



Address
Level 8, 99 St Georges Terrace, Perth WA 6000
Phone
+61 8 9486 4036

ABN
96 095 684 389
WEBSITE
www.frontierresources.com.au

ASX Limited
Market Announcements Platform

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Kimono Fieldcrew Identifies 7m Vein with Panned Visible Gold

- An experienced team of three PNG geologists are continuing rock, trench and soils sampling at Kimono. Work has been focussed on the intersection zone between the NNW-trending Kimono Vein and the NW-trending 120 Vein.
- **Visible gold** was panned from quartz veining in a 7.0m wide zone which may be a continuation of one of the splays of the Kimono Vein with 1-3% disseminated pyrite.
- Several new zones of alteration/veining/brecciation have been mapped and sampled in Muile, Hosiga and Dudu Creeks. The mapped zones range up to 10m in width with a similar northwest trend to the high gold grade 120 Vein where historical trenching returned **13m @ 49.0 g/t Au**.
- A total of 69 rock and trench samples have been collected along with 46 soil samples. Additional trench sampling is underway at the main **Kimono Central vein** where historical Trench #4 (1.6m @ 7.84 g/t Au) and Trench #5 (2m @ 12.3 g/t Au) have been re-located.
- Two previously unknown historical drill sites have been located at Kimono and work is planned to re-log the core.

Frontier Resources Limited (**Frontier** or the **Company**) is pleased to announce the progress of its sampling and mapping program at the Kimono gold prospect. Following two successful landowner meetings, three PNG geologists and support staff from local villages have completed construction of field camps and a helipad (Photo 1 and 2) with another camp location being sighted for future drilling with good mobile phone reception. Daily pre-start meetings are held each morning before work, allocation of duties and safety briefings. Frontier's exploration activities have helped local landowners benefit from employment and extra cash to the local community.



Photo 1: Helipad construction



Photo 2: Geologists' camp

The Kimono gold prospect is defined by a mineralised zone extending for about 4.0km encompassing the Kimono, 120 and Dudu gold veins. Field mapping and sampling to date has been focussed on the intersection zone between two historical mineralised trends, the NNW-trending Kimono Vein and the NW-trending 120 Vein (Figure 1).

Several new zones of alteration, veining and brecciation have been mapped and sampled by Frontier in Muile, Hosiga and Dudu Creeks (Figure 2). These zones within andesitic volcanics range from 20cm to 10m in width with a similar northwest trend to the historical high grade 120 Vein where trench highlights within EL2531 include (refer to ASX Announcement dated 29 May 2019):

- Trench 3: **1m @ 11.5 g/t Au**
- Trench 4: **13m @ 49.0 g/t Au**
- Trench 5: **0.3m @ 107 g/t Au**
- Trench 6: **2m @ 3.4 g/t Au**

Frontier fieldwork highlights include:

1. A 7.0m wide zone trending 300° of clay-pyrite-sericite alteration and quartz veining with 1-3% disseminated pyrite from which **fine colours of gold were panned** in Dudu Creek. This zone may be a continuation of one of the splays of the Kimono Vein and needs to be traced further;
2. A 10.0m wide zone trending 300° of silicified breccia with 1-5% disseminated pyrite mapped in Holsiga Creek;
3. A 65cm wide quartz vein with 1-2.5% pyrite within a silica-clay-pyrite alteration halo mapped in Holsiga Creek;
4. A 1-2m wide brecciated quartz vein with fine sulphides and typical botryoidal, saccharoidal, colloform and chalcedonic epithermal quartz textures mapped in Muile Creek;
5. Several new zones of alteration/veining/brecciation, associated with argillic, phyllic or silica alteration have been mapped and sampled in Muile, Holsiga and Dudu Creeks; and
6. Located historical Trenches #4 and #5 where historical results included **1.6m @ 7.85 g/t Au** and **2m @ 12.3 g/t Au** (refer ASX Announcement dated 28 May 2019).

A total of sixty-one rock and trench samples (27 trench, 26 rock chip, 8 rock float) were collected from Kimono South (Figure 2) during the first two weeks of fieldwork with an additional eight samples (2 trench, 2 rock chip, 4 rock float) collected more recently.

Reconnaissance creek mapping commenced in Muile creek on the 7 September, within the vicinity of the camp, and then along Dudu and Holsiga creeks. Frontier plans to undertake further trench sampling at Kimono Central vein where two ENE trending veins intersect with the Kimono Vein (Figure 1) and its splays. This sampling will be critical to expanding the continuity of the Kimono Vein and aid in delineating drill targets.

Reconnaissance rock sampling, pitting and trenching is planned over selected historical soil anomalies (refer ASX Announcement dated 4 September 2020). Frontier soil sampling is currently designed to intersect or trace the Kimono vein and its splays and trace the 120 Vein respectively. Follow-up Ridge and Spur rock sampling along soil anomalies will be completed to help delineate additional gold targets.

Two previously unknown historical drill holes KI001 and KI002 (Figure 2 and Table 1) have been located and appear to have been drilled from the wrong location. It is suggested future drilling should target the intersection of the Kimono Vein, splays and the ENE veins. Drill core from these two holes are currently stored at the Saki prospect campsite and re-logging of drill core is planned to help in understanding the geology and veining intersected at depth for better future drillhole targeting. Historical drill logs and assay results are currently being sought.

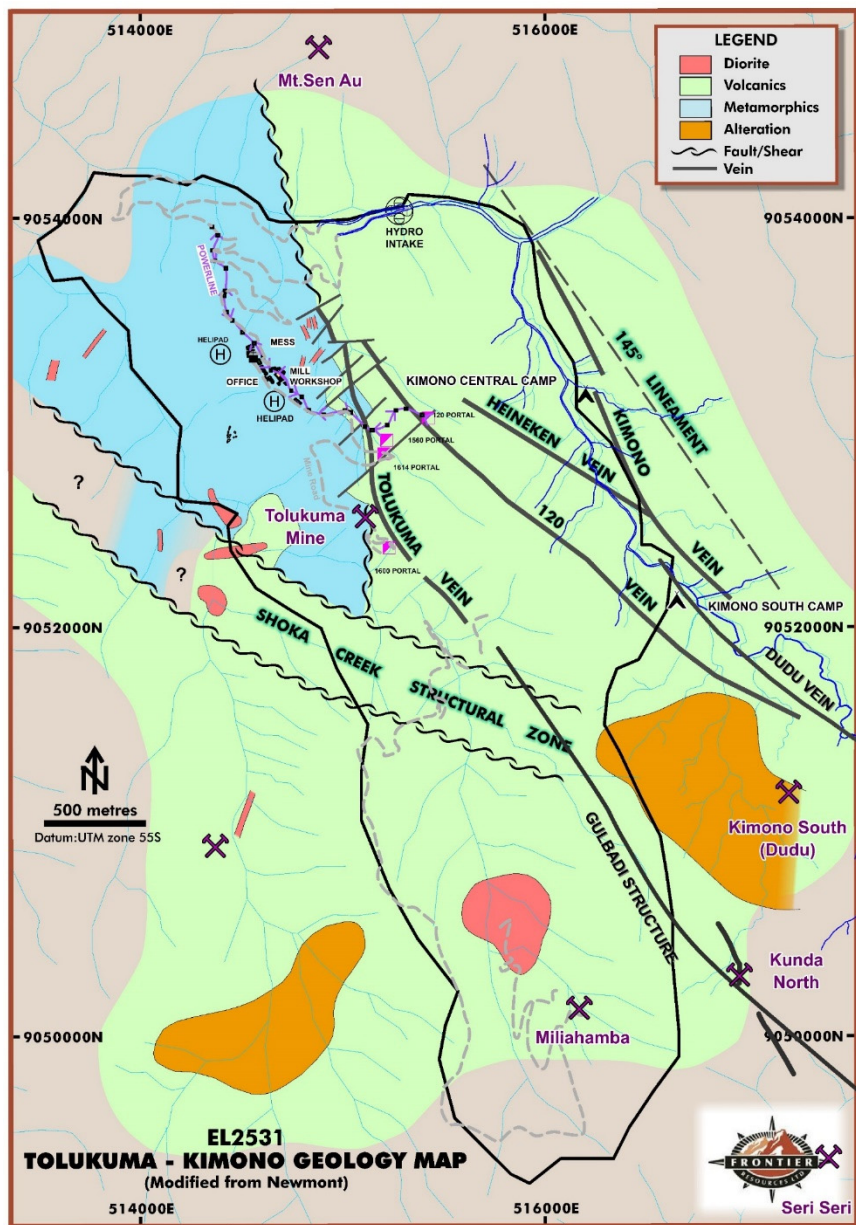


Figure 1: Kimono Geology and Vein Systems

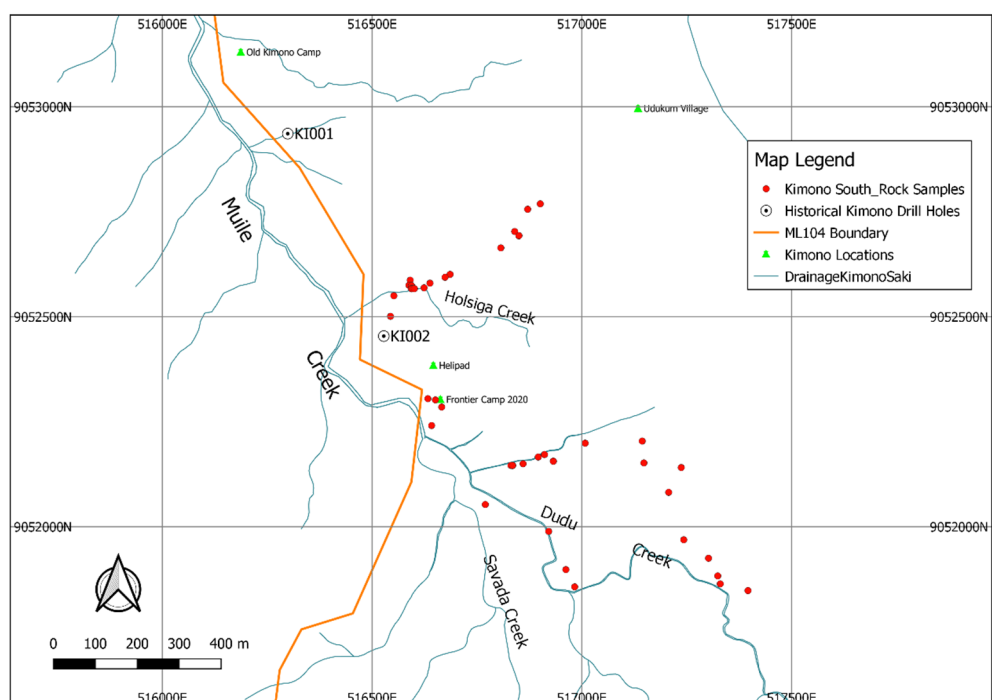


Figure 2: Rock Samples Collected at Kimono South

Table 1: Historical Drill Hole Particulars (approximate)

Hole ID	Easting	Northing	RL	Azimuth	Dip	EOH	Comments
KI001	516299	9052936	1600	035	-70	350m?	Target: Outcrop #6
KI002	516528	9052454	1588	100	-70	320m?	Target: Kimono vein southern extension

An old walking track still in good condition was followed between drill pads KI002 to KI001. Along the track at GPS coordinates 516512E, 9052618N a one-metre wide silicified outcrop was found with 2mm-100mm size quartz veining and strike/dip of 075/75SE (Photo 3-A), believed to be a splay/dilational jog between the Tolukuma vein and Kimono vein. Further north near the KI001 drill pad, a 1-2m wide outcrop of pinch and swell quartz vein with variable widths was exposed along a 15m section of the creek. The vein trends sub-parallel to the creek with quartz showing boytroidal, saccharoidal, colloform, comb and chalcedonic textures (Photo 3 B&C). Float rock samples of mineralised quartz veins also persist upstream which may be shedding from the main Kimono vein. Further north a 3 to 5m wide zone of massive quartz is exposed on a small ridge for about 20m and these are considered potential drill targets.

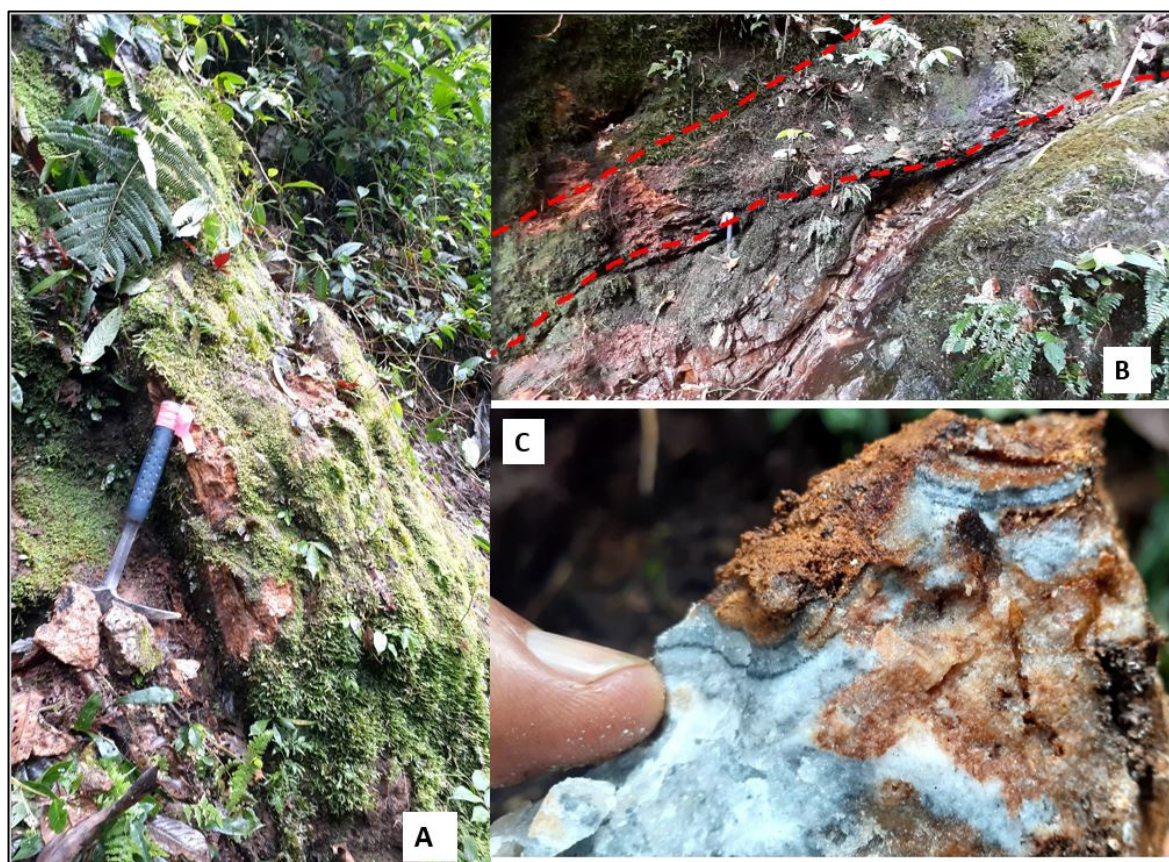


Photo 3: Kimono Central Silicified Outcrop. (A) 1m wide quartz vein along walking track; (B) 1-2m wide quartz vein near KI001 drill pad dipping into the page; (C) Epithermal textures including colloform banding with abundant dark fine grain sulphides.

This announcement has been authorised for release by the Directors of the Company. For additional information please visit our website at www.frontierresources.com.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 Number and Name	Ownership	sub-blocks	AREA (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 is 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 rock and channel samples were sent to the TGM lab for assaying. - Sampling was supervised and reported by on-site geologists to ensure sample representivity. 2kg samples were crushed to -2mm and split by Riffle Jones splitter then 300g were pulverized <75 microns with a final 20g submitted for assay. - All trench/rock samples were logged in a rock-chip sample ledger and assayed using standard laboratory techniques. - Material aspects of the mineralisation are noted in the text 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).	No drilling undertaken.
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.	No drilling undertaken.
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.	No drilling undertaken.
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 undertaken. - Sampling was supervised by TGM's Senior Geologist by visual inspection. Samples were transported to the on-site laboratory by vehicle. - Historical procedures of drying, crushing, splitting and pulverizing is practiced by TGM local laboratories for analysis. Pulps are irregularly sent to an outside independent laboratory for quality checking. - Sampling sizes are appropriate for the quartz vein material being 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. - For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the	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

Criteria	JORC Code explanation	Commentary
	- 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.	3 part hydrochloric acid to one part nitric acid. - Rock samples were fire assayed for total gold and cyanide extractable Ag, Cu. Acceptable accuracy and precision levels were established and reported by the lab. - No Geophysical tools were used - Acceptable levels of accuracy were obtained in the assaying results of Au 0.01 ppm, Cu 1 ppb & Ag 0.01 ppm. - Duplicates were not reported in historical reports.
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 undertaken. - All historical assay data is available on spreadsheets obtained from geologists working on the project. Trench assay data has been submitted to the MRA library as paper copies which were later scanned to digital format.
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.	- No drilling undertaken. - Trench/costeans were located initially by GPS and tape and compass surveying of creeks. - 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 undertaken. - 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.	- Trench samples were 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 narrow quartz veins. - 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. - No drilling undertaken.
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 analytical lab. 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 listed 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.
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 stream sediment sampling and rock chip sampling. - Newmont 1985-1989 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. - Dome Resources purchased the Exploration license from Newmont in 1992 and completed feasibility studies at ML104, granted in 1994, with production commencing

Criteria	JORC Code explanation	Commentary
		in 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 a newly appointed investor in which approximately A\$21million will be spent on refurbishing the mine, environmental work and resource drilling. EL2531 was acquired by Frontier on a first application basis when it was offered by the MRA.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	- Kimono consists of narrow gold mineralised structures of mainly quartz with minor sulphides including pyrite, marcasite, stibnite and cinnabar and silica-sulphide banding. Mineralization is described as "poddy style" with higher gold grades located where cross-cutting clay-sericite altered cross structures containing local minor silicification and trace sphalerite intersect the main Kimono Vein. The Kimono structure was traced for about 1km SSE from the Auga River. The outcrops range from 20-40m in strike length and 0.1m-3.0m wide. - The quartz veins are hosted within rocks of the Pliocene to Miocene Mt.Davidson Volcanics comprised of a complex of Andesitic flow units and Pyroclastic flow units that have been subsequently intruded by quartz Diorites and Monzonites. - The dominant lithology of Kimono is basaltic andesites with minor agglomerate breccias and tuffaceous volcanics, which are members of the Boundary Volcano Suite. - At Kimono South, wide intervals of weakly anomalous gold (>0.05g/t Au) were defined by ridge-spur soil samples, including separate intervals of 160m and 140m. - Historical mapping, rock chip sampling, soil sampling, trenching and airborne geophysics have defined a mineralised zone extending for about 4.0km from the Auga River SSE to upper Muile Creek. - Mineralisation is described in the text.
Drill hole Information	<i>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:</i> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <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>	- No drilling undertaken. - Frontier has acquired additional historical reports which have drillhole and trench information that are currently being reviewed. Digital databases have also been acquired over a number of prospects within EL2531 and form part of the on-going evaluation process of the tenement.
Data aggregation methods	<i>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.</i> <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> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	- Exploration results are reported typically within veins. - No metal equivalent values are stated.
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i>	- The relationship between mineralisation widths & intercept lengths from trench/costeans is moderately well understood - No drilling undertaken.

Criteria	JORC Code explanation	Commentary
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 and tabulations of trench/costean intercepts are included within this report.
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.	Comprehensive reporting of all rock chip and trench results has occurred in historical reports and reported by Frontier where appropriate.
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.	All meaningful exploration data to date has been included in this and previous ASX announcements.
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.	- Analysis of historical exploration results on prospects within EL2531 is continuing with the next phase of fieldwork being planned at the Kimono, and Kimono South. All additional historical results will be announced in due course. - Appropriate plans are included where possible.