MICROMEM TECHNOLOGIES INC. MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE 3 MONTHS ENDED APRIL 30, 2012 PREPARED AS OF JUNE 29, 2012

INTRODUCTION

The following sets out the Management's Discussion and Analysis ("MD&A") of the financial position and result of operations for the 3 months ended April 30, 2012 of Micromem Technologies Inc. (the "Company", "Micromem" or "we"). The MD&A should be read in conjunction with the Company's audited consolidated financial statements and accompanying notes for the year ended October 31, 2011 which are prepared in accordance with International Financial Reporting Standards (IFRS). All financial analysis, data and information set out in this MD&A are unaudited. Additional information regarding the Company is available on the SEDAR website at www.sedar.com.

Certain information provided by the Company in this MD&A and in other documents publicly filed throughout the year that are not recitation of historical facts may constitute forward-looking statements. The words "may", "would", "could", "will", "likely", "estimate", "believe", "expect", "forecast" and similar expressions are intended to identify forward-looking statements.

Readers are cautioned that such statements are only predictions and the actual events or results may differ materially. In evaluating such forward-looking statements, readers should specifically consider the various factors that could cause actual events or results to differ materially from those indicated by such forward-looking statements.

FORWARD LOOKING STATEMENTS

This MD&A contains forward-looking statements and forward looking information within the meaning of applicable Canadian securities legislation ("forward looking statements"). Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, potentials, future events or performance (often, but not always, using words or phrases such as "believes", "expects" or "does not expect", "is expected", "anticipates" or "does not anticipate", or "intends" or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken or achieved) are not statements of historical fact, but are "forward-looking statements". Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company, or developments in the Company's business or in its industry, to differ materially from the anticipated results, performance, achievements or developments expressed or implied by such forward-looking statements. Forward-looking statements include disclosure regarding possible events, conditions or results of operations that are based on assumptions about future conditions, courses of action and consequences. Forward-looking statements may also include, without limitation, any statement relating to future events, conditions or circumstances. The Company cautions you not to place undue reliance upon any such forward-looking statements, which speak only as of the date they are made. Forward-looking statements relate to, among other things, the successful commercialization of our technology, comments about potential future revenues, joint development agreements and expectations of signed contracts with customers etc. A variety of inherent risks, uncertainties and factors, many of which are beyond the Company's control, affect the operations, performance and results of the Company and its business, and could cause actual results to differ materially from current expectations of estimated or anticipated events or results. Some of these risks and uncertainties include the risk of not securing required capital in future, the risks of not successfully concluding agreements with potential partners on a timely basis, the risks associated with commercializing and bringing to market our technology. These risks are affected by numerous factors beyond the Company's control: the existence of present and possible future government regulation, the significant and increasing competition that exists in the Company's business sector, uncertainty of revenues, markets and profitability, as well as those other factors discussed in this MD&A report. This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements and reference should also be made to the Company's Annual Information Form (prepared and filed in the form of a Form 20-F Annual Report pursuant to The Securities Exchange Act of 1934) for a description of additional risk factors.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. The Company does not undertake to update any forward-looking statements that are incorporated by reference herein, except in accordance with applicable securities law.

MICROMEM TECHNOLOGIES INC. MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE 3 MONTHS ENDED APRIL 30, 2012 PREPARED AS OF JUNE 30, 2012

(Unless other indicated dollar amounts reported are stated in U.S. dollars)

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MICROMEM TECHNOLOGIES INC. MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE 3 MONTHS ENDED APRIL 30, 2012 PREPARED AS OF JUNE 30, 2012

1. OVERVIEW

Micromem Technologies Inc. ("Micromem" or "the Company") is a company that has developed proprietary MRAM technology for both memory and sensor applications. The Company's shares are traded on the NASDAQ over the counter Bulletin Board (OTCBB) under the symbol MMTIF and on the CNSX under the symbol MRM. In 2007, the Company incorporated Micromem Applied Sensor Technologies Inc. ("MAST") for the purpose of moving forward with the planned commercialization of its technology.

Reference should be made to the MD&A documentation filed as of October 31, 2011 for a chronology of the Company's activities and developments between 2005-2010 and for a review of the highlights for the fiscal year ended October 31, 2011.

2. HIGHLIGHTS – 3 MONTHS ENDED April 30, 2012

During the quarter ended April 30, 2012:

- (a) The Company raised total financing of approximately \$853,100 including a number of Unit private placement financings and convertible bridge loan financings.
- (b) The Company issued several technical updates/releases on the status of its various projects that are under development and on certain product prototype testing that was completed successfully.
- (c) The Company recovered \$229,425 of amounts previously reported as deferred development costs from several suppliers whose invoices were renegotiated by the Company.
- (d) The Company continues to have a substantial pipeline of development opportunities that it anticipates will translate into additional development contracts in future licensing and sales opportunities.
- (e) The Company has successfully completed its transition to International Financials Reporting Standards (IFRS) reporting and is filing the current quarter financial statements under these new reporting standards. It has restated its previously reported financial information for the relevant reporting periods in this report to conform with the IFRS presentation.

3. GOING CONCERN

These consolidated financial statements have been prepared on the "going concern" basis, which presumes that the Company will be able to realize its assets and discharge its liabilities in the normal course of business for the foreseeable future.

There are material uncertainties related to adverse conditions and events that cast significant doubt about the Company's ability to continue as a going concern for a reasonable period of time in future. During the quarter ended April 30, 2012, the Company reported a (cash) loss from operations of \$583,664 (consisting of the loss from operations as reported of \$1,014,520 less the non cash expense of \$430,856 relating to the Black Scholes computed costs of stock compensation expense in the quarter) (2011-cash loss from operations of \$972,829). As of that date, the Company has an accumulated deficit of \$82,538,598 (2011: \$76,879,106), a working capital deficiency (for this purpose defined as current assets less current liabilities excluding the reported derivative warrant liability of \$1,086,547 (2011: \$1,047,228)

The Company will focus its development effort on existing projects in order to develop commercial applications for these projects and will continue to raise financing for operations as outlined in the notes to the financial statements at April 30, 2012.

It will be necessary for the Company to raise additional funds for the continued development, testing and commercial exploitation of its technologies. To date, the Company has raised financing through successive unit private placements, through the exercise of common share stock options and through the exercise of common share purchase warrants. It has also secured periodic term loans.

In the ensuing fiscal year, the Company anticipates that (i) it will realize initial revenues from commercialization efforts with current strategic development partners, (ii) it will monitor the timing of incurring additional expenses in keeping with its ongoing working capital position, and (iii) it will continue to secure financing in the same manner in which it has raised financing to date.

The consolidated financial statements have been prepared on a going concern basis and do not include any adjustments to the amounts and classifications of the assets and liabilities that might be necessary should the Company be unable to continue in business. If the "going concern" assumption were not appropriate for these consolidated financial statements then adjustments would be necessary to the carrying value of assets and liabilities, the reported expenses and the balance sheet classifications used. Such adjustments may be material.

4. SELECT FINANCIAL INFORMATION AND DISCLOSURES

(a) Financial Position at April 30, 2012:

The following table sets out select unaudited financial information as at April 30, 2012 and for the 3 months then ended prepared under IFRS reporting standards.

	Quarter ended	Quarter ended
	April 30, 2012	April 30, 2011
Interest and other income	-	39
Total cash expenses	583,664	487,072
Stock compensation expense	430,856	12,425
Loss from operations	(1,014,520)	(499,458)
Warranty liability	(1,837,757)	•
Exchange gain (loss)	2,442	(7,767)
Net loss and comprehensive loss	(2,849,835)	(507,225)
Loss per share and diluted loss per share	(0.02)	(0.01)
Weighted average number of shares outstanding	119,982,036	97,860,622
Total assets	828,130	723,762
Cash and cash equivalents	28,188	34,909
Working capital (excludes warrant liability)	(1,086,547)	(1,986,534)
Shareholders equity (deficiency)	(3,126,710)	(1,388,613)

At April 30, 2012 the Company has:

- a) 10,105,000 stock options outstanding which expire, if unexercised, between 2012-2017. The average exercise price of these options is \$0.25 per option.
- b) 29,586,251 common share purchase warrants which expire throughout 2013 if unexercised. The average exercise price of these warrants is \$0.22.

Refer also to **Tables 1 and 2** which are appended to this MD&A. Table 1 sets forth selected information from the consolidated statements of operations and deficit for the fiscal years ending October 31, 2010-2011 and for the related quarterly information through January 31, 2012. Table 2 sets forth selected information from the consolidated balance sheets for the fiscal years ending October 31, 2010-2011 and the related quarterly information through April 30, 2012.

Discussion of Operating Results

The following table summarizes the Company's operating results for the 3 months ended April 30, 2012 and 2011.

Discussion of operating Results

	Quarters ended April 30,			
	2012 (\$000)	2011 (\$000)	2010 (\$000)	
Interest and other income		<u>-</u>	5	
General and administration	128	120	41	
Professional fees and salaries	388	323	394	
Stock-based compensation	431	12	30	
Research	11	(7)	-	
Travel and entertainment	43	21	51	
Foregn exchange (gain) loss	8	49	14	
Amortization of property and equipment	6	2	2	
Allowance for promissory note	-	(20)	-	
Total expenses	1015	500	532	
Warrant recovery liability	1837	-		
Exchange gain (loss)	2	(7)	-	
Net loss and comprehensive loss	(2,850)	(507)	527	
Loss per share	(0.02)	(0.01)	(0.01)	

Interest and other income: The Company remains as a pre-revenue company at April 30, 2012. It reported nil interest revenue in 2012 and a modest amount in 2011 relating to interest earned on outstanding cash balances.

Promissory note: The promissory note from Unotron has been fully reserved. In the quarter ended April 30, 2012, the Company booked and reserved approximately \$10,000 of interest charged on the outstanding balance due (in 2011 it recovered \$10,000 on the promissory note which it had fully reserved at the prior year end). At April 30, 2012, the outstanding balance which is fully reserved and which remains due from Unotron is approximately \$122,000. The Company has issued a demand notice to collect the outstanding balance.

Warrant liability: The Company, under IFRS, has calculated and reports a warrant liability charge of \$1,837,757 relating to the common share purchase warrants issued in Canadian dollars during the quarter. This is further discussed in Section 7 below.

Operating expenses: The Company has maintained its overhead expenses at consistent levels on a quarter over quarter basis. The current monthly cash burn rate on operating expenses is approximately \$120,000 per month.

Deferred development costs: The Company capitalized \$13,123 of deferred development costs in the quarter ended April 30, 2012 relating to various projects under development. It recovered \$229,425 costs previously incurred from suppliers which costs were renegotiated during the quarter. Accordingly it reports a net recovery of deferred development costs for the six months period ended April 30,2012 of \$111,648 (2011 – expenditures of \$179,235).

<u>Current projects under development</u>: An update on projects previously reported in our MD&A documentation and in our periodic press releases is as follows:

- a) Oil Sensor: We have completed our development work on our oil sensor and continue to work with the major international oil company previously referenced. The scope of this work is expanding and we anticipate receiving the next amount of funding from the company prior to end of current fiscal year. By the end of the 2012 calendar year, we anticipate that we will have commercial revenue opportunities under these working arrangements.
- b) Mining sensor: This work continues with NEMT and we are evaluating potential commercial revenue opportunities that we expect can be realized over the next 12 months.
- c) Breast aware technology: We are in current discussion with a 3rd party group with respect to potential manufacturing of a proprietary detection device and with respect to potential licencing opportunities.
- d) GSI: We have completed prototype testing and have begun the manufacture of initial "production first articles" for this company. The Company anticipates commercial revenue opportunities will be realized over the course of the balance of 2012.

Sensor development and new opportunities:

- a) The Company has continued to develop its sensor technology during the quarter and had specific testing completed by a third party group, GMW Associates, who validated the high performance capabilities of our sensors. These results have provided the Company with the ability to respond to a significant number of new proposals, a number of which were introduced to the Company by an open innovation third party service provider, Nine Sigma.
- b) The Company has submitted multiple technical business proposals in response to Nine Sigma's requests for a number of distinct applications. At quarter end, it continues to pursue these proposals and several of these have been advanced through continued interaction with Nine Sigma and the end user customer. Management believes that these initiatives will lead to development contracts and commercial revenue opportunities in future.
- c) At quarter end, as a result of these initiatives, the Company has a significant pipeline of new potential opportunities.

Management has satisfied itself that the projects to which deferred development costs are reported meet the criteria for deferral and management expects that it will realize future revenues against each of these projects sufficient to justify the recurring values reported.

A summary of the continuity of the projects under development and the costs incurred by project for the quarters ended April 30, 2011 and 2012 are as presented below.

						Impairment		
Projects	10/3	31/2010	Add	ditions		reserve		31/04/2011
Project A	\$	1		_	\$		\$	1
Project B	Ψ	1		-	Ψ		Ψ	1
Project C		1		16,360		-		16,361
Project D		1		-		-		1
Project E		146,604		18,782		-		165,386
Project F		1		-		-		1
Project G		1		141,200		-		141,201
Project H		1		-		-		1
Project I		74,908		2,893		-		77,801
Project J		1		-		-		1
Project K		1		-		-		1
Project L								
	\$	221,521	\$	179,235	\$	-	\$	400,756

				Net			
Additions/							
Projects	10/3	1/2011		Recoveries		4/30/2012	
Project A	\$	1	\$	-	\$	1	
Project B		1		-		1	
Project C		15,001		(7,067)		7,934	
Project D		1		-		1	
Project E		176,604		2,180		178,784	
Project F		1		-		1	
Project G		141,201		(141,200)		1	
Project H		1		-		1	
Project I		296,633		18,272		314,905	
Project J		1		-		1	
Project K		17,161		8,438		25,599	
Project L				7,729		7,729	
	\$	646,606	\$	(111,648)	\$	534,958	

Quarterly general and administrative related expenses compare as follows (\$000)

	2012	2011	2010
Investor relations	-	5	-
Reserve, doubtful accounts	-	(16)	-
Telephone	4	4	6
Insurance	16	20	22
Rent	34	14	7
Interest	37	43	-
Exchange gain/loss	-	-	(5)
MAST	5	9	26
All other	32	43	(15)
	128	121	41

Quarterly professional, other fees and salaries related expenses compare as follows(\$000)

	2012	2011	2010
Audit and related services	39	47	53
Legal -patent	-	-	-
Legal -other	13	48	80
President, MAST	100	-	-
Salaries and benefits	94	104	132
Management fees	116	119	112
Other	26	3	17
	388	321	394

In the quarter ended April 30, 2012 the Company paid the President of MAST an additional \$55,000 of compensation beyond the minimum amounts stipulated in the compensation plan in effect (refer to section 14). In 2011 and 2010, his compensation was reported in deferred development costs.

Quarterly Travel related expenses compare as follows (\$000)

2012	2011	2010
	_	
 43	21	51

C) Unaudited Quarterly Financial Information - Summary

Three months ended	Interest and	Expenses	Loss in	Loss per
(unaudited)	other income		period \$	share \$
April 30, 2010	5,009	531,769	(526,760)	(0.01)
July 31, 2010	5,000	1,942,819	(1,937,819)	(0.02)
October 31, 2010	7,778	1,811,661	(1,845,459)	(0.02)
January 31, 2011	339	567,219	(582,616)	(0.01)
April 30, 2011	39	499,497	(507,225)	(0.01)
July 31, 2011	585	238,380	(237,795)	-
October 31, 2011	-	1,248,756	(683,021)	(0.01)
January 31, 2012	-	444,303	(24,327)	-
April 30, 2012	-	1,014,520	2,849,835	(0.02)

Refer also to Tables 1 and 2 for summarized quarterly information.

5. LIQUIDITY AND CAPITAL RESOURCES

Liquidity:

Table 3 provides a summary of the financing that was raised during the 2009-2011 fiscal years and for the current year to date through April 30, 2012.

We currently have no cash flow from operations and will have none until we are in a position to either license or directly produce and sell products utilizing our technologies. As at April 30, 2012, our working capital deficiency (excluding derivative warrants liability) was \$1,086,547 (2011: \$1,986,534).

We currently have no lines of credit in place, we must obtain financing from new investors or from investors who currently hold outstanding options and warrants in order to meet our cash flow needs until we generate revenues.

We have granted to our directors, officers and other employees options to purchase shares at prices that are at or above market price on the date of grant. A summary of the outstanding options and warrants is provided in **Table 4**.

Capital Resources:

We have no commitments for capital expenditures as of April 30, 2012.

6. RISKS AND UNCERTAINTIES OVERVIEW

There are a number of material risks which may individually or in the aggregate effect the long-term commercial success of the Company, both known and unknown. An investment in the Company should be considered highly speculative due to the nature of the Company's activities and its current stage of development:

Stage of Development of Technology:

The Company has made significant strides in developing its prototype products over the past several years in its attempt to commercialize its products with its various strategic development partners. Nonetheless, the Company at this stage has not completed such efforts to the point that it has product available for sale and their remains uncertainties as to the Company's ultimate ability to complete the development of a product that is saleable.

Customers' Willingness to Purchase:

We have entered into multiple joint development agreements whereby our prototype products are being subjected to rigorous testing by our partners. We have not as yet received unequivocal and firm purchase orders for our product. Some of the joint development partners that we are dealing with are private companies and there is a potential risk of those companies having to secure all of their requisite financing to support their orders and their working capital requirement.

Patent Portfolio:

The Company has spent a considerable amount of time, effort and incurred significant costs with respect to the maintenance and development of our intellectual property portfolio. However, given the nature of IP development, the Company is subject to continuing risks that our patents could be successfully challenged, that our patent pending files may not ultimately be granted full patent status. While we continue to make specific efforts to broaden our IP claims, this is an ongoing process and requires continued effort and vigilance. The Company does not have extensive in-house resources so as to manage its IP portfolio in this environment and has traditionally relied heavily on its patent attorneys for these services. In October 2010, the Company's working relationship with its patent attorneys, Morgan Lewis, was discontinued. The Company has secured an alternative service provider. In the fourth quarter of 2011, the Company wrote-down the value of patent asset by \$129,033 which relates to older technology which the Company has no immediate plans to further develop.

Financing:

The Company has successfully raised funding over the past several years to continue to support its development initiatives and fund the Company's corporate structure and overheads. The financing environment for early stage technology companies remains challenging and there is no certainty that the Company will be able to continue to raise financing as it has in the past to continue to support its business initiatives.

Competitors:

The Company is subject to competition from other larger entities who have greater financial resources and more in-house technical expertise.

Management Structure:

The Company is highly dependent on the services of a small number of senior management team members. If one of these individuals were unavailable, the Company could encounter difficult transition processes.

Foreign Currency Exposure:

The Company expects to sell its products and license technologies in the United States, in Canada and abroad. The Company has not hedged its foreign currency exposure, which has not been significant to date. In future, foreign currency fluctuations could present a risk to the business.

7. CRITICAL ACCOUNTING POLICIES

Our significant accounting policies are set forth in Note 3 to our consolidated financial statements and should be read in conjunction with management's discussion of the Company's critical accounting policies and estimates as set forth below.

IFRS:

IFRS reporting has been adopted effective November 1, 2010.

The accounting policies disclosed in Note 4 have been applied in preparing the financial statements for the quarter ended April 30, 2012, the comparative information presented in these financial statements as at October 31, 2011 and for the year then ended, as at April 30, 2012 and for the three months ended and in the preparation of the opening IFRS statement of financial position at November 1, 2010 (the Company's date of transition).

In preparing the opening IFRS statement of financial position, the Company has adjusted amounts reported previously in financial statements prepared in accordance with previous Canadian GAAP. These adjustments relate to:

- (a) The accounting and measurement of warrant liability with respect to common share purchase warrants issued in conjunction with Unit private placement financings which the Company has secured, which are denominated in Canadian dollars.
- (b) The accounting and measurement of the conversion feature of the bridge loans which the Company has secured.
- (c) The presentation of foreign currency transaction adjustments with respect to those entities included in the consolidated financial statements where the function currency for such entities is different from the Company's reporting

currency. In these cases, the foreign currency translation adjustment is reported in Other Comprehensive Income ("OCI").

The illustration of how the transition from previous Canadian GAAP to IFRS has affected the Company's financial position, financial performance and cash flows is set out in Note 6 to the financial statements as of April 30, 2012.

Compound Financial Instruments:

Compound financial instruments issued by the Company comprise convertible notes that can be converted to share capital at the option of the holder and the number of shares to be issued does not vary with changes in their fair value.

The liability component of a compound financial instrument is recognized initially at the fair value of a similar liability that does not have an equity conversion option.

The equity component is recognized initially are the difference between the fair value of the compound financial instrument as a while and the fair value of the liability component. Any directly attributable transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts.

Subsequent to initial recognition, the liability component of a compound financial instrument is measured at amortized cost using the effective interest rate method. The equity component of a compound financial instrument is not remeasured subsequent to initial recognition.

Interest, dividends, losses and gains relating to the financial liability are recognized in profit or loss except for borrowing costs on qualifying assets which are added to asset cost. Distributions to the equity holders are recognized in equity, net of any tax effect.

Comprehensive Income:

Comprehensive income consists of net income and OCI. Comprehensive income is defined as the change in equity from transactions and other events from non-owner sources. OCI refers to items recognized in comprehensive income but that are excluded from net income calculated in accordance with generally accepted accounting principles.

Foreign Currency Translation:

The functional and reporting currency of the Company's wholly-owned foreign subsidiaries is the United States dollar. These entities are integrated foreign operations. Monetary assets and liabilities are translated into United States dollars at the rate of exchange in effect at the consolidated balance sheet dates and non-monetary assets and liabilities are translated at historical rates. Income and expenses are translated using the three month average rate of exchange per quarter, which rate approximates the rate of exchange prevailing at the transaction dates. Gains or losses resulting from translation are included in the determination of net loss for the period.

The functional currency of Micromem and of its wholly-owned subsidiary, 7070159 Canada Inc. is the Canadian dollar. The Company translates monetary assets and liabilities at the rate of exchange in effect at the end of date of the reporting period and

non-monetary assets and liabilities at historical rates. Exchange gains and losses which arise on the settlement of foreign currency denominated transactions and foreign currency differences arising on translation are recognized in OCI.

Research and Development Expenses:

Research costs are expensed in the period incurred. Development expenses are expensed as incurred unless they meet the criteria for deferral and amortization under Canadian GAAP which is the translation of research findings or other knowledge into a plan for the technology prior to commercial production or use.

Patents:

Patents are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. When circumstances dictate, an impairment loss is calculated as equal to the excess of the carrying value of the assets over their undiscounted estimated future net cash flow. The Company amortizes based on our estimated useful life for patents of 5 years. In the quarter ended October 31, 2011, the Company wrote-down the value of its patents by \$129,033 which relates to older technology which the Company has no immediate plans to further develop.

Intangible Assets:

Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. When circumstances dictate, an impairment loss is calculated as equal to the excess of the carrying value of the assets over their undiscounted estimated future net cash flow. During the fiscal year ended October 31, 2011, the Company determined that it met the criteria for capitalizing development costs related to the general sensor technology the Company is pursuing and reports \$130,627 of such costs as intangible assets at April 30, 2012. Amortization is provided on a 7 year straight-line basis.

Stock-Based Compensation:

Stock-based compensation is recognized using the fair value method. Under this method, the Black Scholes option-pricing model is used to determine periodic stock option expense. Any compensatory benefit recorded is recognized initially as deferred share compensation in the consolidated statements of shareholders' equity and then charged against income over the contractual or vesting period.

As stock options are exercised, the Company records a charge to contributed surplus and a credit to share capital. The amount reported in each case is based on the original expense recorded when the related options were granted.

Unit Private Placements:

Until October 31, 2011, the Company had adopted the relative fair value approach in accounts for the value assigned to the common shares and the warrants which it had made available in the Unit private placement financings that it secured, calculated in accordance with the Black Scholes option pricing model.

Under IFRS:

- (i) The Company has adopted the residual value approach in accounting for the value assigned to the common shares and the warrants included in the Unit private placements.
- (ii) For Unit private placements which are denominated in a currency other than the US dollar reporting currency, the Company measures the value of the warrant and reports this value as warrant liability in the consolidated statement of financial position.

Income Taxes:

The Company accounts for income taxes by the asset and liability method. Under the asset and liability method, future tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Future tax assets and liabilities are measured using substantively enacted tax rates and laws that are expected to apply when the asset is realized or the liability settled. To the extent that it is estimated that a future income tax asset will not be realized, a valuation allowance is provided.

8. FINANCIAL INSTRUMENTS

It is management's opinion that the Company is not exposed to significant interest rate and credit risks arising from financial instruments and that the fair value of financial instruments approximates the carrying value.

Fair values: The Company's financial instruments include: cash and cash equivalents, other receivable and accounts payable and accrued liabilities, the fair values of which approximate their carrying values due to their short-term maturity.

Credit risk: Financial instruments, which subject the Company to potential credit risk, consist of other receivable. The Company does not require collateral or other security for accounts receivable. The Company estimates its provision for uncollectible amounts based on an analysis of the specific amount and the debtor's payment history and prospects.

Foreign exchange: The Company completes transactions denominated in Canadian and in United States dollars and, as such, is exposed to fluctuations in foreign exchange rates. The Company does not use derivative instruments to reduce its exposure to foreign currency risk.

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9. COMMITMENTS AND CONTINGENCIES

Technology Development Agreement with Estancia:

To the extent that the Company generates revenue in future relating directly and specifically to the Vemram patents, we are obligated to pay Estancia 32% of the gross profit realized less expenses agreed to by the parities and 32% of any unit royalties realized less direct expenses. To date no revenues have been generated. We have discontinued the development of this technology after 2002.

Operating Leases:

The Company had operating lease commitments which expired in 2012 in respect of its head office. The monthly obligations is \$4,690 plus the proportionate cost of operating costs and taxes.

Legal Matters:

There are currently no outstanding legal matters to which the Company is a party. We have agreed to indemnify our directors and officers and certain of our employees in accordance with our by-laws. We maintain insurance policies that may provide coverage against certain claims.

Royalties:

The Company has obligations under the terms of the License Agreement signed with University of Toronto in June 2005. The total obligation could be \$1 million tied to future product revenues.

Senior Management:

In 2005, we entered into an employment agreement with the Chairman of the Board of Directors, Salvatore Fuda, for a period from January 1, 2005 through December 31, 2009, which contract has been extended to December 31, 2010. Under the terms of the agreement, the Chairman was retained to provide certain management services to the Company. The contract stipulated compensation based on a percentage of the increase of the market capitalization on a year-over-year basis commencing as at December 31, 2005 and subject to a minimum annual compensation amount of \$150,000 Canadian funds (\$143,877 U.S. funds at average exchange rates). Under this contract, the 2010 expense as reported was \$143,877 as compared to \$129,149 in 2009. In January 2011, the Board of Directors extended the Chairman's contract on a month-month-basis at an annual rate of \$150,000 Canadian funds.

In May 2008, the Company entered into two year employment agreements with the President and the CFO and a three year agreement with the President of the Company's subsidiary, MAST Inc. These agreements have now expired and the Company has continued these on a month-to-month basis since expiry date. These agreements stipulated monthly obligations as below:

President	\$13,333	Canadian Funds
Chief Financial Officer	\$12,500	Canadian Funds
President – MAST	\$15,000	U.S. Funds

10. DISCLOSURE CONTROLS / INTERNAL CONTROLS

The Company was not classified as accelerated filer in 2011 and did not complete an external audit on its internal controls in 2011.

Management and the Board of Directors, primarily through the Audit Committee, have instituted review procedures on all of our periodic filings. We have established a disclosure committee consisting of independent directors and our Chief Information Officer. A charter for the disclosure committee and a policy has been developed and has been ratified by our Board of Directors. We engage legal counsel and our external investor relations consultants, to provide guidance, commentary on all of our press releases.

Management has concluded that our disclosure controls and procedures meet required standards. These disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in its various reports are recorded, processed, summarized and reported accurately. In spite of its evaluation, management does recognize that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance and not absolute assurance of achieving the desired control objectives.

11. OFF-BALANCE SHEET ARRANGEMENTS

The Company has no off-balance sheet financial commitments and does not anticipate entering into any contracts of such nature other than the addition of new operating leases for equipment and premises as may be required in the normal course of business.

12. TRANSACTIONS WITH RELATED PARTIES

The Company reports the following related party transactions:

(a) Compensation paid:

Included in professional fees as reported are management and consulting fees paid or payable to individuals (or companies controlled by such individuals) who served as officers and directors of the Company. The total compensation paid to such parties during the quarters ending January 31st is as follows:

(b) Accounts receivable, payable and accruals:

At April 30, 2012 the Company reports the following accounts receivable and payable balances with related parties:

•	Payable to Company's Chairman under terms of employment contract:	\$37,005
•	Payable to officer under the terms of employment contracts (1):	\$105,000

(1) The Company assigned the Unotron promissory note to an officer of the Company during 2011. Of the total of \$110,000 of funds recovered from Unotron in 2011, \$80,000 was paid directly to that officer under this assignment.

13. SHARE CAPITAL

At April 30, 2012 the Company reports 121,603,332 common shares outstanding (2011: 98,099,511). Additionally, the Company has 10,105,000 stock options outstanding with a weighted average exercise price of \$..25 per share (2011: 10,172,199 options outstanding with a weighted average exercise price of \$.89 per share) and a total of 29,586,251 outstanding warrants to acquire common shares with a weighted average exercise price of \$.22 per share (2011: 8,943,430 outstanding warrants with a weighted average exercise price of \$.41 per share).

		Q2 2012 remuneration				
		Cash	Option	Total		
Individual	Position		_ :			
Salvatore Fuda (1)	Chairman, Director	37,816	23,694	61,510		
Joseph Fuda (2)	President, Director	40,337	10,770	51,107		
Steven Van Fleet (3)	President, MAST Inc., Director	100,494	107,700	208,194		
David Sharpless	Director	-	40,926	40,926		
Andrew Brandt	Director	-	26,925	26,925		
Oliver Nepomuceno	Director	-	40,926	40,926		
Larry Blue	Director	-	40,926	40,926		
Alex Dey	Director	-	-	-		
Dan Amadori (2)	CFO	37,816	40,926	78,742		

⁽¹⁾ contract was extended after December, 2010 on a month to month basis.

⁽²⁾ contract was extended on a month to month basis in May 2010.

⁽³⁾ contract was extended on a month-to-month basis in May 2011.

15. SUBSEQUENT EVENTS

- (a) The Company raised \$360,000 from the exercise of 3,000,000 CDN warrants @0.12 per warrant and US \$80,000 from the exercise of 500,000 US warrants @.16 per warrant.
- (b) The Company signed a 5year lease for premises at a monthly costs \$7,189.

Table 1

Micromem Technologies Inc Management Discussion and Analysis April 30, 2012

Fiscal year ending October 31	Interest and other income	Net Loss	Loss per share (basic and fully diluted)
2011	963	(3,180,855)	(0.03)
2010	22,886	(4,674,861)	(0.05)
2009	88,047	(4,310,939)	(0.05)
Quarter ending			
April 30, 2012	•	(2,849,835)	(0.02)
January 31, 2012	•	24,327	0.00
October 31, 2011	1.	(1,248,756)	(0.01)
July 31, 2011	585	(237,795)	8 ,5 0
April 30, 2011	39	(507,225)	(0.01)
January 31, 2011	339	(579,768)	(0.01)
October 31, 2010	12,877	(2,210,282)	(0.02)
July 31, 2010	5,000	(1,937,819)	(0.02)
April 30, 2010	5,009	(526,760)	(0.01)

Micromem Technologies Inc Management Discussion and Analysis April 30, 2012 Selected Balance Sheet Information (all amounts in United States dollars)

Table 2

Fiscal year ending October 31	Working capital (deficiency)	Capital asssets at NBV	Other Assets	Total Assets	Shareholders equity (deficit)
2011	(2,298,916)	10,201	819,749	906,346	(1,468,966)
2010	(1,459,460)	16,686	423,548	568,336	(1,019,226)
2009	(650,044)	24,422	2,148,461	2,562,479	1,522,839
Quarter ending					
April 30, 2012	(1,086,547)	7,995	692,155	828,130	(3,126,710)
January 31, 2012	(2,270,655)	9,098	916,429	1,016,467	(1,345,129)
October 31, 2011	(1,047,228)	10,201	819,749	906,346	(217,278)
July 31, 2011	(1,465,803)	11,800	622,640	717,188	(831,363)
April 30, 2011	(1,986,534)	13,451	584,470	723,762	(1,388,613)
January 31, 2011	(1,429,020)	15,102	415,945	592,430	(997,973)
October 31, 2010	(1,459,460)	16,686	423,548	568,336	(1,019,226)
July 31, 2010	(1,131,126)	18,808	1,596,876	1,984,874	484,558
April 30, 2010	(918,937)	20,981	2,699,602	3,060,200	1,801,646
January 31, 2010	(341,756)	23,156	2,461,488	3,010,357	2,142,888

Micromem Technologies Inc Management Discussion and Analysis April 30, 2012

Summary of financing raised by Company

Date of financing	2009		2010			
	Shares	Price / share	\$	Shares	Price / share	\$
Exercise of options						_
January 2009	32,801	0.74	24,417			
April 2009	631,000	0.64	403,500			
July 2009	889,000	0.57	504,500			
August 2009	100,000	0.60	60,000			
Exercise of warrants						
July 2009	200,000	1.17	234,000			
Private placements						
January 2009	336,053	0.58	194,465			
April 2009	2,777,878	0.58	1,620,397			
July 2009	779,604	0.98	763,980			
October 2009	500,000	0.76	380,000			
January 2010			•	2,204,276	0.476	1,049,062
April 2010				289,899	0.448	130,000
July 2010				1,730,026	0.321	556,078
October 2010				1,717,307	0.196	335,910
	6,246,336		4,185,259	5,941,508		2,071,050
		2011			2012	
	Shares	Price / share	\$	Shares	Price / share	\$
Private placements						
January 31, 2011	2,525,000	0.199	503,140			
April 30, 2011	250,000	0.120	30,000			
July 31, 2011	8,355,045	0.112	932,554			
October 31, 2011	9,695,162	0.104	1,012,987			
Private placements						
January 31, 2012				2,005,022	0.107	214,478
April 30, 2012				2,178,592	0.207	451,539
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				_,,,,,,	0.20	101,000
Exercise of warrants						
January 31, 2012				-		-
April 30, 2012				1,270,000	0.141	179,270
	20,825,207		2,478,681	5,453,614		845,287
			_,470,001	3,730,014		043,207

Micromem Technologies Inc Management Discussion and Analysis

Outstanding options	Strike price	Expiry date
190,000	0.60	10/25/12
315,000	0.55	12/20/12
125,000 2,000,000	0.35 0.35	04/05/16 04/10/17
7,475,000	0.20	10/31/16
10,105,000	0,25	
Total proceeds if all options exercised:		\$ 2,526,000
Outstanding Warrants		
123,276	0.7500	11/05/2012
600,000 772,000	0.7600 0.5600	14/06/2012 16/06/2012
43,000	0.5500	16/06/2012
25,000	0.5500	15/07/2012
300,000	0.5500	26/07/2012
111,111 133,333	0.5600	01/08/2012
429,686	0.5600 1.2000	12/08/2012 14/05/2012
765,188	0.4100	25/05/2012
339,838	0.4500	15/06/2012
312,500	0.3900	12/07/2012
312,500 200,000	0.4000 0.2800	23/07/2012 26/08/2012
1,325,000	0.2400	15/10/2011
500,000	0.2000	05/11/2011
400,000	0.1900	30/11/2011
300,000 250,000	0.2000 0.2000	20/12/2011 04/01/2013
750,000	0.2000	11/01/2013
325,000	0.2000	31/01/2012
20,000	0.2000	17/12/2011
95,000 5,000,000	0.1500	27/04/2012
300,000	0.1250 0.1230	04/05/2012 20/05/2012
790,000	0.1600	30/05/2012
554,545	0.1400	15/06/2012
298,000 312,500	0.2096 0.2105	18/07/2012
20,000	0.2080	22/07/2012 18/07/2012
792,938	0.2076	03/08/2012
75,000	0.1600	05/08/2012
1,666,667 1,275,000	0.1528 0.1212	16/08/2012 12/09/2012
150,000	0.1212	29/09/2012
250,000	0.1200	29/09/2012
200,000	0.1174	29/09/2012
5,118,890 166,667	0.1100 0.1485	21/10/2012 26/10/2011
1,135,022	0.1463	04/11/2012
100,000	0.1200	23/12/2012
770,000	0.1188	23/01/2013
58,824 29,412	0.2000 0.2000	Feb.8.13 Feb.8.13
142,858	0.4400	Feb.10.13
600,000	0.1800	Feb.15.13
66,667	0.1800	Feb.15.13
208,333 83,333	0.3000 0.3000	Feb.27.13
208,333	0.3000	Mar.13.13 Mar.13.13
58,333	0.3000	Mar.23.13
83,333	0.3000	Apr.18.13
41,667	0.1500	Feb.3.13
35,000 145,833	0.1500 0.3000	Feb.3.13 Feb.27.13
208,333	0.3000	Feb.27.13 Feb.27.13
208,333	0.3000	Feb.27.13
29,586,253	0.22	

Total proceeds if all warrants exercised:

6,407,142