SARACEN MINERAL HOLDINGS LIMITED

ACN: 009 215 347

Saracen triples FY17 exploration budget to A$42m to grow production and mine life

Strong drilling results highlight potential to exceed the forecast production rate of 300,000ozpa contained in the five-year outlook

Key Points

- Saracen commits a **record A$42m** to exploration at its existing mine sites for FY17, up from A$14.3m spent in FY16
- Strategy is aimed at **growing group production and mine life**, targeting additional inventory at Thunderbox (Zone A underground, King of the Hills) and Carosue Dam (Karari, Deep South and Red October)
- The increased budget is supported by outstanding new drilling results:
  - **Karari (from new exploration drill platform):**
    - 16.6m @ 8.2g/t
    - 27.7m @ 6.1g/t
    - 19.0m @ 4.6g/t
    - 6.0m @ 11.2g/t
    - 16.0m @ 4.3g/t
    - 24.0m @ 3.9g/t
    - 27.6m @ 2.5g/t
  - **King of the Hills (mining commenced):**
    - 14.8m @ 29.1g/t (ETW* 10.2m)
    - 12.7m @ 11.6g/t (ETW 2.5m)
    - 6.4m @ 21.9g/t (ETW 1.5m)
    - 1.4m @ 30.1g/t (ETW 0.8m)
    - 4.4m @ 10.0g/t (ETW 2.5m)
    - 2.0m @ 44.1g/t (ETW 1.0m)
    - 4.0m @ 27.9g/t (ETW 2.0m)
    - 0.6m @ 41.2g/t (ETW 0.3m)
    - 0.6m @ 52.0g/t (ETW 0.5m)
    - 1.0m @ 22.2g/t (ETW 1.0m)
    - 0.4m @ 43.0g/t (ETW 0.4m)
    - 1.4m @ 30.3g/t (ETW 1.4m)
    - 0.4m @ 71.3g/t (ETW 0.4m)
  - **Red October (new lodes):**
    - 4.3m @ 17.5g/t
    - 0.3m @ 75.2g/t
    - 0.3m @ 131.0g/t
- A$42m exploration budget designed to underpin and potentially enhance Saracen's five-year outlook with production on track to hit annualised rate of **300,000ozpa by the June quarter 2017**
- All-in sustaining costs (AISC) are forecast to fall to **A$950/oz in FY20**
- Increased exploration budget to be funded solely from internally generated cash flow, ensuring Saracen remains debt-free

* ETW means Estimated True Width

Corporate Details:

27th July 2016

***ASX code*:** SAR

Corporate Structure:

Ordinary shares on issue: 800.8m

Unvested employee performance rights: 20.2m

Market Capitalisation: A$1.3b (share price A$1.58)

Cash & Bullion (30 June): A$40.3m

Debt: Nil

Directors:

Mr Geoff Clifford
Non-Executive Chairman

Mr Raleigh Finlayson
Managing Director

Mr Mark Connelly
Non-Executive

Mr Martin Reed
Non-Executive

Ms Samantha Tough
Non-Executive

***Substantial Shareholders*:**

Van Eck Global 13.2%

Wroxby 8.1%

Karara Capital 6.0%

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Saracen Mineral Holdings (**ASX: SAR**) is pleased to advise that it has tripled its exploration budget to A$42 million for this financial year as part of a strategy to grow the inventory and production at its existing mines.

The substantial commitment reflects Saracen's high level of confidence in the organic growth credentials of its Carosue Dam and Thunderbox operations. The targets have resulted from the systematic and rigorous ranking of Saracen's exploration portfolio over the past two years.

The A$65 million capital requirement of the Thunderbox development resulted in a reduced exploration spend of only A$11.1 million and A$14.3 million in FY15 and FY16 respectively.

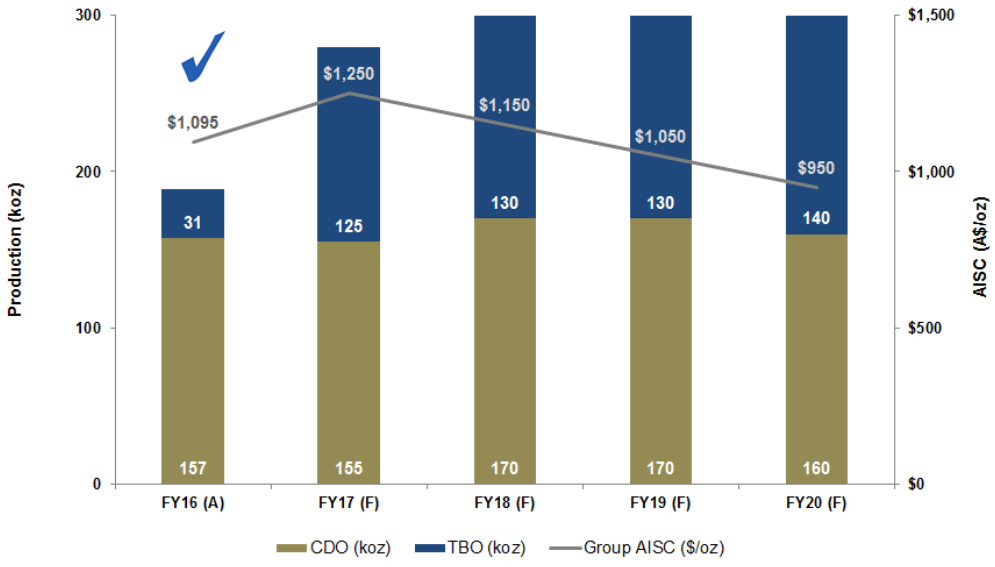
Table 1 – FY17 exploration budget (A$ and timing)

Project	Sep-16 Qtr	Dec-16 Qtr	Mar-17 Qtr	Jun-17 Qtr	TOTAL $m
Thunderbox					
Thunderbox Zone A UG		9.3			$9.3
King of the Hills		3.3			$3.3
Carosue Dam					
Red October	2.5				$2.5
Deep South		6.8			$6.8
Karari			9.1		$9.1
Whirling Dervish				8.2	$8.2
Greenfields					
Regional			2.8		$2.8
TOTAL $m	$8.6	$9.4	$15.4	$8.6	$42.0

The strong prospectivity of Saracen's assets is underlined by recent extensional drilling results from the rapidly growing Karari mine (page 4), the high-grade King of the Hills (KOTH) project (page 9) and potential new discoveries at the Red October mine (page 26). All deposits remain open along strike and at depth.

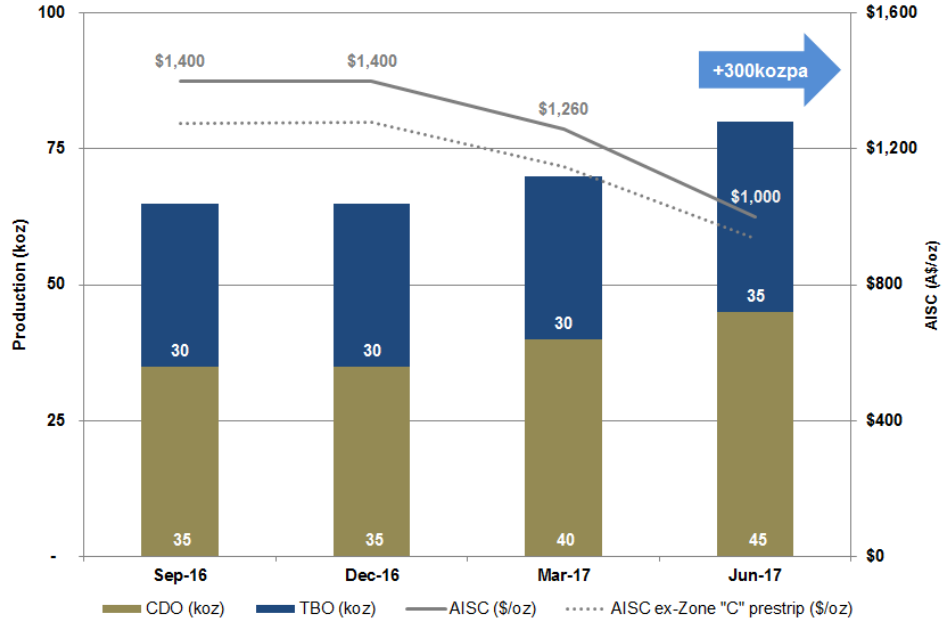
After achieving its FY16 outlook (the fourth year straight Saracen has met or exceeded guidance), the Company is pleased to reiterate its five-year group production outlook (refer to the ASX announcement dated 27th October 2015 – "Robust five-year outlook – Revised").

Figure 1 – Five-year group production outlook



Production is on track to increase to an annualised rate of 300,000ozpa from the June quarter 2017 (Figure 2). AISC are anticipated to fall to A$1,000/oz in the June quarter 2017 and further to A$950/oz in FY20 (as the strip ratio of the Thunderbox open pit continues to decline concurrent with increasing average grades).

Figure 2 – FY17 group production outlook



To re-iterate, Saracen reports AISC in true cashflow terms, with no accounting adjustments for strip ratio and ore stockpiles. Group AISC for FY17 of A$1,250/oz (Figure 1) includes ~A$28 million for Thunderbox Zone C pre-strip mining. There are no ounces delivered to the mill from Zone C in FY17, with waste mining in FY17 to allow access to ore for FY18-20. Excluding the Zone C pre-strip costs reduces the group AISC for FY17 by A$100/oz to A$1,150/oz (Figure 2).

Ore production has commenced at KOTH where FY17 forecast production is a modest 12koz (all in the December half), entirely from the northern extremities of the mine (Figure 10) where previous underground production of 291koz @ 4.5g/t was sourced. Significant potential exists to the south with exploration drilling underway.

The early drill results from the new A$42m exploration budget suggest significant potential to increase annual production and mine life beyond the levels in the current five-year production outlook.

Saracen Managing Director, Raleigh Finlayson, said the Company had every reason to be confident about the exploration upside of its assets.

"*Based on what we have seen so far, we believe this aggressive exploration campaign has the potential to increase our inventory and production in the coming quarters*," Mr Finlayson said. "*The proposed A$42 million exploration budget in FY17 will be the highest exploration commitment Saracen has made in its ten-year history.*"

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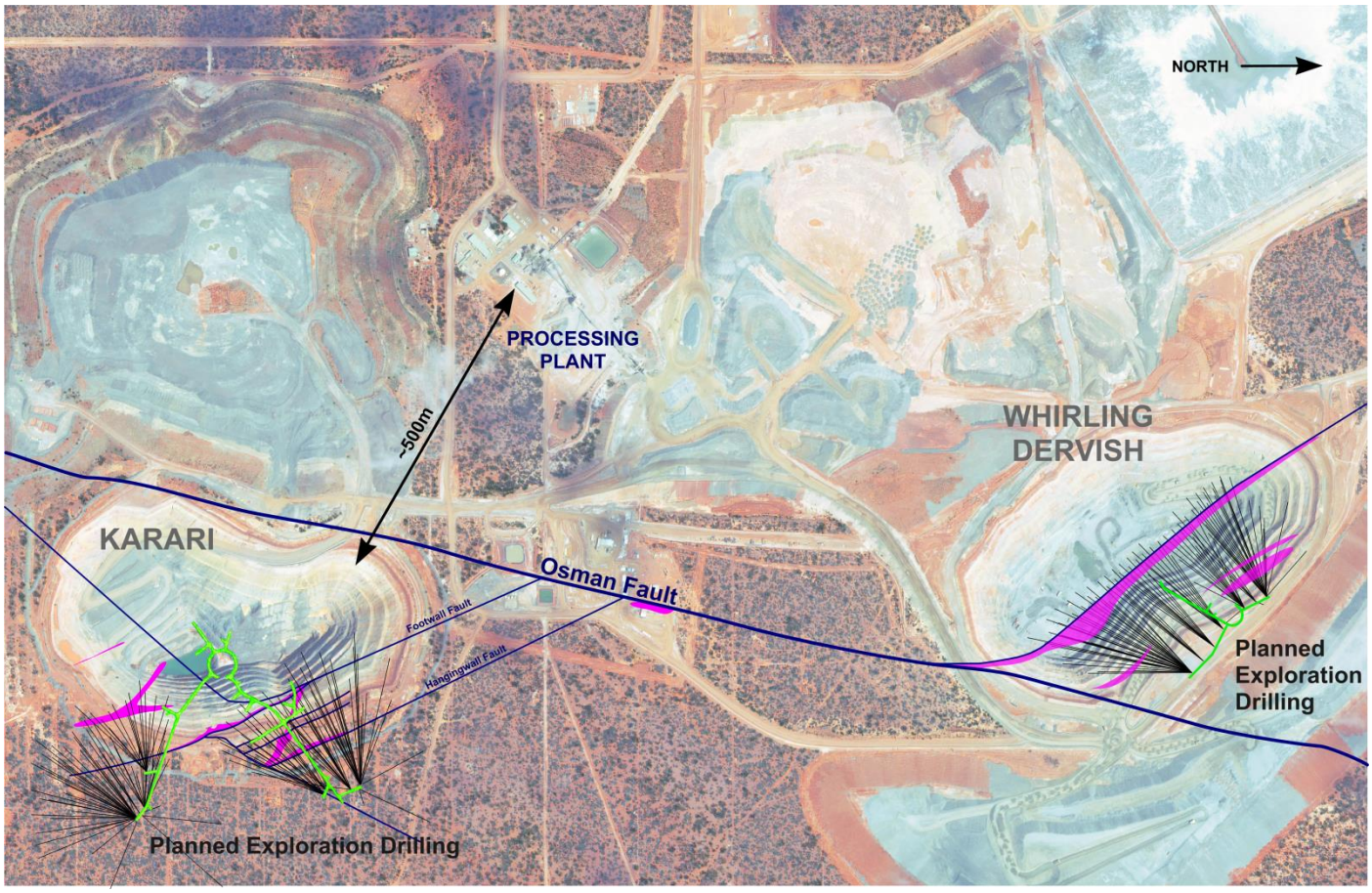
Carosue Dam Operations Drilling Update

Karari Underground

Drilling has recommenced at the Karari Underground mine following the establishment of the first of two new hangingwall drill platforms (Figure 3 – green exploration drill drives).

The 2070 drill drive (to the North) was completed in June 2016, with drilling commencing immediately after services were established. The two new drill platforms are a major commitment to the growth of the mine and will allow drilling ~300m further down dip on the known mineralisation.

Figure 3 – Processing plant adjacent to the Karari and Whirling Dervish mines with planned FY17 drilling



The first results from this drilling program have been returned, demonstrating the robustness and consistency of the mineralisation. Drilling has been focused on the Hangingwall and Resurrection Lodes in the north of the mine and outside the current Ore Reserve (Figures 4-5).

Significant results include:

- **KRRD115 – 16.6m @ 8.2g/t**
- **KRGC314 – 27.7m @ 6.1g/t**
- **KRRD113 – 19.0m @ 4.6g/t**
- **KRRD113 – 6.0m @ 11.2g/t**
- **KRRD112 – 16.0m @ 4.3g/t**
- **KRRD117 – 24.0m @ 3.9g/t**
- **KRRD118 – 27.6m @ 2.5g/t**

Figure 4 – Karari Long Section - New drill results

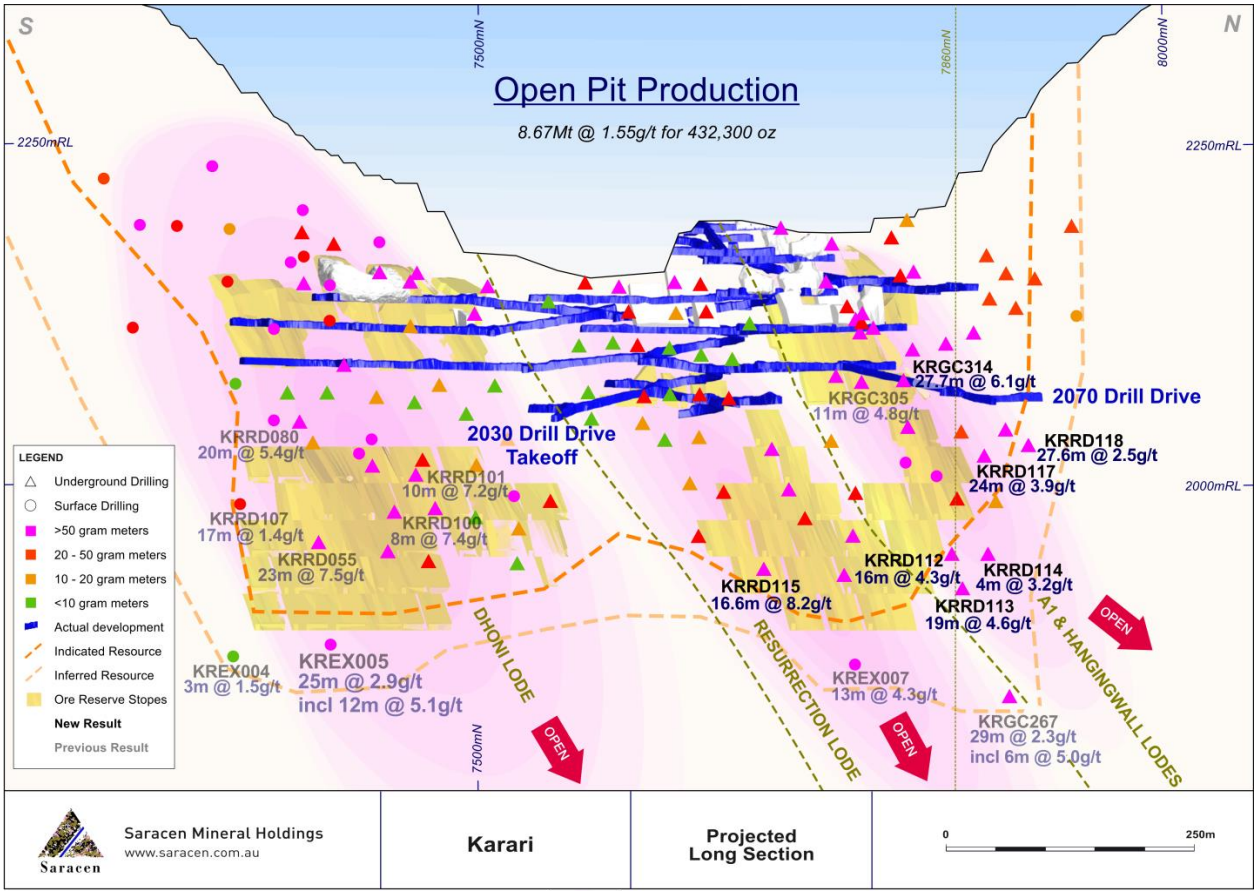
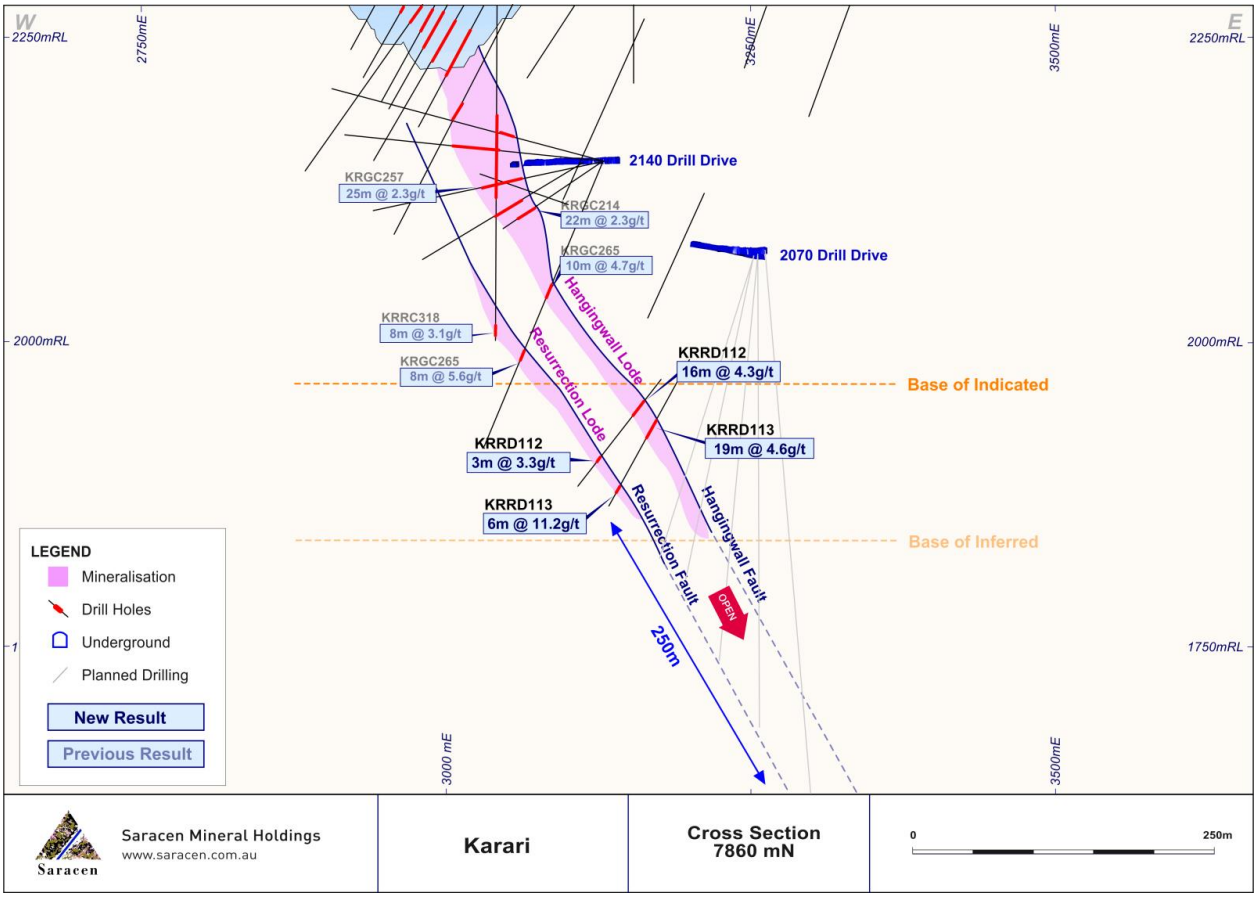


Figure 5 – Karari Cross Section - New drill results

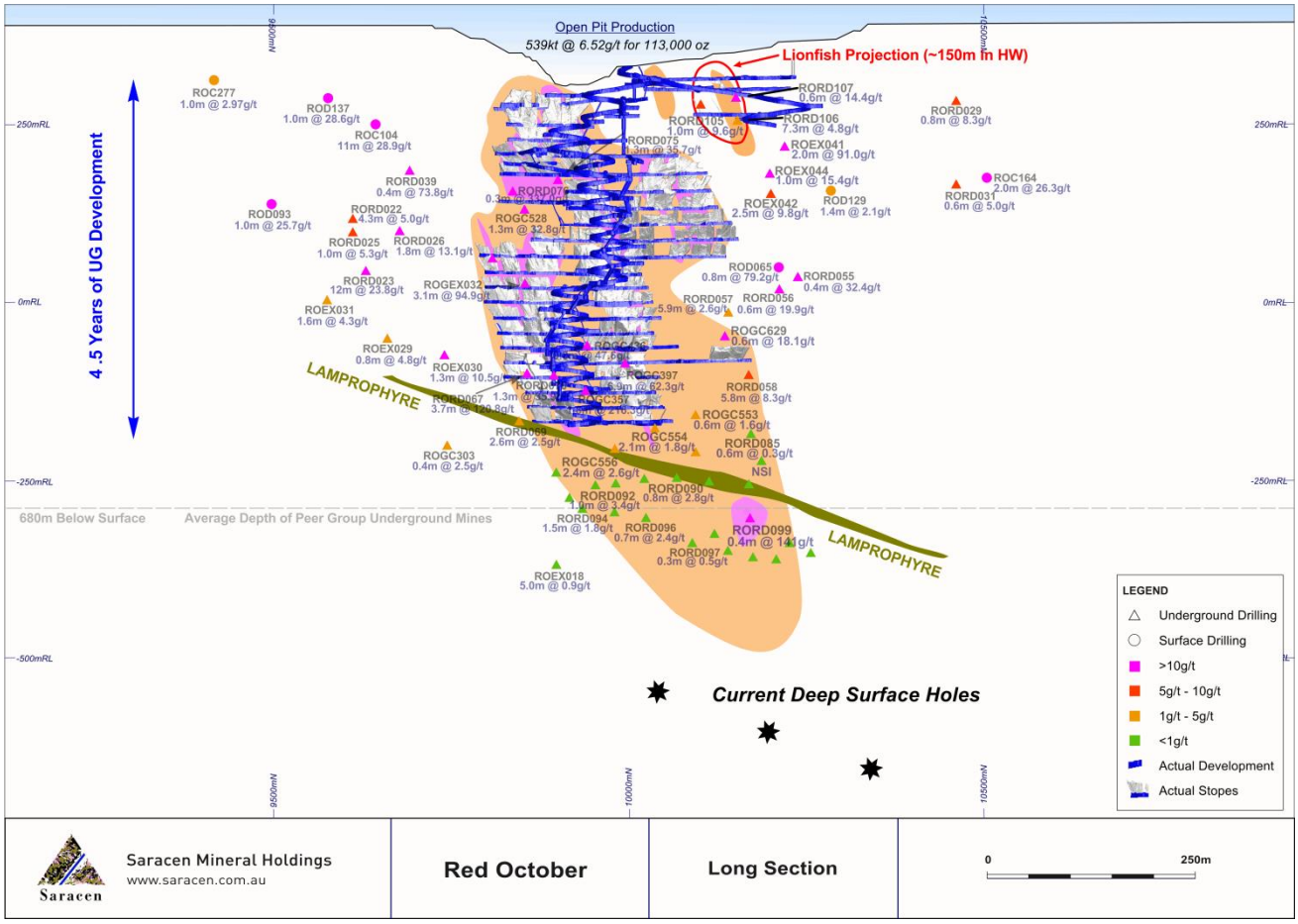


Red October Underground

At the Red October underground mine the extensional drill program is now completed, Resource definition proximal to the mine infrastructure is nearing completion and deeper step out exploration continues.

Underground extensional drilling following up the previously released result (0.4m @ 141g/t) did not return any further favourable results below the mine infrastructure. The dip of the Marlin Lode has flattened slightly and therefore became less favourable for dilation and subsequent brecciation. The change in dip is likely the result of the recently identified Lamprophyre intrusive which is thought to have intruded along a pre-existing structure (Figure 6).

Figure 6 – Red October Long Section



Near mine exploration drilling has discovered a new lode (Lionfish) ~150m in the hangingwall of the Red October shear zone (Figures 6-8).

Further drilling into the Lionfish Lode has demonstrated reasonable continuity and improved geological understanding. The drilling has shown that the lode is positioned on the top of a high MgO basalt flow. The subtle contrast in rheology has proven to be an effective mechanism to focus gold bearing structures. This relationship is common in the Red October environment. Results have been encouraging and, pleasingly, the drilling has also identified additional narrow linking structures where visible gold has been observed.

Drilling highlights include:

- **RORD119 - 4.3m @ 17.5g/t**
- **RORD105 - 0.3m @ 75.2g/t**
- **RORD106 - 5.8m @ 5.6g/t**
- **RORD109 - 0.3m @ 131.0g/t**

Figure 7 – Red October Cross Section - Near mine Resource drilling "Lionfish Lode"

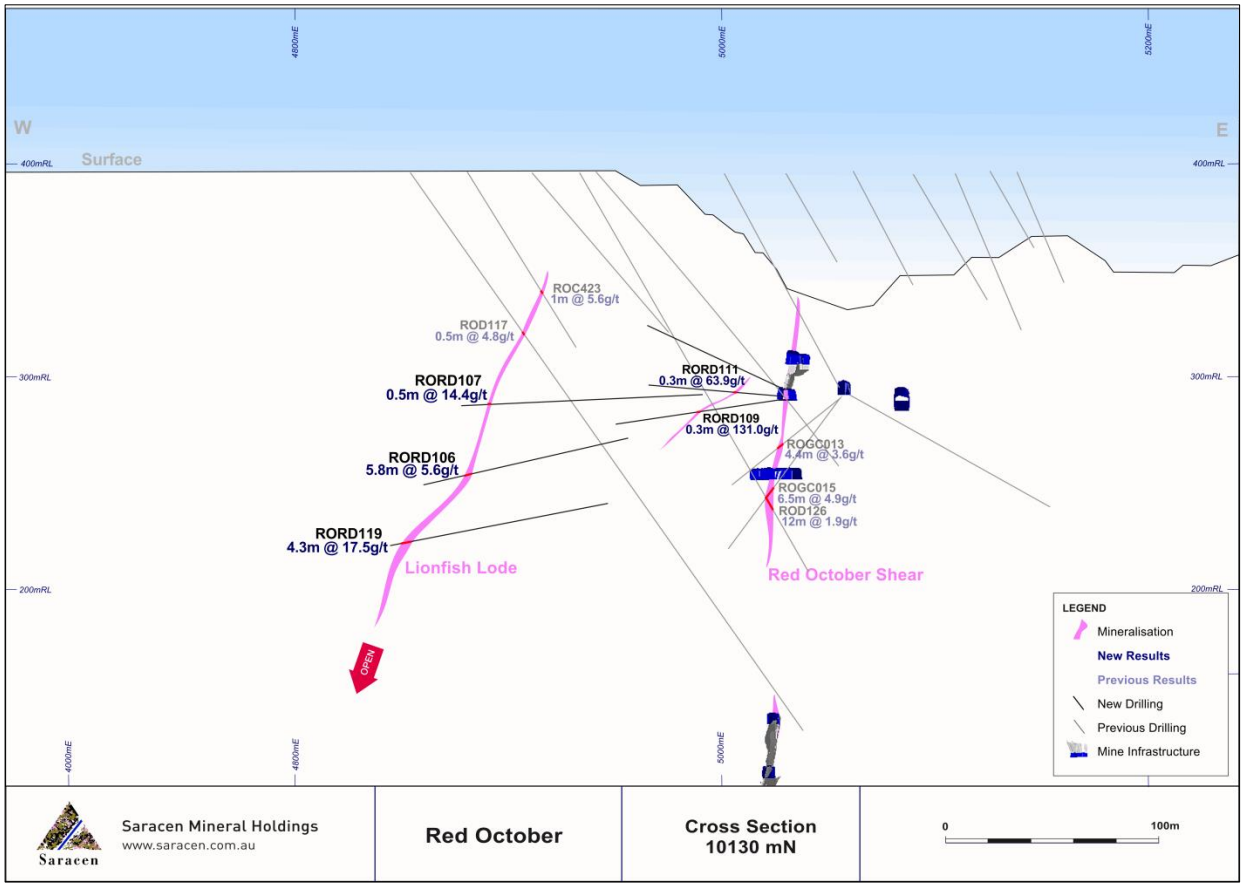
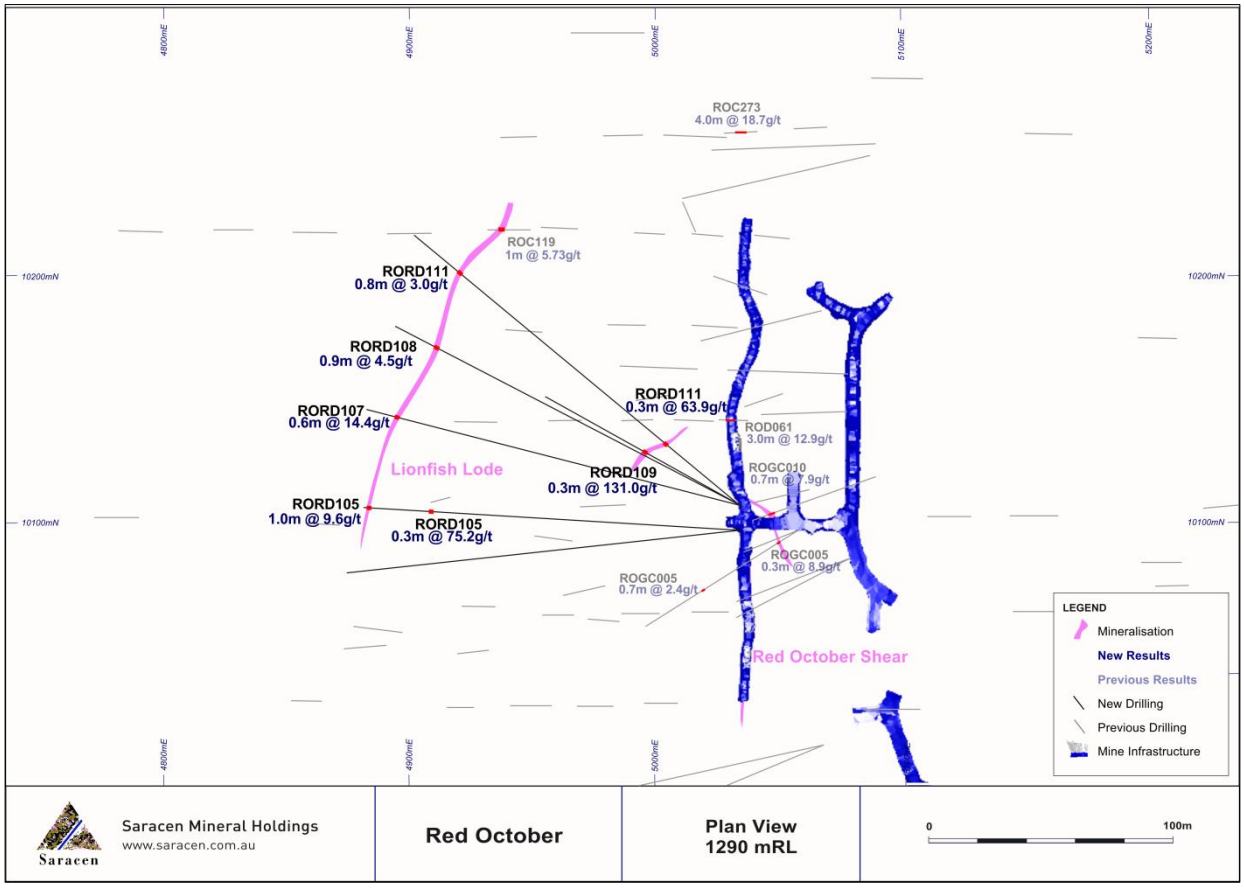


Figure 8 – Red October Plan View - Near mine Resource drilling "Lionfish Lode"

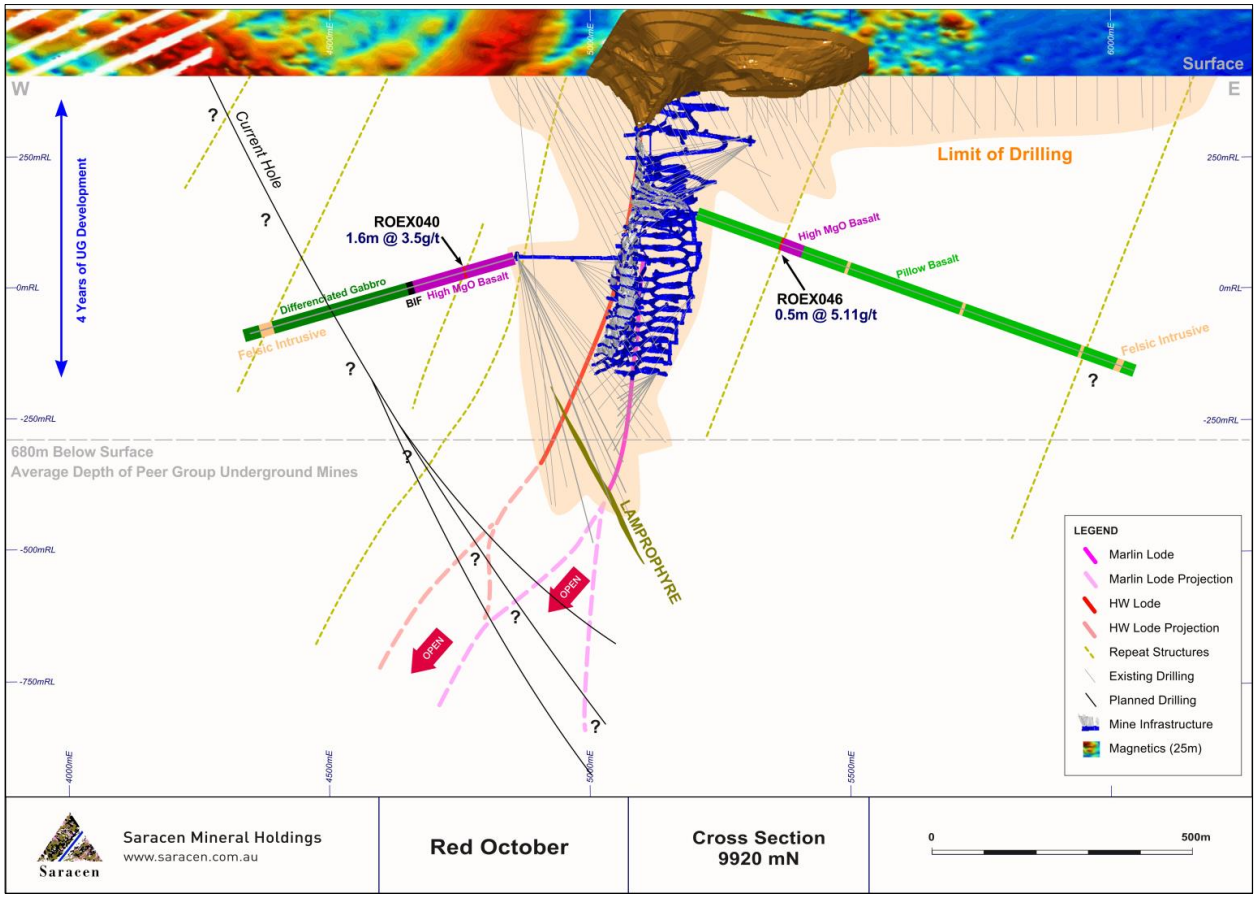


Exploration drilling has also continued in the Red October structural corridor.

An exploration hole (ROEX046) has been drilled into the footwall and has identified stratigraphic horizons previously unknown. A shear zone present on one of these contacts returned an anomalous result of **0.5m** @ **5.11g/t** (Figure 9).

Further geological assessment of the hangingwall stratigraphic hole (ROEX040) has confirmed the magnetic high evident in the recently acquired ground magnetics correlates with the banded iron formation (BIF) (Figure 9). This unit displays similar characteristics to the key stratigraphic unit which focused mineralisation in the upper 200m of the Red October deposit.

Figure 9 – Red October Exploration Cross Section



The exploration program has now entered the next exciting phase, with the commencement of the +1,500m surface diamond hole. This hole will be the parent to two daughters and is aiming to test the Red October structures at depth (Figure 6, 9).

There is currently a production hiatus at Red October in the current quarter while exploration drilling is conducted from the base of the mine and Deep South reaches steady state output. Production is planned to re-commence at Red October in the December quarter 2016, with modest contributions of ~15koz anticipated in each of FY17 and FY18 (in line with the Carosue Dam five-year outlook).

The 30koz of production in the five-year plan has already been defined, with the current and future exploration programs, specifically targeting Lionfish and the deep exploration drilling, having the potential to provide upside to the five-year plan in terms of grade, production and enhanced cashflow.

Thunderbox Operations Drilling Update

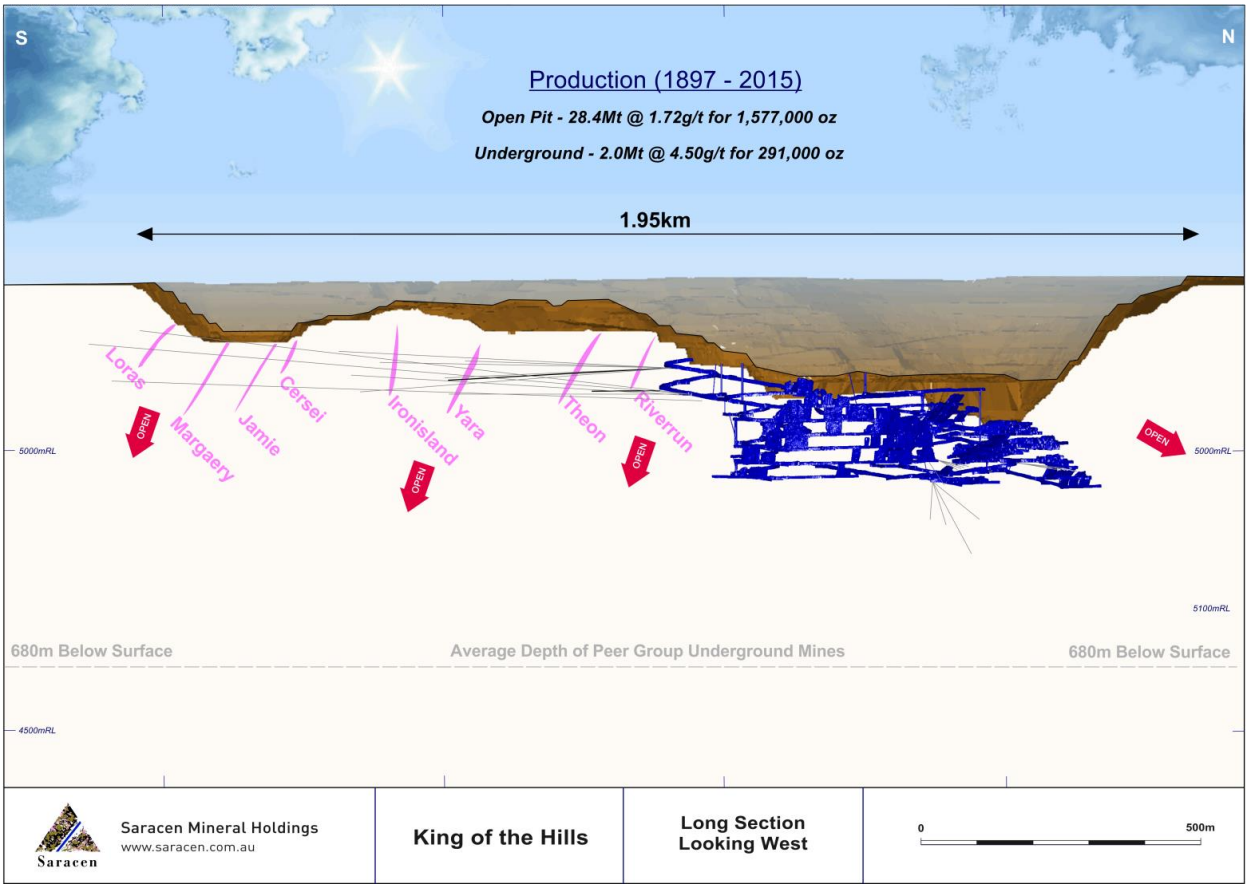
King of the Hills Underground

King of the Hills is located 65km to the south of Thunderbox, immediately adjacent to the Goldfields Highway. This significantly mineralised system produced 1.9Moz since 1985.

Saracen acquired the King of the Hills and Kailis gold projects in August 2015 for a total consideration for both projects of A$3m cash in two tranches, A$0.3m on completion (paid), plus A$2.7m upon the earlier of commercial production from Kailis or 4 years following completion.

Multiple opportunities to define additional Resources were identified following an extensive structural and lithological review of existing data, combined with additional mapping and logging information. Several areas in and around the existing underground workings were highlighted as well as significant potential to the south of the current underground mine (Figure 10).

Figure 10 – King of the Hills Long Section - Showing the location of the current underground workings



An underground drill program has commenced to test both the near mine opportunities and the extensional zones inferred from the structural modelling.

The King of the Hills mineralisation can be broadly classified into two main styles or settings. The first is mineralisation associated with deformation along the contact of the large Granite and the overlying Ultramafic sequence. The second is associated with extensional quartz-carbonate-sulphide veins, which can extend some hundreds of meters into the large Granite body.

Early results have been very encouraging. The first phase of drilling near mine has been completed (Figures 11-13) and follow up drilling is already being planned.

Significant results from near mine drilling include:

- **KHGC026 – 14.8m @ 29.1g/t** (ETW* 10.2m)
- **KHGC023 – 12.7m @ 11.6g/t** (ETW 2.5m)
- **KHGC002 – 6.4m @ 21.9g/t** (ETW 1.5m)
- **KHGC003 – 1.4m @ 30.1g/t** (ETW 0.8m)
- **KHGC001 – 4.4m @ 10.0g/t** (ETW 2.5m)
- **KHGC005 – 2.0m @ 44.1g/t** (ETW 1.0m)
- **KHGC007 – 4.0m @ 27.9g/t** (ETW 2.0m)
- **KHGC003 – 0.9m @ 12.2g/t** (ETW 0.5m)
- **KHGC006 – 1.0m @ 15.6g/t** (ETW 0.5m)
- **KHGC007 – 0.75m @ 19.1g/t** (ETW 0.45m)
- **KHGC008 – 2.6m @ 5.8g/t** (ETW 1.6m)
- **KHGC009 – 0.8m @ 23.3g/t** (ETW 0.65m)
- **KHGC013 – 0.5m @ 10.9g/t** (ETW 0.5m)
- **KHGC023 – 0.6m @ 41.2g/t** (ETW 0.3m)
- **KHGC024 – 1.0m @ 17.3g/t** (ETW 0.75m)
- **KHGC024 – 0.6m @ 27.5g/t** (ETW 0.4m)
- **KHGC027 – 1.0m @ 25.2g/t** (ETW 0.75m)

* ETW means Estimated True Width

Figure 11 – King of the Hills Long Section - Drilling below and outside current mine infrastructure

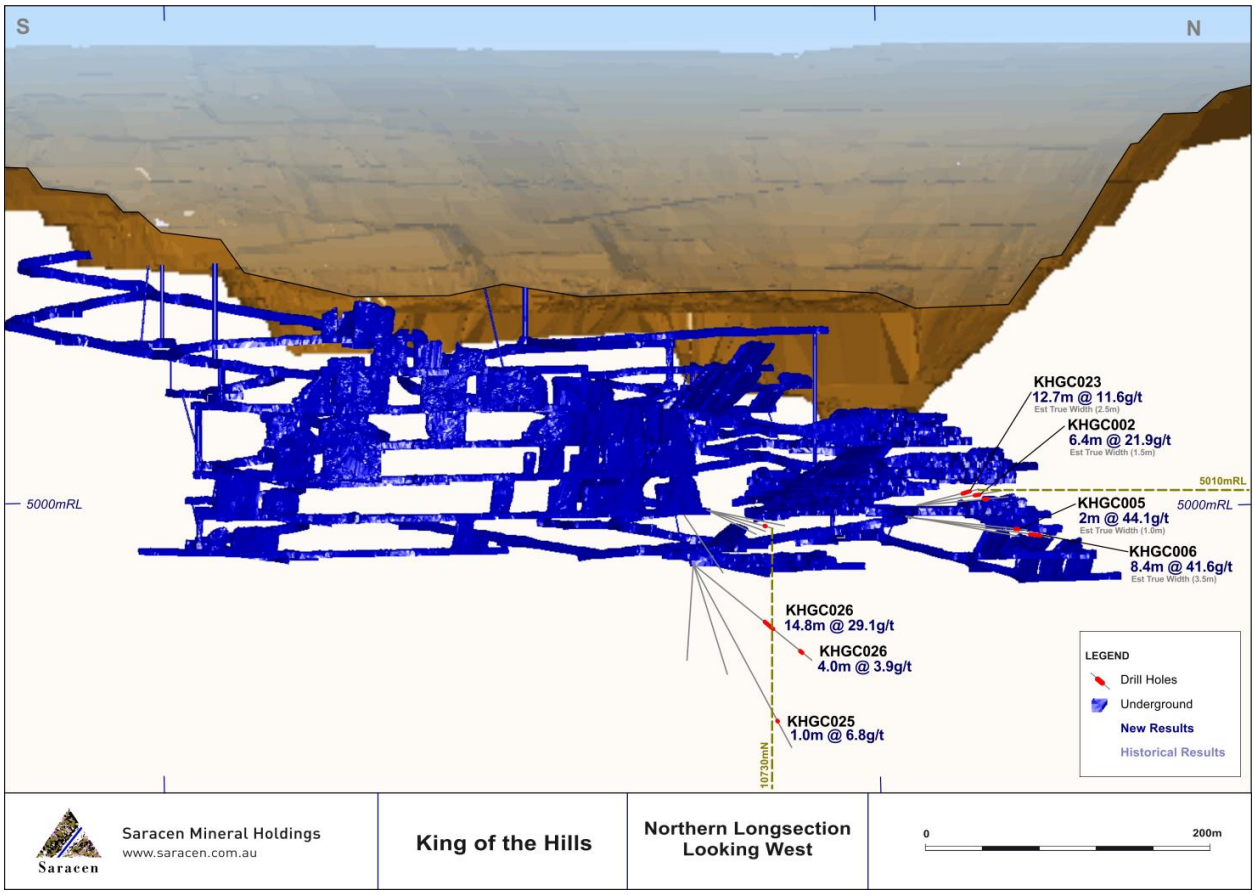


Figure 12 – King of the Hills Cross Section - Drilling below current mine infrastructure

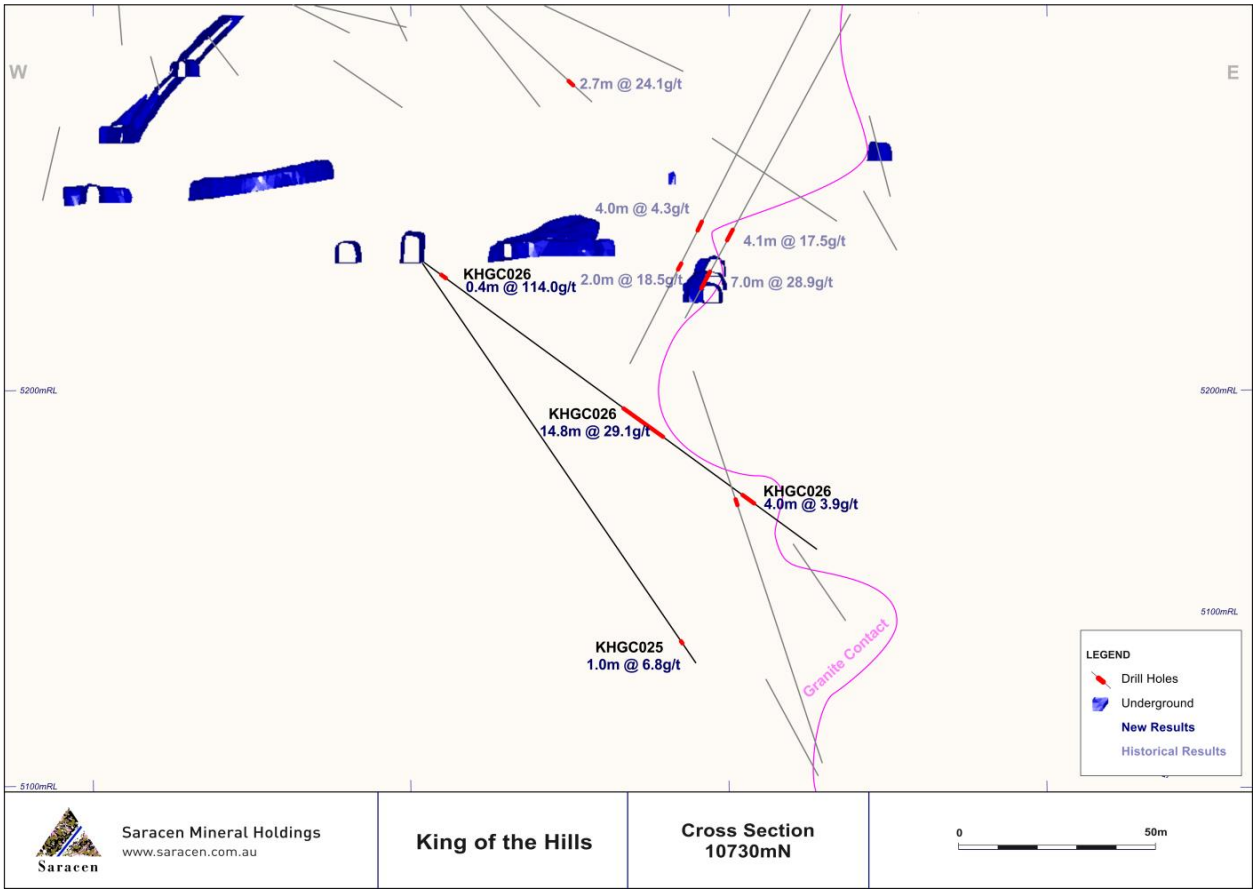
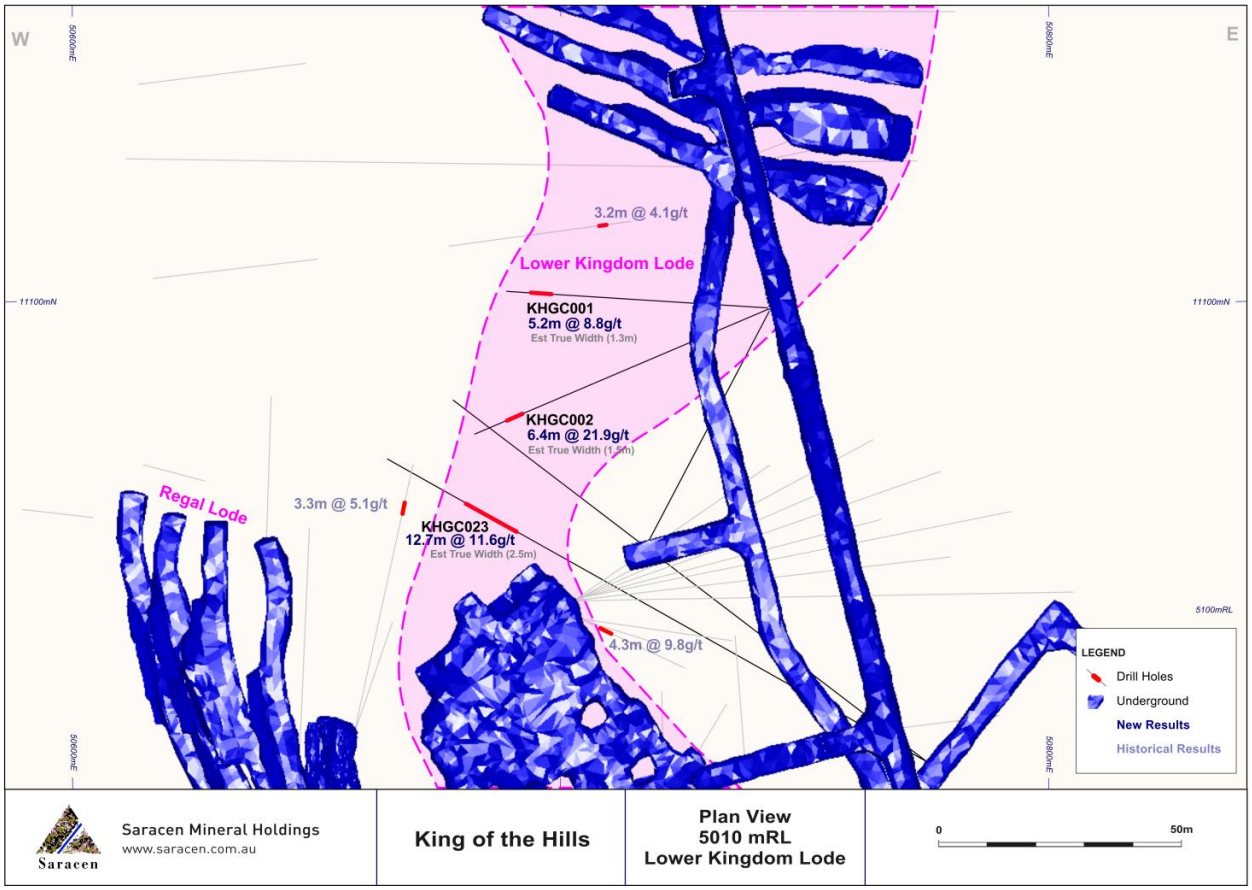
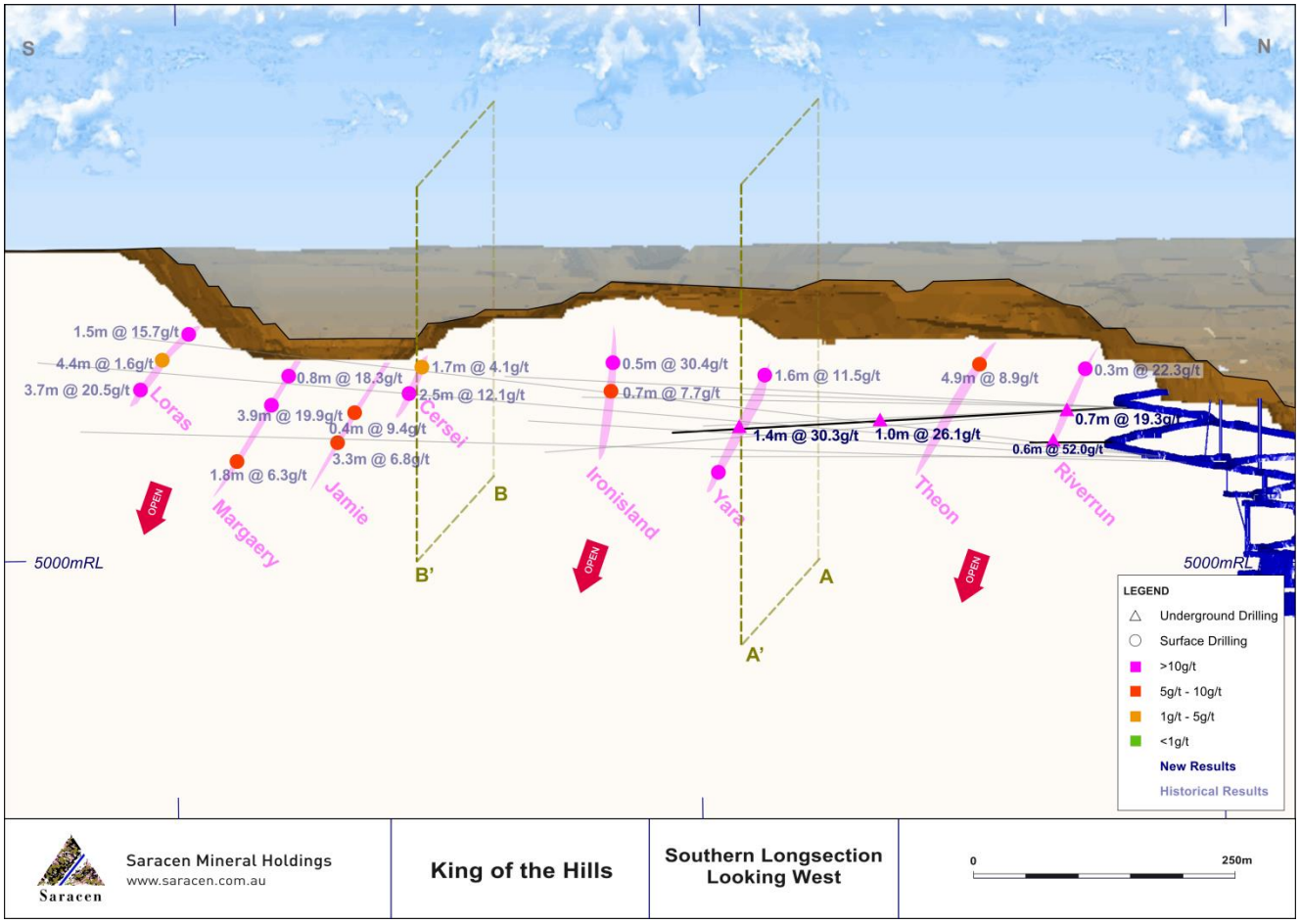


Figure 13 – King of the Hills Plan View - Drilling into the Lower Kingdom Lode



The King of the Hills geological review focused heavily on the available data south of the current underground mine. The results of this work highlighted the potential for additional quartz-carbonate-sulphide extension veins that mimic the veins observed and mined in the north (Figure 14). The data compilation consisted of cleansing and validating historical data, which included re-logging the surface diamond core available. The majority of the historical drilling in the southern area of the mine is comprised of RC, providing limited structural information for extrapolation purposes.

Figure 14 – King of the Hills Long Section - Describing the interpreted extensional veins



The detailed re-logging program identified that the mineralisation in the granite is readily identified by the change in the dominate carbonate phase from **calcite** (+/- chlorite, sericte, albite) to **ankerite** (+/- sericite and albite). The presence of ankerite was discernible in the older core as its colour had changed to brown after being exposed to oxygen over time. This alteration was modelled to define the overall mineralised trends.

Further structural analysis from mapping and re-logging was then used to constrain the higher grade zones within the alteration envelope. This data was limited and the interpretation also relied on the continuity of gold assay values greater than 5g/t and the presence of quartz veining captured in the logging.

Using the available geological data to constrain the higher grades, it was evident that three distinct orientations were present. The key orientation identified was a set of steeply to moderately dipping tension veins that strike northwest – southeast. These veins are the same orientation as those previously mined in the north (Regal, Kingdom and Kaiser Lodes).

The orientation of these high grade veins are sub-optimal to the surface drilling orientation. This made the delineation of these zones difficult, with holes passing through at high angles. The underground program currently underway is drilling the tension veins perpendicular to their strike and is the best angle for defining these high grade veins (Figure 14). Historical holes presented on the above long section have been estimated as true width intersections in an attempt not to over represent the mineralisation.

Significant results from southern exploration area include:

- **KHEX002 – 0.6m @ 52.0g/t** (ETW 0.5m)
- **KHEX001 – 1.0m @ 22.2g/t** (ETW 1.0m)
- **KHEX001 – 0.4m @ 43.0g/t** (ETW 0.4m)
- **KHEX001 – 0.4m @ 17.9g/t** (ETW 0.4m)
- **KHEX003 – 0.7m @ 19.3g/t** (ETW 0.7m)
- **KHEX003 – 1.0m @ 26.1g/t** (ETW 1.0m)
- **KHEX003 – 1.4m @ 30.3g/t** (ETW 1.4m)
- **KHEX003 – 1.6m @ 9.8g/t** (ETW 1.6m)
- **KHEX003 – 0.4m @ 71.3 /t** (ETW 0.4m)

* ETW means Estimated True Width

Figure 15 – King of the Hills Oblique Section - Modelled tension vein "Yara Lode"

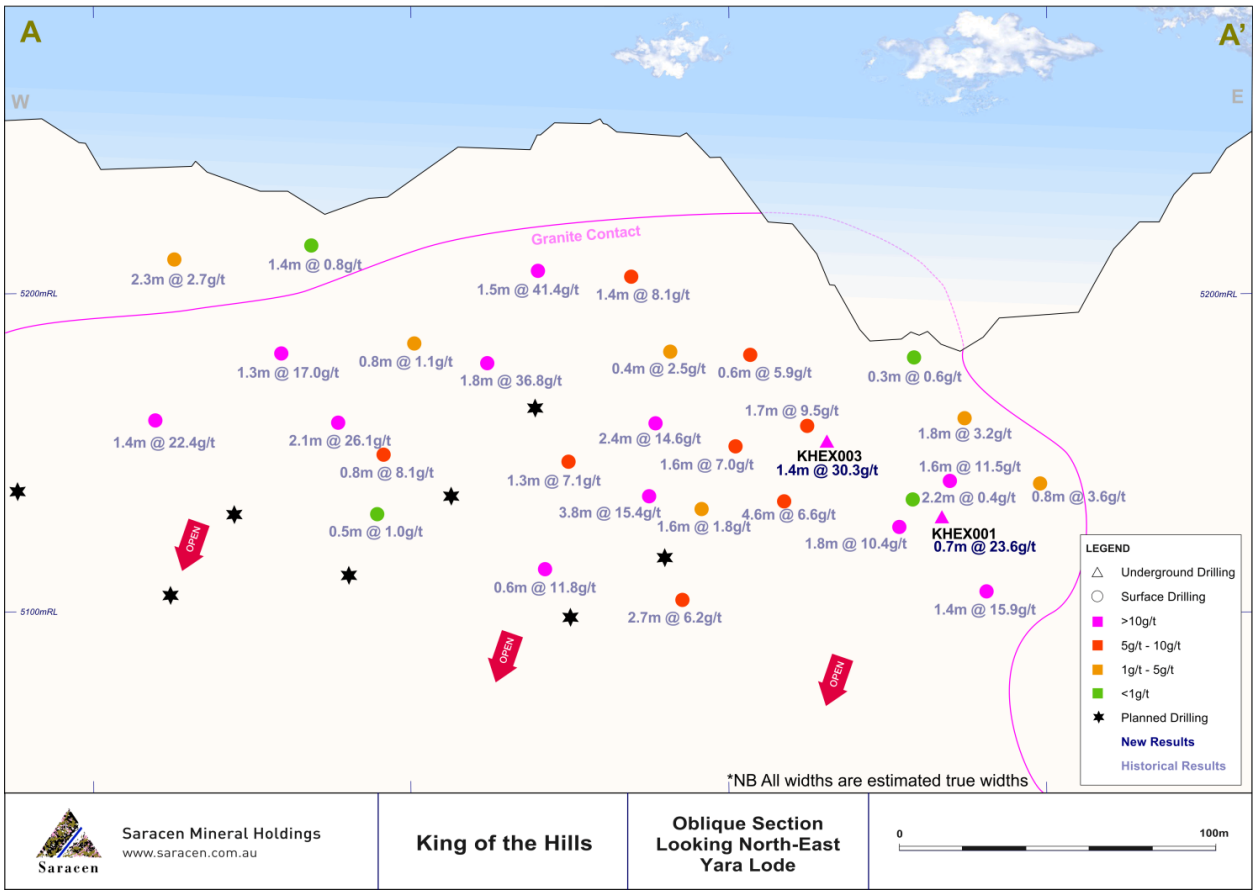
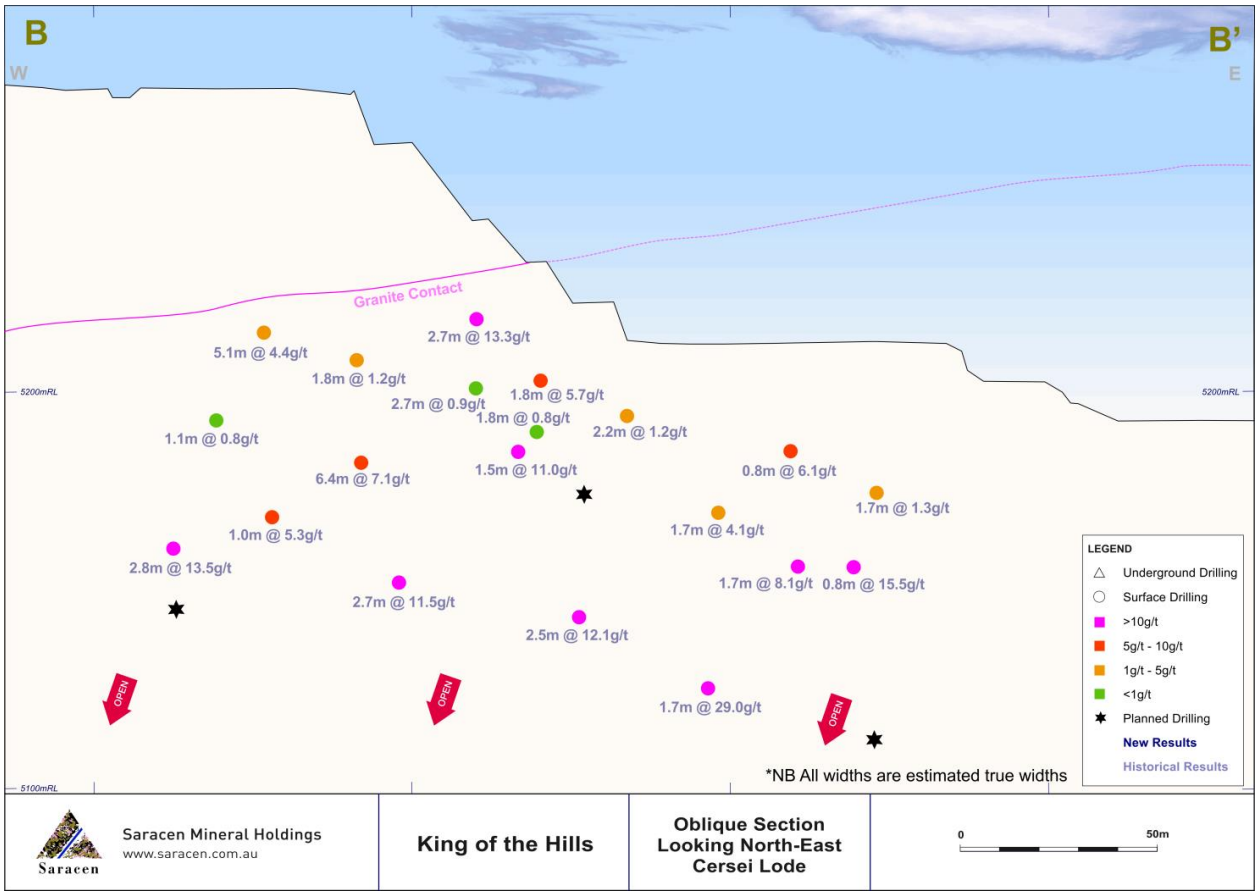


Figure 16 – King of the Hills Oblique Section - Modelled tension vein "Cersei Lode"



Thunderbox Open Pit

As the open pit rapidly develops, systematic RC grade control drilling has taken place to define the local geological boundaries and provide greater resolution on the grade distribution.

Significant results from recent grade control programs include:

- **TBGC_2410_009 – 9.0m @ 4.6g/t**
- **TBGC_2410_025 – 14.0m @ 3.5g/t**
- **TBGC_2410_089 – 16.0m @ 2.2g/t**
- **TBGC_2420_005 – 27.0m @ 1.4g/t**
- **TBGC_2420_006 – 40.0m @ 1.3g/t**
- **TBGC_2420_007 – 36.0m @ 1.6g/t**
- **TBGC_2420_020 – 16.0m @ 3.4g/t**
- **TBGC_2420_027 – 15.0m @ 2.8g/t**
- **TBGC_2420_034 – 38.0m @ 2.0g/t**
- **TBGC_2420_057 – 17.0m @ 3.0g/t**
- **TBGC_2420_061 – 47.0m @ 1.6g/t**
- **TBGC_2430_014 – 17.0m @ 2.5g/t**
- **TBGC_2430_021 – 24.0m @ 2.2g/t**
- **TBGC_2430_034 – 22.0m @ 2.5g/t**

This drilling has demonstrated that the mineralisation as defined by the broader spaced Resource drilling is robust. As the pit develops, the Resource grade improves significantly and this has been highlighted by the most recent grade control programs.

The average strip ratio and reserve grade for each financial year for Zone A and Zone C is shown in Figures 17 and 18 respectively.

Figure 17 – Thunderbox Open Pit A Zone Cross Section

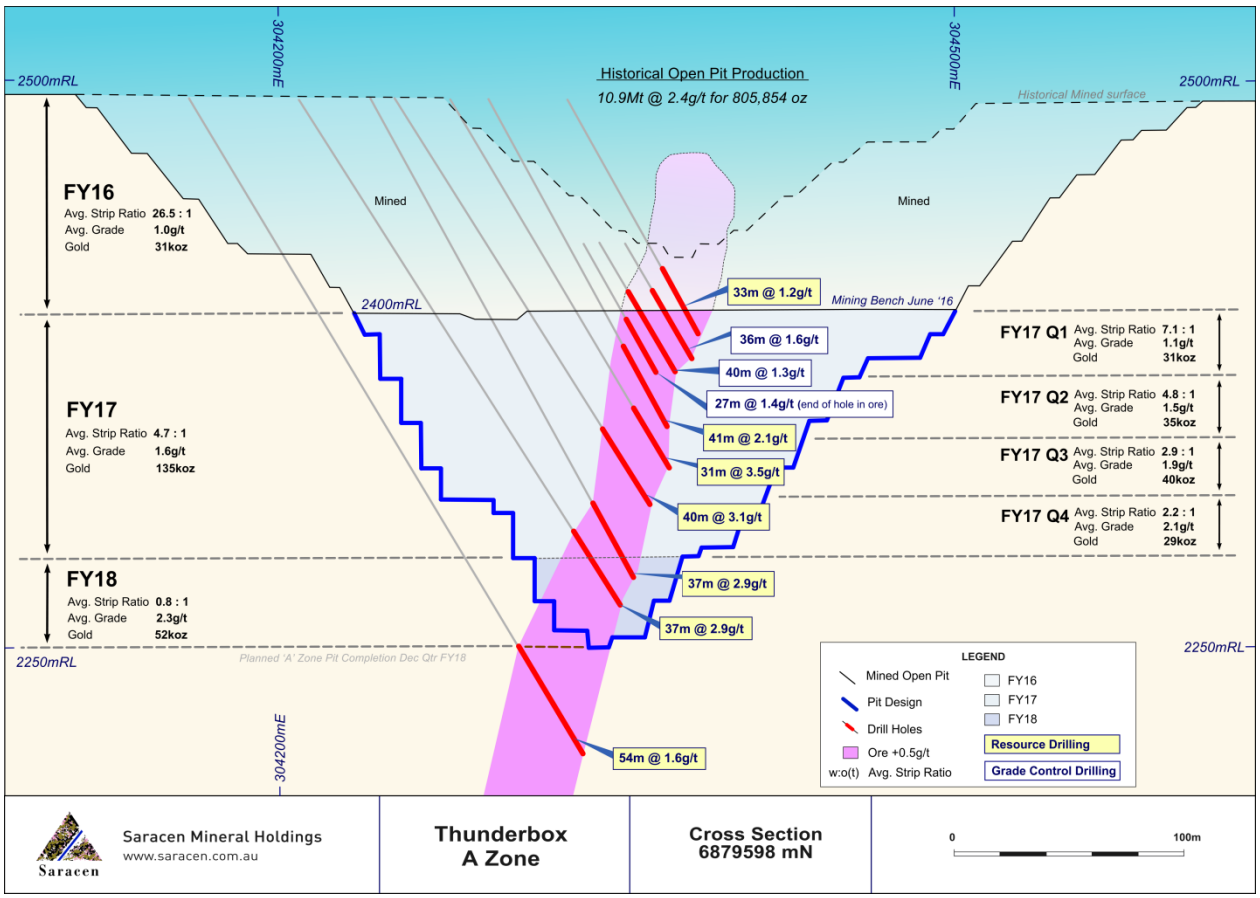
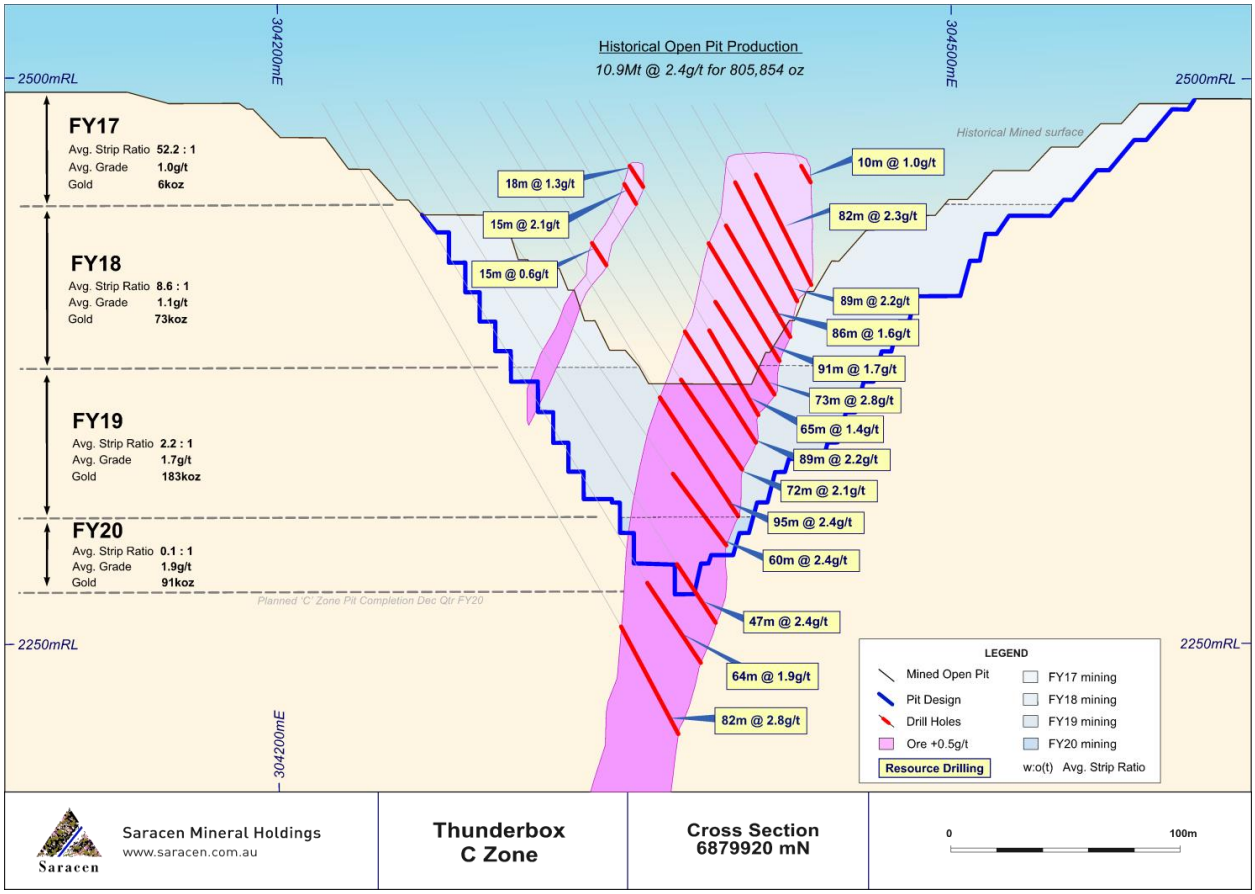


Figure 18 – Thunderbox Open Pit C Zone Cross Section



Due to the top-down, no staging mining method adopted at Thunderbox, the Zone A average strip ratio continuously declines whilst the average grade increases (Table 2-3). The result is significantly lower AISC and improved cashflows as the mine progresses.

Table 2 – Average strip ratio and grades for Thunderbox Zone A (FY17)

Zone A	SR (w:o)	Grade (g/t)
Sep-16	7.1	1.1
Dec-16	4.8	1.5
Mar-17	2.9	1.9
Jun-17	2.2	2.2

Table 3 – Average strip ratio and grades for Thunderbox Zone A (FY16 – FY18)

Zone A	SR (w:o)	Grade (g/t)
FY16	26.5	1.0
FY17	4.7	1.6
FY18	0.8	2.3

A similar trend of declining strip ratios and rising grades is evident in Zone C (Table 4).

Table 4 – Average strip ratio and grades for Thunderbox Zone C (FY17 – FY20)

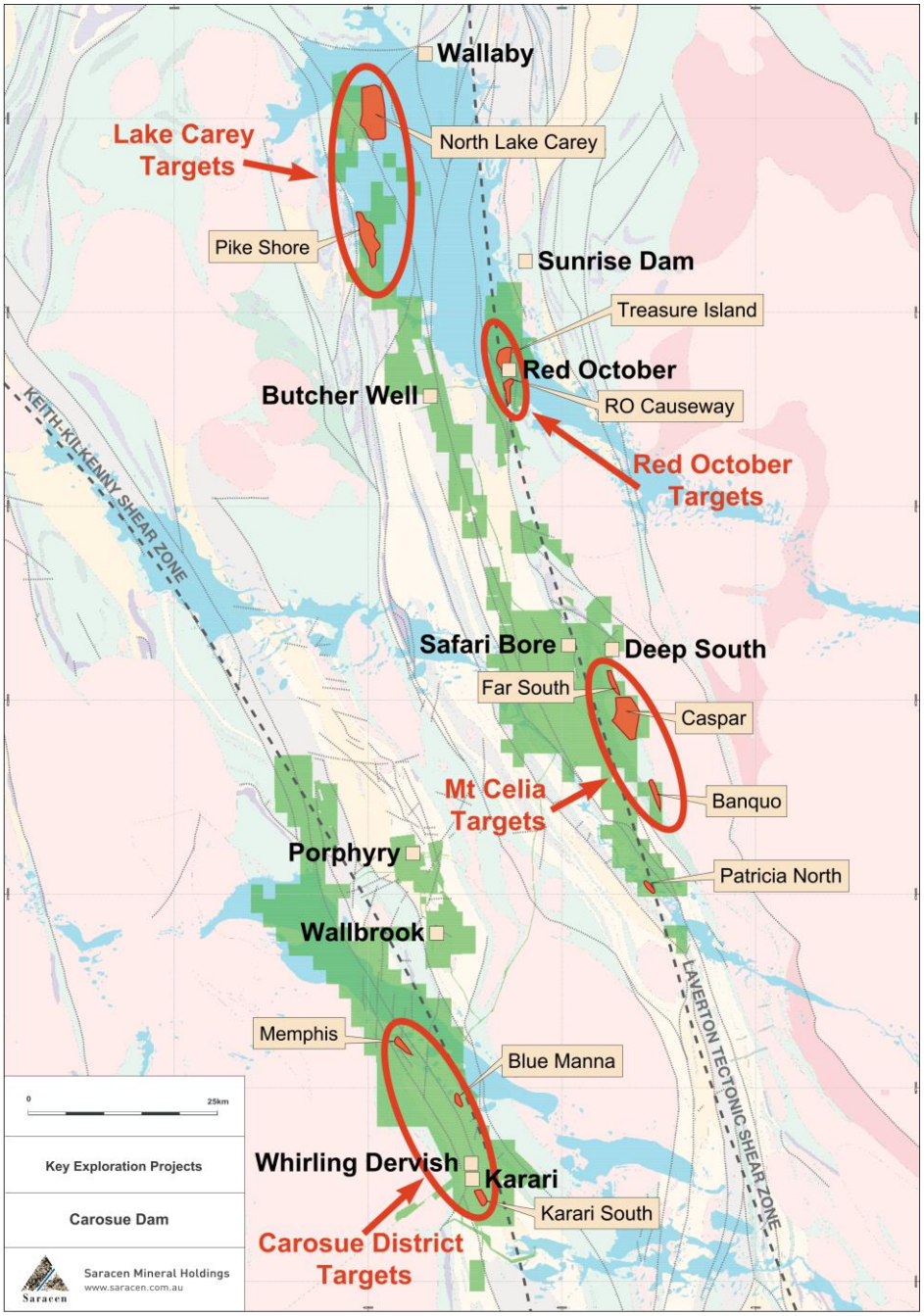
Zone C	SR (w:o)	Grade (g/t)
FY17	52.2	1.0
FY18	8.6	1.1
FY19	2.2	1.7
FY20	0.1	1.9

Carosue Dam Planned Exploration

Exploration priorities (brownfields and greenfield) at Carosue Dam include:

- **Carosue Dam** - Karari underground, Karari North and South, Whirling Dervish underground
- **Mt Celia** - Deep South underground, Far South, Casper, Banquo
- **Red October** - Red October underground, Treasure Island
- **Lake Carey** - North Lake Carey

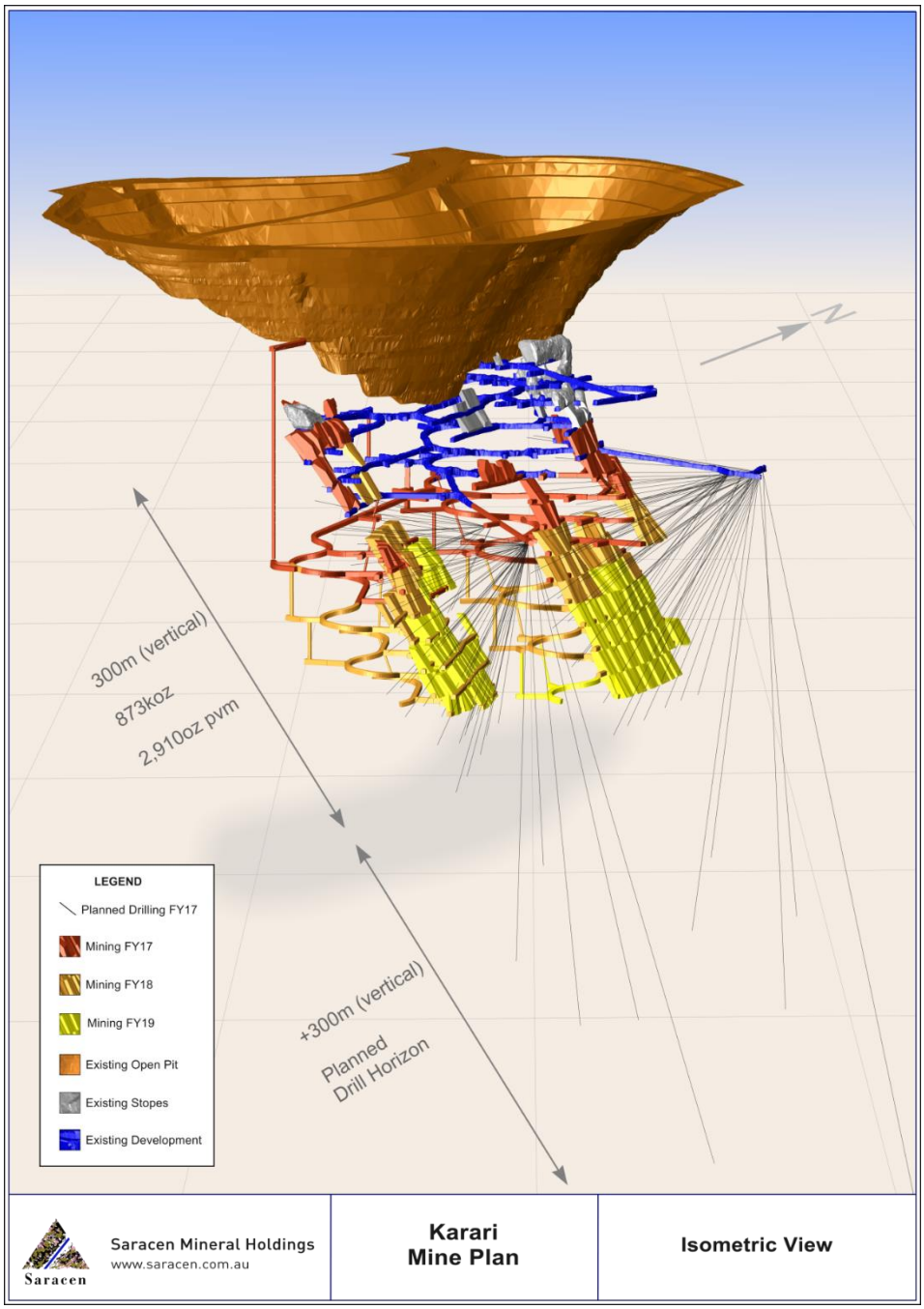
Figure 19 – Carosue Dam Exploration Districts



Karari Underground

An intensive underground drill program is underway comprising over 37,000m during FY17 (Figure 20). The program will substantially add to the confidence of the Resource at depth and also test ~300m below the lower extents of the current Resource.

Figure 20 – Karari Isometric View - FY17 drill plan and mining (by financial year)



The Saracen Board recently approved a dual decline mine design for Karari (Figure 20). A dedicated decline will access the northern stoping horizons of the Hangingwall and A1 Lodes, and a second decline will access the southern stoping horizons of the Dhoni Lode.

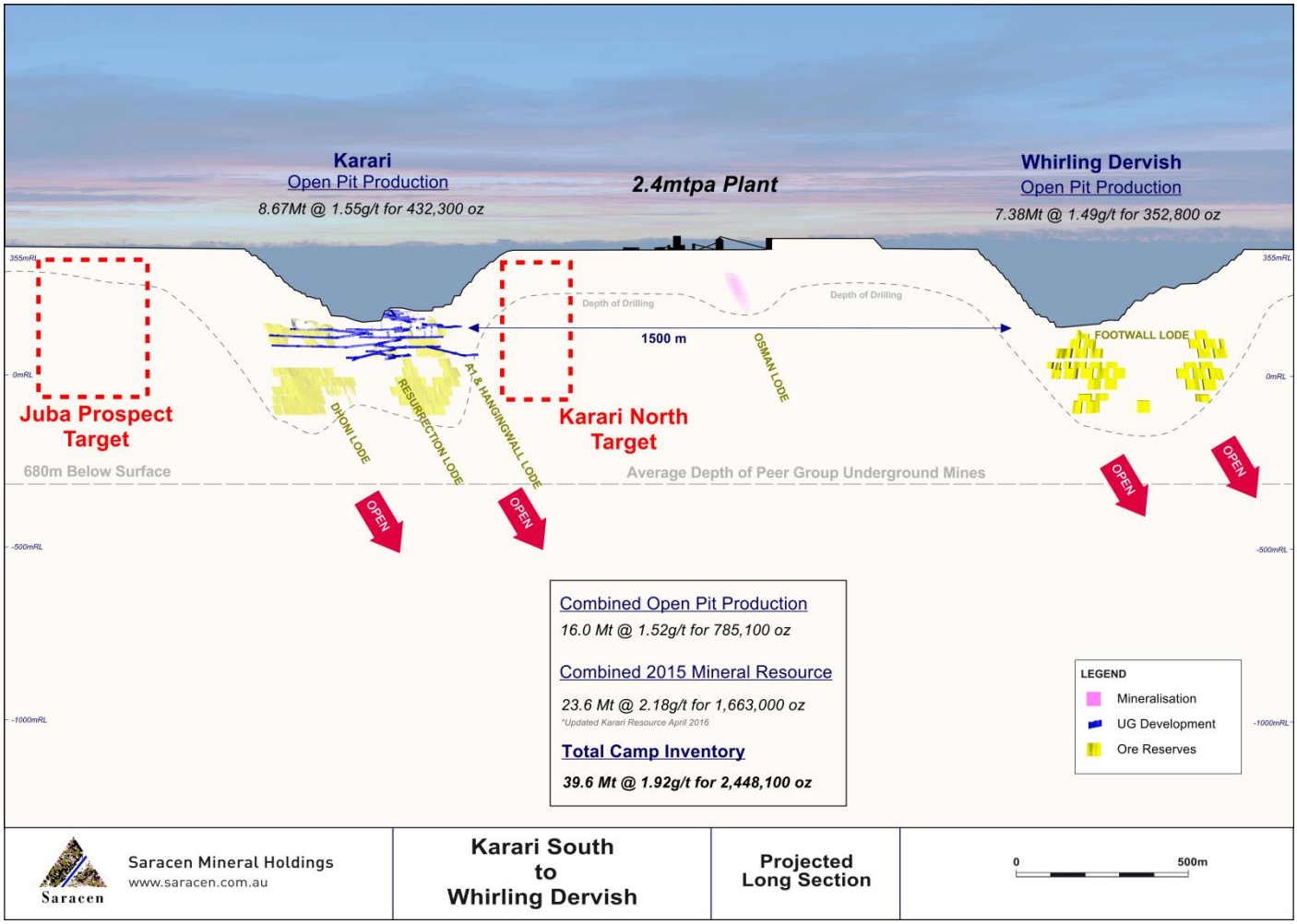
Total ore tonnes mined have the potential to ramp up from current levels of ~750ktpa to in excess of 1.2Mtpa (~75kozpa to ~115kozpa) due to a combination of the dual decline access increasing stoping horizons, improved equipment utilisation and mining efficiencies, as well as increased strike lengths and widths of both the Dhoni and A1/Hangingwall lodes at depth (refer to Figure 20 with mining colour coded by financial year). This could have a significant impact on the annual production from FY18 onwards and improve the overall profitability and efficiency of the Carosue Dam operations.

Karari North and Karari South (Juba)

Karari North is a high priority exploration target immediately north of the mine. This area has never been adequately tested.

Recent underground drilling has highlighted that further potential exists to the north between the mine and where the stratigraphy is truncated by the Osman Fault (Figure 21).

Figure 21 – Karari South (Juba) to Whirling Dervish projected long section



Recent drilling results from KRRD118 (27.6m @ 2.5g/t, Figure 4) highlight that the mineralisation remains open to the north. A surface drilling program is planned in H2 FY17 to test this opportunity. Surface drilling was preferred over underground due to the orientation of the projected mineralisation.

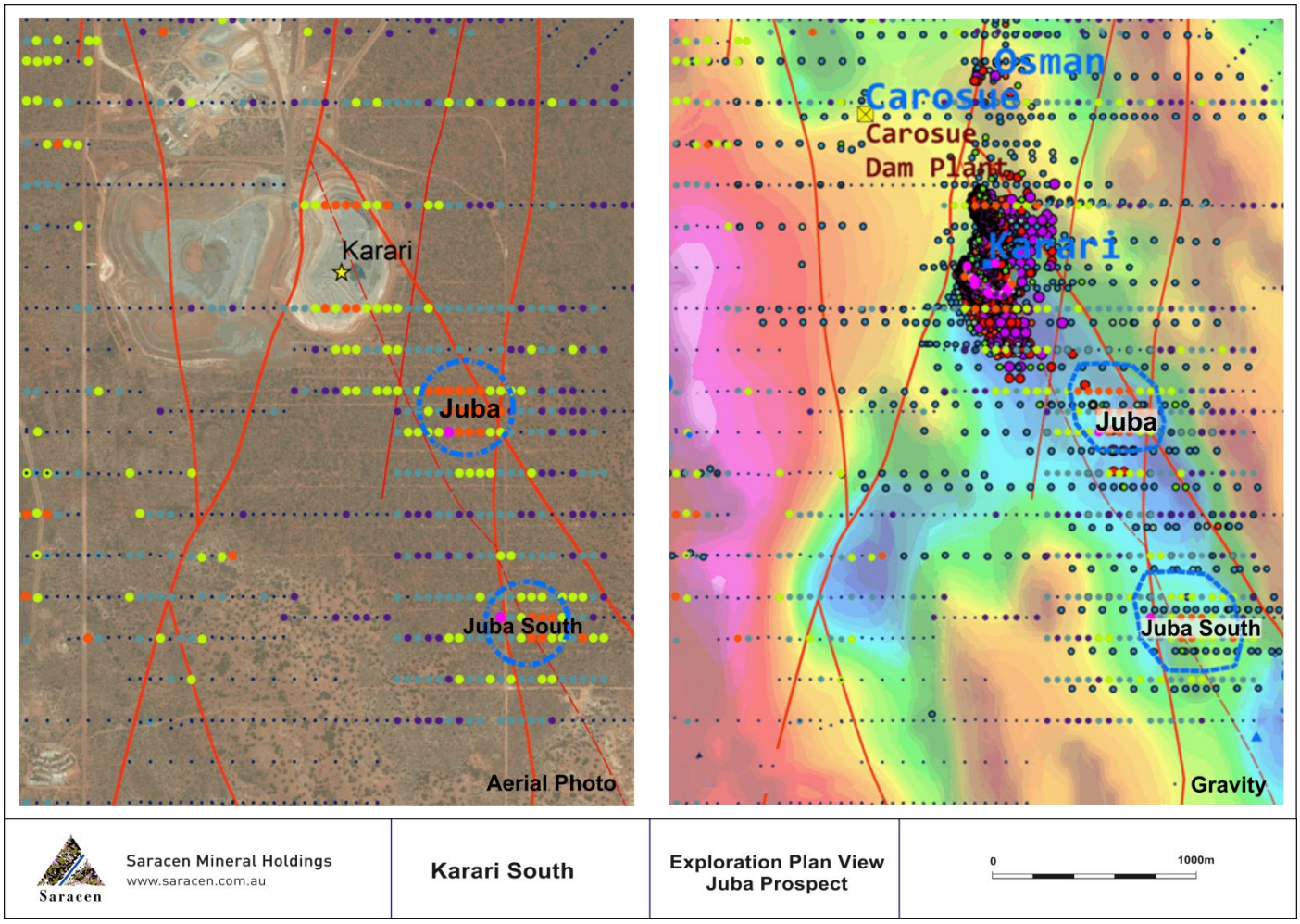
Karari South has recently been reviewed in detail and a number of key targets have been defined. The review included reconnaissance field mapping, reinterpretation of the geochemical dataset in light of recent developments in knowledge from mine geology observations, and integration of improved structural and lithological boundaries defined by the 2015 detailed gravity survey.

The gravity survey was conducted from Yilgangi in the north down to the southern limits of the Carosue Dam tenements in the south. The survey successfully defined the prospective corridor of late basin volcanoclastic sediments which host the major deposits in the Carosue Dam corridor. The key stratigraphy is defined in the gravity data by a gravity low (greens and blues on right image - Figure 22). Many of the deposits in the Carosue district are hosted in this gravity low and are generally proximal to north south striking faults.

The Juba target to the south of Karari and less than 3km from the Carosue Dam mill, is located within the gravity low corridor and is also coincident with interpreted north south striking faults.

Importantly the target is also mapped by a soil anomaly of the same scale as the anomaly identified over Karari (left image - Figure 22).

Figure 22 – Karari South (Juba) soil and RAB anomalies

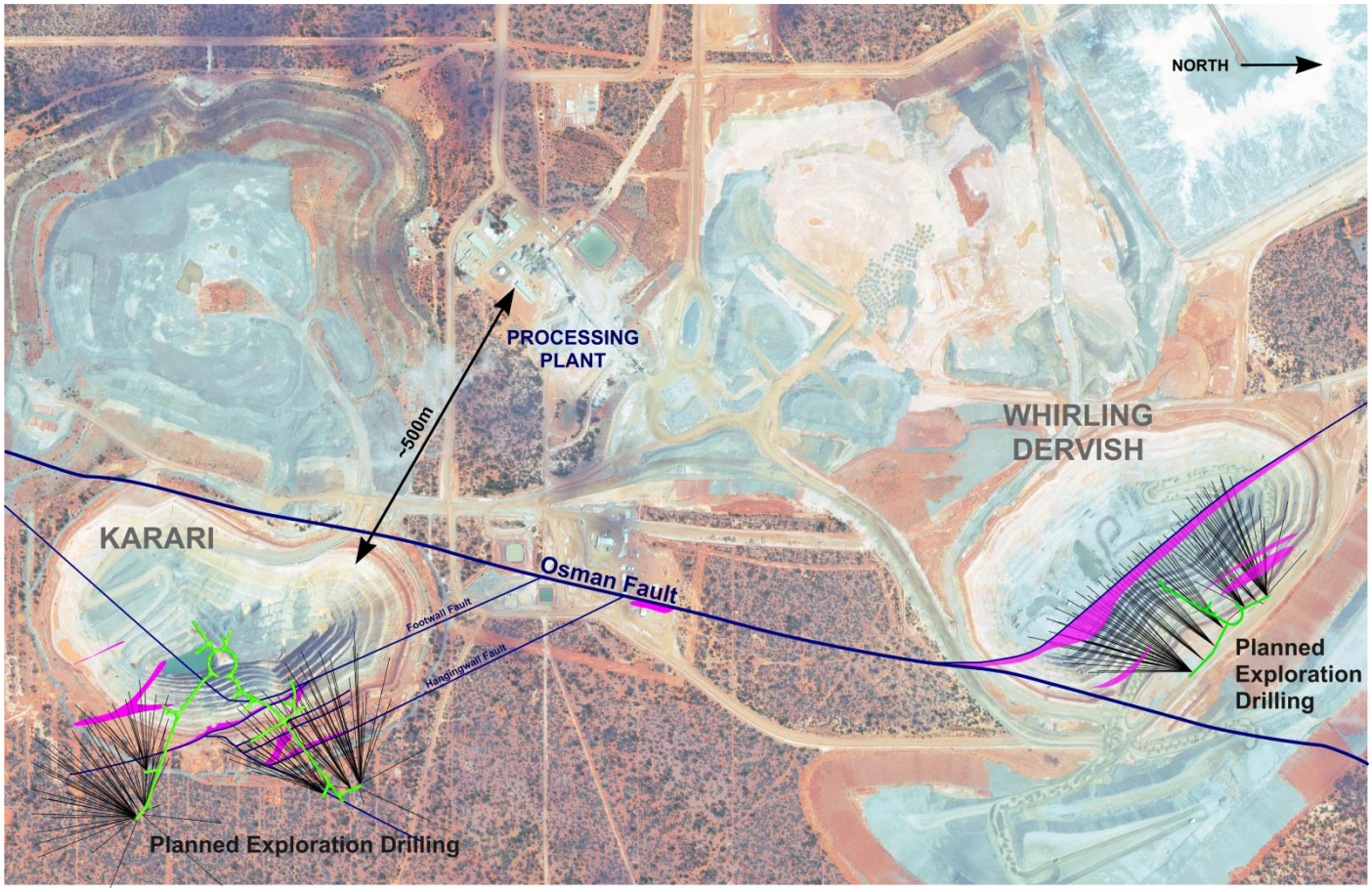


The limited drilling over the Juba prospect is very shallow and in some cases has not penetrated the known depletion zone. Surface drilling is planned for the Juba prospect during June half 2017.

Whirling Dervish Underground

Whirling Dervish is a technically advanced and permitted underground mining opportunity, with a current Ore Reserve of 90koz @ 3.0g/t. The deposit is located less than 500m from the Carosue Dam mill. Whirling Dervish forms part of the same mineralisation package as Karari and has been offset some 1.5km to the north by the Osman Fault (Figures 21 and 23).

Figure 23 – Processing plant adjacent to the Karari and Whirling Dervish mines with planned FY17 drilling



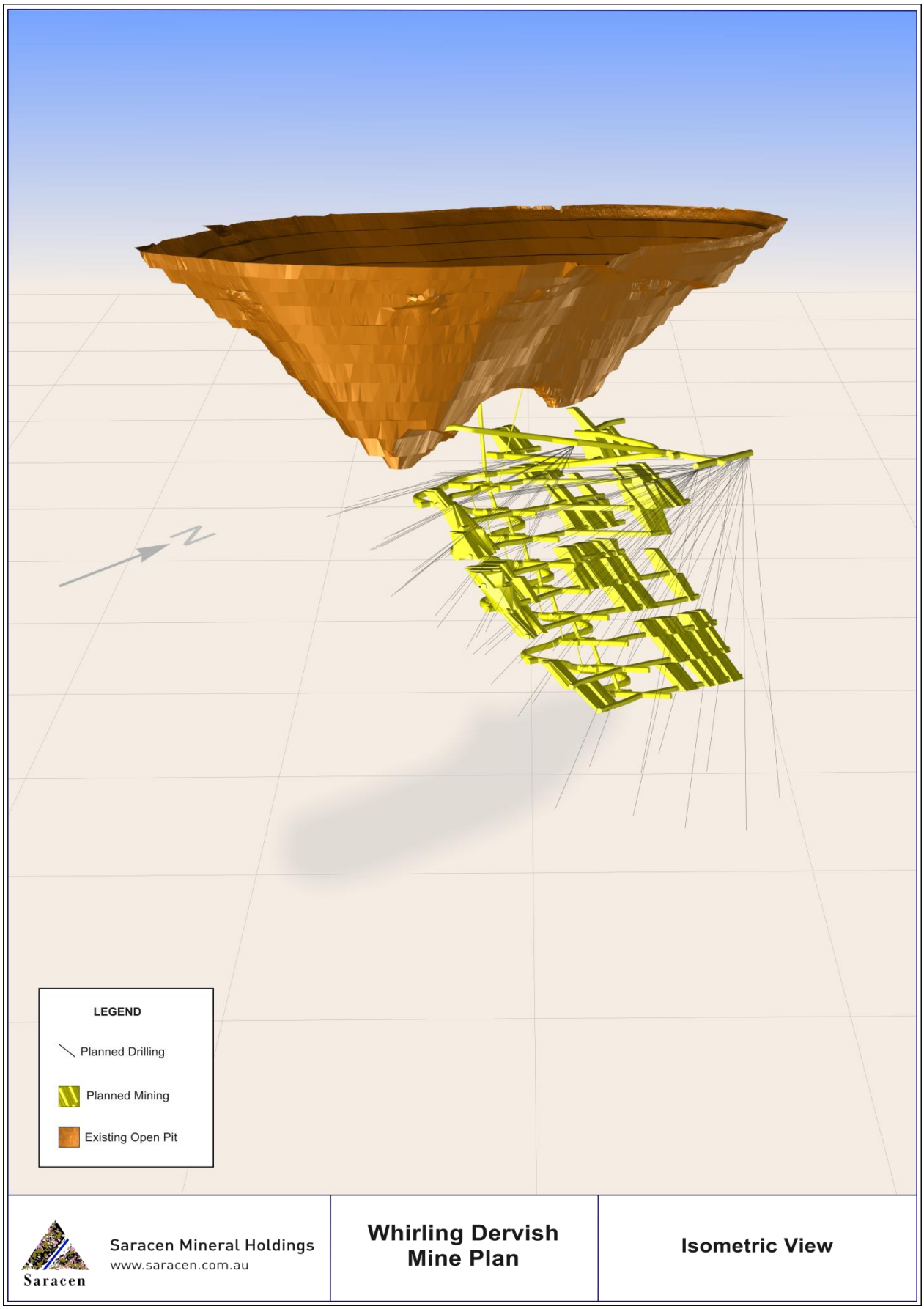
The proposed underground development is a depth extension of the highly successful Whirling Dervish open pit which was completed in June 2015. Total open pit production totalled 7.38Mt @ 1.49g/t for 352,800oz and performed very well relative to the estimated Mineral Resource and Ore Reserves.

Whirling Dervish underground can be brought into production when required in the five-year plan. 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.

It is proposed that an underground drill platform will be established during the March quarter 2017 to enable the commencement of underground diamond drilling in the June quarter 2017 (Figure 24). This drill platform will allow the full definition of the current underground Resource and also provide a position to cost effectively test below the base of the current drilling. The Resource remains open with the deepest hole returning 7m @ 5.7g/t.

The first phase of underground development will primarily be focused on establishing the hangingwall drill drive. The drill drive consists of 525m of lateral development and will take 4 months to complete. A total of 8,900 drill meters are planned before the end of the FY17. The position of the drill drive is proximal to the southern end of the hangingwall lodes and will provide an opportunity to access early revenue when the decision to commence full scale mining is made.

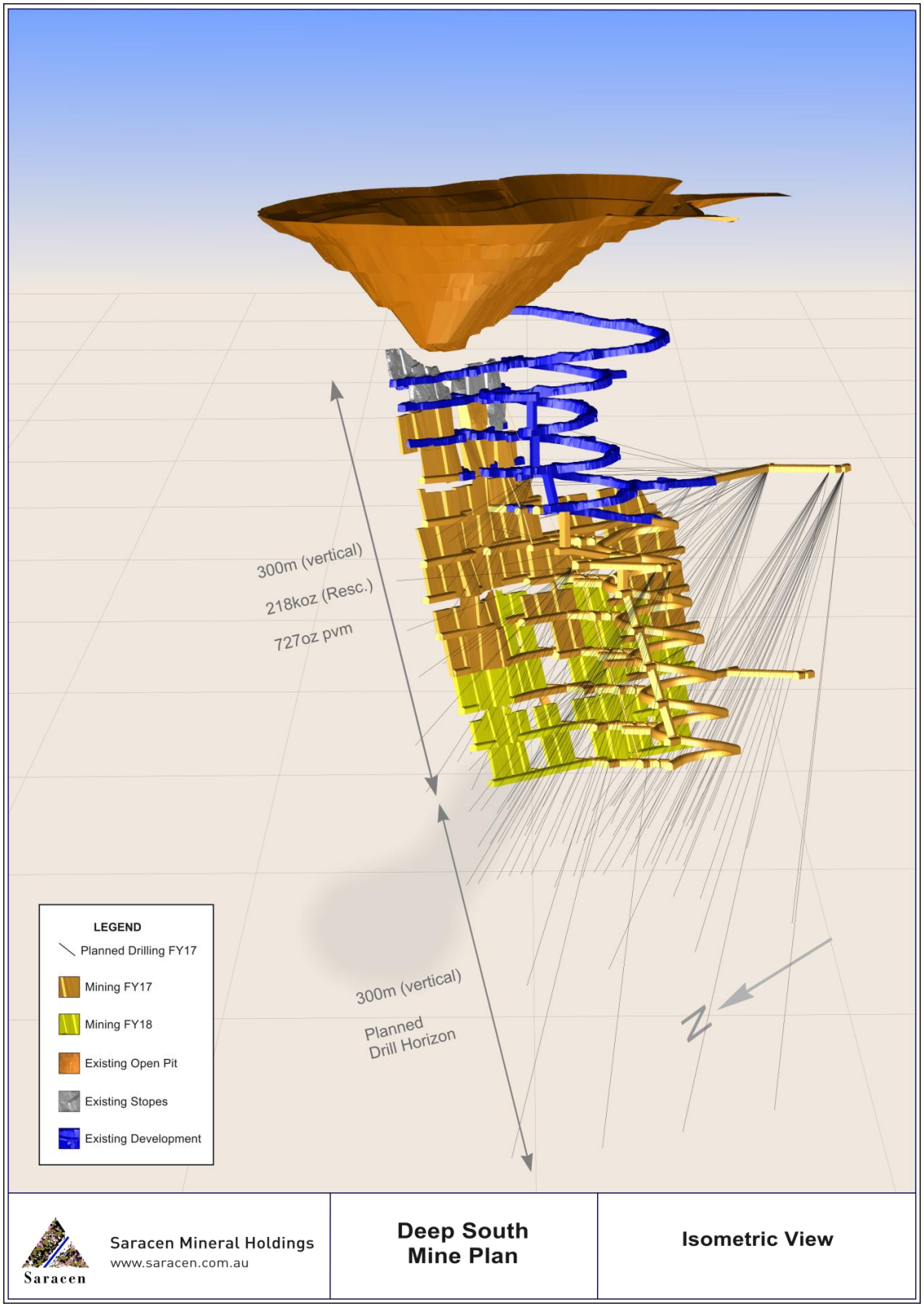
Figure 24 – Whirling Dervish Isometric View - Underground mine plan illustrating the diamond drill program



Deep South Underground

The next phase of underground drilling at Deep South has recently commenced. The drilling will initially focus on the upper areas of the current mine, completing grade control programs before stepping out and infilling the lower inferred areas of the Mineral Resource (Figure 25). Two new hangingwall drill platforms will be developed which will also facilitate the ability to test well below the current extents of the Ore Reserve.

Figure 25 – Isometric view of the FY2017 drill plan for Deep South Underground

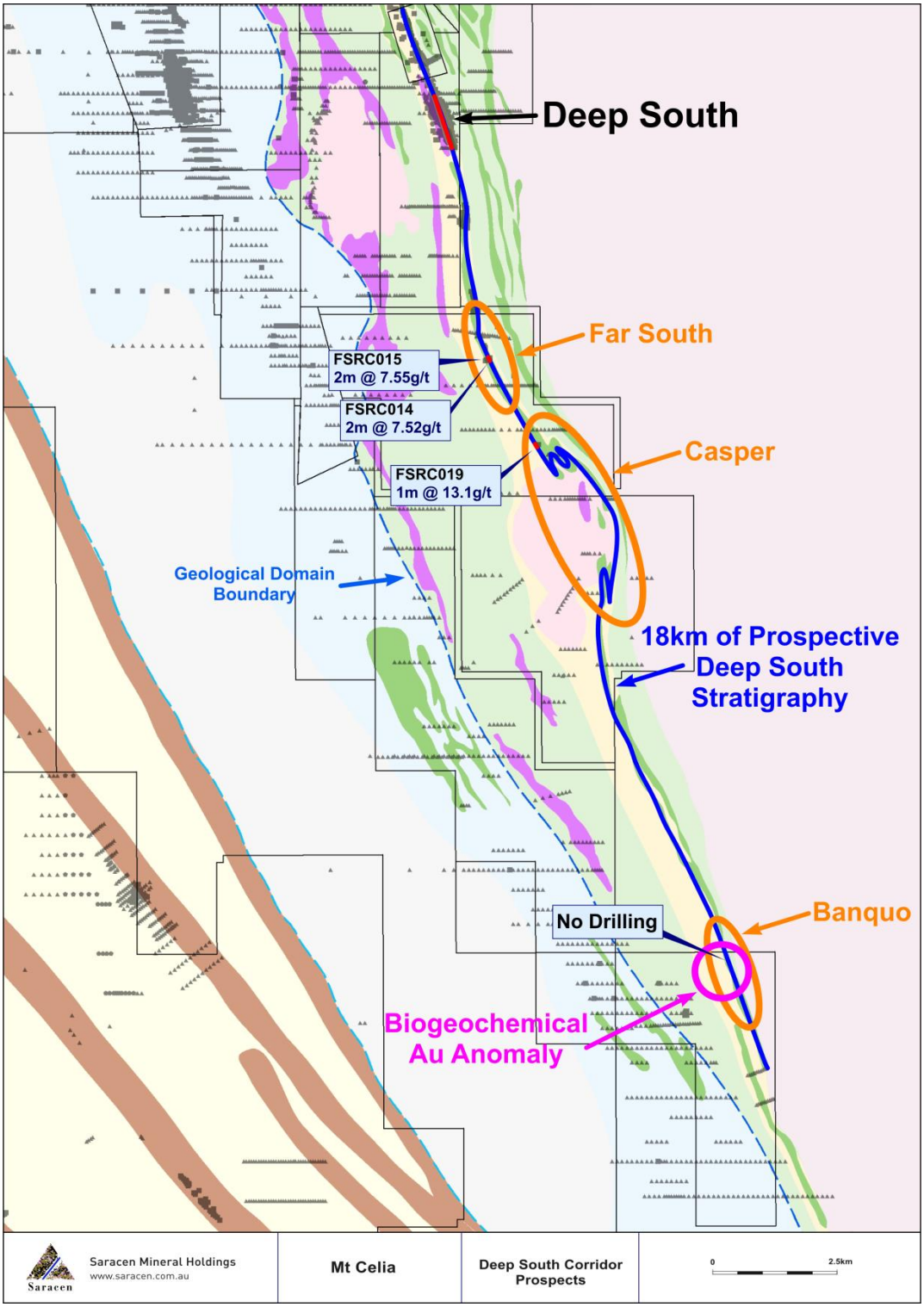


The deepest hole (which currently sits outside the Ore Reserve) of 18m @ 7.4g/t demonstrates that the mineralisation is open and requires more drilling. A total of 32,000m will be drilled during FY2017.

Mt Celia Stratigraphic Corridor (Far South, Casper and Banquo)

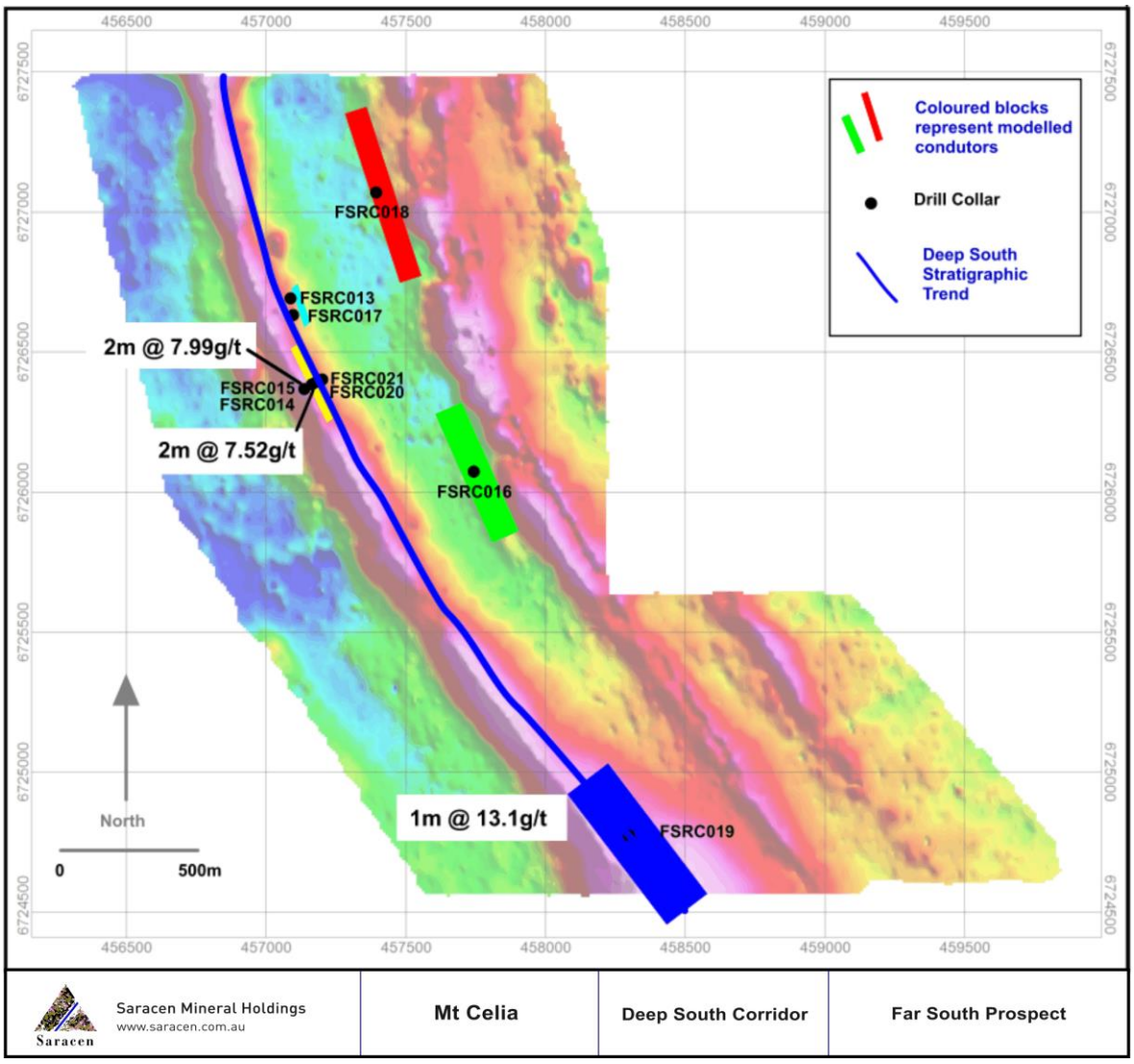
The Deep South stratigraphic corridor is a highly prospective lineament that extends for over 18km (Figure 26). From the Deep South mine it extends south southeast and is very poorly explored. Over the last three years Saracen has been extremely active in the corridor completing extensive field mapping, biogeochemical and maglag multi-element analysis, bottom of hole XRF analysis, a detailed gravity survey, tromino passive seismic surveys and sub-audio magnetic surveys (SAM). Following the SAM survey in 2014, 9 RC holes were drilled into modelled EM plates which returned very positive results **2m @ 7.99g/t, 2m @ 7.52g/t and 1m @ 13.1g/t**. These results have not been followed up to date. Collation of all the exploration work completed in the last three years has prioritised a number of key targets.

Figure 26 – Mt Celia Stratigraphic corridor exploration targets



The Far South target is the most advanced with 9 holes sparsely drilled in 2014. The 4km of strike length was covered by the SAM survey, which revealed accurately the position of the key stratigraphy (Figure 27). Due to the limited greenfields budget during FY15 and FY16, the results previously mentioned have not been followed up. Given the success of the first pass program which targeted very specific EM anomalies, the current plan for FY17 is to systematically test the stratigraphy which hosts the Deep South deposit.

Figure 27 – Far South sub-audiomagnetic survey, 2014 drilling results



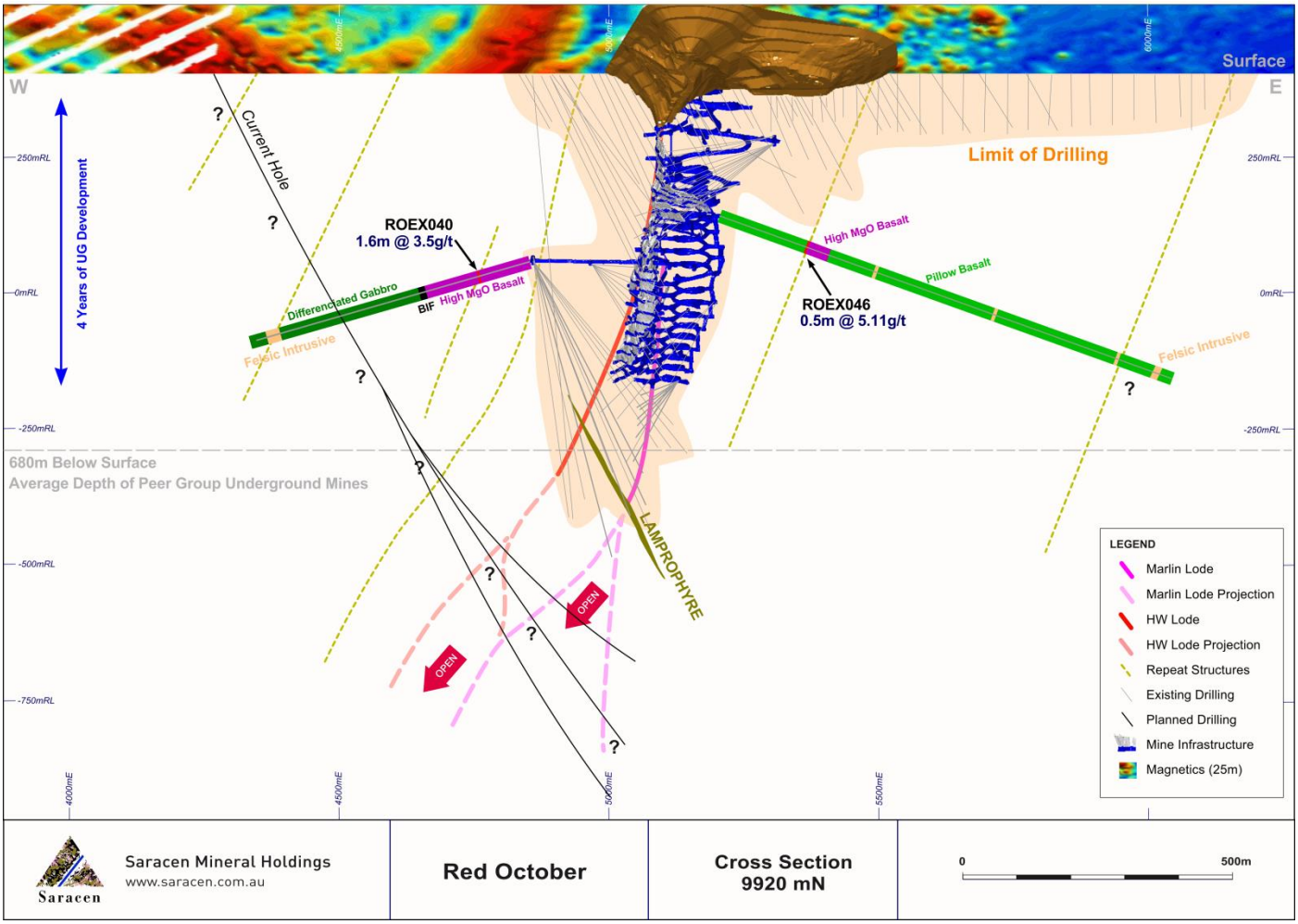
Further south is the Casper prospect which is focused on the same stratigraphic unit, where it wraps around a granitic intrusion. The intrusion provides a buffer to the regional deformation, which is likely to have caused a low strain zone conducive to dilation. The local deformation around the intrusive also appears to have caused a series of tight folds which are evident in the magnetics. Historical RAB drilling is on 1km spaced lines and did not adequately test the key stratigraphy. Systematic aircore drilling will target an alteration system to further refine the target.

The southernmost target, Banquo, is largely conceptual; however the empirical evidence is such that it warrants further investigation. The target lies on the key stratigraphic unit and is coincident with a large gold anomaly identified in the biogeochemical multi-element program. No drilling has occurred in the area, therefore systematic first pass aircore drilling will be conducted to identify the lithostratigraphy and any alteration systems present.

Red October Exploration

The deep exploration drilling currently underway will be completed in the current quarter. This hole, due to its large step out nature and valuable contribution to the geological knowledge of the Red October district has officially qualified for the government Exploration Inventive Scheme (EIS). The deep hole will be the parent to two daughter holes which will assist in building the structural and stratigraphic framework for future targeting (Figure 28).

Figure 28 – Red October Exploration Cross Section



Later in the current quarter the drilling equipment and personnel at Red October will be re-located to Thunderbox to test the depth potential of the Zone A mineralisation.

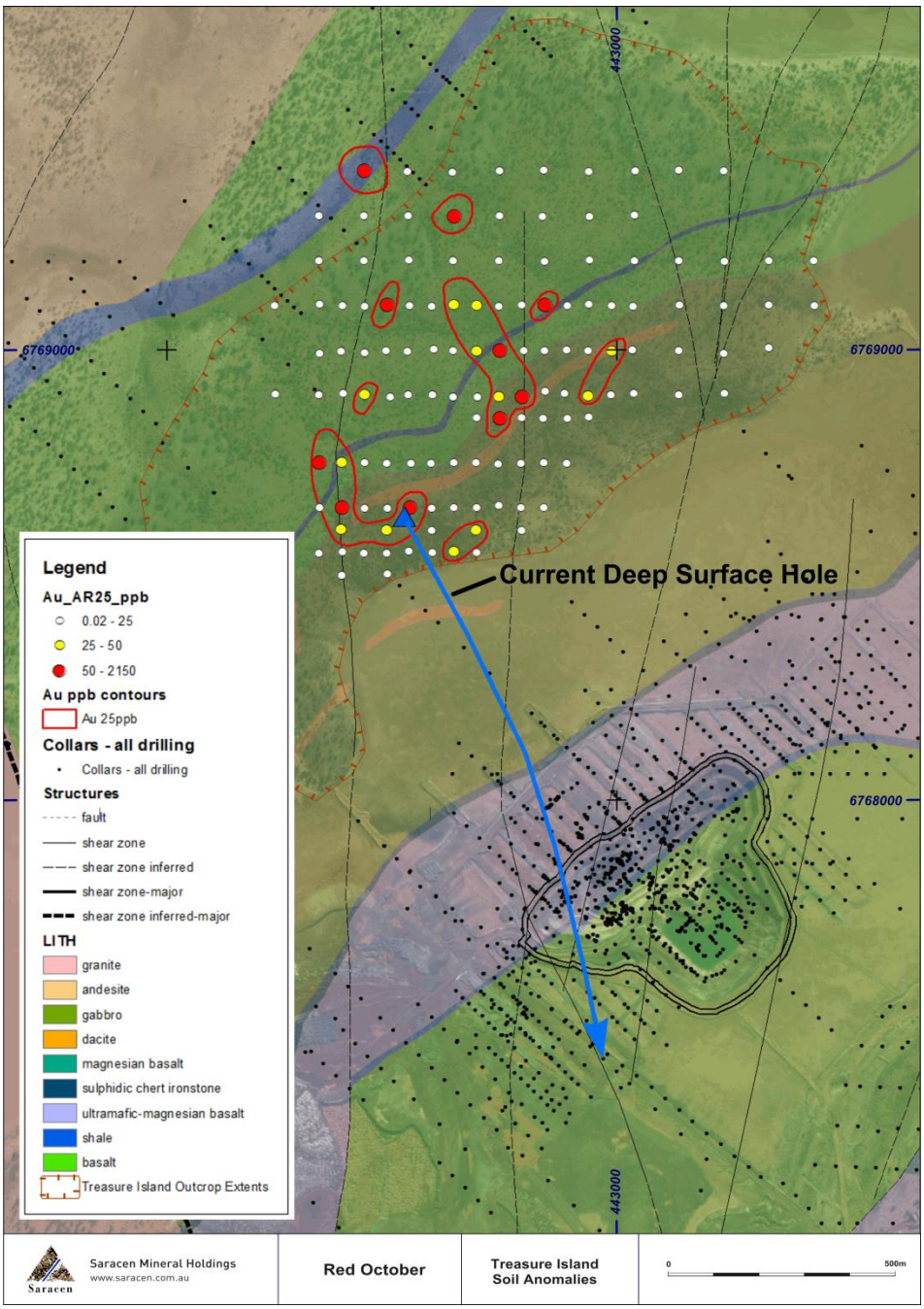
Treasure Island Exploration

One kilometre north-east of the Red October mine is Treasure Island (Figure 29). The island is comprised of outcropping fine to medium grained gabbroic units and fine grained basalts. The mafic stratigraphy is locally intruded by small felsic porphyries.

Recent detailed surface mapping has identified a number of shear zones that cross cut the stratigraphy in the same orientation as the “Anchor” structures at the Red October mine. The shear zones mapped in the south are believed to be the northern extension of the southern Anchor shear zone which terminates the mineralised Red October shear zone and the Marlin breccia vein.

The mapping of these structures across the island identified a significant alteration halo, indicating that mineralising fluids may have passed through the shear zones. This prompted a rock chip and soil sampling program over the island to determine if the alteration signature was related to a gold mineralising event. The sampling has successfully identified a number of anomalous trends. Due to the fresh nature of the outcrop, an RC drill program is planned in H2 FY17 to investigate the source of the anomalous results.

Figure 29 – Treasure Island soil anomaly

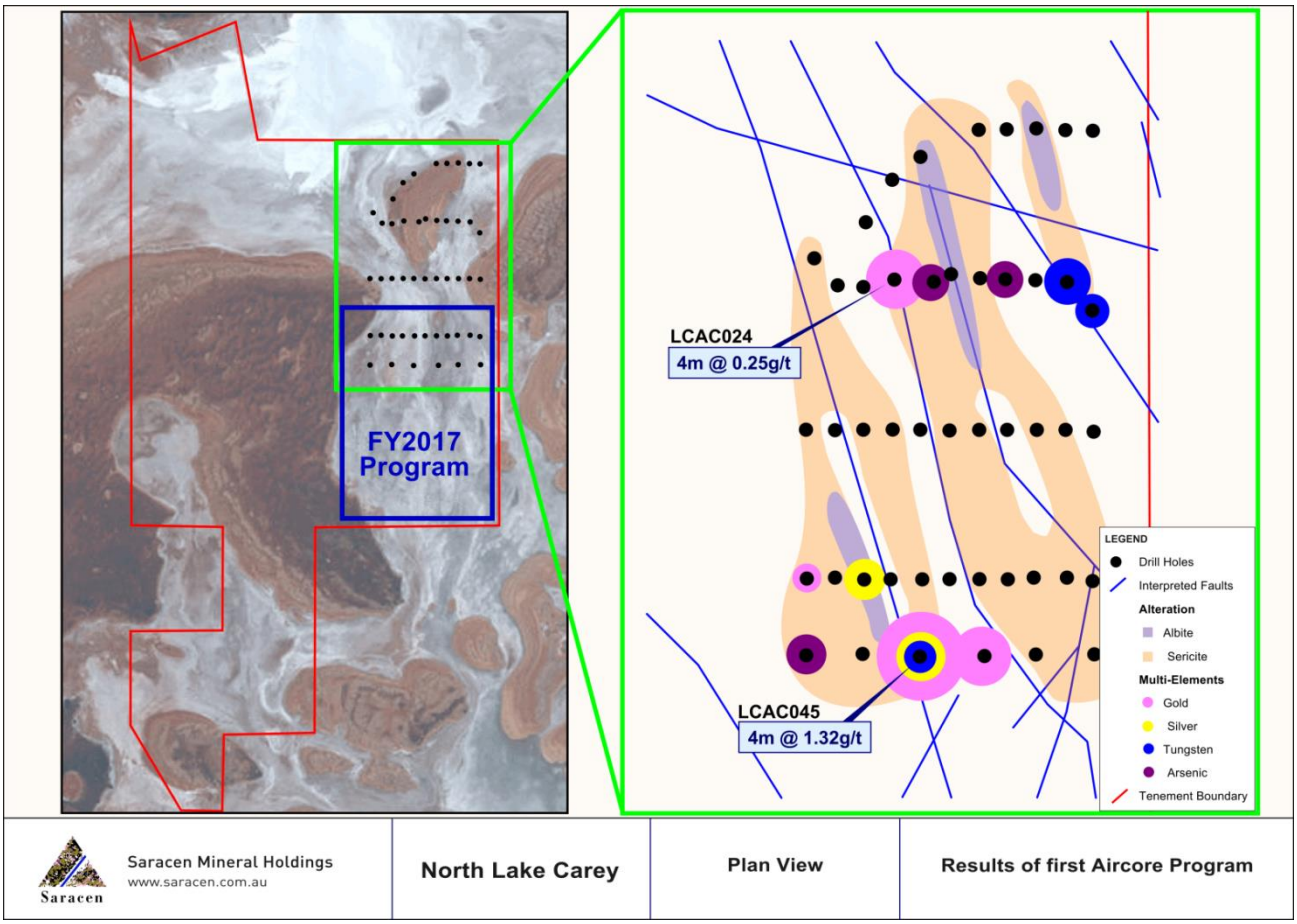


North Lake Carey Exploration

The North Lake Carey prospect is an emerging project 36km north-north-west of Red October on the northern shores of Lake Carey (Figure 30). This highly-endowed address hosts multiple +1Moz gold deposits including AngloGold Ashanti's Sunrise Dam (>10Moz), Goldfields' Wallaby (>7Moz) and Granny Smith (>2Moz) and Dacian Gold's growing Mount Morgans Project.

In June 2015, a broad spaced aircore program was conducted and was the first drilling Saracen has completed on Lake Carey since 2011. The drilling was carried out on the northern most tenement of the Carosue Dam package (Figure 30).

Figure 30 – North Lake Carey Exploration



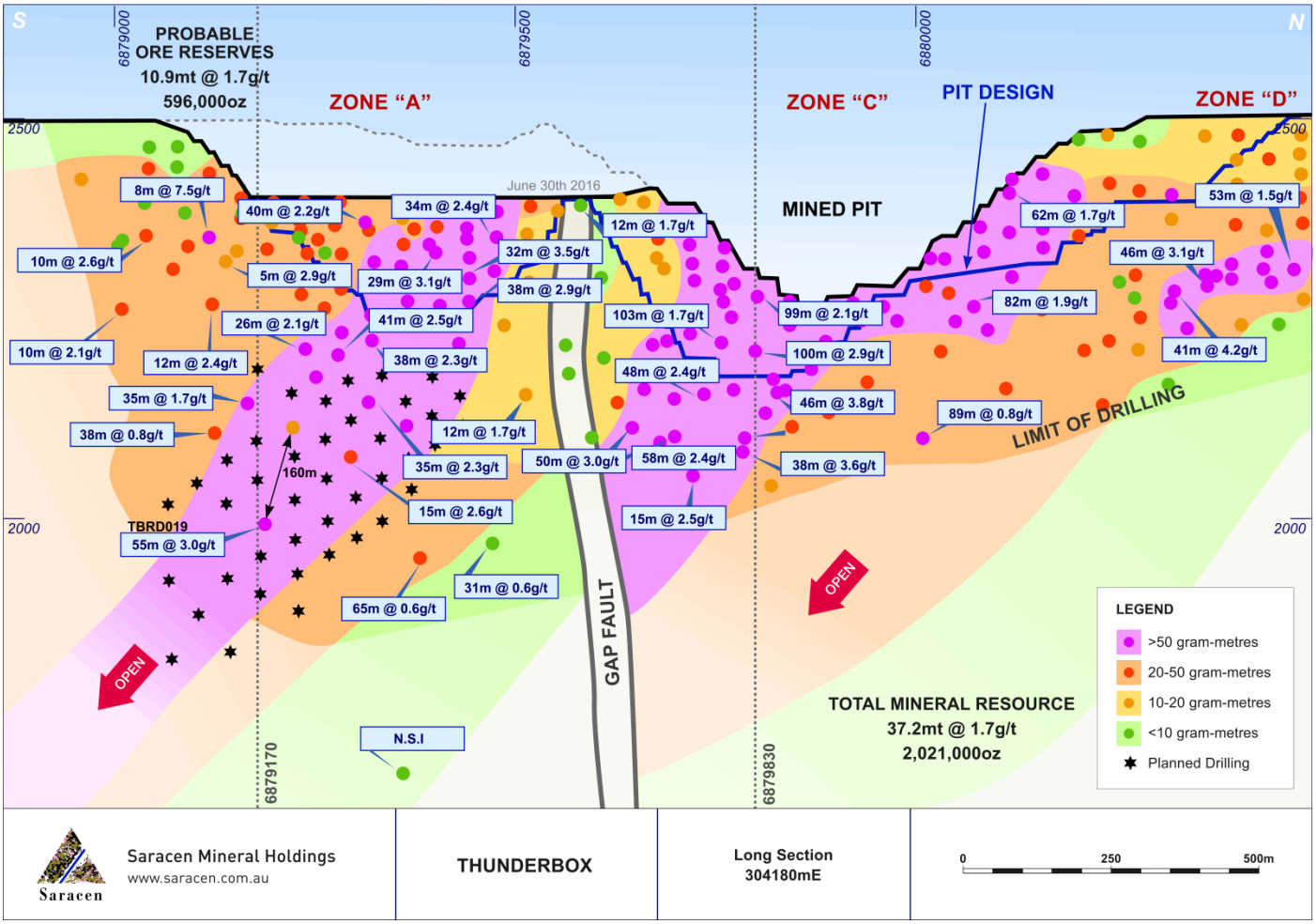
Results from the first aircore drill program have identified encouraging anomalism. Notably supergene gold has been identified in the ferruginous zone (4m @ 1.32g/t) supported with bottom-of-hole anomalism (4m @ 0.08g/t) associated with elevated Silver – Tungsten – Molybdenum and Albite-Sericite alteration, which strongly suggests the gold is primary and not transported. The alteration was observed to be sub-parallel to the interpreted faults and consisted of Sericite with minor Albite. Follow up aircore drilling in the June half 2017 will extend the coverage to the south and infill around the main anomaly.

Thunderbox Planned Exploration

Thunderbox A Zone Deeps

In April 2015, Saracen announced the results of its first pass Resource extension of the A Zone mineralisation at Thunderbox. The final hole drilled in that program returned a spectacular result of **55m** @ **3.0g/t**. This result is 420m down plunge below the base of the final A Zone pit design and is 160m away from the nearest drill hole (Figure 31).

Figure 31 – Thunderbox Long Section



The upcoming drill program will primarily focus on the infill and down plunge extensions of the A Zone high grade shoot. The program will commence later this quarter and continue through to the March quarter 2017. A total of over 32,000m is planned and will comprise a combination of RC pre-collars with diamond tails, and a number of parent-daughter wedges (Figure 31 shows the designed pierce points).

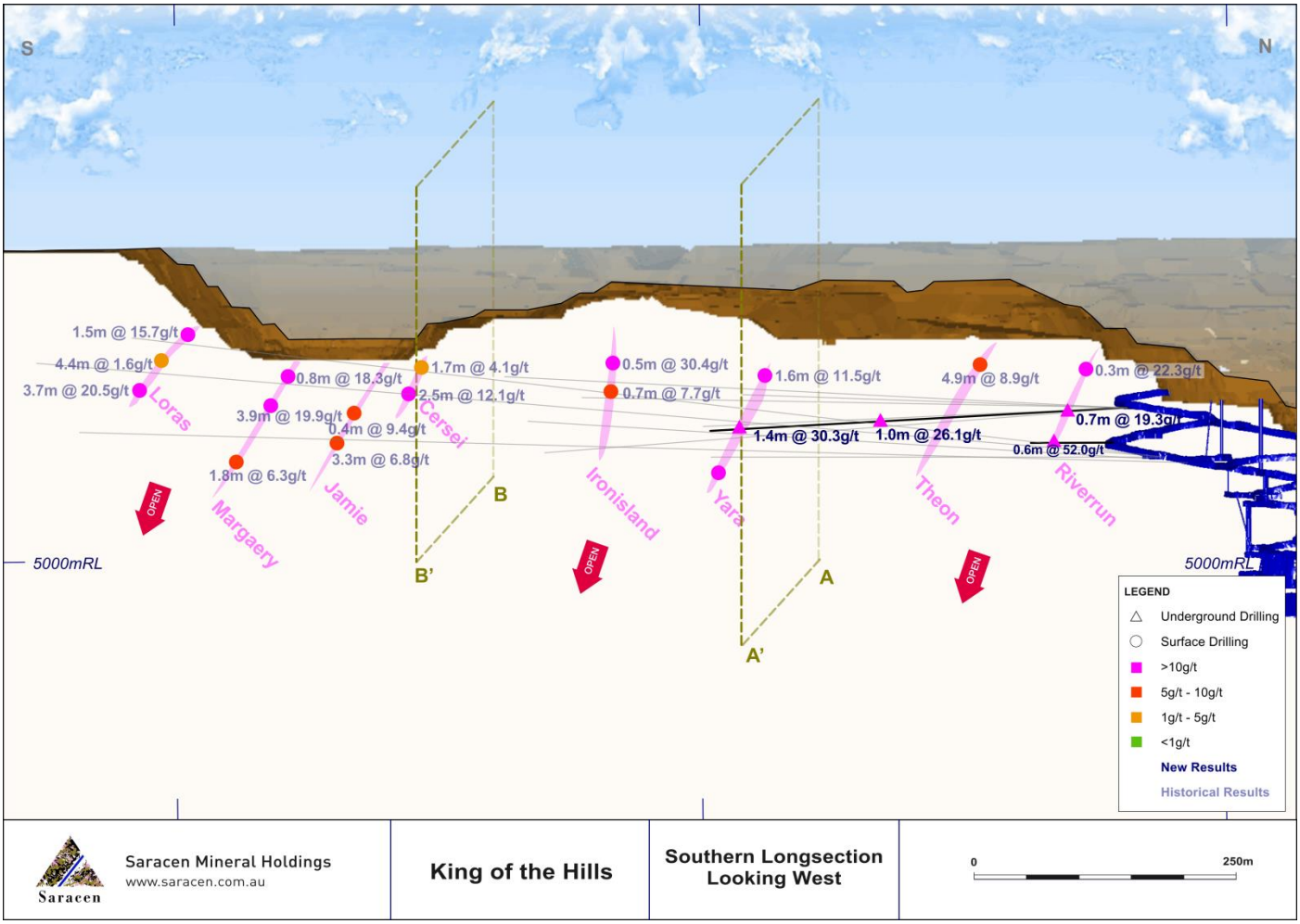
The results of the program will facilitate the completion of a detailed underground feasibility study which is the first step to defining the second stage of the Thunderbox project. Based on existing knowledge of the Mineral Resource this could see the mine life extended out beyond ten years.

AMC have been appointed the lead consultant on the Thunderbox underground feasibility study and work has commenced. The initial focus will be on the detailed geotechnical parameters, mining method and haulage evaluations. It is anticipated that the feasibility study will be completed by the end of FY17 and will incorporate all the additional Resource extension and geotechnical data stemming from the planned exploration drilling.

King of the Hills Exploration

Underground drilling is already underway, with the first 3 holes completed of an initial 11 hole program. The Stage 1 program is due for completion by the end of the current quarter and is heavily focused on understanding the distribution and orientation of the modelled tension veins. Early results indicate that there is a strong correlation with the modelled tension veins and the veins observed (Figure 32).

Figure 32 – King of the Hills southern exploration long section



Three +1,000m holes are part of the southern exploration program. The program has the potential to not only confirm the modelled veins but also identify other structures not mapped or previously drilled.

It is likely that additional drilling will be committed to during FY2017, following the results of the first program. Follow up drilling is already being planned to improve the geological understanding of the recent results in the north. These holes will be drilled this quarter.

Table 5 - Karari Drill Results

KARARI DRILLING JULY 2016								Downhole			
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
KRGC313	438454.775	6663541.876	90.526	96	342.58	-5.57		17.0	24.0	7.0	3.21
							and	50.0	55.9	5.9	2.87
							and	62.1	69.0	6.9	4.00
							and	88.5	96.0	7.5	5.20
KRGC314	438454.933	6663541.904	90.458	89	357.6	-8.52		17.0	18.0	1.0	8.27
							and	22.0	23.0	1.0	4.01
							and	26.0	27.0	1.0	2.92
							and	39.0	66.7	27.7	6.13
KRRD112	438604.354	6663695.918	67.804	249	234	-50.29		146.0	162.0	16.0	4.32
							and	209.0	210.0	1.0	2.62
							and	213.0	213.8	0.8	2.95
							and	216.0	219.0	3.0	3.29
KRRD113	438604.398	6663695.93	67.707	266	236	-57.2		157.0	176.0	19.0	4.63
							and	225.0	231.0	6.0	11.15
KRRD114	438599.715	6663706.166	68.409	243.2	243.09	-50.77		145.0	147.0	2.0	2.95
							and	151.5	155.0	3.9	3.15
							and	162.7	163.1	0.4	2.66
							and	188.0	189.0	1.0	2.89
							and	209.5	216.7	7.2	4.42
							and	221.4	222.6	1.2	9.60
KRRD115	438617.16	6663639.751	71.547	254.1	204.6	-37.8		172.9	174.3	1.4	4.22
							and	179.5	180.5	1.0	9.76
							and	187.0	188.0	1.0	3.93
							and	199.0	215.6	16.6	8.23
KRRD117	438599.161	6663708.676	68.2	240	255	-13.4		147.7	148.1	0.4	2.58
							and	167.4	191.3	24.0	3.88
KRRD118	438598.682	6663708.008	69.355	257	266.04	-11.385		173.6	201.2	27.6	2.46
							and	216.4	217.0	0.6	2.97
							and	235.0	236.0	1.0	3.40
KRRD119	438599.161	6663708.676	68.2	275	267.22	-1.89		248.0	250.0	2.0	7.34

Table 6 – Red October Drill Results

RED OCTOBER DRILLING JULY 2016								Downhole			
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
ROEX046	442982.024	6767735.812	139.36	720	164.48	-10.545		185.28	185.74	0.46	5.11
ROGC635	443250.08	6767965.713	267.7	114.2	239.63	-21.94		28.56	31.75	3.19	5.30
ROGC637	443250.08	6767965.713	267.7	102.44	251.69	-14.6		59.9	60.46	0.56	2.86
ROGC638	443250.08	6767965.713	267.7	90.2	260.99	-29.3		62.5	62.85	0.35	7.45
							and	72.1	72.5	0.40	4.92
							and	79.2	81	1.80	18.45
							and	87.85	88.7	0.85	2.55
ROGC639	443250.08	6767965.713	267.7	90.4	276.29	-18.3		69.6	70.2	0.60	11.17
							and	83.1	83.95	0.85	4.13
ROGC645	442997.488	6767798.927	240.5	60.1	72.89	15.5	no significant results				
ROGC646	442997.488	6767798.927	240.5	83.8	70.69	-3.3	no significant results				
ROGC647	442997.488	6767798.927	240.5	80.7	64.49	10.7	no significant results				
ROGC650	443027.438	6767815.898	-112.73	120	7.33	-31.28		106.66	107.58	0.92	3.13
ROGC655	443164.977	6767995.01	258.37	32.8	323.59	21.7	no significant results				
ROGC656	443166.713	6767994.716	258.36	35.8	4.69	22.3	no significant results				
ROGC657	443166.713	6767994.716	258.36	44.8	23.29	44.5	no significant results				
ROGC658	442990.44	6767748.468	138.759	80.7	258.859	-24.49	no significant results				
ROGC659	442990.426	6767748.462	139.37	80.8	270.92	-7.71	no significant results				

RED OCTOBER DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
ROGC660	442990.462	6767748.616	139.394	90	287.989	-7.365		79.25	80.08	0.83	3.34
ROGC661	442990.737	6767748.694	138.895	88.4	292.19	-21.03		72.85	73.15	0.30	9.41
							and	83.8	84.2	0.40	51.40
							and	88	88.3	0.30	2.62
ROGC662	443085.526	6767790.684	144.292	141	25.32	-9.18		110.7	112.25	1.55	5.44
							and	120.95	121.35	0.40	5.36
ROGC663	443086.087	6767791.076	145.406	122.78	23.91	9.69		80.39	80.8	0.41	5.76
							and	100.03	101.98	1.95	3.24
							and	104.05	104.65	0.60	3.91
RORD104	443099.846	6767906.275	291.6	152	309.31	17		31.15	32.05	0.90	1.26
							and	34.4	34.9	0.50	3.11
							and	114.9	115.4	0.50	1.90
RORD105	443099.674	6767906.479	291.143	191.9	317.34	-5.62		43.6	44.25	0.65	23.10
							and	130.3	130.6	0.30	75.20
							and	155.7	156.7	1.00	9.58
RORD106	443106.322	6767913.811	290.58	184	327.53	-12.51		138.36	141.38	3.02	3.63
							and	160.4	166.2	5.80	5.60
RORD107	443106.44	6767913.777	291.02	163	328.6	-0.87		148.04	148.6	0.56	14.40
RORD108	443106.486	6767913.789	291.186	164	341.34	3.08		30.79	31.32	0.53	1.50
							and	142.5	143.42	0.92	4.48
RORD109	443106.48	6767913.889	290.816	188	343.1	-9.91		49.8	50.1	0.30	131.00
							and	149.88	150.61	0.73	1.29
							and	157.47	158	0.53	2.32
							and	160.2	161.32	1.12	2.45
RORD110	443106.654	6767913.788	292.028	153	346.85	21.89		135	135.8	0.80	2.71
RORD111	443106.565	6767913.876	291.194	178	353.81	1.7		36.34	36.64	0.30	63.90
							and	152.76	153.56	0.80	2.99
RORD112	442870.727	6768004.41	45.161	516	95.56	-58.54	no significant results				
RORD113	442870.727	6768004.41	45.161	552	90.31	-55.91		264.9	265.45	0.55	12.60
RORD114	442870.727	6768004.41	45.161	614.8	76.189	-48.72		277.3	278	0.70	2.90
RORD115	442870.727	6768004.41	45.16	582	83.94	-52.64	no significant results				
RORD116	442870.727	6768004.41	45.16	752.3	72.27	-53.89		377.18	379.5	2.32	4.57
							and	545	545.6	0.60	3.06
RORD117	443159.341	6767980.15	255.59	168	318.72	-10.52		128.61	129.15	0.54	4.99
							and	156.52	156.88	0.36	3.94
							and	163.16	164.16	1.00	6.31
RORD118	443159.341	6767980.15	255.59	180	302.76	-11.5	no significant results				
RORD119	443159.341	6767980.15	255.59	199.7	291.25	-9.42		28.61	28.91	0.30	2.91
							and	32.31	33.23	0.92	363.07
							and	188.77	193.07	4.30	17.50
RORD120	443159.341	6767980.15	255.59	197.9	327.09	-19.21		168.95	169.37	0.42	3.29
							and	180.22	180.62	0.40	3.46
							and	186.14	186.78	0.64	6.64
RORD121	443159.341	6767980.15	255.59	192	313.85	-19.03		131.05	131.38	0.33	2.63
							and	141.22	141.54	0.32	3.68
							and	169	169.6	0.60	3.24
							and	170.1	170.7	0.60	2.51
							and	172.55	173.27	0.72	3.67
RORD122	443159.341	6767980.15	255.59	225	298.22	-17.57		147.4	148.35	0.95	7.57
							and	163.58	164	0.42	26.50
							and	189.42	190.34	0.92	3.11
RORD123	443159.341	6767980.15	255.59	222	322.38	-25.98		135.53	136.08	0.55	8.97
							and	138.06	138.53	0.47	2.80
							and	195.95	196.48	0.53	3.05
							and	211.26	212.78	1.52	6.14
RORD124	443159.341	6767980.15	255.59	225	308.08	-25.125		140.73	142.38	1.65	2.78
							and	148.2	149.97	1.77	28.676

Table 7 – King of the Hills Drill Results

KING OF THE HILL DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
KHEX001	320621.365	6827353.686	202.01	454.38	211.79	3.4		119	120	1	6.27
							and	177	178	1	22.2
							and	410	410.5	0.5	5.01
							and	416.8	417.5	0.7	23.6
							and	423.63	424	0.37	17.9
KHEX002	320558.147	6827336.891	211.33	75	218.43	0.6		68.7	69.3	0.6	52
KHEX003	320529.094	6827372.518	247.53	640	203	1.17		27.25	27.57	0.32	17.9
							and	40.34	41	0.66	19.3
							and	231.8	232.85	1.05	26.1
							and	279.53	280.31	0.78	9.47
							and	401.72	403.16	1.44	30.313
							and	412.91	413.26	0.35	12.6
							and	416	417	1	6.74
							and	479.85	481.45	1.6	9.782
							and	493	493.34	0.34	71.3
							and	524.76	525.75	0.99	7.6
KHEX010	320712.159	6827381.328	189.713		242.07	6.93		Awaiting Results			
KHGC001	320497.445	6828123.419	111.05	56.95	273.68	-17.09		8.28	8.75	0.47	19.4
							and	46.23	51.48	5.25	8.81
KHGC002	320497.819	6828123.307	111.42	65.9	247.04	-4.3		55.1	61.45	6.35	21.9
KHGC003	320497.833	6828123.215	111.29	60.05	207.23	-14.475		24.18	25.5	1.32	10.206
							and	37.84	38.7	0.86	12.2
							and	57	57.54	0.54	6.31
KHGC004	320543.735	6827497.234	227.92	253	52.57	-14.78		27.96	28.34	0.38	8.3
KHGC005	320588.805	6828031.31	81.03	125	86.86	-5.6	and	38	39	1	6.92
							and	41.7	42.7	1	8.09
							and	80	80.4	0.4	8.19
							and	96	98	2	44.09
KHGC006	320588.97	6828031.201	81.09	131.9	97.1	-6.45		3.44	4.14	0.7	7.4
							and	30.53	30.92	0.39	7.35
							and	57.72	58.19	0.47	6.67
							and	71	72	1	15.6
							and	96.88	97.3	0.42	14.9
							and	108	109	1	5.97
							and	113	117.53	4.53	16.092
							and	121	129.38	8.38	41.648
KHGC007	320589.068	6828031.156	81.04	135	106.75	-5.48		30.2	30.9	0.7	6.57
							and	38.25	39	0.75	19.1
							and	109.5	113.5	4	27.862
							and	129	129.3	0.3	7.92
KHGC008	320626.849	6827822.12	84.97	49	49.12	-64.53	no significant results				
KHGC009	320626.954	6827822.205	86.2	60	72.9	-16.81		18.37	21	2.63	5.859
							and	47.2	48	0.8	23.28
KHGC010	320626.876	6827822.256	86.3	61.22	47.42	-16.13		20.96	21.5	0.54	5.26
KHGC011	320626.777	6827822.299	86.3	68	25.22	-12.44		53.5	54.5	1	7.4
KHGC012	320614.572	6827831.339	86.75	63.15	14.27	-21.65	no significant results				
KHGC013	320614.383	6827831.307	87.08	80	4.65	-7.45		31.56	32.02	0.46	10.9
							and	64.5	65.1	0.6	7.71
KHGC014	320614.323	6827831.197	86.96	93.03	349.28	-10.53	no significant results				
KHGC015	320620.179	6827762.049	151.027	123	157.69	20.98	no significant results				
KHGC016	320621.017	6827763	149.73	168	158.29	13.52		65.91	66.35	0.44	9.21
KHGC017	320620.174	6827762.048	150.027	159	178.5	0.89		37	38	1	6.44
							and	105.08	105.58	0.5	14
							and	126.7	127.5	0.8	7.34

KING OF THE HILL DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
KHGC018	320761.883	6827530.967	177.68	116.94	7.81	-10.23		7.68	8	0.32	36
KHGC019	320761.956	6827530.916	177.69	147.33	21.28	-11.42		18.65	19.46	0.81	6.6
							and	47.75	48.24	0.49	14.5
							and	128	128.38	0.38	7.89
KHGC020	320761.98	6827530.909	177.78	143.05	29.62	-11.685		125	125.55	0.55	6.16
							and	135	136	1	10.35
KHGC021	320763.146	6827654.605	179.56	61.08	321.37	-44.31	no significant results				
KHGC022	320763.046	6827654.832	180.2	60.16	347.49	-15.68		41.74	42.16	0.42	14.3
KHGC023	320566.947	6828053.871	82.53	132.1	298.51	16.77		11.2	11.5	0.3	16.1
							and	26.4	27	0.6	41.2
							and	44	45	1	12.8
							and	54	54.4	0.4	53.4
							and	100.2	112.9	12.7	11.6
							and	125.9	126.77	0.87	9.08
KHGC024	320567.029	6828053.938	82.57	129.1	306.77	19.58		25	26	1	6.38
							and	51	52	1	17.3
							and	71.85	72.45	0.6	27.5
							and	86.47	87.25	0.78	10.8
KHGC025	320689.508	6827803.011	52.87	148	87.45	-54.48		139.7	140.7	1	6.84
KHGC026	320689.571	6827803.077	52.93	149	88.26	-35.4		6.6	7	0.4	114
							and	75.18	89.96	14.78	29.05
							and	121	125	4	3.88
KHGC027	320689.601	6827802.975	52.98	147	115.26	-35.64		13	14	1	25.244
							and	50.25	51	0.75	12.1
KHGC028	320689.627	6827802.881	52.84	147	134.44	-29.99		22	22.3	0.3	43.7
							and	112.53	113.3	0.77	6.08
KHGC029	320620.179	6827762.049	151.027	99	193.53	24.2	no significant results				
KHGC030	320620.174	6827762.048	150.027	162.5	179.75	9.27		87.6	87.9	0.3	5.5
							and	91.5	92.65	1.15	21.804
							and	138.6	139.7	1.1	6.406
KHGC031	320763.138	6827654.663	179.62	74.08	317.4	-29.63	no significant results				

Table 8 – Thunderbox Drill Results

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2410_001	304436.522	6879330.274	410.66	36	90	-65		9	23	14	3.56
							and	29	30	1	0.54
TBGC_2410_002	304360.242	6879343.162	410.509	30	90	-60		18	21	3	0.67
TBGC_2410_003	304370.713	6879342.965	410.261	18	90	-60		4	14	10	0.58
TBGC_2410_004	304437.689	6879339.724	410.808	36	90	-90		13	32	19	1.87
TBGC_2410_005	304441.194	6879340.04	410.71	18	90	-60		0	8	8	2.85
							and	12	18	6	0.60
TBGC_2410_006	304352.135	6879350.179	410.36	30	90	-60		25	30	5	1.46
TBGC_2410_007	304362.536	6879350.231	410.406	24	90	-60		8	19	11	0.52
TBGC_2410_009	304432.083	6879350.523	411.138	30	90	-90		21	30	9	4.60
TBGC_2410_010	304439.711	6879350.404	410.897	30	90	-68		0	9	9	2.68
							and	15	16	1	1.53
TBGC_2410_011	304355.753	6879360.852	410.081	30	90	-60		13	24	11	0.86
TBGC_2410_012	304365.557	6879360.324	410.064	18	90	-60		3	14	11	0.65
TBGC_2410_013	304415.034	6879360.438	410.475	42	90	-60		24	37	13	2.59
TBGC_2410_014	304434.891	6879360.358	411.043	24	90	-60		1	4	3	3.71
							and	11	12	1	4.06
TBGC_2410_015	304444.904	6879360.29	410.843	18	90	-60		11	12	1	0.56
TBGC_2410_016	304345.295	6879370.093	410.294	36	90	-60		26	32	6	0.92
TBGC_2410_017	304355.798	6879370.094	410.318	24	90	-60		7	19	12	0.67
TBGC_2410_018	304411.082	6879370.358	410.332	42	90	-60		23	37	14	1.69
TBGC_2410_019	304425.533	6879370.401	410.708	24	90	-60		2	17	15	1.87
TBGC_2410_020	304443.028	6879370.295	410.97	18	90	-60		3	5	2	0.51
TBGC_2410_021	304340.845	6879379.957	410.297	36	90	-60		28	31	3	0.79
TBGC_2410_022	304350.393	6879380.11	410.278	24	90	-60		20	24	4	1.17
TBGC_2410_023	304359.879	6879380.168	410.268	18	90	-60		0	10	10	0.57
							and	16	17	1	1.05
TBGC_2410_025	304417.197	6879379.919	410.526	30	90	-60		10	24	14	3.53
TBGC_2410_026	304426.583	6879380.11	410.471	36	90	-60		0	10	10	1.69
							and	34	35	1	0.85
TBGC_2410_027	304335.727	6879389.708	410.205	42	90	-60		28	40	12	0.93
TBGC_2410_028	304345.278	6879389.954	410.079	30	90	-60		12	13	1	1.36
							and	17	27	10	1.15
TBGC_2410_029	304354.108	6879389.633	410.279	18	90	-60		4	5	1	1.54
							and	11	16	5	1.04
TBGC_2410_031	304425.256	6879390.129	410.277	36	90	-60		2	7	5	0.82
							and	16	17	1	0.87
							and	29	33	4	1.86
TBGC_2410_032	304435.065	6879390.325	410.644	24	90	-60		16	17	1	0.50
TBGC_2410_033	304330.591	6879400.271	410.248	36	90	-60		28	36	8	0.77
TBGC_2410_034	304340.438	6879400.123	410.209	30	90	-60		20	28	8	0.67
TBGC_2410_035	304349.865	6879400.165	410.302	18	90	-60		4	5	1	1.48
							and	10	17	7	1.04
TBGC_2410_036	304410.58	6879400.435	410.302	36	90	-60		8	24	16	1.76
							and	33	34	1	0.96
TBGC_2410_037	304417.759	6879400.79	410.313	30	90	-60		0	12	12	1.95
TBGC_2410_038	304425.143	6879400.355	410.503	36	90	-60		1	12	11	2.54
							and	25	29	4	2.65
TBGC_2410_039	304325.383	6879410.122	410.285	36	90	-60		32	34	2	1.13
TBGC_2410_040	304335.115	6879409.948	410.172	30	90	-60		19	29	10	0.51
TBGC_2410_041	304344.686	6879410.129	410.183	12	90	-60		7	10	3	0.59
TBGC_2410_042	304404.159	6879410.308	410.343	36	90	-60		17	26	9	2.15
TBGC_2410_043	304414.903	6879409.956	410.25	24	90	-60		5	13	8	2.26
							and	20	24	4	1.65
TBGC_2410_044	304425.622	6879410.126	410.467	36	90	-60		6	7	1	0.86
							and	20	23	3	1.97
TBGC_2410_045	304434.799	6879410.258	410.558	18	90	-60		7	8	1	0.51
							and	16	17	1	7.30

THUNDERBOX DRILLING JULY 2016											Downhole
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2410_046	304325.515	6879420.108	410.237	42	90	-60		11	12	1	0.61
							and	29	30	1	0.72
							and	35	38	3	0.70
TBGC_2410_047	304395.863	6879420.437	410.258	30	90	-60		26	30	4	3.10
TBGC_2410_048	304405.481	6879419.978	410.182	36	90	-60		2	3	1	1.03
							and	12	19	7	3.41
							and	30	31	1	2.27
TBGC_2410_049	304425.717	6879420.396	410.388	36	90	-60		5	6	1	0.76
							and	16	22	6	2.31
TBGC_2410_050	304325.541	6879430.253	410.27	36	90	-60		23	34	11	0.72
TBGC_2410_051	304335.266	6879430.526	410.216	24	90	-60		11	20	9	0.71
TBGC_2410_052	304345.186	6879430.448	410.234	12	90	-60		2	7	5	1.44
TBGC_2410_053	304405.655	6879430.367	410.202	54	90	-60		10	13	3	1.96
							and	28	32	4	1.22
							and	40	48	8	1.93
TBGC_2410_054	304415.762	6879430.201	410.244	42	90	-60		11	14	3	5.46
							and	27	34	7	1.77
							and	40	41	1	0.52
TBGC_2410_055	304330.645	6879439.983	410.255	30	90	-60		11	22	11	1.12
TBGC_2410_056	304340.902	6879440.298	410.219	18	90	-60		0	5	5	0.64
TBGC_2410_057	304315.806	6879450.205	410.273	36	90	-60		29	33	4	0.57
							and	35	36	1	0.65
TBGC_2410_058	304327.084	6879450.397	410.246	30	90	-60		17	20	3	0.69
TBGC_2410_059	304337.094	6879450.281	410.295	18	90	-60		6	10	4	1.64
TBGC_2410_060	304396.109	6879450.159	410.141	36	90	-60		13	22	9	1.74
TBGC_2410_061	304405.527	6879450.126	410.264	24	90	-60		3	4	1	0.82
							and	18	22	4	1.41
TBGC_2410_062	304414.763	6879450.093	410.182	36	90	-60		3	7	4	1.15
							and	16	28	12	2.14
TBGC_2410_063	304425.065	6879450.116	410.474	18	90	-60		3	11	8	1.53
TBGC_2410_064	304310.109	6879460.153	410.53	42	90	-60	no significant results				
TBGC_2410_065	304320.257	6879460.25	410.311	30	90	-60		18	24	6	0.71
TBGC_2410_066	304331.018	6879460.158	410.1	18	90	-60		6	15	9	0.54
TBGC_2410_067	304340.412	6879460.265	410.348	12	90	-60		0	3	3	0.76
TBGC_2410_068	304386.113	6879460.225	410.086	30	90	-60		19	30	11	2.09
TBGC_2410_069	304395.655	6879460.359	410.232	24	90	-60		7	17	10	4.14
TBGC_2410_070	304405.521	6879460.19	410.268	24	90	-60		10	16	6	0.78
TBGC_2410_071	304415.082	6879460.2	410.206	24	90	-60		1	3	2	0.83
							and	12	14	2	2.64
							and	17	23	6	1.34
TBGC_2410_072	304425.659	6879460.271	410.289	18	90	-60		0	8	8	1.65
TBGC_2410_073	304315.42	6879470.405	410.312	36	90	-60		7	8	1	0.62
							and	10	11	1	0.57
							and	23	28	5	0.79
TBGC_2410_074	304325.426	6879470.265	410.348	24	90	-60		8	19	11	0.86
TBGC_2410_075	304390.333	6879470.333	410.201	30	90	-60		6	19	13	1.31
TBGC_2410_076	304400.784	6879470.078	410.232	18	90	-60		0	3	3	2.30
							and	12	18	6	1.22
TBGC_2410_077	304416.383	6879470.18	410.162	24	90	-60		4	7	3	1.84
							and	13	16	3	2.78
TBGC_2410_078	304305.515	6879480.161	410.205	30	90	-60		9	10	1	0.51
							and	17	24	7	1.07
TBGC_2410_079	304315.284	6879480.403	410.047	36	90	-60		2	3	1	1.01
							and	12	26	14	0.58
TBGC_2410_080	304380.03	6879480.553	410.155	30	90	-60		18	29	11	2.70
TBGC_2410_081	304390.604	6879480.477	410.243	24	90	-60		0	14	14	1.57
TBGC_2410_082	304400.59	6879480.592	410.217	36	90	-60		8	17	9	2.41
							and	24	25	1	0.87
							and	28	36	8	1.49

THUNDERBOX DRILLING JULY 2016											Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2410_083	304410.138	6879480.478	410.141	30	90	-60		5	6	1	0.88
							and	12	22	10	3.15
TBGC_2410_084	304295.395	6879490.143	410.071	36	90	-60		20	27	7	0.50
TBGC_2410_085	304305.407	6879490.012	410.089	30	90	-60		9	12	3	0.51
							and	27	30	3	1.19
TBGC_2410_086	304314.886	6879489.844	410.091	24	90	-60		0	1	1	0.53
							and	15	19	4	0.93
TBGC_2410_087	304325.576	6879490.086	410.41	18	90	-60		1	8	7	2.40
TBGC_2410_088	304374.904	6879490.232	410.072	30	90	-60		21	30	9	1.43
TBGC_2410_089	304385.652	6879490.203	410.041	36	90	-60		0	16	16	2.16
							and	27	36	9	1.33
TBGC_2410_090	304395.155	6879490.423	410.195	36	90	-60		13	18	5	0.99
							and	26	36	10	2.76
TBGC_2410_091	304405.092	6879490.325	410.227	30	90	-60		2	5	3	3.60
							and	11	12	1	0.69
							and	20	25	5	4.53
TBGC_2410_092	304415.253	6879490.707	410.371	18	90	-60		0	8	8	2.46
TBGC_2410_093	304290.237	6879500.208	409.85	36	90	-60		0	1	1	0.60
							and	24	28	4	1.12
TBGC_2410_094	304300.743	6879500.355	410.001	30	90	-60		10	11	1	0.83
TBGC_2410_095	304310.526	6879500.206	410.09	30	90	-60		0	3	3	0.73
							and	8	9	1	0.58
							and	16	22	6	1.12
TBGC_2410_096	304320.495	6879500.423	410.277	18	90	-60		2	10	8	1.55
TBGC_2410_097	304330.277	6879500.215	410.477	12	90	-60	no significant results				
TBGC_2410_098	304365.514	6879500.191	410.201	30	90	-60		28	30	2	1.83
TBGC_2410_099	304375.412	6879500.124	410.097	30	90	-60		0	1	1	0.71
							and	16	27	11	1.89
TBGC_2410_100	304385.36	6879500.307	410.079	30	90	-60		4	13	9	1.56
							and	22	27	5	1.15
TBGC_2410_101	304395.289	6879500.312	410.231	36	90	-60		8	32	24	0.99
TBGC_2410_102	304415.362	6879500.24	410.165	18	90	-60		0	2	2	1.28
TBGC_2410_103	304435.298	6879789.965	409.926	24	90	-60	no significant results				
TBGC_2410_104	304424.973	6879790.145	410.004	36	90	-60	no significant results				
TBGC_2410_105	304385.438	6879790.182	409.883	24	90	-60		0	9	9	0.55
							and	18	19	1	6.33
TBGC_2410_106	304375.153	6879790.591	409.806	36	90	-60		12	32	20	0.77
TBGC_2410_107	304435.468	6879800.183	409.376	24	90	-60		14	16	2	0.93
TBGC_2410_108	304425.512	6879800.189	410.013	36	90	-60	no significant results				
TBGC_2410_109	304355.276	6879800.239	410.044	48	90	-60		35	46	11	0.74
TBGC_2410_110	304375.601	6879800.168	410.373	30	90	-60		10	19	9	0.75
							and	24	27	3	1.51
TBGC_2420_001	304281.131	6879510.231	420.032	54	90	-60		6	7	1	2.09
							and	38	40	2	1.00
							and	52	53	1	0.60
TBGC_2420_002	304290.854	6879510.236	419.987	54	90	-60		20	21	1	0.84
							and	41	47	6	0.54
TBGC_2420_003	304300.561	6879509.986	419.844	54	90	-60		8	14	6	0.85
							and	30	34	4	0.84
							and	37	38	1	0.63
TBGC_2420_004	304354.695	6879510.241	419.916	54	90	-60		39	40	1	0.74
							and	49	54	5	6.80
TBGC_2420_005	304365.864	6879509.97	419.827	54	90	-60		0	1	1	0.67
							and	27	54	27	1.41
TBGC_2420_006	304375.699	6879510.405	420.14	60	90	-60		20	60	40	1.35
TBGC_2420_007	304385.951	6879510.127	420.12	48	90	-60		2	3	1	0.82
							and	11	47	36	1.60

THUNDERBOX DRILLING JULY 2016											Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2420_008	304395.653	6879510.072	419.915	36	90	-60		4	11	7	0.82
							and	19	30	11	3.30
TBGC_2420_009	304271.439	6879520.373	420.024	54	90	-60		44	53	9	1.13
TBGC_2420_010	304311.378	6879520.41	420.076	32	90	-60		11	17	6	1.12
TBGC_2420_011	304355.443	6879520.078	420.002	54	90	-60		38	52	14	2.15
TBGC_2420_012	304366.142	6879520.265	420.087	66	90	-60		28	58	30	1.55
							and	64	65	1	0.60
TBGC_2420_013	304275.719	6879530.188	419.98	54	90	-60		5	6	1	1.85
							and	34	41	7	0.95
							and	49	52	3	1.16
TBGC_2420_014	304285.625	6879530.101	419.958	54	90	-60		23	35	12	0.66
							and	44	47	3	2.42
TBGC_2420_015	304295.288	6879530.383	419.9	42	90	-60		10	14	4	1.38
							and	29	34	5	0.59
TBGC_2420_016	304306.087	6879530.483	420.011	30	90	-60		17	20	3	0.55
							and	23	24	1	0.73
TBGC_2420_017	304351.396	6879530.402	419.975	72	90	-60		37	52	15	1.16
							and	59	60	1	0.54
							and	70	71	1	0.75
TBGC_2420_018	304360.564	6879530.416	420.119	66	90	-60		28	42	14	1.64
							and	48	52	4	0.64
TBGC_2420_019	304370.602	6879530.347	420.175	54	90	-60		18	32	14	2.74
							and	43	53	10	1.26
TBGC_2420_020	304380.114	6879530.132	420.069	48	90	-60		4	20	16	3.44
							and	28	40	12	2.75
TBGC_2420_021	304271.471	6879540.43	419.765	54	90	-60		34	40	6	1.94
							and	46	47	1	0.83
TBGC_2420_022	304281.257	6879540.285	419.945	54	90	-60		24	31	7	2.67
							and	45	48	3	0.85
TBGC_2420_023	304290.797	6879540.072	419.806	48	90	-60		13	17	4	1.10
							and	27	38	11	0.73
TBGC_2420_024	304346.589	6879540.122	419.874	54	90	-60		37	53	16	1.43
TBGC_2420_025	304356.099	6879540.42	419.946	54	90	-60		28	41	13	2.65
							and	48	54	6	0.64
TBGC_2420_026	304366.177	6879540.143	419.922	54	90	-60		18	32	14	3.80
							and	38	53	15	0.92
TBGC_2420_027	304375.949	6879540.306	419.94	54	90	-60		6	21	15	2.82
							and	32	41	9	1.00
TBGC_2420_028	304255.695	6879550.342	419.767	54	90	-60	no significant results				
TBGC_2420_029	304265.894	6879550.256	419.688	54	90	-60		37	42	5	0.54
TBGC_2420_030	304275.468	6879550	419.787	54	90	-60		27	46	19	0.83
TBGC_2420_031	304285.553	6879550.125	419.911	54	90	-60		13	23	10	3.12
							and	29	39	10	0.65
TBGC_2420_032	304350.802	6879550.44	419.984	54	90	-60		29	54	25	0.94
TBGC_2420_033	304360.642	6879550.326	419.885	66	90	-60		21	59	38	2.01
TBGC_2420_034	304370.264	6879550.233	419.815	54	90	-60		9	22	13	2.67
							and	30	48	18	2.57
TBGC_2420_035	304275.718	6879560.335	420.058	54	90	-60		21	31	10	0.60
							and	41	45	4	0.62
TBGC_2420_036	304287.248	6879560.032	419.8	36	90	-60		13	14	1	15.00
							and	24	25	1	1.09
							and	29	34	5	1.18
TBGC_2420_037	304310.962	6879560.247	419.955	12	90	-60		0	9	9	1.61
TBGC_2420_038	304260.723	6879570.483	419.945	54	90	-60		36	41	5	0.85
TBGC_2420_039	304270.661	6879570.285	420.109	54	90	-60		25	34	9	0.81
							and	48	49	1	0.57
TBGC_2420_040	304280.524	6879570.162	419.835	36	90	-60		12	21	9	0.67
TBGC_2420_041	304325.746	6879570.003	420.138	54	90	-60	and	48	53	5	0.83
TBGC_2420_042	304335.32	6879570.176	420.176	54	90	-60	and	39	52	13	1.57
TBGC_2420_043	304346.56	6879570.129	420.079	78	90	-60	and	28	67	39	0.98

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2420_044	304270.867	6879580.288	419.9	54	90	-60		6	7	1	1.29
							and	40	46	6	0.52
TBGC_2420_045	304279.929	6879580.279	419.998	54	90	-60		23	24	1	0.67
TBGC_2420_046	304325.036	6879579.934	420.057	54	90	-60		44	54	10	0.96
TBGC_2420_047	304335.344	6879579.852	420.096	54	90	-60		35	54	19	1.67
TBGC_2420_048	304345.467	6879579.732	420.198	54	90	-60		18	19	1	0.98
							and	25	54	29	1.09
TBGC_2420_049	304400.593	6879580.126	420.159	24	90	-60		0	3	3	1.19
TBGC_2420_050	304271.327	6879589.847	419.787	54	90	-60	no significant results				
TBGC_2420_051	304330.975	6879589.948	420.119	54	90	-60		36	46	10	1.00
							and	49	54	5	1.87
TBGC_2420_052	304340.294	6879590.057	420.089	54	90	-60		25	54	29	1.32
TBGC_2420_053	304350.852	6879590.338	420.006	78	90	-60		14	57	43	1.26
TBGC_2420_054	304330.444	6879609.58	419.991	54	90	-60		27	39	12	0.78
							and	45	54	9	1.40
TBGC_2420_055	304340.03	6879609.789	419.979	54	90	-60		0	1	1	0.87
							and	19	54	35	0.87
TBGC_2420_056	304350.611	6879610.294	419.772	60	90	-60		7	49	42	0.89
TBGC_2420_057	304380.784	6879609.884	420.273	54	90	-60		0	17	17	2.97
TBGC_2420_058	304281.734	6879619.922	419.891	54	90	-60		50	52	2	1.04
TBGC_2420_059	304325.955	6879620.07	420.027	54	90	-60		34	41	7	2.42
							and	47	54	7	1.06
TBGC_2420_060	304335.409	6879620.007	420.088	54	90	-60		20	54	34	1.23
TBGC_2420_061	304345.409	6879620.074	419.928	54	90	-60		7	54	47	1.62
TBGC_2420_062	304290.123	6879629.778	419.923	54	90	-60		26	27	1	1.75
TBGC_2420_063	304330.565	6879630.372	420.026	54	90	-60		33	54	21	0.67
TBGC_2420_064	304341.11	6879630.173	419.936	54	90	-60		17	27	10	0.80
							and	32	54	22	1.26
TBGC_2420_065	304350.054	6879630.234	419.883	60	90	-60		11	43	32	0.97
TBGC_2420_066	304359.945	6879630.522	419.944	42	90	-60		6	14	8	1.01
							and	20	33	13	1.94
TBGC_2420_067	304331.1	6879640.235	420.096	54	90	-60		28	37	9	1.31
							and	43	54	11	2.07
TBGC_2420_068	304340.04	6879640.269	420.042	54	90	-60		12	24	12	1.40
							and	30	54	24	1.50
TBGC_2420_069	304375.654	6879639.947	419.838	54	90	-60		2	16	14	1.12
TBGC_2420_070	304320.018	6879650.257	420.012	54	90	-60		46	48	2	1.00
TBGC_2420_071	304330.01	6879650.41	420.008	54	90	-60		34	37	3	2.90
							and	47	54	7	2.22
TBGC_2420_072	304340.003	6879650.834	419.875	60	90	-60		11	33	22	0.70
							and	37	56	19	1.60
							and	57	58	1	1.33
TBGC_2420_073	304349.922	6879650.074	419.969	54	90	-60		5	15	10	0.52
							and	21	37	16	0.80
							and	45	46	1	0.58
TBGC_2420_074	304359.868	6879650.145	420.135	36	90	-60		3	4	1	0.67
							and	12	25	13	1.79
TBGC_2420_075	304311.039	6879660.049	419.878	54	90	-60	no significant results				
TBGC_2420_076	304320.011	6879660.228	419.907	54	90	-60	no significant results				
TBGC_2420_077	304330.948	6879660.734	419.919	54	90	-60		6	7	1	2.24
							and	31	34	3	1.13
							and	40	45	5	0.89
TBGC_2420_078	304340.171	6879660.564	419.982	60	90	-60		12	33	21	0.87
							and	45	60	15	1.60
TBGC_2420_079	304359.823	6879660.145	420.123	24	90	-60		0	22	22	0.82
TBGC_2420_080	304331.024	6879669.985	419.816	54	90	-60		25	47	22	0.58
							and	53	54	1	1.31
TBGC_2420_081	304340.927	6879670.067	419.907	60	90	-60		8	29	21	0.80
							and	37	42	5	0.79
							and	49	56	7	0.57

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2420_082	304350.49	6879669.727	420.129	42	90	-60		1	2	1	0.70
							and	7	24	17	0.53
							and	30	36	6	1.86
TBGC_2420_083	304361.153	6879669.825	420.18	30	90	-60		13	15	2	1.04
							and	22	23	1	0.51
TBGC_2420_084	304320.137	6879679.969	420.047	54	90	-60		47	49	2	2.02
TBGC_2420_085	304331.394	6879680.001	420.023	54	90	-60		21	29	8	0.67
							and	38	39	1	0.90
							and	50	51	1	0.54
TBGC_2420_086	304370.672	6879679.982	420.012	24	90	-60		0	4	4	0.54
							and	10	11	1	0.60
TBGC_2420_087	304330.576	6879690.058	420.022	54	90	-60		34	35	1	1.90
							and	46	54	8	1.70
TBGC_2420_088	304341.536	6879690.222	419.81	54	90	-60		14	20	6	0.68
							and	34	54	20	1.61
TBGC_2420_089	304350.265	6879690.353	419.976	54	90	-60		0	2	2	1.02
							and	13	14	1	0.59
							and	28	50	22	1.10
TBGC_2420_090	304360.049	6879690.183	420.076	36	90	-60		3	7	4	0.74
							and	19	30	11	0.51
TBGC_2420_091	304335.407	6879700.142	420.081	54	90	-60		34	54	20	0.72
TBGC_2420_092	304344.785	6879700.039	420.055	54	90	-60		0	1	1	1.29
							and	21	53	32	0.93
TBGC_2420_093	304355.039	6879700.191	420.079	54	90	-60		5	6	1	0.52
							and	12	36	24	1.58
TBGC_2420_094	304370.218	6879700.162	420.181	18	90	-60		0	1	1	0.50
							and	8	12	4	1.00
TBGC_2420_095	304330.749	6879710.456	420.16	60	90	-60		49	53	4	0.59
TBGC_2420_096	304355.995	6879710.019	420.165	60	90	-60		14	39	25	0.71
TBGC_2420_097	304375.838	6879710.117	420.031	12	90	-60		0	2	2	1.11
TBGC_2420_098	304350.627	6879720.177	420.106	36	90	-60		34	35	1	1.67
TBGC_2420_099	304360.9	6879720.618	419.975	36	90	-60		33	34	1	0.93
TBGC_2420_100	304356.026	6879730.446	419.953	36	90	-60					
TBGC_2420_101	304376.453	6879786.664	420.325	12	90	-60	no significant results				
TBGC_2420_102	304386.217	6879786.71	420.247	30	90	-60		6	7	1	0.93
							and	16	19	3	0.69
TBGC_2420_103	304396.147	6879786.728	420.163	36	90	-60		0	4	4	2.66
TBGC_2420_104	304355.826	6879785.601	420.328	54	90	-60		48	54	6	0.75
TBGC_2430_001	304397.304	6879490.203	430.23	48	90	-60		1	4	3	0.55
							and	15	20	5	0.64
							and	28	32	4	2.21
							and	39	44	5	3.28
TBGC_2430_002	304409.816	6879490.461	430.18	30	90	-65		9	23	14	2.23
TBGC_2430_003	304391.626	6879500.224	430.281	48	90	-60		0	10	10	2.81
							and	19	27	8	0.78
							and	36	47	11	2.11
TBGC_2430_004	304415.538	6879500.409	430.032	24	90	-70		0	10	10	2.25
TBGC_2430_005	304406.553	6879509.732	429.835	36	90	-60		5	23	18	1.77
							and	24	25	1	0.56
TBGC_2430_006	304418.484	6879510.245	430.003	18	90	-70	no significant results				
TBGC_2430_007	304384.968	6879520.228	430.235	48	90	-60		7	16	9	8.10
							and	24	45	21	1.84
TBGC_2430_008	304404.017	6879520.394	429.906	30	90	-60		3	23	20	5.74
TBGC_2430_009	304421.341	6879520.558	430.078	12	90	-60	no significant results				
TBGC_2430_010	304389.786	6879530.418	430.088	42	90	-50		0	3	3	0.84
							and	19	28	9	1.79
TBGC_2430_011	304384.819	6879540.281	430.16	38	90	-50		0	10	10	2.47
							and	18	27	9	1.01
TBGC_2430_012	304398.639	6879540.237	429.972	24	90	-55		5	15	10	1.10
TBGC_2430_013	304409.113	6879540.119	430.05	18	90	-60	no significant results				

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2430_014	304372.597	6879550.334	430.246	60	90	-60		8	25	17	2.47
							and	34	50	16	1.63
TBGC_2430_015	304384.602	6879550.108	430.261	42	90	-60		0	6	6	1.27
							and	16	17	1	0.71
							and	20	35	15	1.37
TBGC_2430_016	304398.703	6879550.372	430.225	24	90	-60		3	16	13	2.82
TBGC_2430_017	304363.204	6879560.229	430.006	72	90	-60		17	31	14	2.83
							and	39	59	20	1.38
TBGC_2430_019	304354.355	6879570.246	430.032	72	90	-60		26	64	38	1.54
TBGC_2430_020	304370.096	6879570.214	430.313	60	90	-60		4	9	5	0.97
							and	18	20	2	1.27
							and	28	49	21	1.81
TBGC_2430_021	304400.657	6879569.965	430.259	36	90	-90		0	24	24	2.25
TBGC_2430_022	304411.601	6879569.919	430.46	30	90	-60		0	1	1	0.86
TBGC_2430_023	304353.443	6879580.097	430.158	72	90	-60		0	1	1	0.54
							and	23	66	43	1.39
TBGC_2430_024	304364.271	6879580.08	430.369	60	90	-55		5	6	1	3.43
							and	18	20	2	1.78
							and	25	28	3	0.71
							and	31	34	3	1.69
							and	37	48	11	1.71
TBGC_2430_025	304370.039	6879579.822	430.527	54	90	-45		0	13	13	3.50
							and	20	22	2	2.13
							and	26	36	10	2.77
							and	39	41	2	1.32
TBGC_2430_026	304357.371	6879590.096	430.248	60	90	-60		16	60	44	1.16
TBGC_2430_027	304367.475	6879590.25	430.524	48	90	-60		0	14	14	2.97
							and	16	18	2	0.92
							and	21	22	1	0.95
							and	26	45	19	1.94
TBGC_2430_028	304342.71	6879600.035	430.062	84	90	-60		25	66	41	1.33
								8	34	26	0.78
TBGC_2430_029	304354.035	6879610.317	430.346	66	90	-60	and	40	51	11	1.52
TBGC_2430_030	304368.092	6879611.781	430.37	48	90	-60		1	9	8	1.51
							and	14	42	28	1.51
TBGC_2430_032	304355.61	6879620.168	430.62	54	90	-55		1	50	49	0.88
TBGC_2430_033	304370.259	6879620.175	430.257	36	90	-70		0	3	3	0.68
							and	12	35	23	1.73
TBGC_2430_034	304368.499	6879629.941	430.427	36	90	-50		4	26	22	2.54
TBGC_2430_035	304346.201	6879640.188	430.138	62	90	-60		7	13	6	2.67
							and	23	49	26	1.35
TBGC_2430_036	304376.805	6879650.123	430.173	18	90	-60		0	6	6	3.72
TBGC_2430_037	304376.311	6879450.139	430.006	90	90	-60		45	58	13	2.32
							and	68	86	18	1.57
TBGC_2430_038	304383.055	6879440.396	430.196	90	90	-60		42	53	11	2.89
							and	64	70	6	0.56
							and	74	87	13	1.66
TBGC_2430_039	304404.756	6879440.402	430.092	66	90	-60		5	16	11	1.55
							and	29	37	8	0.53
							and	44	51	7	1.19
TBGC_2430_040	304383.865	6879430.342	430.121	96	90	-60		43	50	7	1.66
							and	66	67	1	1.15
							and	70	71	1	1.15
							and	78	85	7	1.64
TBGC_2430_041	304364.655	6879760.172	429.994	66	90	-60	no significant results				
TBGC_2430_042	304384.705	6879760.307	429.998	48	90	-60		0	5	5	0.67
TBGC_2430_043	304394.564	6879760.501	430.029	38	90	-60	no significant results				
TBGC_2430_044	304367.608	6879770.448	430.006	60	90	-60	no significant results				
TBGC_2430_045	304381.928	6879770.369	430.045	46	90	-60		10	11	1	0.66
TBGC_2430_046	304396.009	6879770.396	430.131	28	90	-60	no significant results				

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2430_047	304406.186	6879770.247	430.128	18	90	-60		0	1	1	0.72
TBGC_2430_048	304364.372	6879780.176	429.95	60	90	-60		40	42	2	0.69
TBGC_2430_049	304379.113	6879780.501	430.067	54	90	-60	no significant results				
TBGC_2430_050	304391.562	6879780.452	430.095	38	90	-60	no significant results				
TBGC_2430_051	304403.646	6879780.414	430.046	18	90	-60	no significant results				
TBGC_2440_001	304390.558	6879299.74	440.092	30	90	-90	no significant results				
TBGC_2440_002	304375.177	6879310.09	440.07	36	90	-60		28	34	6	0.72
TBGC_2440_003	304439.773	6879310.323	439.932	36	90	-60		19	36	17	2.31
TBGC_2440_004	304359.714	6879320.16	439.95	48	90	-60		44	46	2	0.64
TBGC_2440_005	304370.094	6879320.199	439.978	42	90	-60		33	38	5	0.98
TBGC_2440_006	304350.102	6879330.117	440.095	54	90	-60		49	54	5	0.98
TBGC_2440_007	304360.098	6879330.146	440.027	48	90	-60		37	46	9	0.66
TBGC_2440_008	304370.032	6879330.102	439.977	42	90	-60		27	34	7	1.50
TBGC_2440_009	304419.726	6879330.05	439.951	48	90	-60		41	43	2	3.85
TBGC_2440_010	304429.957	6879330.165	439.946	48	90	-60		21	48	27	1.52
TBGC_2440_011	304440.15	6879330.444	440.009	42	90	-60		11	32	21	1.59
TBGC_2440_012	304450.203	6879330.47	440.012	42	90	-60		1	17	16	1.95
TBGC_2440_013	304359.603	6879340.111	440.123	48	90	-60		35	42	7	1.89
TBGC_2440_014	304370.005	6879340.207	440.119	42	90	-60		17	33	16	0.94
TBGC_2440_015	304430.162	6879339.922	440.046	42	90	-60		14	18	4	1.62
							and	21	36	15	1.34
TBGC_2440_016	304345.343	6879350.005	439.937	42	90	-60	no significant results				
TBGC_2440_017	304355.076	6879350.051	440.072	48	90	-60		33	43	10	1.19
TBGC_2440_018	304415.477	6879350.159	439.848	42	90	-60		39	42	3	3.54
TBGC_2440_019	304424.66	6879350.241	440.066	42	90	-60		22	35	13	1.52
TBGC_2440_020	304354.788	6879360.009	440.136	42	90	-60		29	42	13	0.87
TBGC_2440_021	304349.428	6879369.965	440.045	42	90	-60		30	42	12	0.56
TBGC_2440_022	304400.515	6879370.075	440.129	42	90	-60	no significant results				
TBGC_2440_023	304410.12	6879370.263	439.939	42	90	-60		32	42	10	2.96
TBGC_2440_024	304420.119	6879370.461	439.836	42	90	-60		21	36	15	1.29
TBGC_2440_025	304430.563	6879370.334	440.053	42	90	-60		4	7	3	1.92
							and	13	18	5	8.42
							and	37	39	2	0.64
							and	41	42	1	0.54
TBGC_2440_026	304349.818	6879379.952	440.138	42	90	-60		28	30	2	0.63
							and	40	41	1	1.60
TBGC_2440_027	304405.428	6879380.276	440.07	42	90	-60		36	42	6	2.30
TBGC_2440_028	304429.899	6879380.189	440.143	42	90	-60		2	14	12	4.71
TBGC_2440_029	304339.625	6879390.095	440.04	42	90	-60		31	35	4	0.70
TBGC_2440_030	304400.879	6879390.105	439.872	42	90	-60		37	40	3	3.76
TBGC_2440_031	304410.126	6879390.166	439.936	42	90	-60		24	40	16	3.02
TBGC_2440_032	304430.327	6879390.453	440.163	24	90	-60		0	8	8	0.50
TBGC_2440_033	304339.34	6879400.007	440.021	42	90	-60		30	31	1	0.70
TBGC_2440_034	304325.524	6879410.086	440.023	42	90	-60	no significant results				
TBGC_2440_035	304335.248	6879410.129	439.953	42	90	-60		29	30	1	0.51
TBGC_2440_036	304390.791	6879410.145	440.091	42	90	-60		40	42	2	1.31
TBGC_2440_037	304400.658	6879410.177	439.969	42	90	-60		29	33	4	3.80
							and	41	42	1	9.69
TBGC_2440_038	304409.181	6879410.393	440.12	42	90	-60		14	32	18	2.72
TBGC_2440_039	304420.356	6879410.495	439.949	42	90	-60		1	15	14	3.47
TBGC_2440_040	304319.915	6879420.027	440.061	54	90	-60		46	52	6	0.65
TBGC_2440_041	304330.144	6879420.272	440.065	42	90	-60		33	34	1	1.38
TBGC_2440_042	304402.584	6879420.359	440.673	42	90	-60		22	24	2	2.95
							and	30	36	6	0.99
TBGC_2440_043	304320.256	6879430.125	440.16	42	90	-60	no significant results				
TBGC_2440_044	304330.046	6879430.244	440.162	42	90	-60		29	34	5	1.08
TBGC_2440_045	304385.416	6879430.333	440.637	42	90	-60	no significant results				
TBGC_2440_046	304395.794	6879430.466	440.612	42	90	-60		30	36	6	2.20
TBGC_2440_047	304405.91	6879430.514	440.548	30	90	-60		7	8	1	1.97
							and	15	26	11	3.37

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2440_048	304415.616	6879430.529	440.674	18	90	-60		0	12	12	2.24
TBGC_2440_049	304319.859	6879440.313	440.091	42	90	-60		37	41	4	0.65
TBGC_2440_050	304414.864	6879440.16	440.079	42	90	-60		2	10	8	1.38
							and	32	42	10	1.19
TBGC_2440_051	304425.28	6879440.404	440.326	42	90	-60	no significant results				
TBGC_2440_052	304315.218	6879450.178	440.122	42	90	-60	no significant results				
TBGC_2440_053	304324.965	6879450.391	440.13	42	90	-60		36	37	1	0.92
TBGC_2440_054	304379.974	6879450.645	440.73	42	90	-60		29	30	1	1.46
TBGC_2440_055	304391.002	6879450.351	440.897	42	90	-60		27	34	7	2.26
TBGC_2440_056	304400.501	6879450.233	439.978	42	90	-60		8	26	18	1.06
							and	33	37	4	2.39
TBGC_2440_057	304410.05	6879450.292	440.072	42	90	-60		1	8	7	2.58
							and	19	28	9	1.49
							and	34	42	8	1.43
TBGC_2440_058	304420.1	6879450.436	440.261	42	90	-60		18	22	4	0.57
							and	26	28	2	0.63
							and	33	35	2	0.74
TBGC_2440_059	304315.128	6879459.869	440.058	42	90	-60		35	42	7	0.66
TBGC_2440_060	304350.653	6879459.961	440.141	18	90	-60		2	3	1	1.40
							and	6	9	3	0.58
TBGC_2440_061	304374.986	6879460.157	440.017	42	90	-60	no significant results				
TBGC_2440_062	304384.911	6879459.999	440.263	42	90	-60		34	40	6	3.66
TBGC_2440_063	304395.271	6879460.417	440.14	42	90	-60		18	28	10	7.24
							and	37	38	1	0.82
TBGC_2440_064	304405.546	6879460.334	440.2	42	90	-60		0	8	8	1.99
							and	36	38	2	5.09
TBGC_2440_065	304414.634	6879460.257	440.183	42	90	-60		22	34	12	0.82
TBGC_2440_066	304425.065	6879460.33	440.326	42	90	-60		9	10	1	1.10
							and	13	16	3	0.65
TBGC_2440_067	304309.515	6879470.09	439.926	42	90	-60		27	28	1	0.57
							and	39	42	3	1.36
TBGC_2440_068	304320.122	6879470.223	440.145	42	90	-60		30	33	3	0.86
							and	36	37	1	1.70
TBGC_2440_069	304380.39	6879470.309	440.326	42	90	-60		33	34	1	3.26
							and	39	42	3	3.37
TBGC_2440_070	304390.177	6879470.365	440.221	42	90	-60		20	27	7	2.68
							and	37	40	3	0.90
TBGC_2440_071	304400.581	6879470.36	440.248	42	90	-60		0	6	6	2.81
							and	22	30	8	3.38
							and	37	41	4	0.89
TBGC_2440_072	304409.628	6879470.548	440.141	42	90	-60		6	10	4	3.98
							and	23	36	13	2.26
TBGC_2440_073	304420.163	6879470.454	440.175	42	90	-60		5	9	4	1.43
							and	13	18	5	1.29
TBGC_2440_074	304375.289	6879480.289	440.258	42	90	-60		32	37	5	2.35
							and	40	42	2	1.69
TBGC_2440_075	304415.115	6879480.185	440.203	42	90	-60		3	16	13	1.15
							and	18	20	2	0.84
							and	21	22	1	0.50
TBGC_2440_076	304305.323	6879490.206	440.083	42	90	-60		25	31	6	0.80
							and	38	42	4	0.69
TBGC_2440_077	304384.994	6879490.327	440.293	42	90	-60		15	16	1	0.92
							and	24	28	4	1.27
							and	37	38	1	1.85
TBGC_2440_078	304395.195	6879490.507	440.251	42	90	-60		1	11	10	5.30
							and	22	24	2	3.53
							and	33	42	9	1.85

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2440_079	304422.502	6879490.661	440.135	42	0	-90		1	10	9	0.53
							and	21	22	1	0.71
							and	24	25	1	0.50
							and	29	30	1	0.67
TBGC_2440_080	304426.476	6879488.817	440.2	42	0	-90		0	3	3	0.83
							and	22	23	1	0.54
TBGC_2440_081	304431.929	6879489.849	440.243	42	0	-90		17	18	1	0.50
TBGC_2440_082	304300.344	6879499.931	440.059	42	90	-60		21	22	1	0.95
							and	29	30	1	2.84
							and	41	42	1	0.72
TBGC_2440_083	304310.171	6879500.148	440.091	42	90	-60		18	19	1	1.00
							and	24	33	9	0.68
TBGC_2440_084	304369.944	6879500.19	440.293	42	90	-60		29	42	13	2.26
TBGC_2440_085	304380.447	6879500.529	440.148	42	90	-60		12	13	1	2.54
							and	17	27	10	2.38
							and	40	41	1	0.90
TBGC_2440_086	304389.486	6879500.627	440.163	42	90	-60		1	17	16	1.90
							and	26	32	6	1.05
							and	38	41	3	2.30
TBGC_2440_087	304391.008	6879500.618	440.218	42	90	-45		0	10	10	5.65
							and	19	20	1	1.46
							and	28	41	13	2.37
TBGC_2440_088	304425.178	6879499.413	440.176	30	90	-90		13	14	1	0.58
TBGC_2440_089	304305.259	6879509.712	440.203	42	90	-60		17	18	1	0.62
							and	30	42	12	0.84
TBGC_2440_090	304369.562	6879510.048	440.275	42	90	-60		30	40	10	1.07
TBGC_2440_091	304380.014	6879510.218	440.066	54	90	-45		15	22	7	2.99
							and	28	32	4	1.61
							and	39	50	11	1.43
TBGC_2440_092	304378.421	6879510.229	440.131	42	90	-60		19	27	8	0.94
							and	37	38	1	1.13
TBGC_2440_093	304425.415	6879510.574	440.227	30	90	-90		5	6	1	0.53
TBGC_2440_094	304289.377	6879530.116	439.755	42	90	-60		27	30	3	0.63
TBGC_2440_095	304299.979	6879530.197	439.941	42	90	-60		9	10	1	0.89
							and	14	15	1	1.40
							and	29	39	10	0.91
TBGC_2440_096	304361.218	6879529.956	440.49	66	90	-45		29	40	11	1.17
							and	49	61	12	2.41
TBGC_2440_097	304359.676	6879529.966	440.462	42	90	-60		38	42	4	1.79
TBGC_2440_098	304419.693	6879530.048	440.128	30	90	-90		8	9	1	0.74
TBGC_2440_099	304285.497	6879540.107	439.811	42	90	-60		26	35	9	1.00
TBGC_2440_100	304295.043	6879540.043	439.638	42	90	-60		9	10	1	0.71
							and	16	17	1	2.10
							and	34	39	5	0.95
TBGC_2440_101	304359.353	6879540.085	440.809	42	90	-60		34	42	8	2.33
TBGC_2440_102	304360.595	6879540.165	440.809	54	90	-45		28	36	8	1.24
							and	48	54	6	1.57
TBGC_2440_103	304419.517	6879539.873	440.238	30	90	-90		0	3	3	1.89
							and	10	11	1	0.55
TBGC_2440_104	304269.759	6879549.819	439.974	42	90	-60	no significant results				
TBGC_2440_105	304279.999	6879550.034	439.954	42	90	-60		26	34	8	0.77
TBGC_2440_106	304289.768	6879550.138	439.87	42	90	-60		14	22	8	0.62
							and	37	41	4	0.80
TBGC_2440_107	304291.468	6879550.198	439.795	54	90	-45		9	18	9	0.64
							and	31	39	8	0.52
TBGC_2440_108	304354.802	6879550.053	440.668	42	90	-60		38	42	4	1.81
TBGC_2440_109	304414.65	6879550.205	440.276	42	0	-90		8	9	1	0.57
TBGC_2440_110	304279.89	6879570.103	440.036	42	90	-60		19	29	10	4.28
TBGC_2440_111	304274.961	6879579.869	440.114	42	90	-60	no significant results				

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2440_112	304284.947	6879580.138	440.283	42	90	-60		25	26	1	0.74
							and	33	34	1	1.29
TBGC_2440_113	304295.16	6879580.232	440.227	42	90	-60		9	18	9	0.82
							and	25	26	1	0.70
TBGC_2440_114	304415.36	6879580.389	439.884	30	90	-90	no significant results				
TBGC_2440_115	304270.578	6879589.76	440.146	42	90	-60		20	21	1	0.65
TBGC_2440_116	304280.194	6879590.094	440.325	42	90	-60	no significant results				
TBGC_2440_117	304290.546	6879590.119	440.321	42	90	-60		18	19	1	0.88
TBGC_2440_118	304416.217	6879590.24	440.159	30	90	-90		2	3	1	0.69
TBGC_2440_119	304285.628	6879609.931	440.27	42	90	-60	no significant results				
TBGC_2440_120	304295.462	6879610.017	440.301	42	90	-60		22	24	2	1.06
TBGC_2440_121	304305.518	6879610.498	440.293	18	90	-60		2	9	7	0.78
TBGC_2440_122	304339.931	6879610.373	440.312	42	90	-60		28	39	11	1.41
TBGC_2440_123	304275.393	6879620.449	440.279	42	90	-60	no significant results				
TBGC_2440_124	304285.874	6879620.322	440.2	42	90	-60	no significant results				
TBGC_2440_125	304295.283	6879620.39	440.265	42	90	-60		22	23	1	1.06
TBGC_2440_126	304290.332	6879630.369	440.184	42	90	-60		11	12	1	1.67
TBGC_2440_127	304340.527	6879630.32	440.269	42	90	-60		22	24	2	0.75
							and	29	30	1	0.55
							and	38	39	1	1.30
TBGC_2440_128	304341.924	6879630.389	440.253	54	90	-45		20	21	1	0.76
							and	34	54	20	1.20
TBGC_2440_129	304289.819	6879639.952	440.154	42	90	-60	no significant results				
TBGC_2440_130	304285.294	6879650.305	440.303	42	90	-60	no significant results				
TBGC_2440_131	304295.27	6879650.382	440.15	42	90	-60	no significant results				
TBGC_2440_132	304330.725	6879650.207	440.152	42	90	-60		30	40	10	0.77
TBGC_2440_133	304341.298	6879650.325	439.977	42	90	-60		15	17	2	1.56
							and	24	25	1	0.78
							and	30	42	12	0.52
TBGC_2440_134	304350.162	6879650.421	440.228	42	90	-60		2	4	2	1.26
							and	10	42	32	1.16
TBGC_2440_135	304359.803	6879650.247	440.25	18	90	-60		0	2	2	0.64
TBGC_2440_136	304285.606	6879660.189	440.148	42	90	-60	no significant results				
TBGC_2440_137	304298.321	6879659.878	440.218	42	90	-60		4	10	6	0.96
TBGC_2440_138	304330.395	6879660.553	439.994	42	90	-60		31	42	11	1.53
TBGC_2440_139	304350.322	6879659.91	440.044	42	90	-60		7	8	1	2.05
							and	21	42	21	0.68
TBGC_2440_140	304360.444	6879660.341	440.008	42	90	-60		3	4	1	5.69
							and	9	10	1	1.68
							and	15	16	1	0.75
							and	21	31	10	1.40
TBGC_2440_141	304369.977	6879660.345	440.22	42	90	-60		0	19	19	0.99
TBGC_2440_142	304285.89	6879670.324	440.159	42	90	-60	no significant results				
TBGC_2440_143	304325.308	6879670.328	440.012	42	90	-60		39	42	3	1.40
TBGC_2440_144	304335.084	6879670.187	439.924	42	90	-60		23	37	14	0.87
TBGC_2440_145	304345.273	6879670.131	440.132	42	90	-60		7	11	4	1.58
							and	18	35	17	1.45
TBGC_2440_146	304355.444	6879670.454	440.1	42	90	-60		13	18	5	0.72
							and	28	37	9	0.79
TBGC_2440_147	304379.773	6879670.528	440.237	24	90	-60	no significant results				
TBGC_2440_148	304375.449	6879700.613	440.145	42	90	-60		2	9	7	1.59
TBGC_2440_149	304385.485	6879700.598	440.2	42	90	-60	no significant results				
TBGC_2440_150	304356.037	6879710.504	440.008	42	90	-60	no significant results				
TBGC_2440_151	304375.218	6879720.393	440.145	42	90	-60		1	2	1	0.83
TBGC_2440_152	304355.77	6879730.274	440.084	42	90	-60	no significant results				
TBGC_2440_153	304364.637	6879730.335	440.13	42	90	-60	no significant results				
TBGC_2440_154	304369.941	6879740.096	440.12	42	90	-60	no significant results				
TBGC_2440_155	304379.829	6879740.455	439.998	42	90	-60	no significant results				
TBGC_2440_156	304390.345	6879740.502	440.062	42	90	-60	no significant results				
TBGC_2440_157	304399.865	6879740.128	440.08	42	90	-60	no significant results				

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2440_158	304409.676	6879740.246	440.07	42	90	-60	no significant results				
TBGC_2440_159	304419.766	6879740.358	440.042	42	90	-60	no significant results				
TBGC_2440_160	304429.723	6879740.148	440.038	30	90	-60	no significant results				
TBGC_2440_162	304431.233	6879746.63	440.093	42	90	-60	no significant results				
TBGC_2440_163	304404.844	6879749.655	440.098	54	90	-60	no significant results				
TBGC_2440_164	304370.206	6879716.096	440.096	50	150	-45		14	27	13	0.84
TBGC_2440_165	304352.525	6879701.986	440.14	50	150	-45		12	24	12	0.51
							and	30	39	9	0.60
TBGC_2440_166	304337.899	6879688.516	440.102	50	150	-45		16	25	9	2.13
							and	34	50	16	0.71
TBGC_2450_003	304439.517	6879359.194	450.145	30	0	-90		0	29	29	1.38
TBGC_2450_004	304455.088	6879360.217	450.025	30	90	-60		5	11	6	0.65
TBGC_2450_006	304439.007	6879369.237	450.155	42	0	-90		2	37	35	1.50
TBGC_2450_007	304445.054	6879369.886	449.983	30	90	-60		3	6	3	1.76
TBGC_2450_009	304443.972	6879380.442	449.952	18	0	-90		0	3	3	1.39
TBGC_2450_010	304414.938	6879390.436	451.125	48	90	-60		20	23	3	2.44
							and	31	38	7	5.74
TBGC_2450_012	304436.977	6879389.394	449.555	24	90	-60		1	2	1	0.50
							and	20	21	1	0.69
							and	22	23	1	0.59
TBGC_2450_013	304444.852	6879390.071	449.909	12	90	-90	no significant results				
TBGC_2450_014	304426.983	6879403.664	450.384	24	90	-60		0	24	24	3.59
TBGC_2450_016	304424.832	6879410.175	450.703	24	90	-60		2	23	21	2.21
TBGC_2450_017	304435.203	6879410.02	450.575	18	90	-60		12	17	5	0.55
TBGC_2450_018	304444.285	6879409.911	450.664	12	90	-60		0	12	12	0.59
TBGC_2450_019	304405.065	6879420.156	450.789	42	90	-60		18	36	18	2.13
TBGC_2450_020	304421.316	6879420.091	450.887	30	90	-60		0	11	11	2.42
TBGC_2450_021	304440.237	6879420.219	450.619	24	90	-60		1	5	4	1.08
TBGC_2450_024	304425.01	6879429.95	450.642	12	90	-90		2	12	10	0.95
TBGC_2450_025	304434.968	6879440.206	450.374	24	90	-90		4	11	7	0.63
TBGC_2450_026	304435.106	6879449.942	450.105	24	90	-90		4	6	2	1.11
							and	12	13	1	0.61
							and	19	20	1	0.74
TBGC_2450_027	304436.02	6879460.068	450.154	24	90	-90		10	13	3	1.07
TBGC_2450_028	304436.311	6879470.381	450.044	24	90	-90		17	21	4	0.69
TBGC_2450_029	304435.741	6879480.396	450.035	24	90	-90		6	7	1	1.08
TBGC_2450_030	304435.38	6879490.087	450.013	24	90	-90		5	6	1	1.40
							and	12	13	1	2.00
TBGC_2450_031	304435.287	6879499.847	450.066	18	90	-90		1	9	8	1.33
TBGC_2450_032	304434.466	6879509.826	450.189	18	90	-90		2	3	1	0.74
							and	7	8	1	0.59
TBGC_2450_033	304431.703	6879530.092	450.121	18	90	-90		7	8	1	0.50
TBGC_2450_034	304430.191	6879540.08	450.138	18	90	-90		7	10	3	0.53
TBGC_2450_035	304426.764	6879550.002	450.215	18	90	-90	no significant results				
TBGC_2450_036	304425.983	6879560.043	450.157	18	90	-90		7	10	3	1.12
TBGC_2450_037	304425.369	6879569.708	450.064	18	90	-90	no significant results				
TBGC_2450_038	304426.973	6879579.186	450.101	18	90	-90		6	11	5	1.31
TBGC_2450_039	304379.884	6879390.359	450.175	18	90	-60		5	6	1	0.55
TBGC_2450_040	304390.251	6879390.432	450.189	12	90	-60		0	1	1	0.62
TBGC_2450_041	304373.965	6879400.281	450.067	30	90	-60		1	7	6	1.51
TBGC_2450_043	304329.849	6879550.25	450.332	12	90	-60		2	3	1	0.64
TBGC_2450_044	304300.447	6879580.196	450.082	24	90	-60		10	11	1	1.12
							and	23	24	1	1.58
TBGC_2450_045	304310.099	6879580.292	450.189	12	90	-60		2	6	4	0.74
TBGC_2450_046	304310.617	6879590.187	450.1	18	90	-60		3	9	6	0.85
							and	14	16	2	2.23
TBGC_2450_047	304300.362	6879610.148	450.188	18	90	-60		16	17	1	0.71
TBGC_2450_048	304310.283	6879610.291	450.151	18	90	-60					
TBGC_2450_049	304320.267	6879610.398	450.09	12	90	-60		8	9	1	0.78
TBGC_2450_050	304295.112	6879630.274	450.196	24	90	-60		13	14	1	0.66

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2450_051	304305.518	6879630.423	450.259	18	90	-60		13	15	2	3.38
TBGC_2450_052	304315.265	6879630.407	450.408	12	90	-60	no significant results				
TBGC_2450_053	304310.369	6879650.362	450.314	18	90	-60	no significant results				
TBGC_2450_060	304374.887	6879470.426	450.274	36	90	-60	no significant results				
TBGC_2450_061	304366.456	6879490.244	450.625	36	90	-60	no significant results				
TBGC_2450_062	304345.027	6879650.409	450.18	30	90	-60		13	16	3	2.44
							and	21	30	9	0.97
TBGC_2450_063	304340.58	6879660.221	450.127	36	90	-60		24	30	6	1.40
TBGC_2450_064	304355.325	6879670.366	449.857	42	90	-60		0	1	1	1.95
							and	8	9	1	2.82
							and	13	14	1	1.28
							and	24	30	6	2.11
							and	38	42	4	1.56
TBGC_2450_065	304345.34	6879670.318	450.053	36	90	-60		5	11	6	1.14
							and	20	22	2	1.85
TBGC_2450_066	304334.917	6879670.175	450.049	36	90	-60		27	34	7	1.42
TBGC_2450_067	304325.295	6879670.395	450.051	36	90	-60	no significant results				
TBGC_2450_068	304340.716	6879689.928	450.111	42	90	-60		25	33	8	1.33
							and	38	40	2	1.42
TBGC_2450_069	304330.063	6879690.023	450.018	36	90	-60	no significant results				
TBGC_2450_070	304344.99	6879700.392	450.106	42	90	-60		29	30	1	0.89
							and	40	41	1	0.56
TBGC_2450_071	304330.147	6879700.347	450.09	42	90	-60	no significant results				
TBGC_2450_072	304405	6879710.364	450.074	50	90	-60	no significant results				
TBGC_2450_073	304350.322	6879720.258	450.188	50	90	-60		40	41	1	0.58
							and	46	47	1	1.11
TBGC_2450_074	304370.254	6879730.192	450.017	36	90	-60	no significant results				
TBGC_2450_075	304295.602	6879700.327	450.405	42	90	-60	no significant results				
TBGC_2450_076	304305.075	6879700.175	450.168	42	90	-60	no significant results				
TBGC_2450_077	304315.325	6879700.24	450.113	42	90	-60	no significant results				
TBGC_2450_078	304293.263	6879720.218	450.079	42	0	-90	no significant results				
TBGC_2450_079	304300.866	6879720.295	450.101	42	90	-60	no significant results				
TBGC_2450_080	304310.484	6879719.998	450.192	42	90	-60		6	7	1	0.86
							and	34	35	1	1.30
TBGC_2460_001	304493.049	6879290.298	459.83	24	90	-60		9	10	1	1.05
TBGC_2460_002	304485.052	6879320.273	459.979	24	90	-60	no significant results				
TBGC_2460_003	304404.864	6879330.294	459.936	24	90	-60		19	20	1	2.88
TBGC_2460_004	304435.343	6879339.915	460.045	48	90	-60		20	39	19	2.04
TBGC_2460_005	304444.741	6879340.125	459.991	36	90	-60		4	16	12	2.41
							and	33	36	3	0.69
TBGC_2460_006	304454.835	6879340.19	459.985	24	90	-60		0	24	24	1.00
TBGC_2460_007	304464.864	6879339.978	460.026	18	90	-60	no significant results				
TBGC_2460_008	304392.011	6879350.274	460.171	24	90	-60	no significant results				
TBGC_2460_009	304401.988	6879350.386	460.184	18	90	-60	no significant results				
TBGC_2460_010	304434.354	6879346.571	460.202	42	90	-60		17	32	15	1.45
TBGC_2460_011	304446.166	6879348.373	460.051	32	90	-60		1	13	12	1.72
							and	22	31	9	1.31
TBGC_2460_012	304455.656	6879350.594	460.144	18	90	-60		5	17	12	0.82
TBGC_2460_013	304465.198	6879349.874	460.018	12	90	-60		5	6	1	1.59
TBGC_2460_014	304372.176	6879360.383	460.052	42	90	-60		6	7	1	0.64
							and	15	23	8	1.67
							and	26	27	1	3.30
							and	38	39	1	0.62
							and	41	42	1	0.53
TBGC_2460_015	304384.998	6879360.416	460.224	24	90	-60		2	6	4	0.51
TBGC_2460_016	304390.23	6879360.438	460.202	18	90	-60	no significant results				
TBGC_2460_017	304400.306	6879360.381	460.127	12	90	-60		11	12	1	1.00
TBGC_2460_018	304380.247	6879370.415	460.152	36	90	-60		0	11	11	0.91

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2460_019	304390.47	6879370.676	460.038	24	90	-60		8	9	1	1.25
							and	12	14	2	0.93
							and	22	23	1	1.31
TBGC_2460_020	304399.99	6879370.348	460.12	18	90	-60		4	5	1	0.98
							and	14	15	1	0.66
TBGC_2460_021	304375.572	6879380.437	459.924	30	90	-60		8	9	1	0.56
							and	11	12	1	0.75
							and	17	19	2	0.82
TBGC_2460_022	304384.687	6879380.63	459.955	24	90	-60	no significant results				
TBGC_2460_023	304394.657	6879380.62	460.174	18	90	-60		15	16	1	1.58
TBGC_2460_024	304334.749	6879680.475	460.162	12	90	-60	no significant results				
TBGC_2460_025	304365.156	6879410.46	460.057	30	90	-60	no significant results				
TBGC_2460_026	304374.919	6879410.677	460.115	30	90	-60		11	12	1	0.59
TBGC_2460_027	304384.9	6879410.688	460.406	18	90	-60		15	17	2	1.48
TBGC_2460_028	304370.552	6879420.525	460.021	24	90	-60		13	14	1	0.79
							and	18	19	1	1.76
TBGC_2460_029	304382.793	6879420.474	460.209	24	90	-60		8	9	1	1.82
							and	16	17	1	1.82
TBGC_2460_030	304360.618	6879430.552	460.151	24	90	-60		3	5	2	0.58
							and	18	19	1	1.27
TBGC_2460_031	304370.134	6879430.461	460.248	18	90	-60		6	10	4	9.80
TBGC_2460_032	304355.44	6879450.498	460.101	24	90	-60		1	10	9	2.94
							and	17	18	1	2.62
TBGC_2460_033	304347.975	6879460.374	460.032	30	90	-60		0	20	20	1.18
TBGC_2460_034	304357.624	6879460.513	460.148	24	90	-60		3	6	3	0.73
							and	9	19	10	2.48
TBGC_2460_035	304350.108	6879470.444	460.014	18	90	-60		4	9	5	1.29
TBGC_2460_036	304337.572	6879490.123	459.951	30	90	-60		0	12	12	1.09
TBGC_2460_037	304344.755	6879490.309	459.968	18	90	-60		0	12	12	2.49
TBGC_2460_038	304334.701	6879500.3	460.032	24	90	-60		3	5	2	1.12
TBGC_2460_039	304315.461	6879550.419	459.914	32	90	-60		2	16	14	0.77
							and	19	20	1	0.66
TBGC_2460_040	304316.264	6879570.34	460.153	30	90	-60		1	2	1	0.56
							and	17	18	1	0.52
TBGC_2460_041	304315.037	6879590.114	460.437	30	90	-60		2	14	12	0.58
							and	19	21	2	1.69
TBGC_2460_042	304363.733	6879690.837	460.034	36	90	-60		7	8	1	0.58
							and	13	34	21	1.47
TBGC_2460_043	304320.116	6879730.554	459.881	24	90	-60	no significant results				
TBGC_2460_044	304340.146	6879730.324	460.114	24	90	-60	no significant results				
TBGC_2460_045	304360.096	6879726.176	459.972	24	90	-60	no significant results				
TBGC_2460_046	304290.111	6879740.466	459.958	36	90	-60	no significant results				
TBGC_2460_047	304315	6879740.073	459.814	36	90	-60		16	17	1	0.88
TBGC_2460_048	304372.309	6879705.913	459.853	36	90	-60		6	23	17	0.75
TBGC_2460_049	304372.949	6879690.989	459.85	24	90	-60		0	1	1	0.75
							and	6	19	13	2.17
TBGC_2460_050	304380.194	6879722.366	460.163	24	90	-60		10	15	5	0.74
TBGC_2460_051	304284.83	6879660.075	460.024	24	90	-60	no significant results				
TBGC_2460_052	304294.412	6879660.542	459.879	24	90	-60		19	22	3	0.99
TBGC_2460_053	304304.365	6879660.458	459.967	24	90	-60	no significant results				
TBGC_2460_054	304284.509	6879680.392	459.884	36	90	-60	no significant results				
TBGC_2460_055	304294.447	6879680.458	459.933	36	90	-60		12	16	4	0.64
TBGC_2460_056	304304.15	6879680.477	459.949	36	90	-60		23	24	1	0.98
TBGC_2475_001	304418.599	6879260.101	474.9	60	90	-90		19	24	5	1.45
							and	43	45	2	3.43
TBGC_2475_002	304420.512	6879260.127	474.979	120	90	-60		6	7	1	1.19
							and	85	88	3	4.19
							and	94	103	9	1.81
							and	113	116	3	0.79

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2475_003	304390.332	6879269.781	474.744	66	90	-60		42	43	1	0.65
							and	46	47	1	0.52
TBGC_2475_004	304373.01	6879279.964	474.603	78	90	-60		59	64	5	0.57
TBGC_2475_005	304380.463	6879290.114	474.568	72	90	-60		44	53	9	1.47
TBGC_2475_006	304380.203	6879299.975	474.664	66	90	-60		26	27	1	1.12
							and	39	42	3	1.74
							and	48	50	2	3.62
TBGC_2475_007	304439.749	6879299.817	475.248	65	90	-60		28	29	1	0.79
							and	40	65	25	2.25
TBGC_2475_008	304369.894	6879310.113	474.867	78	90	-60		46	60	14	2.30
TBGC_2475_009	304429.957	6879309.768	475.071	84	90	-60		49	67	18	1.85
							and	76	83	7	0.66
TBGC_2475_010	304364.938	6879320.111	474.772	84	90	-60		49	51	2	1.39
							and	56	61	5	0.82
TBGC_2475_011	304420.81	6879319.855	475.04	90	90	-60		53	77	24	2.23
							and	85	90	5	0.55
TBGC_2475_012	304433.001	6879325	475	72	90	-60		36	54	18	2.02
							and	64	65	1	0.52
							and	68	69	1	0.61
							and	70	71	1	0.52
TBGC_2475_013	304443.146	6879325.008	475.345	60	90	-60		17	48	31	1.50
							and	55	57	2	0.69
TBGC_2475_014	304361.933	6879340.165	474.269	66	90	-60		49	57	8	1.11
TBGC_2475_015	304373.33	6879340.098	474.319	60	90	-60		22	23	1	2.47
							and	30	39	9	0.53
							and	51	52	1	0.67
							and	57	58	1	0.78
TBGC_2475_016	304379.095	6879339.918	474.352	126	90	-60		27	28	1	0.87
							and	30	31	1	0.64
							and	48	49	1	0.68
							and	110	121	11	1.91
TBGC_2475_017	304381.37	6879339.947	474.487	102	90	-45		84	96	12	1.53
TBGC_2475_018	304351.874	6879350.103	474.184	78	90	-60		56	58	2	1.57
							and	63	67	4	1.45
							and	77	78	1	0.58
TBGC_2475_019	304362.063	6879349.971	474.081	66	90	-60		34	55	21	1.88
							and	65	66	1	3.25
TBGC_2475_020	304370.789	6879350.048	474.196	60	90	-60		20	21	1	1.12
							and	32	35	3	1.23
							and	39	40	1	1.34
TBGC_2475_021	304358.729	6879359.037	473.931	66	90	-60		25	26	1	1.46
							and	37	55	18	1.58
TBGC_2475_022	304339.93	6879369.977	474.079	78	90	-60		64	65	1	3.00
							and	71	73	2	1.21
TBGC_2475_023	304349.976	6879370.058	474.016	72	90	-60		42	55	13	0.76
							and	60	62	2	1.81
TBGC_2475_024	304359.979	6879370.02	473.91	60	90	-60		21	25	4	0.66
							and	31	32	1	0.84
							and	48	50	2	3.21
							and	53	54	1	1.13
							and	56	57	1	0.65
TBGC_2475_025	304338	6879380	475	78	90	-60		61	72	11	0.89
TBGC_2475_026	304347.263	6879379.912	474.624	72	90	-60		46	51	5	3.07
							and	60	61	1	0.89
TBGC_2475_027	304357.082	6879380.071	474.717	66	90	-60		25	26	1	4.77
							and	40	41	1	0.95
							and	43	44	1	0.55
							and	45	46	1	0.71
							and	51	52	1	2.02

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2475_028	304332.33	6879389.921	474.662	84	90	-60		64	67	3	1.83
							and	74	76	2	1.25
TBGC_2475_029	304342.085	6879389.896	474.641	78	90	-60		42	45	3	0.67
							and	50	51	1	0.97
							and	56	57	1	1.12
							and	61	62	1	0.66
TBGC_2475_030	304351.856	6879390.05	474.961	66	90	-60		24	25	1	1.16
							and	32	52	20	0.56
TBGC_2475_031	304339.293	6879400.002	474.714	78	90	-60		42	62	20	1.24
							and	70	72	2	0.78
TBGC_2475_032	304326.895	6879410.014	475.178	78	90	-60		51	53	2	0.72
							and	56	57	1	0.50
							and	61	63	2	0.77
							and	71	73	2	0.77
TBGC_2475_033	304336.913	6879410.138	475.022	72	90	-60		36	37	1	0.88
							and	65	66	1	0.70
TBGC_2475_034	304347	6879410	475	60	90	-60		24	25	1	1.10
							and	27	28	1	0.67
							and	44	51	7	0.73
TBGC_2475_035	304325.083	6879421.132	475.372	78	90	-60		47	69	22	1.30
TBGC_2475_036	304338.933	6879420.978	475.254	66	90	-60		27	34	7	1.55
							and	40	41	1	0.62
TBGC_2475_037	304343	6879421	475	150	90	-45		26	27	1	0.72
							and	52	53	1	0.50
							and	68	69	1	9.82
							and	97	116	19	1.80
							and	127	132	5	0.96
TBGC_2475_038	304322.011	6879429.981	475.581	78	90	-60		63	64	1	0.77
							and	68	69	1	1.23
TBGC_2475_039	304331.922	6879430.075	475.478	66	90	-60		31	32	1	0.52
							and	38	39	1	0.64
							and	42	44	2	0.55
							and	46	47	1	0.69
							and	51	53	2	1.40
							and	55	57	2	0.78
TBGC_2475_040	304340.914	6879429.972	475.537	48	90	-60		18	19	1	0.90
							and	22	25	3	1.31
							and	29	31	2	1.06
							and	35	38	3	0.66
							and	42	44	2	0.98
TBGC_2475_041	304326.768	6879438.145	475.604	66	90	-60		53	55	2	1.39
TBGC_2475_042	304337.098	6879438.44	475.345	48	90	-60		24	29	5	0.92
							and	39	43	4	0.53
							and	47	48	1	0.73
TBGC_2475_043	304316.803	6879448.046	475.691	78	90	-60		50	57	7	1.28
							and	61	64	3	2.15
TBGC_2475_044	304326.921	6879448.039	475.712	66	90	-60		33	35	2	3.17
							and	40	41	1	6.80
							and	48	49	1	0.57
							and	52	54	2	0.56
							and	63	66	3	1.11
TBGC_2475_045	304334.248	6879448.147	475.795	48	90	-60		32	34	2	1.17
							and	35	45	10	3.33
TBGC_2475_046	304305.991	6879460.241	475.932	78	90	-60		66	78	12	0.88
TBGC_2475_047	304313.587	6879459.996	475.868	72	90	-60		60	67	7	0.55
TBGC_2475_048	304319.354	6879459.565	476.075	60	90	-60		31	38	7	0.63
							and	44	56	12	0.60
TBGC_2475_049	304329.332	6879459.727	476.071	48	90	-60		14	15	1	1.38
							and	19	20	1	0.84
							and	28	47	19	0.59

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2475_050	304307.163	6879469.982	475.927	78	90	-60		50	51	1	1.94
							and	68	70	2	1.25
TBGC_2475_051	304317.352	6879470.085	475.743	66	90	-60		23	24	1	0.96
							and	43	46	3	1.44
							and	51	58	7	2.35
TBGC_2475_052	304325.923	6879469.997	475.883	54	90	-60		20	21	1	0.74
							and	24	40	16	0.84
							and	42	45	3	1.04
							and	49	50	1	0.58
TBGC_2475_053	304299.423	6879480.52	476.023	84	90	-60		75	76	1	1.17
TBGC_2475_054	304309.512	6879480.079	475.952	72	90	-60		23	24	1	0.55
							and	38	40	2	0.99
							and	54	55	1	2.98
							and	61	63	2	1.69
TBGC_2475_055	304319.494	6879479.997	475.855	60	90	-60		22	24	2	4.61
							and	28	32	4	0.66
							and	38	42	4	0.62
							and	44	45	1	0.65
							and	52	53	1	3.83
							and	58	60	2	0.69
TBGC_2475_056	304296.624	6879489.903	476.14	78	90	-60		50	51	1	0.53
							and	60	61	1	0.57
							and	72	75	3	0.83
TBGC_2475_057	304306.915	6879489.901	475.898	66	90	-60		15	16	1	0.93
							and	17	18	1	1.77
							and	25	26	1	1.09
							and	32	33	1	0.97
							and	35	36	1	0.74
							and	42	43	1	1.35
							and	50	51	1	2.21
							and	56	60	4	1.10
TBGC_2475_058	304316.623	6879490.004	476.079	54	90	-60		20	21	1	0.80
							and	29	30	1	0.52
							and	36	43	7	1.43
							and	49	51	2	1.03
TBGC_2475_059	304302.725	6879499.751	475.891	72	90	-60		36	37	1	0.96
							and	46	64	18	1.03
TBGC_2475_060	304313.412	6879499.88	476.033	54	90	-60		20	21	1	1.89
							and	36	39	3	0.77
TBGC_2475_061	304296.849	6879509.94	476.041	72	90	-60		40	45	5	1.13
							and	50	51	1	0.97
							and	54	69	15	1.06
TBGC_2475_062	304304.738	6879509.959	476.063	66	90	-60		37	39	2	0.77
							and	41	42	1	0.92
							and	43	53	10	0.64
TBGC_2475_063	304311.474	6879509.783	476.071	60	90	-60		23	24	1	1.26
							and	29	31	2	1.46
							and	32	46	14	0.52
							and	48	49	1	0.89
TBGC_2475_064	304287.086	6879529.867	476.252	78	90	-60		45	47	2	0.75
							and	61	63	2	1.96
TBGC_2475_065	304296.022	6879530.362	476.096	66	90	-60		28	31	3	0.78
							and	43	61	18	1.68
TBGC_2475_066	304303.916	6879530.01	476.198	54	90	-60		33	48	15	1.11
TBGC_2475_067	304305.413	6879530.037	476.083	42	90	-45		27	37	10	0.82
TBGC_2475_068	304286.596	6879540.096	476.195	78	90	-60		23	24	1	0.50
							and	26	27	1	0.74
							and	36	44	8	0.54
							and	57	58	1	1.38

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2475_069	304295.319	6879539.972	475.966	66	90	-60		29	31	2	2.36
							and	39	53	14	0.80
TBGC_2475_070	304301.241	6879540.059	476.071	54	90	-60		33	49	16	1.21
TBGC_2475_071	304302.723	6879540.075	475.985	42	90	-45		25	26	1	0.95
							and	30	32	2	1.20
							and	35	36	1	1.62
							and	40	41	1	0.51
TBGC_2475_072	304281	6879550	475	78	90	-60		45	47	2	1.97
							and	56	57	1	0.64
							and	60	61	1	0.69
							and	66	74	8	0.57
TBGC_2475_073	304289.832	6879550.001	475.877	66	90	-60		29	38	9	0.55
							and	45	60	15	1.33
TBGC_2475_074	304298.831	6879550.042	476.05	54	90	-60		21	27	6	0.68
							and	32	40	8	1.43
							and	45	46	1	3.58
TBGC_2475_075	304296.959	6879560.225	475.944	60	90	-60		19	22	3	0.81
							and	32	47	15	2.40
TBGC_2475_076	304267.678	6879570.995	475.947	84	90	-60		31	32	1	0.79
							and	70	78	8	0.67
TBGC_2475_077	304276.014	6879570.967	475.775	78	90	-60		34	35	1	1.44
							and	40	41	1	1.47
							and	58	59	1	1.00
							and	65	70	5	0.54
TBGC_2475_078	304285.018	6879571.038	475.759	66	90	-60		29	30	1	0.73
							and	32	33	1	0.67
							and	55	56	1	0.63
							and	58	61	3	1.89
TBGC_2475_079	304292.891	6879570.932	475.911	60	90	-60		17	18	1	0.66
							and	24	25	1	2.70
							and	31	32	1	0.77
							and	34	35	1	0.55
							and	37	38	1	0.87
TBGC_2475_080	304284.52	6879585.866	475.966	76	90	-60		39	48	9	1.80
TBGC_2475_081	304285.343	6879620.028	475.753	76	90	-60		40	46	6	5.19
							and	56	57	1	1.61
TBGC_2475_082	304289.001	6879619.954	475.658	150	90	-45		38	41	3	1.22
							and	45	47	2	0.73
							and	50	51	1	0.73
							and	89	131	42	1.55
TBGC_2475_083	304319.241	6879676.026	474.919	114	90	-60		56	58	2	0.85
							and	70	85	15	1.25
							and	94	104	10	0.79
TBGC_2475_084	304336.216	6879689.74	475.042	84	90	-60		33	39	6	0.57
							and	46	54	8	1.47
							and	65	81	16	0.74
TBGC_2475_085	304344.038	6879698.982	475.23	78	90	-60		19	20	1	0.96
							and	27	42	15	0.57
							and	64	69	5	0.67
TBGC_2480_004	304487.954	6879265.978	479.574	30	90	-60	no significant results				
TBGC_2480_005	304469.752	6879262.311	479.526	46	90	-60		21	28	7	0.79
							and	32	34	2	1.13
TBGC_2480_006	304449.867	6879260.636	479.492	70	90	-60		27	29	2	0.55
							and	32	33	1	0.82
							and	52	67	15	0.59
TBGC_2480_007	304430.519	6879259.911	479.382	100	90	-60		26	27	1	1.10
							and	64	98	34	1.56
TBGC_2480_008	304409.557	6879260.235	479.699	50	90	-60		26	27	1	0.51
							and	31	40	9	2.23
TBGC_2480_009	304481.033	6879269.962	479.607	30	90	-60		27	28	1	2.42

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2480_010	304469.629	6879270.068	479.666	40	90	-60		22	27	5	1.18
							and	32	33	1	1.88
TBGC_2480_011	304460.556	6879269.952	479.741	48	90	-60		31	34	3	0.63
TBGC_2480_012	304451.342	6879270.046	479.764	54	90	-60		31	32	1	1.10
							and	46	52	6	0.80
TBGC_2480_013	304430.676	6879269.995	479.665	40	90	-60		29	30	1	1.10
TBGC_2480_014	304420.452	6879269.903	479.72	48	90	-60		32	33	1	0.54
TBGC_2480_015	304409.993	6879269.875	479.934	54	90	-60		39	40	1	0.56
							and	47	48	1	1.25
TBGC_2480_016	304400.368	6879269.767	480.154	54	90	-60		29	30	1	0.84
							and	33	35	2	1.37
							and	37	45	8	3.19
TBGC_2480_017	304473.126	6879280.095	479.737	35	90	-60		18	22	4	0.88
							and	31	32	1	0.79
TBGC_2480_018	304452.996	6879279.762	479.724	54	90	-60		39	40	1	12.10
							and	49	50	1	0.60
							and	53	54	1	1.11
TBGC_2480_019	304433.859	6879277.136	479.826	30	90	-60		29	30	1	1.71
TBGC_2480_020	304413.788	6879279.897	479.889	50	90	-60		15	16	1	0.68
							and	35	36	1	2.28
TBGC_2480_021	304403.462	6879280.035	480.203	54	90	-60		29	37	8	1.64
							and	41	42	1	0.62
TBGC_2480_022	304392.81	6879279.964	480.196	65	90	-59.5998		36	37	1	0.90
TBGC_2480_023	304479.684	6879289.946	479.903	20	90	-59.745		6	8	2	1.05
TBGC_2480_024	304470.233	6879289.959	479.847	30	90	-60		6	7	1	0.68
							and	17	21	4	0.68
TBGC_2480_025	304459.934	6879290.015	479.827	45	90	-60		27	39	12	0.87
TBGC_2480_026	304450.27	6879290.035	479.967	54	90	-60		32	38	6	3.60
							and	50	54	4	2.47
TBGC_2480_027	304439.918	6879290.09	479.993	54	90	-60		46	51	5	2.02
TBGC_2480_028	304429.906	6879289.833	479.979	25	90	-59.8469	no significant results				
TBGC_2480_029	304420.071	6879289.758	480.018	40	90	-60.2632		29	30	1	0.57
TBGC_2480_030	304410.413	6879289.948	480.066	48	90	-59.8888		17	18	1	0.61
							and	22	23	1	0.51
							and	39	40	1	1.15
TBGC_2480_031	304400.182	6879289.575	480.211	54	90	-59.798		27	31	4	2.46
							and	38	39	1	1.32
TBGC_2480_032	304390.272	6879289.938	480.199	54	90	-59.5601		24	25	1	1.18
							and	36	38	2	4.38
							and	46	47	1	1.28
TBGC_2480_033	304480.243	6879299.851	480.001	25	90	-60	no significant results				
TBGC_2480_034	304470.139	6879300.013	480.066	30	90	-60		15	20	5	0.74
TBGC_2480_035	304460.79	6879299.891	480.12	40	90	-60		24	29	5	0.73
TBGC_2480_036	304450.134	6879299.88	480.178	60	90	-60		29	34	5	2.16
							and	43	45	2	0.67
							and	59	60	1	0.71
TBGC_2480_037	304427.502	6879300.177	480.048	80	90	-60		59	76	17	1.71
TBGC_2480_038	304419.687	6879300.354	479.902	30	90	-60.2861	no significant results				
TBGC_2480_039	304410.132	6879300.125	480.037	46	90	-60		7	9	2	2.33
							and	37	39	2	0.76
							and	42	43	1	0.87
TBGC_2480_040	304400.888	6879299.767	480.031	54	90	-60.4944		17	24	7	0.64
							and	42	46	4	1.38
TBGC_2480_041	304389.837	6879299.833	479.997	60	90	-59.4736		13	14	1	0.56
							and	29	30	1	0.66
							and	34	39	5	2.05
							and	47	49	2	0.73
TBGC_2480_042	304479.939	6879310.832	479.971	20	90	-60		0	1	1	0.50
TBGC_2480_043	304470.177	6879310.829	479.972	35	90	-60		8	19	11	3.08

THUNDERBOX DRILLING JULY 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
TBGC_2480_044	304460.281	6879310.655	479.945	45	90	-60		17	27	10	1.53
							and	34	37	3	1.80
TBGC_2480_045	304450.177	6879310.929	480.025	54	90	-60		24	33	9	1.64
							and	40	41	1	1.19
TBGC_2480_046	304439.755	6879311.001	480.079	60	90	-60		31	60	29	1.78
TBGC_2480_047	304419.87	6879310.659	479.896	30	90	-60	no significant results				
TBGC_2480_048	304409.822	6879310.706	479.917	35	90	-60		3	4	1	0.97
							and	32	33	1	1.10
TBGC_2480_049	304399.49	6879310.75	480.033	120	90	-60		11	13	2	0.62
							and	101	108	7	3.31
							and	116	118	2	0.77
TBGC_2480_050	304390.259	6879310.626	480.06	60	90	-60		48	49	1	0.56
TBGC_2480_051	304380.354	6879310.941	480.062	70	90	-60		37	38	1	0.72
TBGC_2480_052	304475.117	6879318.656	480.035	25	90	-60	no significant results				
TBGC_2480_053	304456.269	6879318.751	479.898	50	90	-60		13	37	24	0.83
TBGC_2480_054	304436.741	6879315.489	480.045	70	90	-60		36	47	11	3.42
							and	63	64	1	0.87
							and	69	70	1	1.20
TBGC_2480_055	304396.541	6879318.512	479.947	46	90	-60		6	9	3	13.99
							and	35	38	3	1.15
							and	43	44	1	0.64
TBGC_2480_056	304374.435	6879318.551	480.093	70	90	-60		34	35	1	0.53
							and	45	53	8	1.21
TBGC_2480_057	304479.605	6879330.236	479.933	15	90	-60	no significant results				
TBGC_2480_058	304472.818	6879330.187	479.854	25	90	-60		20	21	1	1.37
TBGC_2480_059	304470.847	6879330.104	479.856	35	90	-90		0	5	5	0.90
TBGC_2480_062	304381.294	6879326.538	479.969	60	90	-60	no significant results				
TBGC_2480_063	304369.834	6879329.905	479.851	70	90	-60		29	47	18	0.62
							and	53	54	1	0.51
							and	57	58	1	1.05
TBGC_2480_065	304360.122	6879329.856	479.698	75	90	-60		54	56	2	0.69
							and	61	70	9	0.93

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.

The information on Deep South and Red October Mineral Resources and Ore Reserves has been extracted from the ASX announcement titled "2015 Mineral Resources and Ore Reserves" dated 15 October 2015. The report is available to view on the ASX Website at www.asx.com.au and on the Company's website at www.saracen.com.au.The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources and Ore Reserves, that all market assumptions and technical assumptions underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Karari 2012 JORC Table 1

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. 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. RC chips and diamond core provide high quality representative samples for analysis. 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. *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. 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. Some grade control RC chips were analysed in the Saracen on site laboratory using a PAL (pulverise and leach) method. Visible gold is sometimes encountered in underground drillcore and face samples. Historical AC, RAB, RC and diamond sampling was carried out to industry standard at that time. 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. Saracen has completed 13 surface RC precollars with HQ and NQ diamond tail drill holes (precollars averaging 287m, diamond tails averaging 168m) , 73 RC holes from both surface and within the pit (recent drilling utilised a 143mm diameter bit with a face sampling hammer and an external auxiliary booster) and 3052 grade control RC holes within the pit. 298 NQ diamond holes have been drilled underground. 521 underground faces and walls have been chip sampled. Diamond tails were oriented using an Ezi-mark tool. Some historic surface diamond drill core appears to have been oriented by unknown methods.
Drill Sample Recovery	*Method of recording and assessing core and chip sample recoveries and results assessed*	RC sampling recoveries are recorded in the database as a percentage based on a visual weight estimate; no historic recoveries have been recorded. 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.

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
		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. UG faces are sampled from left to right across the face at the same height from the floor. During GC campaigns the sample bags weight versus bulk reject weight are compared to ensure adequate and even sample recovery. Historical AC, RAB, RC and diamond drilling to industry standard at that time.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	There is no known relationship between sample recovery and grade for RC drilling. Diamond drilling has high recoveries due to the competent nature of the ground meaning loss of material is minimal. Any historical relationship is not known.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature.* *Core (or costean, channel, etc) photography.*	Logging of RC chips and diamond drill core records lithology, mineralogy, texture, mineralisation, weathering, alteration and veining. 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. All faces are photographed and mapped. 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. Core is photographed in both dry and wet state. 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. Every second drill line is logged in grade control programs with infill logging carried out as deemed necessary. 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. Underground faces are chip sampled using a hammer. 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. Best practice is assumed at the time of historic sampling.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	All subsampling activities are carried out by commercial laboratory and are considered to be satisfactory. Sampling by previous holders 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.	RC field duplicate samples are carried out at a rate of 1:20 and are sampled directly from the on-board splitter on the rig. These are submitted for the same assay process as the original samples and the laboratory are unaware of such submissions. No duplicates have been taken of underground core or face samples. Sampling by previous holders assumed to be industry standard at the time.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes of 3kg are considered to be appropriate given the grain size (90% passing 75 microns) of the material sampled.

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	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. Some GC samples were analysed in the Saracen onsite laboratory using pulverise and leach method. This method is a partial digest. 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. QAQC data returned are checked against pass/fail limits with the SQL database and are passed or failed on import. A report is generated and reviewed by the geologist as necessary upon failure to determine further action. QAQC data is reported monthly. Sample preparation checks for fineness are carried out to ensure a grindsize of 90% passing 75 microns. The laboratory performs a number of internal processes including standards, blanks, repeats and checks. QAQC data analysis demonstrates sufficient accuracy and precision. 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. 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. 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. All undergournd drillhole collars are picked up by company surveyors using a Leica TS15i (total station) with an expected accuracy of +/-2mm. Underground faces are located using a Leica D5 disto with and accuracy of +/- 1mm from a known survey point. 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. Surveys are carried out every 30m downhole during RC and surface diamond drilling using an Eastman single shot camera A number of drillholes have also been gyroscopically surveyed.

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
		Previous holders' survey accuracy and quality is unknown
	Specification of the grid system used.	A local grid system (Karari) is used. The two point conversion to MGA_GDA94 zone 51 is KAREast KARNorth RL MGAEast MGANorth RL Point 1 4000 8000 0 439359.94 6663787.79 0 Point 2 3000 7400 0 438359.84 6663187.72 0 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. 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.
	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. 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. Underground diamond drilling is designed to intersect the orebody in the best possible orientation given the constraints of underground drill locations. UG faces are sampled left to right across the face allowing a representative sample to be taken.
	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. 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		
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 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. 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. There are no registered Aboriginal Heritage sites within Mining Leases M28/166 and M28/167. 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). All production is subject to a Western Australian state government NSR royalty of 2.5%. 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	A*cknowledgment 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. 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. 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. 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:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation* • *above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* • *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*	All material data is periodically released on the ASX: 13/04/2016, 23/02/2016, 10/12/2015, 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**
	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 2.5ppm. 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 0.5m 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.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	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.*	Appropriate diagrams are provided in this release, relevant to the reported data.
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; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No substantive data acquisition has been completed in recent times.

Section 2: Reporting of Exploration Results		
Criteria	**JORC Code Explanation**	**Commentary**
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive*	A significant drill program is to be executed over the next 12 months. Regular updates will be provided.

Red October 2012 JORC Table 1

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. 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. RC chips and NQ diamond core provide high quality representative samples for analysis. RC, RAB, AC and surface DD drilling completed by previous holders is assumed to adhere to industry standard at that time (1989- 2004).
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems.	Saracen sampling activities have been carried out to industry standard. Reverse circulation drilling is used to obtain 1m samples, diamond core is sampled to geological intervals (0.2m to 1.2m) and cut into half core and UG faces are chip sampled to geological intervals (0.2 to 1m), with all methods producing representative samples weighing less than 3kg. Samples are selected to weigh less than 3 kg to ensure total sample inclusion at the pulverisation stage. Saracen core and chip samples are crushed, dried and pulverised to a nominal 90% passing 75µm to produce a 40 g sub sample for analysis by FA/AAS. Visible gold is occasionally encountered in drillcore and face samples. Historical AC, RAB, RC and diamond sampling is assumed to have been carried out to industry standard at that time. Analysis methods include fire assay, aqua regia and unspecified methods.

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
	Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	
Drilling Techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	The deposit was initially sampled by 495 AC holes, 73 RAB holes, 391 RC holes (assumed standard 5 ¼'' bit size) and 159 surface diamond NQ and HQ core holes. 5 RC holes were drilled using a 143mm diameter bit with a face sampling hammer. The rig was equipped with an external auxiliary/ booster. Saracen has previously completed 6 reverse circulation drillholes, 9 surface HQ and NQ diamond drillholes, 791 underground NQ diamond drill holes and sampled 2418 underground faces. Diamond drill core has been oriented using several different methods which include Ezi-Mark, ACT, and more recently Ori-Finder. Some historic surface diamond drill core appears to have been oriented by unknown methods.
Drill Sample Recovery	*Method of recording and assessing core and chip sample recoveries and results assessed*	RC chip recoveries are recorded in the database as a percentage based on a visual weight estimate. Underground and surface diamond core recoveries are recorded as percentages calculated from measured core versus drilled metres, and intervals are logged and recorded in the database. Diamond core recoveries average >90%. Limited historic surface sampling and surface diamond recoveries have been recorded.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	During RC drilling daily rig inspections are carried out to check splitter condition, general site and address general issues. Ground condition concerns led to extensive hole conditioning meaning contamination was minimised and particular attention was paid to sample recovery. Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against depth given on the core blocks. UG faces are sampled left to right across the face allowing a representative sample to be taken due to the vertical nature of the orebody. Historical AC, RAB, RC and diamond drilling to industry standard at that time.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	There is no known relationship between sample recovery and grade for RC drilling. Diamond drilling has high recoveries due to the competent nature of the ground meaning loss of material is minimal. Any historical relationship is not known.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature.* *Core (or costean, channel, etc) photography.*	Logging of all RC chips and diamond drill core is carried out. Logging records lithology, mineralogy, texture, mineralisation, weathering, alteration and veining. Logging is both qualitative and quantitative in nature. Geotechnical and structural logging is carried out on all diamond core holes to record recovery, RQD, defect number, type, fill material, shape and roughness and alpha and beta angles. Core is photographed in both dry and wet state. All faces are photographed and mapped. Qualitative and quantitative logging of historic data varies in its completeness. Some surface diamond 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. Historical logging is approximately 95% complete, some AC, RAB and RC pre-collar information is unavailable.

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	All diamond core is cut in half onsite using an automatic core saw. Samples are always collected from the same side.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC drilling has been cone split and was dry sampled. UG faces are chip sampled using a hammer. AC, RAB and RC drilling has been sampled using spear, grab, riffle and unknown methods.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation of RC chips, diamond core and UG face chips adhere to industry best practice. It is conducted by a commercial laboratory and involves oven drying, coarse crushing then total grinding using an LM5 to a grind size of 90% passing 75 microns. Best practice is assumed at the time of historic sampling.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	All subsampling activities are carried out by commercial laboratory and are considered to be satisfactory. Sampling by previous holders is assumed to adhere to industry standard at the time.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second half sampling.	RC field duplicate samples are carried out at a rate of 1:20 and are sampled directly from the on-board splitter on the rig. These are submitted for the same assay process as the original samples and the laboratory are unaware of such submissions. No duplicates have been taken of UG diamond core , face samples are duplicated on ore structures. 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. 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. QAQC data returned are checked against pass/fail limits with the SQL database and are passed or failed on import. A report is generated and reviewed by the geologist as necessary upon failure to determine further action. QAQC data is reported monthly and demonstrates sufficient levels of accuracy and precision. Sample preparation checks for fineness are carried out to ensure a grind size of 90% passing 75 microns. The laboratory performs a number of internal processes including standards, blanks, repeats and checks. Industry best practice is assumed for previous holders. Historic QAQC data is stored in the database 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.

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
	The use of twinned holes.	No specific twinned holes have been drilled at Red October but underground diamond drilling has confirmed the width and grade of previous exploration drilling.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols	Primary data is collated in a set of excel templates utilising lookup codes. This data is forwarded to the Database Administrator for entry into a secure acQuire database with inbuilt validation functions. Chips from RC drillholes are stored in chip trays for future reference. Remaining half core is stored in core trays and archived on site Hard copies of face mapping, backs mapping and sampling records are kept on site. Digital scans are also kept on the corporate server. 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. Underground faces are located using a Leica D5 disto with and accuracy of +/- 1mm from a known survey point. Exploration RC holes have been gyroscopically downhole surveyed by ABIMS where possible once drilling is completed. Surveys are carried out every 30m downhole during RC and diamond drilling using an Eastman single shot camera. 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. The two point conversion to MGA_GDA94 zone 51 is ROEast RONorth RL MGAEast MGANorth RL Point 1 5890.71 10826.86 0 444223.25 6767834.66 0 Point 2 3969.83 9946.71 0 442233.31 6768542.17 0 Historic data is converted to Red October local grid on export from the database.
	Quality and adequacy of topographic control.	DGPS survey has been used to establish a topographic surface.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The nominal spacing for the reported results are not uniform and therefore a definitive drill spacing will not be quoted
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Not all data reported meets the required continuity measures to be considered for inclusion in a resource estimate. Holes reported inside or within 40m of the resource will be incorporated into the resource model, or if sufficient density of data confirms continuity, it will be considered for inclusion in the resource.
Orientation of data in relation to geological structure	*Whether sample compositing has been applied.*	RC drillholes are sampled to 1m intervals and underground core and faces are sampled to geological intervals; compositing is not applied until the estimation stage. Some historic RAB and RC sampling was composited into 3-4m samples with areas of interest re-sampled to 1m intervals. It is unknown at what threshold this occurred.
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	RC drilling was carried out at the most appropriate angle possible. The mineralisation is intersected 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.

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
		Underground diamond drilling is designed to intersect the orebody in the best possible orientation given the constraints of underground drill locations. UG faces are sampled left to right across the face allowing a representative sample to be taken due to the vertical nature of the orebody
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No significant sampling bias has been recognised due to orientation of drilling in regards to mineralised structures
Sample security	*The measures taken to ensure sample security.*	Samples are prepared on site under supervision of Saracen geological staff. Samples are selected, bagged into tied numbered calico bags then grouped into larger secured bags and delivered to the laboratory by Saracen personnel.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	An internal review of companywide sampling methodologies was conducted to create the current sampling and QAQC procedures. No external audits or reviews have been conducted.

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.*	Red October is wholly located within Mining Lease M39/412. Mining Lease M39/412 is held 100% by Saracen Gold Mines Pty Ltd a wholly owned subsidiary of Saracen Mineral Holdings Limited. Mining Lease M39/412 has a 21 year life (held until 2019) and is renewable for a further 21 years on a continuing basis. 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. Third party royalties are payable on the tenement: • 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 • A Royalty is payable based on a percentage of proceeds of sale or percentage of mineral value. 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	A*cknowledgment 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.

Section 2: Reporting of Exploration Results		
Criteria	**JORC Code Explanation**	**Commentary**
		Extension RC and diamond drilling from within and around the pit defined the potential underground resource.
Geology	*Deposit type, geological setting and style of mineralisation.*	Red October gold mine is situated within an Archaean greenstone belt of the Laverton Tectonic Zone. The stratigraphic sequence consists of footwall tholeiitic basalts, mineralised shale (containing ductile textures defined by pyrite mineralisation) and a hangingwall dominated by ultramafic flows interbedded with high-Mg basalts. Prehnite- pumpellyite facies are evident within both the tholeiitic basalts and komatiite flows. Sulphide mineralisation is hypothesised to have been caused from interaction with an auriferous quartz vein, which has caused the intense pyrite-defined ductile textures of the shale in the upper levels. The fluid is believed to have been sourced from the intruding granitoid to the south of the deposit
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation* • *above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* • *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: 11/05/2016, 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.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	The geometry of the mineralisation is highly variable and the complex nature of the ore bodies makes the definitive calculation of true thickness difficult.

Section 2: Reporting of Exploration Results		
Criteria	**JORC Code Explanation**	**Commentary**
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Drilling 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 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.*	Appropriate diagrams are provided in this release, relevant to the reported data.
Balanced Reporting	*Where comprehensive reporting of all Exploration Results are not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results from the recent campaign have been reported.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Dr John McLellan from GMEX Pty Ltd was contracted to carry out a stress modelling study on the Red October deposit. A data set of structural observations from core and field mapping was compiled and 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).* *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 current focus is on the deep exploration holes and the Lionfish hangingwall opportunity.

King of the Hills 2012 JORC Table 1

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.).*	Sampling activities conducted at King of the Hills by Saracen include underground diamond drilling (DD) and underground face chip sampling. Sampling methods undertaken at King of the Hills by previous owners have included rotary air blast (RAB), reverse circulation (RC), aircore (AC) and diamond drillholes (DD).

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
	These examples should not be taken as limiting the broad meaning of sampling.	
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Sampling for DD and face chip sampling is carried out as specified within Saracen sampling and QAQC procedures as per industry standard. RC, RAB, AC and DD core drilling is assumed to have been completed by previous holders to industry standard at that time (1984- 2014).
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. *Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information*	Saracen sampling activities have been carried out to industry standard. Core samples are crushed, dried and pulverised to a nominal 90% passing 75µm to produce a 40g sub sample for analysis by FA/AAS. All historic RAB, RC, AC and DD and sampling is assumed to have been carried out to industry standard at that time. The majority of the recent historic drillholes have been sampled to 1m intervals to provide a 2.5-3 kg sample for analysis via fire assay and atomic absorption spectroscopy. Historical analysis methods include fire assay, aqua regia and unknown 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 number of holes intersecting the current resource is 2,072 amounting to 159,956 m. The holes include both RC and Diamond holes. RC drilling is mainly concentrated mainly in the upper parts of the deposit, while diamond drilling is mainly concentrated in the deeper levels. Overall there are 87,989 reverse circulation samples, and 72,049 Diamond core samples. Saracen has completed 42 NQ underground diamond drill holes and sampled 20 underground faces All core is oriented using an Ezi mark tool.
Drill Sample Recovery	*Method of recording and assessing core and chip sample recoveries and results assessed*	Underground 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%. It has been noted that recoveries for historic diamond drilling were rarely less than 100% although recovery data has not been provided. Minor core loss was most likely due to drilling conditions and not ground conditions.
	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. UG faces are sampled left to right across the face allowing a representative sample to be taken. It is unknown what, if any, measures were taken to ensure sample recovery and representivity with historic sampling.
	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. Diamond drilling has high recoveries due to the competent nature of the ground meaning loss of material is minimal. Any historical relationship is not known.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Logging of diamond drill core has recorded lithology, mineralogy, texture, mineralisation, weathering, alteration and veining. 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.

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
	Whether logging is qualitative or quantitative in nature. *Core (or costean, channel, etc) photography.*	Core is photographed in both dry and wet state. All faces are photographed and mapped. Qualitative and quantitative logging of historic data varies in its completeness. Some diamond drilling has been geotechnically logged to provide data for geotechnical studies. Some historic diamond core photography has been preserved.
	The total length and percentage of the relevant intersections logged	All diamond drillholes are logged in full and all faces are mapped. Historic logging varies in its completeness.
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.	Various sampling methods for historic RAB, AC and RC drilling have been carried out including scoop, spear, riffle and cyclone split. UG faces are chip sampled using a hammer. It is unknown if wet sampling was carried out.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation of diamond core and UG face chips adhere to industry best practice. It is conducted by a commercial laboratory and involves oven drying, coarse crushing then total grinding using an LM5 to a grind size of 90% passing 75 microns. Best practice is assumed at the time of historic sampling.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	All subsampling activities are carried out by commercial laboratory and are considered to be satisfactory. Best practice is assumed at the time of historic RAB, DD, AC and RC sampling.
	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.	Some duplicate sampling was performed on historic RAB, RC, AC and DD drilling. No duplicates have been taken of UG diamond core, face samples are duplicated on ore structures.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Analysis of data determined sample sizes were 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.*	A 40 gram fire assay with AAS finish is used to determine the gold concentration for 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. 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 have been utilised at the King of the Hills project
	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 diamond drillhole(1 in 30) and UG face job 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. QAQC data returned are checked against pass/fail limits with the SQL database and are passed or failed on import. A report is generated and reviewed by the geologist as necessary upon failure to determine further action. QAQC data is reported monthly and demonstrates sufficient levels of accuracy and precision.

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
		Sample preparation checks for fineness are carried out to ensure a grind size of 90% passing 75 microns. The laboratory performs a number of internal processes including standards, blanks, repeats and checks. Industry best practice is assumed for previous holders. Historic QAQC data is stored in the database 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 King of the Hills 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. Remaining half core is stored in core trays and archived on site Hard copies of face mapping, backs mapping and sampling records are kept on site. Digital scans are also kept on the corporate server. 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. Underground faces are located using a Leica D5 disto with and accuracy of +/- 1mm from a known survey point. Historic drilling was located using mine surveyors and standard survey equipment; more recent surface drilling has been surveyed using a DGPS system. Surveys are carried out every 15-30m downhole during diamond drilling using an Eastman single shot camera, with the entire hole being surveyed using a deviflex tool upon completion. The majority of downhole surveys for historic RAB, RC, AC and DD drilling are estimates only. More recent (post 1990) drilling has been surveyed with downhole survey tools at regular intervals including DEMS, gyroscope and camera.
	Specification of the grid system used.	A local grid system (King of the Hills) is used. It is rotated 25.89 degrees east of MGA_GDA94. The two point conversion to MGA_GDA94 zone 51 is KOTHEast KOTHNorth RL MGAEast MGANorth RL Point 1 49823.541 9992.582 0 320153.794 6826726.962 0 Point 2 50740.947 10246.724 0 320868.033 6827356.243 0 Historic data is converted to King of the Hills 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.*	Data reported is of variable spacing.
	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.	Historical Data spacing is nominally 20m N-S by 20m E-W in indicated areas of the deposit and sparser in inferred areas of the deposit. 10m N-S by 15m E-W or closer in grade control drilling areas. Current drilling is broadly aiming to match the existing data set.

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
Orientation of data in relation to geological structure	*Whether sample compositing has been applied.*	Underground core and faces are sampled to geological intervals; compositing is not applied until the estimation stage. Some historic RAB and AC drilling was sampled with 3-4m composite samples. Anomalous zones were resampled at 1m intervals in some cases; 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.	Sampling has been conducted in most cases perpendicular to the lode orientations where the mineralisation controls are well understood. Some historical drilling in this deposit has not been optimally intersected, given that that not all the mineralisation controls are well understood. Current drilling is aiming to drill perpendicular to the modelled lodes. Various underground drill locations are being used to optimise the drill orientation.
	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.	There is no record of any sample bias that has been introduced because of the relationship between the orientation of the drilling and that of the mineralised structures. Estimated true widths of ore intercepts are provided where drilling angles are not representative.
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**
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 King of the Hill pit and near mine exploration are located on M37/67, M37/76, M37/90, M37/201 and M37/248 which expire between 2028 and 2031. All mining leases have a 21 year life and are renewable for a further 21 years on a continuing basis. The mining leases are 100% held and managed by Saracen Metals Pty Limited, a wholly owned subsidiary of Saracen Minerals Holdings Limited. The mining leases are subject to a 1.5% 'IRC' royalty. Mining leases M37/67, M37/76, M37/201 and M37/248 are subject to a mortgage with 'PT Limited'. All production is subject to a Western Australian state government 'NSR' royalty of 2.5%. All bonds have been retired across these mining leases and they are all currently subject to the conditions imposed by the MRF. There are currently no native title claims applied for or determined across these mining leases. However, an agreement for Heritage Protection between St Barbara Mines Ltd and the Wutha People still applies. Lodged aboriginal heritage site (Place ID: 1741), which is an Other Heritage Place referred to as the "Lake Raeside/Sullivan Creek" site, is located in M37/90.
	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 license to operate already exists.

Section 2: Reporting of Exploration Results		
Criteria	**JORC Code Explanation**	**Commentary**
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	The King of the Hills prospect was mined sporadically from 1898-1918. Modern exploration in the Leonora area was triggered by the discovery of the Habour Lights and Tower Hill prospects in the early 1980s, with regional mapping indicating the King of the Hills prospect area was worthy of further investigation. Various companies (Esso, Ananconda, BP Minerals. Kulim) carried out sampling, mapping and drilling activities delineating gold mineralisation. Kulim mined two small open pits in JV with Sons of Gwalia during 1986 and 1987. Arboynne took over Kulim's interest and outlined a new resource while Mount Edon carried out exploration on the surrounding tenements. Mining commenced but problems lead to Mount Edon acquiring the whole project area from Kulim, leading to the integration of the King of the Hills, KOTH West and KOTH Extended into the Tarmoola Project. Pacmin bought out Mount Edon and were subsequently taken over by Sons of Gwalia. St Barbara acquired the project after taking over Sons of Gwalia in 2005.
Geology	*Deposit type, geological setting and style of mineralisation.*	Gold mineralisation is associated with sheeted quartz vein sets within a hosting granodiorite stock and pervasively carbonate altered ultramafic rocks. Mineralisation is thought to have occurred within a brittle/ductile shear zone with the main thrust shear zone forming the primary conduit for the mineralising fluids. Pre-existing quartz veining and brittle fracturing of the granite created a network of second order conduits for mineralising fluids. Gold appears as free particles or associated with traces of base metals sulphides (galena, chalcopyrite, pyrite) intergrown within quartz along late stage fractures.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *- easting and northing of the drill hole collar* *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *- dip and azimuth of the hole* *- down hole length and interception depth* *- hole length.* *• 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.*	A total of 2,072 holes have been used in the mineral resource and are deemed to be material. It is not practical to summarise all of the holes here in this release. Future drill hole data will be periodically released or when a results materially change the economic value of the project. Exclusion of the drilling information will not detract from the reader's view of the report.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	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 0.3m and maximum width of 3m for internal dilution.

Section 2: Reporting of Exploration Results		
Criteria	**JORC Code Explanation**	**Commentary**
	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.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Estimated true widths of ore intercepts are provided where drilling angles are not representative. Mineralisation at King of the Hills has been intersected in most cases where mineralisation controls are known, approximately perpendicular to the orientation of the mineralised lodes. Due to the shear abundance of the mineralised structures at King of The Hill, it is unavoidable that some of this mineralisation has not been optimally intersected.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Included in this release is an appropriately orientated longsection of the mineralisation, illustrating the centroids of the intercept point projected to a plane. Included also in this release are cross section views of the mineralisation which provides the visual perspective of the typical drilling angle.
Balanced Reporting	All results from the recent campaign have been reported, irrespective of success or not.	All results from the recent campaign 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; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Aerial photography, geotechnical drilling, petrological studies, ground magnetics, metallurgical test-work and whole rock geochemistry have been completed by various companies over the history of the deposit. Seismic and gravity surveys were carried out in 2003 and 2004 in an effort to identify controls on the mineralisation. Preliminary results indicated that the Tarmoola granite has a base and that mafics exist below this. The reporting was not completed due to Sons of Gwalia entering into administration. St Barbara completed an extended gravity survey from the previous one that was successful in delineating the granite/greenstone contact and mapped poorly tested extensions to known mineralised trends.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive*	Saracen is currently continuing the exploration drilling to the south of the current mine through underground drilling. Further grade control drilling will be conducted as needed.

Thunderbox 2012 JORC Table 1

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 Thunderbox include diamond drilling (DD) and reverse circulation (RC) drilling. Sampling methods undertaken by previous owners have included rotary air blast (RAB), DD and RC drilling and blast hole sampling within the pit. Limited historical data has been provided by previous owners.
	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. RC chips and diamond core provide high quality representative samples for analysis Historic RC, RAB, and DD core drilling is assumed to have been completed by previous holders to industry standard at that time (1999- 2007).
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. *Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information*	RC chips are cone split and sampled into 4m or 1m intervals with total sample weights under 3kg Diamond core is NQ or HQ sized, sampled to 1m intervals or 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. Saracen core and chip samples are crushed, dried and pulverised to a nominal 90% passing 75µm to produce a 40g sub sample for analysis by FA/AAS. All historic RAB, RC and DD and sampling is assumed to have been carried out to industry standard at that time. RC grade control drilling was used to obtain 1m samples or 2m composite samples from which 3 kg was pulverised to create a 50g charge for fire assay, while blast hole samples were composited into 2.5m before a 3kg sample was obtained for pulverising to a final 50g charge for fire assay.
Drilling Techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	The deposit was initially sampled by 470 RAB holes. Further drilling included 306 RC holes (assumed standard 5 ¼ ''bit size) , 216 HQ, NQ and PQ diamond drillholes , approximately 15,400 blast holes and 2,400 RC grade control holes. Some diamond drilling carried out for geotechnical studies was oriented (the method is unknown), it is unknown if other core was oriented. Saracen completed 21RC drillholes, 8 diamond geotechnical holes, 17 RC precollar diamond tail drillholes (precollars averaging 277m, diamond tails averaging 200m) and 689 RC grade control holes. The RC drilling was completed with a 5.5 inch diameter bit with a face sampling hammer. The rig was equipped with an external auxiliary booster. Diamond drilling was HQ or NQ diameter. Drill core was oriented utilising an ACT II core orientation tool.
Drill Sample Recovery	*Method of recording and assessing core and chip sample recoveries and results assessed*	Recoveries for RC drillholes and precollars are recorded as a percentage based on a visual weight estimate. Recoveries for some grade control drilling and blast hole sampling have been recorded based on a visual weight estimate. No other recoveries have been provided, it is unknown if they were recorded
	Measures taken to maximise sample recovery andensure representative nature of the samples	During RC drilling daily rig inspections are carried out to check splitter condition, general site and address general issues. Measures were taken to supress groundwater. 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. Historical drilling is assumed completed to industry standard at that time

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	There is no known relationship between sample recovery and grade for RC drilling. Diamond drilling has high recoveries meaning loss of material is minimal. Any historical relationship is not known.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature.* *Core (or costean, channel, etc) photography.*	Logging of RC chips and diamond drill core records lithology, mineralogy, texture, mineralisation, weathering, alteration and veining. 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. Chips from all RC holes are stored in chip trays for future reference while remaining core is stored in core trays and archived on site. Core is photographed in both dry and wet state. Qualitative and quantitative logging of historic data varies in its completeness.
	The total length and percentage of the relevant intersections logged	All drillholes completed by Saracen have been logged in full.
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. Duplicate core samples are quarter cored. 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 RC samples are cone split. Occasional wet samples are encountered. The sampling method for historic RAB and RC drilling is unknown. Grade control RC drilling has been cone split while blast hole sampling has been riffle split. Wet drilling was rarely encountered, and extra care was taken to clean the splitter after encountering wet samples. Drillholes in puggy, wet clays were abandoned and redrilled once dewatering of the pit had commenced. Care was taken to adjust the splitter orifice for grade control drilling to ensure the sample weight did not exceed 3kg, meaning no subsampling was needed at the preparation stage.
	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. The sampling techniques for historic exploration RAB, RC and DD drilling are unknown, best practice is assumed. The sample preparation of RC grade control drilling and blast hole sampling involved oven drying, coarse crushing and total grinding in an LM5.
	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. Best practice is assumed at the time of historic RAB, DD and RC sampling. Procedures adopted to ensure sample representivity for RC grade control and blast hole sampling included weight analysis to determine split ratio (at least 2 holes per program) and sizing analysis of every 25th sample, with an expected return of 90% passing 75um.
	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. It is unknown if duplicate sampling was performed on historic exploration RAB, RC and DD drilling. Field duplicates were carried out on RC grade control drilling at a rate of one per hole, collected from the second sample port on the cone splitter. Duplicates were carried out at a rate of 1 in 20 for blast hole sampling.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Analysis of data determined sample sizes were considered to be appropriate.

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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 and diamond core are analysed by an external laboratory using a 40g fire assay with AAS finish. This method is considered suitable for determining gold concentrations in rock and is a total digest method. A 50 gram fire assay with AAS finish was used to determine the gold concentration for all grade control samples. This method is considered suitable for determining gold concentrations in rock and is a total digest method. Methods for exploration RC, RAB and DD drilling included fire assay with AAS finish, BAAS 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.	The clay mineralogy of the deposit was investigated using PIMA (Portable Infra-red Microscopic Analyser) analysis to assist with geological interpretation. This data was not used in the estimation process.
	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. These are not identifiable to the laboratory. QAQC data returned are checked against pass/fail limits with the SQL database and are passed or failed on import. A report is generated and reviewed by the geologist as necessary upon failure to determine further action. QAQC data is reported monthly. Sample preparation checks for fineness are carried out to ensure a grindsize of 90% passing 75 microns. The laboratory performs a number of internal processes including standards, blanks, repeats and checks. QAQC data analysis demonstrates sufficient accuracy and precision. 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.	A number of exploration RC holes were drilled to twin original RAB holes and verify results.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols	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. 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. Downhole surveys are carried out using a hired Reflex EZ-gyro by the respective drilling companies on a regular basis, between 10-30m.
	Specification of the grid system used.	MGA Zone 51 grid coordinate system is used
	Quality and adequacy of topographic control.	Kevron Geomatic Services flew and processed aerial photography and provided ortho images at 1:5000 scale over the Thunderbox deposit and environs.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The nominal spacing for drilling is varied from 20mx20m to 40mx40m
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and	The drilling is distributed and spaced such that geological and grade continuity can be established to estimate the mineral resource and ore reserve appropriately. The mineralisation is continuous over a 2km strike length, therefore the 80m x 80m exploration drill spacing effectively defines the continuity.

Section 1: Sampling Techniques and Data		
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	Ore Reserve estimation procedure(s) and classifications applied.	
Orientation of data in relation to geological structure	*Whether sample compositing has been applied.*	RC precollar sampling was composted into 4m samples. Historic RAB drilling was sampled with 4m composite samples. Grade control RC drilling was carried out on 2m composite samples, while blast hole sampling was carried out on 2.5m composites.
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The bulk of the drilling has been oriented to the east in order to provide the best intersection angles possible for the steeply west dipping orebody.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	All drilling from surface has been drilled as close to perpendicular as possible. This has reduced the risk of introducing a sampling bias as far as possible.
Sample security	*The measures taken to ensure sample security.*	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. 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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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.*	M36/504, M36/512 and M36/542 form part of the Thunderbox project and are in good standing. There are no native title claims over the Thunderbox deposit. A number of heritage surveys have been undertaken with Aboriginal groups with no sites of significance identified. In addition a detailed archaeological survey has been conducted with no sites of significance identified
	The 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 license to operate already exists.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Extensive nickel exploration was undertaken in the area during the 1960s and 1970s. Grassroots gold and PGE exploration was undertaken during and since the 1980s by BHP, Dominion, Dalrymple Resources and Forrestania Gold. Thunderbox was discovered in 1999.
Geology	*Deposit type, geological setting and style of mineralisation.*	Thunderbox is a mesothermal lode gold deposit located at the southern end of the Yandal greenstone belt in an area where several major shear zones converge and join with the Perseverance Fault. The shear zone dips at 30° to 60° WSW, with the exception in the vicinity of the mineralisation, where the shear is vertical to steeply dipping. Mineralisation is hosted by strongly deformed, silicified and carbonate altered albite-quartz porphyry in the hangingwall of the shear zone. The shear juxtaposes foliated basalts and intrusive porphyries in the hangingwall against sedimentary rocks in the footwall. The zone of

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		shearing is over 200m wide. An ultramafic unit occurs within the shear, in the footwall of the deposit and is attenuated along the shear. The main gold related hydrothermal alteration assemblage comprises quartz-ankerite-arsenopyrite-pyrrhotite-galena and gold. This assemblage has been overprinted by a retrograde chlorite-epidote-white mica-biotite-quartz and pyrite assemblage. Syn-mineralisation veins have a continuum of vein textures ranging from laminated to pseudo-breccias.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation* • *above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* • *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.*	A total of 458 holes have been used in the mineral resource and are deemed to be material. It is not practical to summarise all of the holes here in this release. Exclusion of the drilling information will not detract from the reader's view of the report. All material data is periodically released on the ASX: 25/11/2015, 29/04/2015, 23/03/2015
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 0.5ppm. 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.
	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.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this*	This announcement includes sufficient detail to clearly illustrate the geometry of the mineralisation and the recent drilling. All results are reported as downhole lengths. The geometry of the mineralisation is well known and true thickness can be calculated. Drilling intersects the mineralisation perpendicular and at an average intersection angle of 45 degrees.

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	effect (eg 'down hole length, true width not known').	
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Included in this release is an appropriately orientated longsection of the mineralisation, illustrating the centroids of the intercept point projected to a plane. Included also in this release are cross section views of the mineralisation which provides the visual perspective of the typical drilling angle.
Balanced Reporting	*Where comprehensive reporting of all Exploration Results are not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results from the recent campaign 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; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Historic activities have included drilling to obtain samples for metallurgical test work, bulk density analyses and geotechnical analyses. A number of geophysical surveys including dipole-dipole IP, Gradient array IP and TEM were carried out over known mineralisation to determine effectiveness in delineating mineralisation/alteration. None were deemed effective. An environmental survey investigated the erosional characteristics of the soil, surface hydrology and groundwater and identified no issues. A partial leach soil sampling program carried out over the deposit was deemed effective in identifying anomalous gold values associated with the deposit. A detailed structural review of the mineralisation has been conducted by Model Earth
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive*	Saracen is currently working on establishing exploration opportunities which will extend the known mineralisation at depth. This will focus on the A Zone Deeps area.