

MFIC CORP  
Form 10-Q  
May 15, 2007

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**Form 10-Q**

(Mark One)

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

For the quarterly period ended March 31, 2007

OR

TRANSITION REPORT UNDER 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**  
(State or other jurisdiction of  
incorporation or organization)

**04-2793022**  
(I.R.S. Employer Identification No.)

**30 Ossipee Road, Newton, Massachusetts**  
(Address of principal executive offices)

**02464**  
(Zip Code)

**(617) 969-5452**

(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

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 (the "Act") 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

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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer (as defined in Rule 12b-2 of the Act):

Large Accelerated Filer

Accelerated Filer

Non-Accelerated Filer

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes  No

As of May 11, 2007, 10,183,746 shares of the registrant's Common Stock, par value \$.01 per share, were outstanding.

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**MFIC CORPORATION**

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**PART I. FINANCIAL INFORMATION****ITEM 1. FINANCIAL STATEMENTS****MFIC CORPORATION****Condensed Consolidated Balance Sheets***(Unaudited - in thousands, except share and per share amounts)*

	<b>March 31, 2007</b>	<b>December 31, 2006</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 1,956	\$ 1,860
Accounts receivable, net of allowance of \$41 and \$38 as of March 31, 2007 and December 31, 2006, respectively	1,931	3,253
Inventories	2,639	2,025
Prepaid and other current assets	463	350
Deferred income taxes	369	369
Total current assets	7,358	7,857
Property and equipment, net	288	303
Patents and licenses, net	65	66
Total assets	\$ 7,711	\$ 8,226
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
Current liabilities:		
Current maturities of long-term debt and obligations under capital lease	\$ 259	\$ 259
Accounts payable	326	247
Accrued expenses	674	818
Customer advances	829	853
Income taxes payable		36
Total current liabilities	2,088	2,213
Long-term liabilities		
Current maturities of long-term debt and obligations under capital lease, net of current maturities	1	65
Total liabilities	2,089	2,278
Stockholders' equity:		
Common stock; \$.01 par value; 20,000,000 shares authorized; 10,397,615 and 10,349,812 shares issued; 10,137,169 and 10,089,366 shares outstanding as of March 31, 2007 and December 31, 2006, respectively	104	104
Additional paid-in capital	17,143	17,052
Accumulated deficit	(10,937)	(10,520)
Treasury stock, 260,446 shares, at cost, as of March 31, 2007 and December 31, 2006	(688)	(688)
Total stockholders' equity	5,622	5,948
Total liabilities and stockholders' equity	\$ 7,711	\$ 8,226

See notes to unaudited condensed consolidated financial statements.

## MFIC CORPORATION

## Condensed Consolidated Statements of Operations

*(Unaudited - in thousands, except share and per share amounts)*

	For The Three Months Ended	
	March 31,	
	2007	2006
Revenues	\$ 2,801	\$ 3,151
Cost of sales	1,194	1,447
Gross profit	1,607	1,704
Operating expenses:		
Research and development	536	397
Selling	824	616
General and administrative	677	623
	2,037	1,636
(Loss) income from operations	(430 )	68
Interest expense	(8 )	(9 )
Interest income	21	10
(Loss) income before income tax provision	(417 )	69
Income tax provision		27
Net (loss) income	\$ (417 )	\$ 42
Net (loss) income per common share:		
Basic	\$ (0.04 )	\$
Diluted	\$ (0.04 )	\$
Weighted average number of common and common equivalent shares outstanding:		
Basic	10,123,084	9,952,837
Diluted	10,123,084	10,590,101

See notes to unaudited condensed consolidated financial statements.

## MFIC CORPORATION

## Condensed Consolidated Statements of Cash Flows

*(Unaudited - in thousands)*

	<b>For The Three Months Ended</b>	
	<b>March 31,</b>	
	<b>2007</b>	<b>2006</b>
<b>Cash flows from operating activities:</b>		
Net (loss) income	\$ (417 )	\$ 42
<b>Adjustments to reconcile net (loss) income to net cash flows:</b>		
Deferred taxes		27
Depreciation and amortization	41	46
Provision for obsolete inventory	6	9
Bad debt expense	3	5
Share-based compensation	38	37
<b>Changes in assets and liabilities:</b>		
Accounts receivable	1,318	99
Inventories	(620 )	(278 )
Prepaid expenses and other current assets	(116 )	(44 )
Accounts payable	78	100
Accrued expenses	(179 )	117
Customer advances	(23 )	(88 )
Net cash flows provided by operating activities	129	72
<b>Cash flows from investing activities:</b>		
Purchase of property, plant and equipment	(22 )	(14 )
Net cash flows used in investing activities	(22 )	(14 )
<b>Cash flows from financing activities:</b>		
Principal repayments on long-term debt and obligations under capital leases	(65 )	(72 )
Net proceeds from issuance of common stock	54	28
Net cash flows used in financing activities	(11 )	(44 )
Net change in cash and cash equivalents	96	14
Cash and cash equivalents at beginning of period	1,860	1,452
Cash and cash equivalents at end of period	\$ 1,956	\$ 1,466

See notes to unaudited condensed consolidated financial statements.

## MFIC CORPORATION

### NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

#### 1. Description of Business

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 high-shear fluid processing systems used primarily in the pharmaceutical, biotechnology, digital ink, microelectronics, food, chemical and personal care industries.

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

The Company's corporate headquarters and manufacturing operations are located in Newton, Massachusetts.

Certain accounts in the condensed consolidated financial statements and related notes have been reclassified to conform to current period presentation.

#### 2. Interim Financial Statements

The condensed consolidated financial information for the three months ended March 31, 2007 is unaudited but includes all adjustments (consisting only of normal recurring adjustments) that the Company considers necessary for a fair presentation of the financial position at such date and of the operating results and cash flows for the period. The results of operations for the three months ended March 31, 2007 are not necessarily indicative of results that may be expected for the entire year. The information contained in this Form 10-Q should be read in conjunction with the Company's audited financial statements, included in its Annual Report on Form 10-K as of and for the year ended December 31, 2006 filed with the Securities and Exchange Commission ( SEC ).

The balance sheet as of December 31, 2006 has been derived from our audited consolidated financial statements at that date but does not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements.

#### 3. Significant Accounting Policies

The significant accounting policies followed by the Company and its subsidiary in preparing its unaudited condensed consolidated financial statements are set forth in Note 1 to the consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2006, filed with the SEC.

#### 4. Revenue Recognition

Revenue from the sale of machines and spare parts is generally recognized upon shipment of the product or when the earnings process is complete. Rental income for the lease of equipment is recognized on a straight-line basis over the term of the lease agreement. Rental income and equipment sales are classified in revenues in the consolidated statement of operations.

The Company has adopted Securities and Exchange Commission (SEC) Staff Accounting Bulletin (SAB) No. 104, *Revenue Recognition in Financial Statements*. The Company recognizes sales at the time of shipment of the system to the customer. Management believes the customer's post-delivery acceptance provisions and installation are routine. The Company has never failed to successfully complete a system installation. With few exceptions, the Company limits its liability to the return of the equipment sold. Installation costs are predictable and insignificant to the total purchase price. The Company has demonstrated a history of customer acceptance subsequent to shipment and installation of these systems.

#### 5. Recent Accounting Pronouncements

In June 2006, the Financial Accounting Standards Board ( FASB ) issued FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes*, an interpretation of FASB Statement No. 109 ( FIN 48 ). FIN 48 clarifies the accounting for uncertainties in income taxes recognized in an enterprise's financial statements. The Interpretation requires that we determine whether it is more likely than not that a tax position will be

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sustained upon examination by the appropriate taxing authority. If a tax position meets the more likely than not recognition criteria, FIN 48 requires the tax position be measured at the largest amount of benefit greater than fifty percent (50%) likely of being realized upon ultimate settlement. This accounting standard is effective for fiscal years beginning after December 15, 2006. Effective January 1, 2007, the Company adopted FIN 48. Management does not believe the adoption of FIN 48 will have a material affect on our financial position and results of operations.

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## 6. Stock Based Compensation

In December 2004, the FASB issued SFAS No. 123R, *Share-Based Payment An Amendment of FASB Statements No. 123 and 95*, which requires all companies to measure compensation cost for all share-based payments, including employee stock options, at fair value. Generally, the approach in SFAS No. 123R is similar to the approach described in SFAS No. 123, *Accounting for Stock-Based Compensation*. However, SFAS No. 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair value over the requisite service period. Pro forma disclosure is no longer an alternative. In March 2005, the SEC issued Staff Accounting Bulletin ( SAB ) No. 107, which expressed the views of the SEC regarding the interaction between SFAS No. 123R and certain rules and regulations of the SEC. SAB No. 107 provides guidance related to the valuation of share-based payment arrangements for public companies, including assumptions such as expected volatility and expected term.

Prior to January 1, 2006, the Company applied the pro forma disclosure requirements under SFAS No. 123 and accounted for its stock-based employee compensation plans using the intrinsic value method under the recognition and measurement provisions of Accounting Principles Board Opinion ( APB ) No. 25, *Accounting for Stock Issued to Employees* and related interpretations. Effective January 1, 2006, the Company adopted the fair value recognition provisions of SFAS No. 123R, using the modified prospective transition method. Under this transition method, compensation cost recognized in the statement of operations for the year ended December 31, 2006 includes: (a) compensation cost for all share-based payments granted prior to, but not yet vested as of January 1, 2006, based on the grant-date fair value estimated in accordance with the original provisions of SFAS No. 123; and (b) compensation cost for all share-based payments granted, modified or settled subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS No. 123R. In accordance with the modified prospective transition method, results for prior periods have not been restated.

For the three month periods ended March 31, 2007 and 2006, the Company recognized stock-based employee compensation expense of \$38,000 and \$37,000, respectively, which is included in General and Administrative expense of the unaudited condensed consolidated statement of operations. The Company did not capitalize any stock-based compensation. The Company has established a valuation allowance for net deferred tax assets, accordingly, no significant tax benefit on the stock-based compensation was recorded during the three month periods ended March 31, 2007 and 2006.

On December 31, 2005, upon recommendation of its Compensation Committee, the Company approved the accelerated vesting of all of the then outstanding unvested stock options ( Options ), pursuant to the Company's 1988 Employee Stock Option Plan, to purchase 765,886 shares of common stock of the Company. The decision to accelerate the vesting of these Options was made primarily to reduce non-cash compensation expense that would have been recorded in the Company's income statement in the future periods upon the adoption of SFAS No. 123R on January 1, 2006. Of the Options eligible for acceleration, Options to purchase 480,915 shares of the Company's common stock became immediately exercisable on December 31, 2005. The remaining terms for each of the Options granted remain the same. With respect of the remaining Options to purchase 284,971 shares of the Company's common stock approved for acceleration, the option holders exercised their opt-out rights to forego acceleration.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

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The fair value of each option granted during the three months ended March 31, 2007 and 2006 is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions:

	Three Months Ended	
	March 31, 2007	2006
Dividend yield	None	None
Expected volatility	115.00	126.00
Risk-free interest rate	4.54 %	4.85 %
Expected life	5.0 years	5.0 years

Dividend yield - The Company has never declared or paid any cash dividends on any of its capital stock and does not expect to do so in the foreseeable future. Accordingly, the Company uses an expected dividend yield of zero to calculate the grant-date fair value of a stock option.

Expected volatility - The expected volatility is a measure of the amount by which the Company's stock price is expected to fluctuate during the expected term of options granted. The Company determines the expected volatility solely based upon the historical volatility of the Company's Common Stock over a period commensurate with the option's expected term. The Company does not believe that the future volatility of its Common Stock over an option's expected term is likely to differ significantly from the past.

Risk-free interest rate - The risk-free interest rate is the implied yield available on U.S. Treasury zero-coupon issues with a remaining term equal to the option's expected term on the grant date.

Expected life - The expected life of options granted represents the period of time for which the options are expected to be outstanding and is derived from the Company's historical stock option exercise experience and option expiration data.

Other reasonable assumptions about these factors could provide different estimates of fair value. Future changes in stock price volatility, life of options, interest rates, forfeitures and dividend practices, if any, may require changes in our assumptions, which could materially affect the calculation of fair value.

The weighted average fair value of stock options granted during the three months ended March 31, 2007 and 2006 was \$1.34 and \$1.29 per share, respectively. We estimate forfeitures related to options grants at an annual rate of 4% for 2007 and 9% for 2006.

Total unrecognized stock-based compensation expense related to unvested stock options, expected to be recognized over a weighted average period of 5 years, amounted to approximately \$448,000 at March 31, 2007.

The Company has three (3) shareholder approved stock option plans as follows: (i) the 1988 Stock Plan, which authorized the grant of stock rights for up to 3,500,000 shares of common stock (the 1988 Plan); (ii) the 1989 Non-Employee Director Stock Option Plan (the 1989 Plan), which authorizes the grant of nonqualified stock options for up to 500,000 shares of common stock; and (iii) the 2006 Stock Plan (the 2006 Plan) which authorizes the grant of stock rights for up to 4,000,000 shares of common stock, increased by the number of shares of common stock underlying unexercised options issued under either the 1988 Plan or the 1989 Plan (collectively referred to herein as the Prior Plans) that expired after June 20, 2006, and decreased by the number of shares of common stock issued and issuable pursuant to options outstanding under the Prior Plans. The 2006 Plan was approved by our shareholders at the Annual Meeting of Shareholders held on June 20, 2006. Upon adoption of the 2006 Plan by our shareholders, we ceased granting new options under the Prior Plans. The Prior Plans permitted, and the 2006 Plan permits, the granting of stock awards to employees, officers, and non-employee members of the Board of Directors. Options granted under the Prior Plans and the 2006 Plan permit vesting over a 3-to-5 year period and expire 5-to-10 years from the date of grant. At March 31, 2007, approximately 691,000 shares were available for future grants under the 2006 Plan and no shares were available for future grants under the Prior Plans.

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During the three months ended March 31, 2007 and 2006, the Company issued 72,232 stock options, pursuant to the 2006 Plan, and 51,000 stock options, pursuant to the Prior Plans, respectively, at exercise prices equal to or greater than the fair market value of the Company's common stock on the date of grant. During the three months ended March 31, 2007 and 2006, approximately 9,500 shares and 34,000 shares, respectively, were forfeited and approximately 88,000 shares and 136,000 shares were vested, respectively, under the 2006 Plan and Prior Plans, collectively.

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Information regarding option activity for the three months ended March 31, 2007 under the Plan is summarized below:

	Options Outstanding	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term in Years
Options outstanding as of January 1, 2007	1,561,086	\$ 1.45	6.60
Granted	72,232	1.63	8.18
Exercised	(32,450 )	1.11	5.75
Cancelled	(9,456 )	1.50	5.75
Options outstanding as of March 31, 2007	1,591,412	1.46	6.10
Options exercisable as of March 31, 2007	1,367,686	1.37	5.95

On November 17, 2004, the Company entered into a general financial and advisory services agreement with Maxim Group LLC pursuant to which Maxim Group LLC was granted, on April, 1, 2005, a three-year warrant to purchase 100,000 shares of the Company's common stock at an exercise price of \$3.20 per share. These warrants were issued pursuant to the exemption to the registration requirements of the Securities Act of 1933, as amended, available under Section 4(2) of that Act. Maxim Group LLC was an accredited investor pursuant to the rules of the Securities and Exchange Commission. The Company filed a registration statement on Form SB-2, which was declared effective on June 5, 2006, for purposes of registering the shares of common stock underlying the warrants. Maxim Group LLC has waived its rights to receive, based upon the date that the registration statement on Form SB-2 was declared effective, an additional warrant to purchase shares of the Company's common stock. The warrants may be exercised in whole or in part at any time on or prior to April 1, 2008. In addition, the warrants provide for certain adjustments to the exercise price upon the issuance by the Company of certain securities at a price below \$3.20. The estimated value of these warrants of \$119,000 was amortized in full prior to January 1, 2006.

### 7. Inventories

Inventories consist of the following:

(in thousands)	March 31, 2007	December 31, 2006
Raw materials	\$ 2,513	\$ 1,957
Work in progress	226	217
Finished goods	106	51
	2,845	2,225
Less: provision for excess inventory	(206 )	(200 )
Total inventories	\$ 2,639	\$ 2,025

## 8. Property, Plant and Equipment

Property, plant and equipment consists of the following:

(in thousands)	March 31, 2007	December 31, 2006
Furniture, fixtures and office equipment	\$ 552	\$ 546
Machinery, equipment and tooling	452	435
Leasehold improvements	93	94
	1,097	1,075
Less: accumulated depreciation and amortization	(809)	(772)
	\$ 288	\$ 303

For the three months ended March 31, 2007 and 2006, depreciation expense was approximately \$37,000 and \$45,000, respectively.

## 9. Accrued Expenses

Accrued expenses consist of the following:

(in thousands)	March 31, 2007	December 31, 2006
Accrued expenses	\$ 247	\$ 240
Accrued wages and vacation pay	197	256
Accrued commissions	154	248
Accrued warranty	76	74
	\$ 674	\$ 818

## 10. Earnings Per Share

Basic net (loss) income per common share was determined by dividing net (loss) income applicable to common stockholders by the weighted average number of common shares outstanding during the period. Diluted net (loss) 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	
	March 31, 2007	2006
Shares for computation of basic net (loss) income per share	10,123,084	9,952,837
Effect of dilutive stock options and warrants		637,264
Shares for computation of diluted net (loss) income per share	10,123,084	10,590,101

## 11. Industry Segment, Geographic and Enterprise-Wide Information

SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information*, requires companies to report selected information about operating segments, as well as enterprise-wide disclosures about products, services, geographic areas and major customers. Operating segments are determined based on the way management organizes its business for making operating decisions and assessing performance. The Company's chief decision-maker, as defined under SFAS No. 131, is the chairman and chief executive officer. The Company has determined that it conducts its operations in one business segment: the development, manufacture, marketing and sale of process and formulation equipment. The Company's sales are primarily to companies with processing needs in the chemical, pharmaceutical, food, cosmetic, and biotechnology industries. The Company has less than 1% of total assets in foreign countries. As a result, the financial information disclosed herein represents all of the material financial information related to the Company's principal operating segment.



Approximate sales to customers by geographic markets, are as follows:

(in thousands)	Three Months Ended	
	March 31,	
	2007	2006
North America	\$ 1,707	\$ 1,489
Asia	430	1,074
Europe	664	588
	\$ 2,801	\$ 3,151

The users of the Company's systems are in various industries, including the chemical, pharmaceuticals, food, cosmetic and biotechnology industries. Mizuho Industrial Co. Ltd. (Mizuho) and Teva Pharmaceuticals Industries Ltd. (Teva) and its wholly-owned subsidiary accounted for 7.0% and 17.5%, respectively, of the Company's revenues in the three months ended March 31, 2007; and 17.3% and 15.7%, respectively, of the Company's revenues in the three months ended March 31, 2006. Mizuho, the Company's Japanese distributor of Microfluidizer processor equipment and spare parts, resells the Company's equipment to numerous end-users in Japan, none of which individually represents 10% or more of the Company's revenues. Two customers accounted for 17.0% and 11.3%, respectively, of the trade accounts receivable as of March 31, 2007. Two customers accounted for 12.9% and 11.9%, respectively, of the trade accounts receivable as of March 31, 2006. A reduction or delay in orders from any of the Company's significant customers could have a material adverse effect on the Company's results of operations.

The Company sells its products in various countries. The Company's sales in North America, including the United States, Canada, and Mexico, accounted for approximately 60.9% of the Company's revenues in the three months ended March 31, 2007 and approximately 47.3% of the Company's revenues in three months ended March 31, 2006. Sales to the rest of the world accounted for approximately 39.1% of the Company's revenues in the three months ended March 31, 2007 and approximately 52.7% of the Company's revenues in the three months ended March 31, 2006. Sales through the Company's exclusive distributors in Japan accounted for approximately 7.0% of the Company's revenues in the three months ended March 31, 2007 and 17.3% of the Company's revenues in the three months ended March 31, 2006. Sales through the Company's representative in Korea accounted for approximately 4.2% of the Company's revenues in the three months ended March 31, 2007 and 9.8% of the Company's revenues in the three months ended March 31, 2006.

## 12. Stockholders Equity

During the three months ended March 31, 2007 and 2006, the Company issued 32,450 and 33,025 shares, respectively, of common stock as a result of the exercise of options by employees and directors, generating cash proceeds of approximately \$36,000 and \$12,000, respectively. During the three months ended March 31, 2007 and 2006, the Company issued 15,353 and 14,288 shares, respectively, of common stock as a result of the purchase of shares under the Employee Stock Purchase Plan, generating cash proceeds of approximately \$18,000 and \$16,000, respectively.

## 13. Credit Facility

On March 1, 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 was comprised of (i) a \$1,000,000 demand revolving line of credit (the Revolving Credit Line), and (ii) a \$1,000,000 four year term promissory note (the Term Loan). The Revolving Credit Line obtains advances thereunder bearing interest at a rate equal to the prime rate (8.25% at March 31, 2007). All borrowings under the Revolving Credit Line were evidenced by a \$1,000,000 demand promissory note (the Revolving Note), and (ii) a \$1,000,000 term promissory note, amortized over a four year period but having a maturity date of March 3, 2008 and bearing interest at a rate equal to 5.67%. Loans under the Credit Facility are secured by a collateral pledge to the Lender of substantially all the assets of the Company and its subsidiaries. The Company's Microfluidics Corporation subsidiary guaranteed the Company's obligations to the Lender under the Credit Facility. The Company also pledged to the Lender all shares of Microfluidics

Corporation owned by the Company. The Company is required to meet two covenants on an annual (calendar) basis as of December 31 of a given year as follows: (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. On November 20, 2006 the Company and the lender agreed to a modification of the definition of the Debt Service Coverage Ratio. The purpose of the modification was to eliminate significant non-cash items, such as stock-based employee compensation expense, from affecting the ratio. At December 31, 2006, the Company was in compliance with the debt covenants.

Due to the subjective acceleration clause and the lock-box arrangement with the Lender, any amount outstanding on the Revolving Credit Line would be classified as a current liability in the condensed consolidated balance sheet. As of March 31, 2007, there was no outstanding balance on the Revolving Credit Line. As of March 31, 2007, the balance outstanding on the Term Loan was \$250,000.

#### 14. Long-Term Debt

Long-term debt as of the following dates consisted of:

(in thousands)	March 31, 2007	December 31, 2006
Term note	\$ 250	\$ 312
Capital leases payable	10	12
	260	324
Less: current portion	(259)	(259)
Long-term debt, net of current portion	\$ 1	\$ 65

Obligations under capital lease consist of three (3) capitalized leases with bargain purchase options that the Company is obligated to pay over a two (2) year period.

#### 15. Income Taxes

The Company provides for income taxes at the end of each interim period based on the estimated effective tax rate for the full fiscal year. Cumulative adjustments to the tax provision are recorded in the interim period in which a change in the estimated annual effective rate is determined. The effective tax rate calculation includes determining both the current and deferred income tax expense as well as accounting for the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. The future tax consequences attributable to these differences result in deferred tax assets and liabilities, which are included on our consolidated balance sheets. We must assess the recoverability of the deferred tax assets by considering whether it is more likely than not that some portion or all of the deferred tax assets will be realized. To the extent we believe that recovery does not meet this more likely than not standard as required in SFAS No. 109, *Accounting for Income Taxes*, we must establish a valuation allowance. Changes in the valuation allowance are reflected in determining the effective tax rate for the year.



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

### Future Operating Results

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, maintain, and/or increase revenue growth, and/or operating profitability, and to achieve, maintain, and/or increase net operating 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, (ii) whether the timing of orders will significantly affect quarter to quarter revenues and resulting net income results for a particular quarter, which may cause increased volatility in the Company's stock price, (iii) 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, (iv) whether the Company's technology will be adopted by customers as a means of producing MMR (defined below) innovative materials in large quantities, (v) whether the Company is able to deploy prototype MMR placements and then manufacture and introduce commercial production MMR equipment, (vi) whether the Company will achieve a greater proportion of its sales in the future through the sale of advanced processor production systems, and (vii) as well as those risks set forth in Item 1a, Risk Factors, in the Company's Annual Report on Form 10K for the year ended December 31, 2006. The Company assumes no responsibility to update any forward-looking statements as a result of new information, future events, or otherwise.

### Overview

MFIC Corporation (MFIC or the Company) has, for over 20 years, specialized in manufacturing and marketing a broad line of high shear fluid processing systems used in numerous applications in the chemical, pharmaceutical, biotech, food and cosmetics industries.

MFIC's line of high shear fluid processor equipment, marketed under the Company's Microfluidizer trademark and trade name, process premixed formulations to produce small uniform structures, usually of the submicron and nanoscale size (commonly defined as particles having dimensions less than 100 nanometers) including nanostructures, microemulsions and nanosuspensions. The equipment produces commercial quantities of such materials important to producers of pharmaceuticals, coatings and other products. Further, the Company guarantees scaleup of formulations and results on its processor equipment from 10 milliliters per minute on its laboratory and bench top models to more than 15 gallons per minute on its pilot and production models.

The Company's technology embodied within its Microfluidizer high shear fluid processor is used for formulation of products that are normally very difficult to mix and stabilize. Microfluidizer processors through process intensification allow manufacturers in the chemical, pharmaceutical, cosmetic, and food processing industries to produce higher quality products with better characteristics on a more consistent basis than with other blending, mixing or homogenizing techniques. Additionally, the equipment is used for cell disruption to harvest the cultivated contents of bacterial, yeast, mammalian and/or plant cells and for liposomal encapsulation of materials for the cosmetics and biotech/biopharma industries.

The Company has begun to take steps toward commercializing its proprietary equipment, processes and technology for the continuous production of precipitated submicron or nanoscale particles by interaction of discrete streams of reacting materials, through a novel adaptation of its Microfluidizer processor equipment that permits the mixing of, and reactions between, streams of different solutions at high pressures. The Company refers to this technology as a Multiple Stream High Pressure Mixer/Reactor or Microfluidics Reaction technology (MMR). In August 1997, the Company filed a patent application for the device and its processes with the United States Patent and Trademark Office (USPTO), and filed a Patent Cooperation Treaty (PCT) application on May 5, 1998. In July and November 2000, the USPTO issued to the Company notices of allowances of utility patent claims regarding the MMR and the use thereof. On September 18, 2002, the European Patent Office advised the Company it would grant its MMR patent substantially as applied for, including its device and process claims. The Company has gained national entry of the patent in France, Germany, Italy, The Netherlands, and the United Kingdom. The Company is still prosecuting the allowance of the patent in Canada. The Company's management believes that future commercialization and growth of nanotechnology may be, in large part, enabled by the manufacturing capability of the Company's materials processor and MMR equipment.



The Company was incorporated in Delaware in 1983. The Company, formerly named Biotechnology Development Corporation, changed its name effective June 8, 1993 to Microfluidics International Corporation, and again changed its name effective July 12, 1999 to MFIC Corporation. From August, 1998 until its sale on February 9, 2004, the Company also operated another division, known as the Morehouse-COWLES Division, which manufactured and sold a broad line of mechanical fluid materials processing systems used for a variety of dispersing, milling, and mixing applications across a variety of industries. The Company's principal executive offices are located at 30 Ossipee Road, in Newton, Massachusetts 02464-9101 and its telephone number is (617) 969-5452.

### *Critical Accounting Policies*

Our significant accounting policies are summarized in Note 1 to our consolidated financial statements included in Item 8 of our Annual Report on Form 10-K for the period ended December 31, 2006. However, certain of our accounting policies require the application of significant judgment by our management, and such judgments are reflected in the amounts reported in our consolidated financial statements. In applying these policies, our management uses its judgment to determine the appropriate assumptions to be used in the determination of estimates. Those estimates are based on our historical experience, terms of existing contracts, our observance of market trends, information provided by our strategic partners and information available from other outside sources, as appropriate. Actual results may differ significantly from the estimates contained in our consolidated financial statements. There has been no change to our critical accounting policies through the quarter ended March 31, 2007. Our critical accounting policies are as follows:

- *Revenue Recognition.* The Company recognizes revenue in accordance with Staff Accounting Bulletin (SAB) No. 104, *Revenue Recognition in Financial Statements*. The Company recognizes revenue from product sales upon shipment, provided that a purchase order has been received or a contract has been executed, there are no uncertainties regarding customer acceptance, the sales price is fixed or determinable and collection is deemed probable. If uncertainties regarding customer acceptance exist, the Company recognizes revenue when those uncertainties are resolved and title has been transferred to the customer. Amounts collected or billed prior to satisfying the above revenue recognition criteria are recorded as deferred revenue.
- *Accounts Receivable Valuation.* We perform various analyses to evaluate accounts receivable balances and record an allowance for bad debts based on the estimated collectibility of the accounts such that the amounts reflect estimated net realizable value. If actual uncollectible amounts significantly exceed the estimated allowance, the Company's operating results would be significantly and adversely affected.
- *Inventory Valuation.* We value our inventory at the lower of our actual cost or the current estimated market value. We regularly review inventory quantities on hand and inventory commitments with suppliers and record a provision for excess and obsolete inventory based primarily on our historical usage for the prior twenty-four month period. Although we make every effort to ensure the accuracy of our forecasts of future product demand, any significant unanticipated change in demand or technological developments could have a significant impact on the value of our inventory and our reported operating results.
- *Product Warranties.* Our products are generally sold with a twelve month warranty provision that requires us to remedy deficiencies in quality or performance of our products at no cost to our customers only after it has been determined that the cause of the deficiency is not due to the actions of the machine operator or product used in the machine. The Company has established a policy for replacing parts that wear out or break prematurely. The policy called for replacing the parts or repairing a machine within one year of the sale. Commencing in May of 2006, the Company altered its warranty by limiting to a period of 90 days its warranty coverage on certain critical wear items. The Company is now selling more advanced processor production systems than past years that may require more costly parts. As of March 31, 2007 the Company has a reserve balance for product warranties in the approximate amount of \$76,000, which we believe is adequate.



## Results of Operations

### Three Months Ended March 31, 2007 vs. March 31, 2006

#### *Revenues*

Total revenues for the three months ended March 31, 2007 were approximately \$2,801,000, as compared to revenues of \$3,151,000 for the comparable prior year period, a decrease of approximately \$350,000, or 11.1%.

North American sales for the three months ended March 31, 2007 increased to approximately \$1,707,000, a 14.6% increase, as compared to sales of approximately \$1,489,000 for the three months ended March 31, 2006. The increase in North American sales was principally due to an increase in the sale of machines of approximately \$129,000 and an increase in the sale of spare parts of approximately \$89,000. Foreign sales were approximately \$1,094,000 for the three months ended March 31, 2007, compared to \$1,662,000 for the three months ended March 31, 2006, a decrease of \$568,000, or 34.2%. The decrease in foreign sales was principally due to a decrease in the sale of machines of approximately \$295,000 and a decrease in the sale of spare parts of approximately \$273,000. The overall decrease in sales was principally due to the delay in shipment of two (2) production units and four (4) smaller units until the second quarter of fiscal 2007. The total value of these units represent approximately \$820,000 in sales.

#### *Cost of Goods Sold*

Cost of goods sold for the three months ended March 31, 2007 was approximately \$1,194,000, or 42.6% of revenue, compared to \$1,447,000, or 45.9% of revenue, for the comparable prior year period. The decrease in cost of goods sold in absolute dollars for the three months ended March 31, 2007, reflects the decrease in sales. The Company's major product lines have different profit margins, as well as multiple profit margins within each product line. The decrease in cost of goods sold as a percentage of sales is primarily attributable to i) the delay in the shipment of two (2) production units having a lower gross profit margin than laboratory units, ii) a decrease in sales to our distributor in Japan who purchases machines and spare parts from the Company at a discount, and iii) an increase in the average sales price per unit compared to the three months ended March 31, 2006.

#### *Research and Development Expenses*

Research and development expenses for the three months ended March 31, 2007 were approximately \$536,000, compared to \$397,000 for the comparable prior year period, an increase of approximately \$139,000, or 35.0%. The increase in research and development expenses was primarily due to planned increases in payroll and related costs of approximately \$69,000, and development costs related to product enhancements of approximately \$56,000.

#### *Selling Expenses*

Selling expenses for the three months ended March 31, 2007 were approximately \$824,000, compared to \$616,000 for the comparable prior year period, an increase of \$208,000, or 33.8%. The increase is primarily attributable to a planned increase in payroll and related costs of approximately \$95,000, an increase in commission expense of approximately \$49,000 resulting from higher North American and European sales of products having higher commission rates, and an increase in occupancy costs of approximately \$21,000.

#### *General and Administrative Expenses*

General and administrative expenses for the three months ended March 31, 2007, were approximately \$677,000, compared to \$622,000 for the comparable prior year period, an increase of \$55,000, or 8.8%. The increase in general and administrative expenses is principally due to i) an increase in consultant costs primarily related to compliance with Sarbanes Oxley of approximately \$44,000, ii) an increase in planned payroll and related costs of approximately \$27,000, and iii) an increase in public relations costs of approximately \$17,000. These increases were partially offset by a decrease in professional fees of approximately \$38,000 due primarily to the absence of costs related to filing of a registration statement which were incurred during the three months ended March 31, 2006.

#### *Interest Income and Expense*

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Interest expense for the three months ended March 31, 2007 was approximately \$8,000 compared to \$9,000 for the comparable prior year period, a decrease of approximately \$1,000 or 11.1%.

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Interest income for the three months ended March 31, 2007 was approximately \$21,000 compared to \$10,000 for the comparable prior year period, an increase of \$11,000 or 110.0%. The increase is due to an increase in cash available for investment, principally from the collection of trade receivables.

#### *Income Tax Provision*

For the three months ended March 31, 2007, the Company recognized no tax provision due to the loss from operations. For the three months ended March 31, 2006, the Company recognized a tax provision of \$27,000 at the Company's expected annualized effective tax rate of approximately 40%.

#### **Liquidity and Capital Resources**

As of March 31, 2007, the Company had approximately \$1,956,000 in cash and cash equivalents, compared to \$1,860,000 as of December 31, 2006. The Company generated cash of \$129,000 and \$72,000 from operations for the three months ended March 31, 2007 and 2006, respectively. For the three months ended March 31, 2007, the Company generated cash by a decrease in trade accounts receivables, partially offset by the loss from operations, an increase in inventories, prepaid expenses and other assets, and a decrease in current liabilities. The increase in inventories was primarily a result of the delay in shipment of the previously discussed units. For the three months ended March 31, 2006, the Company's principal operating cash requirements were to fund its increase in inventory due to production requirements for orders, other prepaid and current assets; offset by its income from operations, decrease in current liabilities, and a decrease in trade receivables.

The Company used cash of \$22,000 and \$14,000 for investing activities for the three months ended March 31, 2007 and 2006, respectively. Net cash used by investing activities for the three months ended March 31, 2007 and 2006 were for the purchase of capital equipment.

The Company used cash of \$11,000 and \$44,000 for financing activities for the three months ended March 31, 2007 and 2006, respectively. Net cash used for financing activities for the three months ended March 31, 2007 and 2006 were for principal payments on the term loan and capital equipment loans, partially offset by proceeds from the issuance of common stock for options exercised and proceeds from stock issued from the employee stock purchase plan.

As of March 31, 2007, 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 line and a \$1,000,000 four-year term loan facility. As of March 31, 2007, there was no balance due under its revolving credit line and a balance of \$250,000 under its term loan facility.

The Company's contractual obligations as of March 31, 2007 are as follows:

(in thousands)	Total as of March 31, 2007	Payable During Remainder of 2007	Payable in 2008	Payable in 2009
Term note	\$ 250	\$ 188	\$ 62	\$
Operating leases	1,147	313	417	417
Capital leases	10	7	3	
	\$ 1,407	\$ 508	\$ 482	\$ 417

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.

#### **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 has approximately \$10,000 of variable rate borrowings outstanding under an equipment loan. A hypothetical 10% adverse change in interest rates for this variable rate debt would have no material effect on the Company's earnings and cash flows on a quarterly basis.





**Item 4.**                    Controls and Procedures

The Company's management, including the President and Chief Operating Officer and Controller, conducted an evaluation of the Company's disclosure controls and procedures as of March 31, 2007. Based on this evaluation, the President and Controller have determined that such controls and procedures are effective to ensure that information relating to the Company, including its consolidated subsidiaries, required to be disclosed in reports that it files or submits under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission. There have been no changes in the Company's internal controls over financial reporting that were identified during the evaluation that occurred during the Company's first fiscal quarter of 2007 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

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## **PART II. OTHER INFORMATION**

### **Item 1. Legal Proceedings**

The Company is not a party to any material legal proceedings.

### **Item 1A. Risk Factors**

You should carefully consider the risks and uncertainties described below and the other information in this filing before making an investment decision regarding a purchase of our common stock. If any of these risks or uncertainties occurs, our business, financial condition or operating results could be materially harmed. In that case the trading price of our common stock could decline and you could lose all or part of your investment. The risks and uncertainties described below are not the only ones we may face. The Company believes that this filing contains forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are subject to regulatory risks and clinical uncertainties. Such statements are based on management's current expectations and are subject to facts that could cause results to differ materially from the forward-looking statements. For further information you are encouraged to review MFIC Corporation's filings with the Securities and Exchange Commission, including its Annual Report on Form 10-K for the period ended December 31, 2006. The Company assumes no continuing obligation to update the information contained in this filing.

#### ***We face intense competition in many of our markets.***

Our Microfluidizer product line of high-shear fluid processors has direct competition in its major markets, including its most important markets in the pharmaceutical, biotechnology and coatings/chemical industries.

In addition, the Company faces, and will continue to face, intense competition from other companies who manufacture and sell fluid processing systems used in particle size reduction, mixing, milling, dispersing, homogenizing, cell disruption and liposomal encapsulation applications. The Company expects competition to intensify in the fluid processing systems field as technical advances are made and become more widely known, and such increased competition may have a material adverse effect upon our business.

*We are subject to significant competition from companies that are pursuing technologies and products that are similar to our technology and products.*

Our future success will depend in large part on the Company's ability to maintain a technologically superior product line. Rapid technological development by the Company or others may result in our products or technologies becoming obsolete before the Company recovers the expenses the Company incurs in connection with their development. Products offered by the Company could be made obsolete by less expensive or more effective technologies. There can be no assurance that the Company will be able to make the enhancements to our technology necessary to compete successfully with newly emerging technologies.

#### ***We rely on suppliers, vendors and subcontractors.***

The Company does not manufacture most of the components contained in its Microfluidizer materials processor equipment but rather subcontracts the manufacture of most components. Based on quality, price, and performance, the Company has selected certain suppliers, vendors, and subcontractors that provide parts, subassemblies, machining and finishing of components that are assembled by the Company's production staff. Although the Company has identified alternate sources for such parts, components, machining and finishing, there can be no assurance that a transition to such alternative sources would not entail quality assurance and quality control difficulties, on-time delivery problems, or other transitional problems, any or all of which could have an impact on the Company's production of equipment and could have a material adverse effect on the Company's business, financial condition, or results of operations.

#### ***Our customer base is concentrated, and a substantial portion of our sales are provided by just three customers.***

Three customers accounted for an aggregate of 29.1% of the Company's revenues for the three months ended March 31, 2007. Historically, our largest single customer has been the Japanese distributor of our Microfluidizer processor equipment and spare parts, which accounted for 7.0% of our revenues for the three months ended March 31, 2007 and 17.3% of our revenues for the three months ended March 31, 2006. Our next historically largest customer accounted for 17.5% of our revenues for the three months ended March 31, 2007, and 15.7% of our revenues for the three months ended March 31, 2006. A third customer is a distributor in Canada who accounted for 4.6% of our revenues for the three months ended March 31, 2007 and 3.9% of our revenues for the three months ended March 31, 2006. Although we are unaware of any plans by any of

these customers to reduce their business

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with us, the loss of any one or more of these customers would be highly problematic for us, and would likely cause a material change in our near-term, and possibly long-term, financial prospects. In addition, a reduction or delay in orders from any of these customers could have a material adverse effect on the Company's results of operations.

As of March 31, 2007, 17.0% and 11.3% of the Company's trade accounts receivable were due from two customers, respectively, both of which are long-established customers of the Company and neither of which have presented credit issues in the past. Nevertheless, if either or both of these customers were to default on their obligations to us such default would likely cause a material change in our near-term, and possibly long-term, financial prospects.

*Many of our current and potential customers are from the pharmaceutical and biotechnology industries and are subject to risks faced by those industries.*

We derive a substantial portion of our revenues from pharmaceutical and biotechnology companies. We expect that pharmaceutical and biotechnology companies will continue to be one of our major sources of revenues for the foreseeable future. As a result, we are subject to risks and uncertainties that affect the pharmaceutical and biotechnology industries, such as pricing pressures as third-party payers continue challenging the pricing of medical products and services, government regulation, ongoing consolidation and uncertainty of technological change, and to reductions and delays in research and development expenditures by companies in these industries.

In particular, the biotechnology industry has been faced with declining market capitalization and a difficult capital-raising and financing environment. If biotechnology companies are unable to obtain the financing necessary to purchase our products, our business and results of operations could be materially adversely affected. As it relates to both the biotechnology and pharmaceutical industries, many companies have significant patents that have expired or are about to expire, which could result in reduced revenues for those companies. If pharmaceutical companies suffer reduced revenues as a result of these patent expirations, they may be unable to purchase our products, and our business and results of operations could be materially adversely affected.

In addition, we are dependent, both directly and indirectly, upon general health care spending patterns, particularly in the research and development budgets of the pharmaceutical and biotechnology industries, as well as upon the financial condition and purchasing patterns of various governments and government agencies. Many of our customers, including universities, government research laboratories, private foundations and other institutions, obtain funding for the purchase of products from grants by governments or government agencies. There exists the risk of potential decrease in the level of governmental spending allocated to scientific and medical research, which could substantially reduce or even eliminate these grants. If government funding necessary to purchase our products were to decrease, our business and results of operations could be materially adversely affected.

*We have only one manufacturing facility.*

The Company has only one manufacturing facility located in Newton, Massachusetts. Our success depends on the efficient and uninterrupted operation of that facility. Whether as a result of a fire, natural disaster, or other cause, any disruption to our manufacturing operations would significantly impair our ability to operate our business on a day-to-day basis. Although the Company maintains business interruption insurance, our business would be injured by any extended interruption of the operations of our manufacturing facility. Further, although the Company carries property and business interruption insurance, our coverage may not be adequate to compensate us for all losses that may occur. This insurance may not continue to be available to the Company. Finally, if the Company seeks to replicate our manufacturing operations at another location, the Company will face a number of technical as well as financial challenges, which the Company may not be able to address successfully.

*We rely on our trade secrets to protect our technology.*

The Company's Microfluidizer processor equipment method patent expired on March 13, 2007 and its device patent expired on August 6, 2002. In addition, the Company has neither sought patent protection for its Microfluidizer interaction chamber nor trademark protection of its Microfluidizer trade name in any country other than the United States. As such, its proprietary rights are not subject to the protection of patent or trademark laws of foreign countries where the Company's equipment is sold. Although the Company has made many alterations, improvements and advances to its equipment over the years and continues to make such advancements with such modification and innovations having been and being treated by the Company as trade secrets, the lack or limited nature of our patent protections will expose the Company to potential competition that would likely have a material adverse effect on the Company.

In order to afford additional protection to its intellectual property, in November 2006 the Company adopted a



provision as part of its standard terms and conditions of purchase. Such provision is an acknowledgement and agreement by a purchaser of the Company's merchandise and equipment (the Equipment) that certain proprietary intellectual property of the Company, including the design, operation and use of the Equipment's interaction chamber or reaction chamber constitutes the Company's trade secret information (the Trade Secret Information). Such purchaser agrees that it will not (and will not aid, assist or permit any other person to): (i) tamper with the Equipment, (ii) utilize imaging equipment or other means to reveal the inner structures and/or designs of the Equipment, (iii) attempt to disassemble or reverse engineer the Equipment, including specifically the interaction or reaction chamber, or (iv) otherwise attempt to discover and/or utilize any of the Trade Secret Information. A purchaser is further prohibited from disclosing (or aiding, assisting or permitting third parties to disclose) any information which the purchaser may learn or discover about the materials and methods of construction, design, assembly, functioning, geometries, measurements and tolerances of the internal components of the Equipment. In the event of a violation of any of the above prohibitions, the purchaser has stipulated that it is liable to the Company and/or its subsidiary, Microfluidics Corporation, for any and all actual and potential, direct and indirect, incidental and consequential damages, including, without limitation, resulting lost profits, and all available equitable relief. The Company has made such provision applicable to purchasers, renters and subsidized users of the Equipment (Users). Despite the protection afforded by such provision, there can be no assurance that the Company will be able to monitor compliance by all Users or that if the Company becomes aware of a violation that it will be able to enforce its rights regarding such violation.

To protect its other proprietary rights, the Company relies on a combination of trademark laws, trade secrets, confidentiality agreements, contractual provisions and technical means. In the event of a breach of these protections, there can be no assurance that these measures will prove to have been adequate to protect the Company's interests, or that the Company will have sufficient resources to prosecute or prevail in an action against a third party. The Company maintains confidentiality and non-competition agreements with those parties to whom it discloses non-public technical information relating to its equipment. The Company believes that enforcement of the provisions of such agreements should adequately protect the Company's proprietary information. However, in the event of a material breach of such agreements, certain of the Company's valuable intellectual property may be disclosed to third parties (including competitors). In such event, despite provisions for equitable relief and damages in the event of such breaches, the Company may suffer competitively and be materially and negatively impacted as a result of such unauthorized disclosure.

***We must continue our research and development efforts to maintain our competitiveness.***

The Company's research and development efforts are focused on: (i) developing new processing applications for the process industries and further enhancing the functionality, reliability and performance of existing products, and development of new equipment models, and (ii) development of the Multiple-Stream High Pressure Mixer/Reactor (MMR) by: (a) working with customers who assist in the development of the system with both application knowledge and financial support, and (b) internal development program relating to interaction chamber design and creation of a variety of nanomaterials. There can be no assurance that the Company will be able to meet the enhancement challenges posed by applications of its core Microfluidizer processor business. Likewise there can be no assurance that the Company will be able to design and manufacture systems for its MMR applications that will deliver the desired result for specific applications. The inability to meet the enhancement challenges or design and manufacture systems for its MMR applications may have a material adverse effect on the Company.

***Our ability to continue planned operations is dependent upon access to financing under a credit facility with our commercial lender.***

The Company's credit facility is comprised of a revolving line of credit in the maximum principal amount of \$1,000,000 and a term loan note in a face amount of \$1,000,000 under which the Company currently owed approximately \$250,000 at March 31, 2007. Under the terms of the credit facility, the Company is subject to a number of restrictions that impact the Company's use of funds. The Company is limited in ability to acquire property and pay dividends, and it must maintain certain financial covenants as defined. The Company's ability to operate is potentially impacted by the Company's ability to achieve future compliance with the financial covenants of the credit facility. The obligations due the lender are essentially demand obligations and under certain circumstances, including the lender's determination that the Company's prospect of payment of all or any part of the obligations due the lender are impaired, the lender may declare a default and accelerate payment of the obligations. 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. In the event of a breach of the covenants or events of default under the credit facility there can be no assurance that the Company can obtain a waiver of such breach or default from its lender. Likewise, in the event of that the Company cannot effect a cure or obtain a waiver of a breach or default under the credit

facility there can be no assurance either that the lender will not terminate the credit facility or that the Company will be able to obtain alternate financing, or that it can obtain alternate financing on terms that are favorable to the Company. Either event could have a material adverse effect on the Company's business, financial condition, or results of operations.

Pursuant to its agreements with the lender, the Company may not issue, create or incur additional debt in excess of its obligations to lender, except in the ordinary course of business.

There can be no assurance that 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 comply with the covenants and terms of the Company's loan agreement with its lender.

***We may be subjected to increased government regulation which could affect our ability to sell our products outside of the United States.***

Although the Company has not historically been significantly affected by any United States governmental restrictions on technology transfer, import, export and customs regulations and other present local, state or federal regulation, any future legislation or administrative action restricting our ability to sell our products to certain countries outside the United States could significantly affect our ability to make certain foreign sales. The extent of adverse governmental regulation, which might result from future legislation or administrative action, cannot be accurately predicted. In particular, the USA Patriot Act and other governmental regulations may impose export restrictions on sale of equipment or transfer of technology to certain countries or groups. There can be no assurance that sale of the Company's equipment will not be impacted by any such legislation or designation. Depending upon which countries and sales may be designated for trade restriction such action could have a material adverse effect on the Company's business, financial condition, or results of operations. Also, certain agreements that may be entered into by the Company involving exclusive license rights may also be subject to national or supranational antitrust regulatory control, the effect of which cannot be predicted.

***We rely on our key management and technical personnel.***

The Company's continued operation, innovation and growth are to some significant degree reliant on the continued services of its key executive officers and leading technical personnel. While the Company entered into employment contracts with its executive officers on April 26, 2007, the Company does not maintain employment contracts with its other members of key management or with its leading technical personnel. There can be no assurance that the Company will be able to retain such key management and technical personnel if employment is offered by other companies better able to pay higher compensation, provide more and better benefits, or willing to offer longer term job security by entering into employment contracts with the Company's employees, whether or not they currently have employment agreements with the Company. Further, there can be no assurance that key executive officers and leading technical personnel will not leave the Company's employment, or either die or become disabled to an extent that they cannot render their services to the Company. On April 6, 2007, Mr. Irwin Gruverman resigned as the Company's Chief Executive Officer. Following Mr. Gruverman's resignation, the Company commenced a search to fill this vacated position. Though the Company believes that it can identify and recruit replacement key management and technical personnel, there can be no assurance as to such availability, the length of time required to obtain such replacement management, including a new Chief Executive Officer, and technical personnel, the salary level that may have to be paid to obtain their respective services, or the impact on operations that may be experienced through the interim absence of such key management and technical personnel. The loss of key management or leading technical personnel could, therefore, have a material adverse effect on the Company's business, financial condition, or results of operations.

***Our stock is listed on the OTC Bulletin Board and our stockholders may have limited liquidity.***

The Company's common stock is quoted on the OTC Bulletin Board, which provides significantly less liquidity than a securities exchange (such as the American or New York Stock Exchanges or The Nasdaq Stock Market LLC). In general, over the past two years, fewer than 100,000 shares of our common stock have traded on a daily basis. Management expects, when and if the Company qualifies, to seek a listing on a national securities exchange, which may increase stockholders liquidity. There is uncertainty that the Company will ever be accepted for a listing on a securities exchange.

*Our quarterly revenues and stock performance are variable.*

The timing of orders and subsequent shipment will significantly affect quarterly revenues and resulting net income results for particular quarters which may cause increased volatility in both the Company's revenues and stock price.

*We allow our customers to lease some of our products and those leases may not turn into sales.*

We sometimes lease our products to our customers prior to or instead of selling a product to a customer. The Company's products are expensive, and customers frequently want to test out a product's capabilities prior to purchase. We have had reasonable success in converting leases into subsequent sales of the same or a newer product, however there is no guarantee that we will continue to be able to convert any of our leases into sales.

*We may be subject to product liability claims from our customers or by persons harmed by our customers' products.*

The Company maintains what it deems to be reasonable levels of product liability coverage through insurance policies with a reasonably small deductible. Nonetheless, inasmuch as the Company sells its equipment to a number of customers who make pharmaceutical preparations and consumer cosmetics, there can be no assurance that if a consumer of end products is injured or dies from such product that a suit by an injured party (or a class of similar situated plaintiffs) will not sue the Company as well as the maker of the drug or cosmetic. Although the Company may have no control over the manufacture of end-products made on its equipments, it may not be able to bar a plaintiff's claims against all parties whose products and equipment were involved in the manufacturing process under a variety of legal theories of liability. The Company may be required to present a vigorous and costly defense if it cannot be dismissed from such an action. The cost of such legal defense may significantly impact the cash flow of the Company.

*Our international business operations expose us to a variety of risks.*

For the three months ended March 31, 2007 and 2006, shipments outside of North America accounted for approximately 39.1% and 52.7%, respectively, of our net revenues in those periods. In particular, approximately 7.0% and 17.3% of our net revenues in the three months ended March 31, 2007 and 2006, respectively, resulted from sales to Japan and approximately 4.2% and 5.5% of those net revenues resulted from sales to Korea in the three months ended March 31, 2007 and 2006, respectively. In addition, approximately 23.7% and 18.7% of our net revenues resulted from sales to Europe in the three months ended March 31, 2007 and 2006, respectively. We expect that shipments outside of North America will continue to account for a significant portion of our total net product revenues.

We attempt to reduce some of our risk related to sales and shipments outside of the United States by requiring that our contracts generally be paid in United States Dollars. Nevertheless, a downturn in the economies of Japan, Korea or Europe might reduce investment in new technology or products while a weakening of foreign currency against the United States Dollar would make our products more expensive, each of which could have a substantial impact on our operating results.

In addition, a significant portion of our total net revenue is subject to the risks associated with shipping to foreign markets in general, including unexpected changes in legal and regulatory requirements; changes in tariffs; political and economic instability; risk of terrorism; difficulties in managing distributors and representatives; difficulties in protecting our intellectual property overseas; and natural disasters, any of which could have a negative impact on our operating results.

*Compliance with internal controls reporting requirements will increase our costs.*

As directed by Section 404 of the Sarbanes-Oxley Act of 2002, the Securities and Exchange Commission adopted rules requiring public companies to include a report of management on a company's internal control over financial reporting in their annual reports on Form 10-K. This report is required to contain an assessment by management of the effectiveness of such company's internal controls over financial reporting. In addition, the public accounting firm auditing a public company's financial statements must attest to and report on management's assessment of the effectiveness of a company's internal controls over financial reporting. We intend to expend resources in developing the necessary documentation and testing procedures required by Section 404. Going forward, there is a risk that we will not comply with all of the requirements imposed by Section 404. If the Company fails to implement required new or improved controls, we may be unable to comply with the requirements of Section 404 in a timely manner. This could result in an adverse





reaction in the financial markets due to a loss of confidence in the reliability of the Company's financial statements, which could cause the market price of the Company's common stock to decline and make it more difficult for the Company to finance its operations. Under current rules, the Company is required to comply with certain requirements of Section 404 by its first fiscal year ending on or after December 15, 2007.

*Future changes in financial accounting standards may adversely affect our reported results of operations.*

A change in accounting standards can have a significant effect on our reported financial results. New accounting pronouncements and varying interpretations of accounting pronouncements have occurred and may occur in the future. These new accounting pronouncements may adversely affect our reported financial results.

*If our accounting estimates are not correct, our financial results could be adversely affected.*

Management judgment and estimates are necessarily required in the application of our Critical Accounting Policies. We discuss these estimates in the subsection entitled Critical Accounting Policies beginning on page 14. If our estimates are incorrect, our future financial operating results and financial condition could be adversely affected.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**

*None.*

**Item 3. Defaults Upon Senior Securities**

*None.*

**Item 4. Submission of Matters to a Vote of Security Holders**

*None.*

**Item 5. Other Information**

*None.*

**Item 6. Exhibits**

**Exhibits**

31.1 Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

31.2 Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

32.1 Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

32.2 Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

**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**

By: */s/ Robert P. Bruno*  
Robert P. Bruno  
*President and Chief Operating Officer*

By: */s/ Dennis P. Riordan*  
Dennis P. Riordan  
*Controller*

Dated: May 14, 2007

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