



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-7010

January 16, 2009

By Facsimile and U.S. Mail

Mr. Kenneth Hicks  
President  
Argentex Mining Corporation  
602 - 1112 West Pender Street  
Vancouver, British Columbia Canada V6E 2S1

**Re: Argentex Mining Corporation**  
**Form 10-KSB for the Fiscal Year Ended January 31, 2008**  
**Filed April 30, 2008**  
**File No. 000-49995**

Dear Mr. Hicks:

We have reviewed your Form 10-KSB for the fiscal year ended January 31, 2008 and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-KSB/A for the Fiscal Year Ended January 31, 2008

Consolidated Statements of Operations

1. We see you have a separate line item entitled "stock-based compensation." Please present the expense related to share-based payment arrangements in the same line or lines as cash compensation paid to the same employees. Refer to SAB Topic 14F.

Note 2. Significant Accounting Policies

Mineral Claim Payments and Exploration Expenditures

2. We note that you expense all costs related to the acquisition of unproven mineral properties to which you have secured exploration rights. Please clarify why you have not capitalized such costs as tangible assets. Refer to EITF 04-02.

Item 8A Disclosure Controls and Procedures

3. We note your disclosure that your president and chief executive officer and chief financial officer concluded that your disclosure controls and procedures were effective as of the end of the period covered by this quarterly report. Please modify your disclosure to clarify that the period covered relates to an annual report.
4. We note your disclosure that there have been no significant changes in your internal controls over financial reporting. Please modify your disclosure to indicate, if true, that there were “no changes,” rather than “no significant changes,” that have materially affected, or are reasonably likely to materially affect, your internal controls and procedures over financial reporting.

Management’s Report on Internal Control Over Financial Reporting

5. We note your disclosure that due to material weaknesses, you determined that your internal controls over financial reporting were not effective as of January 31, 2008. Your disclosure further indicates that you plan to implement changes in your internal control over financial reporting during the fiscal year ended January 31, 2009. Please clarify if you still expect to implement such changes during your current fiscal year. In this manner, we note that you have not made any changes to your internal control over financial reporting during the first three interim periods of fiscal year ended January 31, 2009.

Engineering Comments

Our Work on the Rio Negro Properties to Date, page 26

6. We note your reference to grab samples, sample ranges, and parts per billion in relation to sampling in this section. When reporting the results of sampling and chemical analyses, please modify your disclosure to address each of the following regarding mineralization of existing or potential economic significance on your property:

- Disclose only weighed-average sample analyses associated with a measured length or a substantial volume.
- Eliminate all analyses from “grab” or “dump” samples, unless the sample is of a substantial and disclosed weight.
- Eliminate all disclosure of the highest or best values/grades of sample sets. Present a balanced disclosure of the drill and sampling results
- Eliminate grades disclosed as “up to” or “as high as” or “ranging from.”
- Eliminate statements containing grade and/or sample-width ranges.
- Aggregated sample values from related locations should be aggregated based on a weighted average of lengths of the samples.
- Generally, use tables to improve readability of sample and drilling data.
- Soil samples may be disclosed as a weighted average value over an area.
- Refrain from reporting single soil sample values.
- Convert all ppb quantities to ppm quantities for disclosure.
- Avoid optimistic descriptive adjectives such as high-grade or ore-grade.

Please modify your disclosures to comply with this guidance.

7. Detailed sampling provides the basis for the quality estimate or grade of your mineral discovery. Please provide a brief description of the sample collection, sample preparation, and the analytical procedures used to develop your analytical results. In addition, please disclose any Quality Assurance/Quality Control (QA/QC) protocols you have developed for your exploration program. These procedures would serve to inform potential investors regarding your sample collection and preparation, assay controls, sample custody, assay precision and accuracy procedures and protocols.
8. On a related point, it appears you should also expand your disclosure concerning the exploration plans for your properties to address the following points.

- Disclose a brief geological justification for each of the exploration projects written in non-technical language.
- Give a breakdown of the exploration timetable and budget, including estimated amounts that will be required for each exploration activity, such as geophysics, geochemistry, surface sampling, drilling, etc. for each prospect.
- If there is a phased program planned, briefly outline all phases.
- If there are no current detailed plans to conduct exploration on the property, disclose this prominently.
- Disclose how the exploration program will be funded.
- Identify who will be conducting any proposed exploration work, and discuss what their qualifications are.

#### Closing Comments

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

With respect to all accounting comments, you may contact John Cannarella at (202) 551-3337, or in his absence Kevin Stertz, at (202) 551-3723. You may contact Ken Schuler, Mining Engineer, at (202) 551-3718 with questions about engineering comments. Please contact me at (202) 551-3683 with any other questions.

Sincerely,

Jill Davis  
Branch Chief