MFIC CORP
Form 10-Q
August 10, 2004

FORM 10-Q

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

(Mark One)

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

For the quarterly period ended June 30, 2004

OR

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

For the transition period from to

Commission file number 0-11625

MFIC CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**04-2793022**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

30 Ossipee Road, P.O. Box 9101, Newton, Massachusetts 02464

(Address of Principal Executive Offices) (Zip Code)

(617) 969-5452

(Registrant s Telephone Number, Including Area Code)

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 ý No o

Registrant had 9,895,481 shares of Common Stock, par value $.01 per share, outstanding on July 30, 2004.

MFIC CORPORATION

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PART I. FINANCIAL INFORMATION

ITEM 1.

MFIC CORPORATION

CONDENSED CONSOLIDATED BALANCE SHEETS

ASSETS		June 30, 2004		December 31, 2003
Current Assets:				
Cash and cash equivalents	$	1,919,968	$	50,270
Accounts receivable, less allowance for doubtful accounts of $60,500 at June 30, 2004 and $58,500 at December 31, 2003		1,401,991		1,814,584
Inventories, net		2,108,882		1,683,703
Note receivable NuSil		100,000		
Note receivable current		24,643		16,429
Prepaid expenses		258,922		207,210
Other current assets		94,183		38,749
Assets available for sale				1,383,118
TOTAL CURRENT ASSETS		5,908,589		5,194,063
Property and Equipment, at cost:				
Furniture, fixtures and office equipment		368,443		330,022
Machinery and equipment		387,165		219,765
Leasehold improvements		72,644		50,568
		828,252		600,355
Less: Accumulated depreciation and amortization		(457,067)		(418,066)
Net property and equipment		371,185		182,289
Note receivable long-term		46,547		54,761
Patents, licenses and other assets (net of accumulated amortization of $305,685 at June 30, 2004 and $303,785 at December 31, 2003)		54,078		55,978
TOTAL ASSETS	$	6,380,399	$	5,487,091

See notes to condensed consolidated financial statements.

MFIC CORPORATION

CONDENSED CONSOLIDATED BALANCE SHEETS

LIABILITIES AND STOCKHOLDERS EQUITY	June 30, 2004	December 31, 2003
Current Liabilities:		
Line of credit	$ 19,000	$ 2,425,613
Accounts payable and accrued expenses	633,697	1,061,897
Accrued interest- related party		2,639
Accrued compensation and vacation pay	95,854	111,855
Customer advances	481,793	223,501
Current portion of term note payable	250,000	58,735
Current portion of long-term debt-related party	43,750	75,000
Liabilities associated with assets available for sale		661,095
TOTAL CURRENT LIABILITIES	1,524,094	4,620,335
Long-term debt, net of current portion- related party		6,250
Term note	687,501	
Stockholders Equity:		
Common stock, par value $.01 per share, 20,000,000 shares authorized; 9,888,403 and 8,028,158 shares issued; 9,627,957 and 7,767,712 shares outstanding at June 30, 2004 and December 31, 2003, respectively	98,884	80,281
Additional paid-in capital	16,470,625	13,150,862
Accumulated deficit	(11,713,004)	(11,682,936)
Less: treasury stock, at cost, 260,446 shares at June 30, 2004 and December 31, 2003, respectively	(687,701)	(687,701)
TOTAL STOCKHOLDERS EQUITY	4,168,804	860,506
TOTAL LIABILITIES AND STOCKHOLDERS EQUITY	$ 6,380,399	$ 5,487,091

See notes to condensed consolidated financial statements.

MFIC CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

	Three months ended June 30, 2004 (unaudited)	Three months ended June 30, 2003 (unaudited)	Six months ended June 30, 2004 (unaudited)	Six months ended June 30, 2003 (unaudited)
Revenues	$ 3,081,977	$ 3,119,465	$ 5,333,429	$ 6,069,142
Cost of goods sold	1,406,003	1,453,341	2,418,876	2,911,095
Gross profit	1,675,974	1,666,124	2,914,553	3,158,047
Operating expenses:				
Selling	588,417	642,863	1,134,041	1,148,888
Research and development	207,183	204,195	406,312	340,256
General and administrative	615,453	448,594	1,148,429	863,387
Total operating expenses	1,411,053	1,295,652	2,688,782	2,352,531
Income from continuing operations	264,921	370,472	225,771	805,516
Interest income	11,671	2,411	12,501	4,500
Interest expense	(20,097)	(31,028)	(36,960)	(62,591)
Net income from continuing operations	256,495	341,855	201,312	747,425
Loss from discontinued operations		(87,215)	(231,380)	(303,114)
Net income (loss)	$ 256,495	$ 254,640	$ (30,068)	$ 444,311
Weighted average number of common and common equivalent shares outstanding:				
Basic	9,621,460	7,460,541	9,044,998	7,457,887
Diluted	10,579,796	7,596,056	10,176,675	7,577,542
Net income (loss) per share from continuing operations:				
Basic	$ 0.03	$ 0.05	$ 0.02	$ 0.10
Diluted	$ 0.02	$ 0.05	$ 0.02	$ 0.10
Net (loss) per share from discontinued operations:				
Basic	$ N/A	$ (0.01)	$ (0.03)	$ (0.04)
Diluted	$ N/A	$ (0.01)	$ (0.03)	$ (0.04)
Net income (loss) per share:				
Basic	$ 0.03	$ 0.03	$ (0.00)	$ 0.06
Diluted	$ 0.02	$ 0.03	$ (0.00)	$ 0.06

See notes to condensed consolidated financial statements.

MFIC CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Six months ended June 30, (Unaudited)	
	2004	**2003**
Cash flows from operating activities:		
Net (loss) income	$ (30,068)	$ 444,311
Adjustments to reconcile net (loss) income to net cash used in operating activities:		
Depreciation and amortization	40,901	130,100
Provision for obsolete and excess inventory	30,000	
(Gain) on sale of fixed assets		(23,500)
Bad debt expense	2,000	15,378
Changes in assets and liabilities:		
Trade and other receivables	410,593	259,793
Inventories	(455,179)	(224,719)
Prepaid expenses	(51,712)	27,683
Other current assets	(55,434)	(21,561)
Current liabilities	(188,548)	(616,649)
Assets and liabilities available for sale	(196,215)	
Net cash used in operating activities:	(493,662)	(9,164)
Cash flows from investing activities:		
Proceeds from sale of assets available for sale	818,238	
Proceeds from sale of fixed assets		23,500
Purchase of fixed assets	(227,897)	(40,268)
Net cash provided by (used in) investing activities	590,341	(16,768)
Cash flows from financing activities:		
Proceeds from private placement (net of closing costs of $644,199)	2,922,341	
Proceeds from term loan Banknorth	1,000,000	
Payment on bank line of credit PNC	(2,425,613)	
Payment of subordinated debt-related party	(37,500)	(37,500)
Payments on term loan Banknorth	(62,499)	
Payments on term note PNC	(58,735)	(47,502)
Proceeds from line of credit Banknorth	19,000	
Proceeds from line of credit PNC		96,395
Proceeds from exercise of stock options	405,560	
Proceeds from note receivable		8,214
Issuance of common stock under employee Stock purchase plan	10,465	4,466
Net cash provided by financing activities:	1,773,019	24,073
Net increase (decrease) in cash and cash equivalents	1,869,698	(1,859)
Cash and cash equivalents beginning of period	50,270	84,956
Cash and cash equivalents end of period	$ 1,919,968	$ 83,097

See notes to condensed consolidated financial statements

MFIC CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

1.) **ORGANIZATION, BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES**

Organization

MFIC Corporation (MFIC or the Company), through its wholly-owned subsidiary, Microfluidics Corporation (Microfluidics), operates in one segment, producing and marketing a broad line of proprietary fluid materials processing systems used for a variety of mixing, microemulsion, nanosuspension, encapsulation, and cell disruption applications.

The consolidated financial statements of the Company include the accounts of the Company and its wholly owned subsidiary, Microfluidics. All significant intercompany transactions and balances have been eliminated in consolidation.

Basis of Presentation

The condensed consolidated financial statements included herein have been prepared by the Company pursuant to the rules and regulations of the Securities and Exchange Commission. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. The Company believes, however, that the disclosures are adequate to make the information presented not misleading. It is suggested that these condensed consolidated financial statements be read in conjunction with the consolidated financial statements and the notes thereto included in the Company s latest annual report on Form 10-K/A.

The condensed consolidated financial statements, in the opinion of management, include all adjustments necessary to present fairly the Company s financial position and the results of its operations. These results are not necessarily indicative of the results to be expected for the entire year.

Significant Accounting Policies

The significant accounting policies followed by the Company and its subsidiary in preparing its consolidated financial statements are set forth in Note 1 to the consolidated financial statements included in its Form 10-K/A for the year ended December 31, 2003. The Company has made no changes to these policies during this quarter.

Stock Based Compensation

As allowed by Statement of Financial Accounting Standard (SFAS) No. 123, *Accounting for Stock-Based Compensation* (SFAS No. 123), the Company has elected to account for stock-based compensation at intrinsic value with disclosure of the effects of fair value accounting on net income and earnings per share on a pro forma basis. At June 30, 2004, the Company had one stock incentive plan. The Company accounts for awards issued to employees under the plan under the recognition and measurement principles of Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees,* and related interpretations. Accordingly, no compensation expense has been recognized for its stock option plans. The following table illustrates the effect on net income and earnings per share if the Company had applied the fair value recognition provisions of SFAS No. 123.

	Three Months Ended June 30,				Six Months Ended June 30,			
		2004		**2003**		**2004**		**2003**
Net (loss) earnings, as reported	$	256,495	$	254,640	$	(30,068)	$	444,311
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects		59,186		2,641		105,590		5,008
Pro forma net earnings (loss)	$	197,309	$	251,999	$	(135,568)	$	439,303
Earnings per share:								
Basic as reported	$	0.03	$	0.03	$	0.00	$	0.06
Basic pro forma	$	0.02	$	0.03	$	0.00	$	0.06
Diluted as reported	$	0.02	$	0.03	$	0.00	$	0.06
Diluted pro forma	$	0.02	$	0.03	$	0.00	$	0.06

2.) **INVENTORIES**

The components of inventories are as follows at:

	June 30, 2004	December 31, 2003
Raw material	$ 2,033,626	$ 1,580,991
Work in progress	76,236	80,439
Finished goods	139,020	132,273
Less: provision for obsolete and excess inventory	(140,000)	(110,000)
Total	$ 2,108,882	$ 1,683,703

3.) **ASSETS AVAILABLE FOR SALE**

In the fourth quarter of 2003 the Company determined that its Morehouse-COWLES Division (the Division) was not strategic to the Company s on-going objectives and in December 2003, management committed to a plan to sell substantially all the assets and associated liabilities of the Division. Accordingly, the Company reported the Division as a discontinued operation in accordance with SFAS No.144, Accounting for the impairment of disposal of long-lived assets. The condensed consolidated financial statements have been reclassified to segregate the assets and associated liabilities available for sale and operating results of these discontinued operations for all periods presented.

Assets and liabilities of discontinued operations are as follows:

		December 31, 2003
Assets available for sale		
Accounts receivable-trade	$	472,573
Inventory		2,204,128
Prepaid expense		35,517
Property and equipment		93,615
Total assets available for sale		2,805,833
Less: Provision for loss on disposal		(1,422,715)
Assets available for sale	$	1,383,118
Liabilities associated with assets available for sale		
Accounts payable and accrued expenses	$	457,139
Customer deposits		203,956
Liabilities associated with assets available for sale	$	661,095

The following summarizes operating results of the discontinued operations of Morehouse-COWLES:

	Three Months Ended		Six Months Ended	
	June 30, 2004	June 30, 2003	June 30, 2004	June 30, 2003
Revenues	$	$ 1,035,818	$ 323,635	$ 1,873,324
Cost of sales		725,489	308,548	1,360,057
Gross profit		310,329	15,087	513,267
Total operating expenses		397,544	238,760	816,381
		(87,215)	(223,673)	(303,114)
Loss on disposal of discontinued operations			7,707	
Loss from discontinued operations	$	$ (87,215)	$ (231,380)	$ (303,114)

On February 9, 2004, pursuant to an Asset Purchase Agreement (the Asset Purchase Agreement) dated February 5, 2004 between the Company and a wholly owned subsidiary of NuSil Corporation (NuSil), the Company sold substantially all of the assets and selected liabilities of the Division to NuSil. Other than NuSil s prior purchases of products from the Division, there were no preexisting relationships between MFIC and NuSil.

The assets of the Division that were sold included accounts receivable, furniture, fixtures and equipment, inventory and supplies, books and records, bids, contracts, prepaid expenses, leases, intellectual property, goodwill, domain names and claims, all as described in the Asset Purchase Agreement (collectively, the Assets) in the amount of approximately $2,850,000. In addition, certain rights and obligations arising after February 9, 2004 under the Division s PacifiCare Group Health Insurance Policy were assigned. The Division s cash or cash equivalents on hand on February 9, 2004 were excluded from the assets being sold. Under the Asset Purchase Agreement, the Division s executory obligations under certain contracts and bids, and the Division s accounts payable as of February 9, 2004 in the amount of $623,240, were assumed by NuSil.

The purchase price (other than the assumption of accounts payable described in the preceding paragraph) paid under the Asset Purchase Agreement was $918,238. Of the purchase price, $768,238 (the Closing Cash) was paid in cash, $100,000 was paid in the form of a Promissory Note (the Purchase Note) and $50,000 (the Holdback Payment) was withheld for payment at a future date subject to any purchase price adjustments and offsets, as provided for in the Asset Purchase Agreement. The Holdback Payment was paid in full on March 26, 2004 without adjustment or offset.

The sale resulted in a loss of approximately $1,400,000 which includes approximately $130,000 of selling costs. In addition, due to the sale of the Morehouse-COWLES Division, goodwill associated with the 1998 purchase of this Division in the amount of $2,100,000 was impaired in 2003.

The aforementioned Purchase Note bears interest at five percent (5%) per annum, is secured by the Assets pursuant to a Security Agreement dated February 5, 2004 (the Security Agreement) between the parties and is subject to certain offsets as provided in the Asset Purchase Agreement. Principal and interest on the Purchase Note are payable on February 9, 2005, unless there is a claim for an offset as allowed for under the Asset Purchase Agreement, which claim might delay final payment of amounts due under the Purchase Note until final resolution of any such claim under the procedures outlined in the Asset Purchase Agreement.

Pursuant to the Asset Purchase Agreement, MFIC entered into a Noncompetition and Nonsolicitation Agreement, dated February 5, 2004, which limits MFIC s ability to compete with the business of the Division for a period of five years.

4.) **EARNINGS (LOSS) PER SHARE**

Basic and diluted net (loss) earnings per share are presented in conformity with Statement of Financial Accounting Standards No. 128, *Earnings per Share (SFAS No. 128   ),* for all periods presented. In accordance with SFAS No. 128, basic net income per common share was determined by dividing net income applicable to common stockholders by the weighted average number of common shares outstanding during the period. Diluted net income per share (EPS) reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock, unless the effects of dilution would be anti-dilutive.

	Three Months Ended		**Six Months Ended**	
	June 30, 2004	**June 30, 2003**	**June 30, 2004**	**June 30, 2003**
Shares for computation of basic net income per share	9,621,460	7,460,541	9,044,998	7,457,887
Effect of dilutive stock options and warrants	958,336	135,515	1,131,677	119,655
Shares for computation of diluted net income per share	10,579,796	7,596,056	10,176,675	7,577,542

5.) **CREDIT FACILITY**

On February 6**,** 2004 the Company and PNC Bank, N.A (PNC   ) entered into a Fourth Amendment and Waiver to Revolving Credit and Term Loan Agreement permitting the sale of the assets of the Company   s Morehouse-COWLES Division in exchange for payment to PNC of all monies received by the Company in connection with such sale and assignment to PNC of deferred payments and a promissory note from the purchase issued as part of the purchase price. On March 3, 2004, the outstanding loan balance was repaid from the proceeds of a new senior debt financing from Banknorth, N.A.

On March 3, 2004, the Company and its Microfluidics Corporation subsidiary, as co-borrowers, entered into a revolving credit and term loan agreement with Banknorth, N.A. (the   Lender   ) providing the Company with a $2,000,000 demand revolving credit and four year term loan facility (the   Credit Facility   ). The Credit Facility is comprised of (i) a $1 million demand revolving line of credit (Revolving Credit Line   ) with advances thereunder bearing interest at an interest rate equal to the prime rate (the Prime Rate for United States borrowings from Banknorth, N.A. as publicly announced from time to time).

All borrowings under the Revolving Credit Line are evidenced by a $1 million demand promissory note (the Revolving Note), and (ii) a $1,000,000 term promissory note, amortized over a four year period and having a maturity date of March 3, 2008 and bearing interest at an interest rate equal to the Federal Home Loan Bank Classic Rate at March 4, 2004 plus two and one-half percent (2.50%). Loans under the Credit Facility are secured by a collateral pledge to the Lender of substantially all the assets of the Company and its subsidiary. The Company is required to meet two covenants on an annual (calendar) basis as of December 31 of each year: (i) the Company s senior debt may not be more than four times the amount of its tangible capital base, and (ii) its debt service coverage ratio may not be less than 1.20 to 1.

Due to the subjective acceleration clause, and the lock-box arrangement, the Revolving Credit Line is classified as a current liability in the condensed consolidated balance sheet. At June 30, 2004, the outstanding balance on the Revolving Credit Line was $19,000, having an interest rate of 4%. The balance outstanding on the term loan was $937,501, at an interest rate of 5.67%.

6.) **PRIVATE PLACEMENT OFFERING**

On March 31, 2004, the Company completed a private placement offering of investment units (each unit consisting of one share of common stock and a 3-year warrant to purchase an additional one-half share of common stock). A total of 1,426,616 units were sold, yielding gross proceeds of $3,566,540. The units were priced at $2.50 and the associated warrants are exercisable at $3.05. Additionally, the placement agent for the offering received 5-year warrants to purchase 213,992 shares of common stock at an exercise price of $3.20 per share.

MFIC CORPORATION

ITEM 2. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

1. BACKGROUND

In 1998, the Company purchased the assets and liabilities of Morehouse-COWLES, Inc. (Morehouse-COWLES). This was done to complete a strategic combination with the Microfluidics Division, in order to enhance the Company s position in the coatings market, which, at the time, was the dominant part of the Company s business.

Since that time, the direction of the core business of the Company changed significantly from coatings to other areas, (in particular the Health Care sector). The Company determined that it could no longer support the previous strategic plan and the Company, therefore, prepared a plan to divest the Morehouse-COWLES Division.

It was expected that the sale would positively impact the Company s cash flow, and would allow the Company to focus on the core business, and expand its sales and marketing resources for the Company s Microfluidizer® processor systems line, and promote its new MMR nanoparticle production systems.

During the fourth quarter of 2003, management committed to a plan to sell substantially all the assets and associated liabilities of the Morehouse-COWLES Division. Accordingly, at year end, the Company reported the division as discontinued operations and reclassified the assets and associated liabilities as available for sale. The search for a buyer eventually resulted in NuSil Corporation, a California corporation (NuSil) making an offer in December 2003 to purchase the Morehouse-COWLES Division s assets and selected liabilities at a price that was acceptable to the Company.

On February 9, 2004, pursuant to an Asset Purchase Agreement (the Asset Purchase Agreement) dated February 5, 2004 between MFIC Corporation (MFIC) and a wholly owned subsidiary of NuSil, MFIC sold substantially all of the assets and selected liabilities of its Morehouse-COWLES Division (the Division), to NuSil. Other than NuSil s prior purchases of products from the Division, there were no preexisting relationships between MFIC and NuSil.

The assets of the Division that were sold included accounts receivable, furniture, fixtures and equipment, inventory and supplies, books and records, bids, contracts, prepaid expenses, leases, intellectual property, goodwill, domain names and claims, all as described in the Asset Purchase Agreement (collectively, the Assets). In addition, certain rights and obligations arising after February 9, 2004 under the Division s PacifiCare Group Health Insurance Policy were assigned. The Division s cash or cash equivalents on hand on February 9, 2004 were excluded from the assets being sold. Under the Asset Purchase Agreement, the Division s executory obligations under certain contracts and bids, and the Division s accounts payable as of February 9, 2004 in the amount of $623,240, were assumed by NuSil.

The purchase price (other than the assumption of accounts payable described in the preceding paragraph) paid under the Asset Purchase Agreement was $918,238. Of the purchase price, $768,238 (the Closing Cash) was paid in cash, $100,000 was paid in the form of a Promissory Note (the Purchase Note) and $50,000 (the Holdback Payment) was withheld for payment at a future date subject to any purchase price adjustments and offsets, as provided for in the Asset Purchase Agreement. The Holdback Payment was paid in full on March 26, 2004 without adjustment or offset.

The Closing Cash was paid directly to PNC Bank, National Association (PNC), to be applied to MFIC s outstanding balance under MFIC s Revolving Credit Loan with PNC (the Revolving Credit Loan).

The aforementioned Purchase Note bears interest at five percent (5%) per annum, is secured by the Assets pursuant to a Security Agreement dated February 5, 2004 (the Security Agreement) between the parties and is subject to certain offsets as provided in the Asset Purchase Agreement. Principal and interest on the Purchase Note are payable on February 9, 2005, unless there is a claim for an offset as allowed for under the Asset Purchase Agreement, which claim might delay final payment of amounts due under the Purchase Note until final resolution of any such claim under the procedures outlined in the Asset Purchase Agreement.

Pursuant to the Asset Purchase Agreement, MFIC entered into a Noncompetition and Nonsolicitation Agreement, dated February 5, 2004, which limits MFIC s ability to compete with the business of the Division for a period of five years.

The sale resulted in a loss of approximately $1,400,000. Due to the sale of the Morehouse-COWLES Division, goodwill associated with the 1998 purchase of this division in the amount of $2,100,000 was impaired in 2003.

RESULTS OF CONTINUING OPERATIONS

Total Company revenues for the quarter ended June 30, 2004 were $3,081,977, as compared to revenues of $3,119,465 in the corresponding period in 2003, representing a decrease of $37,488, or 1%. For the six month period ended June 30, 2004, revenues decreased $735,713, or 12%, to $5,333,429 from $6,069,142 for the first six months of 2003. The decrease in revenue for the three months ended June 30, 2004 is due primarily to a decrease in sales of machines of approximately $28,000. The decrease in revenue for the six month period ended June 30, 2004 versus June 30, 2003 is due to one less sale of a large production machine for approximately $615,000, a decrease in the sale of other machines of approximately $50,000, and a decrease in the sales of spare parts of approximately $70,000.

Cost of goods sold for the three months ended June 30, 2004 was $1,406,003, or 46% of revenue, compared to $1,453,341 or 47% of revenue, for the same period last year. For the six month period ended June 30, 2004, cost of goods sold was $2,418,876, or 45% of revenue, compared to $2,911,095 or 48% of revenue, for the comparable period in 2003. The decrease in cost of goods sold in absolute dollars for both the three and six months ended June 30, 2004, reflects the decrease in sales for the respective periods.

The Company s major product lines have different profit margins, as well as multiple profit margins within each product line. In the course of the periods compared, there may be significant changes in the cost of revenues as a percentage of revenue depending on the mix of product sold.

Total operating expenses for the three months ended June 30, 2004 were $1,411,053 or 46% of revenue, as compared to $1,295,652 or 42% of revenue for the same period last year, which is an increase of $115,401 or 9%. Operating expenses for the six months ended June 30, 2004 were $2,688,782 or 50% of revenue, as compared to $2,352,531 or 39% of revenue, for the same period last year, an increase of $336,251 or 14%.

Research and development expenses for the three months ended June 30, 2004 were $207,183 compared to $204,195 for the three months ended June 30, 2003, an increase of $2,988 or 1%.

Research and development expenses for the six months ended June 30, 2004 were $406,312 compared to $340,256 for the six months ended June 30, 2003, an increase of $66,056 or 19%. The increase in research and development expenses was primarily due to an increase in the number of employees and a corresponding increase in payroll costs of approximately $72,000, partially offset by a decrease in testing materials of approximately $15,000.

Selling expenses for the three months ended June 30, 2004 decreased $54,446 or 8%, compared to the three months ended June 30, 2003, from $642,863 to $588,417. The principal decreases in selling expenses were due to a decrease in commission expenses of approximately $40,000, a decrease in payroll and related costs of approximately $22,000, and a decrease in shipping costs of approximately $10,000, partially offset by an increase in advertising costs of approximately $10,000.

Selling expenses for the six months ended June 30, 2004 decreased approximately $15,000 or 1% compared to the six months ended June 30, 2003, from $1,148,888 to $1,134,041. The decreases were due to a decrease in payroll and related expenses of approximately $28,000, a decrease in travel and related costs of approximately $14,000, and a decrease in shipping costs of approximately $6,000, partially offset by an increase in advertising costs of approximately $21,000, and an increase in public relations costs of approximately $12,000.

For the three months ended June 30, 2004, general and administrative expenses increased by approximately $167,000 or 37%, from $448,594 to $615,453. The increase in general and administrative expenses is principally due to an increase in professional fees of approximately $72,000, an increase in general overhead costs of approximately $37,000, and an increase in salaries and related costs of approximately $40,000.

For the six months ended June 30, 2004, general and administrative expenses increased by approximately $285,000 or 33%, from $863,387 to $1,148,429. The increase in general and administrative expenses is principally due to an increase in salaries and related costs of approximately $92,000, an increase in professional fees of approximately $102,000, an increase in general overhead costs of approximately $36,000, and an increase in investor relation expenses of approximately $39,000.

Interest expense for the three months ended June 30, 2004 decreased approximately $11,000 or 35% to $20,097 compared to $31,028 for the three months ended June 30, 2003. The overall decrease is due to the reduction of the line of credit caused by the paydown of the debt from proceeds received from the sale of the Morehouse-COWLES operation.

Interest expense for the six months ended June 30, 2004 decreased approximately $26,000, or 41%, to $36,960 from $62,591 for the six months ended June 30, 2003. The decrease is due to the reduction of the line of credit caused by the paydown of the debt from proceeds received from the sale of the Morehouse-COWLES operation.

RESULTS OF DISCONTINUED OPERATIONS

Total Company revenues from discontinued operations for the quarter ended June 30, 2004 were $0, as compared to revenues of $1,035,818 in the corresponding period in 2003, representing a decrease of $1,035,818, or 100%. For the six month period ended June 30, 2004, revenues decreased $1,549,689, or 83%, to $323,635 from $1,873,324 for the first six months of 2003. The decrease in revenue for both the three and six months ended June 30, 2004 is due to the sale of the operation to NuSil Corporation (NuSil) on February 9, 2004.

Cost of goods sold for the three months ended June 30, 2004 was $0, compared to $725,489 or 70% of revenue, for the same period last year. For the six month period ended June 30, 2004, cost of goods sold was $308,548, or 95% of revenue, compared to $1,360,057 or 73% of revenue, for the comparable period in 2003. The decrease in cost of goods sold in absolute dollars for both the three and six months ended June 30, 2004, is due principally to the sale of the operation to NuSil Corporation (NuSil) on February 9, 2004.

Total operating expenses for the three months ended June 30, 2004 were $0, as compared to $397,544 or 38% of revenue for the same period last year. Operating expenses for the six months ended June 30, 2004 were $238,760 or 74% of revenue, as compared to $816,381 or 44% of revenue, for the same period last year, a decrease of $577,621 or 71%.

Research and development expenses for the three months ended June 30, 2004 were $0 compared to $77,179 for the three months ended June 30, 2003, a decrease of $77,179 or 100%. The decrease in research and development expenses is due to the sale of the operation to NuSil Corporation (NuSil) on February 9, 2004.

Research and development expenses for the six months ended June 30, 2004 were $37,413 compared to $151,715 for the six months ended June 30, 2003, a decrease of $114,302 or 75%. The decrease in research and development expenses was due to the sale of the operation to NuSil Corporation (NuSil) on February 9, 2004.

Selling expenses for the three months ended June 30, 2004 decreased $226,776 or 100%, compared to the three months ended June 30, 2003, from $226,776 to $0. The decrease is due to the sale of the operation to NuSil Corporation (NuSil) on February 9, 2004.

Selling expenses for the six months ended June 30, 2004 decreased approximately $302,000 or 69% compared to the six months ended June 30, 2003, from $435,872 to $134,094. The decrease is due to the sale of the operation to NuSil Corporation (NuSil) on February 9, 2004.

For the three months ended June 30, 2004, general and administrative expenses decreased by approximately $94,000 or 100%, from $93,589 to $0. The decrease in general and administrative expenses is due to the sale of the operation to NuSil Corporation (NuSil) on February 9, 2004.

For the six months ended June 30, 2004, general and administrative expenses decreased by approximately $162,000 or 71%, from $228,794 to $67,253. The decrease in general and administrative expenses is due to the sale of the operation to NuSil Corporation (NuSil) on February 9, 2004.

2. LIQUIDITY AND CAPITAL RESOURCES

On March 31, 2004, the Company completed a private placement offering of investment units (each unit consisting of one share of common stock and a 3-year warrant to purchase an additional one-half share of common stock). A total of 1,426,616 units were sold, yielding gross proceeds of $3,566,540. The units were priced at $2.50 and the associated warrants are exercisable at $3.05. Additionally, the placement agent for the offering received 5-year warrants to purchase 213,992 shares of common stock at an exercise price of $3.20 per share.

As of June 30, 2004, the Company maintains a revolving credit and term loan agreement (the Credit Facility) with Banknorth, N.A., providing the Company with a $1,000,000, four-year revolving credit and a $1,000,000 four-year term loan facility. As of June 30, 2004, the Company had a balance of $19,000 under its revolving credit line and a balance of $937,501 under its loan facility.

The Company used cash of $493,662 and $9,164 from operations for the six months ended June 30, 2004 and 2003, respectively. For the six months ended June 30, 2004, the Company s principal operating cash requirements were to fund its loss from operations, an increase in inventory, an increase in other current assets and prepaid expenses, and a decrease in current liabilities, partially offset by a decrease in trade and other receivables. For the six months ended June 30, 2003, the Company s principal operating cash requirements were to fund its increase in inventory and other current assets, and a decrease in current liabilities, offset by net income from operations, and a decrease in trade receivables and prepaid expenses.

The Company generated cash of $590,341 and used cash of $16,768 for investing activities for the six months ended June 30, 2004 and 2003, respectively. Net cash used for investing activities for the six months ended June 30, 2004 was generated through the sale of the Morehouse-COWLES Division, partially offset by the purchase of capital equipment. Net cash provided by investing activities for the six months ended June 30, 2004 consisted of the proceeds from the sale of fixed assets offset by the purchase of capital equipment.

As of June 30, 2004, the Company had no material commitments for capital expenditures.

The Company generated cash of $1,773,019 for the six months ended June 30, 2004, consisting of proceeds from the private placement, the issuance of common stock for options exercised, proceeds from stock issued from the employee stock purchase plan, and proceeds from a new term loan and line of credit from a new lender, Banknorth, offset by payments on the previous line of credit, the term note and subordinated debt. The Company generated cash of $24,073 for the six months ended June 30, 2003, consisting of proceeds from the line of credit, offset by payments on the term note, and subordinated debt, partially offset by proceeds from the issuance of common stock.

As of June 30, 2004, the Company had $1,919,968 in cash and cash equivalents, compared to $83,097 as of June 30, 2003.

Assuming that there is no significant change in the Company s business, the Company believes that cash flows from operations, together with the Credit Facility, and the existing cash balances, will be sufficient to meet its working capital requirements for at least the next twelve months.

3. FORWARD-LOOKING INFORMATION

This report may contain forward-looking statements that are subject to certain risks and uncertainties including statements relating to the Company s plan to achieve revenue growth, to maintain and/or increase operating profitability, and to attain net income profitability. Such statements are based on the Company s current expectations and are subject to a number of factors and uncertainties that could cause actual results achieved by the Company to differ materially from those described in the forward-looking statements. The Company cautions investors that there can be no assurance that the actual results or business conditions will not differ materially from those projected or suggested in such forward-looking statements as a result of various factors, including but not limited to, the following risks and uncertainties: (i) whether the performance advantages of the Company s Microfluidizer® materials processing equipment will be realized commercially or that a commercial market for the equipment will continue to develop, and (ii) whether the Company will have access to sufficient working capital through continued and improving cash flow from sales and ongoing borrowing availability, the latter being subject to the Company s ability to maintain compliance with the covenants and terms of the Company s loan agreement with its senior lender.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company s fixed rate debt is not exposed to cash flow or interest rate changes but it is exposed to fair market value changes in the event of refinancing this fixed rate debt.

The Company had approximately $19,000 of variable rate borrowings outstanding under its revolving credit agreement. A hypothetical 10% adverse change in interest rates for this variable rate debt would have an immaterial effect on the Company s earnings and cash flows on a quarterly basis.

ITEM 4. DISCLOSURE CONTROLS AND PROCEDURES

As of a date within 90 days prior to the filing of this report (the Evaluation Date), the Chief Executive Officer and Chief Financial Officer evaluated the Company s disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14), and they have concluded that the Company s disclosure controls and procedures are effective to bring to their attention material information relating to the Company for the purposes of this report. In addition, they have concluded that there have been no significant changes in the Company s internal controls or in other factors that could significantly affect those internal controls, including any corrective actions with regard to significant differences and material weaknesses, subsequent to the Evaluation Date.

PART II. OTHER INFORMATION

ITEM 5. OTHER INFORMATION

Not applicable.

MFIC CORPORATION

PART II- OTHER INFORMATION

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibits

No.	**Description**
31.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2003
31.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2003
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2003
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2003

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

MFIC CORPORATION

/s/ Irwin J. Gruverman
Irwin J. Gruverman
Chief Executive Officer
(Principal Executive Officer)

Date: August 9, 2004