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**ASX: FNT** 

Market Announcements Platform

17th August 2017

# Lake Lavu and Sewatupwa Applications Warden's Court Hearings Set

Frontier Resources Limited (**Frontier**) is pleased to announce that the Warden's Court Hearing for Exploration License (EL) Applications 2476 and 2477 in the D'Entrecasteaux Islands, Milne Bay Province, Papua New Guinea, have been set for October 30<sup>th</sup>, 31<sup>st</sup> and November 1<sup>st</sup> and 2<sup>nd</sup> respectively. The hearings will occur at 4 locations in order to consult the respective landowners as required by the Mining Act. The application will then follow the process of review by the Mining Advisory Council, recommendation to the Minister and his decision.

Frontier's Chairman and Managing Director Peter McNeil said:

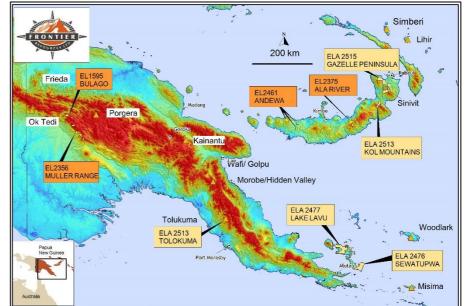
ELA 2476 covers ~436 sq km of the southern, SE central and eastern sections of Normanby Island and ELA 2477 covers ~839 sq km of sections of Fergusson, Goodenough and Sanaroa Islands. The D'Entrecasteaux Islands are accessible, underexplored and have excellent bulk and higher grade epithermal gold mineralisation prospectivity (demonstrated previously at the Misima Mine), that will provide a new focus for Frontier in a 'lower" exploration cost region in PNG (if /when granted).

Prospect Summaries of historic information are attached as Appendices 1 and 2. All information was announced to the ASX on November 3<sup>rd</sup> and 7<sup>th</sup> 2016.

For a more comprehensive Summary Report on the ELAs or additional information relating Frontier and our other projects, please visit the website at <a href="https://www.frontierresources.com.au">www.frontierresources.com.au</a>.

FRONTIER RESOURCES LTD

P.A. McNeil, M.Sc., MAIG Chairman and Managing Director



# **Competent Person Statement:**

The information in this report that relates to Exploration Results is based on information compiled by Peter A. McNeil - Member of the Aust. Inst. of Geoscientists. Peter McNeil is the Chairman/Managing Director of Frontier Resources, who consults to the Company. Peter McNeil 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 McNeil consents to the Inclusion in the report of the matters based on the information in the form and context in which it appears.

### Appendix 1 - ELA 2477 Lake Lavu Prospect Summaries

ELA 2477 contains a large number of individual areas that are prospective for epithermal gold mineralisation. Frontier's aim is to discover a high-grade and/or high tonnage type epithermal gold deposit. Local epithermal deposits include the historic Misima and Wapolu Mines, the Woodlark Gold Reserve and the Imwauna, Gameta and Sehulea Deposits, that demonstrate the region has excellent gold mineralisation potential.

Six main project areas, 18 named prospect areas and other stream sediment anomalies were identified, being:

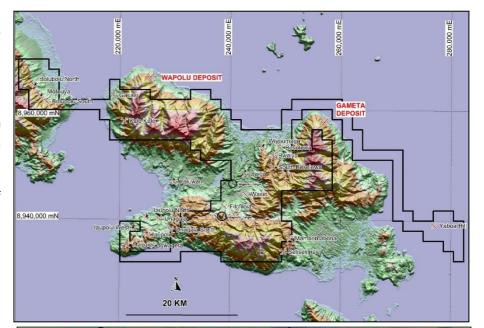
- 1. Wasio Project (Wasio, Filofiloia, Ebadidi and Daigu Prospects central Fergusson Island)
- 2. Bolubolu Project (Yaheyahe =Bolubolu North, Motouya and Bolubolu South Prospects Goodenough Island)
- Sanaroa Project (Yaboa Hill Sanaroa Island)
- 4. Bwaiya Project (Bwaiya, Boselewa, S Boselewa and Wiyoumaga north central Fergusson Island)
- 5. Kukuia Project (Maygidi and Jaupolu SW Fergusson Island)
- 6. Guayasi, Kalokalo and Kwailoi (NW -central Fergusson Island)
- Muneia Uranium (North central coastal Fergusson Island)

### **Wasio Prospect**

Wasio was identified anomalous pan concentrate and silt fraction gold assays, including a maximum of 44.5 g/t gold pan concentrate (+0.270 g/t Gold silt) and 12.0 g/t gold pan concentrate (+1.28 g/t gold silt). Anomalous gold and arsenic in -#80 stream sediments is suggestive of epithermal vein mineralisation. Anomalous gold in Ridge and Spur soil samples occur over a 1.5 km<sup>2</sup> area and 15.6 g/t gold, 10 g/t gold and 0.88 g/t gold rock samples were collected from a quartz vein over 120m interval in a creek.

Grid based soil sampling subsequently demonstrated 3 major, structurally discrete zones with multiple higher grade internal gold sectors. The total anomalous area (>0.02 g/t gold) is about one and a half square kilometres (1.5 km<sup>2</sup>) and it is open to the east over an eight hundred metre (800m) interval.

The soil grid and gold anomalies are located at/south of the





nexus of three (3) major crustal level structures (trending NE-SW, N-S and WNW-ESE), that produce a triangular zone about 1,500 metres per side. The soil anomaly envelope has a WNW-SSE axis that is about 1,200 metres long and is between 1,000 metres wide at the NW end and 700m wide at the SE end. The higher grade internal zones however, have been interpreted to trend E-W to ENE.

### **Filofiloia**

The Filofiloia prospect lies within the NE corridor of the Kukuia – Lavu fault system, with recorded alluvial gold workings in the prospect area. A soil grid was established over an area of 3.2km<sup>2</sup> and it demonstrated one

major and 10 'satellite' gold anomalies from epithermal mineralisation associated with a granitic intrusion. The gold in soil anomaly is about 500 meters long and 200 meters wide with a peak grade of 0.52 g/t gold.

Minor magnetite skarn floats where observed within the creek and this could reflect skarn mineralisation elsewhere in the district. The Filofiloia Creek has possible hot springs and sinters located within the vicinity. Acid sulphate alteration is clearly visible within the strong argillised zones. Gold can also be precipitated within structures formed by the mixing of rising volatiles and oxygenated circulating surficial waters.

### **Ebadidi**

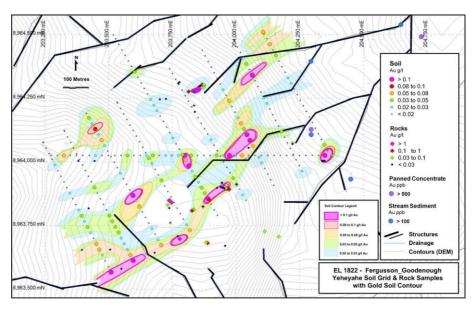
The Ebadidi soil grid demonstrated ten weakly anomalous and disjointed gold in soil samples on 300-meter spaced lines, over a +2km strike length. The reconnaissance grid was designed to evaluate both the strong RTP aeromagnetic anomaly at the northern end of the grid and the length of a geophysical and structural anomaly on southern margin of the Kukuia - Lavu Rift Zone.

### Yaheyahe

Results from bulldozer trenches at Yaheyahe (=Bolubolu North) included 39m of 2.10 g/t gold including 6m of 11.90 g/t gold (horizontal zone), and 8m of 4.90 g/t gold including 4m of 6.14 g/t gold, (vertical zone), 4m of 5.05 g/t gold, 5m of 1.540 g/t gold, and a float sample carrying 5.60 g/t gold and the highest rock being 24.70 g/t gold.

Grid soil sampling for the Yaheyahe Prospect was completed along with 8 short trenches. Soil sampling demonstrated gold anomalous soils over a +1,000m strike length from the SW to the NE and the limited hand trenching returned weighted assay averages to 14m of 2.99g/t gold and float rocks assayed to 17.10 g/t.

The best results were from Trench 6 (58 metres long) which was gold anomalous in 4 zones and included 14m of 2.99 g/t gold. Trench 2 was also gold anomalous with 2m of 3.68 g/t at the end of sampling and trench 4 contained 2 zones of gold and was strongly anomalous at the start of the sampling with 2m of 2.11 g/t gold. 12 of 18 outcrops sampled (66%) were greater than detection limit (>) and included 4.56 g/t, 1.83 g/t, 1.21 g/t and 0.22 g/t gold. addition, 20 of 37 float rock



samples were above detection limit and included 17.10 g/t, 5.63 g/t, 5.10 g/t, 4.96 g/t, 4.54 g/t, 0.62 g/t, 0.59 g/t, 0.58 g/t and 0.33 g/t. All samples were analysed for gold only.

Gold mineralisation is hosted in small disjointed/offset breccia bodies (most are 2-5m thick and apparently up to 20m in strike length) along foliation/schistosity within the metamorphic/gneissic rocks and there appears to be more quartz vein breccia/ stockwork within the area than previously indicated. Gold is hosted in NE-SW and NW-SE trending structures. Late epithermal quartz stockwork veining overprinting early silicification and brecciation is evidence of episodic deposition/ reactivation. Phyllic to argillic alteration is restricted to thin narrow alteration halos within the crushed/sheared wallrock of these veins, reflecting the compact / brittle nature of the metamorphic host rock.

# Motouya

The Motouya Prospect is located between Bolubolu North and South Prospects and covers 4km x 1 km. Reconnaissance sampling returned 1.95 g/t gold in stream sediment and 1.78, 0.88 and 2.87 g/t gold in a rock float samples. A single soil anomaly of 0.668 g/t gold was noted. 5 rocks containing significant grades of gold including 1.26 g/t, 0.52 g/t, 0.35 g/t, 0.34 g/t and 0.30 g/t were assayed by Quintessential Resources Ltd. The best of the 2 outcrop samples returned 0.08 g/t gold.

The source of the 78.4g/t gold float sample appears to be siliceous breccia bodies on the hanging wall of the Wakonai fault, that are similar in texture and appearance to those found at the Yaheyahe Prospect.

#### **Bolubolu South**

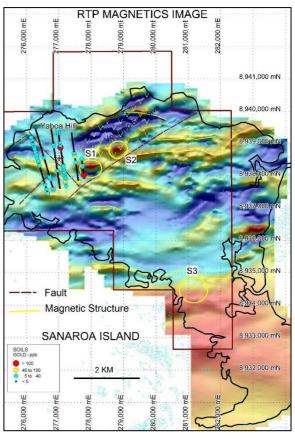
The Bolubolu South Prospect covers an area of strong silicification where sampling programs returned results such as 3.53 and 3.24 g/t gold in pan-concentrates, anomalous silt samples, rock float sample of 1.17 g/t gold and the best trench sample of 5m of 1.06 g/t gold. A large number of samples contained arsenic values greater than 1,000ppm to a maximum of 5,400ppm arsenic.

#### Sanaroa

Sanaroa Island is prospective for a major disseminated gold deposit, being underlain by strongly advanced argillic altered and locally silicified Quaternary rhyolitic to andesitic volcanics with active hot springs in the eastern part of the island.

The Yaboa Hill hydrothermal breccia area has been geological mapped, bulldozer costeaned and had one diamond core and four rotary air blast holes drilled. Altered and sulphide bearing volcanics and some breccias were intersected in the trenches and the drill holes. The trench mapping suggests that the volcanics become increasingly altered and brecciated towards the south with zones of chalcedonic quartz veining and pyrite noted in one trench.

This area returned several intercepts averaging better than 0.1 g/t gold, the highest being 0.44 g/t gold over 2.4m (other areas returned less than this value). Petrology from the drilling indicates an acid leach upper zone with a boiling zone beneath conducive for gold mineralisation. Refer to figures showing details of the Sanaroa Island trenching, drilling and sampling.

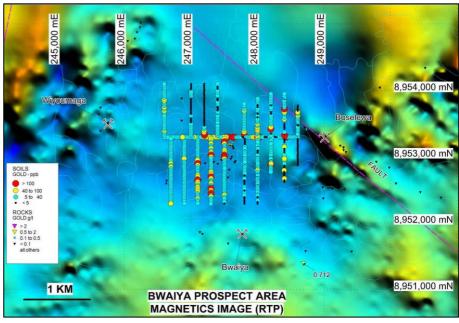


## **Bwaiya**

Initial reconnaissance float sampling returned background to 2.89 g/t gold and showed potential for epithermal mineralisation. Grid soil sampling substantiated earlier ridge and spur sampling results with many soil samples > 0.05 g/t gold and a strong correlation with anomalous arsenic. Virtually all rock samples from Bwaiya contain greater than 100 ppm arsenic; the average for 49 rock samples was 410 ppm arsenic.

The alteration present is described as consisting of silica flooding, clay development and vuggy cockscomb quartz veins in volcanics and granitic rocks. Fresh and partly oxidized pyrite is abundant throughout the altered volcanics. Nearby brecciated ultramafics show local zones of strong silicification with black opaline silica fine and disseminated pyrite.

Based on petrological studies, the felsic volcanics and older



intrusives (granitic) are noted to have been subjected to at least two phases of alteration: (i) a high

temperature, potassic alteration with peripheral phyllic and propylitic alteration, and (ii) a low temperature, epithermal argillic alteration consisting of interlayered illitic clays + quartz + adularia + calcite, which has overprinted the higher temperature mineralogy. Gold mineralisation occurs in both felsic volcanics and intrusives and appears associated with the later epithermal stage of alteration.

The first trenching of the Bwaiya Prospect demonstrated consistent, but generally weakly gold anomalous mineralisation over a +1,000m strike length (SW-NE). The longest intercept was 66 metres grading 0.33g/t gold (T4) and the peak was 4 metres of 2.20g/t gold (T2).

Trench assay highlights are: Trench 1 - 40 metres of 0.10g/t gold, Trench 2 - 58 metres of 0.30g/t gold, Trench 4 - 66 metres grading 0.33g/t gold, Trench 5 - 36 metres grading 0.23g/t gold, Trench 9 - 34 metres grading 0.15g/t gold, Bwaiya River exposure - 14 metres grading 0.28g/t gold and Wiumwana creek exposure - approx. 15 metres grading 0.18g/t gold.

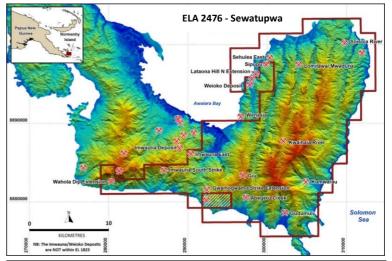
The felsic volcanics and older granitic intrusives have been subjected to at least two phases of alteration: (i) a high temperature, potassic alteration with peripheral phyllic and propylitic alteration, and (ii) a low temperature, epithermal argillic alteration consisting of interlayered illitic clays + quartz + adularia + calcite, which has overprinted the higher temperature mineralogy. Gold mineralisation occurs in both felsic volcanics and intrusives and appears associated with the later epithermal stage of alteration.

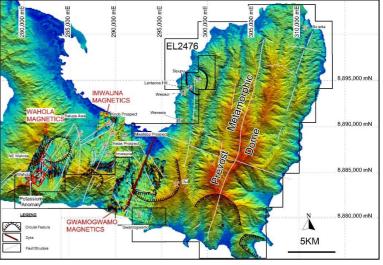
# Appendix 2 - ELA 2476 Sewatupwa Prospect Summaries

The Sewatupwa River ELA contains a number of geochemically anomalous zones with epithermal style gold mineralisation. There are anomalous gold /arsenic values found in stream sediment samples, pan concentrate samples, rock float samples and soil anomalies at 6 prospect areas including: North Gui /Gui, Sewatupwa, North Gwamo, North Sipupu, Lomitawa/ Mwaduna, Kwaiahia River and reconnaissance districts including: Soisoia/ Kwanaula, Abegeru/ Gudumuli Kumwarau rivers.

The application also contains extensions to mineralisation (demonstrated by previous explorers on former ELs 1069/1091) at 6 zones including: Far South Imwauna, North Lataona Hill/ West Sipupu, East Imwauna, North Gwamogwamo, West Wahola and West Weioko.

Details relating to these areas are described below including general information about prospects and mineralisation in adjoining, but excluded areas from the ELA, to give context to results within the ELA and their extensions. It is hoped to obtain the excluded main Gwamogwamo area, but this cannot be assured.





Esso began systematic gold exploration in 1982 (PA 469 covered the entire D'Entrecasteaux Island group) and conducted a reconnaissance program over PA555 in late 1986. I visited what became the Weioko Deposit during that program. Stream sediment and float sampling detected eight gold prospects.

The Imwauna high grade epithermal gold deposit is discussed herein as it is the main regional target type; it is located in former EL 1091 and is not located in <u>ELA 2476</u>, but is within 650m of it across strike at the closest point). Imwauna was discovered by Inco following up an Esso Pan Concentrate stream anomaly. An Inferred Mineral Resource was estimated to be 1.8 million tonnes at 12.1 g/t gold + 20 g/t silver (for the contained metal of 706,000 oz. gold and 1,160,000oz. silver, by New Guinea Gold Corporation in June 2008, documented by a NI43-101 report /compliant with the JORC Code).

#### Gui

A number of streams in North Gui area are strongly gold anomalous. Ridge /spur soil sampling shows the gold anomalism extends northwards from the Gui Prospect. This area has not been evaluated. Assays of pan concentrates highlighted a gold - anomalous area along the ridge to the north of Gui with a peak assay of 470 micrograms gold in follow up.

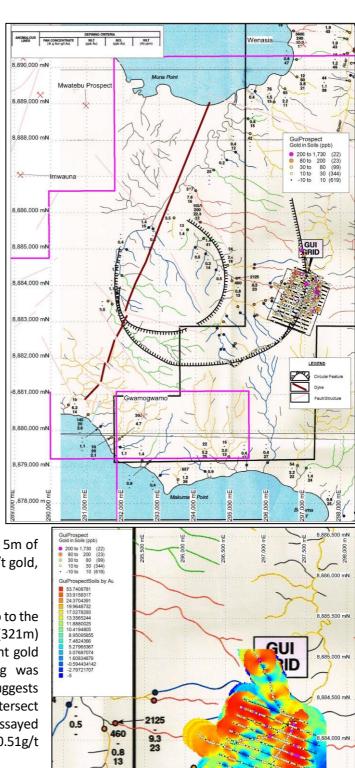
The Gui Prospect itself has anomalous gold assays from 530m of hand trenching including: 10m of 5.06 g/t gold, 5m of 5.29 g/t gold, 10m of 1.0 g/t gold, 6m of 2.30 g/t gold, 5m of 1.17 g/t

gold, 5.5m of 1.31 g/t gold, 10m of 0.64 g/t gold, 5m of 0.86 g/t gold, 5m of 0.69 g/t gold,14.5m of 0.64 g/t gold, 75m of 0.99g/t gold and 6m at 1.75g/t gold.

A bulldozer track was later cut from Gwamogwamo to the Gui Prospect and a five-hole RC drilling program (321m) was completed in an 800m long zone of coincident gold and arsenic in soils. Epithermal quartz veining was reported in the drill holes with a frequency that suggests a zone of stockworking, but the holes failed to intersect significant mineralisation and only one interval assayed greater than 0.1g/t gold (18 - 20m in GU001 = 0.51g/t gold).

# Sipupu North

Vein prospecting was undertaken (plus rock chip (float and outcrop) and stream sediment (silts, pan concentrates, and BLEG's) sampling was completed. Significant epithermal veins were exposed in two creeks 300 metres apart. They were examined and systematically sampled in May 1997. Channel samples taken across the vein gave assays from 0.29 g/t to 4.88 g/t gold (over 1.6m). Float samples returned values up to 8.96 g/t gold.



8.883.000 mN

8,882,500 mN

8.882.000 mN

8,881,500 mM

The vein outcrops exposed were summised to be of the same vein, which ranged from 0.70m to about 3.50m. Sulphides are present in one vein in Kagapuratala Creek and they have an E-W strike radial to an inferred volcanic centre in Sipupu Bay. Host/wallrock to veining is a contorted psammitic quartz-muscovite schist. The

mapping and stream sediment sampling programme in the area requires completion and other historic anomalous rock chip samples require follow up geological work to determine their source and significance.

Aeromagnetic, radiometric and structural targets located in a 22km<sup>2</sup> drainage zone of generally coincident copper, Zn, Ag and Mn in silts with local gold anomalism and aeromagnetic responses (most of this area is in ELA 2476). A molybdenum in silt anomaly also occurs in the northern central part of the anomalous "Sewatupwa" drainages. The drainage geochemical anomaly also extends to the west of the excluded Gwamogwamo block.

The bulk of this region has not been explored and its prospectivity is considered to be very good.

## Gwamogwamo

Gwamogwamo Prospect at the south end of the "Sewatupwa" Zone and is a large copper-gold -silver system centred on gossans representing stacked lenses in chloritic greenschist rocks. It is apparent a large hydrothermal system has been active in the region. The trenching and drilling results show that economic intersections of both gold and/or copper are achievable.

The prospect straddles the boundary between former ELs and is an omitted block in ELA 2476 at this stage. It is hoped to ultimately include it in the ELA area when /if granted, so it is discussed herein to give context to the North Gwamo anomalies discussed herein.

Two gossanous float samples on the beach at Gwamogwamo (within ELA 2476) had anomalous gold, silver and copper assays. The prospect consists of 3 large, sub-linear, coincident, basemetal plus gold in soil anomalies, over a + 2000m total strike length northwards into ELA 2476.

Hand-dug trenches were completed in ELA 2476 and assayed 25m of 0.342% copper plus 10m of 0.108% copper, 5m of 0.242% copper, 5m of 0.131% copper, 10m of 0.210% copper and 5m of 0.131% copper and 155m of 0.60g/t gold, with 0.48% copper and 8g/t Ag.

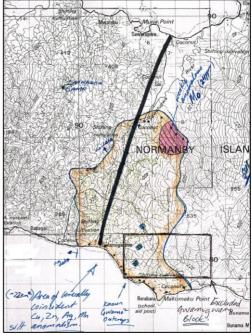
Bulldozer trench T3A tested the areas within the surface soil anomaly and these results need to be located.

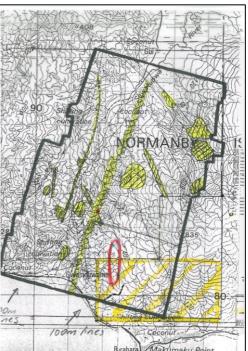
Drilling was undertaken in two episodes with a 9-hole (377m) RC drilling program in 1996, then a 7-hole (303m) program in 1997 to total 16 RC holes for 680m.

The first hole (GRC001 -50m) was drilled at the northern end of the known soil anomalous zone in former EL 1091 and within ELA 2376. The hole did not intersect economic quantities of gold or copper (1-2m had 0.13 g/t gold, in mica-chlorite-quartz-pyrite schist), however, the observed strong to intense chlorite alteration was interpreted as an indicator of an extensive hydrothermal system.

Other results were encouraging around the main gossan (9400 to 9500m N in the excluded block) with holes returning up to 7m of massive sulphide, often with disseminated or veinlet controlled sulphides for several metres on either side.

The favourable, pyritic horizon which hosts the massive sulphides appears to be of widespread occurrence. Several sub-parallel NNE





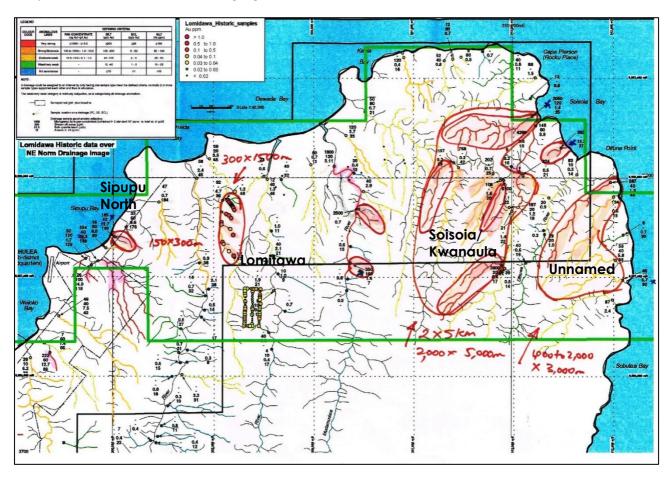
1995 GWAMOGWAMO RECONNAISSANCE ROCK CHIP ASSAY HIGHLIGHTS						
Sample	Assays					
Number	Au	Ag	Cu			
	(g/t)	(ppm)	(%)			
44040	2.29	35.5	0.868			
44043	4.06	21.9	0.278			
44074	0.571	<0.5	0.330			
44076	1.019	5.6	0.166			
44099	0.07	3	1.13			
44107	0.11	6	0.78			
44110	0.53	ND	ND			

trending structural zones and radiometric geophysical anomalies require follow-up sampling. Thus, there is still very good potential to locate a significant zone of massive sulphide mineralisation.

#### Lomitawa

Initial reconnaissance stream sediment sampling and limited ridge and spur soil sampling yielded pan concentrate gold up to 1.24 g/t gold, float up to 7.12 g/t gold with 86 g/t Ag and weakly anomalous soils (peak of 0.14 g/t gold) in a zone that averaged 0.100 g/t gold over 100m. Regional reconnaissance comprised stream and ridge geological traverses, rock chip sampling (83 samples), stream sediment sampling (24 silt samples and 25 pan concentrates) and soil sampling (79 samples).

The quartz veins in the Lomitawa area contained up to 5.33 g/t gold but were only tens of cms thick and were separated by over 10 metres from each other. They require follow up exploration. There are potentially significant tonnages of sulphidic banded metamorphics that have assayed up to 0.77 g/t gold (but most samples have returned less than 0.3 g/t gold).



**Kwaiahia River** prospect is based on the conceptual structural Jog Target base as observed from the N-S alignment of Kwaiahia River. These tensional structures are interpreted to host possible higher-grade epithermal gold mineralization. The exploration work conducted over the target area included 4 soil lines across the interpreted northeast trending tensional features and creek geological mapping. The epithermal-related floats consist of up to 5% of the main river float lithologies, which is a large relative percentage.

### Soisoia River/ Kwanaula

The Soisoia area consists almost entirely of moderate to very strong drainage gold geochemical anomalism covering an area of at least 15 sq.km and located 7 to 13km ENE of the Sub-District Headquarters. The maximum pan concentrate assay returned was 27.2 g/t gold and it contained 6,100 micrograms of gold (in 2 standards 16" pans). This amount of contained gold is approximately 3 times the average of the 'strongly' anomalous pan concentrates. The area has been prospected for alluvial gold.

A total of only 12 rock-chip float samples (no outcrop) have been collected and the peak result was 0.311 g/t gold. No trenching or drilling has been undertaken. Thorough drainage sampling and reconnaissance mapping is required to assess the areas potential for large lower grade bulk tonnage disseminated / stockwork &/or high-grade vein deposits. The bulk of the area is located in the Prevost Metamorphics. Some areas of weaker anomalism located on the north coast could be in ultramafics.

		Section 1 Sampling Techniques and Data	
Criteria		Explanation	Commentary
Sampling techniques	0	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals	All results are historical and obtained from exploration reports by previously TSX listed
		under investigation, such as down whole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	New Guinea Gold Corp., ASX listed Quintessential Resources and Esso.
	0	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	All information has been obtained from historical reports
	0	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 11m samples from which 3 kg was pulverised to produce a 30g 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.	All sampling results have been obtained from historical report and not considered material.
Drilling techniques	0	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	Not applicable.
Drill sample recovery	0	Method of recording and assessing core and chip sample recoveries and results assessed	All sample methods are contained in historical reports.
	0	Measures taken to maximise sample recovery and ensure representative nature of the samples.	All stated results are obtained from historical reports.
	0	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 known relationship.
Logging	0	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.	Not Applicable.
	0	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Not Applicable.
	0	The total length and percentage of the relevant intersections logged	Not Applicable
Sub-sampling techniques and sample	0	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.	Not Applicable.  Not Applicable
preparation	0	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Not Applicable.
	0	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Not Applicable.
	0	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.	Not Applicable.
	0	Whether sample sizes are appropriate to the grain size of the material being sampled.	Not Applicable.
Quality of assay data and	0	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	All sample results are obtained from historical reports.
laboratory tests		Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	
	0	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools, spectrometers or handheld XRF instruments were noted in the historical reports.
Verification of sampling and	0	The verification of significant intersections by either independent or alternative company personnel.	All results have been obtained from historical reports and verified by individual authors.
assaying	0	The use of twinned holes.	Nil
	0	Discuss any adjustments to assay data.	None.
Location of data points	0	Accuracy + quality of surveys used to locate drill holes (collar + down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	All samples were located either by GPS or on geological maps with reference to drainage systems.
	0	Specification of the grid system used.  Quality and adequacy of topographic control.	Map datum is AGD 066. 40m contours - 1:100,000 plans, 10m -DTM contours.
Data spacing and distribution	0	Data spacing for reporting of Exploration Results.	All geochemical results are stated from historical reports and are considered appropriate.
	0	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	Geochemical results were stated from historical reports based on accurately located sample sites designed to test mineralisation along strike.
	0	Whether sample compositing has been applied.	No

Orientation of	0	Whether the orientation of sampling achieves unbiased sampling of possib	le Sampling was designed based on known			
data in relation to geological	J	structures to the extent this is known, considering the deposit type.	geological models and geochemical sampling.			
structure	0	If the relationship between the drilling orientation and the orientation of ke mineralised structures is considered to have introduced a sampling bias, th should be assessed and reported.				
Sample security	0	sample security Quintessential Resources in stated h				
Audits or reviews	0	The results of any audits or reviews of sampling techniques and data are known to have been undertaken.				
Section 2 Reporting of Exploration Results						
Criteria		Explanation Commentary				
Tenure	0	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.  All results are obtained from historical tenements or Prospecting Authority reports. Frontier Resources EL 2477 is currently under application, covering results as noted in the included maps.				
Exploration done by others	0	Acknowledgment and appraisal of exploration by other parties.  Graph of exploration by other parties.  Graph of exploration by other parties.  Graph of exploration in the region was initially completed by Esso in 1982. Esso explored the area in the 1980's followed by TSX-V listed New Guinea Gold and ASX listed Quintessential Resources as part of a search for PNG epithermal related gold.				
Geology	0	mineralisation. Gosawong styl	e -epithermal related targets and high grade le, high tonnage Misima type epithermal gold.			
Drill hole information	0	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:  All results are historical and not considere material.				
		Elevation or RL (Reduced Level- elevation above sea level in metres) of the drill hole collar accurate to 10m.	and located by GPS or creek mapping techniques. and RL's can be obtained from DTM contour maps			
		Dip and azimuth of the hole Information noted here  Down hole length and interception depth Information noted here	rein from historical reports.			
			ein from historical reports.			
	0	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.				
Data aggregation methods	0	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.  All results are obtained from reports.				
		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  All results are obtained from historical reports with no known aggregations.				
o The assumptions used for any reporting of me clearly stated.		•	equivalent values should be No metal equivalent values are reported.			
Relationship between mineralisation	0		erally drilled orthogonal to mineralisation as much e exact relationship between intercept and true in stated.			
widths & intercept	0	If the geometry of the mineralisation with respect to drill hole angle is known its nature should be reported.	n, Historical holes were generally drilled orthogonal to mineralisation as much as			
lengths	0	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width no known').	I between intercent and true width has not			
Diagrams	0	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 intercepts are included.				
Balanced reporting	0	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 Exploration Results has been obtained from historical reports.				
Other substantive exploration data	0	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				
Further work	0	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).  Future work is dependent on getting granted by the PNG Mineral Reference of the properties o				
	0	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided th information is not commercially sensitive.	L cubcoguent program recults			