

ASX Limited Company Announcements Office Announcement

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Very Encouraging High–Grade Gold, plus Silver and Copper Demonstrated in Multiple Outcrop Rock Channel Assays at the Andewa Project, West New Britain Province, Papua New Guinea

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Frontier Resources Ltd is very pleased to announce intercepts/assay results from rock channel chip sampling that was conducted from mid to late 2010 at the Andewa Project.

Numerous gold mineralised outcrops were discovered and sampled over the 21 sq km gridded area from the limited outcrops in creeks. Several different styles of mineralisation / targets are noted.

Peak outcrop assay values were 23 g/t gold, 288 g/t silver, 0.919% copper (float rock), 114 ppm molybdenum, 1.61% lead and 3.59% zinc.

High gold and silver assays are related to structurally controlled, epithermal gold / silver mineralisation and other combinations to possible 'telescoped' porphyry copper-gold-molybdenum.

Two highly significant gold mineralised outcrops were discovered and channel chip sampled, returning:

- 15.0m of 15.48 g/t gold + 21.9 g/t silver (indeterminate true width, but sampled partly along strike).
- 11m of 5.44 g/t gold + 85 g/t silver + 0.22% copper (partly along strike see tan coloured zone in Figure 1). Also 6m of 7.56 g/t gold + 68 g/t silver + 0.25% copper (central width) and 3m of 9.20 g/t gold + 32 g/t silver + 0.30% copper (SE end exposed width).

Silver mineralised outcrop channel chip samples included:

- 4.0m of 210.5 g/t silver + 0.68 g/t gold + 0.55 % zinc
- 3.0m of 137 g/t silver + 0.58 g/t gold

Copper mineralised outcrop channel samples included:

- 2.0m of 0.18% copper + 0.90 g/t gold
- 0.5m of 0.30% copper + 0.63 g/t gold

Additional significant gold mineralised outcrop channel chip intercepts included:

- 0.6m of 23.0 g/t gold + strong arsenic
- 2.0m of 6.48 g/t gold
- 0.5m of 19.0 g/t gold
- 0.6m of 10.3 g/t gold + strong arsenic
- 0.3m of 11.4 g/t gold + strong arsenic
- 4.0m of 3.80 g/t gold + 12.0 g/t silver + 0.95% lead + 0.87% zinc
- 2.0m of 2.19 g/t gold + 21.1 g/t silver + 0.75% zinc ÷
- 1.5m of 4.49 g/t gold + low molybdenum and arsenic
- 1.5m of 3.63 g/t gold + weak lead and zinc

The best rock float sample assayed 23.0 g/t gold + 0.92% copper. Several others contained moderate silver.

Soil assay information is being finalised and will be released Friday 25/3/11.



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The better rock intercepts /assays are attached in Table 1.

Several distinct styles of mineralisation were demonstrated by the rock geochemistry, including:

Epithermal gold:

- Very strong gold & arsenic with moderate silver & lead, low copper, zinc & antimony
- Weak to moderate gold + arsenic
- > Strong silver & arsenic, with weak-moderate gold & antimony, moderate lead

Porphyry copper:

- Weak-moderate copper & gold, low arsenic, +/- molybdenum
- Strong gold, silver, copper & zinc, moderate lead & arsenic & very strong antimony. These may represent veins peripheral or at a higher level to a porphyry copper system.

The samples were predominantly collected from creek exposures and as such may have limited sample lengths. The intercepts (samples) noted above are <u>not</u> from the known gold mineralised Komsen Prospect, but from new outcrops in different locations of the Andewa Project

Figure 2. Location of Frontier's Exploration Licences and Applications in Papua New Guinea.



Figure 3. An SRTM (Shuttle Radar Topography Mission) topographic image of the Andewa Exploration Licence and the Mt Schrader Exploration Licence Application in West New Britain Province.



Table 1:	Summary of	significant ro	ock samples	collected a	at the <i>l</i>	Andewa	Project	in 2010.
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Outcrop Rock Chip Information											
Sample Number	Outcrop or Float	Type Channel Or Grab	Width (m)	Gold (g/t)	Ag (g/t)	Cu ppm	Mo ppm	Pb ppm	Zn ppm		
1614	Outcrop	Channel	1.2	2.59	23.5	24	1	107	63		
1621	Outcrop	Channel	2	1.21	0.5	67	9	60	412		
1622	Outcrop	Channel	1.5	4.49	0.6	52	7	123	107		
1623	Outcrop	Channel	1	2.07	0.6	87	9	12	61		
1625	Outcrop	Channel	1.5	1.65	0.3	61	5	14	54		
1641	Outcrop	Channel	1.5	2.31	0.4	2890	3	25	99		
1644	Outcrop	Channel	1	1.43	0.5	683	4	16	5		
1647	Float	-		19.00	3.0	9190	<1	10	18		
1648	Float	-		1.18	115.0	2850	4	6670	19700		
1653	Outcrop	Channel		1.54	5.3	77	12	31	16		
1675	Outcrop	Channel	0.5	1.71	9.2	184	<1	1050	1470		
1716	Outcrop	Channel	0.6	4.25	1.5	69	<1	81	204		
1717	Outcrop	Channel	0.6	2.37	0.7	83	2	11	145		
1718	Outcrop	Channel	0.6	23.00	2.4	45	3	25	14		
1720	Outcrop	Channel	0.6	1.51	0.9	49	1	335	111		
1777	Outcrop	Channel	1.5	0.951	27.2	839	3	6040	16100		
1780	Outcrop	Grab	0.1	0.27	0.3	1630	4	11	42		
1782	Outcrop	Composite	1	0.256	0.2	1730	5	4	26		
1783	Outcrop	Channel	0.05	0.916	0.6	1760	26	16	70		
1784	Outcrop	Channel	0.2	0.331	0.8	1040	114	3	18		
1785	Outcrop	Channel	0.45	4.83	3.0	136	4	294	943		
1780	Outcrop	Channel	0.0	2.50	2.7	/9	3	238	12100		
1788	Outcrop	Channel	0.3	3.60	8.4	886	13	10000	21500		
1789	Outcrop	Channel	0.3	11 40	47	371	2	1060	2200		
1839	Outcrop	Channel	2	0.213	53.3	1290	2	942	13400		
1840	Outcrop	Channel	2	0.21	88.8	2290	2	1250	21100		
1841	Outcrop	Channel	3	4.99	97.3	2190	1	1410	17800		
1842	Outcrop	Channel	3	6.52	21.5	814	2	1010	2960		
1843	Outcrop	Channel	3	6.62	141.0	3570	1	2810	19700		
1844	Outcrop	Channel	2	2.75	77.8	2140	2	2830	21100		
1845	Outcrop	Channel	3	9.20	32.1	3040	1	341	3740		
1846	Outcrop	Channel	3	5.92	103.0	1970	2	9020	19700		
1847	Outcrop	Channel	2	3.31	1.2	367	1	53	162		
1848	Outcrop	Channel	0.5	19.00	0.7	126	1	68	212		
1851	Outcrop	Channel	3	14.80	42.3	394	1	5300	5160		
1852	Outcrop	Channel	3	20.00	27.5	327	1	1730	1890		
1853	Outcrop	Channel	3	14.90	14.4	183	1	1540	2810		
1854	Outcrop	Channel	3	19.00	13.5	268	2	2880	2710		
1855	Outcrop	Channel	3	8.70	11.8	405	1	465	25100		
1856	Outcrop	Channel	0.4	3.13	5.6	186	1	251	11/00		
1857	Outcrop	Channel	4	0.884	7.0	155	2	699	3040		
1859	Outcrop	Channel	3	0.58	4.8	124	3	1060	2520		
1855	Outcrop	Channel	3	0.58	24.4	95	3	1000	1270		
1861	Outcrop	Channel	2	6.49	85	247	3	136	284		
1862	Outcrop	Channel	2	2 19	21.1	350	3	2580	7510		
1863	Outcrop	Channel	0.7	0.623	51.8	413	7	5360	601		
1864	Outcrop	Channel	0.35	0.958	19.8	288	4	1460	3210		
1865	Outcrop	Channel	1.5	3.63	7.0	240	1	1120	1150		
1866	Outcrop	Channel	0.2	9.34	13.3	315	1	2750	987		
1867	Outcrop	Channel	2	0.456	133.0	176	2	2070	3530		
1868	Outcrop	Channel	2	0.9	288.0	226	5	2280	<mark>7460</mark>		
1869	Outcrop	Channel	2	2.51	11.4	242	1	5580	2670		
1870	Outcrop	Channel	2	5.10	13.3	445	2	3920	5990		
1871	Outcrop	Channel	1.5	1.25	3.4	95	4	177	655		
1872	Outcrop	Channel	1.5	0.618	13.0	187	2	1720	4690		
1874	Outcrop	Channel	0.35	1.13	0.8	73	<1	88	307		
1875	Outcrop	Channel	0.45	1.49	1.3	231	1	108	816		
1876	Outcrop	Channel	1	0.03	26.3	109	4	869	105		
1878	Float	-		1.32	4.2	193	<1	76	368		
1879	Outcrop	Channel	0.7	0.128	20.2	275	2	1890	11600		
1881	Float	-		3.43	6.1	228		226	323		
1883	Outcrop	Channel	0.8	1.22	0.2	144	1	25	103		
1000	Outcrop	Channel	2	0.06	0.7	2070	4	<2	65		
1000	Outerop	Channel	0.5	0.626	0.4	2970	⊥ 	<2	33		
1890	Outcrop	Channel	1 2	4.45	_∪.⊥ ∩⊿	1810	2	<2	5Z 44		
1897	Outcrop	Channel	1 ⊑	1 19	<0. 4 <0.1	133	2	7	9		
1898	Outcrop	Grah	1.5	0.105	82.0	4	<1	, 74			
1899	Outcrop	Grah	1	1 24	1 1	2	<1	7			
1901	Outcrop	Grah	1	1.07	2.8	219	1	619	902		
1912	Outcrop	Channel	0.1	1.35	1.5	2280	2	18	157		
1913	Outcrop	Channel	0.5	2.29	1.3	4340	34	5	16		
1719a	Outcrop	Channel	0.6	10.30	3.3	28	<1	103	128		



Figure 4. Gold assays from rock samples at the Andewa Project on an image of chargeability 50m below topography.

Gold mineralised outcrop exposed in a creek, showing 2 sub-parallel zones containing high volumes of sulphides that are oxidising to produce a distinctive orange ooze. Such zones are virtually always mineralised and often can represent structures such as faults.

Figure 5.











For additional information relating to Frontier Resources please visit our website at <u>www.frontierresources.com.au</u> or feel free contact me.

FRONTIER RESOURCES LTD

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

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 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, 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.

ABOUT FRONTIER RESOURCES LTD

FRONTIER IS FOCUSED ON EXPLORING FOR AND DEVELOPING MINERAL DEPOSITS IN THE HIGHLY MINERALISED PACIFIC 'RIM OF FIRE' IN PAPUA NEW GUINEA AND THE HIGHLY PROSPECTIVE DOLCOATH GRANITE AND MT READ VOLCANICS OF TASMANIA, AUSTRALIA

- The Company is an innovative and socially responsible ASX listed junior mineral explorer whose shares also trade on the Frankfurt, Berlin and Munich Stock Exchanges.
- Frontier's Directors have more than 150 years combined experience in PNG and Australia to serve the interests of the company and its shareholders.
- Frontier operates with a general policy of 'DRILLING' our quality projects using our purpose built and self manufactured, cost
 effective, environmentally friendly, man-portable diamond core rig.
- The Company has a 100% interest in four Exploration Licences (approx. 1,140 km²) and three Exploration Licence Applications (approx. 2,212km²) in PNG. Three ELs and two ELAs are subject to Joint Ventures with PNG producer Ok Tedi Mining Ltd.
- Frontier also has two Exploration Licences and a Retention Licence (123 km²), + three EL Applications and an ERA in Tasmania.
- The tenement portfolio offers excellent mineral deposit potential. Primary targets are World Class copper-gold-molybdenum porphyry, high grade gold epithermal, gold–base metal & tungsten skarns + polymetallic VMS (zinc-lead-silver-gold) deposits.
- The projects <u>all</u> 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 100% OWNED MT ANDEWA EL IN PNG HAS EXCELLENT GOLD AND COPPER MINERALISATION POTENTIAL

- Frontier undertook a major three dimensional Induced Polarisation (3D-IP) geophysical program over a 21 sq km grid at the Andewa gold and copper Project on the island of New Britain in Papua New Guinea in 2010 and collected in excess of 5,000 soil and rock samples. The soil and rock assays are now being collated for announcement.
- The 3D-IP survey was a remarkable success that showed three exceptionally extensive, voluminous and intense, chargeability anomalies that compellingly demonstrate the presence of very large sulphide systems from on-surface to more than 800m deep...
- The total chargeability anomaly (>30ms) area is approximately seven square kilometres, consisting of three very large, spatially related and intense chargeability anomalies called the Core Chargeability (CCZ), Ber and Ekhos Zones. The Ekhos chargeability anomaly is 3.3 Km² in area, the CCZ is 3.0 km² and Ber is approximately 0.5 km² (at 150m below sea level).
- The total anomalous chargeability area is approximately 5,400m long (E-W) and 3,000 wide (N-S). The Ekhos chargeability anomaly is approximately 3,850m long x 1,750m wide. It averages about 1,000m wide and has a higher grade chargeability core zone that is approximately 2,400m long and 1,000m wide (at >30ms and 400m below topography). The CCZ is approximately 2,900m long (NW to SE) and a maximum of 2,100m wide, averaging 1,000m wide.
- Ekhos is the largest and closest to surface 3D-IP chargeability anomaly at Andewa, with much of it very intense at >45ms; it is open to the south and east but appears defined in general at depth. The CCZ chargeability anomaly is open to the south AND at depth, however, it's very intense core (>45ms) appears to be adequately resolved. The CCZ also has large anomalous areas at >45ms chargeability that extend to depths greater than the 800m modelled maximum.
- Each major chargeability anomaly is surrounded by a sub-circular high-resistivity anomaly that appears to merge near the edge and off the grid, to become one approximately 6km diameter resistivity anomaly in the centre of the Mt Andewa crater, with 'holes' in it where the strong chargeability anomalies exist.
- Frontier has previously drilled gold mineralisation at Komsen on the western margin of the CCZ from surface to a maximum depth of 320m below surface in a limited program, with drill intercepts containing significant gold and base metals such as 2m of 5.43 g/t gold + 95 g/t silver + 11.1% zinc + 2.3% lead + 0.12% copper and 7.9m of 10.01g/t gold.
- Field crews are again in the field conducting infill soil sampling and preparing for a deep drilling program scheduled for May 2011 with our own drilling rigs and crews.

HIGHLY PROSPECTIVE TENEMENTS AND FRONTIER'S EXPLORATION SUCCESS IN PNG CULMINATED IN AN EXCELLENT STRATEGIC ALLIANCE - JOINT VENTURE WITH WORLD CLASS COPPER PRODUCER OK TEDI MINING LTD (OTML)

Three ELs and two ELAs are subject to 2 joint ventures that require a total earn-in of US\$60 million over 6 years, consisting of

US\$12 million for each of the 5 projects.

- Frontier then has a deferred carry to completion of a Bankable Feasibility Study on each tenement.
- The Company will retain a 42% interest (dilutable) in the Bulago and Leonard Schultz ELs and a 19.9% interest (non-dilutable) in the Likuruanga EL + Central and East New Britain ELAs, to the completion of a Bankable Feasibility Study.
- ✤ The JVs cover a total area of 2,763 km².
- OTML have completed large aeromagnetic and radiometric programs at each EL in the Joint Venture to discriminate and rank targets for follow up exploration, including drilling in 2011.
- OTML is a major producer of copper concentrate from the Ok Tedi mine (that started operations in 1984) and has become the single largest business contributor to the economy of PNG. In 2009, OTML's export earnings were K4 billion, representing 33% of PNG's total export earnings. The contributions of the mine to PNG are not simply economic, with employment, education and health services all facilitated by the mine.

PNG exploration results from the JV projects have included:

- The Bulago JV has 10 zones of high-grade gold in outcrop channel samples at the Suguma and Funutu Prospects from continuous chip outcrop channel samples. Trench intercepts included 27m of 66.8 g/t gold, 4m of 135.6 g/t gold, 9m of 64.0 g/t gold, 16m of 36.5 g/t gold, 18m of 40.3 g/t gold, 7.5m of 67.0 g/t gold and 9m of 24.0 g/t gold.
- The Kru and nearby Wasi Prospects in the Leonard Schultz JV have excellent gold outcrop trench channel sample assay results including 16m of 18.60 g/t gold contained within 76m of 5.35 g/t gold. Additional significant assay results included 22m of 2.71 g/t and 36m of 1.15 g/t (within 384.3m of 0.67 g/t gold) in outcrop trench.
- Likuruanga JV Esis Prospect has 27m of supergene mineralisation grading 0.71% copper (from 33m depth), plus 66m of primary grading 0.42% copper (from 86.6m to end of hole), with the last 7.6m of the hole grading 0.49% copper.

EXPLORATION IS RAMPING UP ON FRONTIER'S TASMANIAN EXPLORATION AND RETENTION LICENCES, TARGETING KNOWN HIGH-GRADE (PLUS POTENTIALLY BULK MINEABLE) TUNGSTEN, GOLD AND BASE METAL DEPOSITS

The Cethana Project covers an E-W spine of the highly mineralised Dolcoath Granite and a number of skarn and vein deposits, from east to west (proximal to distal) including silver, tin, tungsten, molybdenum, gold+ silver + zinc + lead (Narrawa), zinc+ gold (not FNT's), fluorine (not FNT's) and gold + bismuth (Stormont).

Frontier is specifically targeting tungsten along with other metals in this highly mineralised district.

- There are at least 55 historic workings (shafts, adits and small open pits) within the targeted area testifying to its highly prospective and mineralised status.
- The primary commodity mined in the district was tungsten in at least 23 workings, tin in 9 workings and gold in 7 workings (many are unspecified).
- Previous Frontier tungsten drill intersections included 1m grading 1.98% WO₃ near the NW end of the Narrawa Deposit, within a broad low grade geochemical halo that averaged 14m of 0.20% WO₃ (from 21m).

Narrawa is a stratabound/stratiform skarn Deposit hosted within 4 steeply dipping on/near surface lodes, which could be mined by open pit mining methods.

- The deposit contains an Indicated and Inferred resource with 14,125 ounces of gold, plus 131,300 ounces of silver, 2,765 tonnes of lead and 2,335 tonnes of zinc (at 0.5g/t gold cut-off grade), that is up to 220m long, 20m wide and 60m deep, within 209,330 tonnes of rock grading 2.10 g/t gold, 19.5 g/t silver, 1.32% lead and 1.12% zinc.
- The Indicated Resource consists of 162,755 tonnes grading 2.11 g/t gold, 20.5 g/t silver, 1.42% lead and 1.2% zinc.
- The Inferred Resource consists of 46,574 tonnes grading 2.07 g/t gold, 16 g/t silver, 0.98% lead and 0.81% zinc.

Frontier's detailed exploration and expenditure submission to Mineral Resources Tasmania for the Stormont Deposit - ERA 834 was successful and should be granted in due course.

- The 9 km² ERA consolidates Frontier's tenement portfolio in the Central-North of Tasmania and provides additional highly prospective ground for exploration.
- ✤ ERA 834 contains the on-surface Stormont Deposit, with an Inferred Resource of 14,250 ounces of gold plus 304 tonnes bismuth, within 112,500 tonnes of mineralised rock grading 3.94 g/t gold plus 0.27% bismuth (1.0g/t gold cut-off grade).
- ✤ It is planned to increase the size of the resource and upgrade it from Inferred to Indicated.