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ASX Limited  
Company Announcements Office

**ASX : FNT**

13<sup>th</sup> April 2015

## TECHNICAL REPORT – QUARTER ENDED 31<sup>st</sup> MARCH 2015

Frontier Resources Ltd is focused on mineral exploration in Papua New Guinea (Figure 1). The licences are highly prospective for the discovery and delineation of intrusive related high grade gold, copper+/- gold +/- molybdenum porphyries, associated polymetallic skarn and epithermal gold deposits.

### SUMMARY

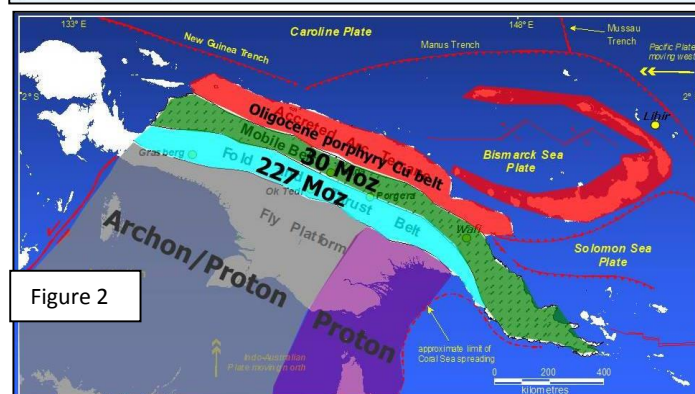
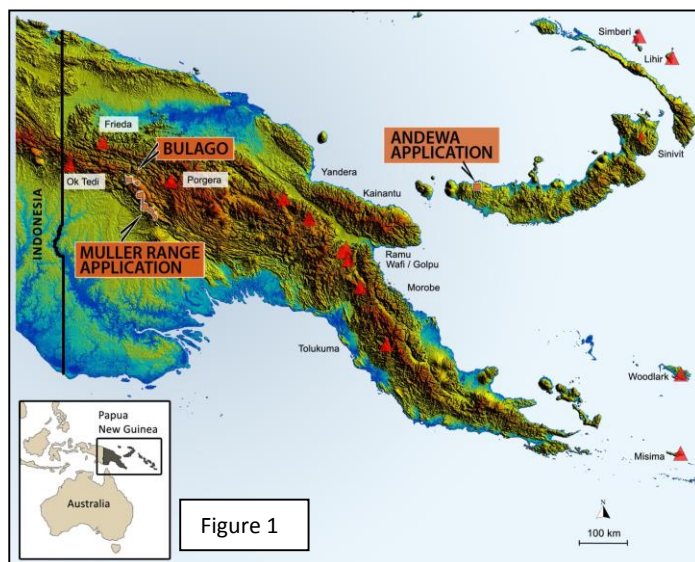
- Frontier to undertake a capital raising via a Rights Issue forthwith.
- Frontier has approximately 3,500 shareholders, including 1,941 shareholders with a \$30 holding or less at the current share price. This also includes 108 shareholders with only 1 share each. Small shareholders are encouraged to obtain a marketable parcel of shares, because subsequent to the closing of the Rights Issue, the Company will rationalise the total number of shareholders on that basis (i.e. buyout the unmarketable parcels less than ~100,000 shares to finish with about 600 shareholders).
- Frontier has a 100% interest in the Bulago Exploration Licence (EL) that is undergoing renewal and a successful Warden's Court Hearing was held in March.
- The Company re-applied for the Andewa area and a successful Warden's Court Hearing was held in March.
- Frontier recently lodged an application for the Muller Range area located in the Fold/Thrust Belt of Western and Southern Highlands Provinces. Muller is located along strike to the SE of Frontier's Bulago Project.

### ELA 2356 - Muller Range

The Muller Range ELA is about 330 km<sup>2</sup> in area and is located in the Fold/Thrust Belt of Western and Southern Highlands Provinces. Muller is located along strike to the SE of Frontier's Bulago Project (Figure 1) and the Company considers this structural zone to be the best geological address to discover very large and potentially economic gold and copper deposits in PNG.

A schematic of the island of New Guinea (from Barrick Gold Corp) shows the most prospective arc for major mineralisation is on the southern fall of the mountainous spine of PNG from OK Tedi through Bulago, the Muller Range ELA and on to Crater Mountain in the Eastern Highlands Province (at the eastern end) (Figure 2).

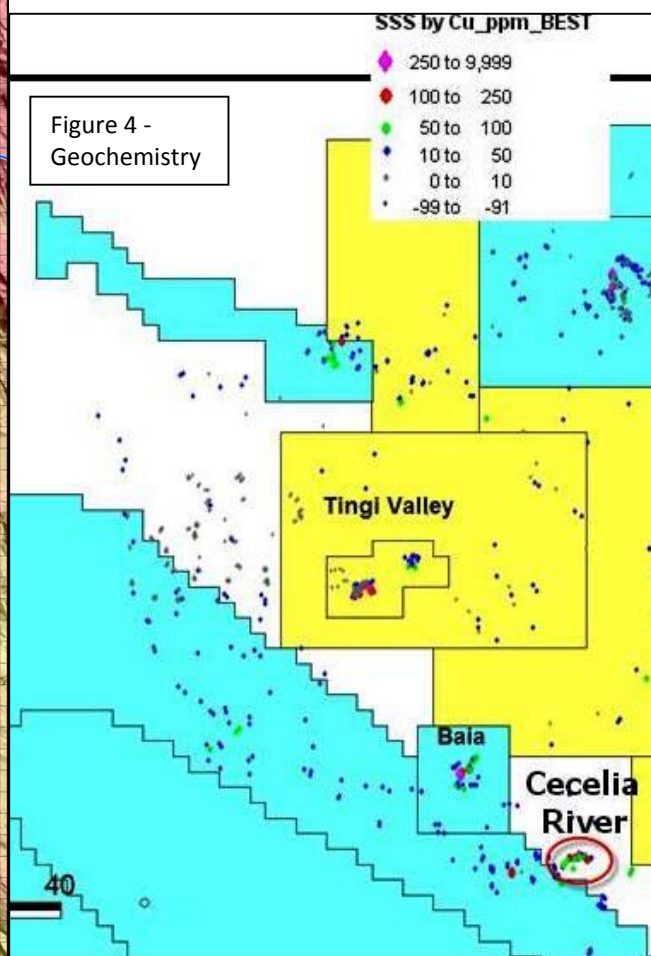
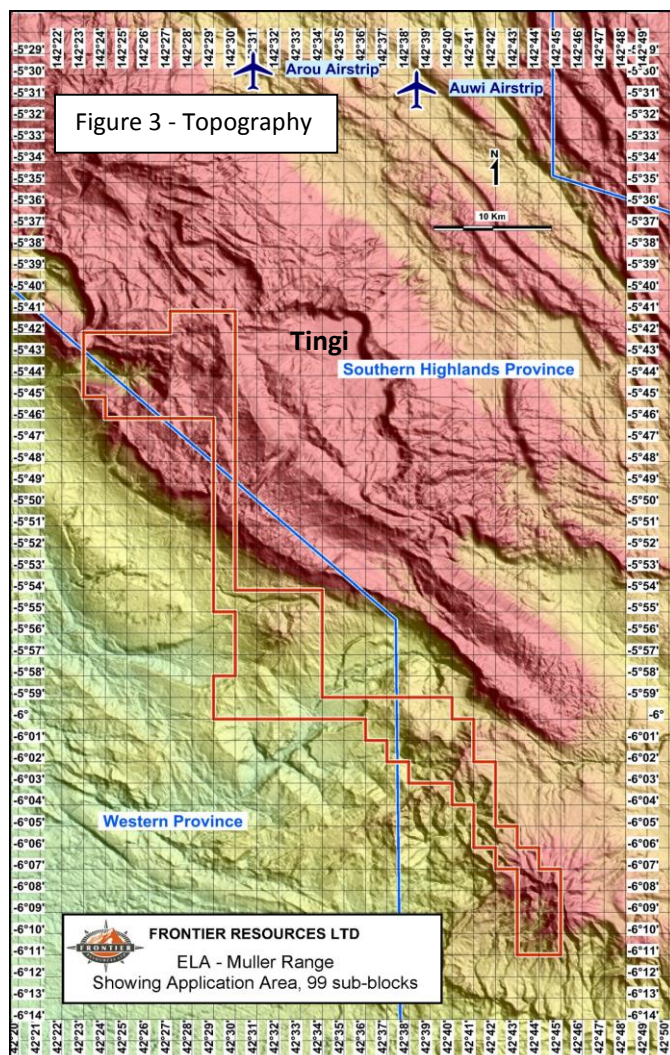
The Muller Range ELA has 4 known project/prospect areas based on copper in



stream geochemistry named Tingi, Baia, Cecilia and Mt Sisa (from the NW to SE- Figure 3). These areas are all associated with volcanism/ intrusions and all warrant additional exploration.

The Baia Project (Figures 3, 4 and 5) is host to a large porphyry system with a copper - gold - molybdenum in soil anomaly, the correct geochemical, geological and structural characteristics, which strongly warrants exploratory drilling based on the following information:

- The copper in soil geochemistry demonstrates a distinct cohesive anomaly that is about 900m long north- south and about 600m wide east -west.
- There are three smaller, but still large, copper anomalies that are about 500m long and up to 200m wide.
- The contoured zinc and lead soil geochemistry at Baia Prospect demonstrates a typical zinc halo around the core of the porphyry copper system, with a 1,200m diameter barren core.
- This barren core is approximately coincident with the outer margins of the copper anomaly. The zinc/lead anomaly has a width of about 500m with an outer annulus diameter of about 2,200m.
- A small skarn system has been noted.
- The prospect is located on a topographic high in a major ENE trending fault zone/ transfer structure, as per the OK Tedi Mine (see Google Earth program).
- Dominant alteration is propylitic, with structurally controlled phyllic and patchy un-mineralised potassic alteration.
- A high potassium intrusive is related to a potassium radiometric anomaly.





The Muller Range ELA boundary and Tingi, Baia, Cecilia and Mt Sisa Prospects are shown above on SRTM topography and right with copper in stream geochemistry relative to historical EL boundaries including Bulago (in blue to the N+NW of Tingi (Figure 3).

Baia contoured copper in soil geochemistry relative to aeromagnetic Analytical Signal Anomalies (Figure 6 below).

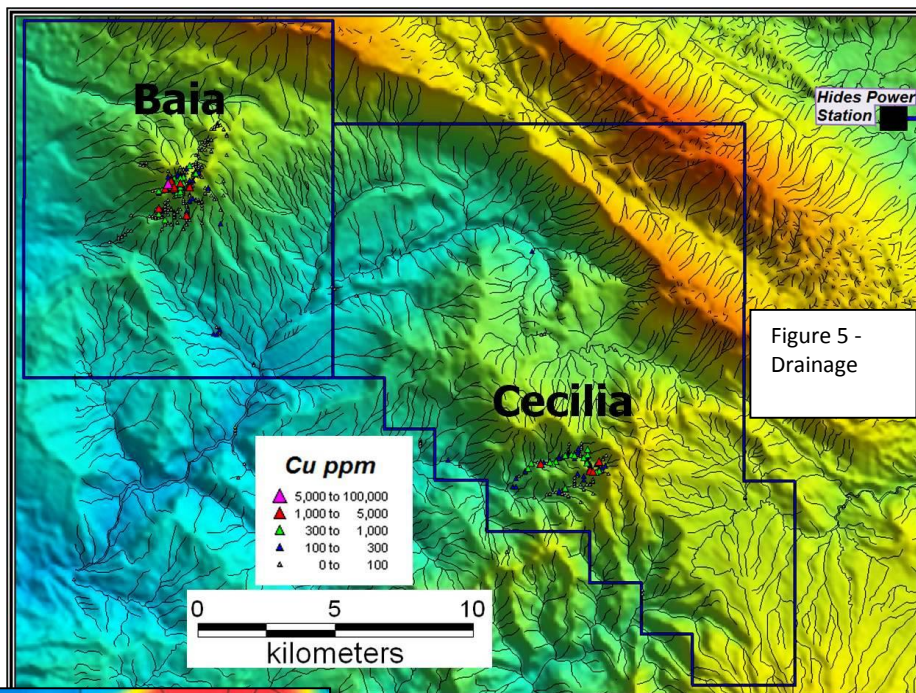


Figure 5 - Drainage

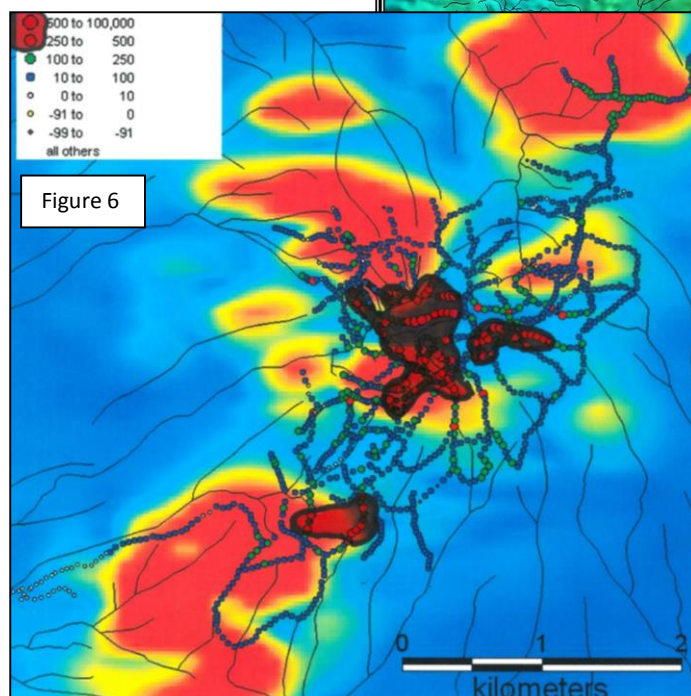


Figure 6

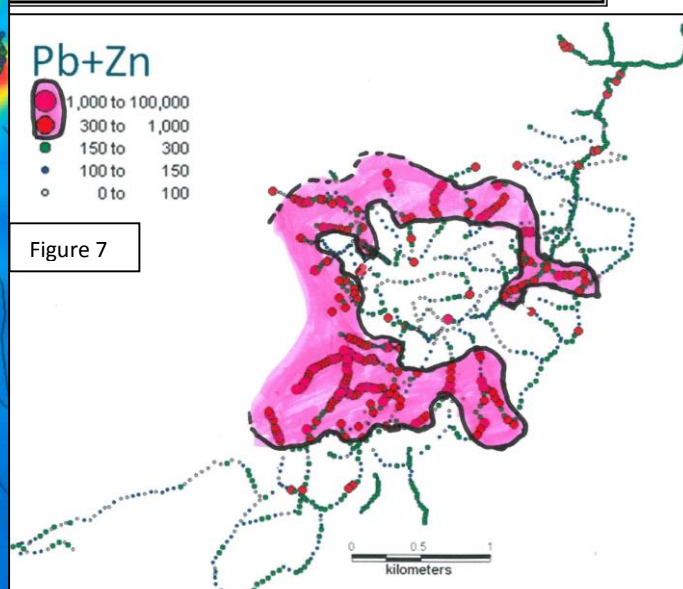


Figure 7

Baia contoured copper (Figure 7) in soil showing a distinct anomaly copper anomaly (about 900m long N-S and 600m wide E-W). In addition, there are three other copper anomalies that are about 500m long and up to 200m wide.

Contoured zinc and lead soil geochemistry at the Baia Prospect (Figure 8 above) demonstrating a typical zinc halo around the porphyry copper system. The 1,200m diameter 'barren core' is coincident with the outer margins of the copper anomaly. The zinc/lead has an outer annulus diameter of about 2,200m. Figures 9 and 10 show outcrop and interpreted geology at Baia.

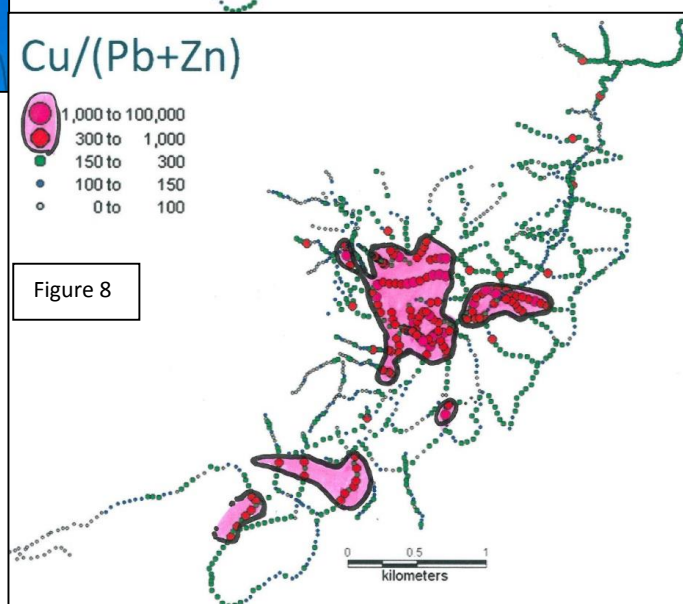


Figure 8

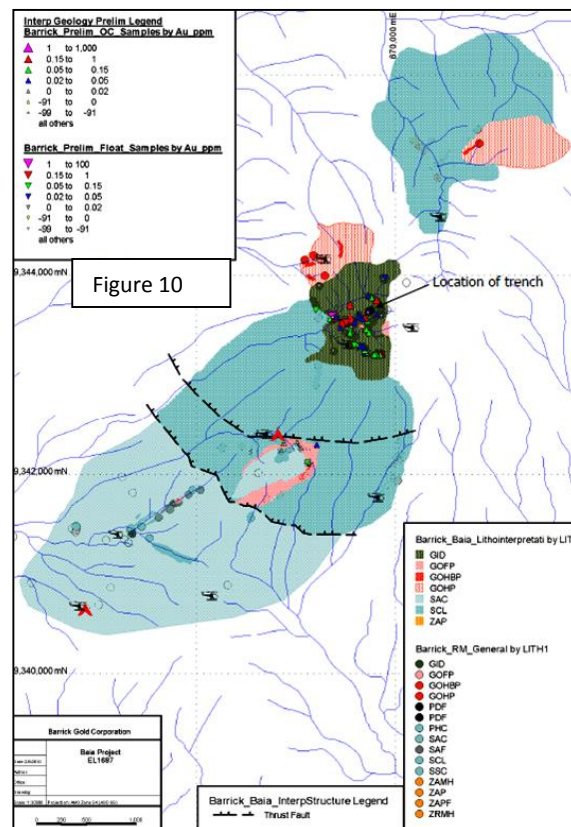
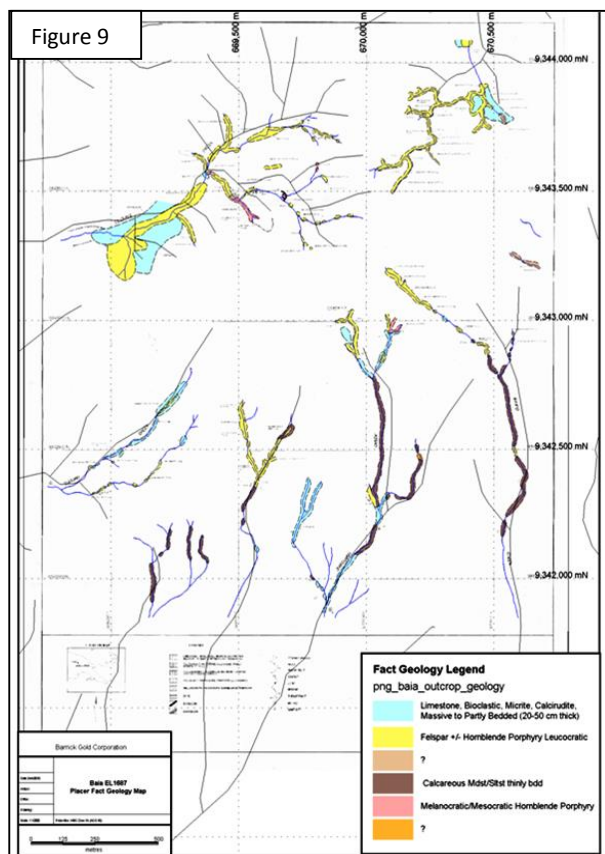
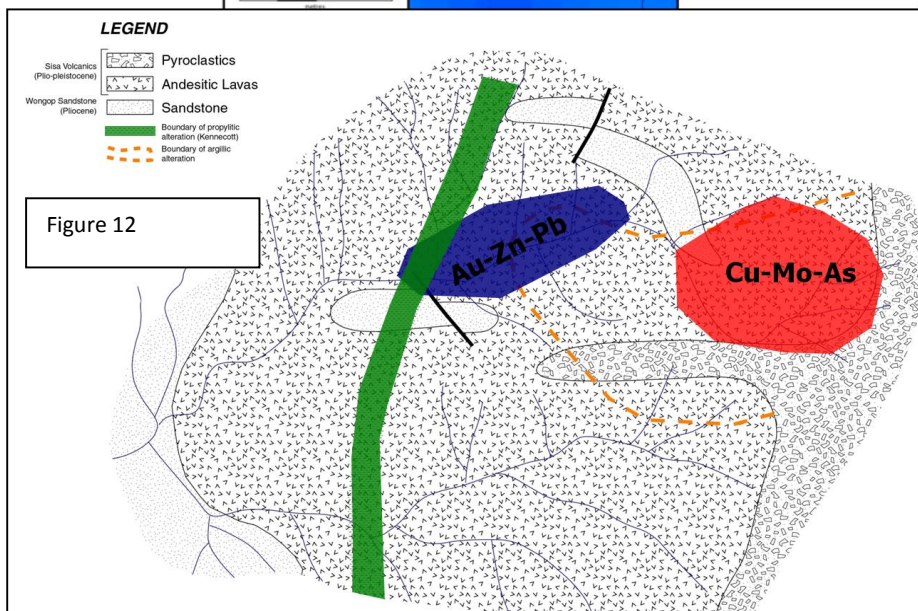
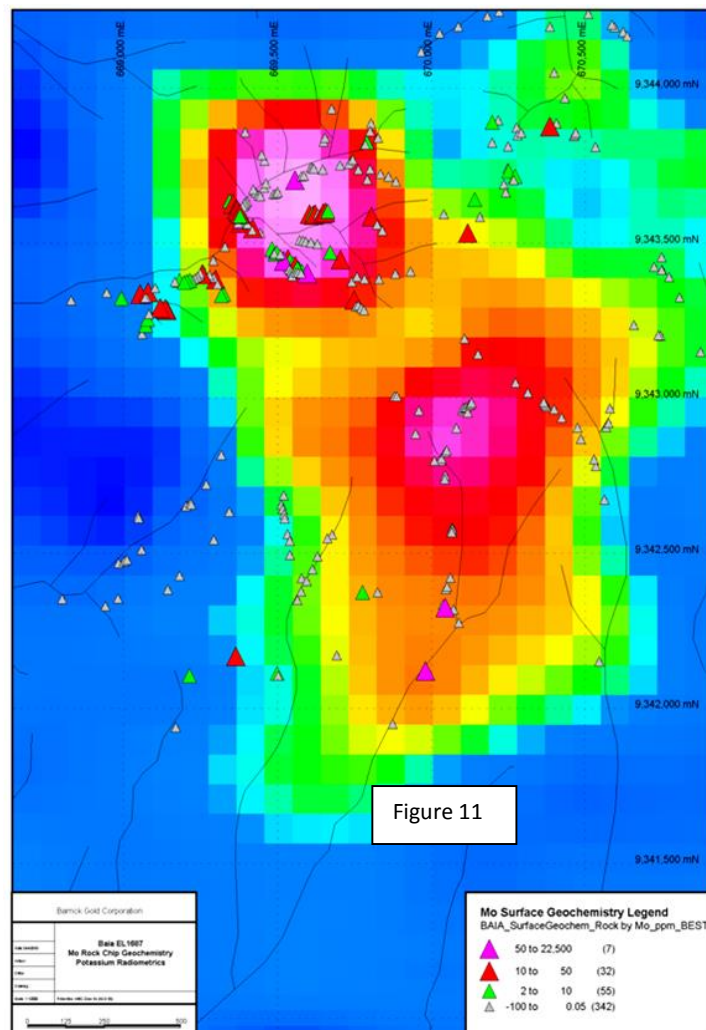




Figure 11 (right): Baia surface molybdenum in rocks plotted on potassium radiometrics.

The Cecilia gold project is located in the upper reaches of Cecilia River and can be rapidly advanced to drill testing with additional surface exploration. It has demonstrated:

- Stream sediment geochemistry >250ppm copper.
- Anomalous gold, arsenic, copper, molybdenum and zinc in rocks (Figure 12 below).
- Strong argillic and propylitic alteration which has been covered by a recent agglomerate (Figure 12).
- Advanced argillic altered areas, with vuggy quartz- alunite-pyrophyllite alteration (high sulphidation epithermal), but no significant gold noted in follow-up.
- Two altered rock chip samples returned 0.616g/t gold and 0.12 g/t gold + 710ppm copper. Altered granodiorite float assayed 0.18% copper, with chalcopyrite and bornite.
- Pebble dykes are common, indicating a probable buried porphyry copper-gold-molybdenum target, with rock chip samples up to 0.62% copper.
- The Baia and Cecilia Prospects are relatively close to the PNG LNG Project (Hides Gas Field /Power Station and the Juha Gas Field).



Detailed research at the Mineral Resource authority Library will provide additional information relating to the Muller Range ELA's mineral prospectivity.

#### Releases to the ASX during the period included:

- 13<sup>th</sup> March - Half yearly report
- 10<sup>th</sup> February - Response to ASX Appendix 5B Query
- 30<sup>th</sup> January - Quarterly Activities Report and cashflow.

For additional information relating to Frontier please visit our website at [www.frontierresources.com.au](http://www.frontierresources.com.au).

**FRONTIER RESOURCES LTD**

*P.A. McNeil*  
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, or compiled under the supervision of Peter A. McNeil - Member of the Aust. Inst. of Geoscientists. Peter McNeil is the 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.

Frontier Resources Ltd Exploration Licence Information						
	Licence No.	Date From	Date To	Ownership	Area (SQ KM)	Latitudinal Sub Blocks
<b>Bulago River</b>	EL 1595	7/07/2012	6/7/2014	100% Frontier Gold PNG Ltd --Under Renewal	100	30
<b>Mt Andewa</b>	ELA 2348	New Application		100% Frontier Copper PNG Ltd	140	42
<b>Muller Range</b>	ELA	New Application		100% Frontier Copper PNG Ltd	330	99
<b>Cethana</b>	EL 29/2009	13/09/2010	12/09/2015	10% Free Carried to BFS Frontier -Torque Mining Ltd JV	109	NA
<b>River Lea</b>	EL 42/2010	3/04/2011	2/04/2016	10% Free Carried to BFS Frontier -Torque Mining Ltd JV	9	NA
<b>Narrawa Creek</b>	RL 3/2005	12/05/2013	12/05/2015	10% Free Carried to BFS Frontier -Torque Mining Ltd JV	2.8	NA
<b>Stormont Mine</b>	ML 1/2013	3/11/2013	13/08/2018	5% Nett Profits Interest Frontier -Torque/BCD Mining	0.13	NA
<b>Elliott Bay</b>	EL 20/1996	12/06/2014	11/06/2015	10% Free Carried to BFS Frontier -Torque Mining Ltd JV	11	NA
<b>Wanderer River</b>	EL 33/2010	29/03/2011	28/03/2016	10% Free Carried to BFS Frontier -Torque Mining Ltd JV	41	NA
<b>Total PNG Area =</b>					<b>570</b>	<b>SQ KM</b>
					<b>743</b>	<b>SQ KM</b>
NB: 1. The Papua New Guinea Mining Act of 1992 stipulates that ELs are granted for renewable 2 year Terms (subject to Work and Financial Commitments)						
2. The PNG Government maintains the right to purchase up to 30% project equity at "Sunk Cost" if/when a Mining Lease is granted.						
3. BFS = Completion of a positive and hence "Bankable" Feasibility Study into the viability of any proposed mining operation						

The following information is provided to comply with the JORC Code (2012) requirements for the reporting of exploration results.

JORC CODE 2012			
Section 1 -- Sampling Techniques and Data			
Criteria		Explanation	Commentary
<b>Sampling techniques</b>	o	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down whole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	<b>The information is historic from competitors</b> and was surveyed (averaged) utilising a handheld GPS, with reference to topographic maps etc. Logging normally included mineralisation, lithology, weathering, alteration, structure and texture. Sampling protocols and QAQC are as per industry best practice procedures.
	o	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Standard industry practice sampling procedures were followed.
	o	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.	
<b>Drilling techniques</b>	o	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.).	
<b>Drill sample recovery</b>	o	Method of recording and assessing core and chip sample recoveries and results assessed	
	o	Measures taken to maximise sample recovery and ensure representative nature of the samples.	

	o	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.	
<b>Logging</b>	o	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.	
	o	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	
	o	The total length and percentage of the relevant intersections logged	
<b>Sub-sampling techniques and sample preparation</b>	o	If core, whether cut or sawn and whether quarter, half or all core taken.	
	o	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	
	o	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	o	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	
	o	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.	
	o	Whether sample sizes are appropriate to the grain size of the material being sampled.	
<b>Quality of assay data and laboratory tests</b>	o	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Assaying techniques utilised can be considered to be appropriate. Acceptable levels of accuracy and precision were established with duplicate and repeat analyses by the laboratory.
	o	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.	
	o	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.	
<b>Verification of sampling and assaying</b>	o	The verification of significant intersections by either independent or alternative company personnel.	
	o	The use of twinned holes.	
	o	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	
	o	Discuss any adjustments to assay data.	No adjustments/calibrations have been made to assays.
<b>Location of data points</b>	o	Accuracy + quality of surveys used to locate drill holes (collar + down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Not applicable. A hand held GPS (waypoint averaged) was used to determine drill collar locations.
	o	Specification of the grid system used.	Map datum is AGD 066.
	o	Quality and adequacy of topographic control.	40m contours - 1:100,000 plans
<b>Data spacing and distribution</b>	o	Data spacing for reporting of Exploration Results.	Refer to the attached plans for details relating to the data spacing of exploration results.
	o	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	The current data spacing and distribution is insufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation.
	o	Whether sample compositing has been applied.	No sample compositing has been applied.
<b>Orientation of data in relation to geological structure</b>	o	Whether the orientation of sampling achieves unbiased sampling of possible structures to the extent this is known, considering the deposit type.	
	o	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.	
<b>Sample security</b>	o	The measures taken to ensure sample security	
<b>Audits or reviews</b>	o	The results of any audits or reviews of sampling techniques and data.	No specific audits or reviews of sampling techniques and data have been undertaken.

Section 2 -- Reporting of Exploration Results			
Criteria		Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	o	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.	Exploration Licence application (ELA) 2376 - Muller is located in Papua New Guinea's Hela Province and ELs are regulated under the Mining Act of 1992 (currently under review).  There no agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and/or environmental issues associated with the EL.  The PNG National government under the Mining Act of 1992 currently has the right to acquire up to 30% of any project at the time of granting of a mining lease for the 'sunk cost'.
	o	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement EL 2376 is an application. No known impediments exist apart from the geographic isolation and the necessity for creating and maintaining good relationships with amicable, strongly development minded local landowners.
<b>Exploration done by other parties</b>	o	Acknowledgment and appraisal of exploration by other parties.	Exploration in the region was initiated in the late 1960s as part of a PNG porphyry copper deposit search. It was explored for gold initially in the early'/mid 1980's, with little work since 1988.
<b>Geology</b>	o	Deposit type, geological setting and style of mineralisation.	High grade gold intrusive -epithermal related targets, higher grade gold -silver-zinc-lead magnetite skarns and porphyry copper-gold - molybdenum targets.
<b>Drill hole information</b>	o	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:	
		Eastings 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	
	o	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.	
<b>Data aggregation methods</b>	o	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.	Tables of results included show data aggregation if applied in trench/channel samples etc. No top cuts have been applied.
		Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail	If this occurs, it is stated in the text.
	o	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are reported.
<b>Relationship between mineralisation widths &amp; intercept lengths</b>	o	These relationships are particularly important in the reporting of Exploration Results.	
	o	If the geometry of the mineralisation with respect to drill hole angle is known, its nature should be reported.	The 'down' outcrop or downhole sampled lengths have been reported because the geometry of the mineralisation with respect to the sampling orientation has not been properly constrained.
	o	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 not known').	



<b>Diagrams</b>	o	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.
<b>Balanced reporting</b>	o	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.	Summary reporting of Exploration Results has been completed.
<b>Other substantive exploration data</b>	o	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 hand has been included in this and previous releases.
<b>Further work</b>	o	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Future exploration and drilling is dependent on a capital raising to be undertaken.
	o	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Appropriate plans will be included, where possible in a later release documenting approved future work programs.