



ADDRESS
PO Box 35
North Perth
WA 6906 Australia

PHONE
+61 (8) 9295 0388
FAX
+61 (8) 9295 3480

EMAIL
info@frontierresources.com.au
WEBSITE
www.frontierresources.com.au

ABN 96 095 684 389
ASX : FNT

ASX Limited
Company Announcements Office
Announcement

4th October 2010

**High-Grade Mineralisation Demonstrated by Rock Outcrop Assays at the Wasi Prospect
(Gold to 180 g/t, Silver to 1,090 g/t, Copper to 4.12% and Molybdenum to 872 ppm)
and Additional Gold Defined by Hand Trenches at the Kru Prospect
(28m of 1.43 g/t Gold and 4m of 8.01 g/t Gold)**

Frontier Resources Ltd is pleased to announce highly encouraging, high-grade gold, silver, copper and molybdenum assay results from rock chip outcrop and float sampling completed earlier in 2010 at the Wasi porphyry copper-gold -molybdenum Prospect, plus assay results from the final hand trenching at the adjoining Kru gold Prospect, Leonard Schultz (EL 1597), Papua New Guinea.

A total of 403 outcrop /float rock samples were collected over about a 5 sq km area at Wasi and they have defined targets for further evaluation and future hand trenching.

- High grade gold and silver was located in a massive sulphide vein outcrop that assayed 180 g/t gold + 1090 g/t silver + 3.43% copper + 1.34% zinc + 0.92% lead + 25 ppm molybdenum.
- Outcrop rock chip channel sampling returned to 1m of 20.9 g/t gold + 243 g/t silver + 0.26% copper.
- Rock chip grab samples from separate outcrops assayed to 8.48 g/t gold and 5.72 g/t gold.
- The highest copper in rock chip channel samples assayed 4.12% copper + 0.70 g/t gold + 30 g/t silver, contained in a 3m wide quartz sulphide vein. Fifteen other samples ranged from a 0.5m outcrop grading 1.63% copper (+ weak silver) to grab samples assaying 0.20% copper (plus weak gold).
- Silver was noted to 314 g/t silver + 1.65 g/t gold + 0.35% copper in outcrop rock grab samples.
- Molybdenum in outcrop assayed to 872 ppm + 0.21% copper. Five float rock samples assayed >100 ppm molybdenum (+/- weak copper as expected peripheral to a porphyry copper system).
- Rock outcrop and float samples collected during the program included 10.5 g/t gold + 17 g/t silver, 8.99 g/t gold + 157 g/t silver + 0.37% copper + 157 ppm molybdenum, 1.06% copper + 0.84 g/t gold, 0.89% copper, 0.59% copper + 3.3 g/t gold + 57 g/t silver, 0.12% copper + 8.94 g/t gold + 13 g/t silver, 0.18% copper + 5.00 g/t gold + 16 g/t silver, 0.24% copper + 1.29 g/t gold + 16 g/t silver, 0.65% copper + 0.31 g/t gold + 17 g/t silver, 0.21% copper, 3.84 g/t gold + 29 g/t silver, 2.97 g/t gold + 12.6 g/t silver + 80 ppm molybdenum, 4.38 g/t gold + 153 ppm molybdenum.

The quartz sulphide gold veins and gold in soil anomaly at the Kru Prospect cover an area of about 2,500m by greater than 100m and are located peripheral to the Wasi porphyry copper occurrence.

A total of 120 samples were collected at Kru from deep hand dug trenches and several returned very good results. Results from all Trench 3 and the final samples from Trench 1 included:

- 4m of 8.01 g/t gold, 28m of 1.43 g/t gold, 44m of 0.45 g/t gold and 68m of 0.29 g/t gold.
- Previously reported Frontier trench assays demonstrated excellent gold results in Trench 2, such as 76 metres of 5.35 g/t gold (including 16 metres of 18.60 g/t gold), plus 22m of 2.71 g/t gold and 36m of 1.15 g/t gold.
- The mineralised area in hand trenches is currently up to 200m long and 200m wide. The noted vertical interval (RL) between gold mineralisation in creeks and trenches is about 80m, highlighting the high prospectivity of the system and the substantial minimum vertical component to the gold mineralisation that is known.

Earn-In Joint Venture partner Ok Tedi Mining Ltd are currently flying a detailed aeromagnetics /radiometrics survey over the Wasi - Kru sector of the Exploration License. The program should be completed late October.

ADDITIONAL DETAILS

A total of 403 outcrop - float rock samples were collected over a 5 sq km area earlier in 2010 at the Wasi Prospect, Leonard Schultz EL, Papua New Guinea (PNG).

The highly encouraging gold, silver, copper and molybdenum rock assay results, plus the final group of encouraging gold assay results from 480m of hand trenching at the adjoining Kru are reported herein.

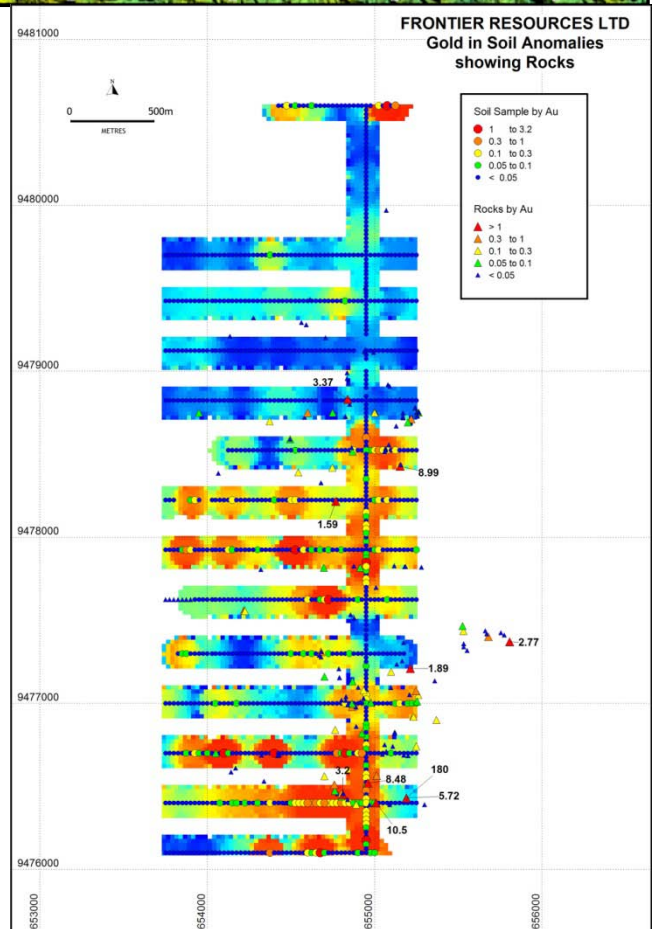
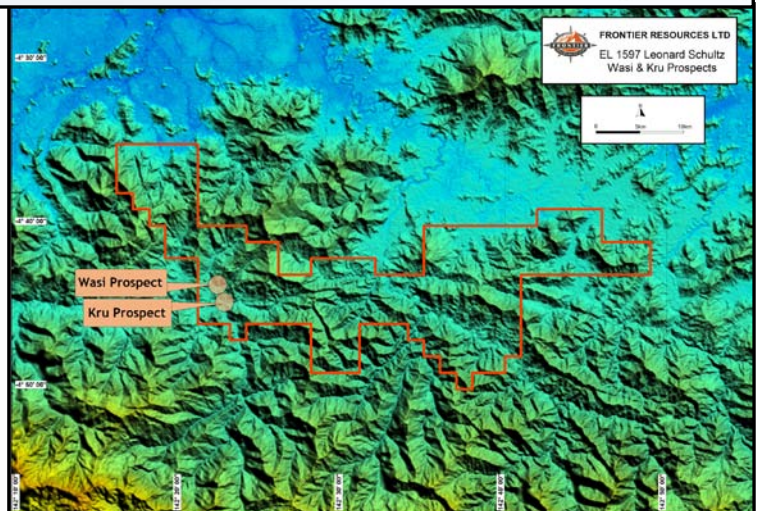
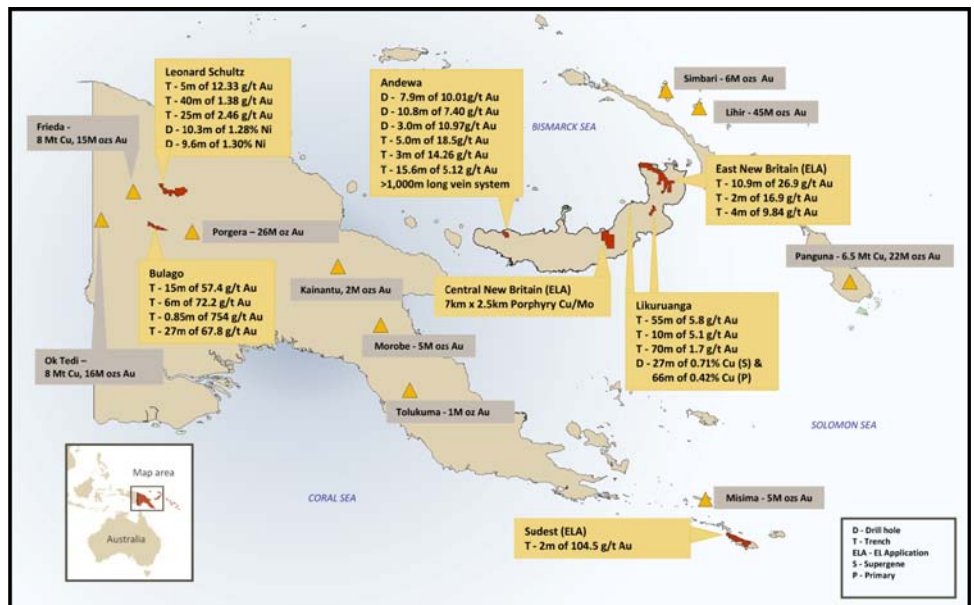
The gold contained in rock samples is plotted on the gold soil geochemistry summary plan and the copper contained in rocks is plotted on the copper soil geochemistry summary plan.

Outcrop and float rock samples collected during the program included 0.89% copper + 0.12 g/t gold + 17 g/t silver, 0.59% copper + 3.3 g/t gold + 57 g/t silver, 0.12% copper + 8.94 g/t gold + 13 g/t silver, 0.18% copper + 5.00 g/t gold + 16 g/t silver, 0.24% copper + 1.29 g/t gold + 16 g/t silver, 0.65% copper + 0.31 g/t gold + 17 g/t silver, 0.21% copper + 0.09 g/t gold + 2 g/t silver, 3.84 g/t gold + 29 g/t silver, 2.97 g/t gold + 12.6 g/t silver + 80 ppm molybdenum, 4.38 g/t gold + 2 g/t silver + 153 ppm molybdenum, 3.27 g/t gold + 5 g/t silver and 1.59 g/t gold + 5 g/t silver, 10.5 g/t gold + 17 g/t silver and 8.99 g/t gold + 157 g/t silver + 0.37% copper + 157 ppm molybdenum.

Grid based soil sampling was conducted at Wasi over a 4 x 1.5 km grid, along with the rock outcrop / float sampling reported herein. Major gold, copper and molybdenum in soil anomalies were demonstrated, with the gold in soil anomaly 525m wide and greater than 900m long. The gold anomaly is open along strike to the south, merges into the Kru gold in soil anomaly in the southeast and trends into a major copper anomaly in the north and west. The gold anomaly grades 0.23 g/t over its widest part, with a peak grade of 0.87 g/t. Several additional smaller soil anomalies were documented grading to 3.2 g/t gold.

The colours of the samples represents the assays accurately, but the thematic contouring is schematic due to the large distances between grid lines.

The main copper anomaly discovered at Wasi is



presently 1,800m long and 600 to 900m wide. It is located in the south of the grid (peripheral to the Kru Prospect), has coincident molybdenum anomalism and is partly coincident with the above noted gold anomaly. Peak copper in soil is 1080 ppm (0.108%). A second copper in soil anomaly occurs in the far north of the grid along with significant gold. The anomaly is 600m wide along line and is unconstrained to the north and south. Peak copper in soil is 1160 ppm and gold is 3.2 g/t.

The quartz-sulphide-gold veins and soil anomaly at the Kru Prospect cover an area of approximately 2,500m by greater than 100m, peripheral to the Wasi porphyry copper occurrence. Frontier re-located, joined together, deepened, extended and channel chip sampled the historically limited hand trenches at Kru Prospect. Additional hand trenches were also excavated and three long trenches were completed with each successively higher upslope and wrapping around the SE terminating end of a ridgeline.

Trench results reported herein include all of Trench 3 and part of Trench 1. Results include: 28m of 1.43 g/t gold (including 4m of 2.66 g/t gold, 4m of 4.2 g/t gold, 2.15 g/t gold), 4m of 8.01 g/t gold, 68m of 0.29 g/t gold (including 4m of 1.60 g/t gold), 44m of 0.45 g/t gold (including 4m of 1.96 g/t gold), 24m of 0.30 g/t gold (including 4m of 1.18 g/t gold), 24m of 0.33 g/t gold. All trenches at Kru have now been analysed and gold assays and mineralised zones reported.

The trench gold assay results show excellent overall continuity to the lower grade gold mineralisation over an area of 200m x 200m. The gold mineralisation dips moderately/steeply NE and is open in all directions (notably to the NW /SE).

The vertical interval (RL) between gold mineralisation noted in lower and upper creeks and trenches is estimated to be greater than 80m. This highlights the substantial minimum vertical component to the gold mineralisation that is already known and the high prospectivity of the system.

The Kru and Wasi Prospects are located about 80km to the north of the Bulago Project, where very high-grade gold channel samples were announced earlier in 2010.

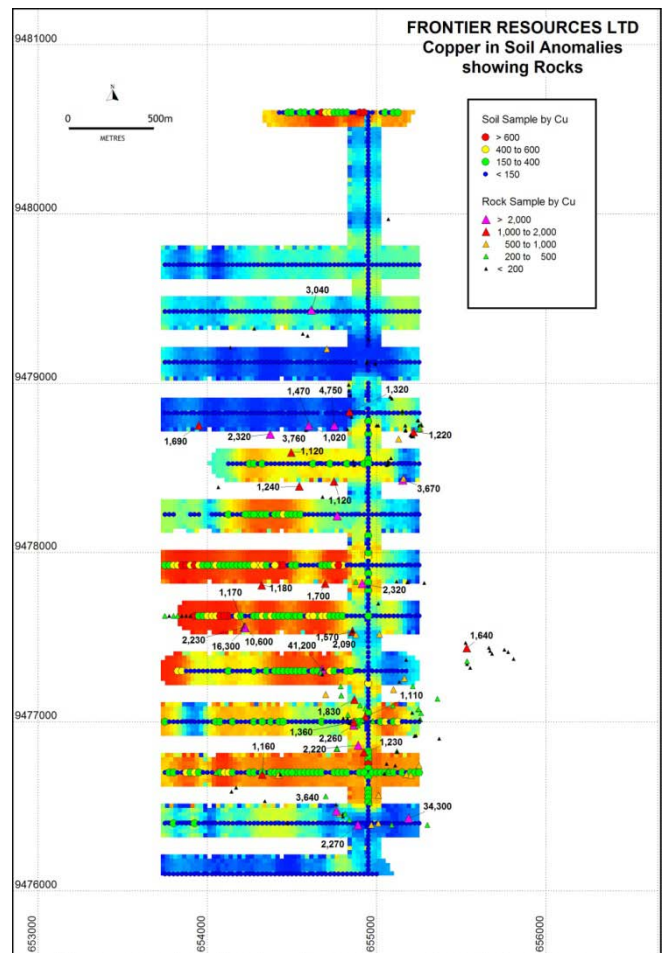


Table 1. Kru Prospect Gold Trench Assay Results

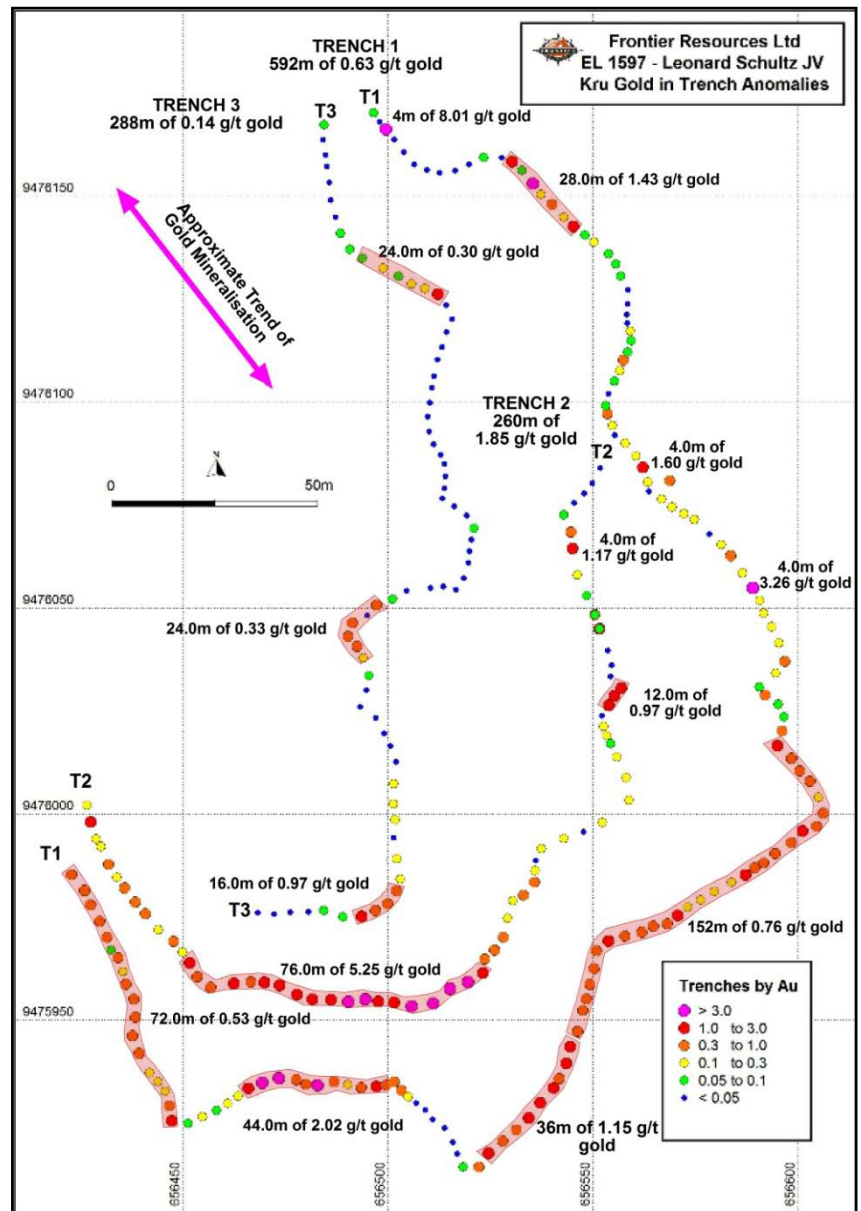
Trench No.	Intercept Length (m)	Gold g/t	Sub Intercept Length (m)	Gold g/t
Trench 1	592m	0.63		
incl.	72m	0.53	incl. 8m	1.02
plus	44m	2.02	incl. 12m	4.43
			incl. 4m	4.56
			plus 4m	1.03
plus	152m	0.76	incl. 36m	1.14
			incl. 4m	1.05
			plus 4m	1.44
			plus 4m	1.15
			plus 4m	1.17
			plus 4m	1.17
plus	4m	3.26		
plus	4m	1.60		
plus	28m	1.43	incl. 4m	2.66
			plus 4m	4.20
			plus 4m	2.15
plus	4m	8.01		
Trench 2	260m	1.85	incl. 4m	2.03
incl.	76m	5.25	incl. 16m	18.60
plus	12m	1.32		
plus	4m	2.97		
plus	4m	1.03		
Trench 3	288m	0.14		
incl.	24m	0.30	incl. 4m	1.18
plus	24m	0.33	incl. 4m	0.55
plus	44m	0.45	incl. 16m	0.97
			incl. 4m	1.96

Frontier Resources Ltd has entered into farm-in joint ventures with Ok Tedi Mining Limited (OTML) on 3 Exploration Licenses and 2 EL Applications, covering 2,763 km², in Papua New Guinea. This includes the Leonard Schultz EL. OTML's total earn-in for Leonard Schultz is US\$12 million over 6 years. Frontier is then deferred carried to completion of any Bankable Feasibility Study. Frontier will retain a 42% interest in the EL up to the completion of a Bankable Feasibility Study -refer to the ASX release dated 26/5/2010.

Refer to ASX releases dated 3/4/2009, 28/1/2010, 2/3/2010, 22/3/2010, 12/4/2010 and 24/5/2010 and 27/9/2010 for additional information on the Leonard Schultz Exploration License.

Refer to ASX releases dated 2/9/2008, 11/9/2009 and 23/11/2009, 15/1/2010, 1/3/2010 and 17/3/2010 for additional information on the Bulago Project.

Please visit our website at www.frontierresources.com.au for additional information relating to Frontier Resources Ltd, or feel free contact me.



FRONTIER RESOURCES LTD

Peter McNeil

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

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 2004 Edition of the Australasian Code of Reporting Exploration Results. Peter McNeil consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.