



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-0404

July 3, 2007

By U.S. Mail and facsimile to (617)-338-2880

John N. Hatsopoulos
Chairman
Glenrose Instruments, Inc.
45 First Avenue
Waltham, Massachusetts 02451

**Re: Glenrose Instruments, Inc.
Amendment No. 2 to Registration Statement on Form 10
Filed June 5, 2007
Form 10-Q for the Quarterly Period ended April 1, 2007
Filed May 14, 2007
File Nos. 000-51645**

Dear Mr. Hatsopoulos:

We have reviewed your filing and have the following comments. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Amendment No. 2 to Registration Statement on Form 10
Results of Operations, page 24

1. We have reviewed your revised disclosures in response to our prior comment 2. Please expand your disclosures as noted below:
 - We note your general and administrative expense in 2006 increased \$332,698 in 2006 from 2005. You further disclose that business development activities increased \$125,730 and corporate G&A increased \$327,039. Please disclose the offsetting expenses that decreased in 2006 from 2005.
 - Explain the reasons for the fluctuations in your cost of sales for 2005 compared to 2004. We note that you do not disclose any reasons for these fluctuations.
 - You disclose that your general and administrative expenses in 2005 decreased by \$536,697 from 2004. In consideration that you disclose that this decrease is due to more efficient use of indirect personnel and no goodwill impairment in 2005 compared to \$606,403 in 2004, disclose and quantify the offsetting items that increased in 2005 compared to 2004.

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Note 11 – Segment Data, page 68

2. We have reviewed the CODM reports you provided to us in response to our prior comment 9 and your response to our prior comment 8. Based on the information that you have provided to us, it appears that discrete financial information is available and reviewed by your CODM for your Analytical Laboratories and Environmental Services, and therefore, your two reportable segments are appropriate. Please revise your segment data footnote to provide all of the disclosures required by paragraphs 25 through 33 of SFAS 131. Specifically, disclose per segment, assets, capital expenditures, depreciation expense, and operating income. Your footnote should also contain relevant information for each period that an income statement is presented.

Form 10-Q for the Quarterly Period ended April 1, 2007

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 13

3. We note the following:
 - Your Analytical Laboratories cost of sales exceeded revenues for the three months ended April 1, 2007. Please expand your discussion to explain to your readers the reason for this negative gross profit.
 - Quantify the reasons for the 25.3% increase in your general and administrative expenses in the quarter ended April 1, 2007.

You may contact Ryan Rohn, Staff Accountant, at (202) 551-3739 or Al Pavot, Senior Accountant, at (202) 551-3738 if you have questions regarding comments on the financial statements and related matters. Please contact Matt Franker, Staff Accountant, at (202) 551-3749 or me, at (202) 551-3767 with other questions.

Sincerely,

Jennifer R. Hardy
Legal Branch Chief

cc: Edwin L. Miller, Jr.
Sullivan & Worcester LLP
One Post Office Square
Boston, Massachusetts 02109