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ASX Limited  
Market Announcements Platform

28 February 2022

## 128,000 oz Au Maiden Inferred Resource at Saki Prospect PNG

- **Maiden Inferred Mineral Resource of 2.0 Mt @ 2.0 g/t gold for 128,000 oz Au estimated for the Saki system of gold veins that occur 3km to the north-east of the Tolukuma Gold Mine.**
- **Scoping economic studies recommended ahead of further drilling.**
- **Upside with apparent potential for further strike and depth extensions with the veins having been tested to only 120m depth and above the base of mineralisation.**

Brian Thomas, Technical Director of Frontier Resources Ltd, commented: *“This maiden Mineral Resource Estimate for the Saki Gold Prospect is an exciting step for Frontier in unlocking the potential of Saki. Recent geological mapping and trench sampling has allowed Frontier to better understand the controls on gold mineralisation, and this has been incorporated into the interpretation of historic diamond drilling. The new Mineral Resource provides Frontier with a solid basis for planning further work to infill and extend the mineralisation. Frontier is in the process of evaluating a haul road between Saki and the nearby Tolukuma Gold Mine, which will allow site access for trucks.”*

Frontier Resources Limited (**Frontier** or the **Company**) is pleased to announce the results of an independent analysis of historical drilling coupled with Frontier’s recent geological mapping to produce a Maiden Inferred Resource Estimate of the Saki gold prospect in Papua New Guinea (Figures 1 and 2).

Frontier requested Steve Rose of Rose and Associates, Mining Geology Consultants (RMG), carry out a Mineral Resource estimate over the Saki Gold Prospect. Saki is an epithermal gold deposit, with mineralisation sitting in a series of north-west striking veins which outcrop or lie close to surface.

Saki has 46 historical diamond drill holes for a total of totalling 4191.85 metres. Recent mapping by Frontier geologists showed the extent and outcrop of mineralised veins and together with trenching results has allowed the Mineral Resource to be classified.

**The Mineral Resource estimate of 2.0 Mt @ 2.0 g/t gold for 128,000 ounces Au** (using a 1 g/t Au cut-off) has been classified using JORC 2012 (Table 1A).

**Table 1A: Saki Mineral Resource Estimate using 1g/t Au cut-off**

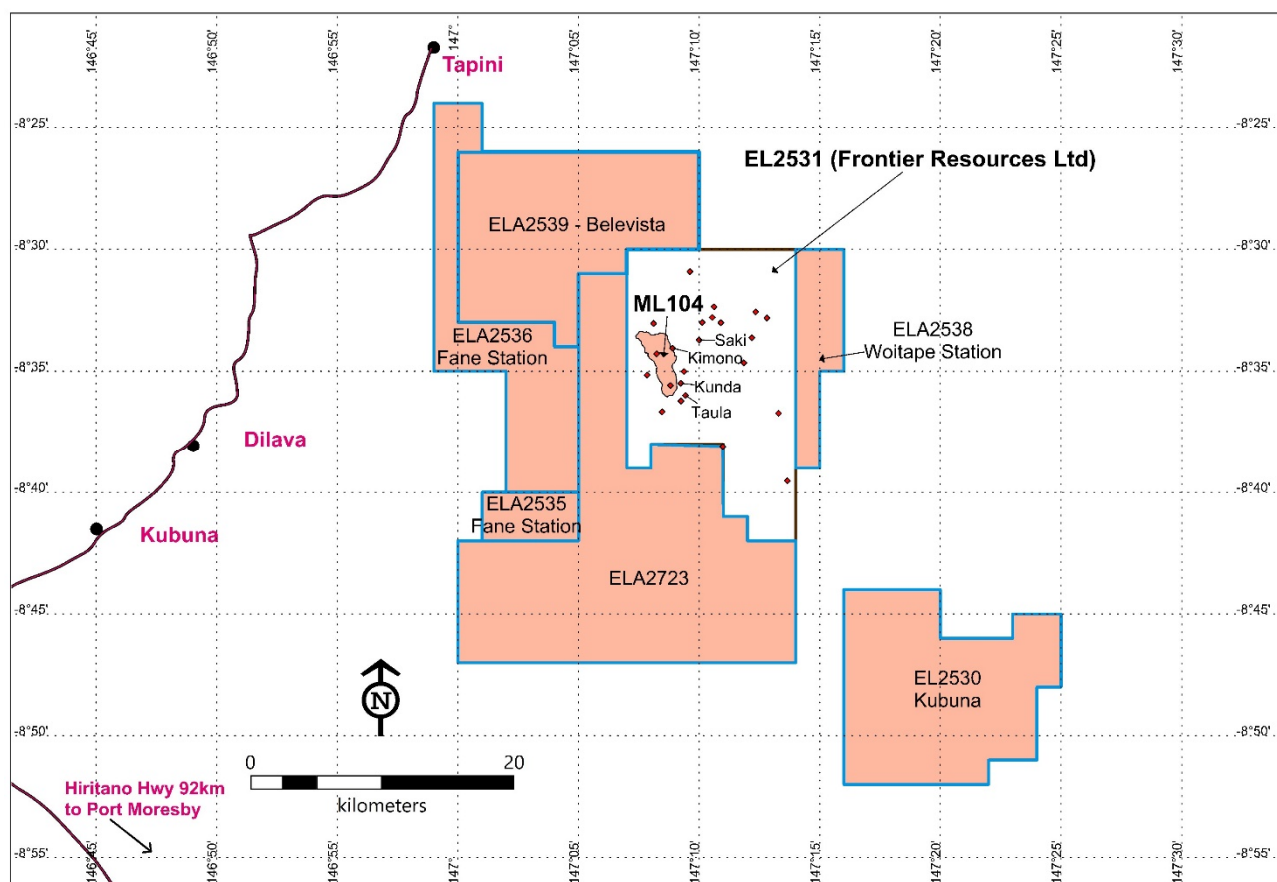
Classification	Volume (Mm <sup>3</sup> )	Tonnes (Mt)	Gold (g/t)	Ounces Au
Inferred	0.8	2.0	2.0	128,000

**Note:** Figures are rounded to reflect appropriate level of confidence. Apparent differences may occur due to rounding.

The veins have been modelled to reflect Frontier’s mapping and there appears potential for further strike extensions, particularly for Saki-1, Saki-3, Saki-4, and Saki-5 veins.

The veins are only tested down to a depth of 120m below surface. Grade seems to be controlled by a flattish plunge to the north, which if applied to new drilling could see improved success rates.

Epithermal gold systems can have distinct and abrupt bases to economic mineralisation. Indications during the resource estimation process are that drilling is above this base with potential additional mineralisation at depth.



**Figure 1: Frontier Gold Prospects within EL2531 and Nearby Tolukuma Mine Tenements**

From its recently completed mapping, trench and rock sampling program, Frontier demonstrated significant gold and silver grades along the Saki III vein including trench sample results of **1m @ 128.5g/t Au + 94g/t Ag, 3m @ 40.28g/t Au + 27.92g/t Ag** including **1m @ 115.0g/t Au + 54.1g/t Ag** (refer to ASX Announcement dated 26 October 2021).

Frontier has completed a preliminary geotechnical site investigation of a proposed route from Saki to Tolukuma Mine along local bush tracks and old horse tracks along ridges. The access road is 5km in length starting from Hoyu Creek at Saki to New Gutiva village which connects to mine roads within mining lease ML104 (refer to ASX Announcement dated 31 March 2021). A preliminary geotechnical site investigation of a suitable hydro dam plant site has also been completed (refer to ASX Announcement dated 27 April 2021).

Saki forms part of the **Saki-Yava** gold system (Figure 2) with an envelope of mineralisation of more than 3.6 sq.km, providing a substantial footprint to expand on potential resources. The Saki, Yava, Soju and Salat prospects were discovered and initially explored by Newmont during 1986-89 with most significant results of **5.4m @ 8.7 g/t Au** and **1m at 32.5 g/t Au** at Saki and **2m at 5.3 g/t Au** and **1,750 g/t Au** in rock float at Soju (refer to ASX Announcement dated 28 May 2019).

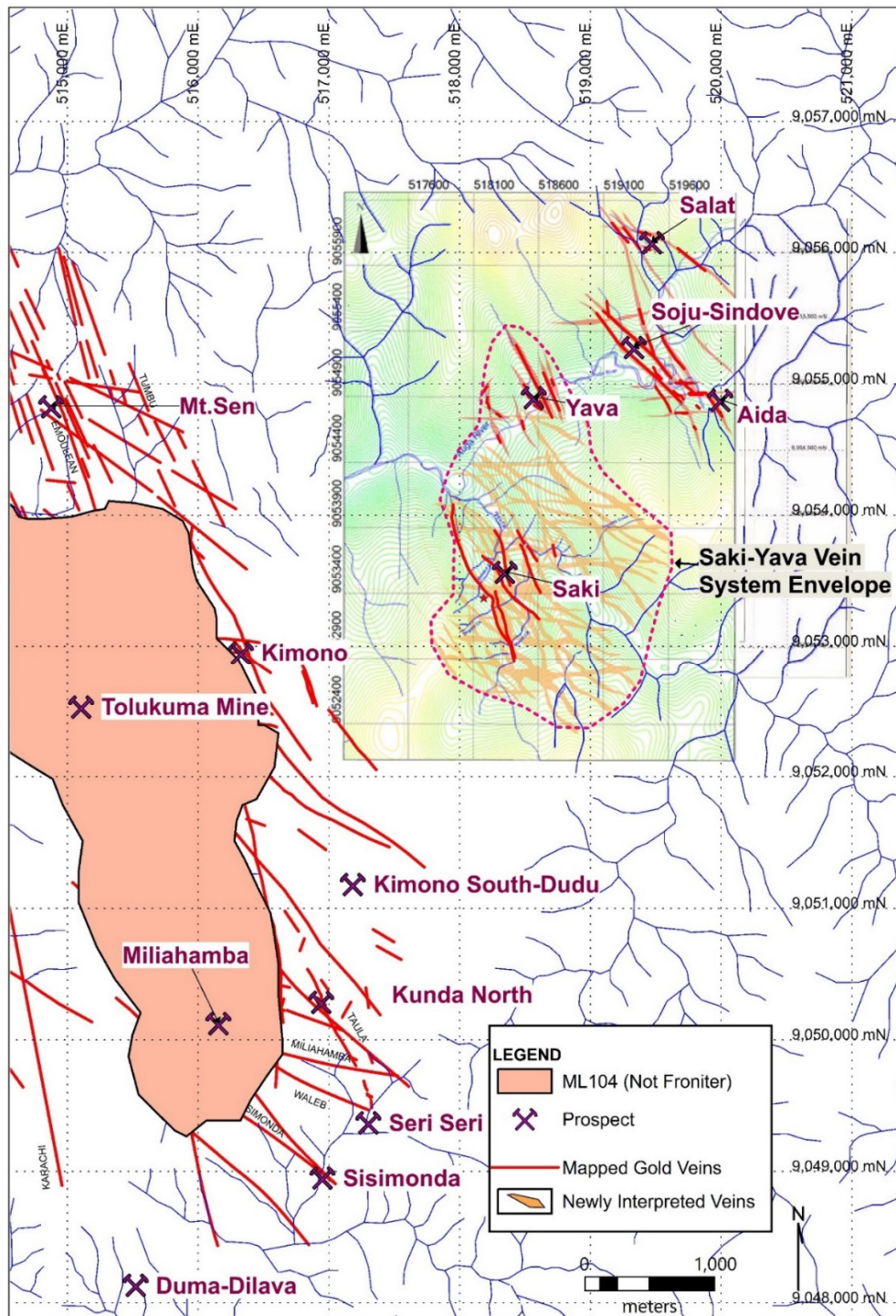


Figure 2: Saki-Yava System of Gold Veins

### Summary of Saki Mineral Resource Estimate

Frontier confirms the reporting of the Mineral Resource Estimate for the Saki Gold Deposit as at 25 February 2022.

The estimate of Mineral Resources is reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (JORC Code) and the Australia Securities Exchange Listing Rules. This report summarised the information contained in the JORC Code Table 1 which is included in the Appendix to this report. The breakdown of the total Mineral Resource estimate into the categories specified in the JORC Code is contained in Table 1A. A summary of JORC Table 1 is provided below for compliance with the Mineral Resource Estimate and in line with the requirements of ASX listing rule 5.8.1.

## Project Tenure

The Saki Gold Project is in Papua New Guinea (PNG), roughly 100 km to the north of Port Moresby, and 3 km east of the Tolukuma Gold Mine (Figure 1). The prospect sits within EL2531 which covers an area of 441.72 km<sup>2</sup> and surrounds the mining lease of the Tolukuma Gold Mine.

## Geology and Geological Interpretation

Mineralisation at Saki is similar to the neighbouring Tolukuma gold deposit and is considered a low-sulfidation epithermal gold-quartz vein deposit.

The vein system is localised near the intersection of the graben-like structural contact between Cretaceous basement Owen Stanley metamorphic rocks and the overlying Pliocene Mt Davidson Volcanics. The volcanism has been dated at 4.8Ma. The Mt Davidson volcanics comprise basalts, tuffs, agglomerates and breccias intruded by diorites and porphyries. The basement Kagi sequence consists of slate, phyllite schist, and minor gneiss. Locally, carbonaceous phyllites containing metamorphic quartz veins predominate as the basement rocks. Diatreme breccias contain mixed basement and volcanic material.

The volcanics and intrusives have undergone pervasive alteration to an intermediate argillic assemblage of quartz-albite-illite-chlorite±carbonate. Adularia replaces primary feldspar in the wall rock immediately adjacent to veining. Illite clay, commonly postdates adularia alteration.

Mineralisation is primarily hosted within the Mt Davidson Volcanics.

Gold occurs within a series of steeply dipping, narrow quartz-adularia epithermal veins within a north-south trending structural corridor. Tension structures have developed linking some of the veins and can be mineralised.

The mineralisation has been defined with a strike length of about 1 km. The veins average between one and two metres in width. Five veins have been modelled in this MRE (Figure 3 and 4), based on diamond drilling, surface mapping and surface trenching.

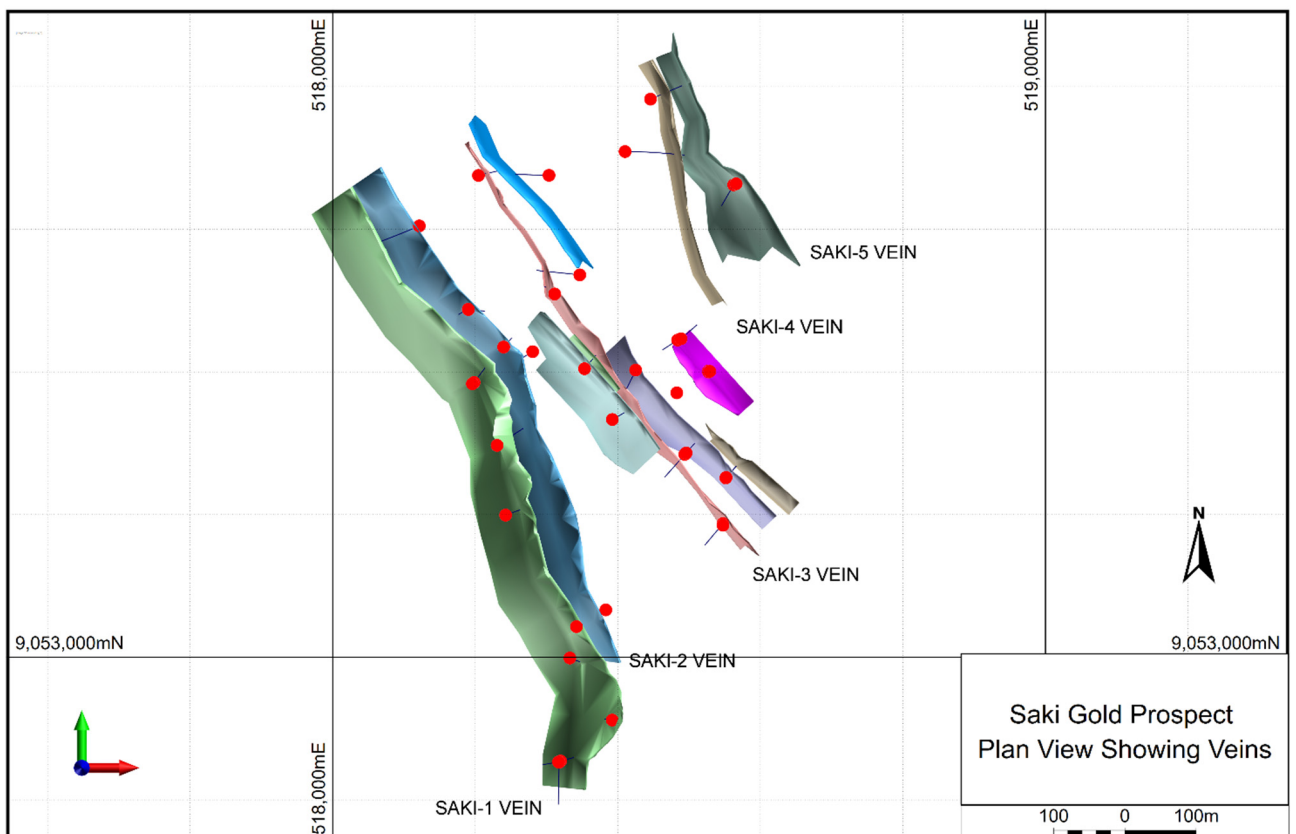
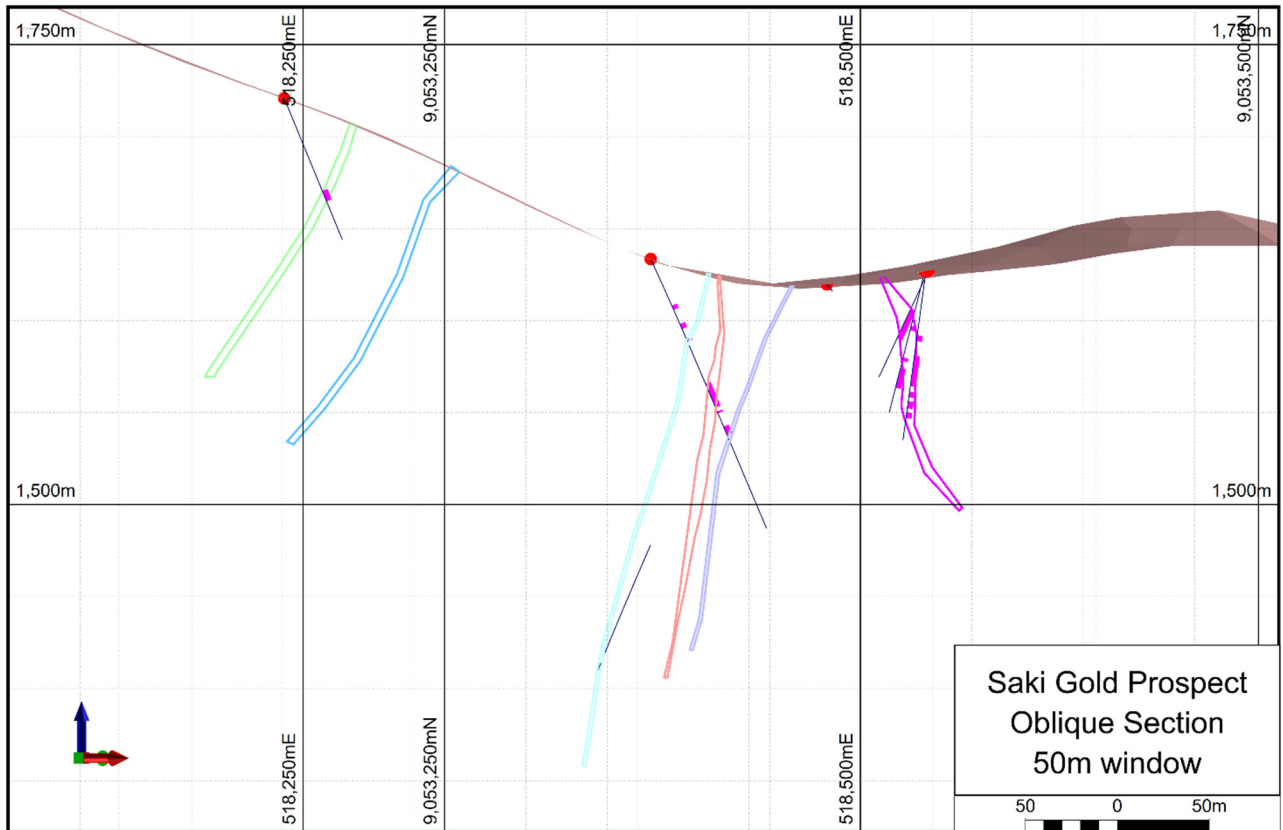


Figure 3: Saki Modelled Veins and Drillhole Locations



**Figure 4: Saki Modelled Veins Oblique Section**

### Sampling and Sub-Sampling Techniques

The Saki MRE is based on logging and sampling of 46 surface diamond drillholes for 4,191.85m, with approximately 1,672 drilling samples with interval ranges from 0.1m to 2.1m, but predominantly with an interval of 1m. The drillholes have a variable spacing, but average about 80 m between collars. The drilling type is all surface diamond drilling at HQ core size. The diamond drillholes were all sampled based on geological boundaries to a nominal maximum length of 1m, marked up prior to being cut in half length wise using a diamond saw. A consistent side of the core was submitted for analysis.

### Drilling Techniques

Data used for the Saki MRE are from historical diamond drilling between 2002 and 2012 by Tolukuma Gold Mines and then Petromin. The drilling method was surface diamond drilling at HQ core size.

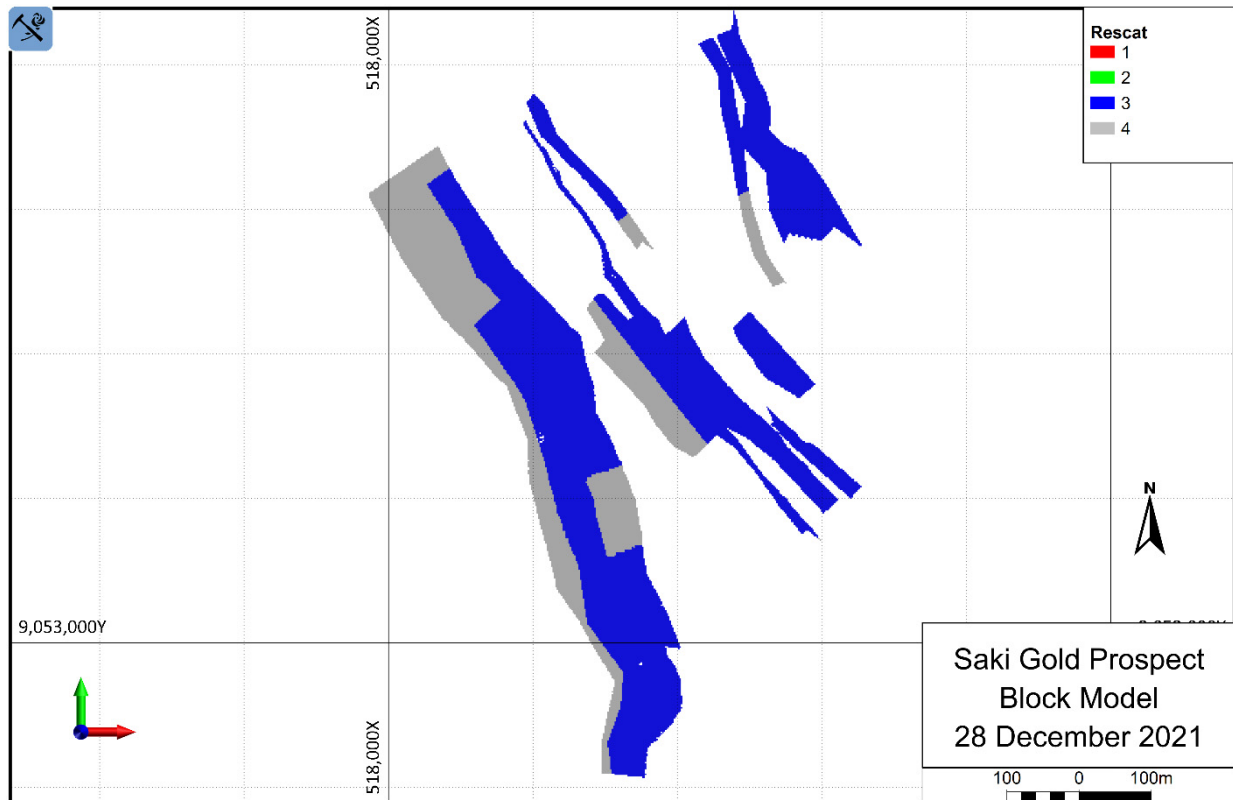
### Mineral Resource Classification

Mineral Resource classification criteria are based on the level of data informing both geological model and grade estimation.

The Mineral Resource has been constrained to a maximum vertical depth of 120 m below surface. Blocks have been classified as Inferred based on drill hole spacing, geological continuity, collar survey accuracy, and limited QAQC data.

The Inferred Mineral Resource was defined where there was a moderate level of geological confidence in geometry, there was continuity of grade, and drill spacing was generally less than 80 m.

Unclassified mineralisation has not been included in this Mineral Resource. This is the material where drill spacing is wider than 80 m (Figure 5).



**Figure 5: Saki Mineral Resource Estimate Classification Scheme. Rescat 3 is Inferred; Rescat 4 is unclassified**

### Sample Analysis Method

Details and QC data for holes drilled before 2009 are poorly recorded. Since then, routine duplicate samples and reference samples were used.

Samples were prepared and analysed at the laboratory at Tolukuma Gold Mine, with referee samples analysed at Genalysis laboratory in Perth. The assay method was aqua regia for those samples analysed at the Tolukuma Gold Mine laboratory and fire assay/AAS for those samples analysed at Genalysis.

### Estimation Methodology

Vein wireframes were interpreted using logged geology, surface mapping and gold assays (using a nominal lower cut-off of 0.3 g/t Au).

Drillhole intercepts were composited downhole to 1m lengths and gold estimation of all mineralisation domains was carried out using ordinary kriging and hard boundaries between all domains. A top cut of 30 g/t Au was applied. Three search passes, with increasing search distances and decreasing minimum sample numbers, were employed.

Density was applied on the basis of lithology based on a set of 63 density samples from diamond drill core. A bulk density of 2.28 g/cm<sup>3</sup> was applied to blocks with a rock code COL (colluvium) and 2.46 g/cm<sup>3</sup> was applied to all other blocks.

### Cut-off Grades

A nominal lower cut-off grade of 0.3g/t Au was used for interpreting geological continuity of the mineralisation. For reporting, a cut-off grade of 1 g/t Au was applied, on the basis that the mineralisation sub-crops and lies within 100m of surface.

## **Mining and Metallurgical Parameters**

This MRE is has been reported to a maximum vertical depth of 120 m, which is considered within reach of an open pit, however, no pit optimisation runs have been carried out. To satisfy the reasonable prospect of eventual economic extraction specified in the JORC Code, the following were considered:

- Saki is only 3 km from an existing gold mine and processing plant; some work has been completed on permitting a road between Saki to Tolukuma;
- The veins and mineralisation at Saki are similar to those exploited at Tolukuma Gold Mine, which has previously been in production for several years; and
- The mineralisation at Saki is within 120 m of the surface

## **Exploration Potential**

The veins have been modelled to reflect Frontier's mapping. There appears potential for further strike extensions, particularly for Saki-1 to the south, and also for Saki-3, Saki-4, and Saki-5.

The veins are only tested down to a depth of 120 m below surface. Grade seems to be controlled by a flattish plunge to the north, which if applied to new drilling could see improved success rates

This announcement has been authorised for release by the Directors of the Company. For additional information please visit our website at [www.frontierresources.net.au](http://www.frontierresources.net.au).

## **FRONTIER RESOURCES LTD**

### **Competent Person Statement:**

*The information in this report that relates to Mineral Resources is based on information compiled by Steve Rose, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Steve Rose is a full-time consultant with Rose and Associates, Mining Geology Consultants.*

*Steve Rose 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'. Steve Rose consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

## ABOUT FRONTIER:

### DALKEITH CAPITAL PTY LTD (WESTERN AUSTRALIA)



#### **Gascoyne Rare Earth Elements (REE) Project**

These two tenement blocks will be the focus of exploration for light rare-earth oxides of Neodymium ( $Nd_2O_3$ ) and Praseodymium ( $Pr_6O_{11}$ ) critical to the production of permanent magnets with demand set to increase 5x by 2030. The Gascoyne REE Project adjoins the world-class Yangibana Deposit (ASX:HAS ~A\$460 million market capitalisation) in the Gascoyne Region. Rare earth elements are essential to the clean and technology revolutions taking place around the world. Their deposits are relatively fast to drill and develop, with low capex, simple metallurgy, and a high value offtake product.

**Mt Clere Project** – Frontier has applied for a significant new area prospective for rare earths and lithium pegmatites in the eastern Gascoyne Province. The strategic pegging of the Mt Clere Project is a great opportunity to expand our exploration focus for rare earths and lithium to complement the existing Gascoyne Project. An initial desktop review has highlighted numerous sites of interest including some pegmatite occurrences. Ongoing review and compilation of historical datasets will identify additional targets.

**Koolya High Purity Alumina (HPA) Project** - Prospective for bright white kaolin and High Purity Alumina located 460km east of Perth. The Kaolin market is growing with High Purity Alumina investment in EV and battery market for ceramic coated separators driving global demand. Koolya is a drill ready project with reconnaissance drilling to be undertaken to investigate the depth, thickness, ISO brightness, mineralogy, and alumina content over the project area.

**Kalgoorlie Project** – This tenement application is located 50km east of Kalgoorlie, 5km southwest of the Jubilee Mining Centre and 6km northeast of the Queen Lapage Mining Centre. Once granted, initial exploration work will focus on the site of historic prospecting activity followed by an extensive geochemical sampling program, with Air Core drilling to follow pending positive results.

### SOUTHERN RARE EARTHS PTY LTD (SOUTH AUSTRALIA)

**Murraydium Project** – These four tenement blocks are within the Murray Basin and along strike of the Australian Rare Earth's (ASX:AR3) Koppamurra Rare Earths (REE) prospect which already has established Mineral Resources at Red Tail and Yellow Tail. Recent drilling by AR3 confirms clay hosted rare earth mineralisation adjacent Frontier's Naracoorte Tenement Block with results including 2m @ 1008 ppm TREO. Frontier will undertake an initial significant drilling program along existing roads and tracks to identify occurrences of clay hosted REE mineralisation.

#### Frontier Resources Ltd Tenement Information (Australia)

Tenement Number and Name	Ownership	Sub-blocks	Area (sq.km)	Application /Grant Date	Expiry Date
E 09/2515 - Gascoyne (WA)	100% Dalkeith Capital Pty Ltd	47	147.02	17-Dec-21	16-Dec-26
E 09/2516 - Gascoyne (WA)	100% Dalkeith Capital Pty Ltd	25	78.35	17-Dec-21	16-Dec-26
E 77/2796 - Koolya (WA)	100% Dalkeith Capital Pty Ltd	47	138.78	05-Nov-21	04-Nov-26
E 77/2797 - Koolya (WA)	100% Dalkeith Capital Pty Ltd	28	82.68	05-Nov-21	04-Nov-26
E 27/648 - Kalgoorlie (WA)	100% Dalkeith Capital Pty Ltd	5	14.76	10-Jun-21	
E 52/4012 - Mt Clere (WA)	100% Dalkeith Capital Pty Ltd	191	591.63	09-Nov-21	
ELA2021/00058 - Murraydium (SA)	100% Southern Rare Earths Pty Ltd	78	876.00	14-May-21	
Total of Granted Tenements		421	1929.22		



## FRONTIER COPPER PNG LTD (PAPUA NEW GUINEA)

**Tolukuma Project** - Frontier's only tenement in Papua New Guinea (EL2531) surrounds the Tolukuma gold Mining Lease ML104 in the Central Province, 70km North of the national Capital of Port Moresby. A new owner is currently being sought for ML104 to refurbish the mine. Given the proximity of high grade gold prospects within EL2531, Frontier is focusing on developing potential resources within EL2531 that will be required for future mill-feed once the mine has re-opened.

### Frontier Resources Ltd Exploration Licence Information (Papua New Guinea)

Exploration Licence Number and Name	Ownership	Sub-blocks	Area (sq.km)*	Grant Date	Expiry Date
EL2531 - Tolukuma	100% Frontier Copper PNG Ltd	65	223.00	25-Feb-19	24-Feb-23
ELA2529 - Gazelle	100% Frontier Copper PNG Ltd	211	719.51	N/A	N/A
Total of Granted EL's		65	223.00		

\*1 sub-block approximately 3.41 sq.km

Notes: The PNG Mining Act-1992 stipulates that EL's are granted for a renewable 2 year term (subject to satisfying work and expenditure commitments) and the PNG Government maintains the right to purchase up to 30% project equity at "Sunk Cost" if/when a Mining Lease is granted. Licence EL2531 is currently subject to an extension renewal process.

## JORC Code, 2012 Edition – Table 1 Report of Exploration Results

### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	Diamond drilling with HQ core size, which provides a high-quality sample, and was used for geological interpretation and grade estimation  Trenching, which provides exposure of veins, but a relatively poor sample. These were used for geological interpretation only. They weren't used for grade estimation.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	All drillholes were drilled close to perpendicular to the vein boundaries. Holes were logged and comments made about core recovery.
	<i>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.</i>	Diamond drilling with HQ core size was used. All holes were logged geologically. Sampling was by cutting half core, with breaks at geological boundaries. The most common sample length was 1 m. Half core samples were crushed and pulverized and then assayed by fire assay for gold.
Drilling techniques	<i>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 orientated and if so, by what method, etc.).</i>	HQ diamond core drilling using wireline with a standard tube. The core was not orientated.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Core recoveries are 90% plus.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Core recovery was poor in earlier drilling (Golder Associates, 2012), but techniques were developed to get 90% plus recovery.
	<i>Relationship between sample recovery and grade/sample bias.</i>	No analysis of recovery against grade has been carried out, since recovery data is not recorded in the drillhole database.
Logging	<i>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.</i>	All core is geologically logged for lithology, alteration and structure. The standard is sufficient to support Mineral Resource estimation, mining studies and metallurgical studies.

Criteria	JORC Code explanation	Commentary
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging was qualitative; however, the geologists also record visual quantitative mineral percentage ranges for the sulphide minerals present.  Whilst it was reported that core is photographed, photos were not part of the dataset used for this MRE.
	<i>The total length and percentage of the relevant intersections logged.</i>	All holes and intersections have been logged.
<b>Subsampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Core samples were taken from half core, cut using a diamond core saw. The remainder of the core was retained in core trays tagged with a hole number and metre mark. They are stored in a shed on site.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	NA
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique</i>	Half core samples are sent to the assay laboratory for sample preparation which comprises crushing, splitting and then pulverizing to give a pulp. A 50g fire assay is carried out, with AAS finish. The method is typical and well accepted for gold sampling, and is considered appropriate.
	<i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i>	Cut lines are marked on diamond drill core to ensure that the core to minimise bias when cutting.  When the half core has been crushed, the crushed sample is split using a riffle splitter down to 1kg splits. The 1kg split is then totally pulverized.
	<i>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.</i>	Cut lines are marked on diamond drill core to ensure that the core to minimise bias when cutting.  No duplicate results were available in the dataset. (Golder Associates, 2012) state that QAQC processes were recently adopted, but no data from this was available. This has affected the MRE classification.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes were appropriate for the type, style and consistency of mineralisation encountered during this phase of exploration.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	The assay method and laboratory procedures were appropriate for this style of mineralisation. The fire assay technique was designed to measure total gold in the sample.
	<i>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.</i>	No geophysical tools, spectrometers were used.
	<i>Nature of quality control procedures adopted and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	No QAQC data was made available for the MRE. This has affected the classification given to the resource.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	No process is in place. This is not considered material for this study.
	<i>The use of twinned holes.</i>	Twinned holes have not been drilled at this stage. The prospect is currently drilled at a relatively wide spacing. Twinning is recommended as part of the next stage infill program.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	There is no documentation of data entry procedures. Frontier took over the project in 2019, and has not carried out any diamond drilling since then. All drilling was carried out by previous explorers.  Original logging was on paper logs, and then entered into Excel sheets. The drillhole database is an Access database. FNT is recommended to set up a formal drillhole database.
	<i>Discuss any adjustment to assay data.</i>	No adjustments have been made to assay data.

Criteria	JORC Code explanation	Commentary
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Drill collars were surveyed after completion presumably by GPS, but no details are provided in the dataset.  When plotting up the holes, they were not sitting on the topographic surface. For the purpose of this MRE the collars were draped on the topographic surface. This is considered appropriate for the current MRE, but drill collars should be picked up with DGPS.  Downhole surveys are recorded relative to grid north. There is no record of the downhole survey method in the data provided. The holes are relatively short, and the veins interpreted in the drilling match with surface mapping, so this is not considered an issue for this MRE, but future drilling should include better documentation.
	<i>Specification of the grid system used.</i>	All coordinates and bearings use the AMG66 Zone 55 grid.
	<i>Quality and adequacy of topographic control.</i>	The quality of the topographic control is considered to be sufficient for this MRE, but should be improved if FNT wish to upgrade the resource.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	The data spacing is irregular, with a clustering in the main part of the deposit, but average spacings are approximately 80 m.
	<i>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.</i>	The CP believes that the mineralised domains have sufficient geological and grade continuity to support the classification applied to the Mineral Resource given the current drill pattern.  Mineral Resource estimation procedures are also considered appropriate give the quantity of data available and style of mineralisation under consideration.
	<i>Sample compositing</i>	Sample composites have not been used.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Drilling was designed based on known geological models, field mapping, and cross-sectional interpretation.  Drillholes oriented at right angles to strike of deposit, with dip optimised for drill capabilities and the dip of the orebody.
	<i>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.</i>	This is not considered to be a material factor because of the style of mineralisation.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	No information was provided on sample security. During drilling the prospect was run from the nearby Tolukuma gold mine. Samples from Saki were flown by helicopter to Tolukuma, and then by helicopter to Port Moresby. This means that there would be limited opportunity to tamper with the samples.  The CP recommends that this facet is better documented in future.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	(Golder Associates, 2012) carried out a review in 2012.

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	Saki lies on EL2531, which was granted to FNT in 2019.
	<i>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.</i>	All tenements are in good standing.

Criteria	JORC Code explanation	Commentary
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	All drilling was carried out prior to FNT taking up the EL. Initial work was carried out by Newmont, as part of the work that led to the discovery and development of the nearby Tolukuma Gold Mine. Subsequent work was carried out by Petromin. The work seems adequate and appropriate for this deposit.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>Saki is similar to the neighbouring Tolukuma deposit, and is considered a low-sulfidation epithermal quartz vein deposit.</p> <p>The vein system is localised near the intersection of the graben-like structural contact between Cretaceous basement Owen Stanley metamorphic rocks and the overlying Pliocene Mt Davidson Volcanics (Semple, Corbett, &amp; Leach, 1995). The volcanism has been dated at 4.8ma. The Mount Davidson volcanics are extensively altered basalts, tuffs, agglomerates and breccias intruded by diorites and porphyries. The basement Kagi sequence consists of slate, phyllite schist, and minor gneiss. Locally, carbonaceous phyllites containing metamorphic quartz veins predominate as the basement rocks. Diatreme breccias contain mixed basement and volcanic material.</p> <p>The volcanics and intrusives have undergone pervasive alteration to an intermediate argillic assemblage of quartz-albite-illite-chlorite± carbonate. Adularia replaces primary feldspar in the wall rock immediately adjacent to veining. Illite clay, commonly postdates adularia alteration.</p> <p>Mineralisation is primarily hosted within the Mount Davidson Volcanics.</p> <p>Gold occurs within a series of steeply dipping, narrow quartz-adularia epithermal veins within a north-south trending structural corridor. Tension structures have developed linking some of the veins, and can be mineralised.</p> <p>The mineralisation has been defined with a strike length of about 1 km. The veins average between one and two metres in width.</p>
<b>Drillhole information</b>	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i></p> <ul style="list-style-type: none"> <li>• <i>easting and northing of the drillhole collar</i></li> <li>• <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</i></li> <li>• <i>dip and azimuth of the hole</i></li> <li>• <i>downhole length and interception depth</i></li> <li>• <i>hole length.</i></li> </ul>	Exploration results are not being reported.
	<i>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.</i>	Exploration results are not being reported.
<b>Data aggregation methods</b>	<i>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.</i>	Exploration results are not being reported.
	<i>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.</i>	Exploration results are not being reported.

Criteria	JORC Code explanation	Commentary
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Exploration results are not being reported.
<b>Relationship between mineralisation widths and intercept lengths</b>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Exploration results are not being reported.
	<i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i>	Holes were drilled orthogonal to mineralisation as much as possible; however, the exact relationship between intercept width and true width cannot be estimated exactly in all cases.
	<i>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</i>	Exploration results are not being reported.
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</i>	Exploration results are not being reported.
<b>Balanced reporting</b>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	Exploration results are not being reported.
<b>Other substantive exploration data</b>	<i>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.</i>	No substantive exploration data not already mentioned in this table has been used in the preparation of this MRE.
<b>Further work</b>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Further work will be focused on infilling mineralisation to upgrade to a higher Mineral Resource classification and testing for dip extensions and strike extensions.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Exploration results are not being reported.

### Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i>	Logging information was originally recorded on paper, then entered into MS Excel spreadsheets, which were then imported into an Access database. Original assay certificates were not available for this MRE. There is no information about data entry.
	<i>Data validation procedures used.</i>	(Golder Associates, 2012) state that they carried out a review of the drillhole database, and verified it against a small selection of raw data. RMG carried out thorough validation of the data using tools in Micromine. The data is considered adequate for this MRE.
<b>Site visits</b>	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	Steve Rose is the Competent Person. He visited the site in 2012. No exploration activity was being carried out at the time, but it showed the exploration office, the coreshed, sampling locations. During the visit time was also spent at Tolukuma gold mine, examining the assay laboratory, the underground mine and surface plant.
	<i>If no site visits have been undertaken indicate why this is the case.</i>	Not applicable.
<b>Geological interpretation</b>	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	There is a reasonable level of confidence in the geological interpretation of the mineralisation that is traceable over numerous drillholes and trenches.

Criteria	JORC Code explanation	Commentary
	<i>Nature of the data used and of any assumptions made.</i>	Surface mapping of mineralised outcrop, drillhole intercept logging, assay results and detailed geological logging have formed basis for the geological interpretation.
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	Geological continuity is implied between drillholes and conforms well to the anticipated geological model based on the interpretation of regional and local geology, and its association with mineralisation. The data does not readily offer alternative interpretations. In places, the precise limits and geometry cannot be absolutely defined due to the limitations of the current drill coverage and the structural complexity. Further work is required to better define the geometry and limits of the mineralised zones, but no significant downside changes to the interpreted mineralised volume are anticipated.
	<i>The use of geology in guiding and controlling Mineral Resource estimation.</i>	The grade and lithological interpretation form the basis for the modelling.
	<i>The factors affecting continuity both of grade and geology.</i>	Mineralisation is hosted in epithermal quartz veins. The veins are emplaced into steep northwest-southeast structures. The structures are a second or third order response to the tectonic history of the area.
<b>Dimensions</b>	<i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i>	The Mineral Resource has a strike length of 1,000m, a width of 500 m (in five veins, each of 1 m each) and extends from surface to 120 m below surface.
<b>Estimation and modelling techniques</b>	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i>	Grade estimation was carried out using the geostatistical method of ordinary kriging. The methods use estimation parameters defined by variography. The 1 m composite top-cut dataset was used for the grade interpolation. Estimation of the resource was completed using Micromine. The mineralisation domains, resource category and lithology were coded to the block model. Density data was applied on the basis of lithology.
	<i>The availability of check estimates, previous estimates and/or mine production records and whether the MRE takes appropriate account of such data.</i>	A check Inverse Distance estimate was carried out. There is no production from Saki.
	<i>The assumptions made regarding recovery of by-products.</i>	Not considered.
	<i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i>	No potentially deleterious elements have been considered.
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	A 3D block model was generated to enable grade estimation. The selected block size was based on the geometry of the domain interpretation and the data configuration. A block model was created using 10.0 mE x 10.0 mN x 10.0 mRL parent blocks. Sub-cells were generated down to 2 mE x 2 mN x 2 mRL) as appropriate to honour wireframe domains and geological interpretations during model construction.
	<i>Any assumptions behind modelling of selective mining units.</i>	No selective mining units were assumed in this estimate.
	<i>Any assumptions about correlation between variables.</i>	No strong correlations were found between the grade variables.
	<i>Description of how the geological interpretation was used to control the resource estimates.</i>	The geological interpretation was used as a basis for mineralisation modelling. Lower cut-off grades of 0.3 g/t Au for gold domains defined the mineralised envelopes in conjunction with mapping and logging of veins. Hard boundaries between the grade envelopes were used to select sample populations for grade estimation.
	<i>Discussion of basis for using or not using grade cutting or capping.</i>	Top cuts were used to treat the high-grade outliers of the domains. Top cuts were based on review of the domain histogram and log probability plot.

Criteria	JORC Code explanation	Commentary
	<i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i>	Validation of the block model consisted of comparison of the block model volume to the wireframe volume. Grade estimates were validated by statistical comparison with the drill data, visual comparison of grade trends in the model with the drill data trends. Additionally, swath plots were generated to verify block model grades vs drillhole grades along easting, northing and elevation slices. QKNA was carried to optimize block model parameters.
<b>Moisture</b>	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	Tonnages are estimated on a dry basis.
<b>Cut-off parameters</b>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	The Mineral Resource has been reported above a 1 g/t Au cut-off grade.
<b>Mining factors or assumptions</b>	<i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i>	Saki is only 3 km from an operating gold mine; some work has been completed on permitting a road between Saki to Tolukuma; The veins at Saki are similar to those being exploited at Tolukuma; The gold grades at Saki are reported above a sensible cut-off grade; The mineralisation at Saki is within 100 m of the surface;
<b>Metallurgical factors or assumptions</b>	<i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	No metallurgical testwork data was available. Similar veins are currently being mined at the nearby Tolukuma Gold Mine. Nothing in the geological logs or the assays suggests there will be problems with gold extraction using conventional methods.
<b>Environmental factors or assumptions</b>	<i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i>	No assumptions have been made. The nearby Tolukuma Gold Mine has been in production for many years. It is assumed that mining on a similar scale can be approved.
<b>Bulk density</b>	<i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i>	A table of density data was provided in the dataset. (Golder Associates, 2012) goes into some detail on the processes being used, and sets out a table. This information was used for this MRE. The values applied seem reasonable based on the lithologies present.
	<i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i>	Some porosity can be expected, however, the bulk density assigned is considered to be reasonable.
	<i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	Values were assigned on the basis of lithology.

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Classification</b>	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i>	The Mineral Resource was classified as Inferred, considering the level of geological understanding of the deposit, survey precision, quality of samples, density data, drillhole spacing and sampling and assaying processes.
	<i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i>	The following initial classification approach was adopted: <ul style="list-style-type: none"> <li>• The resource was classed as Inferred if the block was filled in the second pass of estimation, with a radius of 120 m.</li> <li>• The resource was not classified if block received a grade on the third estimation pass.</li> </ul> The initial classification was reviewed visually. Based on the initial classification, strings were created and used to assign the RESCAT to the model.
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	The MRE appropriately reflects the view of the Competent Person.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of MREs.</i>	No audits have been carried out.
<b>Discussion of relative accuracy/ confidence</b>	<i>Where appropriate a statement of the relative accuracy and confidence level in the MRE using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i>	The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The MRE has been classified in accordance with the JORC Code (2012 Edition) using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.
	<i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i>	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.
	<i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	Saki is at the prospect stage; it is not in production.