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31<sup>st</sup> July, 2007

ASX LIMITED  
COMPANY ANNOUNCEMENTS OFFICE

## TECHNICAL REPORT - QUARTER ENDED 31st July 2007

### HIGHLIGHTS OF THE QUARTER

- The Inferred Resource at the Kodu porphyry copper - gold - molybdenum Deposit was re-estimated and the contained tonnage increased 88% to 203 million tonnes, grading 0.47% copper equivalent\*.
  - The deposit contains 945,000 tonnes of copper equivalent\* grading 0.47%, within 203 Million tonnes grading 0.28% copper + 0.32g/t gold + 73ppm molybdenum + 1.8g/t silver. It contains 570,000 tonnes of copper, 65 tonnes of gold, 15,000 tonnes of molybdenum and 365 tonnes of silver (or 1.25 billion pounds of copper, 2.1 million ounces of gold, 33 million pounds molybdenum and 12 million ounces of silver).
  - The mineralisation at Kodu is contained in one contiguous steeply westerly dipping zone, with a higher grade core appearing to run the length of the Deposit that could provide the basis for a 'Starter Pit'.
  - Good continuity of copper - gold - molybdenum mineralisation has been documented on nearly all sections drilled to date, further extending and confirming the continuity of the deposit. Section 10300N at the far northern end is apparently outside of the deposit and is the exception.
  - A Scoping Study will be undertaken in August/September to evaluate the various parameters associated with possible development paths forward for the deposit and its further exploration.
  - The Kodu Resource will be re-estimated as Indicated and Inferred, utilising all holes drilled to date (i.e. incorporating KFD 008 and KFD010 - 014), for release anticipated late-September.
  - Resource delineation and expansion drilling continued at Kodu until late June, when Rig 1 completed hole KFD014 at 488.9m depth (at the limit of rig capability for that hole, not megascopic copper mineralisation). The rig was then shipped to the Andewa Gold Project to conduct drilling to satisfy EL1345's exploration commitment.
  - 1,268.9m of diamond core drilling was completed by the Company at the Kodu Deposit during the second quarter of 2007, with 4,788.9m completed program to date.

Diamond drilling commenced at the Andewa Gold Project on July 28<sup>th</sup>, 2007.

- The goal is to attempt to define an Indicated and Inferred gold Resource following the completion of the planned 3 month, 52 hole (approx. 3,800m) program.
- Systematic 20m spaced hand trenching was completed over the central section of the vein system to assist future drill targeting and for later incorporation into any Resource estimation. Results are awaited.
- A bulldozer was purchased to undertake an extensive regional trenching program and will be mobilised to site in early September.
- Diamond drilling commenced at the large Elo porphyry copper-gold-molybdenum mineralised system, located 18km NW of Kodu on June 11<sup>th</sup>, 2007, initially testing the highest tenor copper/gold/molybdenum soil anomalies with 2 long drill holes.
  - Hole 1 was drilled to the southwest at a 55° inclination from the top of Elo hill and was completed at about 370m depth (after many time wasting issues with fauna damaging the water supply line to the drill rig).
  - Hole 2 is being drilled easterly at a 55° inclination from the same pad and is currently at about 120m depth, also targeting a total depth of about 370m.
  - Additional holes are planned, subject to encouraging assay results.
  - Reconnaissance soil sampling was initiated on a Landsat Satellite interpreted 8km long Madilogo epithermal Prospect (a jarosite-iron oxide or pathfinder anomaly), located about 1.5km to the east of Elo in the centre of an interpreted stratovolcano.
- An open ended, 4.8km long multi-element soil anomaly was defined at the Bukuam Prospect (copper + coincident molybdenum + lesser gold and silver).
  - The additional 2.8km north-south length of grid-based soil sampling, over the 5.5km long x 1.2km wide stream sediment copper anomaly, was all anomalous.
  - Additional soil sampling is required to close the anomaly off to the southeast south, north, and east.
  - Trench and rock chip sample results have now been received and will be reported when compiled.
- Significant gold - silver - lead assay results were returned from rocks and soil samples from the SW Kodu / Sirimu Epithermal precious metal Prospect, over an area at least 1.5km long and 1.0km wide, centred about 1,100m west of Kodu.
  - Rock chip sampling of float in Ofi Creek returned a consistent epithermal style of mineralisation with assays to 5.73g/t gold, 491g/t silver and 8.49% lead. In addition, two rocks contained molybdenum only, grading 1300ppm and 131ppm.
  - Soil sampling returned peak gold of 0.14g/t, with coincident lead grading 0.24%, in a north trending zone.
  - A major bulldozer trenching program has commenced at the SW Kodu / Sirimu Prospect to define drilling targets. The only previous drill hole (KD005) in this region returned 2m of 15.5 g/t gold.
- The Company successfully finalised and fully subscribed its Entitlements Issue (from Q1), with placements of the shortfall, to raise a grand total of \$5.74million.

## ABOUT FRONTIER RESOURCES

- The Company is focused on exploring the highly mineralised Pacific 'Rim of Fire', Papua New Guinea and the major Kodu copper-gold-molybdenum Deposit. Frontier is also exploring the Elo and Bukuam porphyries and the Andewa gold Project, plus the SMRV and Gowrie Park zinc-lead-silver-gold Projects in Tasmania.
- Frontier's objective is to advance the Kodu Deposit rapidly and cost effectively, by confirming, delineating and expanding the existing resource base. The Scoping Study will assist in evaluating exploration and 'development' requirements going forward.
- The Company has a 100% interest in an approx. 7,500km<sup>2</sup> portfolio of quality copper and gold properties in PNG, with 3 Exploration Licences (Kodu, Likuruanga and Andewa) and 8 applications, plus 5 Exploration Licences and 2 Retention Licences covering 211 km<sup>2</sup> in Tasmania.
- The portfolio offers excellent mineral deposit potential, with primary Targets being World Class copper/gold/molybdenum porphyry, gold/silver epithermal and polymetallic - zinc/lead/silver VHMS deposits. The projects all have high-grade exploration results in rock, trenches and/or drill hole and are in the same or similar geological terranes as existing World Class and/or major mines.
- The Company's Directors and management team have more than 200 years combined experience in PNG and Australia.
- Frontier operates with a general policy of 'DRILLING' our quality projects with our self manufactured, cost effective, environmentally friendly, man-portable diamond core rigs.
- Frontier is an ASX listed junior mineral explorer whose shares also trade on the Frankfurt, Berlin and Munich Stock Exchanges.

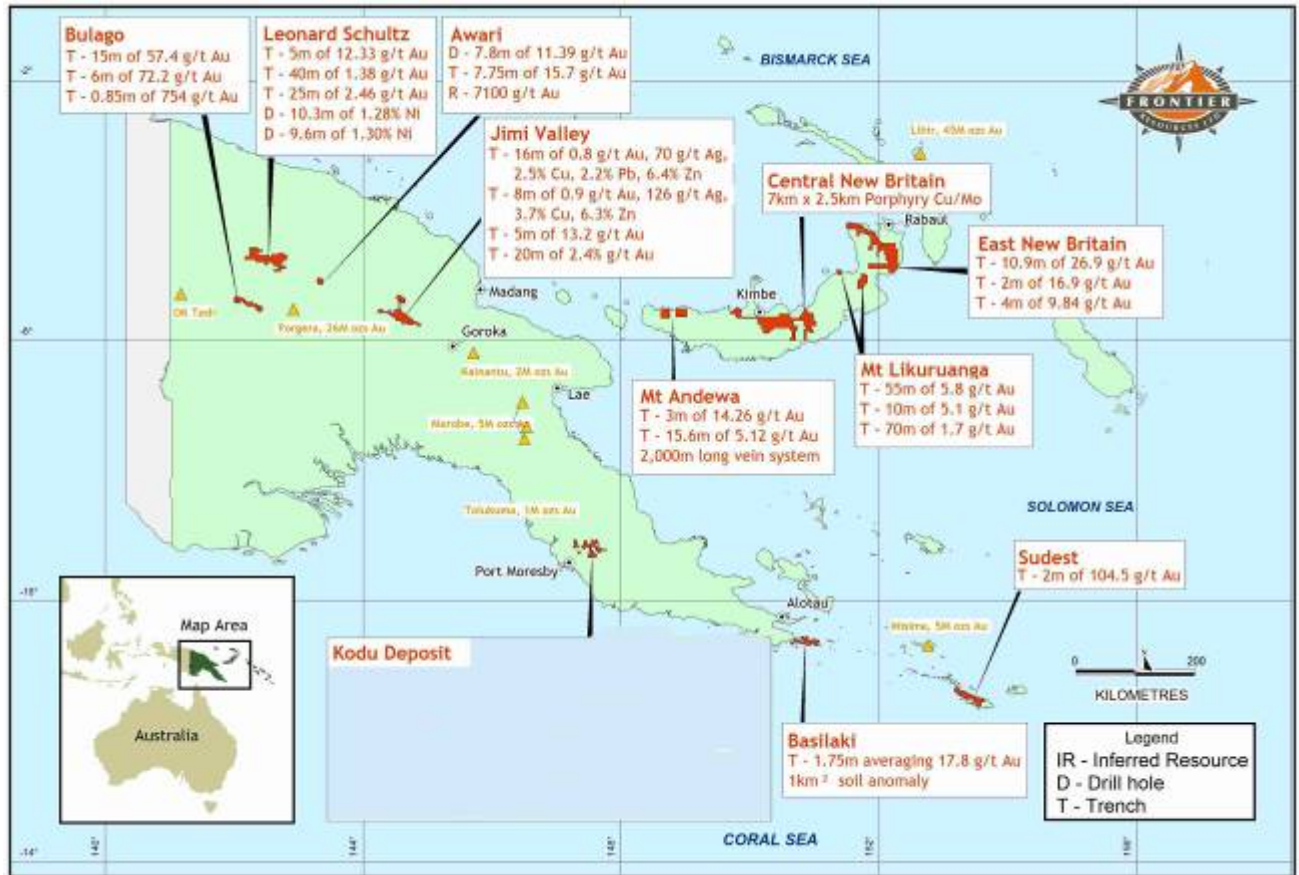
## SUMMARY OF ASX ANNOUNCEMENTS RELEASED DURING THE QUARTER

- Entitlements issue raises \$1.275 million (2<sup>nd</sup> April)
- Width of drilled mineralisation at the Kodu Deposit increased by 100-200% on Section 9950N (19<sup>th</sup> April)
- Issue of securities - entitlements issue shortfall (20<sup>th</sup> April)
- Issue of securities - entitlements issue shortfall (23<sup>rd</sup> April)
- Issue of securities - entitlements issue shortfall (27<sup>th</sup> April)
- Technical report - quarter ended 31<sup>st</sup> March (30<sup>th</sup> April)
- Copper - molybdenum +/- gold - silver core of the Elo porphyry system expanded to about 750m x 250m (2<sup>nd</sup> May)
- Entitlements issue securities fully subscribed with a total of \$5.74 million raised (28<sup>th</sup> May)
- Hole KFD004's extension returns additional mineralisation at the Kodu Deposit, PNG (4<sup>th</sup> June)
- Drilling commences to evaluate the major Elo copper-gold-molybdenum occurrence, PNG (12<sup>th</sup> June)
- Mineralisation at the Kodu Deposit extended further with long drill intersections such as 450m grading 0.48% copper equivalent\* (to end of hole) (13<sup>th</sup> June)
- Promotional roadshows (18<sup>th</sup> June)
- 88% tonnage increase in the Kodu Inferred Resource to 203 million tonnes grading 0.47% copper equivalent (18<sup>th</sup> June)
- Copper-molybdenum soil geochemical anomaly length increased by approx. 150% to >4,800m, at the Bukuam Porphyry Prospect, PNG (19<sup>th</sup> June)
- Epithermal gold-silver-lead potential upgraded in the Kodu region assays to 5.73 g/t gold, 491 g/t silver, 8.5% lead and 0.11% molybdenum in rock samples at SW Kodu, plus similar multi-element soil anomalism (27<sup>th</sup> June)
- Allotment of securities (27<sup>th</sup> June)
- Copper - gold - molybdenum mineralisation confirmed to >450m vertical depth in the northern sector of the Kodu Deposit, Papua New Guinea (30<sup>th</sup> July)
- Drilling commences to evaluate the Komsen epithermal gold vein Prospect at the Andewa Gold Project, West New Britain, Papua New Guinea (31<sup>st</sup> July)

# DETAILS

## PAPUA NEW GUINEA

Figure 1. Location of the Frontier Resource Ltd's PNG Exploration Licences and EL Applications.



### EL 1348 - MT BINI

#### KODU PORPHYRY COPPER - GOLD - MOLYBDENUM DEPOSIT

1,268.9m of diamond core drilling was completed by the Company at Kodu during the second quarter of 2007, with 4,788.9m completed program to date. Results and location information are listed below.

Table 1: Drill Assay Intersections Reported Q2 2007 plus Location Information for Holes Drilled at the Kodu Deposit

Hole ID	Intercept Length	Copper Equiv. (%)	Copper (%)	Gold (g/t)	Moly (Mo) (ppm)	Silver (ppm)	From (m)	To (m)	Easting (m)	Northing (m)	RL (m)	Azimuth (true)	Dip (0)	EOH Depth (m)
KFD004	246.2	0.53	0.32	0.30	105	1.3	4.0	250.2	564401	8972590	935	325	-65	250.2
KFD005A	450.0	0.48	0.32	0.39	31	1.5	50.0	500.0	564164	8972398	966	110	-80	500.0
KFD007	188.0	0.53	0.33	0.38	74	1.5	8.0	196.0	564468	8972724	946	143	-45	397.3
plus	163.3	0.38	0.22	0.26	64	1.4	234.0	397.3						
KFD008*	454.6	0.37	0.23	0.22	63	1.1	14.0	468.6	564468	8972724	946	145	-80	468.0
including	312.0	0.42	0.26	0.25	75	1.2	66.0	378.0						
plus	80.3	0.36	0.26	0.28	19	1.2	388.0	468.3						
KFD009	38.0	0.23	0.17	0.11	19	0.5	50.0	88.0	564162	8972403	969	325	-65	286.8
KFD010	40.0	0.25	0.11	0.06	99	1.3	8.0	48.0	564466	8972726	946	325	-50	92.4
KFD011	171.2	0.28	0.11	0.06	131	1.0	6.0	177.2	564466	8972726	946	325	-75	177.2
KFD012**	12.0	0.24	0.08	0.04	106	5.2	158.0	170.0	564661	8972802	1008	145	-45	519.1
KFD013	12.0	0.21	0.04	0.27	69	1.5	22.0	34.0	564736	8972720	985	145	-45	350.4
KFD014	Awaiting Assays								564745	8972195	971	312	-45	488.9

Note: \* KFD008 has 34m of rock <0.2% Cu Equiv. included in the weighted assay average interval 2 zones  
 \*\* KFD012 is awaiting assays from 190m to end of hole

Drilling has substantially improved the documented continuity of mineralisation on all sections reported to date. The consistent copper and gold assays returned to date have extended the mineralisation throughout the Deposit and have added significant tonnage to the resource model.

An internal zone of variable but coherent higher-grade mineralisation appears to run longitudinally and dip steeply to the west, within the wider and lower grade mineralised envelope. The copper-gold-molybdenum mineralised zone (on the 10100N section) is now about 500m wide at a 0.2% copper equivalent cut-off grade.

The Company announced a substantial increase (88%) in the Inferred Resource tonnage at the Kodu Deposit to 203 million tonnes grading 0.47% copper equivalent\* (0.28% copper, 0.32g/t gold, 1.8g/t silver and 73ppm molybdenum) on June 18th. Previously (on 11/8/06) the Company had announced an Inferred Resource of 108 million tonnes grading 0.52% copper equivalent\* (both using a 0.2% copper equivalent\* cut-off).

The revised Inferred Resource contains 945,000 tonnes of copper equivalent\*, including 570,000 tonnes of copper, 65 tonnes of gold, 15,000 tonnes of molybdenum and 365 tonnes of silver (or 1.25 billion pounds of copper, 2.1 million ounces of gold, 33 million pounds molybdenum and 12 million ounces of silver).

Peter McNeil, Managing Director commented:

*"The revised Inferred Resource has exceeded the 200 million tonne hurdle, indicating it could have the critical mass to move towards production. A scoping study will now commence to evaluate possible development paths forward and requirements for continued exploration.*

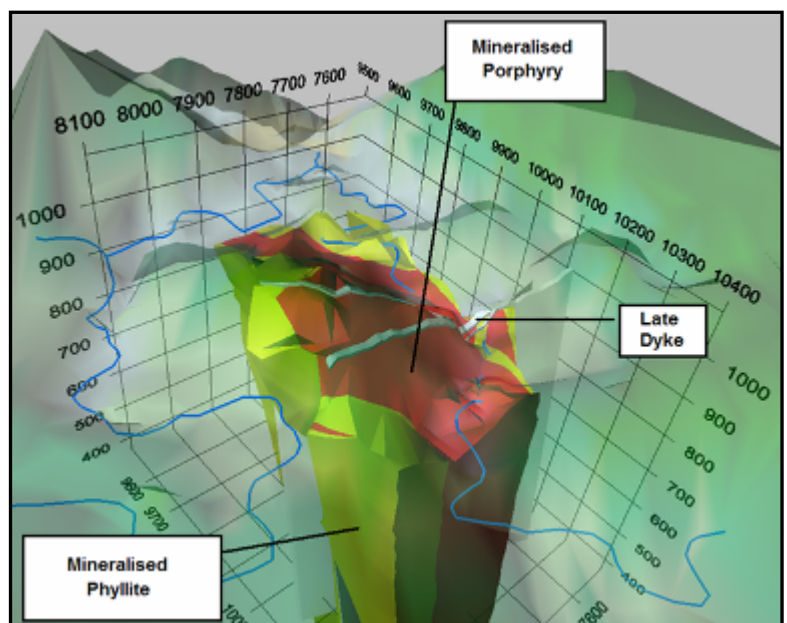
*Frontier is very well positioned with respect to copper and gold, given the major increase in the total copper equivalent in the Inferred Resource, the continued high copper-gold-molybdenum prices and outlook, the potential to further increase the global resource at Kodu and the excellent potential to locate additional copper-gold-molybdenum mineralisation at the Elo, Oomargi, Tamala and Ua' Ule Prospects, also within EL1348.*

*The next round of work should upgrade a substantial portion of the Inferred Resource to Indicated to allow initiation of a Pre-Feasibility Study. We expect to be releasing drill results to the market on a regular basis from the Kodu Deposit and Elo porphyry copper-gold-molybdenum occurrence, plus the Andewa gold Project. Frontier is now positioned for a very exciting future."*

Figure 2. Model of the mineralised porphyry and wallrock (phyllite), viewed to the southwest.

The Kodu Deposit is located approximately 55km NE of Port Moresby. Frontier's drilling program thus far has substantially increased the estimated global tonnage of the deposit and three additional holes drilled in the far north-east sector of the resource and one in the east can potentially add significant additional tonnage to the 203 million tonnes. Megascopically, mineralisation from this zone looks encouraging, with remaining assay results expected in approximately 3 weeks.

The strike of the deposit runs broadly northeast - southwest with a dyke like composite stock occupying the central part of the resource with mineralised phyllite on either side of the mineralised porphyry. The porphyry has generally been modelled as one unit with two narrow unmineralised dykes modelled crosscutting this unit in a NW-SE direction. The mineralised phyllite boundaries were determined using a 0.2% copper equivalent cut-off grade.



The slightly lower copper equivalent\* grade than that in the 11/8/06 estimation results from the edges of the resource being more thoroughly tested by drilling, with larger volumes of peripheral lower grade but still significantly mineralised wallrock (phyllite) being defined and included. This also accounts for the 22% increase in molybdenum grade which is more abundant peripheral to, than coincident with the copper mineralisation.

The overall silver grade of the Inferred Resource has increased due to systematic sampling for silver in the recent drilling (not all previous drilling assayed for silver) and further intersections with an epithermal overprint higher in silver content (1.8g/t versus the previous average of 1.5g/t).

The modelled Inferred Resource update includes drill hole assay data from nine new holes (2801.4m) from the Frontier drilling program. The Inferred Resource is now defined by a total of twenty four drill holes (8,151m).

The block model was run using the same interpolation parameters defined in the 2006 resource calculation, however current geological interpretation has been enhanced by infill drilling and mineralised boundaries have been expanded and late unmineralised dykes have been modelled in more detail. There is a significantly greater drill density than previously available. Bulk density values are considered conservative and the block size is considered appropriate for a porphyry deposit. Statistical analysis indicates that inverse distance weighting is appropriate and no top cuts were applied to the model.

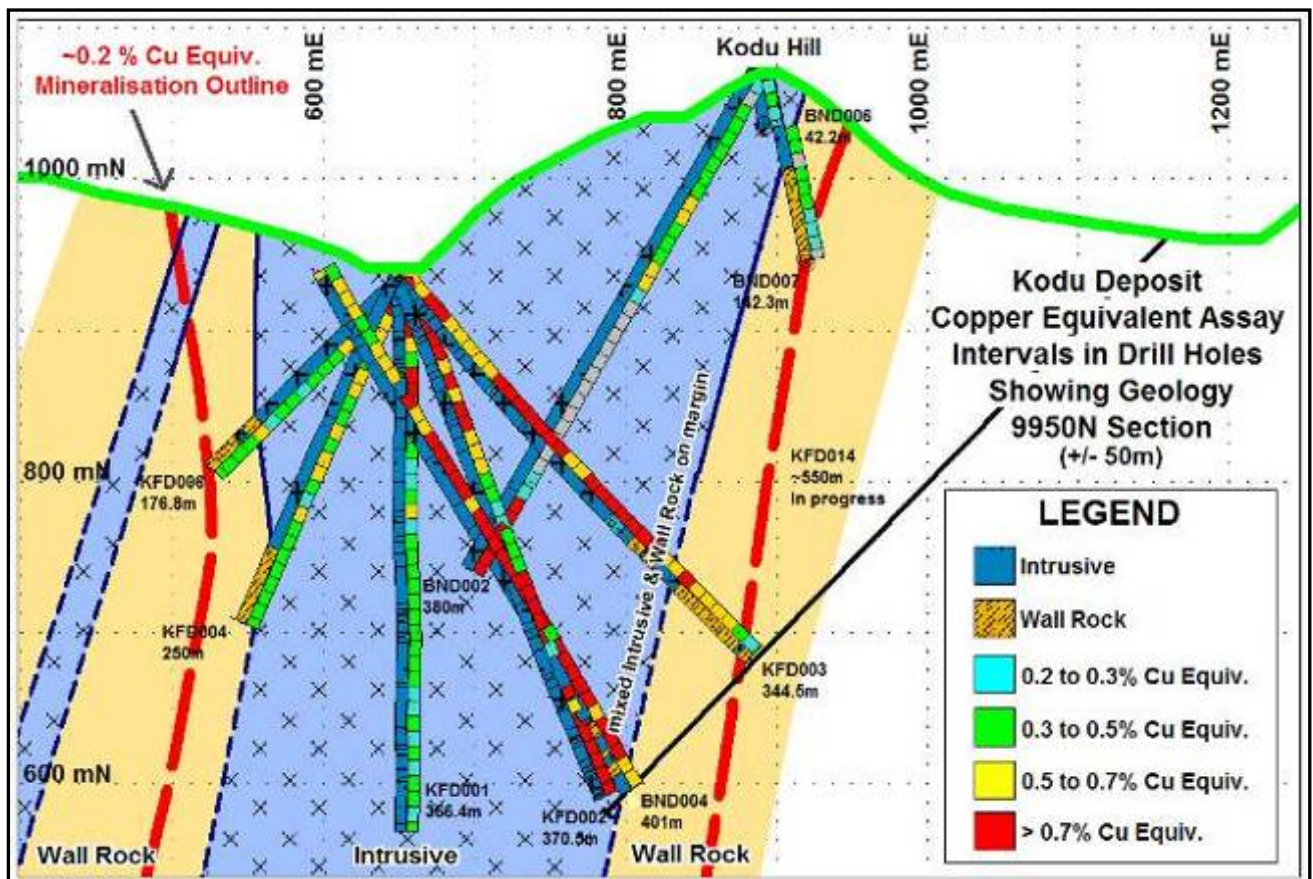
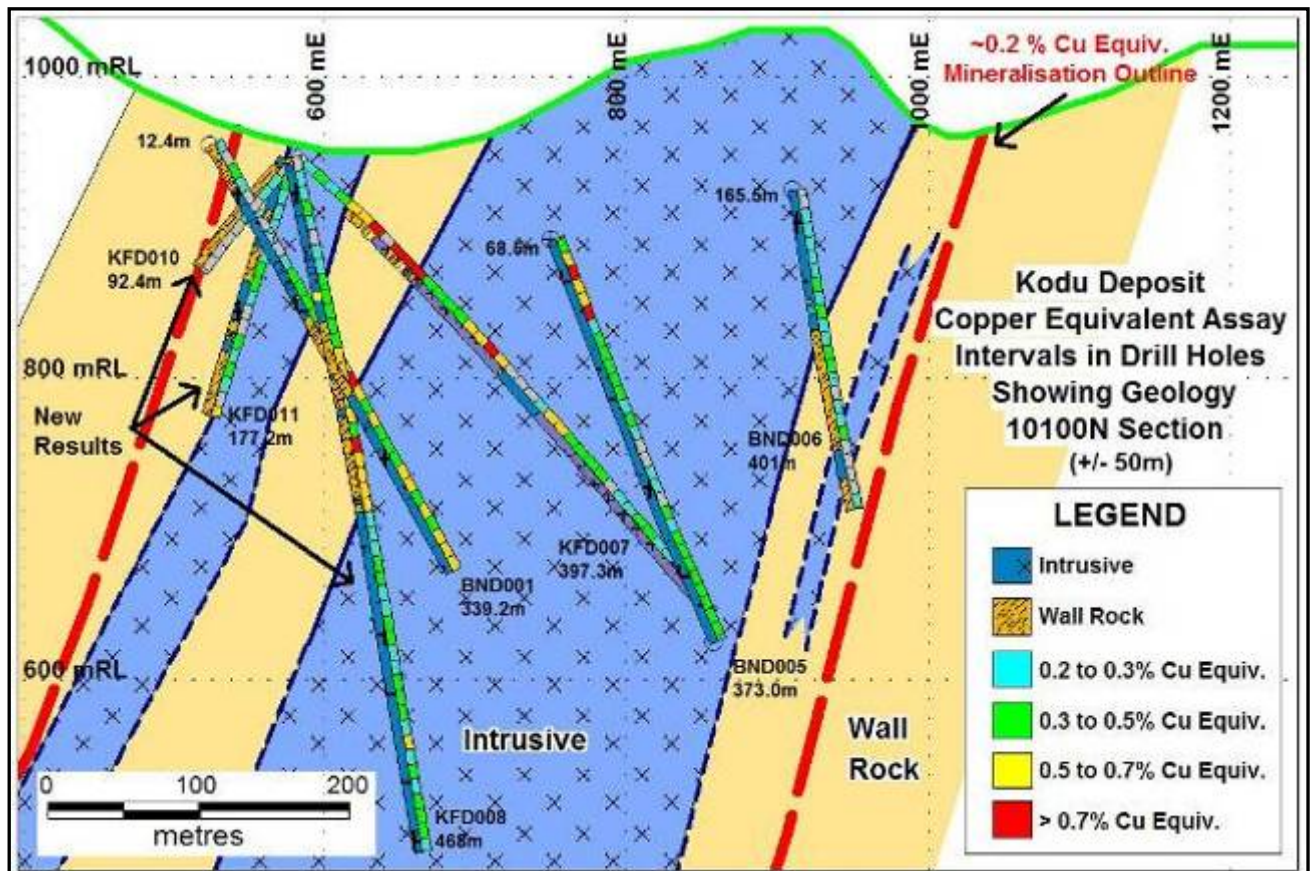
The Inferred Resource was estimated 'In House' using Surpac geological modelling software and the following method:

- Drill hole collars were located in the field and are accurate to approximately 5m, holes were regularly surveyed every 50m down hole.
- Assaying was undertaken on half core samples composited to 2m lengths. Assay data was verified by submitting standard reference materials with each lab batch to ALS Laboratories Townsville and repeatability of results has been verified.
- The Inferred Resource is based on the geological database as at the 21<sup>st</sup> of May and assays for all historic holes and Frontier holes KFD001 through KFD007 + KFD009.
- Sectional interpretation was undertaken using down hole geology and assays of both mineralised and unmineralised rock types between the 350 and 1150m RL, on sections spaced between 35 and 130m. Slices were cut through the sections at every 50m.
- These flitches were then wire framed and checked against drill hole locations.
- Two metre composites were generated and flagged for lithology type.
- A block model was created using a block size of 10x10x5m.
- A leached surface was digitised on sections and snapped to oxidation depths to account for waste material near surface. The block model was then clipped below this surface.
- Block grade was then interpolated for Cu, Au, Ag, Mo and Copper Equivalent using inverse distance weighting ( $1/x^3$ ) within each geological wireframe.
- Tonnage was calculated using density values of 2.65 and 2.8 for mineralised porphyry and mineralised phyllite, respectively.
- A 0.2% copper equivalent cut-off grade was applied to eliminate waste blocks for the model output.

Data density, and geological confidence are good, however the resource has all been classified as inferred at this stage. Extrapolation of end sections of the model are 50m to the south west and 75m to the north east. The width of mineralised porphyry is interpreted between sections 9760N and 9975N and is evident from mapping. Collar RL's are matched to the DTM, which is believed to be accurate to +/- 15m. Bulk density data is based on limited sampling for the porphyry and an average 'global density' for phyllite from the Field Geologists Manual.



Figures 3A, B and C. Cross sections for the 10100N, 9950N and 9650N respectively, showing the approximate boundary of the 0.2% copper equivalent mineralised zone, the traces of drill holes completed to date, 10m composite downhole copper equivalent\* mineralised intervals and the spatial relationship between the two types of porphyry intrusives and the mineralised and unmineralised wallrock.





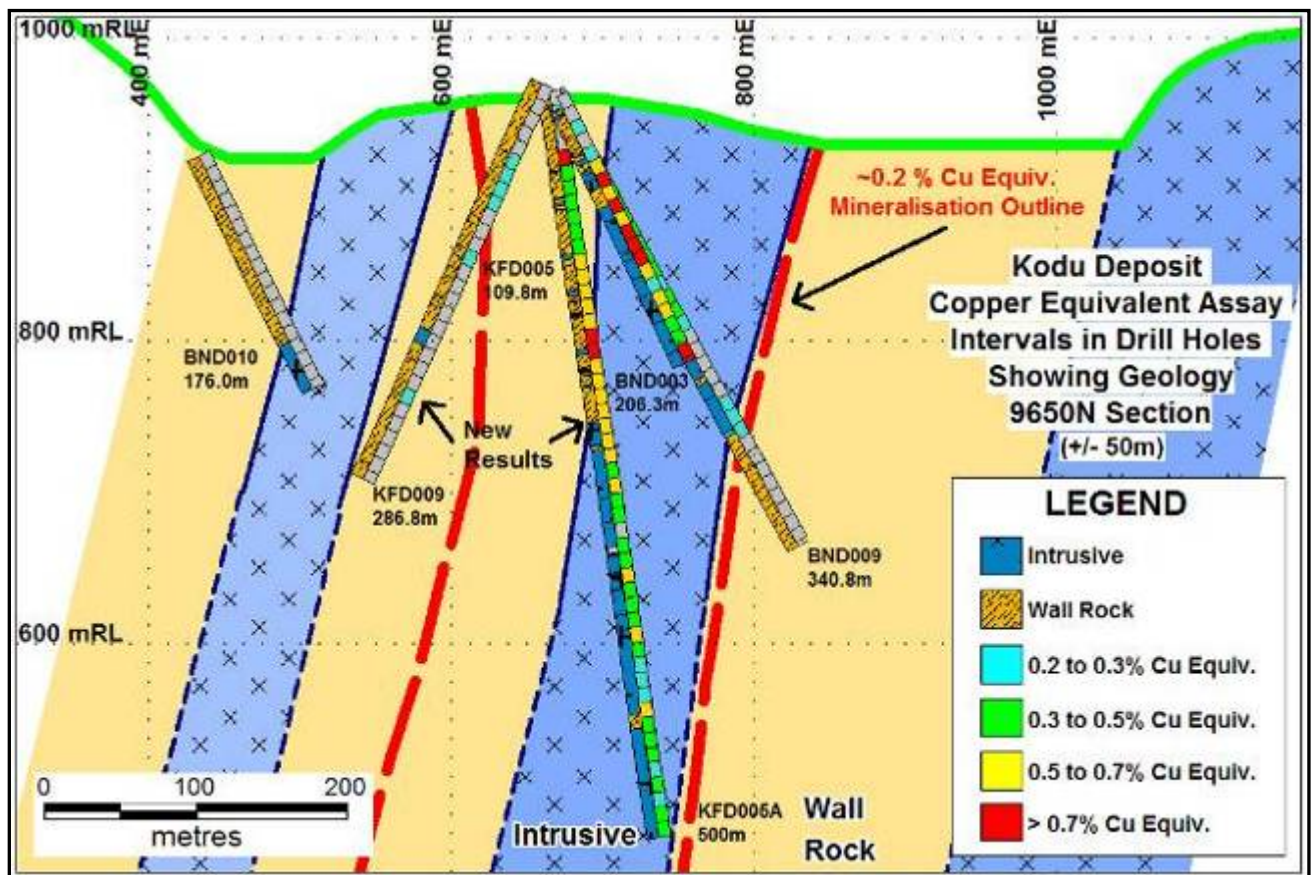


Figure 4. The plan shows the approximate boundary of the 0.2% copper equivalent mineralised zone, 10m downhole composite copper equivalent\* intervals and 10m topographic contours. The mineralised zone is still completely open to the SW, even though the plan shows it tentatively closed off and appears to be fault offset (to the SE) in the NE sector.

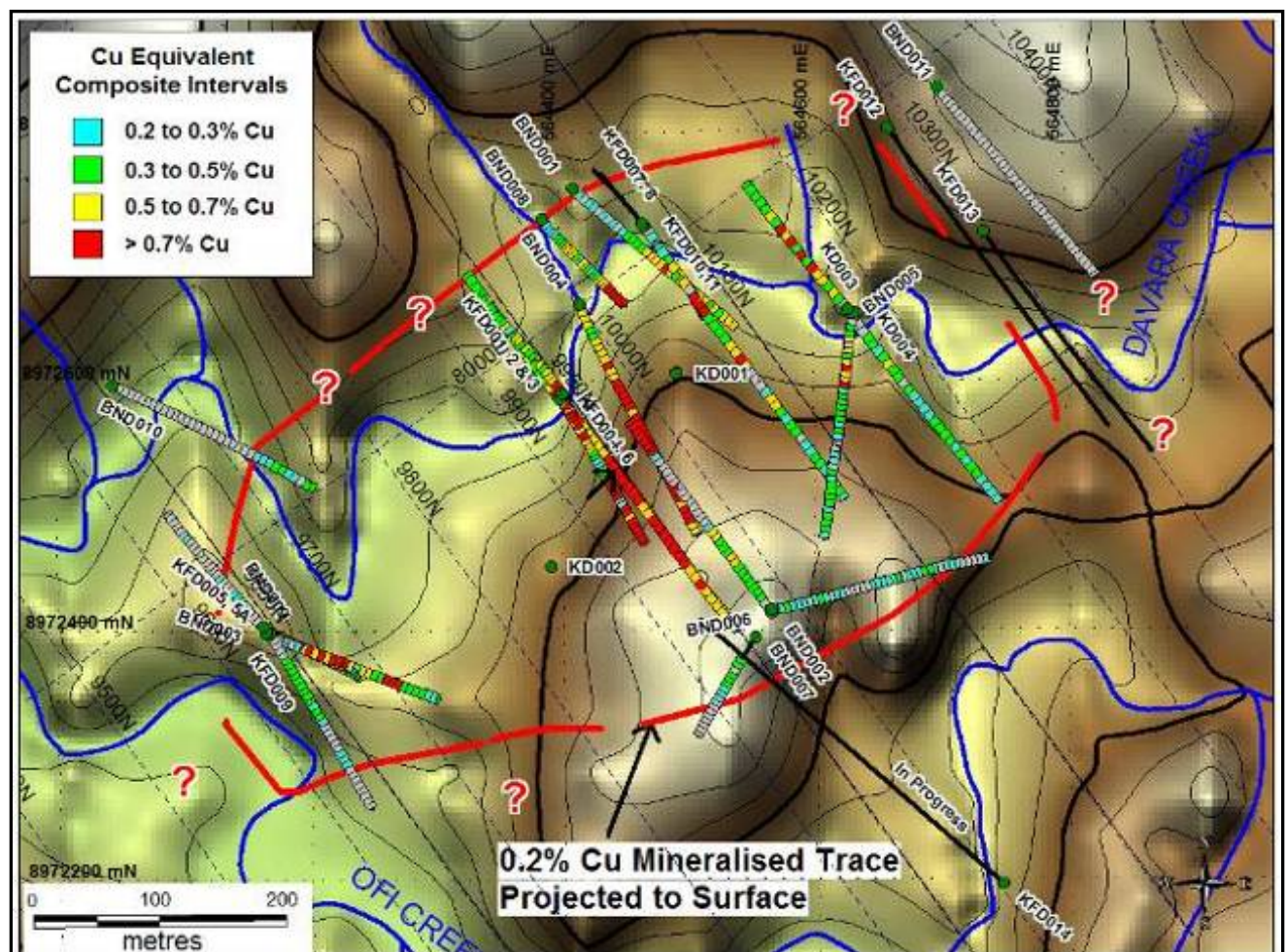




Table 2. Frontier (KFD/KD) and previous drill holes utilised in the Inferred Resource estimation.

Hole ID	Intercept Length	Copper Equiv.	Copper (%)	Gold (g/t)	Moly (Mo) (ppm)	Silver (g/t)	From (m)	To (m)	Easting (m)	Northing (m)	RL (m)	Azi-muth (True)	Dip	EOH Depth (m)
KFD 001	366.4 m	0.45 %	0.27	0.28	79	2.3	0.0	366.4	564399	8972588	935	145	-85 °	366.4
KFD 002	366.5 m	0.72 %	0.49	0.47	65	2.9	4.0	370.5	564398.9	8972588	935	145	-65 °	370.5
KFD 003	338.6 m	0.74 %	0.49	0.47	83	2.9	6.0	344.6	564398.9	8972588	935	145	-50 °	344.5
KFD 004	246.2 m	0.53 %	0.32	0.30	105	1.3	4.0	250.2	564399	8972588	934	325	-65 °	250.2
KFD 005A	450.0 m	0.48 %	0.32	0.39	31	1.5	50.0	500.0	564166	8972399	969	111	-80 °	500.0
KFD 006	174.8 m	0.47 %	0.27	0.22	117	1.2	2.0	176.8	564399	8972588	934	325	-45 °	176.8
KFD 007	188.0 m	0.53 %	0.33	0.38	74	1.5	8.0	196.0	564468	8972724	948	143	-45 °	397.3
plus	163.3 m	0.38 %	0.22	0.26	64	1.4	234.0	397.3						
KFD009	286.8 m	0.16	0.10	0.10	24	0.3	0.0	286.8	564166	8972399	969	320	-65 °	286.8
BND001	329.2 m	0.43 %	0.24	0.37	68	1.4	10.0	339.2	564411.07	8972754	961	131	-60 °	339.2
BND002	163.0 m	0.45 %	0.23	0.42	61	4.1	3.0	166.0	564565	8972414	1074	324	-60 °	380
plus	60.0 m	0.83 %	0.54	0.79	45	2.1	320.0	380.0						
BND003	229.9 m	0.59 %	0.31	0.83	29	1.7	58.0	287.9	564166.67	8972395.8	969	111	-60 °	287.9
BND004	399.0 m	0.75 %	0.52	0.57	45	2.8	2.0	401.0	564415.64	8972661.5	936	160	-60 °	401
BND005	359.8 m	0.38 %	0.22	0.28	68	2.0	20.0	379.8	564633	8972654	966	194	-60 °	379.8
BND006	354.0 m	0.25 %	0.10	0.09	96	2.9	10.0	364.0	564565	8972416	1074	83	-60 °	401
BND007	94.6 m	0.28 %	0.08	0.08	134	5.0	43.4	138.0	564552	8972394	1073	215	-60 °	210.7
BND008	296.0 m	0.54 %	0.35	0.32	87	N/A***	4.0	300.0	564386.79	8972729.5	942	142	-70 °	300
BND009	218.0 m	0.30 %	0.21	0.24	17	N/A***	54.0	272.0	564167.09	8972398.5	969	150	-60 °	340.8
BND010	98.95 m	0.28 %	0.16	0.12	77	N/A***	248.0	346.95	564045.07	8972597.9	926	116	-61 °	346.95
BND011	no significant intervals								564700.49	8972835.1	1040	145	-60 °	398.1
KD001	442.0 m	0.23 %	0.13	0.22	20	1.7	64.0	506.0	564492	8972606	994	0	-90 °	543.76
KD002	510.3 m	0.46 %	0.26	0.24	108	1.7	2.0	512.3	564391.09	8972450.8	990	0	-90 °	512.3
KD003	260.0 m	0.35 %	0.16	0.21	105	1.8	40.0	300.0	564627.01	8972657.5	966	140	-50 °	300
KD004	182.0 m	0.58 %	0.34	0.41	105	1.6	12.0	194.0	564627.01	8972657.5	966	320	-50 °	195

NB: Cu Equivalent is based upon metal prices on 12/6/2007, being US\$3.32/lb Cu, US\$654/oz Au, US\$32/lb Mo (57% MoO3 conc) & US\$13.2/oz Ag

The Kodu Resource will be re-estimated as Indicated and Inferred, utilising all holes drilled to date (i.e. incorporating KFD 008 and KFD010 - 014), for release anticipated late-September.

## EL 1348 - MT BINI ELO PORPHYRY COPPER - GOLD - MOLYBDENUM PROSPECT

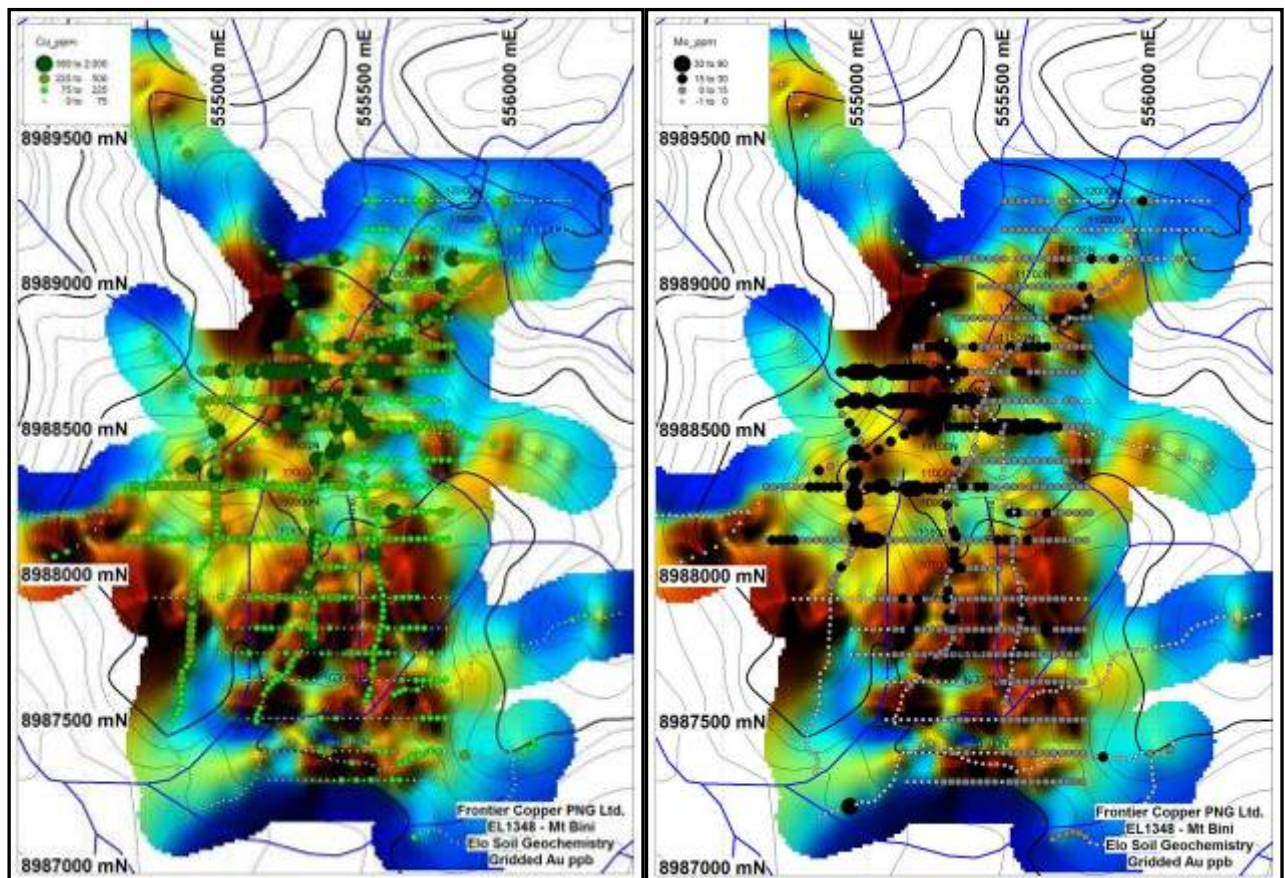
The Elo project area is prospective for porphyry copper-gold-molybdenum and epithermal gold deposits. The exploration target is 300 to 500M tonnes grading 0.8% to 1.0% copper equivalent, from near surface (based on the size and tenor of the soil geochemical anomaly, plus alteration noted). The regional example is the Kodu porphyry copper deposit (in respect to the above Target we caution that the potential quantity and grade is conceptual in nature, no mineral resource has been defined on the property and it is uncertain if a mineral resource will be defined on the property).

A 2km x 3km elliptical topographic high hosts the large Elo mineralised system. Landsat imagery interpretation has shown a marked change in lineament / fault -fracture patterns in the central part of EL 1348, with Elo occurring on a major NE/SW trending lineament/structural zone that marks a change from in dominant fracture trends.

The lineament is about 15km wide and contains the 5 known copper-gold-molybdenum mineralised occurrences (Kodu, Oomargi, Elo, Tamala and Ua-Ule). It appears to be a transfer fault, which is a highly prospective, long-lived and deeply extending structural corridor that has served as a conduit for mineralisation.

Porphyry copper style mineralisation has been observed in several creeks draining the elliptical topographic high and in the very limited, previously announced, historic hand dug trenching. Trench 2 was 212m of 0.08% copper, plus 0.10g/t gold (its entire length), including 84m of 0.10% copper plus 0.17g/t gold. There is a high probability of surface leaching of copper, as at Kodu, making these results highly encouraging. Gold was previously noted in the southern gold only zone in several trenches related to quartz/pyrite veining, with 50m of 0.163g/t gold and 60m of 0.122g/t gold. This is a separate target to be evaluated.

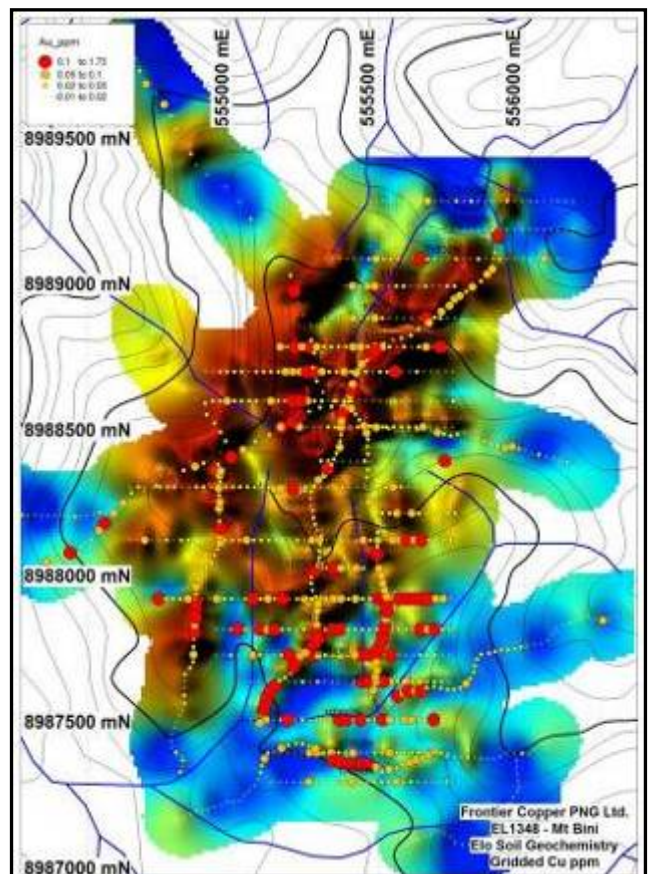
The core zone of the major precious / base metal mineralised porphyry system at the Elo Prospect was upgraded during the quarter with the return of 21 kilometres of grid-based soil sample assays. The NE oriented zone is quite cohesive and is roughly 750m x 250m, with semi coincident copper and molybdenum (at >500ppm and >30ppm, respectively). This area expands rapidly at lower thresholds, with the entire anomaly covering an area of at least 4km<sup>2</sup>.



Figures 5a and b are plans showing spot samples of copper and molybdenum on 'contoured' gold in soils (respectively). Figure 5c shows spot samples of gold on 'contoured' copper in soils. Grid spacing is 500m.

Gold and silver are locally coincident with the copper and molybdenum, but less cohesive; they occur peripherally to the copper and molybdenum and are more widely distributed over the entire grid. A major, but less cohesive triangular gold only zone (about 1,000m on edge) was documented on the south side of the prospect area, with minimal associated copper and molybdenum.

Peak soil assay values were: 0.12% copper, 90 ppm molybdenum and 0.54 g/t gold, with intervals such as 600m of 456ppm copper + 35ppm molybdenum + 0.055g/t gold in the main copper zone and 275m of 0.19g/t gold in the southern gold only zone. A ground magnetic survey has now been completed over most of the prospect.



Diamond drilling commenced at Elo on June 11th, 2007, testing the highest tenor copper/ gold/ molybdenum soil anomalies. Hole EFD001 was drilled to the southwest at a 55° inclination from the top of Elo hill and completed at about 370m depth (after many time wasting issues with fauna damaging the water supply line to the drill rig). Hole EFD002 is currently being drilled in an easterly direction at a 55° inclination from the same pad and is currently at about 120m depth (also targeting a total depth of about 370m). Further holes are planned, subject to encouraging initial megascopic and/or assay results.

When considering comparable intensity copper in soil geochemistry, Elo's mineralised surface area is approximately 6 times larger than that associated with the Kodu Deposit. The large size of the Elo system could reasonably reflect significant prospectivity for the discovery of a major body of copper-gold-molybdenum mineralisation.

Reconnaissance soil sampling was initiated on a Landsat Satellite interpreted jarosite (iron oxide - pathfinder) anomaly called the Madilogo epithermal Prospect, located about 1.5km to the east of Elo in the centre of an interpreted stratovolcano.

Elo is located 54km NNE of the national capital, Port Moresby, and 18km to the NW of the Kodu Deposit; it is far removed from the Kokoda Track (which is located 13km to the SE). The project area is within 5km of existing logging tracks, that provide good access and logistics during exploration and for any possible future development.

## EL 1348 - MT BINI SIRIMU / SW KODU / NW KODU EPITHERMAL GOLD PROSPECTS

The epithermal gold-silver-lead potential in the Kodu region was upgraded, with assays to 5.73 g/t gold, 491 g/t silver, 8.5% lead and 0.11% molybdenum in rock samples collected from SW Kodu, plus similar multi-element soil anomalism. Bulldozer trenching has commenced.

Evaluation of the new data (in conjunction with Frontier's first review of the nearby Sirimu and Kodu NW Prospects) shows epithermal mineralisation apparently occurring over an area at least 1.5km long and 1.0km wide (centred 1,100m west of the Kodu Deposit).

Rock chip sampling of float in Ofi Creek returned a consistent epithermal style of mineralisation with assays to 5.73g/t gold, 491g/t silver and 8.49% lead. In addition, two rocks contained molybdenum only, grading 1300ppm and 131ppm.

Soil sampling returned peak gold of 0.14g/t, with coincident lead grading 0.24%, in a north trending zone.

Table 3		High-Grade Rock Float Samples From Southwest Kodu Epithermal Prospect		
Sample Number	Gold Equivalent*	Gold (g/t)	Silver (g/t)	Lead (%)
364003	20.7	3.3	491	6.81
364026	5.9	3.94	97	0.18
364027	6.48	1.41	251	0.11
364029	15.46	5.73	19	8.49
364034	2.32	2.32	1	0.05
364035	13.34	2.87	83	7.99
364037	7.74	3.33	186	0.59
364038	7.17	5.59	39	0.72
364040	1.04	0.64	20	0.10
364041	2.33	1.57	10	0.51
364044	5.35	5.01	17	0.05

Frontier's Managing Director, Peter McNeil commented:

"The Company's exploration options at Kodu have markedly improved again. High-grade epithermal precious and base-metal mineralisation provides a highly significant exploration and possible later development target near Kodu, that could also be easier and faster to bring into production than the large copper - gold - molybdenum deposit".

The exciting epithermal prospects at SW Kodu, Sirimu and NW Kodu warrant concerted exploration and the company will further assess the areas with trenching".

Sampling of quartz bearing float in Ofi creek by BHP during their historical reconnaissance returned gold assays of up to 20.8g/t with to 463g/t silver in multiple samples. They also noted very high silver in the drainage geochemistry of 2 small creeks draining the SE sector of the NW Kodu Prospect. These anomalies have never been followed up, are highly significant within the



context of the high silver epithermal mineralisation discussed herein, as they drain from a silver-lead anomaly in the SE sector of the NW Kodu Prospect.

### SW Kodu Prospect

Reconnaissance mapping and sampling by Structural Geologist, Dr R.H Findlay in May, confirmed the presence of a significant gold, silver and lead bearing epithermal target at SW Kodu. High-grade assays (see Table 3) were returned from gossanous epithermal rock samples forming a distinct float rock train between 1.2 and 1.7 km downstream of the southwest end of the Kodu copper-gold-molybdenum Deposit. Twenty three rock float samples were collected.

Twenty soil samples were collected to first pass locate a potential bedrock source to these high grade samples, where previously only very limited ridge and spur soil sampling existed. Frontier's soil sampling purposefully gridded across a radiometric anomaly located slightly upstream of the above rocks and discovered a coherent and coincident apparently north - south trending gold - silver-lead anomalous zone across a ridge, providing a viable bulldozer trench and perhaps drill target.

Peak gold in soil samples was 0.14g/t, with coincident lead grading 0.24%. The sample collected 30m south also contained anomalous gold (0.07g/t) with coincident silver (1.7g/t) and lead (0.10%) (see Figures 6a-c). The soil anomaly shows the same geochemical signature as the epithermal vein rock chip samples collected from Ofi Creek and reported above.

The soil anomalism is open to the north, south and east, providing for possible significant strike extensions to the epithermal mineralisation.

### Sirimu Prospect

A significant gold in soil anomaly was historically noted at the Sirimu Prospect, the centre of which is located approx. 600m to the NE of the current Frontier soil sampling and 1,100m SW of the Kodu Deposit.

High-grade epithermal gold mineralisation is evident in trench and rock chip samples. Trench sampling results by previous explorers in the area include 35m grading 1.09g/t gold, 30m grading 1.10g/t gold and 60m grading 0.79g/t gold, with selective grab rock chip samples up to 20.3g/t gold with 5.5% copper. Dr Findlay has recommended these trenches be deepened and re-evaluated.

Frontier's former Joint Venture partner drilled one hole (KD005) on the gold in soil (maximum 0.62g/t gold)/ trench anomaly at Sirimu. Analysis of the drill assay data shows that 25% of the 2m long samples (37 of 150) graded >0.1 g/t gold, within about 8 anomalous zones. These results establish the existence of highly significant gold occurrences that are not part of the Kodu Deposit. The peak gold result from hole KD005 was 2m of 15.5 g/t gold, in an epithermal vein/structural zone.

Best gold results are associated with strong pyritic argillic alteration along late (post porphyry) structures. The high grade result occurs adjacent to a lithological contact between carbonaceous shales and diorite porphyry. It is common for epithermal mineralisation to display irregular geometry controlled by favourable structural-lithological interaction and 'level' in the mineralising system. It appears evident in this case, that the tenor of both veining and mineralisation in surface trenches are not replicated in drill hole KD005, suggesting that the drill hole has not intersected the main mineralised zone.

It is important to note that the Sirimu mineralisation only contains low tenor silver and erratic higher lead and is unlikely therefore to be the source of the rocks reported herein. This means that in the immediate area there is likely to be another significant source of gold mineralisation, that also contains high tenor silver +/- lead. Follow up reconnaissance sampling and mapping was recommended on the north side of Ofi Creek.

Figures 6a, b and c. Gold contours with lead (6a), arsenic (6b) and copper (6c) spot soil geochemistry, at the SW Kodu, Sirimu and NW Kodu Epithermal Prospects.

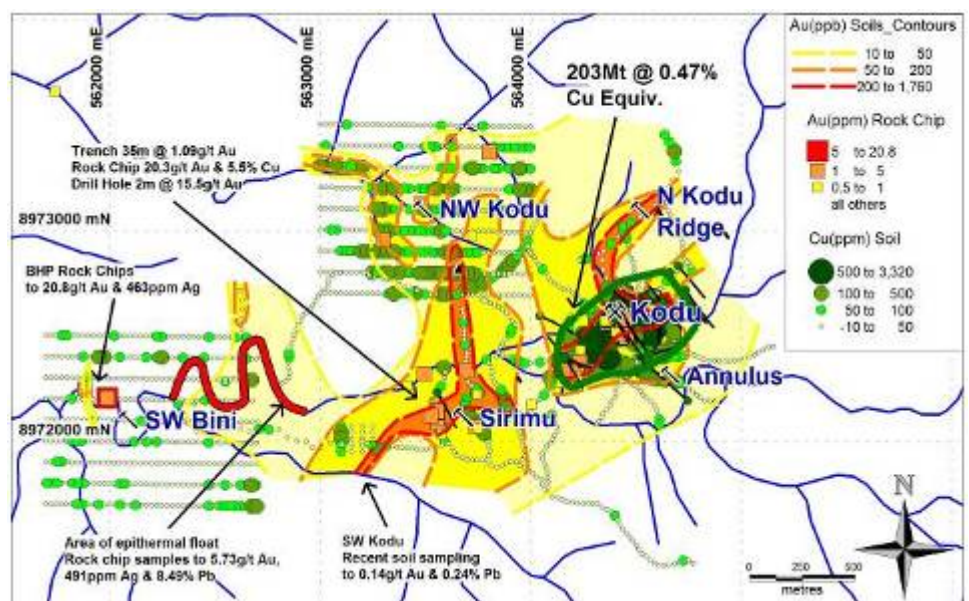
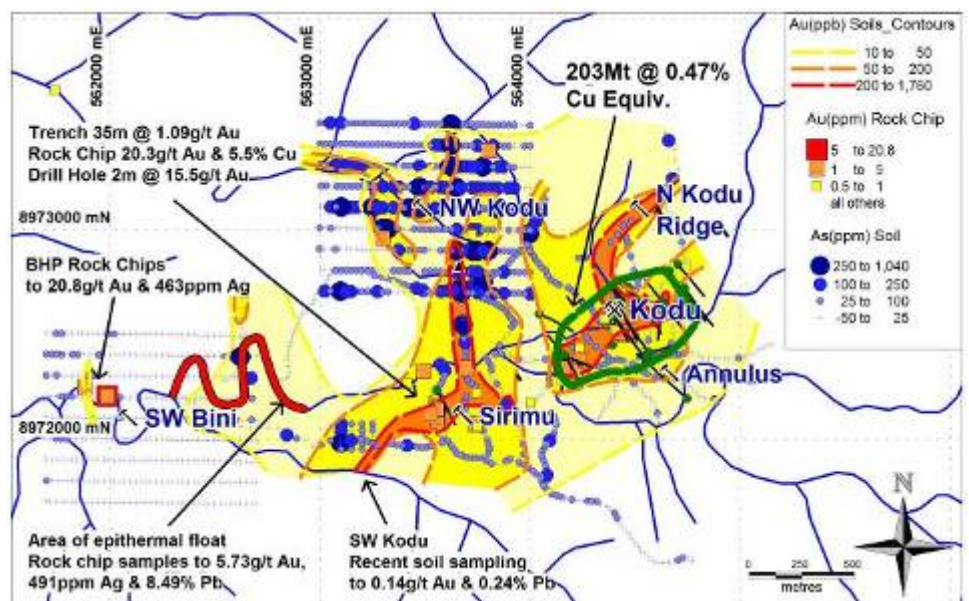
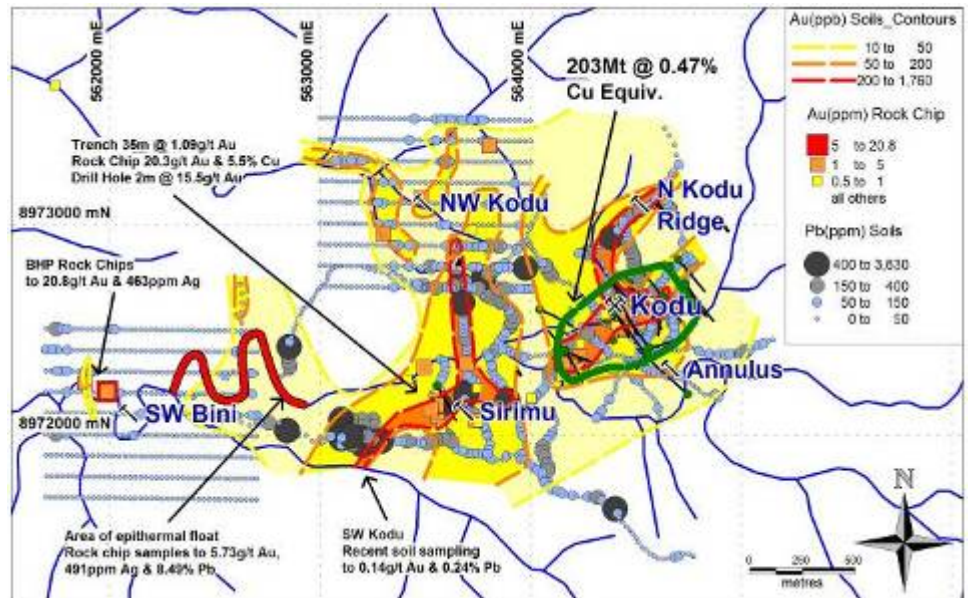
### NW Kodu Prospect

Visible gold has been panned in two prominent arcuate drainages that define a 700m diameter circular feature (about the same size as the prominent and round Kodu Hill), that could reflect a sub-surface potentially mineralised intrusion and/or associated epithermal vein mineralisation. Fracture orientations in 'unroofed' intrusives and vein sets often exhibit such concentric and linear patterns. Rock analyses have confirmed these structures are gold mineralised.

A copper/ gold 'core' is evident in the interpretation of the soil geochemical anomalies from the approx. 1km x 1km Kodu NW soil grid, weakening peripherally to a halo of molybdenum, lead and zinc geochemistry.

The general tenor of the copper and gold in soils is weaker than observed at Kodu itself, however, the Kodu NW Prospect is located at a higher elevation and this result would be expected if the intrusive has not yet been 'unroofed'.

Gold and copper values varied as expected from near or below detection on the edges of the grid, up to 0.223 g/t gold and 336 ppm copper in the core.





Silver is distinctly anomalous in the SE of the grid, from where drain 2 creeks with highly anomalous silver in stream sediment samples. The copper and gold anomalous zones are relatively cohesive and coincident and are approximately 800m long and 500m wide.

Previous limited rock sampling by the former JV partner was never reported and results included 4 grab diorite rock samples over 7m running 1.49 g/t gold, 2m grading 1.03 g/t gold in fault pug in andesite, grab rock of fault pug grading 2.22 g/t gold, plus other lower tenor results from other faults. There is generally coincident arsenic anomalism with gold in rocks and a weak copper association in the southern sector of the grid.

The Kodu NW Prospect is located 1,200m northwest of Kodu and is separated from it by a ridgeline. Dr Findlay has recommended trenching the arsenic anomalies at the Kodu NW Prospect to test for epithermal mineralisation.

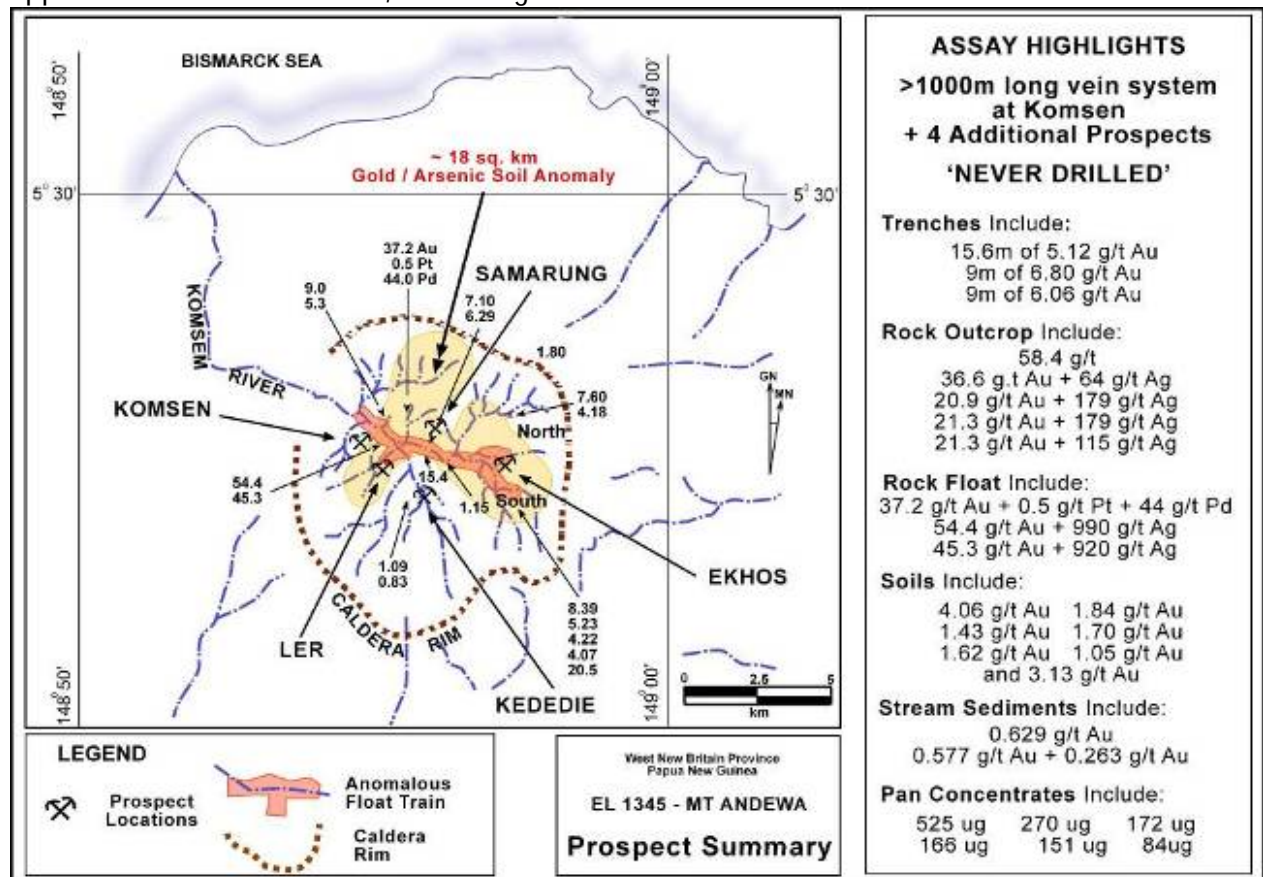
## EL 1345 - ANDEWA KOMSEN EPITHERMAL GOLD PROSPECT

This highly prospective extinct stratovolcano/caldera (approx. 9km wide, eroded, breached to the NW) has widespread and substantial hydrothermal alteration of the multi-phase, calc-alkaline rocks contained within a 7,000m x 2,500m NW trending fracture/structural zone.

There are five known high stratigraphic level, undrilled prospects requiring substantial evaluation and many additional areas of interest (Figure 7). The project area is well located for possible project development near the northern coast of West New Britain Province.

Gold/arsenic anomalous soil geochemistry covers an embayed triangular shaped area of approx. 18km<sup>2</sup>. Assays include trenches to 3m of 14.26 g/t gold, 15.6m of 5.12 g/t gold, 5m of 8.61 g/t + 5.9m of 3.86 g/t gold + 5.1m of 3.27 g/t gold, 9m of 6.80 g/t gold and 9m of 6.06 g/t gold and outcrop rock to 58.4 g/t gold, often with high silver +/-lead/ zinc.

Results have documented a >1,000m long vein system at the Komsen Prospect with higher grade veins and possible lower grade bulk mineable targets. Possible extensions to the vein system appear to be an additional 1,000m long.





It is Frontier's intent to fast track evaluation of the Andewa Prospects with the view to defining higher grade vat leaching targets for possible development in the near term.

Diamond drilling commenced at the Andewa Gold Project on July 28<sup>th</sup>, 2007, with a goal of trying to define an Indicated and Inferred gold Resource following the completion of the planned 3 month (approx. 3,800m) program.

Systematic 20m spaced hand trenching was completed over the central section of the vein system during the quarter to assist future drill targeting and for incorporation into any Resource estimation and results are awaited.

A bulldozer was purchased to undertake an extensive regional trenching program and will be mobilised to site in early September.

The approx. 492km<sup>2</sup> EL has 'barely' been examined and also covers Mt Schrader to the west, both in a similar tectonic setting to the Lihir deposit and perhaps with similar potential.

### **EL 1351 - LIKURUANGA BUKUAM PORPHYRY COPPER - GOLD - MOLYBDENUM PROSPECT**

The Company announced that assays returned from the third grid based soil sampling program at the Bukuam Prospect (about 21 linear kilometres at 25m downline spacing) documented a major extension to the previously known mineralised zone. The anomaly extension is 200 to 400m wide, cohesive and contiguous, with mostly coincident copper and molybdenum geochemistry in soils along most of the >4,800m length.

The soil sample assays are still completely open to the north and the south, with some probable width extensions to the east and west. The grid still needs to be extended another kilometre to the SE to cover the remainder of the copper in drainage anomaly. Zinc, gold and silver also show encouraging assays in soil in this recent grid extension.

Bukuam is located in a 5.5km x 1.2km copper in stream sediment anomaly in EL 1351, East New Britain, Papua New Guinea and the soils returned from this program have very accurately reflected the original drainage anomaly interpretation.

Managing Director Peter McNeil commented:

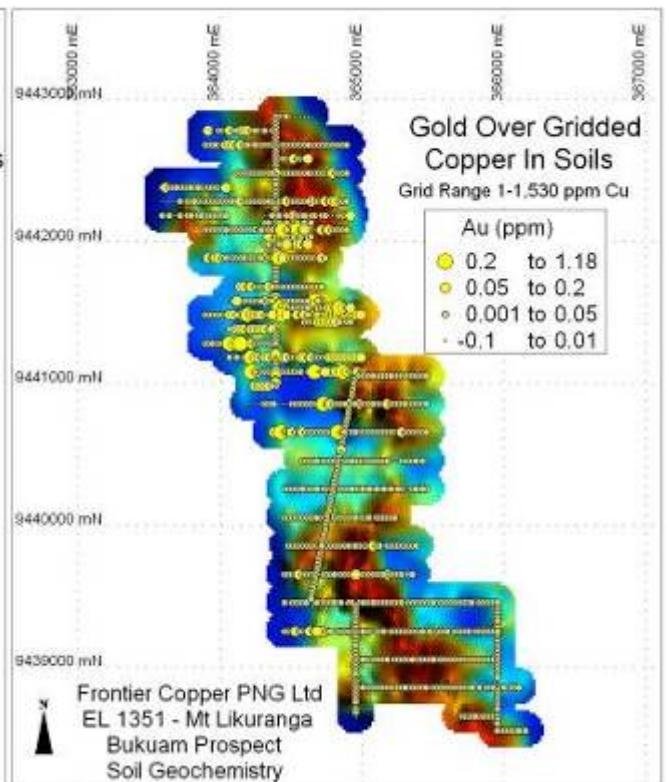
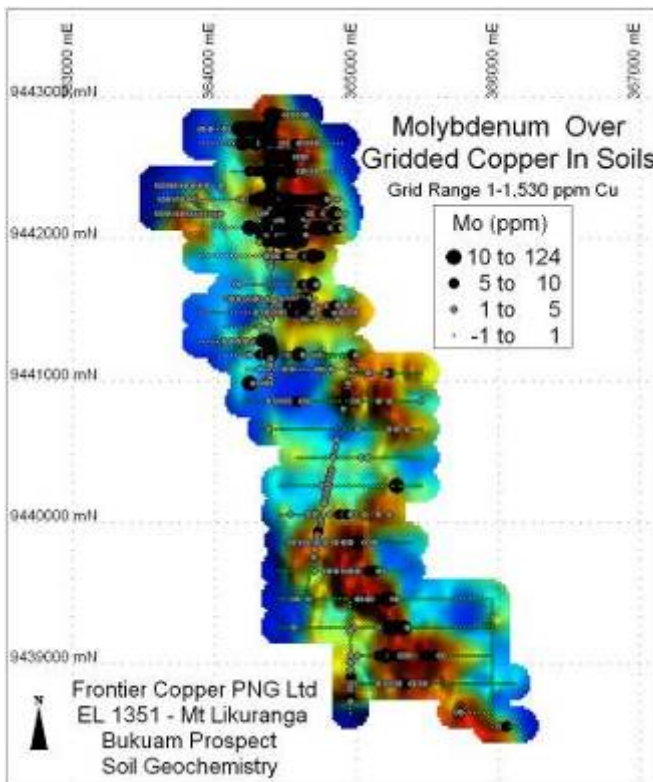
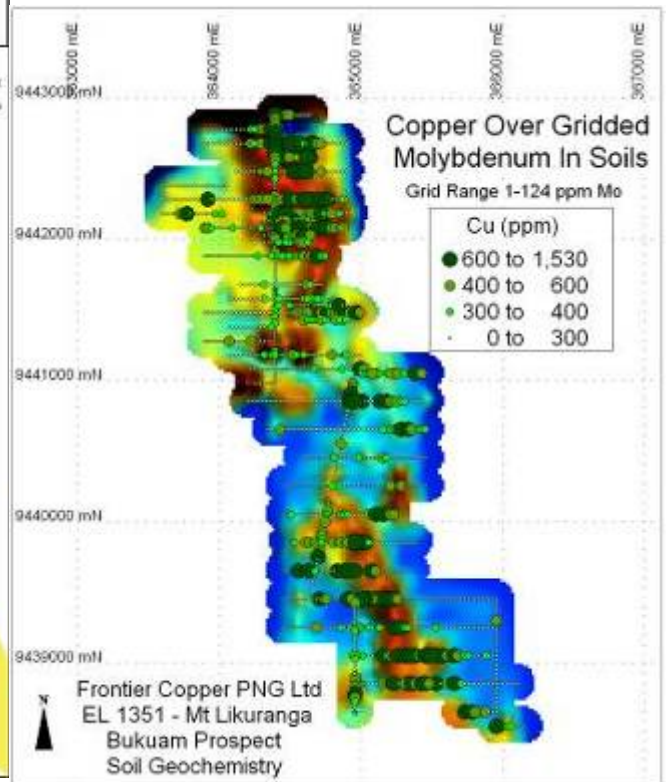
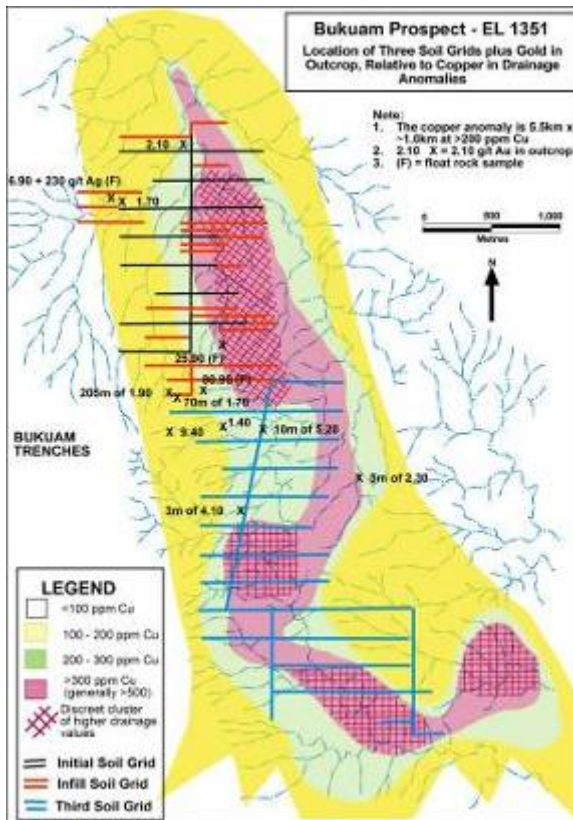
*"The Bukuam copper - molybdenum - gold - silver Prospect is continuing to impress and motivate our exploration team, even in the context of the 'World Class' mineralised systems mined in Papua New Guinea, by returning a completely open ended, >4.8km long zone of strongly anomalous copper and molybdenum mineralisation in soil samples."*

*The approx. 150% increase in length of the Bukuam mineralised system in soils reflects the significantly enhanced prospectivity for the discovery of a 'World Class' copper - molybdenum (+/-) gold deposit. The probability of discovering the other target models consisting of zinc - silver - gold skarns and /or high-grade shear hosted and epithermal gold has also been enhanced.*

*Frontier's high quality tenement portfolio continues to produce outstanding results, positioning the Company with high quality exploration and drilling targets for a very exciting and rewarding future."*

Figures 8a-d (below) show the stream anomaly plus 3 soil plots with circle assay plots of copper, molybdenum and gold overlying contoured molybdenum, copper and copper in soils, respectively.

Note that the copper soil anomaly in the southern section of the grid is higher in overall tenor than the northern section, with 10 assays reporting greater than 0.1% copper. In comparison, the molybdenum anomalism is not as wide as in the northern section, perhaps reflecting a greater depth to the inferred copper-molybdenum mineralised porphyry.



Seven geochemically anomalous zones were evaluated in January and February this year via focused pitting, hand trenching and composite rock chip sampling, plus geological mapping. Soil, trench and rock chip samples were despatched to the laboratory by sea freight and were short shipped and 'lost' resulting in the long time frame between sample collection and reporting. Assay results from these trenches and rocks have been returned and will be announced shortly.

It is anticipated that the trenching, rock chip sampling and ground magnetic survey results will enable a thorough evaluation of the area and provide good targeting vectors to insitu mineralised zones. Drill testing is now tentatively scheduled to commence in Q4 2007, with one of Frontier's own diamond drill rigs.

For additional detailed information on previous assay results and the mineralisation potential of the Bukuam Prospect, please refer to previous releases dated 25/10/2006, 28/11/2006, 5/12/2006, 24/1/2007 and 15/3/2007.

The large (and increasing) relative size of the Bukuam system, which is completely open to the north and the south, could reasonably reflect highly significant prospectivity for the discovery of a major body of copper - gold - molybdenum mineralisation, base and precious metal skarns and/or high grade shear hosted gold.

## **CORPORATE**

On May 28<sup>th</sup> the Company announced that its Entitlements Issue was fully subscribed, with a total of \$5.74 million Raised, from the last tranche of \$3.25 million from the shortfall.

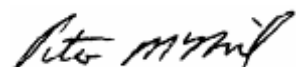
25,021,258 fully paid ordinary shares (with each share accompanied by one option exercisable at 20 cents on or before 30 November 2007 and under the terms and conditions of the Prospectus and Appendix 3B dated 22 February 2007) were allotted to clients of Bell Potter Securities Ltd.

Funds from this Issue will be applied to continued evaluation and drilling at several of the PNG and Tasmanian projects that are showing significant exploration potential, including:

- Continued resource delineation and expansion drilling at the Kodu porphyry copper-gold-molybdenum Deposit, followed by a Pre-Feasibility Study later in 2007.
- First ever drill evaluation of the:
  - Elo porphyry copper-gold-molybdenum occurrence.
  - Andewa gold mineralised epithermal vein system.
  - Bukuam porphyry copper - gold - silver - molybdenum Prospect (+ zinc - gold - silver skarn targets).
- Evaluation drilling of the Esis porphyry copper occurrence.
- Exploration drilling on the Wart Hill high-grade zinc-lead-silver-gold targets in the Mount Read Volcanics of Tasmania (early January 2008.)

For additional information relating to the Company and its projects please visit our website at [www.frontierresources.com.au](http://www.frontierresources.com.au) or feel free call me on +61 (0) 8 9295 0388.

## **FRONTIER RESOURCES LTD**



P.A. McNeil, M.Sc.  
**MANAGING DIRECTOR**

The information in this report that relates to Exploration Results, Mineral Resources is based on information compiled by, or compiled under the supervision of Peter A. McNeil - Member of the Aust. Inst. of Geoscientists and Robert D. McNeil - Fellow of the Aust I.M.M. Peter McNeil and Robert McNeil are Managing Director and Chairman of Frontier Resources, respectively and neither is a full time employee of Frontier. Peter McNeil and Robert McNeil, have collectively 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. Peter McNeil and Robert McNeil consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.



**Notes:**

- Assaying was carried out at ALS Chemex in Townsville using the ICP technique with analysis for Ag, As, Cu, Mo, Pb, S, Sb and Zn and 25 gram fire assays for Au.
- Drill core was sampled as 2m half core composites for the entire length of the hole. Quality control was assessed via submission of known standards every 10 samples (~20m downhole). Laboratory quality control reported good repeatability for in-house standards, as well as for duplicate drill core analysis undertaken every ~35<sup>th</sup> sample.
- **\*Copper Equivalent** is the contained copper, gold, silver and molybdenum that are converted to an equal amount of pure copper and summed (based on assays of mineralised rock and actual metal prices). It is used to allow interpretation of the possible theoretical 'value' of mineralised rock, without consideration of the ultimate extractability any of the metals.
- Copper Equivalent is based upon metal prices of US\$3.32/lb Cu, US\$654/oz Au, US\$32/lb Mo (57% MoO<sub>3</sub> conc.) & US\$13.20/oz Ag (12/6/2007). The formula used is  $\text{Cu Equivalent}^* \% = \text{Cu}(\%) + \text{Au}(\text{g/t}) \times 0.28728 + \text{Mo}(\text{ppm}) \times 0.00115 + \text{Ag}(\text{g/t}) \times 0.00580$ .
- Island Arc porphyry copper- gold- molybdenum deposits such as Kodu, typically recover contained Cu, Au, Mo and Ag (subject to metallurgical characteristics and prevailing metal prices).
- The ASX requires a metallurgical recovery be specified for each metal, however, no testwork has ever been undertaken at Kodu and recoveries can only be assumed to be typical for Island Arc porphyry copper - gold - molybdenum - silver deposits.
- It is the Company's opinion that each of the elements included in the metal equivalents calculation have a reasonable potential to be recovered if the project proceeds to mining.
- **\*Gold Equivalent** is the contained gold, silver and lead that are converted to an equal amount of pure gold and summed (based on assays of mineralised rock and actual metal prices). It is used to allow interpretation of the possible theoretical 'value' of mineralised rock, without consideration of the ultimate extractability any of the metals.
- Gold Equivalent is based upon metal prices of US\$654/oz Au, US\$13.20/oz Ag and US\$1.05/lb Pb (12/6/2007). In terms of value at those prices, 1g/t Au = 49.55 g/t Ag and 1g/t Au = 0.908%Pb. The formula used to calculate Au Equivalent\* g/t =  $\text{Au}(\text{g/t}) + (\text{Ag}(\text{g/t})/49.55) + (\text{Pb}(\%) /0.908)$ .
- Island Arc epithermal gold- silver -basemetal deposits such as apparent at SW Kodu, Sirimu and NW Kodu typically recover contained Au, Ag and basemetals if in sufficient quantities (subject to metallurgical characteristics and prevailing metal prices).
- The ASX requires a metallurgical recovery be specified for each metal, however, no testwork has ever been undertaken at SW Kodu and recoveries can only be assumed to be typical for Island Arc epithermal gold- silver - basemetal deposits.
- It is the Company's opinion that each of the elements included in the metal equivalents calculation have a reasonable potential to be recovered if the project proceeds to mining.