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Announcement

12th August 2009

Narrawa and Stormont Deposit Update

Summary

- ◆ The Revised 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 and future source of income to the shareholders of Frontier Resources Ltd.
- ◆ Mining Lease applications covering the deposits, possible satellite mineralised areas and the required plant and tailings areas, will be initiated and submitted to Mineral Resources Tasmania as the next phase toward possibly developing either a self mined/treated, self mined/toll milled or other type of extractive development.
- ◆ Feasibility studies will continue in due course with:
 - Expansion drilling to increase the total resources and thus further improve the overall project economics;
 - Infill drilling to improve the classification or confidence of the resources associated with each deposit, so reserves can be estimated, fiscal outcomes published and development capital ultimately be raised;
 - Additional metallurgical testwork to maximise metal recoveries and minimise operating costs; and
 - Environmental and other evaluations.

Details

Frontier Resources Ltd is pleased to announce an encouraging result from the revision to the Conceptual Mining Study (CMS) for the Narrawa gold and base metals Deposit and the Stormont gold and bismuth Deposit, located 6.5km apart in central-northern Tasmania.

The Conceptual Mining Study shows a satisfactory theoretical cash flow from processing the mineralisation at the Narrawa and Stormont Deposits, based on a capital expenditure estimated at A\$8 million (neglecting working capital and provision for contingencies).

The CMS is not a feasibility study, but a detailed evaluation designed to determine if there are economic reasons for pursuing and further advancing a project that is known to contain certain types and grades of mineralisation.

The Conceptual Mining Study 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 cash flow for Frontier.

The CMS was based on the current Indicated and Inferred Resource for the Narrawa Deposit and the current Inferred Resource for the Stormont Deposit. The total resource at Narrawa contains 23,550 ounces of gold equivalent grading 3.5 g/t gold equivalent and consists of 14,125 ounces of gold, plus 131,300 ounces of silver, 2,765 tonnes of lead and 2,335 tonnes of zinc, at a 0.5g/t gold equivalent cut-off grade. The mineralisation is contained 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 at Narrawa consists of 162,755 tonnes grading 3.61 g/t gold equivalent, consisting of 2.11 g/t gold, 20.5 g/t silver, 1.42% lead and 1.2% zinc.

The Inferred Resource for the 'high grade' zone at Stormont contains 13,430 ounces gold, 27.7 tonnes bismuth and 10,340 ounces silver, within 91,400 tonnes of mineralised rock grading 4.57g/t gold, 0.30% bismuth and 3.52g/t silver, at a 1.5g/t gold cut-off grade. Not all known mineralisation was included in the Stormont Inferred Resource due to the limited drill holes.

Theoretical cash flows for the project were estimated for Narrawa then Stormont, vice versa and then both combined for simultaneous processing utilising extractive technology which has become available in Australia. The evaluation included order of magnitude estimates of capital, operating costs, personnel costs and logistical requirements.

The CMS did not attempt to determine cash flows for only the Indicated portion of the Narrawa Resource, the results of which Frontier could then report to the ASX and shareholders. This is because those figures would not be very meaningful in the present context as Frontier are not able to report the possible cash flows from the Inferred Resource at Stormont. Cash flows for the combined operation were determined and are encouraging, however, under ASX guidelines, cash flow figures and financial evaluations can only be published in relation to Indicated or Measured Resources, not Inferred Resources. As such, Frontier note that the results from the Narrawa/Stormont CMS should be regarded with appropriate caution.

The Conceptual Mining Study was undertaken by Mr H.D.Swain, Mining Engineer and Director of Frontier Resources Ltd, with more than 40 years professional experience in many different types of deposits. Mr Swain noted in the conclusions to his report:

The philosophy of mining and processing at the Narrawa and Stormont Deposits is to adopt a simple approach utilising local workforce and contractors to mine and process the low tonnage Mineral Resources.

The Conceptual Mining Study demonstrates the potential of a satisfactory investment, which will yield a future source of income to the shareholders of Frontier Resources Ltd.

Extraction of gold from the Stormont mineralised material would potentially be by the Carbon in Pulp (CIP) process, utilising the 'future' Narrawa plant/infrastructure to minimise capital costs. Metallurgical testwork was received on the Stormont mineralisation in mid 2009 (Amdel Laboratories -Perth) and it returned high recoveries of 92% for gold from gravity separation (and leaching of the gravity separation products) with normal CIP processing. The overall CIP gold recoveries were shown to improve with the fineness of the grind, as did recovery of gold into the gravity concentrate (which ranged from 22-29%). Bond Work Index was 14kWhr/t.

Mineralised material from the Narrawa Deposit would potentially be mined and concentrated onsite, then smelted at Hobart's Risdon refinery. The metallurgical testwork concentrate for Narrawa showed high recoveries for each metal, low reagent consumption, low Bond Work Index and production of a high quality concentrate. As a result, low Operating Costs are anticipated. Metallurgical testwork was conducted in 2008 on the Narrawa mineralisation (Amdel Laboratories - Perth) and it returned very high recoveries of 96.7% for gold, 98.5% for zinc, 95.6% for lead and 92.4% for silver, indicating non-refractory gold plus zinc, lead, copper and silver mineralisation. Bond Work Index was 14kWhr/t.

Simple mining practices and low waste to ore ratios are anticipated at both deposits, given the orientation of the mineralised zones relative to local topography. The Narrawa Deposit is anticipated to have a good stripping ratio of 1.0 tonne of waste to 1.0 tonne of ore and Stormont should have an excellent stripping ratio of 0.5 tonnes of waste to 1.0 tonne of ore.

Cash operating costs are estimated to be \$46/tonne for Narrawa and \$55/tonne for Stormont. Non-labour operating costs are estimated to be A\$10.97/tonne for Narrawa and A\$14.19/tonne for Stormont. These costs could be markedly reduced for a larger scale simultaneous operation and/or if alternate metallurgical processes live are successful.

Due to the complex polymetallic nature of the mineralised material at Narrawa Deposit, toll smelting and refining is likely to be relatively expensive but due to the unusually high quality of the concentrate, charges and losses are anticipated to be low at say about 5% of the value of contained metal (compared to the normal charges approaching 7% to 10% of the value of the metal). The charge would be deducted from gross revenue as a royalty by the smelter company.

The Conceptual Mining Study has indicated that there could be a theoretical pre-tax profit after the return of capital expenditure costs for an operation based solely on the Narrawa Deposit, but the possible profit improves significantly with an increase in total available resources from a combined operation and would improve further from a larger operation. This finding rationalises why Frontier will undertake additional resource expansion and infill definition drilling at the Narrawa and Stormont Deposits when possible.

The establishment of an 'extractive processing centre' in the region of Retention Licenses 3/2005 (Narrawa) and 4/2005 (Stormont) would allow other known gold and polymetallic mineralisation to be targeted for conversion to resources by additional drilling and for possible subsequent exploitation.

There is very good exploration potential to further increase the size of both deposits and thus improve possible cash flows for the project. Future resource expansion drilling at both deposits will target:

1. Strike extensions to the known deposits
2. Depth extensions
3. Fault offset extensions
4. Satellite deposit mineralisation and
5. High grade tungsten mineralisation proximal to and within the Narrawa Deposit.

The Stormont resource is wholly classified as Inferred and was included in the CMS to evaluate the robustness of the overall project. The 2004 JORC Code states "Caution should be exercised if this category (Inferred) is considered in technical and economic studies". Metals prices utilised in the CMS were from 3/7/2009, being US\$940/oz gold, US\$0.71.44/lb zinc, US\$0.7738/lb lead, US\$13.70/oz silver.

Mining Lease applications will be initiated and submitted to Mineral Resources Tasmania as the next phase toward developing either a self mined/treated, self mined/toll milled or other type of mining/extractive operation.

For additional information relating to the Narrawa and Stormont Deposits, please visit our website at www.frontierresources.com.au and see the ASX releases dated 27/7/09, 29/1/09, 26/11/2008, 22/11/2008, 19/11/08, 27/10/2008, 2/10/2008, 1/10/08, 5/9/08 and 19/8/08, plus the Quarterly Reports, or feel free contact me.

FRONTIER RESOURCES LTD



P.A. McNeil, M.Sc.

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 his information in the form and context in which it appears.

About Frontier Resources

- 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.
- Frontier has a 100% interest in 5 Exploration Licences covering approx. 1,795 km² in PNG (EL 1596 is currently being sold for A\$300,000 cash) and 1 Exploration Licence + 2 Retention Licences covering 18 km² in Tasmania.
- The portfolio offers excellent mineral deposit potential, with primary targets being World Class gold/silver epithermal, gold- base metal skarn, copper-gold-molybdenum porphyry and 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.
- 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 is an ASX listed junior mineral explorer whose shares also trade on the Frankfurt, Berlin and Munich Stock Exchanges.

Notes:

- ❖ The gold equivalent formula used to calculate the gold equivalent values is as follows: $\text{Gold Equivalent (g/t)} = \text{gold g/t} + (\text{lead\%} \times 0.46269) + (\text{zinc\%} \times 0.4644) + (\text{silver g/t} \times 0.01386)$
- ❖ This formula is based on metal prices obtained on 7th April 2009, these being US\$884/oz gold, US\$0.5965/lb lead, US\$0.5987/lb zinc and US\$12.26/oz silver.
- ❖ Skarn gold- silver -basemetal deposits such as the Narrawa Deposit typically recover contained gold, silver and basemetals if in sufficient quantities (subject to metallurgical characteristics and prevailing metal prices).
- ❖ The ASX requires metallurgical recovery be specified for each metal and they are: 96.7% for gold, 98.5% for zinc, 95.6% for lead and 92.4% for silver.
- ❖ It is the Company's opinion that each of the elements included in the Narrawa metal equivalent calculations have a reasonable potential to be recovered if the project proceeds to mining.