

## Regulatory Announcement

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<b>Company</b>	Frontier Mining Ltd
<b>TIDM</b>	FML
<b>Headline</b>	Q1 Projects Update
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### Frontier Mining Ltd

### First Quarter 2005 Projects Update

#### Gold Highlights

- Kappes Cassidy and Associates (“KCA”) were advisors on the final report titled *Naimanjal Gold Project Heap Leach Operation Project Design & Cost Estimate* which concludes “the Naimanjal Project is a relatively low-risk investment proposition with upside potential in both the metallurgical recovery and further expansion of the resource”
- Naimanjal gold mine in northeastern Kazakhstan remains on schedule [and within budget] to begin gold and silver production in June 2005.
- Koskuduk gold project: nine additional core holes were completed and a revised reserve estimate is expected in May. A metallurgical test programme is underway examining the leach characteristics of the oxide ore.
- Baltemir gold project: two-year license extension has been approved and a nine core hole drilling programme over Koskia, the new mineralised target area, is in progress

#### Copper Highlights

- Beschoku copper project: 18 core hole discovery drilling programme has commenced to confirm that geochemical and geophysical anomalies are related to sulphide mineralisation over potential VMS-type and porphyry copper target
- Beschoku copper project: first four confirmed the presence of sulphide mineralisation, both copper and molybdenite have been identified in borehole logs assay information is awaited
- Beschoku copper project: expanded geochemical survey commenced to study the continuation of mineralization
- Yubileiny copper project: 24 core hole drilling program commenced for resource definition of VMS-type oxide copper mineralization
- Yubileiny copper project: expanded geophysical survey commenced to study the continuation of known mineralised zone to the northwest

#### Other Highlights

- Frontier continues to review uranium exploration and development projects within the CIS countries and has retained Behre Dolbear as independent consultant to complete technical due diligence and valuation

#### Corporate Developments

- To date, 9,552,240 warrants have been exercised at 16.5p providing £1,576,119.62 additional proceeds to the company
- Robin Young resigned from the board of directors in order to become Chief Executive Officer of an exploration company. Robin remains supportive of Frontier Mining and will continue to act as an independent consultant to the Company.

Brian Savage, CEO of Frontier Mining, comments, "We have been very busy during the first quarter as we move ever closer to first gold production at Naimanjal in May. We have also made significant progress on our other gold and copper projects and are excited by the potential of the uranium projects under review."

### **Naimanjal Gold Mine Development**

The Naimanjal gold mine in northeastern Kazakhstan remains on schedule to begin gold and silver production in May 2005 with stacking ore in early May and pouring the first gold bar in June 2005. Frontier has executed a contract with Trud LLP, an experienced local contract mining company, for earth work including construction of the heap leach pads and mining ore and waste. Trud LLP has mobilised a fleet of equipment to Naimanjal and is currently constructing the heap leach pads which will be ready for stacking ore in early May. An existing ore stockpile containing 17,000 tonnes of ore with a gold grade of 2.05 grams per tonne will be the first ore stacked on the heap leach pads.

KCA were advisors on the final report entitled "Naimanjal Gold Project Heap Leach Operation Project Design & Cost Estimate." The conclusions of the report covering the first three years of the project are:

- The Naimanjal resource comprises multiple sub-parallel gold mineralisation zones, traced approximately 2,000 metres along strike to a depth of at least 150 metres, and with five defined mining areas. Mineralisation within the orebodies is associated with the basaltic conglomerate on the contact with sandstone/greywacke. Based on a 0.5 gram per tonne ("gpt") gold cut-off grade, the resource comprises 2.01 million tonnes grading 1.33 gpt gold and 25 gpt silver. Similar saprolite-hosted gold deposits are being successfully mined within the region and, as a consequence, the reserve estimation above is considered well founded and technically conservative.
- The Naimanjal Heap Leach Project ("NHLP") will process crushed ore mined by standard open pit drill and blast mining techniques. Ore will be crushed through a three-stage crushing circuit. The crushed ore will be processed using conventional, cyanide heap leach technology. Precious metals will be recovered using Merrill Crowe technology to produce a doré product for export.
- Run of mine ore will be crushed to a  $P_{80}$  of 15mm before cement agglomeration and conveyor stacking into two lifts of eight metres each. The ore will be stacked over an impermeable liner and the final leach pad area will be approximately 110,000 m<sup>2</sup>. Cyanide solution will be sprayed over the ore for up to a 120-day leach cycle, leaching the precious metal content before recovery from the leach solution using a Merrill Crowe (MC) based recovery system. The precious metals will be recovered in the MC presses and smelted to produce doré bullion for export.
- NHLP ore is amenable to processing using heap leach technology and the operating projections outlined in the report are robust and conservative.
- Heap leach technology is ideal for this form of gold mining project. The low capital requirement and short lead times allow a comparatively low-risk entry to the Project with an early cash flow and short time to breakeven.
- Heap leach processing can confidently be expected to achieve 74 per cent. or better gold recovery and 44 per cent. or better silver recovery from the oxide ore. There is potential for upside in recovery rate at the longer field leach times. Reagent consumption and Project metallurgy are based on conservative design parameters well founded in test work and based on proven scale-up techniques.
- The physical characteristics of the oxide ore are well defined and it is unlikely that the percolation problems that can hinder other heap leach operations will occur at Naimanjal.

Conveyor stacking allows much tighter control of stacking placement and ensures that design parameters can be achieved at all times. Conveyor stacking also allows some flexibility in choice of heap height, allowing percolation problems to be overcome through reduced lift height, albeit at marginally increased cost.

- The operating cost parameters are robust and realistically based on similar projects in Kazakhstan. In the event the ore reserve is increased, on-going processing can be achieved with minimal additional capital expenditure. There is considerable upside to the Project if the sulphide ore or parts of it can be added to the reserve. If this occurs, the incremental capital cost will be low.
- The Project capex is low at \$3.64 million and the overall Project is comparatively insensitive to capital costs. It is, however, sensitive to operating costs and this is the area where overall Project profitability will be determined.
- Operating costs including mining have been determined at US\$6.81 per tonne ore or US\$181 per ounce.
- FML expects to be able to commence stacking in May with the first bar poured in June. The simple nature of the project and the low capital cost should allow the schedule to be met.
- The project is comparatively insensitive to the capital investment level but is very sensitive to operating costs and revenue. This is a common investment profile for gold heap leach operations and the FML management team are well versed in the management of these important issues.

### **The six Naimanjal satellite deposits**

The six Naimanjal satellites include Baritovy, Naiman, Ergozy, Toksanbay, Jal, and Jantilak.

At Baritovy ore stockpiled from historical trenching was sampled to contain 4,870 tonnes of ore assaying 4.64 gpt gold containing 22.6 kilograms (726 ounces) of gold. We intend to stack this on the Naimanjal heap leach pad in the near future.

A preliminary resource estimate incorporating the results from the 2004 drilling, trenching, geochemical, and geophysical data contains 530,000 tonnes of ore at 1.04 gpt gold using a 0.5 gpt cut off or 271,000 tonnes of ore at 1.97 gpt gold using a 1.0 gpt cut off. The deposit is open in all directions. Four core holes totaling 345 metres were drilled at Baritovy during the first quarter to extend the known resource. The assay results of these core holes are pending and will be incorporated into the resource model when available.

At Naiman, five core holes were drilled in 2004 totaling 439 metres and did not intersect significant mineralisation. During the first quarter 2005, four core holes were drilled at 50° angle totaling 345 metres to follow up on a new geochemical anomaly. The assay results of these core holes are pending.

At Ergozy, two core holes 100 metres long at a 50° angle were drilled during 2004. One hole did not contain significant mineralisation and 1 core hole intercepted mineralisation from 65 metres to 87.5 metres assaying 1.9 gpt gold. During the first quarter, 1 core hole 120 metres long at a 50° angle was drilled. The assay results are pending, but the character of mineralisation is similar to the mineralised hole.

Toksanbay, Jal, and Jantilak satellites have not had any work performed on them during the first quarter other than reviewing the results of the 2004 geochemical surveys. Additional exploration is planned during 2005.

### **Exploration update for Koskuduk and Baltemir Gold Projects**

## **Koskuduk**

To date nine core holes have been drilled by FML to provide infill confirmation of already known East and West Koskuduk mineralised zones. A revised reserve evaluation is expected to be completed in May 2005. Preliminary results of the reserve evaluation suggest an increase from the current 180,000 ounces of C2 category reserves to add 70,000 ounces of C1 category reserves.

Eight oxide mineralisation samples are being studied at Alex Stewart laboratory in Kyrgyzstan. The bottle roll tests are designed to determine recovery of gold from oxide mineralisation.

## **Baltemir**

CenterKazNedra, the regional government agency responsible for exploration and mining, has agreed to extend the Baltemir license for another two years. The extension is being formalised and is expected by the end of May.

To date 25 core holes have been drilled at various locations along the seven kilometre long quartz vein system. While there are areas of high-grade, we are still working on establishing geological control of the mineralisation. Exploration on the seven kilometre long quartz vein system will continue.

A nine core hole drilling programme at Koskia, the new mineralised target (15km by 8km) identified in the northern part of the license area about six kilometres from the known quartz vein system, is in progress. This is a complex mafic/ultramafic Koskia pluton with explosive breccia in vein zones and smaller rhyolitic intrusives. Gold values of 0.5 gpt have been encountered in outcrops with 0.5 per cent. lead and 0.5 per cent. arsenic.

The first hole BK-1 has been drilled at an outcrop of a basalt-hosted "breccia pipe" with a diameter of 50 metres. Picritic basalts and ultramafic rocks occur as breccia fragments with up to 3 per cent. pyrite, arsenopyrite, and what is currently believed to be pentlandite occurring in the matrix of the breccia. The drill hole went out of the breccia pipe at 60 metres depth and was terminated at 97 metres. Assays are pending.

Drill hole KOS-2 to test an arsenic-gold geochemical anomaly, which is located at Koskia Hills, has been drilled to 136 metres and encountered the sulfide mineralisation up to 5 per cent. and thick silicification zones.

Drill hole KOS-3, also at Koskia Hills, is in progress, it tests the same anomaly 500 metres to the south of KOS-2.

## **Beschoku**

Our best copper exploration results were achieved at Beschoku. Geological and geophysical results to date have identified two large mineralised systems within the Beschoku area, a copper/gold VMS deposit including oxide mineralisation, and a copper/molybdenum porphyry deposit. The copper and molybdenum minerals include malachite, azurite, chrysocolla, chalcopyrite, bornite and molybdenite.

Based on alteration zoning, geochemistry, and geophysics, to a depth of 200 metres, using 10 per cent. sulphide content and a specific gravity of 2.7 tonnes per cubic metre, management estimate a preliminary inferred geologic resource (P1) for the VMS type deposit of 810,000 tonnes of contained copper with 1 per cent. grade and 1.67 million tonnes of contained copper with 1 per cent. grade for the porphyry copper with skarn type deposit.

The first phase drilling program started in mid-March consists of 18 core holes targeted to discover and confirm the 2.48 million tonnes of contained copper resources reported previously. Nine core holes are targeted in geophysical anomalies and nine core holes are targeted in geochemical anomalies in both VMS-type and porphyry-type deposits.

The geophysical targets are based on work performed by GaiaScan Geophysics Ltd., and included Induced Polarization ("IP") and resistivity profiling, as well as a magnetic survey. The IP anomalies totaled six square kilometres. The anomalous IP zones range from 900 metres to 1,200 metres wide and four kilometres long with chargeability values reaching 45 mv/v.

The geochemical anomalies include copper content above 500 parts per million ("ppm") within a one square kilometre area. The most significant geochemical anomaly, Kotansor, contained up to 3,230 ppm (0.3 per cent.) copper with gold values reaching one gpt. Two mid-19<sup>th</sup> century oxide copper mines, Beschoku and Kotansor, are located within this anomalous area.

Drill holes BCH-1, BCH-6, BCH-9, BCH-10, and BCH-14 were drilled at Beschoku within the last two weeks and BCH-18 is currently being drilled. These holes intersected expected mineralisation and interpreted structures at predicted depths with the following results;

- BCH-1 was 206.3 metres long at a 60° angle. Sulphide mineralisation consisting of pyrite, chalcopyrite, arsenopyrite, and molybdenite occurred from 103 metres to 200 metres;
- BCH-6 was 100 metres long and drilled at a 60° angle. Sulphide mineralisation, mainly chalcopyrite, occurred from 60 metres to 95 metres;
- BCH-9 was a 106.5 metres long vertical hole with disseminated sulphide mineralisation;
- BCH-10 was 201.5 metres long at a 60° angle to test the Kotansor geochemical anomaly with 0.3% Cu values. This hole contains chalcopyrite, arsenopyrite, and minor molybdenite; and
- BCH-14 was 123.6 metres long and drilled at a 60 angle. It contains zones of chalcocite, and covellite, transitioning to pyrite, and chalcopyrite.

## **Future plans**

An expanded geochemical and geophysical programme has been initiated to pursue the above mentioned anomalies to the northwest and southeast of the above-mentioned anomalies.

The first phase of the 18-hole drilling programme will be completed by the end of June. If assay results are good and confirm a discovery, then we will proceed immediately with the second phase of the drilling programme that will be used to establish ore reserves as part of a pre-feasibility study.

## **Yubileiny**

We have upgraded the inferred geologic (P1) resource of 30,000 tonnes of contained copper to a C2 category resource with a grade of 1per cent. We have also defined an additional inferred geologic (P1) resource of 80,000 tonnes of contained copper to the north of the C2 area.

A continuous and well defined IP anomaly of 150 metres to 170 metres wide with a strike length of over 700 metres was delineated. Excellent correlation with historic mine workings and recent drilling suggests that copper mineralisation is the causative source of the delineated IP anomaly. The IP anomaly is open at depth and along strike past the extent of the IP survey grid.

We currently have three core drill rigs drilling at Yubileiny that will include a 24 core hole program that will be used to upgrade the inferred geologic resource. This programme is expected to be completed by the end of May.

### **Baitimir**

The geophysical survey planned for April 2005 has postponed in order to complete the expanded geophysical survey at Beschoku and Yubileiny.

The four RC holes to a depth of 100 metres that were planned to be drilled in January in the most intensely altered areas near historic mine workings, have been postponed until June when drilling is completed at Yubileiny.

### **Enquiries**

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Notes To Editors:

### **About FML**

FML is a mineral exploration and development company that was incorporated in the state of Delaware, USA, on 5 August 1998 for the purpose of exploring and developing gold and copper deposits in the Republic of Kazakhstan and other countries of the Commonwealth of Independent States. Through its subsidiaries and affiliates, FML locates, evaluates, acquires, explores and develops mineral properties.

FML has two licenses, over a total area of 4,326 km<sup>2</sup>, owned by its wholly owned subsidiaries in Kazakhstan. They are the Naimanjal exploration and mining license, held by FML Kazakhstan, and the Baltemir exploration license, held by Baltemir LLP. FML is currently focused on three gold projects with more than two million ounces of oxide gold resource and two copper/gold projects with more than 5 billion pounds of contained copper (P1) resource.

FML was admitted to the AIM Market of the London Stock Exchange on 2 September 2004. FML has 88,196,461 ordinary shares issued and 11,777,217 outstanding options and warrants, giving 99,973,678 fully diluted ordinary shares.

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