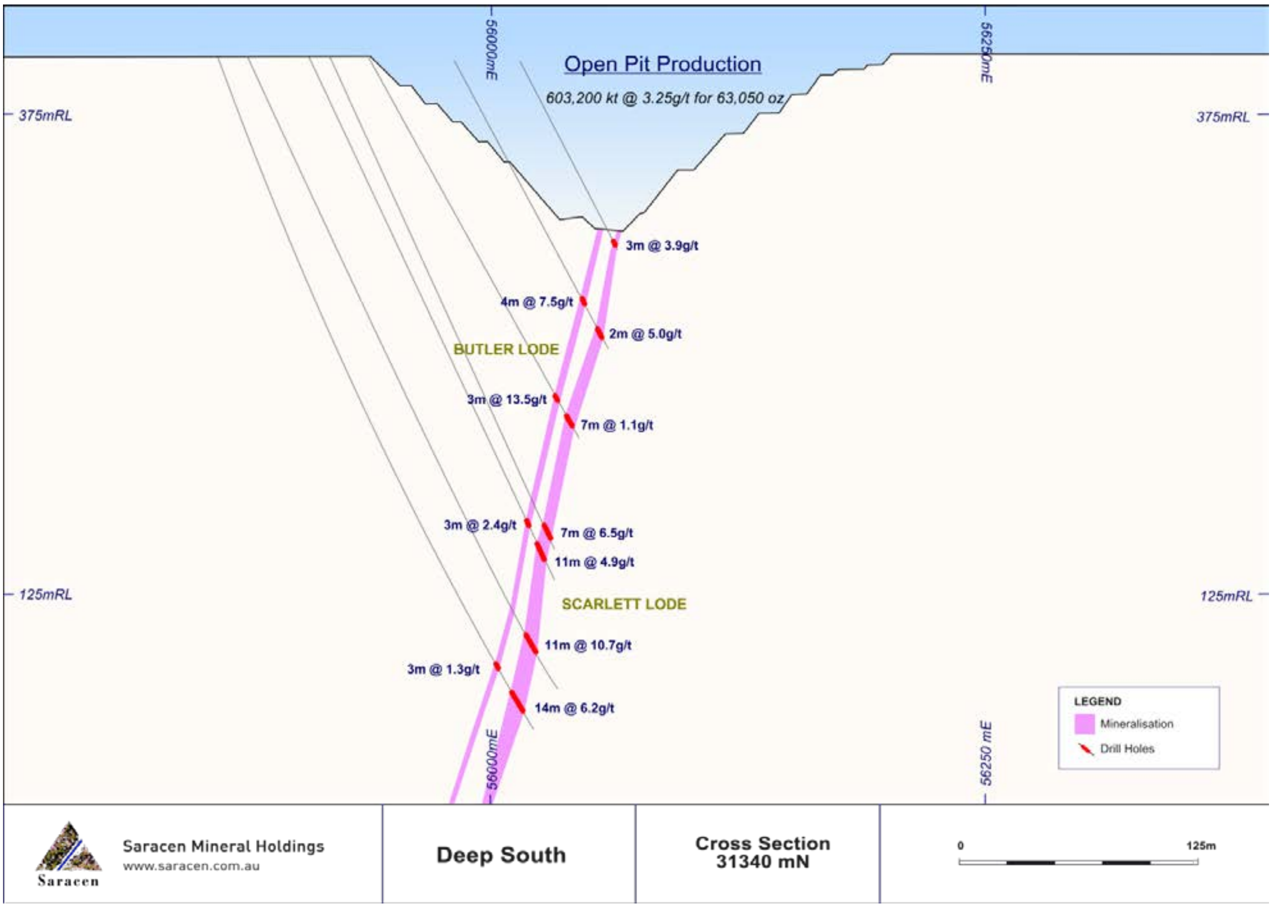


**Figure 24 - Deep South Cross Section**




## Financial Analysis

Project financials and physical metrics are shown in Tables 18 and 19.

**Table 18 - Deep South Financial Analysis**

| Description | Units | |
|---|---|---|
| Pre-production Capital costs | A$m | 14.9 |
| Total Mining Cost per tonne | A$/t ore | 88 |
| Haulage Costs per tonne | A$/t ore | 10 |
| Processing Costs per tonne | A$/t ore | 20.5 |
| Administration Costs per tonne | A$/t ore | 4.5 |
| Royalty | A$/t ore | 7.2 |
| Total All in Costs per tonne | A$/t ore | 130 |
| AISC | A$/oz | 1,088 |

**Table 19 - Deep South Physicals**

| Mine Physicals | | |
|---|---|---|
| Ore Mined | kt | 1308 |
| Grade | g/t | 4.2 |
| Gold Produced | koz | 174 |
| Recovery | % | 88 |
| Recovered Gold | koz | 154 |

## Underground Feasibility Study

A Feasibility Study analysing the underground potential of the mineralisation immediately below the pit was completed in June 2015. This was followed by a tender process, receipt of statutory approvals and the award of the mining contract to commence the project.

## Underground Development

Dewatering of the Deep South pit and infrastructure works commenced in September 2015 and portal development will commence during October. Development will commence during the December Quarter 2015 with steady state production anticipated by the end of FY16.

### Competent Person Statements

The information in the report to which this statement is attached that relates to Exploration Results and Mineral Resources related to Gold 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.

## Summary of Drilling Results – Karari

| KARARI DRILLING OCTOBER 2015 | | | | | | | | | | Downhole | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hole | Easting | Northing | RL | Depth | Azimuth | Dip | | From (m) | To (m) | Width (m) | Grade g/t |
| KRRC339 | 438543.49 | 6663090.805 | 362.026 | 250 | 150.3 | -55.2 | | 232.0 | 233.0 | 1.0 | 5.56 |
| KRRC340 | 438549.89 | 6663096.505 | 361.887 | 250 | 228.1 | -60.6 | | 193.0 | 195.0 | 2.0 | 4.01 |
| KRRC341 | 438585.33 | 6663117.393 | 361.61 | 350 | 216 | -52.65 | | 199.0 | 200.0 | 1.0 | 2.51 |
| KRRC342 | 438565.76 | 6663110.207 | 361.661 | 275 | 227.6 | -65.59 | | 107.0 | 108.0 | 1.0 | 2.95 |
| | | | | | | | and | 179.0 | 195.0 | 16.0 | 2.52 |
| KRRC343 | 438524.92 | 6663100.618 | 361.832 | 270 | 247.6 | -55.78 | | 197.0 | 198.0 | 1.0 | 4.90 |
| | | | | | | | and | 207.0 | 209.0 | 2.0 | 5.38 |
| KRRC344 | 438608.37 | 6663152.499 | 361.209 | 310 | 208.2 | -57.29 | | 134.0 | 135.0 | 1.0 | 4.54 |
| KRRC345 | 438605.3 | 6663150.985 | 361.236 | 290 | 239.6 | -62 | | 226.0 | 244.0 | 18.0 | 1.62 |
| KRRC346 | 438562.19 | 6663135.975 | 361.517 | 290 | 257 | -51.22 | | 219.0 | 233.0 | 14.0 | 1.36 |
| | | | | | | | and | 273.0 | 274.0 | 1.0 | 6.62 |
| KRRC347 | 438558.67 | 6663138.544 | 361.587 | 280 | 257 | -64.33 | | 221.0 | 224.0 | 3.0 | 3.02 |
| KRRC348 | 438575.71 | 6663155.927 | 361.179 | 290 | 257 | -53.3 | | 217.0 | 218.0 | 1.0 | 6.00 |
| | | | | | | | and | 244.0 | 246.0 | 2.0 | 3.25 |
| KRRC349 | 438558.45 | 6663140.336 | 361.519 | 300 | 262.5 | -46.78 | | 173.0 | 174.0 | 1.0 | 3.72 |
| | | | | | | | and | 227.0 | 230.0 | 3.0 | 7.51 |
| | | | | | | | and | 245.0 | 246.0 | 1.0 | 3.58 |
| KRRC350 | 438618.11 | 6663201.736 | 360.832 | 430 | 241.59 | -61.09 | | 265.0 | 266.0 | 1.0 | 2.64 |
| | | | | | | | and | 272.0 | 273.0 | 1.0 | 7.60 |
| | | | | | | | and | 272.0 | 284.0 | 12.0 | 6.29 |
| | | | | | | | and | 295.0 | 296.0 | 1.0 | 6.59 |
| KRRC351 | 438633.69 | 6663244.196 | 360.489 | 350 | 246.7 | -55.35 | | 208.0 | 209.0 | 1.0 | 5.15 |
| | | | | | | | and | 295.0 | 305.0 | 10.0 | 2.97 |
| | | | | | | | and | 310.0 | 311.0 | 1.0 | 4.58 |
| KRRC352 | 438572.23 | 6663139.155 | 361.445 | 291 | 246.7 | -55.35 | | 215.0 | 218.0 | 3.0 | 7.95 |
| | | | | | | | and | 225.0 | 226.0 | 1.0 | 2.87 |
| KRRD026 | 438632.03 | 6663469.073 | 172.85 | 431 | 229.6 | -36 | | 118 | 119 | 1.00 | 9.30 |
| | | | | | | | and | 203 | 204 | 1.00 | 3.41 |
| KRRD027 | 438632.03 | 6663469.073 | 172.85 | 300.1 | 262.1 | -43 | | 196 | 197.6 | 1.6 | 5.91 |
| KRRD028 | 438632.03 | 6663469.073 | 172.85 | 300 | 249.8 | -44.2 | no significant results | | | | |
| KRRD056 | 438635.67 | 6663425.889 | 172.088 | 630 | 195.6 | -51 | | 148.6 | 149.4 | 0.7 | 3.62 |
| | | | | | | | and | 284.8 | 293.0 | 8.3 | 3.47 |
| | | | | | | | and | 302.6 | 304.4 | 1.8 | 5.13 |
| KRRD057 | 438635.67 | 6663425.889 | 172.088 | 600 | 202.1 | -57.2 | | 150.0 | 151.0 | 1.0 | 3.56 |
| | | | | | | | and | 229.0 | 230.0 | 1.0 | 5.96 |
| | | | | | | | and | 291.0 | 293.0 | 2.0 | 4.87 |
| | | | | | | | and | 305.2 | 306.0 | 0.8 | 9.61 |
| | | | | | | | and | 530.0 | 530.6 | 0.6 | 3.06 |
| KRRD060 | 438635.57 | 6663427.347 | 172.7 | 595 | 222.6 | -55.8 | | 210.7 | 222 | 11.3 | 1.07 |
| | | | | | | | and | 219.6 | 220 | 0.40 | 3.91 |
| | | | | | | | and | 284.45 | 285 | 0.55 | 3.44 |
| KRRD063 | 438628.07 | 6663497.754 | 171.5 | 305 | 251.8 | -55.2 | | 212.0 | 213.0 | 1.0 | 5.69 |
| | | | | | | | and | 221.0 | 222.0 | 1.0 | 2.50 |
| KRRD064 | 438628.07 | 6663497.754 | 171.5 | 270 | 278.6 | -26 | results pending | | | | |
| KRRD066 | 438636.17 | 6663425.547 | 173.003 | 467 | 222.6 | -9.5 | | 276.0 | 286.8 | 10.8 | 1.67 |
| | | | | | | | and | 284.0 | 284.8 | 0.8 | 3.84 |
| KRRD067 | 438636.17 | 6663425.547 | 173 | 431.9 | 223.6 | -21 | | 264.1 | 269.0 | 4.9 | 3.16 |
| KRRD068 | 438636.17 | 6663425.547 | 173 | 524.85 | 203.6 | -15.2 | | 285.0 | 301.1 | 16.1 | 4.27 |
| KRSD025 | 438436.68 | 6663514.62 | 143.766 | 50 | 333.25 | 12 | | 24.0 | 25.0 | 1.0 | 3.28 |
| | | | | | | | and | 29.0 | 30.0 | 1.0 | 4.19 |
| | | | | | | | and | 32.0 | 32.3 | 0.3 | 3.79 |
| KRSD026 | 438437.08 | 6663514.545 | 144.87 | 90 | 16.25 | -19 | | 58.0 | 70.0 | 12.0 | 6.66 |
| KRSD027 | 438437.08 | 6663514.545 | 144.87 | 92.3 | 354.25 | -19 | | 51.0 | 59.0 | 8.0 | 4.33 |
| | | | | | | | and | 66.0 | 67.0 | 1.0 | 6.48 |
| | | | | | | | and | 74.0 | 75.0 | 1.0 | 5.43 |
| | | | | | | | and | 81.2 | 82.0 | 0.8 | 6.97 |
| KRSD028 | 438437.08 | 6663514.545 | 144.87 | 75 | 339.25 | -18 | | 38.0 | 39.0 | 1.0 | 2.98 |
| | | | | | | | and | 50.0 | 57.0 | 7.0 | 5.31 |
| KRSD029 | 438435.49 | 6663485.701 | 190.463 | 60 | 3.9 | 12.7 | | 17.0 | 17.3 | 0.3 | 7.05 |
| | | | | | | | and | 21.0 | 29.7 | 8.7 | 9.10 |
| KRSD030 | 438542.17 | 6663504.187 | 183.223 | 109 | 284.6 | 19 | | 88.0 | 99.0 | 11.0 | 4.19 |

| KARARI DRILLING OCTOBER 2015 | | | | | | | | | | Downhole | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hole | Easting | Northing | RL | Depth | Azimuth | Dip | | From (m) | To (m) | Width (m) | Grade g/t |
| KRGC200 | 438490.29 | 6663647.912 | 149.821 | 112 | 225.6 | 35.2 | | 72.2 | 80.0 | 7.8 | 1.95 |
| | | | | | | | and | 98.0 | 99.7 | 1.7 | 2.67 |
| KRGC201 | 438490.54 | 6663647.701 | 148.612 | 106 | 221.5 | 21.9 | | 68.0 | 69.0 | 1.0 | 3.47 |
| | | | | | | | and | 73.0 | 96.0 | 23.0 | 2.05 |
| | | | | | | | and | 100.5 | 101.3 | 0.8 | 3.20 |
| KRGC202 | 438490.52 | 6663647.773 | 148.252 | 125 | 223.1 | 5.3 | | 67.0 | 68.6 | 1.6 | 4.29 |
| | | | | | | | and | 102.0 | 103.0 | 1.0 | 3.49 |
| KRGC203 | 438490.44 | 6663647.875 | 146.635 | 169 | 221.3 | -12.8 | | 53.0 | 54.0 | 1.0 | 3.19 |
| | | | | | | | and | 73.0 | 78.3 | 5.3 | 4.13 |
| | | | | | | | and | 113.1 | 118.0 | 4.9 | 6.49 |
| KRGC204 | 438490.19 | 6663648.13 | 146.865 | 143 | 221.7 | -28.9 | | 72.0 | 73.0 | 1.0 | 3.08 |
| | | | | | | | and | 74.0 | 75.0 | 1.0 | 2.99 |
| | | | | | | | and | 90.9 | 91.3 | 0.4 | 7.04 |
| | | | | | | | and | 95.0 | 97.0 | 2.0 | 4.20 |
| | | | | | | | and | 100.1 | 103.0 | 2.9 | 4.82 |
| KRGC205 | 438489.96 | 6663648.039 | 149.632 | 59.8 | 237.85 | 23 | no significant intercepts | | | | |
| KRGC206 | 438490.1 | 6663647.94 | 148.971 | 103 | 236.2 | 22.9 | | 53.0 | 54.0 | 1.0 | 3.30 |
| | | | | | | | and | 72.7 | 74.0 | 1.4 | 4.79 |
| | | | | | | | and | 87.0 | 89.0 | 2.0 | 2.78 |
| | | | | | | | and | 97.0 | 102.0 | 5.0 | 2.65 |
| KRGC207 | 438491.24 | 6663646.892 | 150 | 183 | 235.6 | 8 | | 60.0 | 94.2 | 34.2 | 1.82 |
| | | | | | | | and | 114.9 | 117.2 | 2.3 | 4.35 |
| | | | | | | | and | 120.4 | 120.9 | 0.5 | 4.76 |
| | | | | | | | and | 159.5 | 160.0 | 0.5 | 4.57 |
| | | | | | | | and | 167.7 | 172.0 | 4.3 | 3.40 |
| KRGC208 | 438490.01 | 6663648.316 | 147.034 | 161 | 235.6 | -13.8 | | 80.2 | 80.8 | 0.5 | 6.21 |
| | | | | | | | and | 115.0 | 116.5 | 1.5 | 8.67 |
| | | | | | | | and | 124.0 | 125.0 | 1.0 | 9.50 |
| KRGC209 | 438489.72 | 6663648.33 | 147.446 | 153 | 235.6 | -31.9 | | 70.3 | 109.0 | 38.7 | 1.37 |
| KRGC211 | 438490.04 | 6663648.205 | 148.61 | 104.6 | 254.6 | 23.1 | | 49.6 | 50.3 | 0.7 | 4.18 |
| | | | | | | | and | 71.0 | 73.0 | 2.0 | 2.90 |
| | | | | | | | and | 99.0 | 101.7 | 2.7 | 3.03 |
| KRGC212 | 438490.24 | 6663648.07 | 147.878 | 210 | 251.6 | 7.5 | | 58.0 | 59.0 | 1.0 | 3.81 |
| | | | | | | | and | 62.0 | 63.0 | 1.0 | 3.19 |
| | | | | | | | and | 81.0 | 83.0 | 2.0 | 3.31 |
| | | | | | | | and | 94.0 | 95.0 | 1.0 | 4.01 |
| | | | | | | | and | 101.0 | 102.0 | 1.0 | 7.95 |
| | | | | | | | and | 201.0 | 202.0 | 1.0 | 3.96 |
| KRGC213 | 438489.37 | 6663648.507 | 147.042 | 162 | 254.6 | -13.6 | | 128.0 | 130.6 | 2.6 | 3.62 |
| | | | | | | | and | 161.5 | 162.0 | 0.5 | 2.96 |
| KRGC214 | 438489.72 | 6663648.459 | 147.285 | 156 | 254.6 | -32.1 | | 51.0 | 52.0 | 1.0 | 3.11 |
| | | | | | | | and | 69.0 | 95.0 | 26.0 | 2.04 |
| | | | | | | | and | 114.0 | 115.5 | 1.5 | 3.65 |
| KRGC215 | 438490.65 | 6663647.53 | 147.859 | 148.1 | 212.6 | 3.2 | | 72.3 | 73.2 | 0.9 | 2.50 |
| | | | | | | | and | 78.1 | 78.6 | 0.5 | 7.24 |
| | | | | | | | and | 84.1 | 84.8 | 0.8 | 2.69 |
| | | | | | | | and | 97.9 | 98.7 | 0.7 | 4.76 |
| | | | | | | | and | 115.7 | 132.1 | 16.4 | 2.62 |
| | | | | | | | incl | 124.0 | 130.8 | 6.8 | 4.70 |
| | | | | | | | and | 139.1 | 140.0 | 1.0 | 5.31 |

| KARARI DRILLING OCTOBER 2015 | | | | | | | | | | Downhole | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hole | Easting | Northing | RL | Depth | Azimuth | Dip | | From (m) | To (m) | Width (m) | Grade g/t |
| KRGC216 | 438490.54 | 6663647.561 | 147.034 | 158 | 189.6 | -8.1 | | 75.0 | 104.9 | 29.9 | 2.51 |
| | | | | | | | incl | 96.5 | 104.9 | 8.5 | 5.60 |
| | | | | | | | and | 149.0 | 151.0 | 2.0 | 4.14 |
| | | | | | | | and | 157.0 | 158.0 | 1.0 | 19.40 |
| KRGC217 | 438490.6 | 6663647.493 | 146.752 | 135 | 186.8 | -22.5 | | 73.0 | 99.0 | 26.0 | 3.54 |
| KRGC218 | 438415.99 | 6663259.376 | 200.232 | 110 | 279.6 | -60.5 | | 56.0 | 69.0 | 13.0 | 4.10 |
| | | | | | | | and | 97.0 | 97.7 | 0.7 | 3.26 |
| KRGC219 | 438415.78 | 6663259.258 | 200.219 | 110 | 289.6 | -57 | | 56.9 | 61.0 | 4.1 | 4.61 |
| | | | | | | | and | 67.7 | 72.7 | 5.0 | 5.72 |
| KRGC220 | 438416.25 | 6663259.172 | 200.216 | 130 | 263.85 | -32 | | 57.0 | 58.0 | 1.0 | 7.55 |
| | | | | | | | and | 70.0 | 75.0 | 5.0 | 4.42 |
| | | | | | | | and | 79.0 | 79.4 | 0.4 | 3.65 |
| | | | | | | | and | 84.0 | 85.0 | 1.0 | 3.77 |
| | | | | | | | and | 117.8 | 118.5 | 0.6 | 7.31 |
| | | | | | | | and | 128.0 | 129.0 | 1.0 | 25.90 |
| KRGC221 | 438416.07 | 6663259.341 | 200.212 | 100 | 249.6 | -53 | | 49.4 | 75.0 | 27.0 | 5.22 |
| | | | | | | | incl | 57.0 | 73.0 | 16.0 | 7.90 |
| KRGC222 | 438416.04 | 6663259.064 | 200.211 | 185 | 232.6 | -37.7 | | 61.7 | 69.0 | 7.3 | 8.59 |
| | | | | | | | and | 129.0 | 129.9 | 0.9 | 2.51 |
| KRGC223 | 438416.63 | 6663259.355 | 200.211 | 111 | 173.6 | -64 | | 42.0 | 46.0 | 4.0 | 4.89 |
| | | | | | | | and | 64.3 | 83.0 | 18.7 | 3.67 |
| | | | | | | | incl | 64.3 | 73.8 | 9.5 | 4.30 |
| KRGC224 | 438402.44 | 6663213.376 | 237.96 | 130 | 6.6 | -88.5 | | 64.0 | 98.0 | 34.0 | 3.70 |
| | | | | | | | incl | 71.7 | 92.0 | 20.3 | 4.33 |
| | | | | | | | and | 106.5 | 107.0 | 0.5 | 2.62 |
| KRGC225 | 438402.04 | 6663213.269 | 237.963 | 120 | 263.1 | -73.1 | | 52.1 | 55.0 | 2.9 | 3.67 |
| | | | | | | | and | 61.7 | 62.1 | 0.4 | 5.57 |
| | | | | | | | and | 72.0 | 75.0 | 3.0 | 3.47 |
| KRGC226 | 438402.09 | 6663212.872 | 237.981 | 210 | 215.1 | -58 | | 45.0 | 47.0 | 2.0 | 7.07 |
| | | | | | | | and | 68.9 | 77.0 | 8.1 | 2.90 |
| KRGC227 | 438402.08 | 6663212.988 | 237.966 | 200 | 201.4 | -41.5 | | 42.0 | 43.0 | 1.0 | 2.59 |
| | | | | | | | and | 76.0 | 88.0 | 12.0 | 2.97 |
| | | | | | | | and | 134.0 | 135.0 | 1.0 | 3.06 |
| KRGC228 | 438402.23 | 6663213.014 | 237.978 | 120 | 192.2 | -73.8 | | 63.0 | 64.0 | 1.0 | 2.75 |
| | | | | | | | and | 68.0 | 71.1 | 3.1 | 3.51 |
| | | | | | | | and | 75.5 | 76.0 | 0.5 | 3.24 |
| KRGC229 | 438402.52 | 6663213.081 | 237.626 | 240 | 180.5 | -59.7 | | 24.5 | 25.3 | 0.8 | 3.56 |
| | | | | | | | and | 53.0 | 54.0 | 1.0 | 3.45 |
| | | | | | | | and | 80.0 | 81.0 | 1.0 | 4.40 |
| | | | | | | | and | 184.6 | 185.0 | 0.4 | 3.52 |
| KRGC230 | 438402.64 | 6663213.412 | 237.968 | 140 | 151.9 | -55.2 | | 49.0 | 50.0 | 1.0 | 5.16 |
| | | | | | | | and | 77.0 | 79.0 | 2.0 | 5.06 |
| | | | | | | | and | 85.0 | 86.0 | 1.0 | 2.84 |
| | | | | | | | and | 87.0 | 87.6 | 0.6 | 2.62 |
| | | | | | | | and | 91.0 | 94.0 | 3.0 | 2.64 |
| | | | | | | | and | 96.0 | 97.0 | 1.0 | 3.04 |
| | | | | | | | and | 112.0 | 114.8 | 2.8 | 4.87 |
| | | | | | | | and | 124.0 | 125.0 | 1.0 | 5.40 |
| KRGC231 | 438402.68 | 6663213.545 | 237.956 | 140 | 121.6 | -73.2 | | 75.0 | 84.0 | 9.0 | 3.68 |
| | | | | | | | and | 88.7 | 89.1 | 0.5 | 3.13 |
| | | | | | | | and | 109.8 | 110.3 | 0.5 | 3.90 |

| KARARI DRILLING OCTOBER 2015 | | | | | | | | | | Downhole | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Hole** | **Easting** | **Northing** | **RL** | **Depth** | **Azimuth** | **Dip** | | **From (m)** | **To (m)** | **Width (m)** | **Grade g/t** |
| KRGC232 | 438457.2 | 6663350.01 | 138.75 | 280 | 239.6 | 10 | | 114.0 | 119.0 | 5.0 | 4.99 |
| | | | | | | | and | 124.0 | 127.0 | 3.0 | 3.62 |
| | | | | | | | and | 143.0 | 143.6 | 0.6 | 4.14 |
| | | | | | | | and | 154.3 | 155.5 | 1.3 | 11.51 |
| | | | | | | | and | 187.0 | 187.9 | 0.9 | 2.88 |
| | | | | | | | and | 196.0 | 197.0 | 1.0 | 3.14 |
| KRGC233 | 438457.2 | 6663350.01 | 138.757 | 260 | 247.6 | 7 | results pending | | | | |
| KRGC234 | 438457.21 | 6663350.01 | 138.757 | 275.6 | 242.6 | 3.6 | results pending | | | | |
| KRGC235 | 438457.21 | 6663350.01 | 138.757 | 210 | 249.1 | 2 | | 149.9 | 162.5 | 12.6 | 3.89 |
| | | | | | | | incl | 156.0 | 162.5 | 6.5 | 4.81 |
| KRGC236 | 438457.21 | 6663350.01 | 138.757 | 160 | 233.9 | -0.2 | | 98.0 | 107.0 | 9.0 | 3.42 |
| | | | | | | | and | 117.0 | 118.0 | 1.0 | 4.28 |
| | | | | | | | and | 126.0 | 128.9 | 2.9 | 4.92 |
| KRGC237 | 438457.21 | 6663350.01 | 138.757 | 195 | 248.6 | -3 | | 101.0 | 102.0 | 1.0 | 3.24 |
| KRGC238 | 438457.2 | 6663350.01 | 138.757 | 180 | 257.6 | -10 | no significant intercepts | | | | |
| KRGC239 | 438457.2 | 6663350.01 | 138.75 | 145 | 241.6 | -11 | | 59.3 | 59.8 | 0.5 | 5.30 |
| | | | | | | | and | 86.0 | 88.4 | 2.4 | 4.21 |
| | | | | | | | and | 99.0 | 103.0 | 4.0 | 7.24 |
| KRGC240 | 438457.21 | 6663350.01 | 138.757 | 140 | 255.6 | -21.2 | no significant intercepts | | | | |
| KRGC241 | 438457.21 | 6663350.01 | 138.757 | 110 | 236.6 | -26 | | 78.0 | 79.0 | 1.0 | 2.81 |
| | | | | | | | and | 81.0 | 82.0 | 1.0 | 2.52 |
| | | | | | | | and | 93.0 | 94.0 | 1.0 | 2.65 |
| KRGC242 | 438457.21 | 6663350.01 | 138.757 | 156.1 | 252.6 | -34.4 | no significant intercepts | | | | |
| KRGC243 | 438457.21 | 6663350.01 | 138.757 | 115 | 254.8 | -55.8 | results pending | | | | |
| KRGC244 | 438457.2 | 6663350.01 | 138.75 | 149.8 | 213.6 | -9.3 | results pending | | | | |
| KRGC245 | 438457.21 | 6663350.01 | 138.757 | 110 | 223.6 | -20 | | 83.4 | 88.0 | 4.6 | 6.98 |
| KRGC246 | 438385.58 | 6663608.628 | 151.182 | 77.5 | 177.6 | 12.7 | | 7.0 | 8.0 | 1.0 | 5.20 |
| KRGC247 | 438385.58 | 6663608.628 | 151.182 | 83.5 | 201.6 | 16.5 | | | | | |
| KRGC248 | 438385.58 | 6663608.628 | 151.182 | 64.1 | 180.6 | -14.1 | results pending | | | | |
| KRGC249 | 438385.58 | 6663608.628 | 151.182 | 65 | 221.6 | -19 | | 26.5 | 37.5 | 11.0 | 3.74 |
| | | | | | | | incl | 32.7 | 36.0 | 3.3 | 9.19 |
| KRGC250 | 438385.58 | 6663608.628 | 151.182 | 123 | 130.6 | -47.6 | results pending | | | | |
| KRGC251 | 438385.58 | 6663608.628 | 151.182 | 76 | 221.6 | -70.2 | results pending | | | | |

## Summary of Drilling Results – Whirling Dervish

| WHIRLING DERVISH DRILLING OCTOBER 2015 | | | | | | | | | | Downhole | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hole | Easting | Northing | RL | Depth | Azimuth | Dip | | From (m) | To (m) | Width (m) | Grade g/t |
| WDRD266 | 438369.98 | 6665560.145 | 352.631 | 470.6 | 224 | -67.7 | | 340.6 | 343.0 | 2.4 | 1.66 |
| | | | | | | | and | 386.0 | 387.7 | 1.8 | 1.18 |
| | | | | | | | and | 392.0 | 393.4 | 1.4 | 3.46 |
| | | | | | | | and | 416.0 | 427.0 | 7.3 | 4.11 |
| | | | | | | | and | 430.1 | 432.0 | 1.9 | 1.53 |
| WDRD267 | 438346.28 | 6665593.628 | 352.538 | 470.7 | 225 | -68.5 | | 341.6 | 342.8 | 1.2 | 2.58 |
| | | | | | | | and | 398.0 | 399.6 | 1.6 | 2.49 |
| WDRD268 | 438260.16 | 6665670.584 | 352.638 | 470.3 | 217.5 | -68.0 | | 337.0 | 342.5 | 5.5 | 2.57 |
| | | | | | | | and | 415.4 | 430.0 | 14.7 | 3.28 |
| WDRD269 | 438298.29 | 6665638.455 | 352.494 | 470.2 | 219 | -68.6 | | 413.1 | 415.1 | 2.1 | 2.12 |
| | | | | | | | and | 420.0 | 421.0 | 1.0 | 1.59 |
| | | | | | | | and | 425.0 | 431.5 | 6.5 | 3.17 |
| WDRD270 | 438257.82 | 6665672.712 | 352.55 | 430.5 | 223 | -60.7 | | 322.5 | 327.1 | 4.6 | 1.48 |
| | | | | | | | and | 380.1 | 391.1 | 11.0 | 3.32 |
| WDRD271 | 438402.77 | 6665524.905 | 352.343 | 506.8 | 225 | -67.6 | | 397.3 | 398.3 | 1.0 | 1.02 |
| | | | | | | | and | 416.8 | 419.0 | 2.2 | 2.08 |
| | | | | | | | and | 425.1 | 427.0 | 1.9 | 3.21 |
| WDRD272 | 438202.05 | 6665709.991 | 352.641 | 420.7 | 221 | -64.3 | | 262.8 | 265.6 | 2.8 | 1.18 |
| | | | | | | | and | 369.7 | 376.0 | 6.3 | 2.67 |
| | | | | | | | and | 386.7 | 389.9 | 3.2 | 1.02 |
| WDRD273 | 438448.57 | 6665470.807 | 352.044 | 410.8 | 225.5 | -51.7 | | 349.0 | 366.9 | 17.8 | 2.58 |
| | | | | | | | and | 379.9 | 384.7 | 4.8 | 1.53 |
| WDRD274 | 438487.48 | 6665415.337 | 352.754 | 440 | 227 | -62.5 | | 364.0 | 369.4 | 5.4 | 1.92 |
| | | | | | | | and | 372.7 | 397.0 | 24.3 | 2.77 |
| WDRD275 | 438407.31 | 6665471.212 | 352.593 | 405.2 | 224 | -49.3 | | 350.0 | 351.1 | 1.1 | 2.64 |
| WDRD276 | 438255.83 | 6665675.655 | 352.655 | 480.1 | 221 | -64.5 | | 344.0 | 345.0 | 1.0 | 1.17 |
| | | | | | | | and | 396.6 | 408.0 | 11.4 | 4.18 |

## Summary of Drilling Results – Red October

| RED OCTOBER DRILLING OCTOBER 2015 | | | | | | | | | | Downhole | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hole | Easting | Northing | RL | Depth | Azimuth | Dip | | From (m) | To (m) | Width (m) | Grade g/t |
| ROEX037 | 443073.67 | 6767782.694 | 143.5 | 201.1 | 218.29 | -26.3 | | 121.0 | 122.0 | 1.0 | 3.74 |
| | | | | | | | and | 189.5 | 189.8 | 0.3 | 2.53 |
| ROEX038 | 443073.67 | 6767782.694 | 143.5 | 111.1 | 229.25 | -30 | no significant intercepts | | | | |
| ROEX039 | 443073.67 | 6767782.694 | 143.5 | 114 | 239.9 | -44.5 | | 77.0 | 77.3 | 0.3 | 3.87 |
| ROGC508 | 443026.67 | 6767798.539 | -35.13 | 86 | 335.82 | -25.1 | | 74.6 | 75.0 | 0.4 | 132.00 |
| ROGC509 | 443026.67 | 6767798.539 | -35.13 | 89.8 | 345.71 | -25.7 | | 76.4 | 76.8 | 0.4 | 3.52 |
| ROGC510 | 443026.42 | 6767798.421 | -35.13 | 95.5 | 356.06 | -23.8 | | 83.2 | 86.1 | 2.9 | 10.83 |
| ROGC511 | 443026.42 | 6767798.421 | -34.719 | 116.65 | 331.62 | -46.7 | | 101.8 | 102.4 | 0.6 | 38.20 |
| ROGC512 | 443026.83 | 6767798.676 | -34.681 | 118 | 341.04 | -46.2 | | 46.5 | 46.8 | 0.3 | 44.00 |
| | | | | | | | and | 84.0 | 85.0 | 1.0 | 27.30 |
| | | | | | | | and | 106.4 | 108.6 | 2.2 | 15.90 |
| ROGC513 | 443026.9 | 6767798.703 | -34.831 | 133 | 343.12 | -50.9 | | 123.4 | 123.8 | 0.4 | 6.97 |
| ROGC514 | 443027.35 | 6767798.878 | -34.669 | 138 | 356.29 | -48.3 | | 100.7 | 101.7 | 1.0 | 4.68 |
| | | | | | | | and | 116.2 | 116.7 | 0.5 | 51.30 |
| | | | | | | | and | 124.5 | 124.9 | 0.4 | 5.86 |
| | | | | | | | and | 129.8 | 132.6 | 2.8 | 21.32 |
| ROGC515 | 443027.36 | 6767798.905 | -34.512 | 125.7 | 358.26 | -41.9 | | 108.7 | 110.8 | 2.1 | 15.72 |
| ROGC516 | 443027.29 | 6767798.885 | -34.538 | 104.8 | 349.41 | -36 | | 84.9 | 85.6 | 0.8 | 6.11 |
| | | | | | | | and | 89.0 | 90.0 | 1.0 | 15.57 |
| ROGC519 | 442919.87 | 6767917.559 | 43.374 | 171.7 | 195.48 | -42.8 | | 159.2 | 159.6 | 0.4 | 401.00 |
| ROGC520 | 442919.87 | 6767917.559 | 43.37 | 170.5 | 179.38 | -54.4 | no significant intercepts | | | | |
| ROGC521 | 442919.87 | 6767917.559 | 43.373 | 188.5 | 206.41 | -47.6 | | 119.2 | 122.3 | 3.2 | 3.47 |
| ROGC522 | 442940.34 | 6767694.571 | 142.47 | 20.7 | 175.58 | 45.06 | no significant intercepts | | | | |
| ROGC523 | 442940.35 | 6767694.427 | 140.705 | 20.7 | 175.61 | 0.03 | no significant intercepts | | | | |
| ROGC524 | 442940.5 | 6767694.424 | 139.497 | 25.4 | 175.79 | -45 | no significant intercepts | | | | |
| ROGC525 | 442937.66 | 6767697.013 | 142.431 | 20.5 | 265.78 | 43.7 | no significant intercepts | | | | |
| ROGC526 | 442937.46 | 6767696.939 | 140.704 | 20 | 265.47 | -0.06 | no significant intercepts | | | | |
| ROGC527 | 442937.43 | 6767696.831 | 139.6 | 25.2 | 266.28 | -46.3 | no significant intercepts | | | | |
| ROGC528 | 442949.94 | 6767701.348 | 140.551 | 72 | 147.37 | 0 | | 26.0 | 27.0 | 1.0 | 6.01 |
| | | | | | | | and | 32.0 | 32.6 | 0.6 | 5.56 |
| | | | | | | | and | 38.0 | 39.3 | 1.3 | 32.80 |
| ROGC531 | 442919.98 | 6767917.851 | 43.373 | 197.7 | 170.83 | -60.9 | | 27.6 | 27.9 | 0.3 | 4.41 |
| | | | | | | | and | 177.6 | 179.3 | 1.7 | 2.33 |
| ROGC532 | 442920.38 | 6767918.044 | 43.372 | 207.1 | 157.28 | -64.3 | | 17.5 | 18.2 | 0.7 | 5.43 |
| | | | | | | | and | 186.4 | 186.8 | 0.4 | 3.45 |
| | | | | | | | and | 191.9 | 192.2 | 0.3 | 12.90 |
| ROGC533 | 442921.12 | 6767918.568 | 43.37 | 228 | 128.22 | -66.6 | | 11.7 | 12.7 | 1.0 | 4.53 |
| | | | | | | | and | 127.5 | 128.0 | 0.5 | 3.85 |
| | | | | | | | and | 209.0 | 209.6 | 0.6 | 17.30 |
| ROGC534 | 442921.36 | 6767918.865 | 43.372 | 252 | 118.31 | -64.1 | | 10.0 | 10.8 | 0.8 | 6.60 |
| | | | | | | | and | 122.0 | 122.8 | 0.8 | 3.54 |
| | | | | | | | and | 126.3 | 126.6 | 0.3 | 2.72 |
| | | | | | | | and | 211.7 | 213.5 | 1.9 | 6.64 |
| ROGC535 | 442921.58 | 6767919.02 | 43.372 | 239.8 | 107.84 | -61.4 | | 11.1 | 11.6 | 0.5 | 2.80 |
| | | | | | | | and | 123.7 | 124.6 | 0.9 | 2.74 |
| | | | | | | | and | 211.4 | 211.7 | 0.3 | 40.20 |
| | | | | | | | and | 215.8 | 216.1 | 0.3 | 99.30 |
| ROGC536 | 442918.79 | 6767917.897 | 43.373 | 221.4 | 205.79 | -59 | | 117.9 | 118.9 | 1.0 | 24.50 |
| ROGC537 | 442919.2 | 6767917.74 | 43.373 | 194.3 | 191.88 | -57.6 | | 182.2 | 182.7 | 0.5 | 105.00 |
| ROGC538 | 442919.87 | 6767917.558 | 43.373 | 213 | 129.63 | -63 | | 11.6 | 11.9 | 0.3 | 3.10 |
| | | | | | | | and | 196.2 | 197.3 | 1.1 | 5.22 |
| ROGC539 | 442983.21 | 6767729.831 | -5.187 | 144.04 | 302.2 | -27.8 | | 9.4 | 9.7 | 0.3 | 2.93 |
| | | | | | | | and | 124.8 | 128.1 | 3.3 | 2.79 |
| | | | | | | | and | 137.6 | 137.9 | 0.3 | 103.00 |
| ROGC540 | 442983.22 | 6767729.668 | -5.433 | 147 | 302.97 | -29.8 | | 14.6 | 14.9 | 0.3 | 5.12 |
| | | | | | | | and | 126.0 | 126.3 | 0.3 | 5.16 |
| | | | | | | | and | 127.8 | 128.2 | 0.4 | 6.64 |
| | | | | | | | and | 139.8 | 141.0 | 1.2 | 14.06 |

| RED OCTOBER DRILLING OCTOBER 2015 | | | | | | | | | | Downhole | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hole | Easting | Northing | RL | Depth | Azimuth | Dip | | From (m) | To (m) | Width (m) | Grade g/t |
| ROGC541 | 442983.14 | 6767729.238 | -5.333 | 168 | 304.49 | -33.9 | | 146.5 | 147.0 | 0.5 | 7.82 |
| ROGC542 | 442983.33 | 6767729.812 | -5.461 | 165 | 316.65 | -36.3 | | 17.4 | 17.7 | 0.3 | 21.30 |
| | | | | | | | and | 134.5 | 134.8 | 0.3 | 59.50 |
| | | | | | | | and | 140.7 | 141.0 | 0.3 | 90.30 |
| ROGC543 | 442983.1 | 6767729.522 | -5.136 | 155.7 | 287.81 | -29.2 | | 11.9 | 12.2 | 0.3 | 4.81 |
| | | | | | | | and | 124.3 | 124.6 | 0.3 | 12.70 |
| | | | | | | | and | 142.0 | 142.7 | 0.7 | 3.44 |
| | | | | | | | and | 144.3 | 144.9 | 0.6 | 2.59 |
| ROGC544 | 442983.25 | 6767729.028 | -5.135 | 131.7 | 281.82 | -30 | no significant intercepts | | | | |
| ROGC545 | 442983.3 | 6767728.958 | -5.279 | 165.05 | 292.54 | -35 | | 145.0 | 145.5 | 0.5 | 13.50 |
| | | | | | | | and | 158.4 | 159.4 | 1.0 | 2.56 |
| ROGC546 | 442983.22 | 6767729.672 | -5.429 | 159.02 | 307.81 | -38.6 | | 143.2 | 144.9 | 1.7 | 12.34 |
| | | | | | | | and | 154.9 | 155.2 | 0.3 | 2.50 |
| ROGC548 | 443023.26 | 6767878.483 | -56.15 | 35.7 | 358.01 | 42.2 | no significant intercepts | | | | |
| ROGC549 | 443024.78 | 6767879.533 | -58.551 | 45 | 17.2 | -5.08 | no significant intercepts | | | | |
| ROGC550 | 443012.8 | 6767863.562 | -60.352 | 42.2 | 70.96 | -28.2 | no significant intercepts | | | | |
| ROGC551 | 442871.99 | 6768005.664 | 45.13 | 327 | 99.39 | -31.4 | | 89.6 | 90.1 | 0.5 | 3.00 |
| ROGC552 | 442871.41 | 6768005.158 | 45.15 | 297 | 116.07 | -39.5 | | 290.3 | 292.2 | 2.0 | 1.16 |
| ROGC553 | 442871.98 | 6768005.711 | 46.034 | 318 | 100.25 | -35.5 | | 286.8 | 287.4 | 0.6 | 1.61 |
| ROGC554 | 442871.35 | 6768005.03 | 45.153 | 309.02 | 120.09 | -48.1 | | 293.9 | 296.0 | 2.1 | 1.82 |
| | | | | | | | and | 300.2 | 300.5 | 0.3 | 2.90 |
| ROGC556 | 442870.74 | 6768004.579 | 45.166 | 301 | 142.04 | -56.2 | | 138.8 | 139.3 | 0.5 | 61.10 |
| | | | | | | | and | 203.3 | 206.2 | 2.9 | 2.30 |
| | | | | | | | and | 285.4 | 287.8 | 2.4 | 2.63 |
| ROGC558 | 442904.43 | 6767803.585 | -60.524 | 24.8 | 296.79 | -26.3 | | 1.0 | 4.0 | 3.0 | 7.90 |
| | | | | | | | and | 12.5 | 13.4 | 0.9 | 3.64 |
| | | | | | | | and | 15.4 | 16.8 | 1.5 | 4.07 |
| ROGC559 | 442905.33 | 6767804.082 | -60.387 | 18 | 352.14 | -26.4 | | 1.1 | 2.0 | 1.0 | 16.00 |
| | | | | | | | and | 5.8 | 6.4 | 0.6 | 42.70 |
| ROGC560 | 442943.16 | 6767828.498 | -77.775 | 8.8 | 339.79 | -45.4 | no significant intercepts | | | | |
| ROGC561 | 442936.01 | 6767824.56 | -77.818 | 8.9 | 341.73 | -45 | | 4.8 | 6.1 | 1.3 | 11.14 |
| ROGC562 | 442917.26 | 6767815.128 | -77.114 | 21 | 345.45 | -20.5 | no significant intercepts | | | | |
| ROGC563 | 442956.77 | 6767760.644 | -82.567 | 99 | 289.8 | -16.3 | no significant intercepts | | | | |
| ROGC564 | 442957.54 | 6767761.055 | -82.648 | 89.75 | 312.99 | -19.4 | | 85.9 | 86.2 | 0.3 | 4.18 |
| | | | | | | | and | 86.5 | 86.8 | 0.3 | 2.83 |
| ROGC565 | 442957.77 | 6767761.394 | -82.658 | 96.2 | 326.36 | -16.9 | | 74.7 | 76.2 | 1.5 | 13.88 |
| | | | | | | | and | 79.6 | 80.3 | 0.7 | 162.09 |
| ROGC566 | 442887.17 | 6767772.868 | -53.664 | 22.04 | 258.61 | 39.29 | | 16.3 | 18.2 | 1.9 | 58.02 |
| ROGC567 | 442889.14 | 6767781.174 | -53.379 | 22 | 267.55 | 44.46 | | 1.7 | 2.0 | 0.3 | 51.80 |
| | | | | | | | and | 16.6 | 17.3 | 0.7 | 841.58 |
| ROGC568 | 442879.36 | 6767783.562 | -52.938 | 22.3 | 331.43 | 49.97 | | 8.5 | 9.6 | 1.2 | 19.77 |
| | | | | | | | and | 12.9 | 14.2 | 1.4 | 8.80 |
| ROGC569 | 442882.89 | 6767789.758 | -53.054 | 14.91 | 339.14 | 50.04 | | 2.9 | 5.0 | 2.2 | 2.57 |
| | | | | | | | and | 6.9 | 7.3 | 0.5 | 19.70 |
| ROGC570 | 442883.55 | 6767797.255 | -54.163 | 28 | 100.13 | 26.08 | | 9.9 | 10.2 | 0.4 | 2.58 |
| | | | | | | | and | 18.0 | 19.4 | 1.4 | 7.48 |
| | | | | | | | and | 25.6 | 26.8 | 1.2 | 27.47 |
| ROGC571 | 442914.74 | 6767811.098 | -57.554 | 42 | 270.71 | -20.7 | no significant intercepts | | | | |
| ROGC572 | 442884.44 | 6767789.767 | -53.104 | 16 | 15.19 | 52.26 | | 7.0 | 7.4 | 0.4 | 33.30 |
| | | | | | | | and | 11.5 | 11.8 | 0.3 | 2.81 |
| ROGC573 | 442885.18 | 6767790.31 | -53.432 | 27 | 356.92 | 41.36 | | 9.8 | 10.3 | 0.5 | 3.39 |
| ROGC574 | 442957.35 | 6767760.563 | -80.258 | 79.4 | 323.79 | 29.14 | no significant intercepts | | | | |
| ROGC575 | 442957.29 | 6767760.457 | -80 | 80.9 | 322.59 | 13.3 | | 64.4 | 64.8 | 0.4 | 2.69 |
| ROGC576 | 442957.29 | 6767760.457 | -80 | 77.8 | 343.89 | 12.79 | | 65.4 | 69.3 | 3.9 | 3.01 |
| | | | | | | | and | 71.0 | 71.3 | 0.3 | 2.85 |
| ROGC577 | 442957.64 | 6767761.124 | -83.281 | 120.1 | 348.73 | -35.7 | | 79.5 | 79.7 | 0.3 | 4.15 |
| ROGC578 | 442957.59 | 6767761.137 | -83.005 | 117 | 329.84 | -32.1 | no significant intercepts | | | | |
| ROGC579 | 442957.29 | 6767760.457 | -83.55 | 114 | 305.28 | -24.9 | | 87.3 | 87.6 | 0.3 | 3.67 |
| | | | | | | | and | 88.4 | 88.7 | 0.4 | 2.69 |
| | | | | | | | and | 104.2 | 104.5 | 0.4 | 6.07 |

# Notes to Accompany JORC Code 2012 Drilling Results

## Whirling Dervish

**Section 1: Sampling Techniques and Data**

| 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 methods undertaken by Saracen at Whirling Dervish have included reverse circulation (RC), diamond drillholes (DD) and RC grade control drilling within the pit.<br>Historic methods conducted since 1993 have included aircore (AC), rotary air blast (RAB), reverse circulation and diamond drillholes. |
| | *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used* | Sampling for diamond and RC drilling is carried out as specified within Saracen sampling and QAQC procedures as per industry standard.<br>RC chips and diamond core provide high quality representative samples for analysis.<br>RC, RAB, AC and DD core drilling was completed by previous holders to industry standard at that time (1993- 2002). |
| | *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.*<br>*Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information* | Diamond core is NQ sized, sampled to 1m intervals and geological boundaries where necessary and cut into half core to give sample weights under 3 kg. Samples are selected to weigh less than 3 kg to ensure total sample inclusion at the pulverisation stage.<br>RC chips are riffle or cone split and sampled into 1m intervals with total sample weights under 3kg<br>Saracen core and chip samples are crushed, dried and pulverised to a nominal 90% passing 75µm to produce a 40g or 50 g sub sample for analysis by FA/AAS.<br>Historical AC, RAB, RC and diamond sampling was carried out to industry standard at that time.<br>Analysis methods include fire assay, aqua regia, B/ETA 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 35 AC holes, 159 RAB holes, 407 RC holes (assumed standard 5 ¼ ''bit size) and 53 surface diamond HQ core and unknown diameter holes.<br>Saracen has completed 50 surface RC precollar with NQ diamond tail drill holes (precollars averaging 193m, diamond tails averaging 200m) , 6 diamond geotechnical holes , 72 RC holes from both surface and within the pit and 3989 grade control RC holes within the pit.<br>Diamond tails were oriented using an Ezy-mark tool.<br>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* | Diamond core recovery percentages calculated from measured core versus drilled intervals are logged and recorded in the database.<br>Recoveries average >90%.<br>RC sampling recoveries are recorded as a percentage based on a visual weight estimate; no historic recoveries have been recorded. |

| Section 1: Sampling Techniques and Data | | |
|---|---|---|
| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | *Measures taken to maximise sample recovery and ensure representative nature of the samples* | Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against depth given on the core blocks.<br>During GC campaigns daily rig inspections are carried out to check splitter condition, general site and address general issues. The sample bags weight versus bulk reject weight is compared to ensure adequate and even sample recovery.<br>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.* | Diamond drilling has high recoveries meaning loss of material is minimal. There is no known relationship between sample recovery and grade for RC drilling.<br>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.*<br>*Whether logging is qualitative or quantitative in nature.*<br>*Core (or costean, channel, etc) photography.* | Logging of diamond drill core and RC chips records lithology, mineralogy, texture, mineralisation, weathering, alteration, veining and other features.<br>Geotechnical and structural logging is carried out on all diamond holes to record recovery, RQD, defect number, type, fill material, shape and roughness and alpha and beta angles.<br>Chips from all RC holes (exploration and GC) are stored in chip trays for future reference.<br>Core is photographed in both dry and wet state.<br>Qualitative and quantitative logging of historic data varies in its completeness. |
| | *The total length and percentage of the relevant intersections logged* | All diamond drillholes and exploration RC holes are logged in full.<br>Every drill line is logged in grade control programs. Historical logging is approximately 95% complete. |
| Sub-sampling techniques and sample preparation | *If core, whether cut or sawn and whether quarter, half or all core taken.* | All drill core is cut in half onsite using an automatic core saw. Samples are always collected from the same side.<br>Historic diamond drilling has been half core sampled. |
| | *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | All exploration and GC RC samples are cone or riffle split. Occasional wet samples are encountered; increased air capacity is routinely used to aid in keeping the sample dry when water is encountered.<br>Historic AC, RAB and RC drilling was 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 diamond core and RC chips adhere to industry best practice. It is conducted by a commercial laboratory and involves oven drying, coarse crushing then total grinding to a size of 90% passing 75 microns.<br>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.<br>Sampling by previous holders assumed to be 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.* | Duplicate sampling is carried out at a rate of 1:10 for exploration drilling and 1:20 for GC drilling and is 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.<br>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 are considered to be appropriate. |
| 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.* | RC chip samples, grade control chip samples and diamond core are analysed by external laboratories using a 40g or 50g fire assay with AAS finish. These methods are considered suitable for determining gold concentrations in rock and are total digest methods.<br>Historic sampling includes fire assay, aqua regia, B/ETA and unknown methods. |

| Section 1: Sampling Techniques and Data | | |
|---|---|---|
| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | *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 have been utilised for reporting gold mineralisation at Whirling Dervish. |
| | *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 drillhole at a rate of 1:25 for exploration RC and DD, and 1:40 for GC drilling. These are not identifiable to the laboratory.<br>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.<br>QAQC data is reported monthly.<br>Sample preparation checks for fineness are carried out to ensure a grindsize of 90% passing 75 microns.<br>The laboratory performs a number of internal processes including standards, blanks, repeats and checks.<br>QAQC data analysis demonstrates sufficient accuracy and precision.<br>Industry best practice is assumed for previous holders. |
| 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. |
| | *The use of twinned holes.* | No specific twinned holes have been drilled at Whirling Dervish but grade control 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.<br>Data from previous owners was taken from a database compilation and validated as much as practicable before entry into the Saracen acQuire database. |
| | *Discuss any adjustment to assay data.* | No adjustments have been made to assay data. First gold assay is utilised for resource estimation. |
| 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.* | Exploration drillholes are located using a Leica 1200 GPS with an accuracy of +/- 10mm.<br>Drillhole collars within the pit and immediate surrounds are picked up by company surveyors using a Trimble R8 GNSS (GPS) with an expected accuracy of +/-8mm.<br>Downhole surveys are carried out using an Eastman single shot camera at regular intervals (usually 30m). A number of drillholes have also been gyroscopically surveyed.<br>Previous holders' survey accuracy and quality is unknown |
| | *Specification of the grid system used.* | A local grid system (Whirling Dervish) is used. It is rotated 45 degrees west of MGA_GDA94.<br>The one point conversion to MGA_GDA94 zone 51 is<br>WDEast WDNorth RL MGAEast MGANorth RL<br>Point 1 20003.8190 50277.5540 0 437865.3740 6665770.2100 0<br>Historic data is converted to Whirling Dervish local grid upon export from the database. |
| | *Quality and adequacy of topographic control.* | Topographic control originally used site based survey pickups in addition to Kevron aerial photogrammetric surveys with +/- 5m resolution.<br>Pre mining, new and more detailed topography has since been captured and will be used in future updates and for subsequent planning purposes. |
| Data spacing and | *Data spacing for reporting of Exploration Results.* | The nominal spacing for exploration drilling is 25m x 25m |

| Section 1: Sampling Techniques and Data | | |
|---|---|---|
| **Criteria** | **JORC Code Explanation** | **Commentary** |
| distribution | *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.* | Data spacing and distribution are sufficient to establish the degree of geological and grade continuity appropriate for JORC classifications applied. |
| Orientation of data in relation to geological structure | *Whether sample compositing has been applied.* | Sample compositing is not applied until the estimation stage.<br>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.* | The majority of drillholes are positioned to achieve optimum intersection angles to the ore zone as are practicable. |
| | *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 is thought to occur 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 secured cages and collected by the laboratory personnel.<br>Sample submissions are documented via laboratory tracking systems and assays are returned via email. |
| 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. |

| Section 2: Reporting of Exploration Results | | |
|---|---|---|
| **Criteria** | **JORC Code Explanation** | **Commentary** |
| Mineral tenement and land tenure status | *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* | The Whirling Dervish pit is located on M28/166 and M31/220, while near mine exploration has been carried out on M28/245.<br>The tenements are held 100% by Saracen Gold Mines Pty Ltd, a wholly owned subsidiary of Saracen Mineral Holdings Limited. Mining Leases M28/166 and M31/220 have a 21 year life (held until 2020) and are renewable for a further 21 years on a continuing basis. Mining Lease M28/245 has a 21 year life (held until 2029) and is renewable for a further 21 years on a continuing basis.<br>Mining Lease M28/166 is subject to two third party royalties and one caveat (Caveat 51H/067). Mining Lease M31/220 is subject to two third party royalties and one caveat (Caveat 64H/067) and Mining Lease M28/245 is subject to one third party royalty. There are no caveats associated with Mining Lease M28/245. Mining Leases M28/166, M28/245 and M31/220 are subject to a bank mortgage (Mortgage 415495). All production is subject to a Western Australian state government NSR royalty of 2.5%.<br>Mining Leases M28/166, M31/220 and M28/245 are subject to the Pinjin Pastoral Compensation Agreement. Mining Lease M31/220 is subject to the Pinjin and Gindalbie Pastoral Compensation Agreements. |
| | *The security of the tenure held at the time of reporting along with any known impediments to* | The tenements are in good standing and the licence to operate already exists. |

| Section 2: Reporting of Exploration Results | | |
|---|---|---|
| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | *obtaining a licence to operate in the area.* | |
| Exploration done by other parties | *Acknowledgment and appraisal of exploration by other parties.* | The Carosue Dam project area in which the Whirling Dervish deposit is located has been subjected to extensive gold exploration by numerous companies since 1991. Airborne geophysics conducted by Aberfoyle Resources in 1997 highlighted numerous targets in the project area with subsequent RAB drilling intersecting the Whirling Dervish mineralisation and an extensive RC campaign confirming it. Oriole Resources obtained the project in 1998 and, through wholly owned subsidiary company PacMin, completed closely spaced RC drilling to develop the resource through to reserve status. Sons of Gwalia carried out minor drilling before their collapse and takeover of the project by St Barbara. |
| Geology | *Deposit type, geological setting and style of mineralisation.* | Whirling Dervish is situated along the Kilkenny-Yilgangi fault zone on the boundary of the Steeple Hill and Mulgabbie domains.<br>The lithology comprises primarily intermediate felsic volcaniclastic sandstones, intermediate tuffs and intermediate porphyry units intruded by granites of varying composition, with stratigraphy dipping generally to the east at approx. 60 degrees.<br>Mineralization has a combined lithological and structurally control dipping parallel to the stratigraphy. Mineralization is continuous along strike in the footwall but is very discontinuous and patchy in the hanging wall structures and overall controlled by the general NW trending ductile faulting and is characterized by weak Hematite banding on the margins to intense hematite-silica alteration hosted in breccia zones adjacent to the faulting with high grade cores typically sericite-silica breccia. Pyrite is the dominant sulphide.<br>The mineralization is terminated to the west by the by a NW trending shear zone dipping 60 degrees to the east. |
| 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:*<br>*easting and northing of the drill hole collar*<br>*elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>*dip and azimuth of the hole*<br>*down hole length and interception depth*<br>*hole length.*<br>*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.* | All material data is periodically released on the ASX:<br>14/10/2013, 23/07/2013, 03/12/2012, 10/10/2012, 31/07/2012, 27/04/2012, 06/03/2012, 27/01/2012, 06/01/2012, 26/10/2011, 01/08/2011, 28/07/2011, 03/06/2011, 21/04/2011, 09/02/2011 |
| 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 grades are usually Material and should be stated.* | All significant intercepts have been length weighted with a minimum Au grade of 1ppm. No high grade cut off has been applied. |

| Section 2: Reporting of Exploration Results | | |
|---|---|---|
| **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.* | 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. |
| | *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 and intercept lengths | *These relationships are particularly important in the reporting of Exploration Results.*<br>*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>*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').* | Previous announcements included sufficient detail to clearly illustrate the geometry of the mineralisation and the recent drilling. All results are reported as downhole lengths. |
| 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.* | Please refer to diagrams in this announcement. |
| 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 previous campaigns have been reported, irrespective of success or not. |
| Other substantive exploration data | *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;*<br>*geochemical survey results; bulk samples – size and*<br>*method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | No substantive data acquisition has been completed in recent times. |
| Further work | *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>*Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided* | Whirling Dervish is currently in production and extensional exploration at this time is under review. |

| Section 2: Reporting of Exploration Results | | |
|---|---|---|
| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | *this information is not commercially sensitive* | |

## Karari

| Section 1: Sampling Techniques and Data | | |
|---|---|---|
| **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 methods undertaken by Saracen at Karari have included reverse circulation drillholes (RC), diamond drillholes (DD) and RC grade control drilling within the pit, and diamond drilling and face chip sampling underground.<br>Historic sampling methods conducted since 1991 have included aircore (AC), rotary air blast (RAB), reverse circulation and diamond drillholes. |
| | *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used* | Sampling for diamond and RC drilling and face chip sampling is carried out as specified within Saracen sampling and QAQC procedures as per industry standard.<br>RC chips and diamond core provide high quality representative samples for analysis.<br>RC, RAB, AC and DD core drilling was completed by previous holders to industry standard at that time (1991- 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.*<br>*Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information* | RC chips are cone or riffle split and sampled into 1m intervals, diamond core is NQ or HQ sized, sampled to 1m intervals or geological boundaries where necessary and cut into half core and underground faces are chip sampled to geological boundaries (0.2-1m). All methods are used to produce representative sample of less than 3 kg. Samples are selected to weigh less than 3 kg to ensure total sample inclusion at the pulverisation stage.<br>Saracen core and chip samples are crushed, dried and pulverised to a nominal 90% passing 75µm to produce a 40g or 50 g sub sample for analysis by FA/AAS.<br>Some grade control RC chips were analysed in the Saracen on site laboratory using a PAL (pulverise and leach) method.<br>Visible gold is sometimes encountered in underground drillcore and face samples.<br>Historical AC, RAB, RC and diamond sampling was carried out to industry standard at that time.<br>Analysis methods include fire assay 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 11 AC holes, 452 RAB holes, 496 RC holes (assumed standard 5 ¼ ''bit size) and 25 surface unknown diameter diamond core holes.<br>In the recent program 16 RC holes were drilled using a 143mm diameter bit with a face sampling hammer. The rig was equipped with an external auxiliary booster.<br>Saracen has previously completed 6 surface RC precollars with HQ and NQ diamond tail drill holes (precollars averaging 198m, diamond tails averaging 190m) , 43 RC holes from both surface and within the pit and 3052 grade control RC holes within the pit. 215 NQ diamond holes have been drilled underground. 201 underground faces and walls have been chip sampled.<br>Diamond tails were oriented using an Ezi-mark tool.<br>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 sampling recoveries are recorded in the database as a percentage based on a visual weight estimate; no historic recoveries have been recorded. |

| Section 1: Sampling Techniques and Data | | |
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| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | | Diamond core recovery percentages calculated from measured core versus drilled intervals are logged and recorded in the database. Recoveries average >90%. |
| | *Measures taken to maximise sample recovery and ensure representative nature of the samples* | RC drilling daily rig inspections are carried out to check splitter condition, general site and address general issues.<br>Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against depth given on the core blocks.<br>UG faces are sampled from left to right across the face at the same height from the floor.<br>During GC campaigns the sample bags weight versus bulk reject weight are compared to ensure adequate and even sample recovery.<br>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.<br>Diamond drilling has high recoveries due to the competent nature of the ground meaning loss of material is minimal.<br>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.*<br>*Whether logging is qualitative or quantitative in nature.*<br>*Core (or costean, channel, etc) photography.* | Logging of RC chips and diamond drill core records lithology, mineralogy, texture, mineralisation, weathering, alteration and veining.<br>Geotechnical and structural logging is carried out on all diamond holes to record recovery, RQD, defect number, type, fill material, shape and roughness and alpha and beta angles.<br>All faces are photographed and mapped.<br>Chips from all RC holes (exploration and GC) are stored in chip trays for future reference while remaining core is stored in core trays and archived on site.<br>Core is photographed in both dry and wet state.<br>Qualitative and quantitative logging of historic data varies in its completeness. |
| | *The total length and percentage of the relevant intersections logged* | All RC and diamond drillholes holes are logged in full and all faces are mapped.<br>Every second drill line is logged in grade control programs with infill logging carried out as deemed necessary.<br>Historical logging is approximately 95% complete. |
| Sub-sampling techniques and sample preparation | *If core, whether cut or sawn and whether quarter, half or all core taken.* | All drill 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.* | All exploration and grade control RC samples are cone or riffle split. Occasional wet samples are encountered.<br>Underground faces are chip sampled using a hammer.<br>AC, RAB and RC drilling has been sampled using riffle and unknown methods. |
| | *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | The sample preparation of diamond core and RC and underground face chips adhere to industry best practice. It is conducted by a commercial laboratory and involves oven drying, coarse crushing then total grinding to a size of 90% passing 75 microns.<br>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.<br>Sampling by previous holders assumed to be 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* | 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. |

## Section 1: Sampling Techniques and Data

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| | *duplicate/second half sampling.* | No duplicates have been taken of underground core or face samples.<br>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.* | RC chip samples, grade control chip samples, underground face chip samples and diamond core are analysed by external laboratories using a 40g or 50g fire assay with AAS finish. These methods are considered suitable for determining gold concentrations in rock and are total digest methods.<br>Some GC samples were analysed in the Saracen onsite laboratory using pulverise and leach method. This method is a partial digest.<br>Historic sampling includes fire assay 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 have been 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 drillhole at a rate of 1:25 for exploration RC and DD, and 1:40 for GC drilling. These are not identifiable to the laboratory.<br>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.<br>QAQC data is reported monthly.<br>Sample preparation checks for fineness are carried out to ensure a grindsize of 90% passing 75 microns.<br>The laboratory performs a number of internal processes including standards, blanks, repeats and checks.<br>QAQC data analysis demonstrates sufficient accuracy and precision.<br>Industry best practice is assumed for previous holders. |
| 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. |
| | *The use of twinned holes.* | No specific twinned holes have been drilled at Karari but grade control drilling and 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.<br>Data from previous owners was taken from a database compilation and validated as much as practicable before entry into the Saracen acQuire database. |
| | *Discuss any adjustment to assay data.* | No adjustments have been made to assay data. First gold assay is utilised for resource estimation. |
| 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.* | Exploration drillholes are located using a Leica 1200 GPS with an accuracy of +/- 10mm.<br>Drillhole collars within the pit and immediate surrounds are picked up by company surveyors using a Trimble R8 GNSS (GPS) with an expected accuracy of +/-8mm.<br>All undergournd drillhole collars are picked up by company surveyors using a Leica TS15i (total station) with an expected accuracy of +/-2mm.<br>Underground faces are located using a Leica D5 disto with and accuracy of +/- 1mm from a known |

**Section 1: Sampling Techniques and Data**

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| | | survey point.<br>Underground downhole surveys are carried out using a Reflex single shot camera at regular intervals (usually 30m) down the hole. A multishot survey is carried out every 3m upon completion of the drillhole.<br>Surveys are carried out every 30m downhole during RC and surface diamond drilling using an Eastman single shot camera<br>A number of drillholes have also been gyroscopically surveyed.<br>Previous holders' survey accuracy and quality is unknown |
| | *Specification of the grid system used.* | A local grid system (Karari) is used.<br>The two point conversion to MGA_GDA94 zone 51 is<br>KAREast KARNorth RL MGAEast MGANorth RL<br>Point 1 4000 8000 0 439359.94 6663787.79 0<br>Point 2 3000 7400 0 438359.84 6663187.72 0<br>Historic data is converted to the Karari local grid upon export from the database. |
| | *Quality and adequacy of topographic control.* | Topographic control originally used site based survey pickups in addition to Kevron aerial photogrammetric surveys with +/- 5m resolution.<br>Pre mining, new and more detailed topography has since been captured and will be used in future updates and for subsequent planning purposes. |
| Data spacing and distribution | *Data spacing for reporting of Exploration Results.* | The nominal spacing for drilling is 25m x 25m. The recent drilling has been completed on 40m spaced lines |
| | *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.* | Data spacing and distribution are sufficient to establish the degree of geological and grade continuity appropriate for JORC classifications applied. |
| Orientation of data in relation to geological structure | *Whether sample compositing has been applied.* | Sample compositing is not applied until the estimation stage.<br>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.* | The majority of drillholes are positioned to achieve optimum intersection angles to the ore zone as are practicable.<br>Underground diamond drilling is designed to intersect the orebody in the best possible orientation given the constraints of underground drill locations.<br>UG faces are sampled left to right across the face allowing a representative sample to be taken. |
| | *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 secured cages and collected by the laboratory personnel.<br>Sample submissions are documented via laboratory tracking systems and assays are returned via email |
| 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. |

| Section 2: Reporting of Exploration Results | | |
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| **Criteria** | **JORC Code Explanation** | **Commentary** |
| Mineral tenement and land tenure status | *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* | The Karari pit is located on M28/166 and M28/167<br>Mining Leases M28/166 and M28/167 are held 100% by Saracen Gold Mines Pty Ltd a wholly owned subsidiary of Saracen Mineral Holdings Limited.<br>Mining Leases M28/166 and M28/167 have a 21 year life (held until 2020) and are renewable for a further 21 years on a continuing basis.<br>There are no registered Aboriginal Heritage sites within Mining Leases M28/166 and M28/167.<br>Mining Leases M28/166 and M28/167 are subject to two third party royalties payable on the tenements, a bank mortgage (Mortgage 41595) and two caveats (Caveat 51H/067 and 52H/067, respectively).<br>All production is subject to a Western Australian state government NSR royalty of 2.5%.<br>The tenements are subject to the Pinjin Pastoral Compensation Agreement. |
| | *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | The tenements are in good standing and the licence to operate already exists |
| Exploration done by other parties | *Acknowledgment and appraisal of exploration by other parties.* | The Carosue Dam project area in which the Karari deposit is located has been subjected to extensive gold exploration by numerous companies since 1991. Karari was highlighted as an area of interest following an aeromagnetic survey conducted by CRA Exploration. Auger sampling of the target defined a widespread gold anomaly with follow up RAB drilling intersecting significant gold mineralisation. RC and DD drilling further defined the mineralisation before Aberfoyle entered into a joint venture agreement with CRA. Further drilling by Aberfoyle defined mineralisation over a 600m strike length.<br>Aberfoyle were subject to a hostile takeover by Western Metals with PacMin then purchasing the Carosue Dam project. An intensive resource definition program consisting of both RC and DD drilling was carried out before mining of Karari commenced in 2000. |
| Geology | *Deposit type, geological setting and style of mineralisation.* | The Karari deposit sits along the regional NNW-trending Keith-Kilkenny fault zone within the eastern edge of the Norseman-Wiluna greenstone belt.<br>The deposit itself is lithologically and structurally controlled and sits within an altered volcaniclastic sandstone unit that has been offset along a series of major faults running NE-SW and NW-SE, as well as intruded by large lamprophyre units post mineralization.<br>Mineralization is dominated by pyrite and hosted in broad hematite altered sandstone units with a central high grade siliceous core light-moderately dipping to the North. |
| 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:*<br>*easting and northing of the drill hole collar*<br>*elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>*dip and azimuth of the hole*<br>*down hole length and interception depth*<br>*hole length.*<br>*If the exclusion of this information is justified on the basis that the information is not Material and this* | All material data is periodically released on the ASX:<br>03/07/2015, 25/05/2015, 05/05/2015, 11/03/2015, 16/01/2014, 14/10/2013, 25/01/2013, 28/07/2011, 03/06/2011, 21/04/2011, 09/02/2011, 03/11/2008 |

| Section 2: Reporting of Exploration Results | | |
|---|---|---|
| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | *exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | |
| 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.* | All underground diamond drillhole significant intercepts have been length weighted with a minimum Au grade of 1ppm. No high grade cut off has been applied. |
| | *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.* | 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. |
| | *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 and intercept lengths | *These relationships are particularly important in the reporting of Exploration Results.*<br>*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>*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').* | Previous announcements included sufficient detail to clearly illustrate the geometry of the mineralisation and the recent drilling. All results are reported as downhole lengths. |
| 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 previous campaigns have been reported, irrespective of success or not. |
| Other substantive exploration data | *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;*<br>*geochemical survey results; bulk samples – size and*<br>*method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock* | No substantive data acquisition has been completed in recent times. |

| Section 2: Reporting of Exploration Results | | |
|---|---|---|
| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | *characteristics; potential deleterious or contaminating substances.* | |
| Further work | *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>*Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive* | Further infill drilling may be carried out inside the reserve pit design to improve confidence. The drilling is getting to the depth where exploration is expensive and the approach needs to be carefully considered. |

## Red October

| Section 1: Sampling Techniques and Data | | |
|---|---|---|
| **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.<br>Historic sampling methods conducted since 1989 have included aircore (AC), rotary air blast (RAB), RC and surface and underground DD holes. |
| | *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.<br>RC chips and NQ diamond core provide high quality representative samples for analysis.<br>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.*<br>*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.<br>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 weigh less than 3 kg to ensure total sample inclusion at the pulverisation stage.<br>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.<br>Visible gold is occasionally encountered in drillcore and face samples.<br>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* | 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.<br>5 RC holes were drilled using a 143mm diameter bit with a face sampling hammer. The rig was |

| Section 1: Sampling Techniques and Data | | |
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| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | *standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).* | equipped with an external auxiliary/ booster.<br>Saracen has previously completed 6 reverse circulation drillholes, 9 surface HQ and NQ diamond drillholes, 710 underground NQ diamond drill holes and sampled 2032 underground faces. Diamond drill core has been oriented using several different methods which include Ezi-Mark, ACT, and more recently Ori-Finder.<br>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.<br>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%.<br>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.<br>Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against depth given on the core blocks.<br>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.<br>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.<br>Diamond drilling has high recoveries due to the competent nature of the ground meaning loss of material is minimal.<br>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.*<br>*Whether logging is qualitative or quantitative in nature.*<br>*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.<br>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.<br>Core is photographed in both dry and wet state.<br>All faces are photographed and mapped.<br>Qualitative and quantitative logging of historic data varies in its completeness. Some surface diamond drill photography has been preserved. |
| | *The total length and percentage of the relevant intersections logged* | All RC and diamond drillholes are logged in full and all faces are mapped.<br>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.<br>UG faces are chip sampled using a hammer.<br>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* | 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 |

| Section 1: Sampling Techniques and Data | | |
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| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | *technique.* | using an LM5 to a grind size of 90% passing 75 microns.<br>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.<br>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.<br>No duplicates have been taken of UG diamond core , face samples are duplicated on ore structures.<br>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 diamond 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.<br>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(1 in 30) and UG face jobs to assess laboratory accuracy and precision and possible contamination. These are not identifiable to the laboratory. Blanks are also included at a rate of 1 in 30 for diamond drill core and one per lab dispatch for face samples. Feldspar flush samples are requested after each sample with visible gold, or estimated high grade.<br>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.<br>QAQC data is reported monthly and demonstrates sufficient levels of accuracy and precision.<br>Sample preparation checks for fineness are carried out to ensure a grind size of 90% passing 75 microns.<br>The laboratory performs a number of internal processes including standards, blanks, repeats and checks.<br>Industry best practice is assumed for previous holders. Historic QAQC data is stored in the database but 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. |
| | *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.<br>Chips from RC drillholes are stored in chip trays for future reference. Remaining half core is stored in |

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| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | | core trays and archived on site<br>Hard copies of face mapping, backs mapping and sampling records are kept on site. Digital scans are also kept on the corporate server.<br>Data from previous owners was taken from a database compilation and was validated as much as practicable before entry into the Saracen acQuire database. |
| | *Discuss any adjustment to assay data.* | 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 collars are picked up by company surveyors using a Leica TS15i (total station) with an expected accuracy of +/-2mm.<br>Underground faces are located using a Leica D5 disto with and accuracy of +/- 1mm from a known survey point.<br>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.<br>Previous holders' survey accuracy and quality is generally unknown. |
| | *Specification of the grid system used.* | A local grid system (Red October) is used. It is rotated 44.19 degrees east of MGA_GDA94.<br>The two point conversion to MGA_GDA94 zone 51 is<br>ROEast RONorth RL MGAEast MGANorth RL<br>Point 1 5890.71 10826.86 0 444223.25 6767834.66 0<br>Point 2 3969.83 9946.71 0 442233.31 6768542.17 0<br>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.<br>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 at 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.<br>Underground diamond drilling is designed to intersect the orebody in the best possible orientation given the constraints of underground drill locations.<br>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* | No significant sampling bias has been recognised due to orientation of drilling in regards to mineralised |

## Section 1: Sampling Techniques and Data

| Criteria | JORC Code Explanation | Commentary |
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| | *and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | 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. |

## Section 2: Reporting of Exploration Results

| Criteria | JORC Code Explanation | Commentary |
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| Mineral tenement and land tenure status | *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* | Red October is wholly located within Mining Lease M39/412.<br>Mining Lease M39/412 is held 100% by Saracen Gold Mines Pty Ltd a wholly owned subsidiary of Saracen Mineral Holdings Limited.<br>Mining Lease M39/412 has a 21 year life (held until 2019) and is renewable for a further 21 years on a continuing basis.<br>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, 2452 and 2457) are not affected by current mining practices.<br>Third party royalties are payable on the tenement:<br>• 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<br>• A Royalty is payable based on a percentage of proceeds of sale or percentage of mineral value.<br>All production is subject to a Western Australian state government NSR royalty of 2.5%. |
| | *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | The tenement is in good standing and the licence to operate already exists. |
| 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.<br>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 |

| Section 2: Reporting of Exploration Results | | |
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| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | | 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 |
| 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:*<br>• *easting and northing of the drill hole collar*<br>• *elevation or RL (Reduced Level – elevation*<br>• *above sea level in metres) of the drill hole collar*<br>• *dip and azimuth of the hole*<br>• *down hole length and interception depth*<br>• *hole length.*<br>• *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.* | All material data is periodically released on the ASX:<br>25/05/2015, 10/03/2015,25/05/2015.16/01/2014, 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 grades are usually Material and should be stated.* | All significant intercepts have been length weighted with a lower cut-off Au grade of 2.5ppm. No high grade cut is applied |
| | *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.* | 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. |
| | *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.*<br>*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>*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').* | No exploration results have been reported in this release.<br>The geometry of the mineralisation is highly variable and the complex nature of the ore bodies makes the definitive calculation of true thickness difficult.<br><br>Drilling has been orientated to intersect the various ore bodies at most optimum angle where possible. 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* | No diagrams are referenced in this release. |

| Section 2: Reporting of Exploration Results | | |
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| **Criteria** | **JORC Code Explanation** | **Commentary** |
| | *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.* | |
| 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;*<br>*geochemical survey results; bulk samples – size and*<br>*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 used 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. Model Earth Pty was engaged to conduct a structural review of the Red October camp area in May 2015. Several local and regional scale targets were identified for follow-up. |
| Further work | *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>*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. |