

Reconnaissance Soil and Rock Sampling Program Completed at Gasmata Altered Intrusive Mapped Associated with the 'Bullseye' Aeromagnetic Anomaly

Quintessential Resources Ltd (QRL) is pleased to announce that the exploration program on EL 2057 Gasmata was completed by the New Britain Joint Venture with Frontier Resources Ltd (FNT). The samples recently arrived at the laboratory for processing.

The program confirmed that altered intrusives are present in this sector of the tenement, as was inferred from the 'Bullseye' aeromagnetic signature (Figures 4a-c and 5a-e). Encouraging potassic alteration was noted (K feldspar +/- magnetite and biotite) with traces of base-metal (?) mineralisation, along with moderate to strong clay-hematite and clay-sericite alteration.

The alteration and presence of intrusives confirmed the possibility for locating porphyry copper mineralisation within the tenement.

Investigation of the main creeks revealed the presence of the expected NW-SE, N-S and NE-SW trending structures. The intersections of 2 or more of these structures (on a regional scale) provide the ideal location for intrusions and mineralising fluids to utilise (Figure 6f).

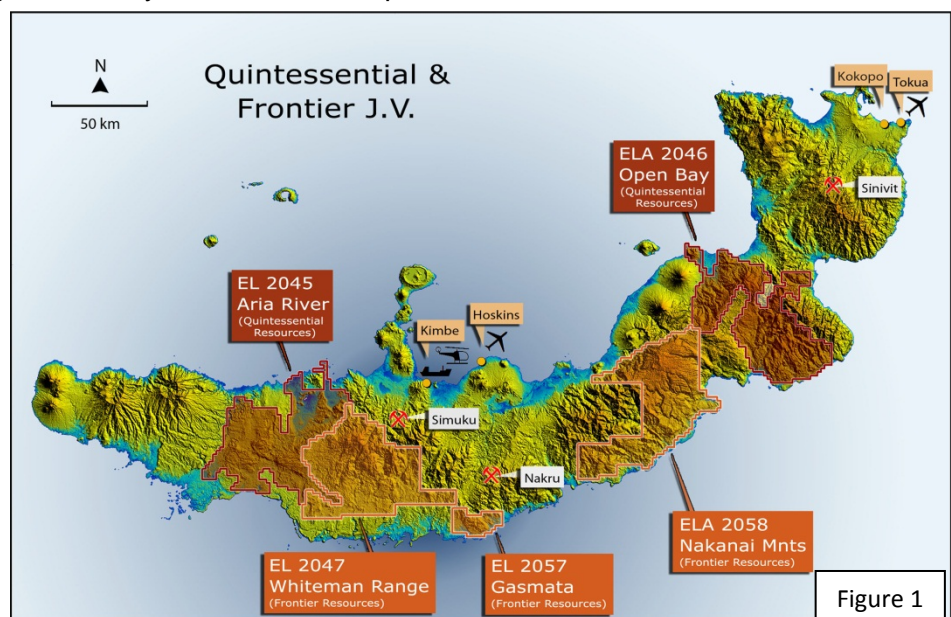
The Bullseye Prospect at Gasmata occurs on such a NE trending transfer structure that also hosts the Plesyumi porphyry copper occurrence (owned by Coppermoly Ltd). Papua Mining PLC recently reported interesting copper in soil results located ~24 km to the NE (proximal and to the south of the Plesyumi Prospect), that they intend to drill. This strong geochemistry further highlights the prospectivity of the NE structure where it intersects the Bullseye NW trending structural zone.

Epidote is a significant component of propylitic alteration that virtually always surrounds porphyry copper-gold systems and was noted in veining at the Bullseye (as opposed to being disseminated - Photos 5 and 6) which is encouraging, as that difference is generally recognised as a vector towards the hotter and better part of a porphyry system.

Regional reconnaissance of the apparently significant silver occurrences within the EL (Figure 6a) was advocated as part of the next exploration program along with follow up geological mapping of every drainage surrounding the Bullseye intrusive outcrop and further in the headwaters of Au River towards the North and North-East (subject to results).

The Gasmata people and landowners supported the exploration program and were very accommodating.

The reconnaissance exploration program proposed for the Stoneleigh Prospect at Aria River EL 2045 (also Frontier JV) has been postponed due to a very 'wet' season.



Details

Gasmata (EL 2057) is accessible from Kimbe by a 3 to 6 hours 4x4 vehicle (fitted with snorkel for deep water crossings depending on road conditions) to Amio Village on the south coast (Figure 1). Then a 2 to 3 hour dinghy ride to safe and strategically located Menpa Village just bit further inland from Gasmata Government Station up the Auwek River.

Targets at EL 2057 are porphyry copper (gold) + skarn related mineralisation, porphyry gold and high /low sulphidation epithermal gold deposits, that could occur within the lightly explored volcanics and/or under limestone 'cover' rocks at/near major structural intersections that could have acted as mineralising conduits.

The Gasmata area is mostly unexplored and it was targeted based on interpretation of existing aeromagnetics and conceptual targets. There is a bullseye total magnetic intensity anomaly associated with a distinct and major circular feature (on SRTM topography) in the NW corner of the EL (Figure 6f). The Bullseye anomaly is similar to the Foyson/TVI Pacific Atui Prospect's Aeromagnetic anomaly (Figure 4a-c) located ~29km to the east.

The rivers that drain the Bullseye Prospect are officially named "Au River East Branch" and "Au River Central Branch" on the PNG 1:250,000 Geological Plan (Figure 3). The bulls eye is located at a major interpreted structural intersection and is associated with a gold plus silver in drainage anomaly. Limited rock assays from just outside the EL but draining from this region run to 1.37% copper.

A fly camp base was established on the eastern centre of the soil gridlines just where the Line 05 cuts the logging track, in the middle of the work area. The campsite was approximately 25 kilometres by logging tracks and about 12 kilometres 'beeline' from Menpa Village. The only available and easy access to the work area and campsite from the coast was by hiring the local logging company's 4x4 vehicles.

Two major drainages (Ami and Amio Creeks) were reconnoitred and sampled. Encouraging altered intrusive was located in outcrop, tracked, mapped and sampled (Figure 2). A total of 432 samples were collected during the program and have been despatched for analysis. Collected were: 387 soil, 32 rock chip (float, outcrop and selective outcrop samples) and 13 trench (continuous chip channel) samples.

The dominant lithologies within the creeks are massive, indurated, highly jointed, basaltic or andesitic lava, agglomerate, conglomerate, variable volcanic breccia, arenite, minor lutite, tuff and basic to intermediate lavas (locally metamorphosed). They occur as lenses, breccia zones and as massive and extensive outcrops that are fresh, unaltered greenish-grey or dark coloured, fresh to highly weathered / moderately oxidised.

The main alteration in the volcanics is propylitic (chlorite-pyrite-epidote-calcite) with over-printing sericite and carbonate plus clay alteration in structures and contact zones. Generally the volcanics are not mineralised apart from scarce/occasional minor quartz+/-carbonate veining. Disseminated fine dark sulphides and clusters of cubic pyrite are generally associated with alteration.

Recrystallised limestone, calcareous sediments (calcareenite, calcilutite, bioclastics & conglomerates) are found in the far north-western corner of the grid mainly sharing a contact with the volcanics.

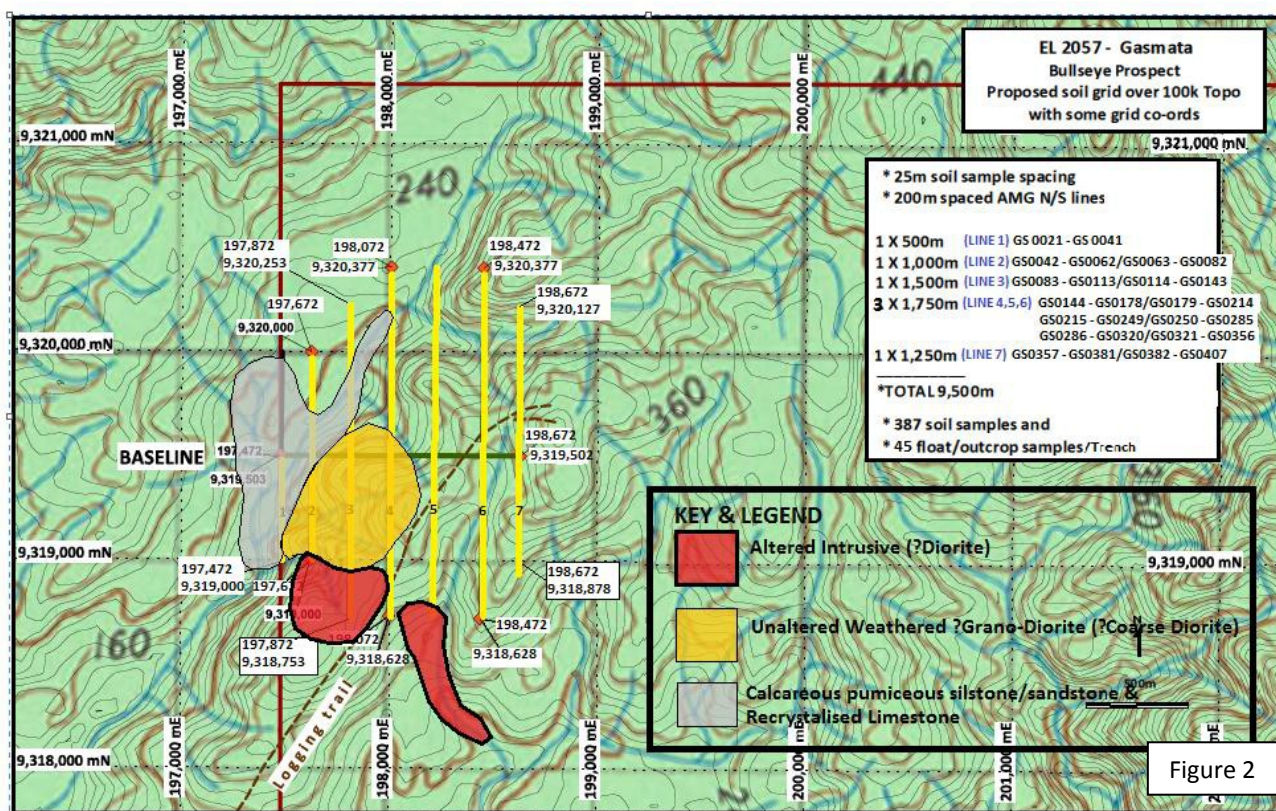


FIGURE 2. Interpretation plan showing the completed soil sample lines and statistics, the generalised locations of altered diorite, coarse diorite and recrystallised limestone, with the remainder "volcanics".

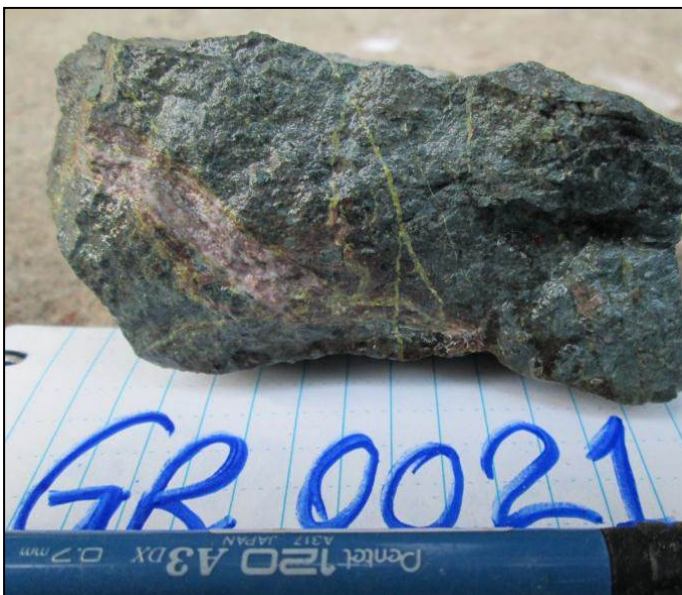
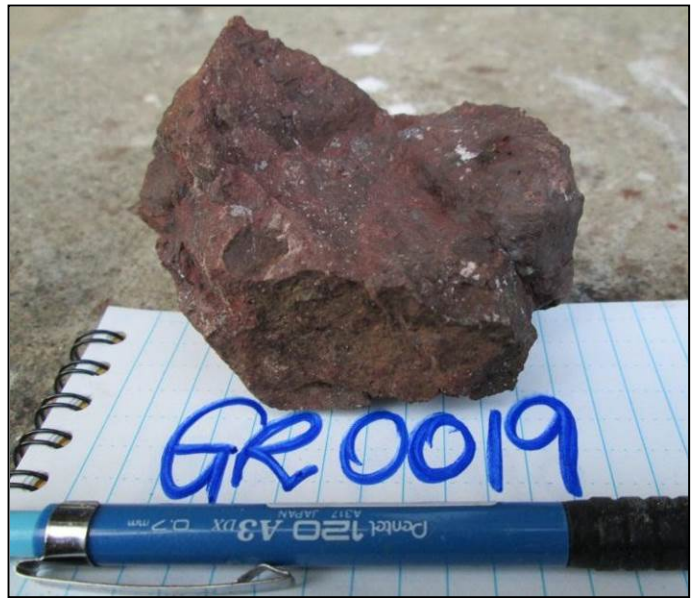
According to Flynn Moses, the Exploration Geologist undertaking the program, "the Altered Diorite has remarkably encouraging alteration but relatively scarce occurrence". The associated unaltered coarse diorite (?granodiorite) has a sandy appearance upon weathering.

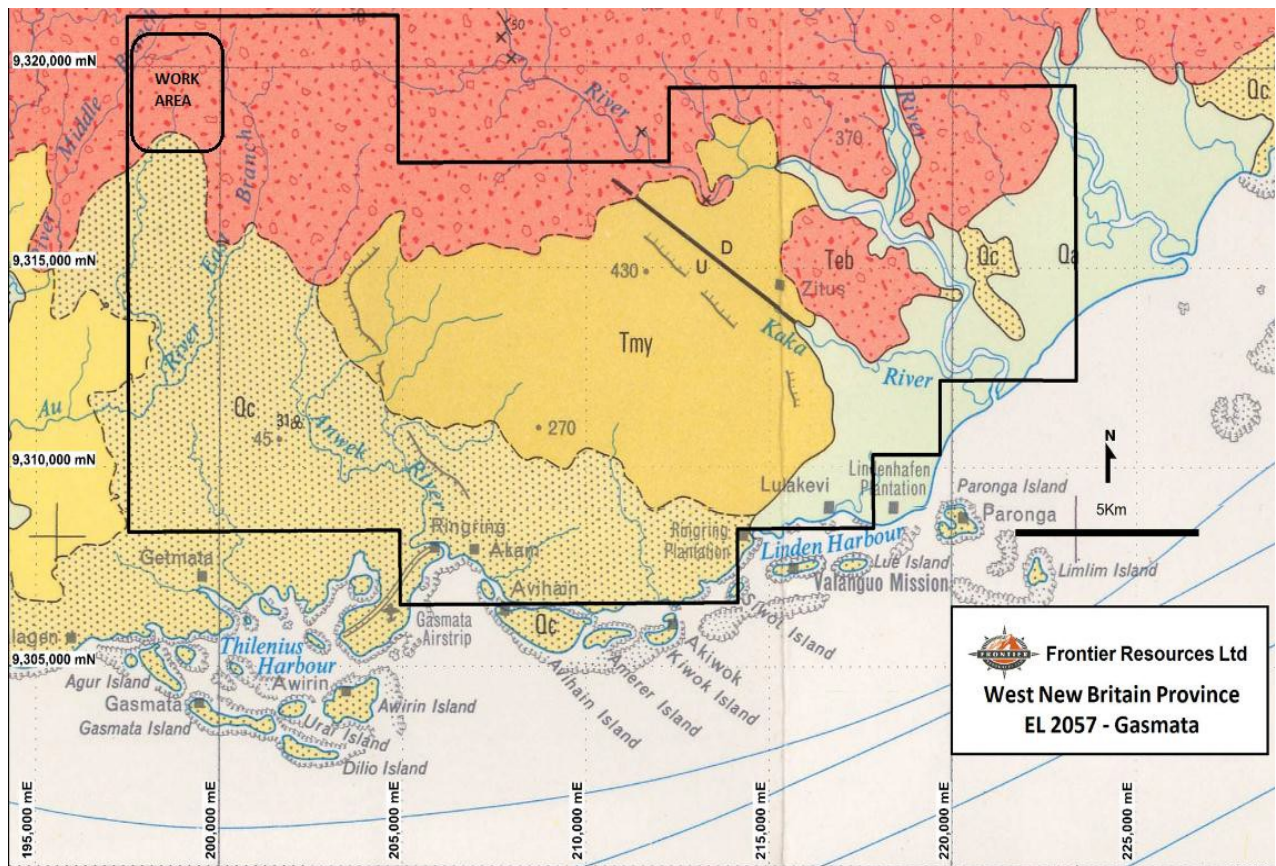
The altered diorite has moderate to strong sericite -clay (phyllic) alteration overprinting original chlorite - epidote (propylitic) alteration. Minor to pervasive remnant signatures of K Feldspar - magnetite +/- biotite (potassic) alteration locally (py+/- mt+/- qz mineralisation with trace dissem./fine aggregates of ?chalcopyrite - tarnished Py?) and trace very fine dark sulphides.

The dominant structures observed in the area are: ~North-South, Northwest -Southeast and Northeast - Southwest. They include these measured structures: 200°/70°, 100°/40° and 135°/80° and also 300° /86°, 175°/85° X-cuts 85°/85° sets. The altered diorite appears to strike associated/ along the N-S structures. The structures form clay altered zones within the intrusives and dilatational jogs are filled by interesting clay altered lenses and fault breccias, where they intersect.

Sample #	Sample Type	Description/Remarks
GR 0002	Outcrop	Similar to above GR 0001. Fresh. Ser' alteration overprinting ch-ep-felspar- py+/-mt alteration. Minor py dissem. throughout.
GR 0003	Outcrop	Dk Gry. Intensely hard, fresh, chl-epi-py+/-mt altered Andesite. Trace occasional dissem. py. Litho Contact with above GR 0002 @ 100°/80°.
GR 0015	Outcrop	Similar outcrop as above 3 samples, further upstream. Grnish Gry. Mod hard. Fresh-slightly weath'd. Blocky, NS (190°). Mod-strong ser-cly (phyllic) altn overprinting original Chl-Epi-Py-feldspar (propyl) alteration. Minor perv' remnant
GR 0019	Outcrop	Reddish Brown mod'ly hard hematite altered intrusive
GR 0021	Outcrop	Grn-blueish Gry. Mod'ly hard. Frsh - weakly weath'd, weakly oxidised. Chl-epi-ca-mt-cb- ser-cly alt'd Volcanics with up to 3mm thick, leached out Cb-
GR 0028	Outcrop	Milky Grey. Mod hard. Slightly weakly weathered. Ser'-cly-epi-chl+/-py altered volcanic breccia with up to 2cm wide ser'-cly altered clasts. FeO stained fracture surfaces. (Outcrop in the creek)

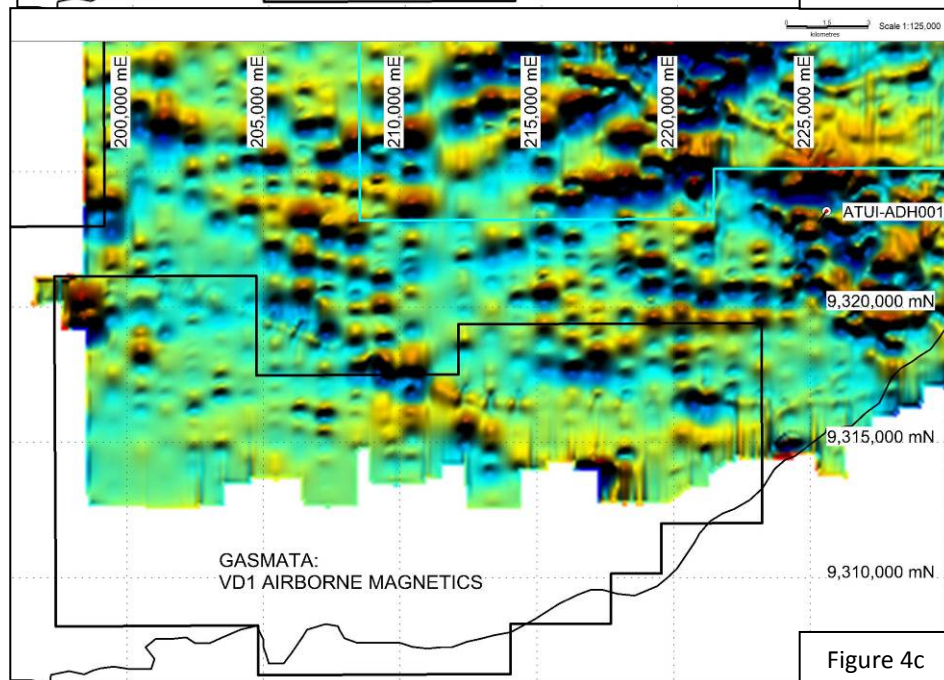
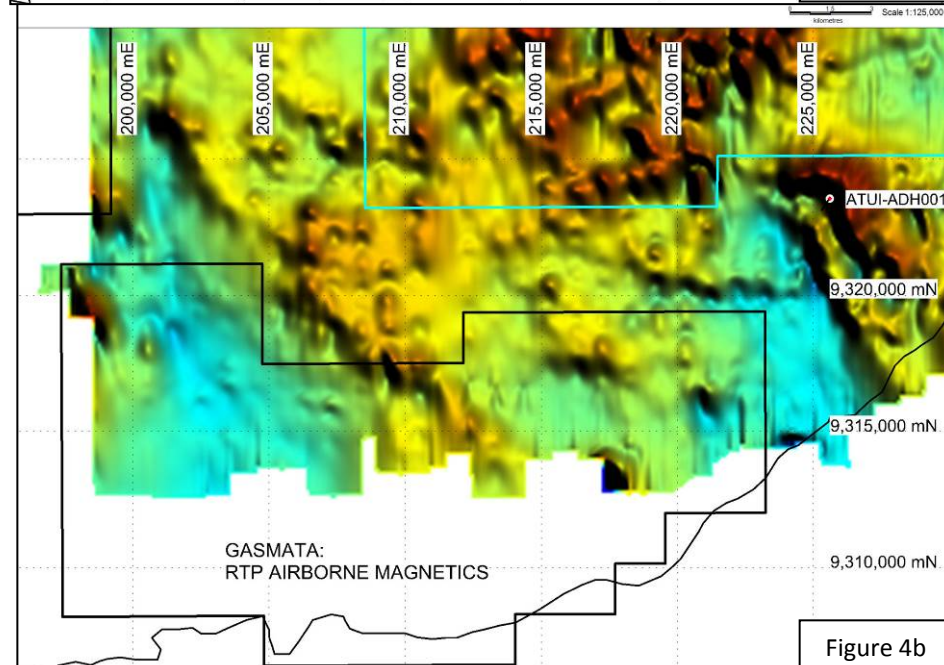
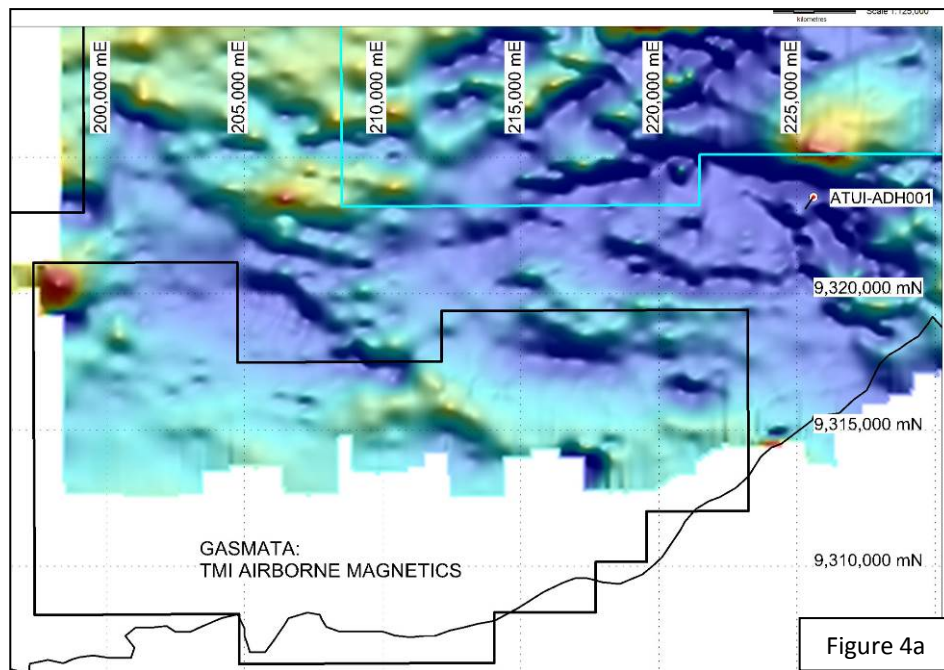
Photo 1. 'Altered Diorite' outcrop from samples GR0012 to GR0016 going upstream, with 5m to 25m wide exposures. Photos 2-6 show selected rocks collected from outcrop and Table 1 (above) gives descriptions.

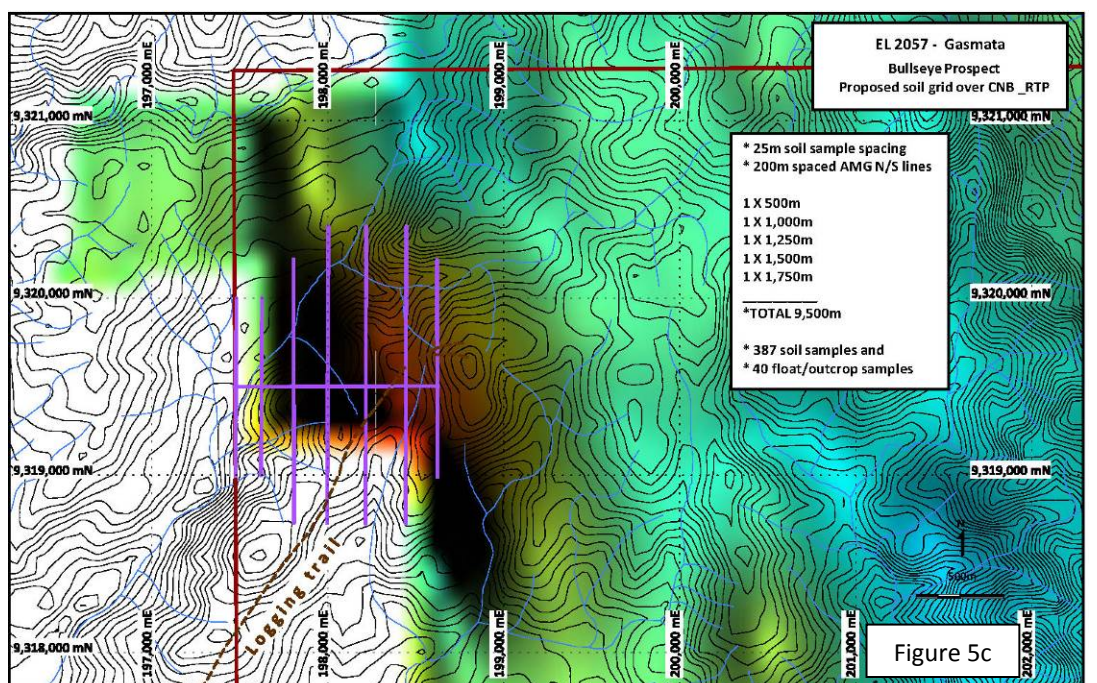
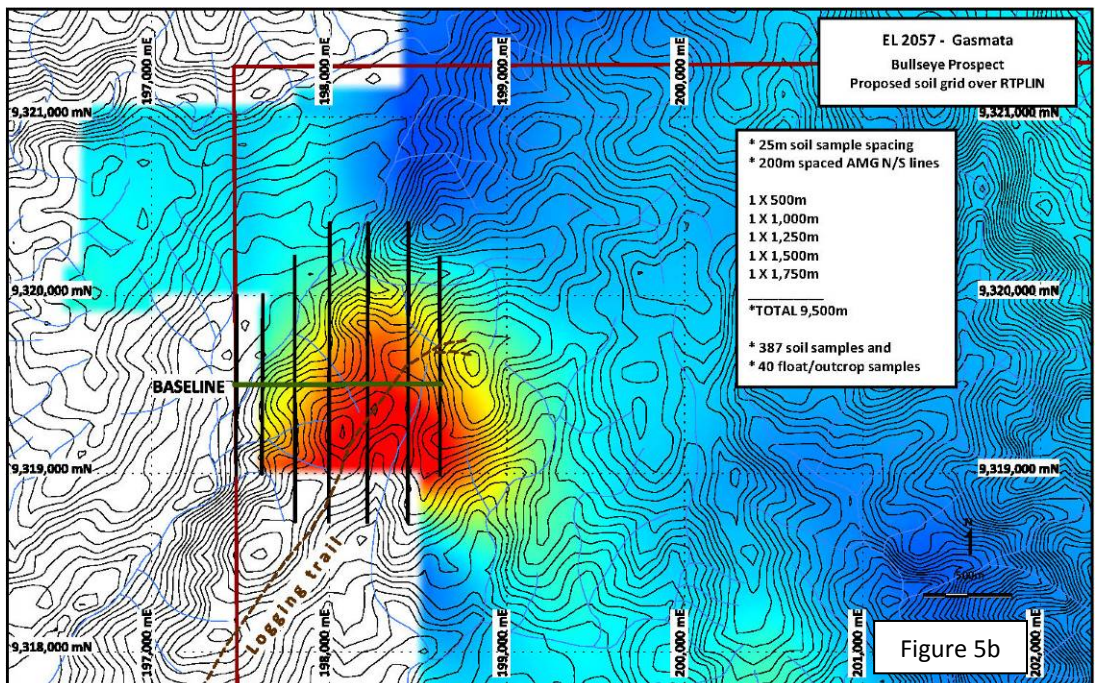
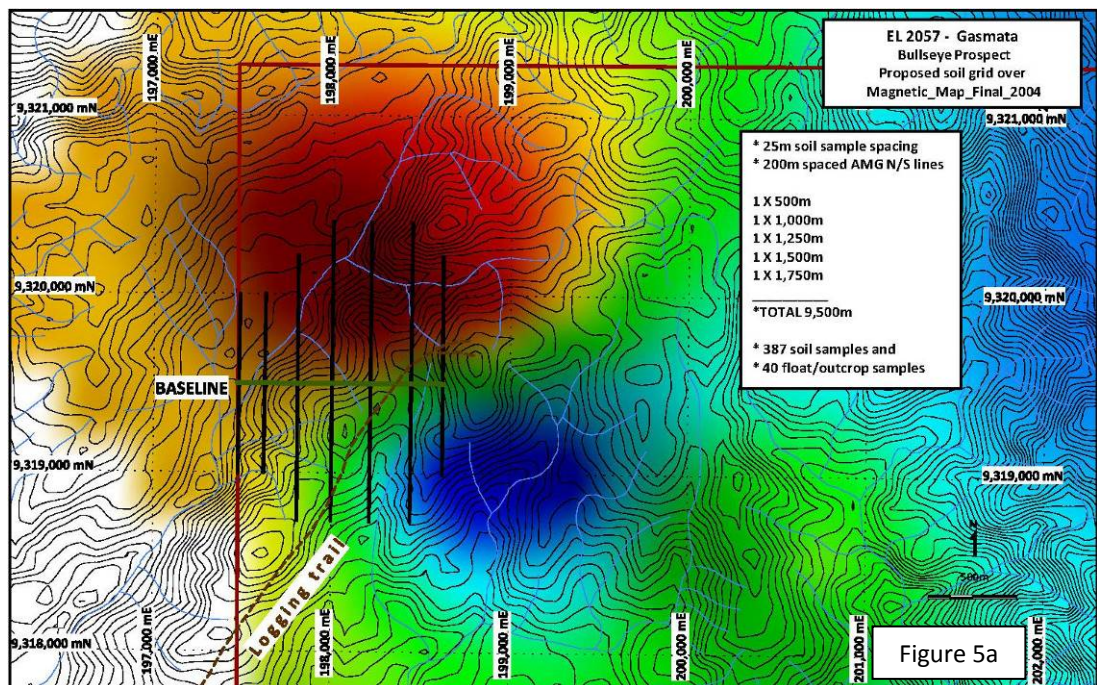


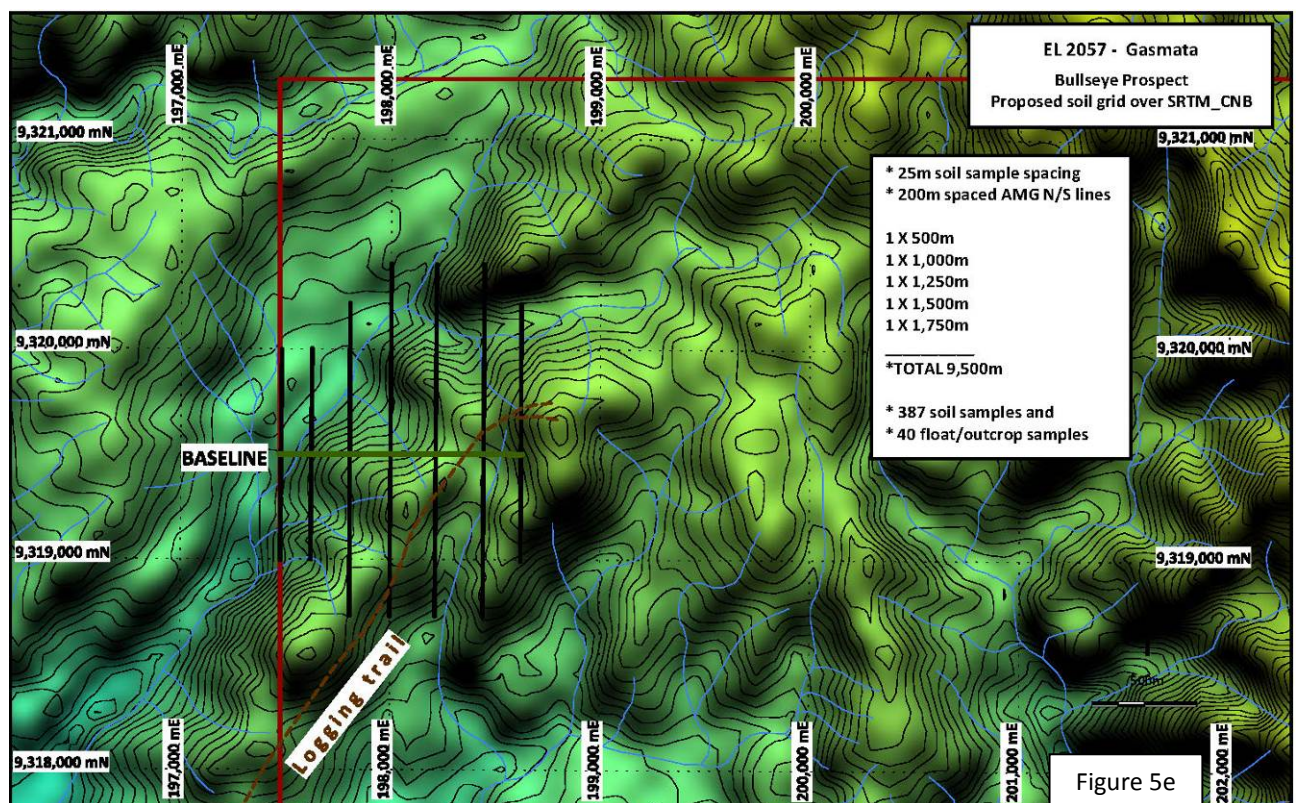
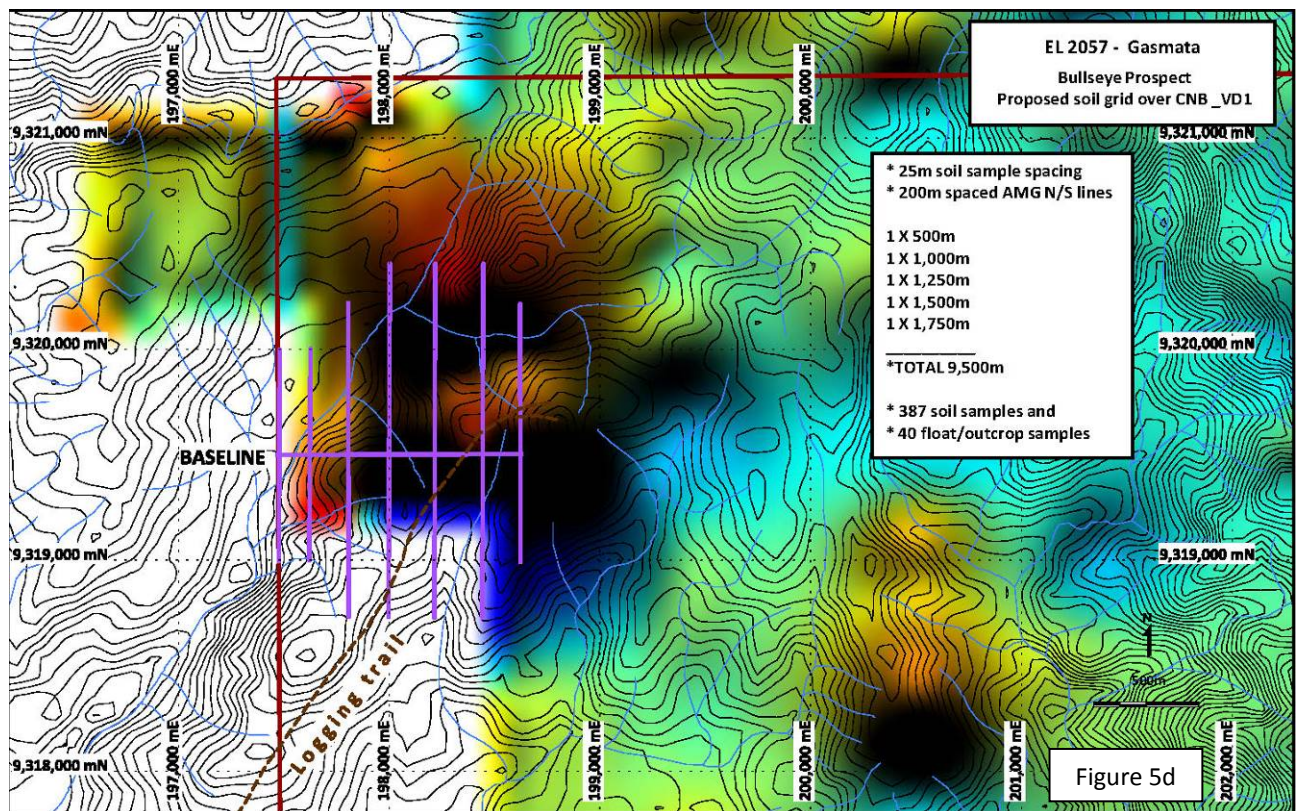


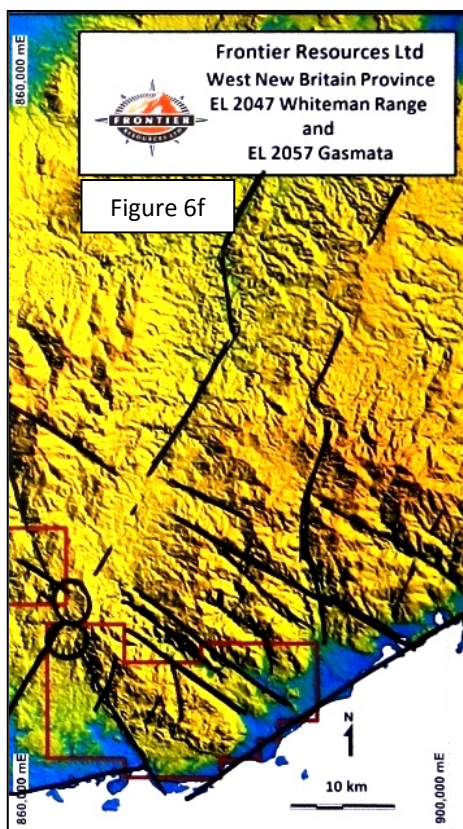
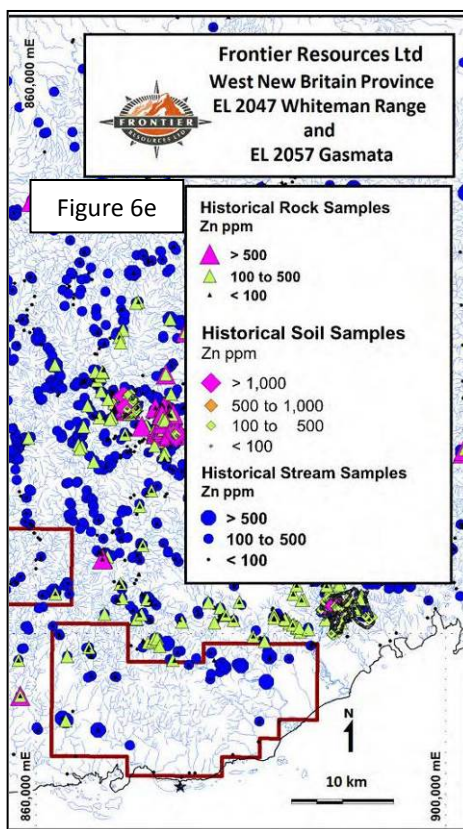
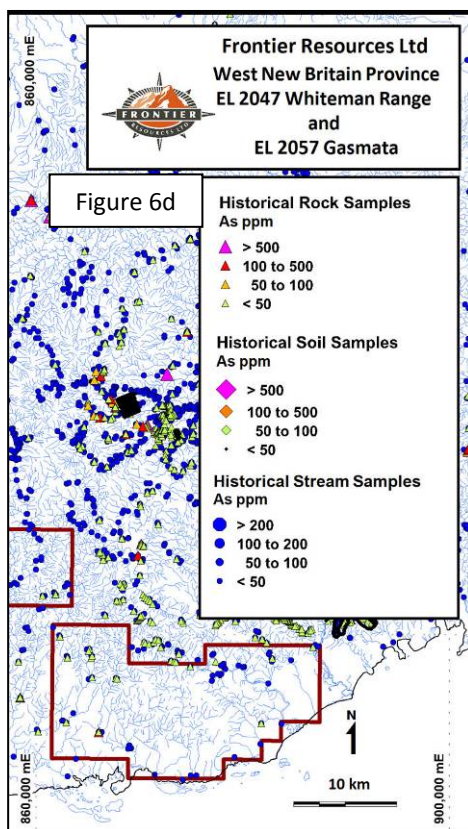
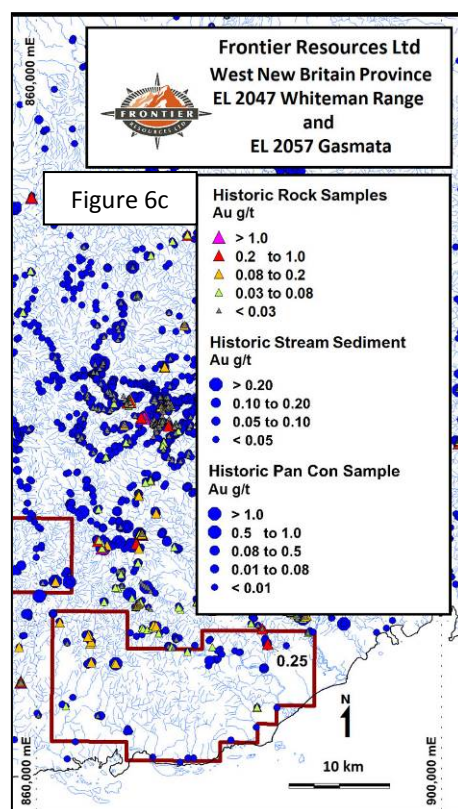
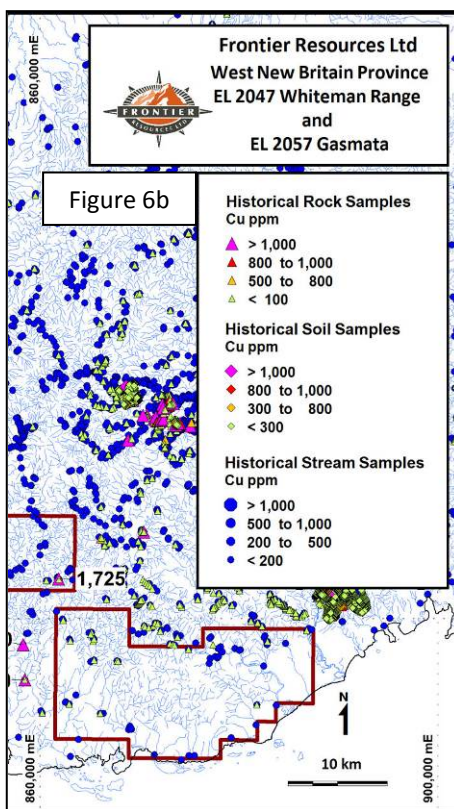
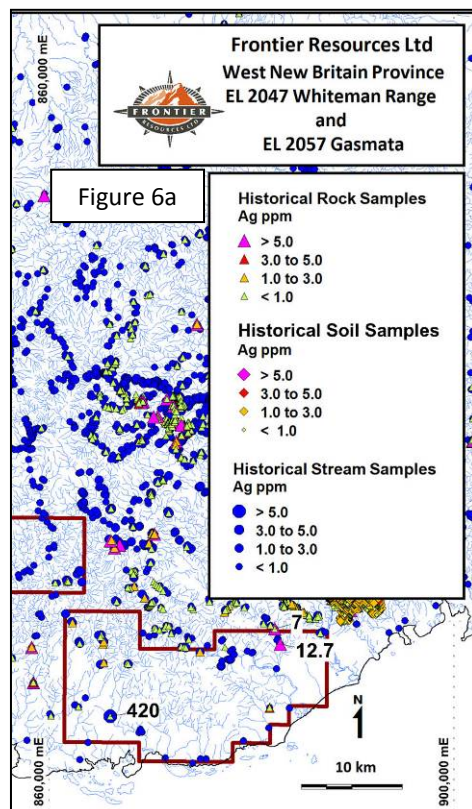
Reference		
QUATERNARY	PLEISTOCENE TO HOLOCENE	Qa Gravel, sand, silt, clay: alluvium
		Qc Calcarene, calcilutite, calcirudite, calcareous sandstone, siltstone, mudstone, conglomerate: raised coral reefs and lagoons
		Qk Basaltic to rhyolitic pyroclastics, principally ash, lapilli, scoria and rubble, andesite, basalt, dacite, rhyolite extrusives, hypabyssal intrusives
	PLIOCENE	Tpk Semi-consolidated massive to well-bedded acid tuffaceous sandstone, siltstone and conglomerate, tuff, volcanolithic conglomerate, calcareous sediments, limestone
		Tpm Dacite, rhyodacite, andesite, pumiceous tuff
		Tpj Soft calcareous siltstone, sandstone, mudstone, conglomerate, limestone, shelly pumiceous siltstone
		Tpt Porphyritic hornblende andesite and microdiorite
	UPPER MIOCENE TO PLIOCENE	Tps Soft calcareous siltstone and mudstone, calcilutite, bioclastic limestone
		Tmy Compact or porous massive to well-bedded bioclastic limestone, chalk, calcareous siltstone and mudstone; minor calcirudite
TERTIARY	MIOCENE upper Te and Tf *	Tom Massive to well-bedded, moderately indurated volcanic breccia, conglomerate, sandstone and siltstone, tuff; minor basic lava and limestone
		Tok Massive to well-bedded, moderately indurated volcanic breccia, maroon tuff, lapilli tuff, volcanic sandstone, siltstone and conglomerate, basic to intermediate lavas and hypabyssal rocks; minor limestone
	UPPER OLIGOCENE Lower Te *	Toi Tonalite, gabbro, diorite, granodiorite, adamellite, monzonite, mangerite; related porphyries and microplutonic rocks Intrusive breccias and pyroclastic rocks
	UPPER EOCENE Tb *	Tbb Massive to well-bedded indurated and strongly-jointed volcanic breccia, conglomerate, sandstone and siltstone, basic to intermediate lavas and hypabyssal rocks, tuff; minor limestone

* Tertiary letter stage









Quintessential Resources Ltd and Frontier Resources Ltd (ASX: FNT), are 50/50 contributing Joint Venture Partners, over a total area of 10,280 km² on the island of New Britain. The tenements are all prospective for major porphyry copper and/or epithermal gold deposits.

The New Britain JV supplies each company with extensive tenement interests, maximises the chance for success and reduces total risk with the new tenements, by having half as much equity each, but in twice as many project areas.

Frontier will manage and operate the Joint Venture on behalf of the partners. Earn-In Joint Ventures will be sought, ideally with major mining companies for groups of tenements or individual ELs or targeted and value adding exploration will be funded by pro-rata (50/50) contributions.

The JV is based on the Exploration Licenses noted below.

Quintessential	Aria River	EL 2045
	Open Bay	ELA 2046 (under application)
Frontier	Whiteman Range	EL 2047
	Gasmata	EL 2057
	Nakanai Mts	ELA 2058 (under application)

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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 Mr P.A.McNeil - Member of the Australian Inst. of Geoscientists. Mr P.A.McNeil is Consultant Geologist to Quintessential Resources Ltd. Mr P.A.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 2004 Edition of the Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Resources. Mr P.A.McNeil consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.