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ASX Limited

Market Announcements Platform

10 February 2021

Modelling Extends Saki-Yava-Soju Vein system

- An independent technical analysis of all surface and drillhole geochemistry at the Saki-Yava-Soju vein systems shows a significant increase of interpreted gold veins.
- The interpreted system of gold veins at Saki-Yava prospects more than **doubles the area covered by previously known veins** and provides a substantial target area of 3.6km² for follow-up sampling and drilling to develop a gold resource near the Tolukuma gold mine.

Frontier Resources Limited (**Frontier** or the **Company**) is pleased to announce results from an independent technical analysis of geochemical data over the Saki-Yava-Soju system of gold veins that lie 2 to 3km east of the Tolukuma mine (ML104) and 70km north of the national Capital of Port Moresby (Figure 1). The low sulfidation vein-type deposits at Saki and Soju-Yava share similar characteristics with that of the Tolukuma gold deposit within ML104.

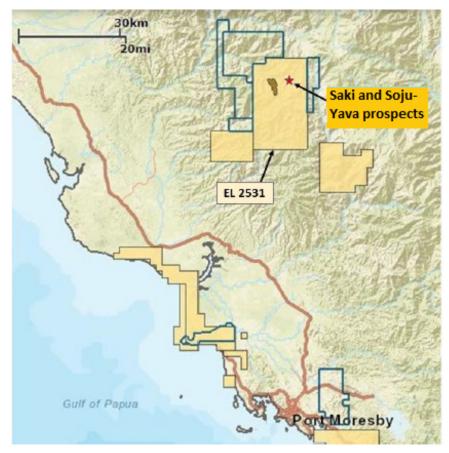


Figure 1: Location of the Saki-Yava-Soju Prospects in EL2531

The technical review completed by an independent expert geologist aimed to identify anomalies, signatures or patterns displayed from metal concentrations in geochemical samples together with element correlations to map out previously undefined vein targets for follow-up trench sampling.

Historically mapped gold-bearing veins at Saki are predominated by NNW-SSE and E-W trending fissure veins. At the Soju-Yava prospect 1km to the northeast of Saki, veins generally trend NW-SE to NNW-SSE with E-W trending veins at places (Figure 2). Historical drilling at Saki (Figure 5) targeted some of the 54 trenches that were anomalous in gold, some up to 6m wide, with best surface grades of **0.5m @ 535 g/t Au** and **1.0 m @ 55.69 g/t Au** (refer to ASX Announcement dated 7 October 2019). Many of the existing gold anomalous trenches are yet to be drill tested and will be followed-up in a future drilling program.

The newly interpreted system of gold veins over the Saki-Yava area occur within an envelope of mineralisation of more than 3.6km² (Figure 2) and provides a substantial target area for follow-up trench sampling, geological mapping and subsequent drill hole targeting with an aim to develop a significant gold resource for future "mill-feed" to the mine.

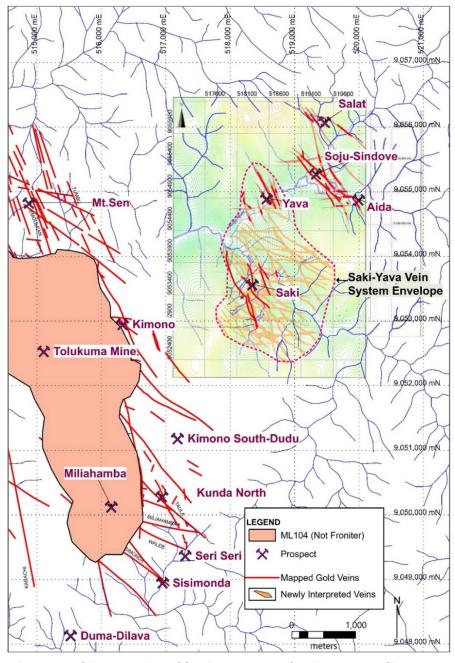


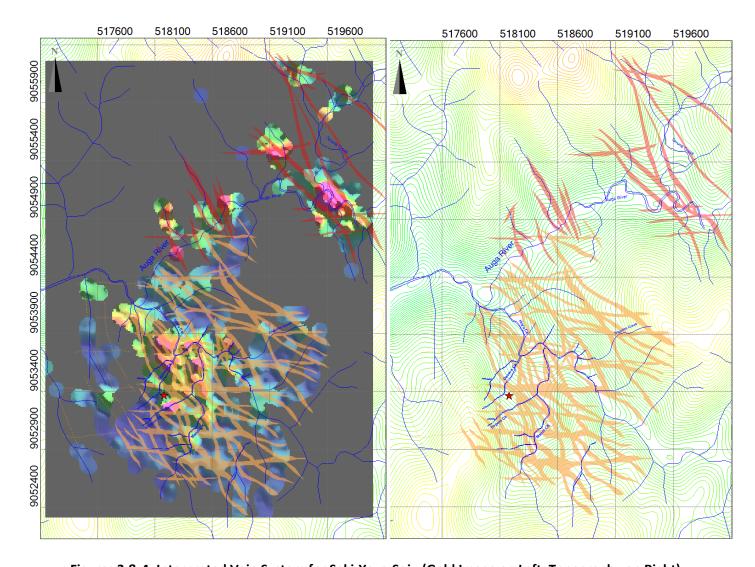
Figure 2: Saki-Yava-Soju Gold Vein System and Veins Surrounding ML104

Numerous historical data-sets of soil, rock chip, trench and diamond drill core results were acquired, processed and analysed for the Saki-Yava-Soju prospects and a total of 4260 surface samples were filtered for analyses (Table 1).

Table 1: Summary of Data-Sets Analysed at Saki-Soju-Yava

Prospect	Sample type	Number of samples analyzed
Saki	Rock	221
Saki	Trench	1613
Saki	Soil	1026
Saki	Drill core	1157
Soju-Yava	Rock	208
Soju-Yava	Trench	35

Elements targeted in this study include gold (Au), silver (Ag), lead (Pb), antimony (Sb), copper (Cu), zinc (Zn) and mercury (Hg). Arsenic (As) is included for drill core data analysis from holes SK001 to SK045 (Figure 5), excluding SK044 which was abandoned. The geochemical analysis found a positive association of gold with silver (Ag) and antimony (Sb) with implied base metal sulphides formed at depth in a porphyry copper-gold system at depth. A significant system of veining has been interpreted from the analysis (Figures 3 and 4).



Figures 3 & 4: Interpreted Vein System for Saki-Yava-Soju (Gold Image on Left, Topography on Right)

- 1. From rock samples, correlation x-y plots show a positive correlation between gold and silver (Ag), lead (Pb), antimony (Sb) and Mercury (Hg).
- 2. Trench samples with gold Au >3 g/t show similar correlations to those from rock samples except for Antimony (Sb) and Mercury (Hg).
- 3. Soil samples show a correlation of gold with silver (Ag), lead (Pb), copper (Cu) and Mercury (Hg).
- 4. A total of 1,157 drill core data in 44 drill holes for Saki were processed for analysis (Figure 5). Comparing all drill core samples, the correlation between gold with silver remains high with both having a significant correlation to Antimony (Sb), Copper (Cu) and Mercury (Hg) and a positive relationship with lead (Pb) and Zinc (Zn).

The newly interpreted vein anomaly map for Saki (Figure 2) has been proposed by combining geochemical assay attributes, soil assay grid maps and the historical vein anomaly map shown in Figure 5 below.

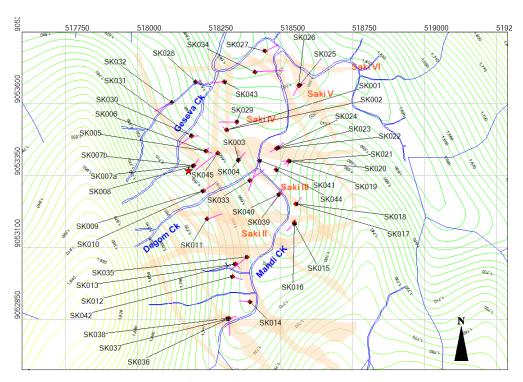


Figure 5: Drill collar locations for SK001 to SK045 and Historically Interpreted Veins

Soju-Yava Prospect

A total of 208 rock samples and 35 trench samples from the Soju-Yava gold prospects were analysed with gold showing a close association with silver (Ag) and antimony (Sb). Gold bearing veins mainly trend NW-SE to NNW-SSE based on historical trench mapping (red dashed lines; Figure 6). A series of E-W trending veins also exist with best historical trench sampling results at the Justin Vein at Soju of 1.0m @ 158.37 g/t Au (refer to ASX Announcement dated 19 August 2020). Best surface rock sample results taken by Newmont in 1989 include 1,750 g/t Au and 183 g/t Au with drilling results of 0.3m @ 6.13 g/t Au (refer ASX release 19 August 2020). With only seven drillholes completed, the Soju-Yava vein system is virtually untested by drilling.

New veins have been interpreted (Figure 6) based on geochemical signatures expressed by rock and trench samples. Additional rock chip and trench sampling has been recommended to affirm the extension and existence known and interpreted veins, respectively.

High-level intrusives are reported near Soju close to subsurface and mineralisation observed at Soju-Yava may be associated with a porphyry copper-gold deposit at depth.

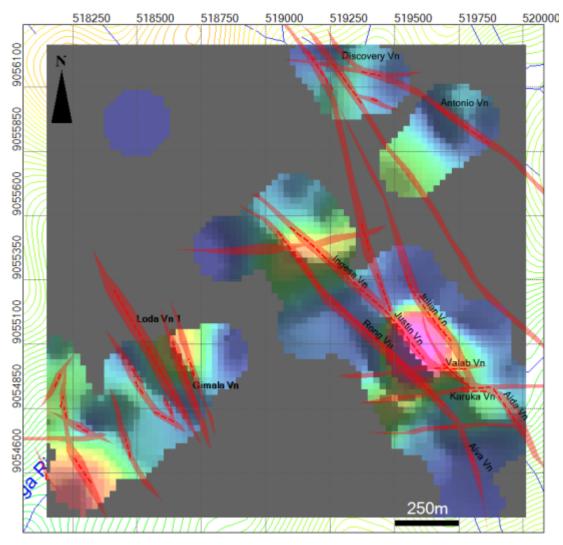


Figure 6: Gold Sample Colour Grid with Interpreted Veins (Transparent Red Lines) and Historical Trends (Dashed Red Lines)

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

FRONTIER RESOURCES LTD

Competent Person Statement:

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by or compiled under the supervision of Peter Swiridiuk - Member of the Aust. Inst. of Geoscientists. Peter Swiridiuk is a Technical Consultant and Non-Executive Director for Frontier Resources. Peter Swiridiuk has sufficient experience which is relevant to the type of mineralisation and type of deposit under consideration to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Resources. Peter Swiridiuk consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. Additionally, Mr Swiridiuk confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.

Frontier Resources Ltd Exploration Licence Information

Exploration Licence		sub-	AREA		
Number and Name	Ownership	blocks	(sq.km)*	Grant Date	Expiry Date
EL2531 - Tolukuma	100% Frontier Copper PNG Ltd	130	441.72	25-Feb-19	24-Feb-21
ELA2529 - Gazelle	100% Frontier Copper PNG Ltd	211	719.51	N/A	N/A
	Total of Granted EL's	130	441.72		

*1 sub-block approx. 3.41 sq.km

NB: 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 if granted.

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

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). 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. 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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Historical drill core samples were sawn in two, with hal returned to the core tray for visual inspection and the othe half sent to the Tolukuma Gold Mines (TGM) lab fo assaying. Downhole surveys were completed. Sampling was supervised and reported by on-site geologists to ensure sample representivity. Historical diamond core HQ drilling was done to obtain mineralised vein sections in multiples of 50cm then to work back to the remainder of the core section to be assayed at intervals marked by the site geologist and separated by wooden core markers. 2kg samples were oven dried for 6-8hrs @ 120DegC, crushed to -2mm, spli by Riffle Jones splitter. 300g were pulverised to <75microns with >95% passing with a final 20g submitted for assay. All rock and trench samples were logged in a rock-chip sample ledger and assayed using standard laborator techniques. All sampling were supervised and reported by on-site geologists. Material aspects of the mineralisation are noted in the tex of the document.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	 Longyear38 man portable drill rig operated by United Pacific Drilling for historical drilling. PQ and HQ diamond core was orientated. No drilling has been undertaken by Frontier.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Core was visually assessed on-site on tables constructed at the core shed at Saki camp. Historical drilling recovery was essentially 98 – 100% with an average of over 99%. Diamond impregnated bits and driller experience contributed to good core recoveries. No relationship exists between grade and recovery. No drilling has been undertaken by Frontier.
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. The total length and percentage of the relevant intersections logged. 	 Drill core was sampled logged on paper by an experienced geologist for alteration mineralogy, lithology and mineralisation. Geotechnical parameters included recovery, compressive strength and RQD to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Core trays were photographed in two trays at a time. Part of the logging included unconfined compressive strength estimations. Logging was qualitative in nature and based or geological observations. Detailed geological descriptions were hand-written into a drill log for each core section and transferred to spreadsheets. The total length and 100% of all drill core was logged. Trench samples geologically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. No drilling has been undertaken by Frontier.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 No drilling has been undertaken by Frontier. Drill core samples were sawn in two, with half returned to the core tray for visual logging and all the other half sen to the TGM lab for assaying. Drill half core 2kg samples were submitted to the Laboratory for sample preparation and assaying. Sampling was supervised by TGM's Senior Geologist by visual inspection. Core sample sizes of 50cm as determined by the geologist by visual inspection are appropriate for the quartz vein material being sampled. Core was transported to the on-site laboratory by helicopter. Procedures of drying, crushing, splitting and pulverising was practiced by TGM local laboratories for analysis Pulps were irregularly sent to an outside independent laboratory for quality checking

laboratory for quality checking.

Sampling has been supervised by TGM's Senior Geologist and sample sizes are appropriate for the quartz vein material being sampled.

Criteria	JORC Code explanation	Commentary
		No drilling has been undertaken by Frontier.
		 Sampling sizes are appropriate for the quartz vein material being sampled. 2kg of rock samples taken by Frontier were crushed to 70% less than 2mm and split by Riffle Jones splitter then 250g were pulverized to better that 85% passing 75 microns with a final 30g submitted for assay.
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. 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. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Rock samples taken by Frontier have been sent to ALS Laboratories in Brisbane for preparation. All samples were sorted and pulverised (85%<75µm) up to 2kg. They were fire assayed at the ALS laboratory for total gold with a 30g charge (FA50/AA). All rock, trench and soil samples have undergone aqua regia digestion (ME-MS41) at the ALS laboratory in Brisbane for a suite of 51 elements (Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, Ln, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr). Levels of accuracy obtained from ALS assaying results are Au 0.01 ppm, Ag 0.01 ppm, As 0.1 ppm, Ba 10 ppm, Cu 0.2 ppm, Mo 0.05 ppm, Pb 0.2 ppm, Sb 0.05 ppm and Zn 2 ppm. All samples have been stored at ALS laboratories for future re-analysis if required. Duplicates and blank have not been used by Frontier due to the reconnaissance nature of the sampling program by Frontier. Duplicates have not been reported from historical reports. Duplicates, Standards and Blanks have been used by ALS Laboratories for their own quality assurance procedures. Historical procedures undertaken by TGM were appropriate. Samples were crushed and prepared as 20g samples for assaying for a partial aqua regia digest and AAS for Au, Ag, Pb, Cu, Zn, Sb. The principle of Aqua Regia digest is that gold can be dissolved by a mixture of 3 part hydrochloric acid to one part nitric acid. Rock samples were fire assayed for total gold. No Geophysical tools were used.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Verified by senior geologist and other geologists onsite at the time. No drilling has been undertaken by Frontier. All assay data is stored as digital Excel spreadsheets and stored in reports submitted to the MRA library in digital PDF and Excel formats.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Historical drill holes were located initially by tape and compass surveying for drill sections and long sections. No drilling has been undertaken by Frontier. Trench/costeans were located initially by GPS and tape and compass surveying of creeks taken. Map Datum is AGD66. Topographic control is low with 40m contours from 1:100,000 plans and 10m contours from airborne DTM contours.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	 Refer to any attached plans and tables for rock and trench/costean spacing. No drilling has been undertaken by Frontier. Trench locations and hence data spacing and distribution is not yet sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedures. Sample compositing was not applied.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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 drilling has been undertaken by Frontier. Historical drill holes are designed to intersect known mineralisation from surface trench results in a nominally perpendicular orientation as much as is practicable. Sample intervals are selected based upon observed geological features and the strike of the narrow quartz veins. Trench samples are taken to intersect known mineralisation from surface trench results in a nominally perpendicular orientation as much as practicable. Sample intervals are selected based upon observed geological features and the strike of the quartz veins. Trench/costean samples have been taken selectively within each trench.

Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	 Access to site is controlled and rock trench samples are stored on-site in a remote location. Site employees transport samples to the PNG Capital of Port Moresby by helicopter. Local employees transport the samples to the analytical lab via air cargo. The laboratory compound is secured.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 No audits or reviews of sampling techniques and data have been performed.

Section 2 Reporting of Exploration Results

(Criteria lis	ted in the preceding section also apply to this section.)			
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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Frontier Resources Ltd have a 100% ownership of Frontier Copper (PNG) Limited, which hold 100% title to Exploration Licence EL 2531-Tolukuma. There are no joint ventures or partnerships in place. Frontier Copper PNG Ltd IPA Certification Number: 91414 was re-issued on 26th April 2019 and originally Certified 8th November 2005. There are no known impediments to operate in the Tolukuma EL. Tenements are granted by the Minister of Mines for a period of two years and security is governed by the PNG Mining Act 1992 and Regulation. Frontier has applied for a two year tenement renewal due 24th February 2021 which required a 50% reduction in tenement size. 		
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 EL2531 Tolukuma was initially stream sampled by Kenecott in the 1960's afterwards by CRAE who completed both steam sediment sampling and rock chip sampling. Newmont 1985-1988 discovered the Tolukuma vein and completed costean and soil sampling and diamond drill holes testing the NW-SE Taula Vein. Newmont completed resource drilling and mine feasibility studies. From 1989-1992 Newmont completed 2nd phase drilling. Dome Resources purchased the Exploration license from Newmont in 1992 and completed feasibility studies in the ML104, granted in 1994, with first gold poured in December 1995. In 2000, Durban Roodepoort Deep purchased Dome Resources and took over all its interests in PNG. TGM's work programs (now 100% DRD included trench sampling and mapping. Work commenced at Saki in 2002 with a programme of extensive trench sampling and mapping and drilling at the Kunda prospect both inside ML104 and within the current EL2531. Petromin PNG Holdings acquired 100% of the Tolukuma projects from Emperor Mines in 2008. Singapore company Asidokona purchased Tolukuma Gold Mines Ltd from Petromin (PNG Government) in November 2015. The Tolukuma gold mine is currently under control of the MRA. New investment is currently being sought to refurbish the mine and to establish a resource drilling program on ML104. EL2531 was acquired by Frontier on a first application basis when it was offered by the MRA. 		
Geology	Deposit type, geological setting and style of mineralisation.	 The veins are typically +/-1.0m wide with strike lengths ranging from 20m (Salat Vein) to 90m (Rhong Vein) to 600m (Tevuna Vein) and are locally truncated by E-W faults with a left lateral displacement of up to 60 meters. The cross faults are locally strongly mineralised at the structural intersections. The veins are associated with zones of clay+pyrite+quartz (argillic) alteration hosted within propylitically altered Mt. Davidson Volcanics. Compositionally the veins are "base metal rich comprising coarse bladed stibnite in the northwest (Ingesa and Kamikazi veins) ranging to sphaleritegalena-chalcopyrite in the southeast (Aida Vein). Texturally the veins display variable hydrothermal brecciation, local sulphide banding and a general absence of colloform and crustiform textures. Soju and Yava Prospects lie entirely within the Late Miocene to Early Pliocene Mt. Davidson Volcanics. At Soju the volcanics comprise light to medium green porphyritic feldspar andesites, crystal lithic tuffs and 		

Criteria	JORC Code explanation	Commentary	
		fluidised volcanic breccias. The crystal lithic tuffs are moderately sorted, well bedded, and contain rare small metamorphic lithic fragments. TGM mapped a possible andesitic intrusive body at Yava. The fluidised breccias are coarse to very coarse and polymictic with clasts of andesite and porphyritic andesite in a dark grey to black matrix. Clasts are typically well rounded, strongly altered and range from 2cm to 10cm or more. All surface outcrops at Soju are heavily altered and primary features are difficult to identify. In contrast to Soju, Yava Prospect is located entirely in unaltered predominantly massive, dark green andesitic volcanics, commonly fractured, which locally grade into hornblende andesites.	
Drill hole 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. 	 Frontier has acquired historical reports with drillhole and trench information that have been reviewed and interpreted. Digital databases have also been acquired over known prospects within EL2531 and have formed part of the regional evaluation process of prospects within EL2531 and used in the required 50% tenement reduction as required for tenement renewal. 	
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	Trench grades are compiled using length weighting. No metal equivalent values are used.	
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'). 	widths & intercept lengths from trench/costeans is moderately well understood. Assay results from the Frontier sampling are continuing to be received.	
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 maps, sections and tabulations of drillhole rock, soil and trench/costean intercepts are included where relevant.	
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	sample results has occurred in historical reports and	
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. 	 included in this and previous ASX announcements. All geochemical analysis has been completed by independent geologist Thomas Tagab Sorulen (PhD). 	
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. 	lateral extensions of known veins and interpreted vein systems at Kimono and Saki prospect areas. • Appropriate plans are included where possible.	