



**ADDRESS**  
PO Box 52  
West Perth  
WA 6872 Australia  
ABN 96 095 684 389

**PHONE**  
+61 (08) 9295 0388  
**FAX**  
+61 (08) 9295 3480

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

ASX Limited  
Company Announcements Office

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## **Drilling at Stormont Intersects 17.6m grading 10.80 g/t gold (from surface), 15m of 7.67 g/t gold (from 3m) & 6.5m grading 6.56 g/t gold (from 8.5m)**

Frontier Resources Ltd is pleased to announce gold results from the initial six diamond core holes drilled in 2011 at the Stormont gold/bismuth/silver Deposit, Moina Project, Tasmania (Figure 1).

Peter McNeil, MSc., Chairman and Managing Director commented:

*Very high grade gold has been demonstrated in the initial diamond drill core assay results in 2011 from Stormont and include 4.5m grading 37.4 g/t gold, 4m of 19.4 g/t gold and 2m of 13.4 g/t gold, each in different holes within significant and wider lower grade mineralised envelopes. These are excellent results and the first we have drilled in the region in 3 years.*

*A 40 km<sup>2</sup> 3D-Induced Polarisation geophysical survey is being undertaken over the entire Stormont area and the general Moina Project further east to generate World Class Intrusive Related Gold and precious + base metal skarn targets for drilling in 2012. Line cutting is progressing well for the 3D-IP and the actual survey should commence in 4 weeks. The 3D-IP has been a very successful exploration tool at our Andewa Project and other areas in PNG and the concepts are the same.*

*A soil geochemical survey is also planned to test areas covered by the IP survey (not covered by basalt) and should be completed by the end of the year.*

*There is a high correlation of gold mineralisation to high magnetic susceptibility at Stormont which is a useful exploration tool. Hole SFD 022 was successfully drilled to test for near surface gold resource extensions to the southeast of the Inferred Resource and it, together with the ground magnetics, suggests a significant extension to the gold mineralisation to the east/southeast.*

*The assay results show that moderate to very high grade gold exists from surface between section 2100E and section 2075E and also occurs outside the existing Inferred Resource area. These areas will be further targeted.*

*The excellent correlation between gold mineralisation and high magnetic susceptibility lends confidence that with continued exploration and drilling by Frontier, that some of the numerous other magnetic anomalies near the Company's Stormont Gold –Bismuth Deposit and in the Moina Exploration License, will yield further significant gold mineralisation and ultimately mineral resources"*

An additional seven holes have since been completed at Stormont (sampled and sent for analysis) and approximately fifteen further holes are planned for this phase of the drilling. This program will complete the infill holes necessary to upgrade the present Inferred Resource to Indicated Resource status and will also test for extensions to the stated resource. Further encouraging results (such as SFD 022), would result in additional exploration drilling.

Gold results from holes SFD 017 to SFD 022 (cut-off grade of 0.5 g/t gold) are shown in the Table 1 below and bismuth/silver assays are pending.

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Hole No	Length (m)	Gold (g/t)	From (m)	To (m)	Azimuth (° True N)	Dip (degrees)	Final Depth (m)
SFD 017	1.0	0.73	10.0	11.0	225	-80	33.0
plus	0.9	0.69	17.0	17.9			
SFD 018	7.0	0.82	6.0	13.0	225	-60	30.0
<b>SFD 019</b>	<b>8.5</b>	<b>1.6</b>	7.5	16.0	225	-50	28.5
<b>SFD 020</b>	<b>15</b>	<b>7.67</b>	3.0	18.0	235	-50	34.5
<b>Inc.</b>	<b>4.0</b>	<b>19.4</b>	14.0	18.0			
<b>plus</b>	<b>5.65</b>	<b>2.76</b>	23.35	28.0			
<b>SFD 021</b>	<b>17.6</b>	<b>10.8</b>	0.4	18.0	235	-65	34.1
<b>incl.</b>	<b>4.5</b>	<b>37.4</b>	6.0	10.5			
<b>plus</b>	<b>3.8</b>	<b>2.37</b>	23.0	26.8			
<b>SFD 022</b>	<b>6.5</b>	<b>6.56</b>	8.5	15.0	043	-60	21.4
<b>incl.</b>	<b>2.5</b>	<b>13.4</b>	12.5	15.0			

Drilling is scheduled to commence in the near future testing magnetic features near to Stormont, using Frontier’s new “man portable” drill rig. Gold at Stormont has a direct correlation with magnetic highs (see below for further discussion).

The location of the drill holes, additional completed holes (assays pending) and planned holes are shown on Figure 2. This figure is a plan which also shows the near surface projection of the Inferred Resource (colour coded as shown), surface geology and some significant intersections from earlier drilling.

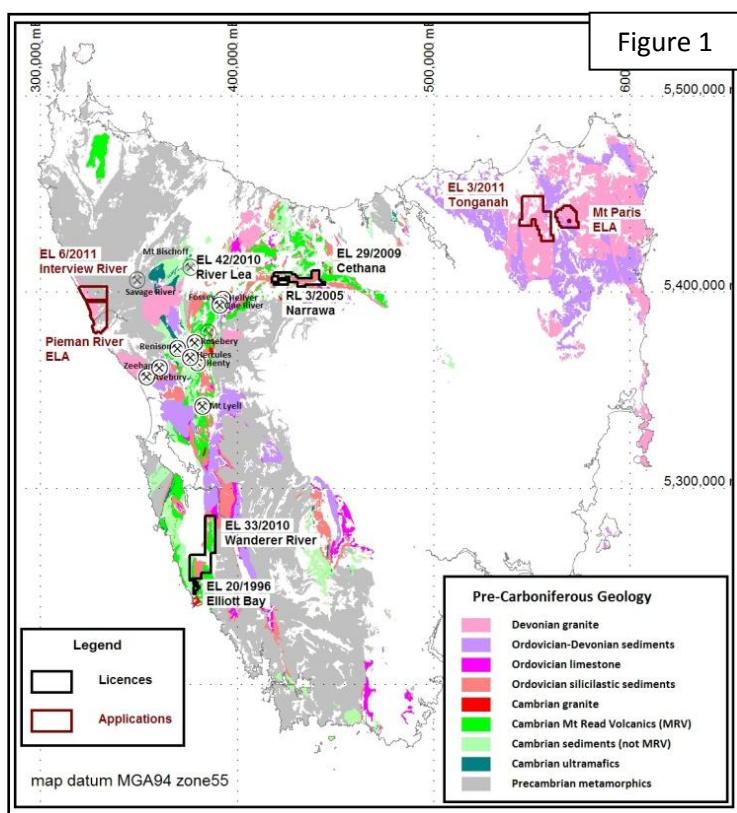
For much of the deposit, near surface, there appears to be ‘eastern’ and ‘western’ higher grade zones that are separated by lower gold content mineralisation.

The present Inferred Resource is 112,500 tonnes grading 3.94 g/t gold plus 3.41 g/t silver plus 0.27% bismuth (cut-off grade 1.0 g/t gold), containing 14,250 ozs gold, 12,335 ozs silver and 30.6 tonnes bismuth.

Stormont is a skarn style, stratiform deposit located in the core and on the limbs of a shallowly, south-easterly plunging syncline, at its north-western end. The deposit is located at or near surface to depths of 20 to 25 m below surface. It is known to extend over a distance of 150 m and is open to the southeast where it passes beneath a thin, post mineral cover of basalt.

Geology of the deposit, current resource and earlier exploration is described in detail in ASX releases dated 29 July 2009, 13 July 2011 and in Technical Report – Quarter ending 30 June 2011.

The drill intersections quoted above are at a cut-off grade of 0.5g/t, but are also within a more extensive gold mineralised “envelope”, as shown in table 2.



Hole No	Length (m)	Gold (g/t)	From (m)	To (m)
SFD 017	16.5	0.24	3.0	19.5
SFD 018	14.6	0.52	5.4	20
SFD 019	16.9	1.18	0.6	17.5
SFD 020	29.5	4.5	0.5	30
SFD 021	26.4	7.59	0.4	26.8
SFD 022	8.8	4.92	8.5	17.3

Gold content drops off sharply to trace amounts beyond the boundaries of the envelope. The significance of recognition of an envelope is that with the exploration of other magnetic anomalies it is necessary to drill at least several holes in each anomaly, as low grade or trace gold could still indicate economic gold somewhere else within that system. Note the blue holes with arrow heads in figure 2 represent proposed drill holes.

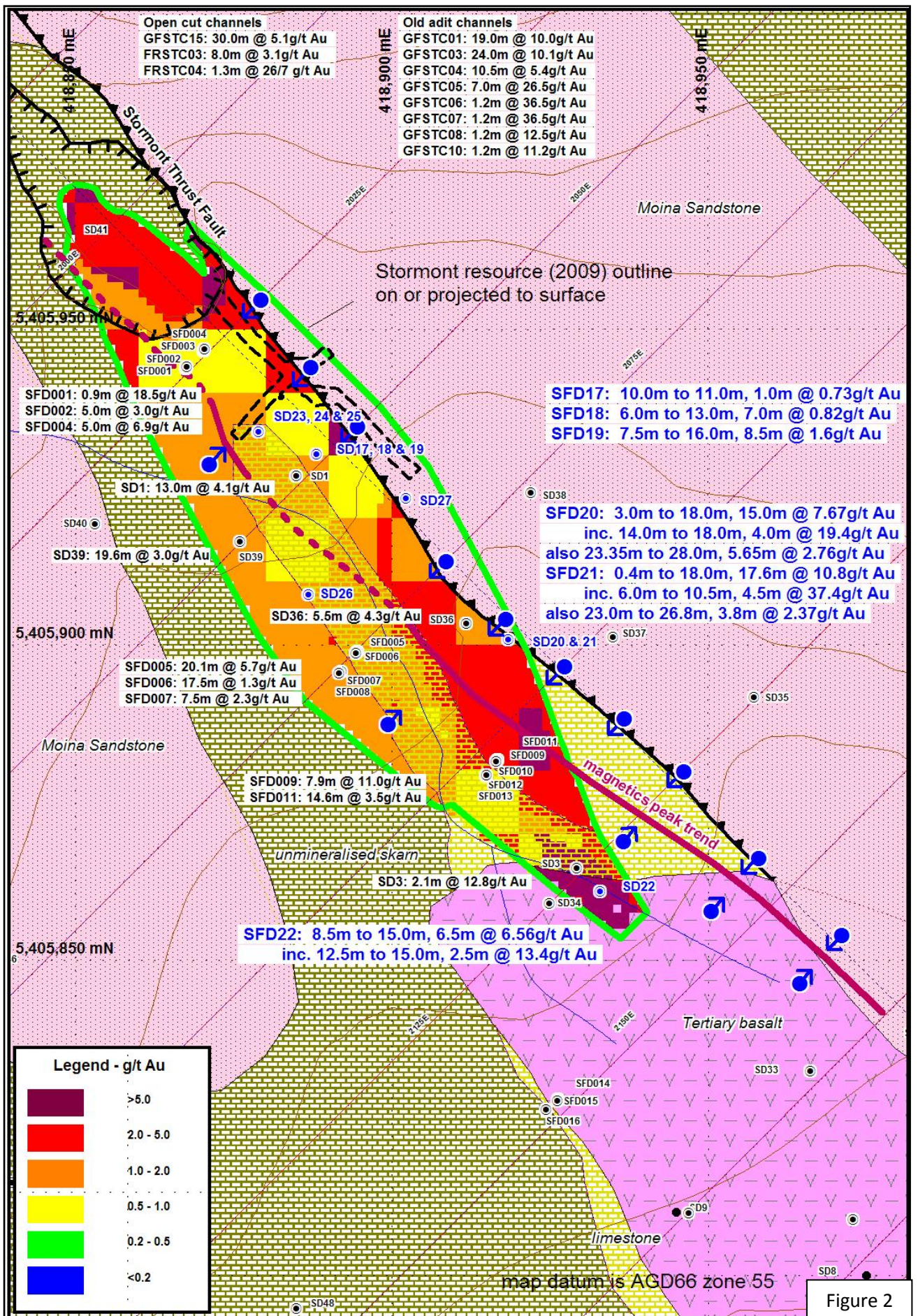
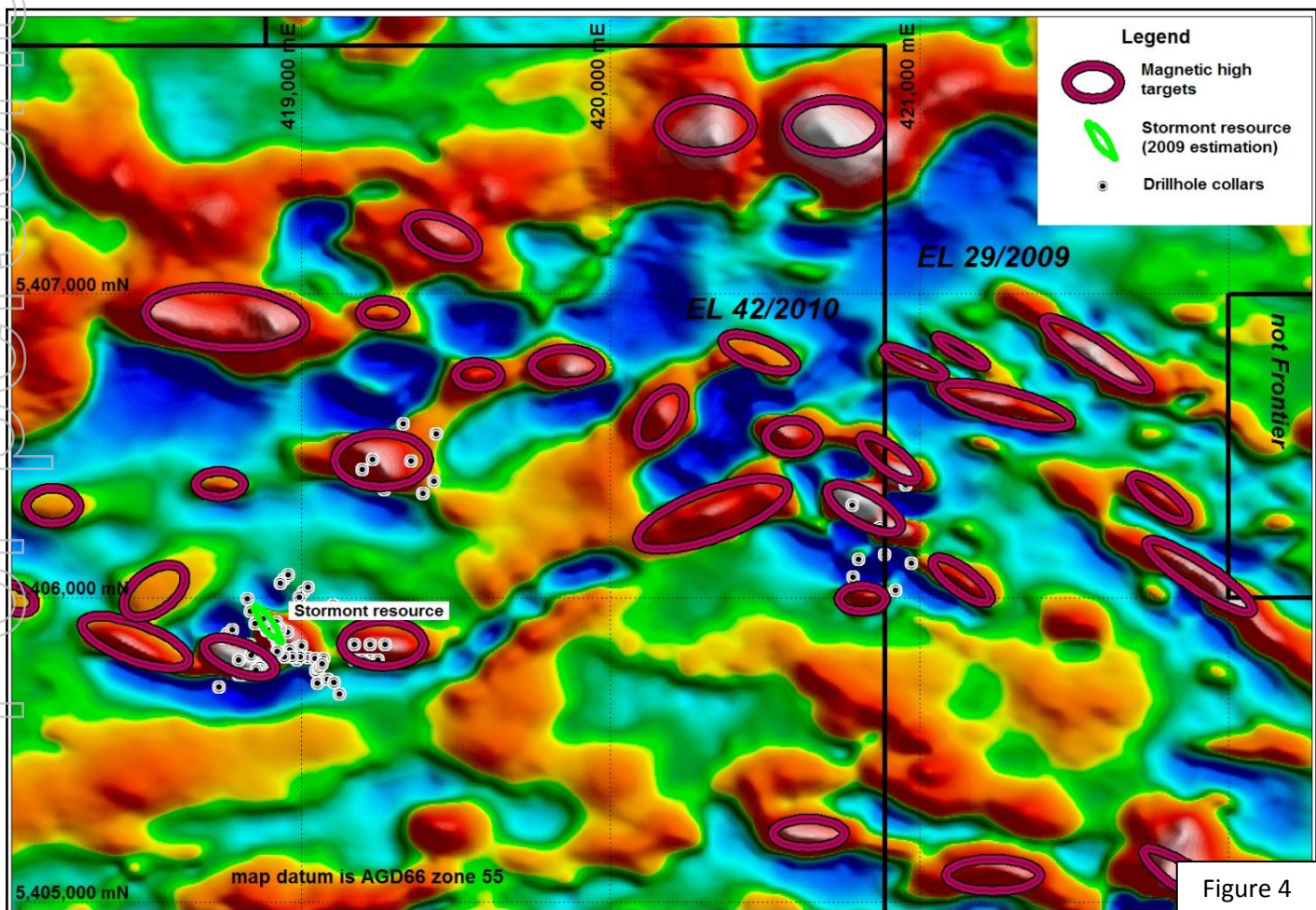
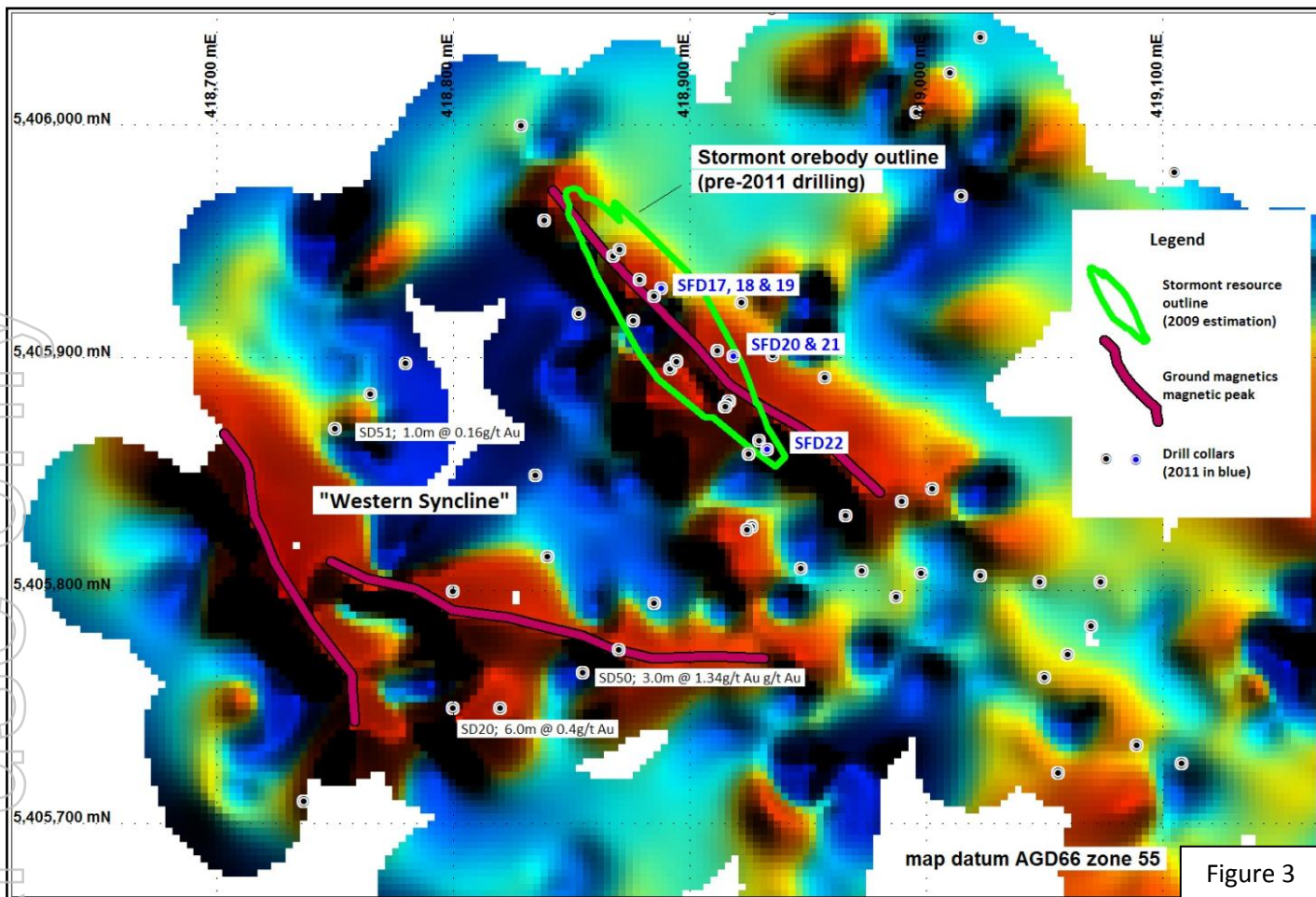


Figure 2



Holes SFD 020 and SFD 021 were drilled to test and confirm the high grade zone thought to exist on the eastern or south-eastern side of the deposit, between sections 2075E and 2100E (local grid). They confirmed the presence of high to very high grade gold – indeed gave higher results than previous holes drilled on sections 2075 and 2100E.

Hole SFD 022 was drilled at the extreme south-eastern limit of known, higher grade gold mineralisation and confirmed that such mineralisation extends beyond the limits of present drilling to the east /southeast. Hole SFD 022 and the ground and airborne magnetics (Figures 3 and 4) suggest significant potential remains to increase the resource at Stormont to the east or southeast beneath basalt cover.

Holes SFD 017 to 019 were drilled to further test a low grade part of the resource between holes SD 039 (19.6m at 3.0g/t gold) and SD 001 (13.0m at 4.1 g/t gold). These holes confirmed the continuity of the gold “envelope” and the separation of eastern and western higher grade zones, but did not intersect significant intersections above 1.0g/t gold.

Figure 3 is a more detailed magnetic survey of the immediate Stormont area (ground magnetic survey). Note the apparent high prospectivity of the zone, as indicated by magnetics, to the southeast of Hole SFD 022. To the west of Stormont several magnetic features as shown on Figure 3 are all considered to also have high prospectivity for further gold mineralisation and will be soil sampled and drilled in the near future.

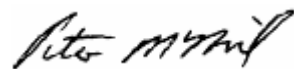
The gold mineralisation at Stormont has a close correlation with high magnetic susceptibility both spatially and in drill core and thus magnetics is a prime exploration indicator of possible gold mineralisation in the general Stormont area. By analogy with Stormont the numerous magnetic highs shown on Figure 4 must be considered excellent exploration targets for the definition of additional gold deposits. This has also been previously noted in earlier ASX releases but Frontier, with its two drill rigs in the area, is now in a position to begin testing them.

Many of these magnetic highs are beneath the thin basalt cover previously noted and thus would not have been detected by earlier exploration, such as soil geochemistry or surface prospecting.

Diamond core was split by diamond saw. Samples were assayed by AMDEL Adelaide by fire assay (40g charge) with independent standards every 25 samples.

For additional information relating to Frontier Resources please visit our website at [www.frontierresources.com.au](http://www.frontierresources.com.au) or feel free 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 on 3 ELs in the coming year, commencing soon.
- 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\$0.71.44/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.