

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 29, 2009

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 000-51645

GLENROSE INSTRUMENTS INC.
(Exact name of Registrant as specified in its charter)

Delaware
(State of incorporation or organization)

20-3521719
(IRS Employer Identification No.)

45 First Avenue
Waltham, Massachusetts
(Address of Principal Executive Offices)

02451
(Zip Code)

Registrant's Telephone Number, Including Area Code: (781) 622-1120

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check One):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

Title of each class	Outstanding at March 29, 2009
Common Stock, \$0.01 par value	3,117,647

GLENROSE INSTRUMENTS INC.
QUARTERLY REPORT ON FORM 10-Q
FOR THE PERIOD ENDING MARCH 29, 2009

TABLE OF CONTENTS

PART I – FINANCIAL INFORMATION		
Item 1:	Financial Statements (unaudited)	3
	Condensed Consolidated Balance Sheet – March 29, 2009 and December 28, 2008	3
	Condensed Consolidated Statement of Operations – Three Months Ended March 29, 2009 and March 30, 2008	5
	Condensed Consolidated Statement of Cash Flows – Three Months Ended March 29, 2009 and March 30, 2008	6
	Notes to Condensed Consolidated Financial Statements	7
Item 2:	Management’s Discussion and Analysis of Financial Condition and Results of Operations	15
Item 3:	Quantitative and Qualitative Disclosures about Market Risk	18
Item 4T:	Controls and Procedures	18
PART II - OTHER INFORMATION		
Item 1A:	Risk Factors	19
Item 6:	Exhibits	19
	Signatures	20

References in this Form 10-Q to “we”, “us”, “our”, the “company” “GlenRose Instruments” and “GlenRose” refers to GlenRose Instruments Inc. and its consolidated subsidiaries, unless otherwise noted.

PART I – FINANCIAL INFORMATION

Item 1 – Financial Statements

GLENROSE INSTRUMENTS INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
As of March 29, 2009 and December 28, 2008

	March 29, 2009	December 28, 2008
	<u>UNAUDITED</u>	<u></u>
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 736,115	\$ 1,062,581
Short-term investments	10,020,668	10,321,219
Accounts receivable (net of allowances of \$27,688 for 2009 and 2008, respectively)	3,578,571	3,036,225
Unbilled contract receivables	564,956	776,988
Supply inventory	199,491	209,491
Prepaid expenses	183,398	250,324
Other receivables	91,792	183,658
Income tax receivable	302,391	302,391
Deferred tax asset	257,046	557,123
Total current assets	15,934,428	16,700,000
Property, plant and equipment, net	2,714,844	2,713,471
Other assets		
Restricted cash	415,000	415,000
Deferred financing costs	520,000	550,000
Goodwill	2,740,913	2,740,913
Total other assets	3,675,913	3,705,913
TOTAL ASSETS	<u>\$ 22,325,185</u>	<u>\$ 23,119,384</u>

The accompanying notes are integral part of these condensed consolidated financial statements

GLENROSE INSTRUMENTS INC.
CONDENSED CONSOLIDATED BALANCE SHEETS (CONTINUED)
As of March 29, 2009 and December 28, 2008

	March 29, 2009	December 28, 2008
	UNAUDITED	
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	\$ 1,008,055	\$ 1,015,715
Accrued expenses	164,439	169,980
Accrued employee-related costs	1,734,332	1,623,850
Accrued interest	266,009	601,328
Capital lease obligations	4,654	7,593
Income taxes payable	1,881	1,881
Total current liabilities	3,179,370	3,420,347
Long-term liabilities		
Convertible debentures due to related parties	14,875,000	14,875,000
Capital lease obligations, net of current portion	27,861	27,861
Deferred tax liability	256,946	256,946
Other long-term liabilities	34,156	39,954
Total liabilities	18,373,333	18,620,108
Stockholders' equity		
Common stock (\$0.01 par value; 10,000,000 shares authorized; 3,117,647 shares issued and outstanding at March 29, 2009 and December 28, 2008)	31,176	31,176
Additional paid-in-capital	7,799,485	7,764,185
Accumulated deficit	(3,879,086)	(3,268,245)
Accumulated other comprehensive income (loss)	277	(27,840)
Total stockholders' equity	3,951,852	4,499,276
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 22,325,185	\$ 23,119,384

The accompanying notes are integral part of these condensed consolidated financial statements

GLENROSE INSTRUMENTS INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
For the Three Months Ended March 29, 2009 and March 30, 2008

	<u>March 29, 2009</u>	<u>March 30, 2008</u>
	<u>UNAUDITED</u>	<u>UNAUDITED</u>
Revenues	\$ 8,278,384	\$ 8,265,250
Cost of sales	<u>7,783,234</u>	<u>7,902,811</u>
Gross profit from operations	495,150	362,439
General and administrative expenses	<u>660,240</u>	<u>674,614</u>
Operating loss	(165,090)	(312,175)
Other income (expense)		
Miscellaneous income	(801)	109
Interest income	78,218	5,717
Interest expense	<u>(222,991)</u>	<u>(90,673)</u>
Total other expense	(145,574)	(84,847)
Loss from operations, before income taxes	<u>(310,664)</u>	<u>(397,022)</u>
Provision for income taxes	(300,177)	-
Net loss	<u>\$ (610,841)</u>	<u>\$ (397,022)</u>
Net loss per share - basic and diluted	<u>\$ (0.20)</u>	<u>\$ (0.13)</u>
Weighted average shares outstanding - basic and diluted	<u>3,102,647</u>	<u>3,102,647</u>

The accompanying notes are integral part of these condensed consolidated financial statements

GLENROSE INSTRUMENTS INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Three Months Ended March 29, 2009 and March 30, 2008

	<u>March 29, 2009</u>	<u>March 30, 2008</u>
	<u>UNAUDITED</u>	<u>UNAUDITED</u>
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (610,841)	\$ (397,022)
<i>Adjustments to reconcile net loss to net cash used in operating activities:</i>		
Depreciation and amortization and other noncash expense	208,718	116,226
Provision for (benefit of) deferred income taxes	300,077	(100)
Amortization of deferred financing costs	30,000	-
Stock-based compensation	35,300	70,022
Bad debt expense	27,688	-
<i>Changes in operating assets and liabilities</i>		
<i>(Increase) decrease in:</i>		
Accounts receivable	(570,034)	203,641
Other receivables	91,866	(17,177)
Unbilled contract receivables	212,032	(25,777)
Prepaid expenses	66,926	(4,708)
Inventory	10,000	-
<i>Increase (decrease) in:</i>		
Accounts payable	(7,660)	213,109
Accrued interest	(335,319)	(357,000)
Other long-term liabilities	(5,798)	-
Other accrued liabilities	104,941	219,566
Net cash (used in) provided by operating activities	<u>(442,104)</u>	<u>20,780</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of property and equipment	(181,974)	(59,022)
Proceeds from the sale of short-term investments	300,551	-
Net cash provided by (used in) investing activities	<u>118,577</u>	<u>(59,022)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payments on capital lease obligations	(2,939)	(2,281)
Net cash used in financing activities	<u>(2,939)</u>	<u>(2,281)</u>
Net (decrease) increase in cash and cash equivalents	<u>(326,466)</u>	<u>(40,523)</u>
Cash and cash equivalents, beginning of the period	1,062,581	1,206,722
Cash and cash equivalents, ending of the period	<u>\$ 736,115</u>	<u>\$ 1,166,199</u>

The accompanying notes are integral part of these condensed consolidated financial statements

GLENROSE INSTRUMENTS INC.

Notes to Interim Financial Statements (Unaudited) for the period ending March 29, 2009

Note 1 – Organization and Significant Accounting Policies:

Organization

GlenRose Instruments Inc., a Delaware corporation, (“GlenRose Instruments”, the “company”, “we”, “our”, or “us”) was incorporated in September 2005 by the GlenRose Partnership L.P., (the “GlenRose Partnership”), a private-equity partnership with its headquarters in Waltham, Massachusetts. The company was organized to serve as a holding company through which the GlenRose Partnership’s partners would hold the shares of Eberline Services, Inc. (“Eberline Services” or “ESI”) (all of which had previously been held by the GlenRose Partnership). In order to effect such change in structure, the GlenRose Partnership entered into a stock exchange agreement with the company in September 2005 pursuant to which all outstanding shares of Eberline Services owned by the GlenRose Partnership were exchanged for 3,000,000 shares of common stock of GlenRose Instruments. As a result of this exchange, the GlenRose Partnership owned all of the outstanding stock of the company, and the company owned all of the outstanding stock of its subsidiary, ESI.

On August 30, 2007, the company issued 102,647 shares to a limited number of accredited investors through a private placement of common stock at a price per share of \$7.00. On December 31, 2007, the limited partners and the general partner of the GlenRose Partnership dissolved the partnership and distributed the 3,000,000 shares of common stock of GlenRose Instruments to its limited partners in accordance with the GlenRose Partnership plan of liquidation and distribution.

On July 25, 2008, the company entered into subscription agreements with four investors for the sale of convertible debentures in the aggregate principal amount of \$14,875,000. The debentures bear interest at 4%, payable quarterly in cash, and mature on July 25, 2013. The debentures are convertible at the option of the holder at any time into shares of common stock at an initial conversion price equal to \$7.00; see “Note 2 – Debt”.

GlenRose Instruments, through Eberline Services and its subsidiaries, provides radiological services and operates a radiochemistry laboratory network, as well as provides radiological characterization and analysis, hazardous, radioactive and mixed waste management, and facility, environmental, safety and health management. The subsidiaries of Eberline Services are Eberline Services Hanford, Inc. (“ESHI”), Eberline Analytical Corporation, Benchmark Environmental Corp., and Lionville Laboratory Inc. (“Lionville”).

Principles of Consolidation and Basis of Presentation

The accompanying consolidated financial statements include the company and its subsidiaries. All significant intercompany transactions have been eliminated. In the opinion of management, the unaudited financial statements contain all adjustments (all of which were considered normal and recurring) necessary to present fairly the company's financial position at March 29, 2009, and the results of operations and cash flows for the three months ended March 29, 2009 and March 30, 2008. The unaudited financial statements included herein should be read in conjunction with the audited financial statements and notes thereto included in the company’s Form 10-K for the year ended December 28, 2008.

Fiscal Year

The company’s fiscal year-end is the last Sunday of each calendar year. Each quarter is comprised of two four-week and one five-week period to ensure consistency in prior-year comparative analysis. The company changed the fiscal year-end to the current format in 2006. The previous fiscal year-end was December 28, 2008.

Use of Estimates in Preparation of Statements

The preparation of financial statements in conformity with generally accepted accounting principles, or GAAP, requires management to make estimates and underlying assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Concentration of Credit Risk

Financial instruments, which potentially subject the company to concentrations of credit risk, consist of highly liquid cash equivalents and trade receivables. The company’s cash equivalents are placed with certain financial institutions and issuers. At March 29, 2009, the company had a balance of \$3,630,391 in cash and cash equivalents and short-term investments that exceeded the Federal Deposit Insurance Corporation limit of \$250,000.

GLENROSE INSTRUMENTS INC.

The company performs periodic credit evaluations of its customers' financial condition and generally does not require collateral. The company provides for an allowance for doubtful accounts on receivable balances based upon the expected collectability of such receivables. Federal and state governments collectively account for more than 90% of all revenues for the three month periods ended March 29, 2009 and March 30, 2008. Only two of the company's customers account for more than 10% of revenue and trade accounts receivable. One customer represented approximately 77% and 72% of revenue and 40% and 43% of trade accounts receivable for the three months ended March 29, 2009 and March 30, 2008, respectively. The other customer represented approximately 10% and 14% of revenue and 20% and 20% of trade accounts receivable for the three months ended March 29, 2009 and March 30, 2008, respectively.

Revenue Recognition

Revenue for laboratory services, which are generally short-term, is recognized upon completion of the services and any required quality control procedures. Revenue for government service contracts is recognized as the services are performed. Revenues are recognized based upon actual costs incurred plus specified fees or actual time and materials as required. The company performs certain contracts that are audited by either the Defense Contract Audit Agency (the "DCAA"), or Los Alamos National Laboratories Internal Audit. Such contracts may be subject to adjustment dependent upon such factors as provisional billing rates or other contract terminology. Calculations of allowable overhead and profit may also change after audits by the DCAA for cost reimbursable type contracts. Contracts are normally settled during the audit year the contract terminates performance and is submitted for closure. The company is currently audited and settled through December 2005 for all contracts subject to review by DCAA and audited through December 2002 for contracts subject to review by the Los Alamos Internal Audit. Contracts performed before either 2005 or 2002 respectively that are either active or have not been submitted for closure may be subject to adjustment during subsequent audits during the year they are closed and audited.

The company is engaged principally in three types of service contracts with the federal government and its contractors:

Cost Reimbursable Contracts. Revenue from "cost-plus-fixed-fee" contracts is recognized on the basis of reimbursable contract costs incurred during the period plus an earned fee. Costs incurred for services which have been authorized and performed, but may not have been billed, are allocated with operational fringe, overhead, general and administrative expenses and fees, and are presented as Unbilled Contract Receivables on the accompanying consolidated balance sheet contained herein.

Time-and-Materials Contracts. Revenue from "time and material" contracts is recognized on the basis of man-hours utilized plus other reimbursable contract costs incurred during the period.

Fixed-Price Contracts. Revenue from "fixed-price" contracts is recognized on the percentage-of-completion method. For fixed-price contracts, the amount of revenues recognized is that portion of the total contract amount that the actual cost expended bears to the anticipated final total cost based on current estimates of cost to complete the project (cost-to-cost method). However, when it becomes known that the anticipated final total cost will exceed the contract amount, the excess of cost over the contract amount is immediately recognized as a loss on the contract. Recognition of profit commences on an individual project only when cost to complete the project can reasonably be estimated and after there has been some meaningful performance achieved on the project (greater than 10% complete). Changes in job performance, job conditions, and estimated profitability, including those arising from contract penalty provisions (when applicable) and final contract settlements, may result in revisions to costs and income and are recognized in the period in which the revisions are determined. The company did not have any open fixed-price contracts at year end.

Direct costs of contracts include direct labor, subcontractors and consultants, materials and travel. The balance of costs, including facilities costs, insurance, administrative costs, overhead labor and fringe costs, are classified as either indirect costs or general and administrative expense, and are allocated to jobs as a percentage of each division's total cost base. Provision for estimated losses on uncompleted contracts is made in the period in which such losses are determined. Claims and change orders are not recorded and recognized until such time as they have been accepted.

Goodwill

Goodwill is the excess of the purchase price over the fair value of identifiable net assets acquired in business combinations. Goodwill is subject to an impairment test at the end of the fourth quarter of each year. Goodwill is also reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Goodwill for the Eberline Services unit in the amount of \$2,740,913 was tested in accordance with Statement of Financial Accounting Standards No. 142 "Goodwill and Other Intangibles", or SFAS No. 142 as of December 28, 2008 and was considered to be not impaired. No events occurred or circumstances changed that required the company to further test goodwill for impairment during the three months ended March 29, 2009.

GLENROSE INSTRUMENTS INC.

Loss per Common Share

The calculation of loss per common share is based on the weighted-average number of common shares outstanding during the applicable period.

Stock Based Compensation

The company accounts for share-based compensation arrangements in accordance with Statement of Financial Accounting Standards No. 123 (revised 2004), "Share Based Payment", or SFAS No. 123(R), which is a revision of Statement of Financial Accounting Standards No. 123, "Accounting for Stock Based Compensation", or SFAS No. 123. SFAS No. 123(R) supersedes Accounting Principles Board No. 25, "Accounting for Stock Issued to Employees", and Statement of Financial Accounting Standards No. 95, "Statement of Cash Flows". SFAS No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values.

The company recognized employee non-cash stock based compensation expense of \$35,300 and \$70,022 related to the issuance of restricted stock and stock options at March 29, 2009 and March 30, 2008, respectively. The total compensation cost related to unvested restricted stock awards and stock option awards not yet recognized is \$260,300 at March 29, 2009. This amount is expected to be recognized over a weighted average period of 3.56 years. The determination of the fair value of share-based payment awards is affected by our stock price. The company considered the sales price of common stock in private placements to unrelated third parties during the year as a measure of the fair value of its common stock.

SFAS No. 123(R) also requires companies to utilize an estimated forfeiture rate when calculating the expense for the period, whereas, SFAS No. 123 permitted companies to record forfeitures based on actual forfeitures, which was our historical policy under SFAS No. 123. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Stock-based compensation expense recognized in our financial statements in 2008 and thereafter is based on awards that are ultimately expected to vest. We evaluate the assumptions used to value our awards on a quarterly basis and if factors change and we employ different assumptions, stock-based compensation expense may differ significantly from what we have recorded in the past. If there are any modifications or cancellations of the underlying unvested securities, we may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense.

On November 10, 2005, the FASB issued Statement of Financial Accounting Standards Staff Position No. 123R-3, "Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards". The company has elected to adopt the alternative transition method provided in the FASB Staff Position for calculating the tax effects (if any) of stock-based compensation expense pursuant to SFAS No. 123(R). The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in capital pool related to the tax effects of employee stock-based compensation, and to determine the subsequent impact to the additional paid-in capital pool and the consolidated statements of operations and cash flows of the tax effects of employee stock-based compensation awards that are outstanding upon adoption of SFAS No. 123(R).

See "Note 4 – Stockholders' Equity" for a summary of the restricted stock and stock option activity under our stock-based employee compensation plan for the period ended March 29, 2009.

Recent Accounting Pronouncements

In December 2007, the Financial Accounting Standards Board, or FASB, issued Statement of Financial Accounting Standards No. 141(R), "Business Combinations", or SFAS No. 141(R), which requires changes in the accounting and reporting of business acquisitions. The statement requires an acquirer to recognize the assets acquired, the liabilities assumed, and any noncontrolling interest in purchased entities, measured at their fair values at the date of acquisition based upon the definition of fair value outlined in Statement of Financial Accounting Standards No. 157, or SFAS No. 157. SFAS No. 141(R) is effective for the company for acquisitions that occur beginning in fiscal year 2009. The effects of SFAS No. 141(R) on our financial statements will depend on the extent that the company makes business acquisitions in the future.

In December 2007, the FASB issued Statement of Financial Accounting Standards No. 160, "Noncontrolling Interests in Consolidated Financial Statements an Amendment of ARB No. 51", or SFAS No. 160, which requires changes in the accounting and reporting of noncontrolling interests in a subsidiary, also known as minority interest. The statement clarifies that a minority interest in a subsidiary is an ownership interest in the consolidated entity that should be reported as equity in the consolidated financial statements. SFAS No. 160 was effective for the company beginning December 29, 2008, and there was no effect from the adoption of this standard.

GLENROSE INSTRUMENTS INC.

In February 2008, the FASB issued FASB Staff Position No. 157-2, or FSP No. 157-2, which delays the effective date of SFAS No. 157 for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). SFAS No. 157 establishes a framework for measuring fair value and expands disclosures about fair value measurements. FSP No. 157-2 partially defers the effective date of SFAS No. 157 to fiscal years beginning after November 15, 2008, and interim periods within those fiscal years for items within the scope of this FSP No. 157-2. On January 1, 2009, the company adopted without material impact on its condensed consolidated financial statements the provisions of SFAS No. 157 related to nonfinancial assets and nonfinancial liabilities that are not required or permitted to be measured at fair value on a recurring basis including nonfinancial long-lived assets and goodwill measured at fair value for impairment assessment.

In March 2008, the FASB issued Statement of Financial Accounting Standards No. 161, "Disclosures about Derivative Instruments and Hedging Activities — an amendment of Statement of Financial Accounting Standards No. 133", or SFAS No. 161. SFAS No. 161 changes the disclosure requirements for derivative instruments and hedging activities. This standard requires enhanced disclosures about how and why an entity uses derivative instruments, how instruments are accounted for under Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities," and how derivatives and hedging activities affect an entity's financial position, financial performance and cash flows. This standard became effective for us on December 29, 2008, and did not have a material impact on our results of operations and financial condition.

Note 2 – Debt:

On July 25, 2008, the company entered into subscription agreements with four investors for the sale of convertible debentures in the aggregate principal amount of \$14,875,000. The primary investor was Blum Strategic Partners IV, L.P., who subscribed for \$12,000,000 of the debentures. Additional investors included John N. Hatsopoulos, the company's Chairman of the board, Arvin H. Smith, the company's President and Chief Executive Officer, and Philip Frost M.D., a holder of more than 10% of the outstanding equity securities of the company immediately prior to the sale of the debentures, who subscribed for \$2,875,000 of debentures by exchanging existing promissory notes of the company for the debentures. The debentures bear interest at 4%, payable quarterly in cash, and mature on July 25, 2013. The debentures will be convertible at the option of the holder at any time into shares of common stock at a conversion price equal to \$7.00 per share. In connection with the transaction, the company appointed John H. Park to the company's board of directors. Ladenburg Thalman & Co., Inc., a registered broker-dealer, acted as placement agent on a best efforts basis for the sale of the company's debentures. In connection with the transaction, the company paid the placement agent a cash fee of \$600,000.

Note 3 – Commitments and Contingencies:

The company and its subsidiaries lease facilities and equipment under various operating leases. Future minimum rental commitments for long-term, non-cancelable operating leases at March 29, 2009 are as follows:

Summary of Lease Obligations:

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>Totals</u>
Facilities	\$ 255,838	\$ 161,541	\$ 169,989	\$ 175,413	\$ 75,439	\$ 838,220
Equipment	70,979	35,490	-	-	-	106,469
	<u>\$ 326,817</u>	<u>\$ 197,031</u>	<u>\$ 169,989</u>	<u>\$ 175,413</u>	<u>\$ 75,439</u>	<u>\$ 944,689</u>

For the period ending March 29, 2009, rent expense was \$81,730 and for the period ending March 30, 2008, rent expense was \$125,418. On June 3, 2008, the company entered into a lease for a new facility for the Lionville business. From July 2008 to February 2009 the company paid rent for two facilities in Lionville, while in a transition period.

The company performs services under numerous subcontract agreements on cost-reimbursable contracts with the federal government. During the period from 1998 to 2003, the company was party to a subcontract agreement with Johnson Control Northern New Mexico, or JCNNM, to provide services to Los Alamos on a cost-reimbursable basis. On May 14, 2007, the company received notification from IAP-Northern New Mexico, or IAPNNM, the successor corporation to JCNNM, that the results of a Los Alamos audit for the period ending in 2003 determined that certain costs previously claimed and billed by the company were subsequently deemed unallowable or otherwise not reimbursable. IAPNNM requested that the company reimburse the amount of \$321,836 that was paid to the company during the subject time period. In January 2009, the company protested the Los Alamos audit results claiming they were inaccurate and requested to resubmit a claim for the subject contract. The Los Alamos audit team agreed to review the audit results and adjust the claim as needed. In the event it is determined that the company has to reimburse such amount in full, the resultant cost would materially affect its results of operations.

GLENROSE INSTRUMENTS INC.

In late 2008, the New Mexico Environmental Department notified the company of a proposed civil penalty for non-compliance with certain New Mexico administrative statutes. The company refuted the allegations in early 2009. Management believes that these allegations will not result in a material adverse affect on its business, operating results or financial condition.

Note 4 – Stockholders’ Equity:

Common Stock

On August 30, 2007, the company issued 102,647 shares to a limited number of accredited investors through a private placement of common stock at a price per share of \$7.00 resulting in proceeds net of costs to the company of \$687,417.

Stock Based Compensation

In September 2005, the company adopted a stock option plan under which the board of directors may grant incentive or non-qualified stock options and stock grants to key employees, directors, advisors and consultants of the company.

The maximum number of shares of stock or underlying options allowable for issuance under the plan is 700,000 shares of common stock, including 15,000 restricted shares as of March 29, 2009. Stock options vest based upon the terms within the individual option grants, usually over a five-year period at 20% per year, with an acceleration of the unvested portion of such options upon a liquidity event, as defined in the company’s stock option agreement. The options are not transferable except by will or domestic relations order. The option price per share under the plan is not less than the fair market value of the shares on the date of the grant. The number of securities remaining available for future issuance under the plan was 488,000 at March 29, 2009.

The company accounts for share-based compensation arrangements in accordance with SFAS No. 123(R). SFAS No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. The determination of the fair value of share-based payment awards is affected by our stock price. The company considered the sales price of common stock in private placements to unrelated third parties during the year as a measure of the fair value of its common stock. The company’s most recent private placement of common stock was in August of 2007 at a price of \$7.00 per share.

The company recognized employee non-cash stock based compensation expense of \$35,300 and \$70,022 related to the issuance of restricted stock and stock options at March 29, 2009 and March 30, 2008, respectively. The total compensation cost related to unvested restricted stock awards and stock option awards not yet recognized is \$260,300 at March 29, 2009. This amount is expected to be recognized over a weighted average period of 3.56 years. There were no stock options granted during the period ending March 29, 2009. Stock option activity for the period ending March 29, 2009 was as follows:

	Number of Options	Exercise Price Per Share	Weighted Average Exercise Price	Weighted Average Remaining Life	Aggregate Intrinsic Value
Outstanding, December 28, 2008	200,000	\$ 7.00	\$ 7.00	5.88	\$ -
Granted	-	-	-		
Exercised	-	-	-		
Canceled	(3,000)	7.00	7.00		
Expired	-	-	-		
Outstanding, March 29, 2009	<u>197,000</u>	<u>\$ 7.00</u>	<u>7.00</u>	<u>5.62</u>	<u>-</u>
Vested & Exercisable, March 29, 2009	<u>40,000</u>		<u>\$ 7.00</u>	<u>5.62</u>	<u>\$ -</u>

The aggregate intrinsic value of options outstanding as of March 29, 2009 is calculated as the difference between the exercise price of the underlying options and the price of the company’s common stock for options that were in-the-money as of that date.

GLENROSE INSTRUMENTS INC.

In 2007, the company made restricted stock grants to three of its directors by permitting them to purchase an aggregate of 15,000 shares of common stock at a price of \$0.01 per share. Those shares begin to vest 90 days after the company's initial listing on a securities exchange or an over-the-counter bulletin board at a rate of 25% per year. All of the shares become vested shares upon a change in control prior to a termination event. At March 29, 2009, there were 15,000 unvested shares of restricted stock outstanding. Restricted stock activity for the period ending March 29, 2009 was as follows:

	<u>Number of Restricted Stock</u>	<u>Grant Date Fair Value</u>
Unvested, December 28, 2008	15,000	\$ 7.00
Granted	-	-
Vested	-	-
Forfeited	-	-
Unvested, March 29, 2009	<u>15,000</u>	<u>\$ 7.00</u>

Note 5 - Loss per Share:

Basic and diluted loss per share are computed by dividing earnings available to common stockholders by the weighted average number of common shares outstanding during the period to common stock. There are no dilutive securities as of March 29, 2009 and March 30, 2008. The following reconciles amounts reported in the financial statements:

	<u>Three Months Ended</u>	
	<u>March 29, 2009</u>	<u>March 30, 2008</u>
Earnings per share		
Income (loss) available to stockholders	\$ (610,841)	\$ (397,022)
Weighted average shares outstanding - basic	3,102,647	3,102,647
Net earnings (loss) per share - basic	\$ (0.20)	\$ (0.13)
Assumed exercise of dilutive stock options and warrants	-	-
Weighted average shares outstanding - diluted	3,102,647	3,102,647
Net earnings (loss) per share - diluted	\$ (0.20)	\$ (0.13)
Anti-dilutive restricted stock outstanding	15,000	15,000
Anti-dilutive shares underlying stock options outstanding	197,000	230,000
Anti-dilutive convertible debentures	2,125,000	-

Note 6 – Fair Value Measurements:

SFAS No. 157 defines and establishes a framework for measuring fair value and expands disclosures about fair value measurements. In accordance with SFAS No. 157, we have categorized our financial assets and liabilities, based on the priority of the inputs to the valuation technique, into a three-level fair value hierarchy as set forth below. If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument. The three levels of the hierarchy are defined as follows:

Level 1 — Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 — Observable inputs other than quoted prices included in Level 1. Level 2 inputs include quoted prices for identical assets or liabilities in non-active markets, quoted prices for similar assets or liabilities in active markets and inputs other than quoted prices that are observable for substantially the full term of the asset or liability.

Level 3 — Unobservable inputs reflecting management's own assumptions about the input used in pricing the asset or liability. We currently do not have any Level 3 financial assets or liabilities.

During the three months ended on March 29, 2009, the company had \$3,880,391 in Money Market funds and \$6,140,277 in short-term investments that are comprised of Certificates of Deposits which are categorized as Level 2. The Company determines the fair value of certificates of deposits using information provided by the issuing bank which includes discounted expected cash flow estimates using current market rates offered for deposits with similar remaining maturities.

GLENROSE INSTRUMENTS INC.

Note 7 - Segment Data:

The company's executive officers include Arvin Smith, Dr. Richard Chapman and Dr. Shelton Clark. Collectively, they are the Chief Operating Decision Maker, or CODM, as defined by Statement of Financial Accounting Standards No. 131, "Disclosures about Segments of an Enterprise and Related Information". The office of the CODM is responsible for assessing the performance of each segment, as well as the allocation of company resources. Other than general and administrative services incurred at GlenRose Instruments, ESI currently constitutes 100% of the activity of the company. Costs incurred by GlenRose Instruments are aggregated and reported separately from the Eberline Services activity.

The company currently operates three business segments: Environmental Services, Analytical Laboratories and Instruments. ESI maintains separate general and administrative functions consisting of all executive management, business development, accounting and finance, and human resource personnel that support the entire business. The Environmental Services provide engineering and technical support to the Los Alamos National Laboratory, the Department of Energy's Hanford Reservation Site, as well as other government and commercial agencies. The Analytical Laboratories consist of four separate laboratories serving a wide variety of federal, state and local governments. The laboratories are located in Albuquerque, New Mexico, Richmond, California, Oak Ridge, Tennessee, and Exton, Pennsylvania. A dedicated laboratory manager is responsible for the operation of each laboratory. Management monitors the performance of each laboratory separately. Intercompany costs and sales are eliminated in the consolidated financial statements.

The Instruments segment was formed in 2006 with the intent to include the company's future instrument related acquisitions. Analytical instruments use a variety of highly sophisticated measurement technologies and are used by the scientific community, the government and industry to perform basic research, applied research and development, process monitoring and control, and many other applications. The company's strategy is to acquire instrument companies, which have well-established and proven technology and increase their operating margins and revenues using techniques developed by the company's management team during the course of their careers in the analytical instruments industry. As of the date of this report the company has not made any commitments, nor has it acquired any instrument businesses. The company's segment data show all general and administrative costs related to the instruments segment captured during the period.

GLENROSE INSTRUMENTS INC.

Segment data for the periods ending March 29, 2009 and March 30, 2008 are included below:

	Three Months Ended	
	March 29, 2009	March 30, 2008
	UNAUDITED	UNAUDITED
<i>Revenues</i>		
Environmental Services	\$ 6,244,095	\$ 6,547,091
Analytical Laboratories	2,034,289	1,718,159
Instruments	-	-
	<u>8,278,384</u>	<u>8,265,250</u>
<i>Cost of Sales</i>		
Environmental Services	5,707,851	5,976,124
Analytical Laboratories	2,075,383	1,926,687
Instruments	-	-
	<u>7,783,234</u>	<u>7,902,811</u>
<i>Gross Profit (Loss)</i>		
Environmental Services	536,244	570,967
Analytical Laboratories	(41,094)	(208,528)
Instruments	-	-
	<u>495,150</u>	<u>362,439</u>
<i>Operating Loss</i>		
Environmental Services	308,028	316,633
Analytical Laboratories	(369,144)	(530,083)
Corporate & Instruments	(103,974)	(98,726)
	<u>(165,090)</u>	<u>(312,175)</u>
<i>Supplemental Disclosure</i>		
<i>Depreciation Expense</i>		
Environmental Services	62,489	44,770
Analytical Laboratories	118,112	71,456
Instruments	-	-
	<u>180,601</u>	<u>116,226</u>
<i>Capital Expenditures</i>		
Environmental Services	-	54,648
Analytical Laboratories	181,974	4,374
Instruments	-	-
	<u>181,974</u>	<u>59,022</u>
<i>Total Assets(1)</i>		
Environmental Services	7,542,251	8,115,673
Analytical Laboratories	4,195,147	4,092,783
Instruments	10,587,787	10,910,928
	<u>\$ 22,325,185</u>	<u>\$ 23,119,384</u>

(1) Total Assets as of March 29, 2009 and December 28, 2008.

GLENROSE INSTRUMENTS INC.

Item 2: Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-looking statements are made throughout this Management's Discussion and Analysis of Financial Condition and Results of Operations. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words "believes," "anticipates," "plans," "expects," "seeks," "estimates" and similar expressions are intended to identify forward-looking statements. While the company may elect to update forward-looking statements in the future, it specifically disclaims any obligation to do so, even if the company's estimates change and readers should not rely on those forward-looking statements as representing the company's views as of any date subsequent to the date of the filing of this Quarterly Report on Form 10-Q. There are a number of important factors that could cause the actual results of the company to differ materially from those indicated by such forward-looking statements, including those detailed under the heading "Risk Factors" in this Quarterly Report on Form 10-Q.

First Quarter 2009 Compared to First Quarter 2008

Revenues

Revenues in the first quarter of 2009 were \$8,278,384 compared to \$8,265,250 for the same period in 2008, an increase of \$13,134 or 0.2%. The increase in revenues was primarily due to an increase in our Analytical Laboratory revenues, which was partially offset by a decrease in our Environmental Services revenues. The increase in the Analytical Laboratory revenues was associated with additional sample volume during the quarter.

Revenues from our Environmental Services in the first quarter of 2009 were \$6,244,095 compared to \$6,547,091 for the same period in 2008, a decrease of \$302,996 or 4.6%. Our Environmental Services contributed 75.4% to total revenues in the first quarter of 2009 versus 79.2% in the first quarter of 2008. The decrease in revenues was primarily due to lower subcontract revenue at Los Alamos.

Revenues from our Analytical Laboratories in the first quarter of 2009 were \$2,034,289 compared to \$1,718,159 for the same period in 2008, an increase of \$316,130 or 18.4%. Our Analytical Labs contributed 24.6% to total revenues in the first quarter of 2009 versus 20.8% for the same period in 2008. The increase in revenues was primarily due to additional sample volume during the quarter.

Cost of Sales

The cost of sales in the first quarter of 2009 was \$7,783,234 compared to \$7,902,811 for the same period in 2008, a decrease of \$119,577 or 1.5%. The decrease in cost of sales was primarily due to lower subcontract costs at Los Alamos.

The cost of sales from our Environmental Services in the first quarter of 2009 was \$5,707,851 compared to \$5,976,124 for the same period in 2008, a decrease of \$268,273 or 4.5%. The cost of sales from our Analytical Laboratories in the first quarter of 2009 was \$2,075,383 compared to \$1,926,687 for the same period in 2008, an increase of \$148,696 or 7.7%. Included in cost of sales were non-recurring expenses of approximately \$180,000 including additional rent, clean-up costs, write-off of leasehold improvements and other expenses associated with the relocation of our Lionville Laboratory.

Gross Profit

Gross profit in the first quarter of 2009 was \$495,150 compared to \$362,439 for the same period in 2008, an increase of \$132,711 or 36.6%. The gross profit margin increased to 6.0% in the first quarter of 2009 from 4.4% for the same period in 2008. The increase in the quarterly gross profit was primarily due to increased revenues at our Analytical Laboratories that have a relatively fixed cost structure.

The gross profit from our Environmental Services in the first quarter of 2009 was \$536,244 compared to \$570,967 for the same period in 2008, a decrease of \$34,723 or 6.1%. The gross profit from our Analytical Laboratories in the first quarter of 2009 was a loss of \$41,094 compared to a loss of \$208,528 for the same period in 2008, an increase of \$167,434 or 80.3%. The gross profit was affected by non-recurring expenses of approximately \$180,000, including additional rent, clean-up costs, write-off of leasehold improvements and other expenses associated with the relocation of our Lionville Laboratory.

Operating Expenses

General and administrative expenses in the first quarter of 2009 were \$660,240 compared to \$674,614 for the same period in 2008, a decrease of \$14,374 or 2.1%. Our general and administrative costs remained relatively stable in the first quarter of 2009 compared with the general and administrative costs for the same period in 2008.

GLENROSE INSTRUMENTS INC.

Operating Income (Loss)

The operating loss in the first quarter of 2009 was \$165,090, compared to an operating loss of \$312,175 for the same period in 2008. The operating loss was primarily due to the Environmental Services operating income of \$308,028, offset by an operating loss at the Analytical Laboratories of \$369,144 and corporate general and administrative expenses of \$103,974.

Other Income (Expense)

Other expenses in the first quarter of 2009 were \$145,574 compared to \$84,847 for the same period in 2008, an increase of \$60,727 or 71.6%. Interest and other miscellaneous income in the first quarter of 2009 was \$77,417 compared to \$5,826 for the same period in 2008. The increase was primarily due to a higher cash balance of funds invested. Interest expense in the first quarter of 2009 was \$222,991 compared to \$90,673 for the same period in 2008, due to interest expense on our convertible debenture and the amortization of deferred financing costs.

Provision for Income Taxes

We recorded a tax provision in the first quarter of 2009 of \$300,177 compared with no tax benefit or provision for the same period in 2008. The provision is a non cash expense associated with the write-off of certain deferred tax assets in accordance with Statement of Financial Accounting Standards No. 109 "Accounting for Income Taxes", or SFAS No. 109. The company believes it is more likely than not to realize the benefit of the remaining deferred tax asset.

Net Loss

We incurred a net loss in the first quarter of 2009 of \$610,841 compared to a net loss of \$397,022 for the same period in 2008.

Liquidity and Capital Resources

Consolidated working capital at March 29, 2009 was \$12,775,058, compared to \$13,279,653 at December 28, 2008. Included in working capital were cash, cash equivalents and short-term investments of \$10,756,783 as of March 29, 2009, compared to \$11,383,800 at December 28, 2008. The decrease in working capital was a result of cash needed to fund operations.

Cash used by operating activities was \$442,104 in the first quarter of 2009, compared to cash used by operating activities of \$20,780 for the same period in 2008. Our net receivables balance increased to \$3,578,571 in the first quarter of 2009, compared to \$3,036,225 at December 28, 2008, due to an increase in service related receivables attributed to a new contract and the increase in our Analytical Laboratory revenue, resulting in a decrease in cash of \$542,346. Our unbilled contract receivables decreased to \$564,956 in the first quarter of 2009, compared to \$776,988 at December 28, 2008, resulting in an increase in cash of \$212,032. The decrease in the unbilled contract receivables is primarily due to cost-plus service related contracts billed during the first quarter. Our prepaid expenses decreased to \$183,398 in the first quarter of 2009, compared to \$250,324 at December 28, 2008, resulting in an increase in cash of \$66,926. The decrease in the prepaid expenses is primarily due to scheduled payments of insurance premiums. Other receivables decreased to \$91,792 in the first quarter of 2009, compared to \$183,658 at December 28, 2008, resulting in an increase in cash of \$91,866, due to the receipt of certain employee related expenses that were due to the company by our prime contractor. Our deferred tax asset decreased to \$257,046 in the first quarter of 2009, compared to \$557,123 at December 28, 2008, resulting in an increase in cash of \$300,077, due to the write-off of certain deferred tax assets in accordance with SFAS No. 109.

Accounts payable decreased to \$1,008,055 in the first quarter of 2009, compared to \$1,015,715 at December 28, 2008, resulting in a decrease in cash of \$7,660. Other accrued liabilities, including accrued expenses, accrued employee-related costs, income taxes payable and other long-term liabilities, increased to \$1,934,808 in the first quarter of 2009, compared to \$1,835,665 at December 28, 2008, primarily due to an increase in accrued employee related costs, resulting in an increase in cash of \$99,143. Our accrued interest balance associated with the subordinated notes decreased to \$266,009 in the first quarter of 2009, compared to \$601,328 at December 28, 2008, resulting in a decrease in cash of \$335,319, due to payments on the accrued interest on our subordinated notes.

The primary investing activities of the company's operations included the purchase of equipment. The company continues to manage its capital expenditures very selectively and in the first quarter of 2009 we used \$181,974 for purchases of equipment. The company's short-term investments provided \$300,551 of cash as our funds invested in certificates of deposits matured and converted into cash. The company's financing activities used \$2,939 of cash in the first quarter of 2009, primarily due payments on capital lease obligations.

GLENROSE INSTRUMENTS INC.

The company believes that its existing resources, including cash and cash equivalents and future cash flow from operations, are sufficient to meet the working capital requirements of its existing business for the foreseeable future, including the next 12 months. We believe that our cash and cash equivalents and our ability to control certain costs, including those related to general and administrative expenses will enable us to meet our anticipated cash expenditures through the end of 2009.

GLENROSE INSTRUMENTS INC.

Item 3: Quantitative and Qualitative Disclosures about Market Risk

Not applicable.

Item 4T: Controls and Procedures

Management's evaluation of disclosure controls and procedures:

Our chief executive officer and our chief financial officer, after evaluating the effectiveness of our "disclosure controls and procedures" (as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act") Rules 13a-15(e) and 15d-15(e); collectively, "Disclosure Controls") as of the end of the period covered by this report (the "Evaluation Date") has concluded that as of the Evaluation Date, our Disclosure Controls were effective to provide reasonable assurance that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified by the Securities and Exchange Commission, and that material information relating to our company and any consolidated subsidiaries is made known to management, including the chief executive officer and chief financial officer, particularly during the period when our periodic reports are being prepared to allow timely decisions regarding required disclosure.

Changes in Internal Controls over Financial Reporting:

In connection with the evaluation referred to in the foregoing paragraph, we have identified no change in our internal control over financial reporting that occurred during the period ending March 29, 2009 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

GLENROSE INSTRUMENTS INC.

PART II – OTHER INFORMATION

Item 1A: Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed under “Risk Factors” in our Annual Report on Form 10-K for our fiscal year ended December 28, 2008. The risks discussed in our Annual Report on Form 10-K could materially affect our business, financial condition and future results. The risks described in our Annual Report on Form 10-K are not the only risks facing us. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially and adversely affect our business, financial condition or operating results.

Item 6: Exhibits

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
31.1*	– Rule 13a-14(a) Certification of Chief Executive Officer
31.2*	– Rule 13a-14(a) Certification of Chief Financial Officer
32.1*	– Section 1350 Certifications of Chief Executive Officer and Chief Financial Officer

* Filed herewith.

GLENROSE INSTRUMENTS INC.

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on May 13, 2009.

GLENROSE INSTRUMENTS INC.
(Registrant)

By: /s/ ARVIN H. SMITH
Chief Executive Officer
(Principal Executive Officer)

By: /s/ ANTHONY S. LOUMIDIS
Chief Financial Officer
(Principal Financial Officer)

GLENROSE INSTRUMENTS INC.
CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(a) and 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Arvin H. Smith, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of GlenRose Instruments Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2009

/s/ Arvin H. Smith
Chief Executive Officer

GLENROSE INSTRUMENTS INC.
CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(a) and 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Anthony S. Loumidis, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of GlenRose Instruments Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2009

/s/ Anthony S. Loumidis
Chief Financial Officer

GLENROSE INSTRUMENTS INC.
CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(b) and 15d-14(b),
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

We, Arvin H. Smith, Chief Executive Officer, and Anthony S. Loumidis, Chief Financial Officer, of GlenRose Instruments Inc. (the “Company”), certify, pursuant to Section 1350, Chapter 63 of Title 18, United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Quarterly Report on Form 10-Q of the Company for the quarter ending March 29, 2009 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, (15 U.S.C. 78 m or 78o(d)); and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 13, 2009

/s/ Arvin H. Smith

Chief Executive Officer

/s/ Anthony S. Loumidis

Chief Financial Officer
