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Announcement

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## Resource Expansion and Infill Drilling Underway at the Stormont Gold Deposit

Frontier Resources is pleased to announce that drilling commenced at the Stormont gold - bismuth Deposit in EL 42/2010 in central-northern Tasmania on Monday.

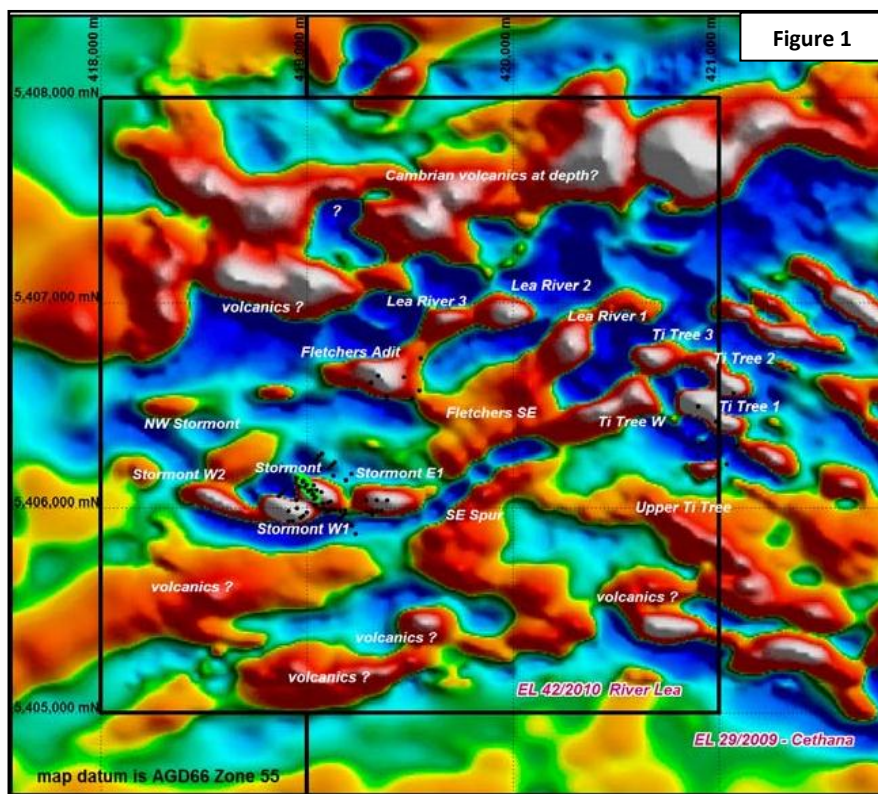
The Stormont Deposit contains a JORC compliant gold + silver + bismuth Inferred Resource of 112,500 tonnes grading 3.94g/t gold, 3.41g/t silver and 0.27% bismuth (at a cut-off grade of 1g/t gold) for 14,250 ounces of gold, 12,335 ounces of silver and 30.6 tonnes of bismuth.

Preliminary metallurgical testwork on three samples consisting of gravity separation and leaching of the gravity separation products, has shown overall gold recoveries ranging from 80-85%, with the highest recovery at the finest grind.

The gravity tailings leaching curves indicate that the gold is present in two phases, being a non-refractory fast leaching phase (with 80-90% of the leachable gold recovered in the first two hours of the test) and a slow leaching component (with the remaining gold recovered in the following 48 hours). The results indicate that this slow leaching component is still leaching at 48 hours and thus overall recoveries can be improved with additional testwork.

Figure 1 shows the River Lea EL (9 km<sup>2</sup>) and the Stormont Deposit plus 23 prospective aeromagnetic anomalies (some of which correspond to the known 5 gold – bismuth occurrences) on a 2nd vertical derivative aeromagnetic image. Figure 1 also shows the Stormont resource (light green ellipse), drill collars and numerous aeromagnetic highs having limited or no drilling.

Stormont is a skarn-style stratiform deposit located in the core and on the limbs of a shallowly southeasterly plunging syncline at its northwestern end. The deposit is located on or very near surface and ranges in stratigraphic thickness between 10m and 15m.



A consistently mineralised resource is modelled in the 150m long, NW part of the central syncline, referred to as the high grade zone. Stormont is genetically associated with the highly fertile Dolcoath Granite that recently demonstrated very large (to 6km long) multi- metal soil anomalies near the Company's Narrawa Deposit (located about 6.5km to the east).

The drilling program in the Stormont 'District' has four objectives:

1. Expansion drilling along strike and down dip/plunge to increase the total resources to improve the project economics
2. Definition of additional on or near surface satellite gold - bismuth deposits to increase the total resources and improve the overall project economics.
3. Infill drilling of all mineralised zones to improve the classification (confidence) of the resource, so reserves can be estimated, fiscal outcomes published and development capital ultimately be raised
4. Obtain samples for continued metallurgical testwork to maximise recoveries and allow developmental planning.

There is good scope to increase the resource with additional drilling in the SE of the central syncline, the untested western sector of the western syncline and proximal to the eastern thrust. Significant high grade gold+/-bismuth intersections have been demonstrated over the entire 300m known length of the central syncline, with drillholes returning up to 4m of 12.7 g/t gold, that are not included in the resource estimation.

Analysis of high resolution heli-magnetic data clearly demonstrates a strong spatial association between the Stormont Deposit and aeromagnetic highs and has revealed the presence of numerous lookalike magnetic highs containing little or no drilling. The mineralised skarn assemblage includes magnetite and so has a positive magnetic response.

Targets at Stormont and within the district are generally shallow and will be quickly tested. Resources that are identified will likely be amenable to open cut mining (as at Stormont). The potential to locate additional high grade gold skarns within the licence (as well as Frontier's adjacent EL29/2009 - Cethana) is high.

Feasibility studies will continue in due course with:

- Additional metallurgical testwork to maximise metal recoveries and minimise possible operating costs
- Environmental and other evaluations undertaken in conjunction with the nearby Narrawa polymetallic Deposit to allow for probable joint development of the deposits.


A Conceptual Mining Study relating to possible mining and processing of the gold and base metal mineralisation at the Narrawa and Stormont Deposits has demonstrated the potential for a positive theoretical cash flow. Metals prices utilised in the CMS on 3/7/2009 were US\$940/oz gold, US\$0.7144/lb zinc, US\$0.7738/lb lead, US\$13.70/oz silver; since then, the gold price has appreciated more than 50%, silver more than 300% and zinc and lead prices are also strong.

The CMS demonstrates that the continuation of Feasibility Studies is strongly warranted to evaluate the ultimate economic potential of the Narrawa and Stormont Deposits and to move them toward future production and possible cash flow for Frontier.

**Frontier's intention is ALSO to explore the Moina Project area at greater depths for World Class multi-metal mineral deposits related to the Dolcoath Granite, subsequent to completion and interpretation of a major IP survey that will be conducted over the next six months.** The Moina Project surrounds an excluded (competitor's) 2 km<sup>2</sup> area that contains the worlds' largest unmined fluor spar (fluorite) deposit, demonstrating that 'World Class' Deposits are associated with the Dolcoath Granite.

For information relating to Frontier Resources and/ or its projects, please visit the Company's website at [www.frontierresources.com.au](http://www.frontierresources.com.au) or feel free to contact me.

**FRONTIER RESOURCES LTD**



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

- Frontier is an innovative and socially responsible ASX listed junior mineral explorer whose shares also trade on the Frankfurt, Berlin and Munich Stock Exchanges.
- Directors have more than 150 years combined experience in PNG and Australia to serve the interests of the company, its shareholders and stakeholders.
- 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 rigs.
- The Company has a 100% interest in six Exploration Licences (approx. 2,807 km<sup>2</sup>) and two Exploration Licence Applications (approx. 2,933km<sup>2</sup>) in PNG. Five ELs (approx. 2,690km<sup>2</sup>) are subject to two Joint Ventures with PNG copper-gold producer Ok Tedi Mining Ltd.
- Frontier also has four Exploration Licences and one Retention Licence (348 km<sup>2</sup>) + 3 EL Applications in Tasmania.
- The tenement portfolio offers excellent mineral deposit potential. Primary targets are World Class copper-gold-molybdenum porphyry, high grade gold epithermal, intrusive related gold (IRG), gold-base metal & tungsten skarns + polymetallic VMS (zinc-lead-silver-gold) 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.

## PAPUA NEW GUINEA

### THE 100% OWNED MT ANDEWA EL IN PNG HAS EXCELLENT GOLD AND COPPER MINERALISATION POTENTIAL

- **Frontier's exploration team is in the field conducting a 10,000m drilling program with our own rig, infill soil sampling and hand trenching.**
- 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 about 5,000 soil and rock samples.
- The 3D-IP survey was a remarkable success that showed three exceptionally voluminous and intense, chargeability anomalies indicating the presence of very large sulphide systems from on-surface to more than 800m deep.
- The total chargeability anomaly (over 30ms) area is approximately seven square kilometres, consisting of two very large, spatially related and intense chargeability anomalies (plus one smaller anomaly) called the Core Chargeability (CCZ), Ekhos and Ber Zones. The Ekhos chargeability anomaly is 3.3 Km<sup>2</sup> in area, the CCZ is 3.0 km<sup>2</sup> and Ber is approximately 0.5 km<sup>2</sup> (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 over 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 over 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 (over 45ms) appears to be adequately resolved. The CCZ also has large anomalous areas at over 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 1 x ~6km diameter quasi donut shaped resistivity anomaly in the centre of the Mt Andewa crater, with 'holes' present 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.

## OK TEDI MINING LTD JOINT VENTURE

### 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)

- **13,000m of JV drilling is planned in the coming year, commencing August.**
- Five ELs 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 is then deferred carried to completion of a Bankable Feasibility Study on each tenement, repayable from 50% of future cash flow.
- 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, Central and East New Britain ELs, to the completion of a Bankable Feasibility Study.
- The JVs cover a total area of 2,690 km<sup>2</sup>.
- OTML have completed large and detailed aeromagnetic and radiometric programs at Bulago, Leonard Schultz and Likuruanga to discriminate and rank targets for follow up exploration.
- The Central and East New Britain licences were granted earlier in 2011 and aeromagnetic programs will be flown as soon as possible.
- 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 wide reaching improving opportunities for employment, education and health services.

**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. The Bukuam porphyry copper-gold-molybdenum soil anomaly is over 4.8km long and has not yet been drilled.

## **TASMANIA**

### **EXPLORATION ON FRONTIER'S TASMANIAN EXPLORATION AND RETENTION LICENCES IS TARGETING KNOWN HIGH-GRADE (PLUS POTENTIALLY BULK MINEABLE) TUNGSTEN - TIN - MOLYBDENUM, GOLD - SILVER - LEAD - ZINC AND INTRUSIVE RELATED GOLD DEPOSITS**

The Moina Project consists of RL 3/2005 (Narrawa), EL 42/2010 (Stormont) and EL 29/2009 (Cethana). It covers the highly mineralised Dolcoath Granite, parts of its E-W spine and of the number of skarn and vein deposits [from east to west (proximal to distal) including silver, tin, tungsten, molybdenum, gold + silver + zinc + lead, zinc+ gold, fluorspar (excised RL not FNT's) and gold + bismuth].

Frontier is specifically targeting tungsten and intrusive related gold deposits, along with other metals in this highly mineralised district.

- There are at least 70 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% WO<sub>3</sub> near the NW end of the Narrawa Deposit, within a broad low grade geochemical halo that averaged 14m of 0.20% WO<sub>3</sub> (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.

**The Stormont Deposit is a skarn hosted within on/near surface fold keels, which could be easily mined by open pit mining methods.**

- 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 Stormont resource and upgrade it from Inferred to Indicated. The 9 km<sup>2</sup> provides additional highly prospective ground for exploration.

**A Conceptual Mining Study evaluating mining the on-surface Stormont and Narrawa Deposits showed a satisfactory theoretical cash flow from processing based on a capital expenditure estimated at A\$8 million (neglecting working capital and provision for contingencies).**

- The theoretical cash flow improves significantly with increased metal prices, grades and/or tonnages of mineralisation.
- Metals prices utilised in the CMS were US\$940/oz gold, US\$0.7144/lb zinc, US\$0.7738/lb lead, US\$13.70/oz silver. Since 3/7/2009, the gold price has appreciated more than 50% , silver more than 300% and zinc and lead prices are also strong.

### **WART HILL DEPOSIT, SMRV PROJECT, SW TASMANIA**

**Frontier is targeting a 45km total strike length of the highly prospective Mt Read Volcanics in SW Tasmania for World Class Rosebery and Eskay Creek type of Volcanic Hosted Massive Sulphide Deposits (EL 20/96 and EL 33/2010).**

- A high-grade 'Rosebery' style VHMS base metal (zinc, lead, silver, gold) horizon has been tracked for 290m down a fold keel by Frontier's drilling. A 3D-IP survey was completed and it has provided useful targeting vectors. The faulted off southern extension and the 'sides' are good exploration targets and there is excellent regional potential to locate additional volcanic hosted massive sulphide and also high grade gold deposits.
- Trench results have included 3m of 21.9% zinc + 13.9% lead + 680g/t silver + 0.84g/t gold and 4m of 17.9% zinc + 10.2% lead + 138g/t silver + 0.60g/t gold.

Drill results include 13.9m grading 1.11 g/t gold + 37g/t silver + 8.97% zinc + 4.47% lead + 0.31% copper, 3.9m of 0.60 g/t gold + 124 g/t silver + 12.1% zinc + 7.3% lead, 1.1m of 0.60 g/t gold +123 g/t silver + 23.6% zinc +10.4% lead and 5.7m of 0.35 g/t gold + 77 g/t silver + 7.5 % zinc + 4.0 % lead.