UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ **Quarterly** report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the quarterly period ended June 30, 2017 or

☐ Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the transition period from ______ to ______

001-9731
(Commission file No.)

Micron Solutions, Inc.
(Exact name of registrant as specified in its charter)

DELAWARE	**72-0925679**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. employer identification no.)*

25 Sawyer Passway
Fitchburg, Massachusetts 01420
(Address of principal executive offices and zip code)

(978) 345-5000
(Registrant's telephone number, including area code)

____
(Former name, former address and former fiscal year, if changed from 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 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

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

Large Accelerated filer ☐	Accelerated filer ☐	Non-Accelerated filer ☐	Smaller reporting company ☒ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

As of August 11, 2017 there were 2,820,999 shares of the Company’s common stock outstanding.

Micron Solutions, Inc. and Subsidiary
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PART I - CONDENSED FINANCIAL STATEMENTS

Item 1. Condensed Consolidated Financial Statements (unaudited)

Micron Solutions, Inc. and Subsidiary
Condensed Consolidated Balance Sheets
(unaudited)

	June 30, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 338,069	$ 380,381
Trade accounts receivable, net of allowance for doubtful accounts of $42,000 at June 30, 2017 and $30,000 at December 31, 2016	3,441,272	2,276,608
Inventories	3,254,264	3,060,085
Prepaid expenses and other current assets	610,204	614,362
Total current assets	7,643,809	6,331,436
Property, plant and equipment, net	6,396,582	6,440,911
Assets held for sale, net	688,750	688,750
Intangible assets, net	44,401	30,093
Other assets	10,629	156,231
Total assets	$ 14,784,171	$ 13,647,421
Liabilities and Shareholders' Equity		
Current liabilities:		
Revolving line of credit	$ 2,670,000	$ 1,785,795
Equipment line of credit	504,781	102,500
Term notes payable, current portion	2,217,480	487,468
Accounts payable	2,611,071	1,744,261
Accrued expenses and other current liabilities	439,474	333,361
Customer deposits	210,465	122,290
Deferred revenue, current	173,722	224,988
Total current liabilities	8,826,993	4,800,663
Long-term liabilities:		
Term notes payable, non-current portion	—	1,970,863
Subordinated promissory notes	436,471	432,011
Deferred revenue, non-current portion	—	156,953
Total long-term liabilities	436,471	2,559,827
Total liabilities	9,263,464	7,360,490
Commitments and Contingencies		
Shareholders' equity:		
Preferred stock, $0.001 par value; 2,000,000 shares authorized, none issued	—	—
Common stock, $0.01 par value; 10,000,000 shares authorized; 3,926,491 issued, 2,820,999 outstanding at June 30, 2017 and 3,926,491 issued, 2,816,639 outstanding at December 31, 2016	39,265	39,265
Additional paid-in-capital	11,489,089	11,457,320
Treasury stock at cost, 1,105,492 shares at June 30, 2017 and 1,109,852 shares at December 31, 2016	(3,016,667)	(3,028,564)
Accumulated deficit	(2,990,980)	(2,181,090)
Total shareholders' equity	5,520,707	6,286,931
Total liabilities and shareholders' equity	$ 14,784,171	$ 13,647,421

See accompanying notes to condensed consolidated financial statements.

Micron Solutions, Inc. and Subsidiary
Condensed Consolidated Statements of Operations
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Net sales	$ 5,390,726	$ 5,129,013	$ 10,655,703	$ 10,112,294
Cost of sales	5,008,889	4,184,263	9,620,492	8,482,425
Gross profit	381,837	944,750	1,035,211	1,629,869
Selling and marketing	234,820	303,564	500,693	596,910
General and administrative	552,678	491,432	1,169,508	1,182,067
Research and development	28,344	24,415	57,640	50,258
Total operating expenses	815,842	819,411	1,727,841	1,829,235
Net income (loss) from operations	(434,005)	125,339	(692,630)	(199,366)
Other expense:				
Interest expense	(87,429)	(63,276)	(151,330)	(123,496)
Other income, net	9,981	50	34,070	827
Total other expense, net	(77,448)	(63,226)	(117,260)	(122,669)
Net income (loss) before income tax provision (benefit)	(511,453)	62,113	(809,890)	(322,035)
Income tax provision (benefit)	—	—	—	—
Net income (loss)	$ (511,453)	$ 62,113	$ (809,890)	$ (322,035)
Earnings (loss) per share - basic	$ (0.18)	$ 0.02	$ (0.29)	$ (0.11)
Earnings (loss) per share - diluted	$ (0.18)	$ 0.02	$ (0.29)	$ (0.11)
Weighted average common shares outstanding - basic	2,820,999	2,816,639	2,819,915	2,816,392
Weighted average common shares outstanding - diluted	2,820,999	2,900,493	2,819,915	2,816,392

See accompanying notes to condensed consolidated financial statements.

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Micron Solutions, Inc. and Subsidiary
Condensed Consolidated Statements of Cash Flows
(unaudited)

	Six Months Ended June 30,	
	2017	2016
Cash flows from operating activities:		
Net loss	$ (809,890)	$ (322,035)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Gain on sale of property, plant and equipment	(21,554)	—
Depreciation and amortization	803,217	745,440
Non-cash interest expense	16,753	13,842
Change in allowance for doubtful accounts	12,000	(30,000)
Share-based compensation expense	32,417	30,591
Changes in operating assets and liabilities:		
Accounts receivable	(1,176,664)	106,330
Insurance receivable	—	(258,842)
Inventories	(194,180)	(554,983)
Prepaid expenses and other current assets	4,159	36,855
Other non-current assets	145,603	52,602
Accounts payable	866,811	185,567
Accrued expenses and other current liabilities	117,361	83,922
Customer deposits	88,175	298,627
Deferred revenue, current	(51,266)	(19,156)
Other non-current liabilities	(156,953)	(29,510)
Net cash provided by (used in) operating activities	(324,011)	339,250
Cash flows from investing activities:		
Purchases of property, plant and equipment	(759,546)	(960,144)
Proceeds from sale of property, plant and equipment	23,200	—
Cash paid for patents and trademarks	(15,296)	—
Net cash provided by (used in) investing activities	(751,642)	(960,144)
Cash flows from financing activities:		
Proceeds from (payments on) revolving line of credit, net	884,205	570,000
Proceeds from equipment line of credit	402,281	544,851
Payments on term notes payable	(253,145)	(291,104)
Proceeds from stock option exercises	—	51,150
Net cash provided by (used in) financing activities	1,033,341	874,897
Net increase (decrease) in cash and cash equivalents	(42,312)	254,003
Cash and cash equivalents, beginning of period	380,381	272,291
Cash and cash equivalents, end of period	$ 338,069	$ 526,294

	Six Months Ended June 30,	
Supplemental Cash Flow Information	2017	2016
Cash paid for interest	$ 138,279	$ 113,112
Non-cash activities:		
Issuance of Treasury Stock for Directors Fees	$ 11,250	$ —
Equipment line of credit converted to term notes payable	$ —	$ 881,701

See accompanying notes to condensed consolidated financial statements.

Micron Solutions, Inc. and Subsidiary
Period Ended June 30, 2017

Notes to the Condensed Consolidated Financial Statements (unaudited)

1. Basis of Presentation

The consolidated financial statements (the "financial statements") include the accounts of Micron Solutions, Inc.® ("Micron Solutions") and its subsidiary, Micron Products, Inc.® ("Micron" and together with Micron Solutions, the "Company"). All intercompany balances and transactions have been eliminated in consolidation.

The unaudited interim condensed consolidated financial statements and related notes have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"). Accordingly, certain information and footnote disclosures normally included in complete financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") have been omitted pursuant to such rules and regulations. These financial statements and related notes should be read in conjunction with the consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 22, 2017.

The results of operations for interim periods are not necessarily indicative of the results to be expected for the full year. The Company's balance sheet at December 31, 2016 has been derived from the audited financial statements at that date, but does not include all the information and footnotes required by GAAP for complete financial statements.

The information presented reflects, in the opinion of the management of the Company, all adjustments necessary for a fair presentation of the financial results for the interim periods presented. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Recent Accounting Pronouncements

In the normal course of business, management evaluates all new accounting pronouncements issued by the Financial Accounting Standard Board ("FASB"), Securities and Exchange Commission ("SEC"), Emerging Issues Task Force ("EITF"), or other authoritative accounting bodies to determine the potential impact they may have on the Company's Consolidated Financial Statements. Based upon this review, except as noted below, management does not expect any of the recently issued accounting pronouncements, which have not already been adopted, to have a material impact on the Company's consolidated financial statements.

ASU No. 2016-02, "Leases (Topic 842)"

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)," which requires companies to recognize all leases as assets and liabilities on the consolidated balance sheet. The standard retains a distinction between finance leases and operating leases, and the classification criteria for distinguishing between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between capital leases and operating leases in the current accounting literature. The result of retaining a distinction between finance leases and operating leases is that under the lessee accounting model in Topic 842, the effect of leases in a consolidated statement of comprehensive income and a consolidated statement of cash flows is largely unchanged from previous GAAP. The amendments in this standard are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Earlier application is permitted.

As of the date of this report, the Company is the lessee of office equipment in a single operating lease and is the lessee of a parking lot as well as storage units. The Company is not a lessor in any arrangements. The Company is evaluating other supplier relationships to determine if such arrangements constitute a lease per this guidance. The Company expects to complete is evaluation prior to the end of 2017 and will evaluate the impact of adoption at that time. The Company does not expect any material impact on reporting or on the results of operations.

ASU No. 2014-09, "Revenue from Contracts with Customers" ("ASU 2014-09")

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers" ("ASU 2014-09"). The core principle behind ASU No. 2014-09 is that an entity should recognize revenue in an amount that reflects the consideration to which the entity expects to be entitled in exchange for delivering goods and services. This model involves a five-step process that includes identifying the contract with the customer, identifying the performance obligations in the contract, determining the transaction price, allocating the transaction price to the performance obligations in the contract and recognizing revenue when the entity satisfies the performance obligations. This ASU allows two methods of adoption; a full retrospective approach where historical financial information is presented in accordance with the new standard, and a modified retrospective approach where this ASU is applied to the most current period presented in the financial statements. In August 2015, the FASB issued ASU No 2015-14 "Revenue from

Contracts with Customers: Deferral of the Effective Date," which deferred the effective date of ASU 2014-09 to annual reporting periods beginning after December 15, 2017, with earlier application permitted as of annual reporting periods beginning after December 15, 2016.

As of the date of this report the Company has established a multi-disciplinary team including members of executive management, accounting, sales, operations and IT which is expected to begin implementation of a transition plan to the new guidance in the third quarter. The team will evaluate all supply and manufacturing agreements with customers as well as the nature of other arrangements and relationships between the Company and all other customers ("arrangements"), to determine if a contract, as defined by the guidance, exists. After evaluating the arrangements, the Company will determine the appropriate treatment for revenue recognition per the guidance compared to the Company's present revenue recognition policy is outlined in the Company's Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 22, 2017. As of the date of this report, given the scope of the new standard, the Company is currently unable to provide a reasonable estimate regarding the financial impact or which method of adoption will be elected.

Operating matters and liquidity

On June 16, 2017 the Company's credit facility (see Note 6) was renewed for 90 days, expiring September 30, 2017. At June 30, 2017, the outstanding balance on the Company's revolver was $2,670,000 with $728,879 of borrowing capacity. As of the June 30, 2017 testing date, the Company was in compliance with the terms of the credit facility except with respect to the debt service coverage ratio covenant. Non-compliance with the covenant entitles the bank to declare a default and seek immediate repayment of all outstanding balances. As of the date of these financial statements, the bank has indicated that they will not demand repayment of the outstanding balances. The Company is in discussion with the bank to obtain a waiver of non-compliance with the covenant. Concurrently, the Company is working with bank on extending the credit facility beyond September 30, 2017. As a result of the non-compliance with the debt service coverage ratio covenant, all of the Company's bank debt has been classified as current liabilities as of June 30, 2017.

The Company believes that it will be able to obtain the waiver of non-compliance and extension of the credit facility beyond September 30, 2017, and anticipates that cash flows from its operations, together with its existing working capital, increased booked orders and other resources will be sufficient to fund operations at current levels and repay debt obligations over the next twelve months; however, there can be no assurance that the Company will be able to do so.

Assessment of going concern

The Company follows accounting standard ASU No. 2014-15, — Presentation of Financial Statements - Going Concern (Subtopic 205-40), Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern. The new accounting standard requires management to evaluate whether there are conditions that give rise to substantial doubt as to the Company's ability to continue as a going concern within one year from the date of issuance of these financial statements. Substantial doubt exists when conditions and events, considered in the aggregate, indicate that it is probable that a company will be unable to meet its obligations as they become due within one year after the financial statement issuance date. Management evaluations include identifying relevant conditions and events that were known and reasonably knowable as of the date these financial statements have been issued.

At December 31, 2016, the Company identified certain conditions and events which in the aggregate required management to perform an assessment of the Company's ability to continue as a going concern. These conditions included the Company's ability to renew the credit facility which was maturing in June 2017, negative financial history and the Company's limited liquidity to meet the working capital needs to support the Company's operations. While the Company was successful in renewing the credit facility for an additional 90 days, to September 30, 2017, similar conditions exist as of June 30, 2017. As of the June 30, 2017 testing date, the Company was in compliance with the terms of the credit facility except with respect to the debt service coverage ratio covenant. The Company is in discussions with the bank to obtain a waiver of such non-compliance and extension of the credit facility beyond September 30, 2017.

Management's assessment included an analysis of the Company's first half 2017 results and financial forecasts looking forward twelve months from the date of these financial statements. During the first half of 2017, the Company made strategic decisions to take on new large orders, at aggressive initial pricing, in order to land follow-on orders with lower material costs. During this period the Company incurred extraordinary costs related to the starting up of these new customers, including increased scrap, tooling, labor, rework, expediting charges from suppliers, shift premiums and overtime, in order to meet customer delivery requirements. The Company landed the follow-on orders with the lower material costs and mitigated the startup costs of these new products.

Micron Solutions, Inc. and Subsidiary
Period Ended June 30, 2017

Notes to the Condensed Consolidated Financial Statements (unaudited)

The second half 2017 and 2018 forecasts reflect the expected results of austerity measures and productivity improvements implemented, beginning in the second quarter of 2017, which are expected to improve gross margin, reduce operating expenses and return the Company to profitability. These include more efficient use of labor by reducing overtime and modifying production schedules, process improvements, improved material yields, and decreased overhead expenses in part by compensation reductions for all salaried personnel including executive officers. In July 2017, the Company engaged a manufacturing consultancy firm with a focus on plastics, medical devices, contract manufacturing and outsourcing to analyze and benchmark the Company's operations, suggest business development strategies and improve operating performance. Management's assessment also considered the Company's history of meeting financial covenants and being able to renew and refinance its debt obligations.

Based on the expected extension of the Company's credit facility beyond September 30, 2017, certain austerity measures and improvements as noted above, cash forecasts, the expected fulfillment of booked orders from existing customers and new customer prospects and the engagement of the manufacturing consultancy firm, the Company expects to continue to meet its obligations for the next twelve months. The financial statements do not include any adjustment that might result from the outcome of this uncertainty.

Prior period adjustment

In the three months ended June 30, 2017, the Company identified $84,721 of cost of goods sold related to revenue recognized in the first quarter of 2017. The statement of operations for the three months ended June 30, 2017 has been adjusted for these amounts so as to accurately present the results of operations for the second quarter of 2017. The statement of operations for the six months ended June 30, 2017 is presented including these amounts on a year to date basis. The Company concluded that the correction of this error was immaterial, both quantitatively and qualitatively, to all relevant periods. The impact of the adjustment on first quarter results is an increase in net loss to $298,436 from $213,715.

2. Earnings per Share ("EPS")

Basic earnings (loss) per share is computed by dividing net income (loss) available to common shareholders by the weighted average number of common shares outstanding. The computation of diluted earnings (loss) per share is similar to the computation of basic earnings (loss) per share except that the denominator is increased to include the average number of additional common shares that would have been outstanding if the dilutive potential common shares had been issued. In addition, the numerator is adjusted for any changes in net income (loss) that would result from the assumed conversions of those potential shares.

The following table presents the calculation of both basic and diluted EPS:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Income (loss) from continuing operations	$ (511,453)	$ 62,113	$ (809,890)	$ (322,035)
Net income (loss) available to common shareholders	$ (511,453)	$ 62,113	$ (809,890)	$ (322,035)
Basic EPS:				
Weighted average common shares outstanding	2,820,999	2,816,639	2,819,915	2,816,392
Earnings (loss) per share - basic				
Continuing operations	$ (0.18)	$ 0.02	$ (0.29)	$ (0.11)
Consolidated basic EPS	$ (0.18)	$ 0.02	$ (0.29)	$ (0.11)
Diluted EPS:				
Weighted average common shares outstanding	2,820,999	2,816,639	2,819,915	2,816,392
Assumed conversion of net common shares issuable under stock option plans	—	70,981	—	—
Assumed conversion of net common shares issuable under warrants	—	12,873	—	—
Weighted average common and common equivalent shares outstanding, diluted	2,820,999	2,900,493	2,819,915	2,816,392
Earnings (loss) per share - diluted				
Continuing operations	$ (0.18)	$ 0.02	$ (0.29)	$ (0.11)
Consolidated diluted EPS	$ (0.18)	$ 0.02	$ (0.29)	$ (0.11)

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3. Inventories

Inventories consist of the following:

	June 30, 2017	December 31, 2016
Raw materials	$ 799,698	$ 1,027,474
Work-in-process	624,983	537,858
Finished goods	1,829,583	1,494,753
Total	$ 3,254,264	$ 3,060,085

Silver included in raw materials, work-in-process and finished goods inventory had an estimated cost of $583,733 and $521,745 as of June 30, 2017 and December 31, 2016, respectively.

4. Property, Plant and Equipment, net

Property, plant and equipment, net consist of the following:

	Asset Lives (in years)	June 30, 2017	December 31, 2016
Machinery and equipment	3 to 15	$ 17,322,498	$ 16,647,302
Building and improvements	5 to 25	3,986,715	3,986,715
Vehicles	3 to 5	90,713	90,713
Furniture, fixtures, computers and software	3 to 5	1,538,316	1,504,776
Construction in progress		122,822	402,099
Total property, plant and equipment		23,061,064	22,631,605
Less: accumulated depreciation		(16,664,482)	(16,190,694)
Property, plant and equipment, net		$ 6,396,582	$ 6,440,911

For the three months ended June 30, 2017 and 2016, the Company recorded depreciation expense of $406,761 and $361,001, respectively. For the six months ended June 30, 2017 and 2016, the Company recorded depreciation expense of $801,881 and $744,561, respectively

In January 2016, the Company entered into a Purchase and Sale Agreement (Agreement) with a Buyer (collectively the "Parties") to sell two unoccupied buildings, with approximately 52,000 square feet, and land, at its Fitchburg, Massachusetts campus.

In December 2016, the Parties entered into a First Amendment to the Purchase and Sale Agreement (the First Amendment) which extended the time to close to January 13, 2018. As part of the consideration for extending the Agreement the Buyer agreed to pay certain extension fees.

In January 2017, the Parties entered into a Second Amendment to the Purchase and Sale Agreement (the Second Amendment) to further extend the time to close to July 2018. The Second Amendment permits the Buyer to assign the Agreement to a third party and extends the extension fees through July 2018 or the culmination of the agreement.

At June 30, 2017 and December 31, 2016, the real estate under agreement was classified as Assets Held for Sale valued at $688,750. The carrying value approximated the fair value less the cost to sell.

5. Intangible Assets, net

The Company assesses the impairment of long-lived assets and intangible assets with finite lives annually or whenever events or changes in circumstances indicate that the carrying value may not be fully recoverable. For the three and six months ended June 30, 2017 and 2016, the Company did not impair any intangible assets.

Notes to the Condensed Consolidated Financial Statements (unaudited)

Intangible assets consist of the following:

	Estimated Useful Life (in years)	June 30, 2017 Gross	June 30, 2017 Accumulated Amortization	June 30, 2017 Net	December 31, 2016 Gross	December 31, 2016 Accumulated Amortization	December 31, 2016 Net
Patents and trademarks	10	$ 26,290	$ 10,617	$ 15,673	$ 26,290	$ 9,738	$ 16,552
Patents and trademarks pending	—	25,568	—	25,568	13,541	—	13,541
Trade Names	—	3,268	108	3,160	—	—	—
Total intangible assets		$ 55,126	$ 10,725	$ 44,401	$ 39,831	$ 9,738	$ 30,093

For the three months ended June 30, 2017 and 2016, the Company recorded amortization expense of $547 and $1,006, respectively. For the six months ended June 30, 2017 and 2016, the Company recorded amortization expense of $987 and $2,013, respectively.

6. Debt

The following table sets forth the items which comprise debt for the Company:

	June 30, 2017	December 31, 2016
Revolving line of credit	$ 2,670,000	$ 1,785,795
Equipment line of credit	$ 504,781	$ 102,500
Subordinated promissory notes	$ 436,471	$ 432,011
Term notes payable:		
Commercial term loan	$ 2,187,403	$ 2,398,870
Equipment term loans	—	—
Equipment notes	30,077	59,461
Total term notes payable	$ 2,217,480	$ 2,458,331
Total Debt	$ 5,828,732	$ 4,778,637

Bank Debt

The Company has a multi-year credit facility with a Massachusetts based bank. This credit facility consists of a revolving line of credit (the "revolver"), a commercial term loan and an equipment line of credit. The debt is secured by substantially all assets of the Company with the exception of real property. On June 16, 2017, the credit facility was renewed for a 90 day term, expiring September 30, 2017. The Company is in discussion with the bank to extend the credit facility beyond September 30, 2017.

Revolver

The revolver provides for borrowings up to 80% of eligible accounts receivable and 50% of eligible raw materials inventory. The interest rate on the revolver is calculated at the bank's prime rate plus 0.25% (4.50% at June 30, 2017). Amounts available to borrow under the revolver are $728,879 at June 30, 2017.

Commercial term loan

In November 2016, the Company refinanced its bank term debt, including the commercial term loan and three equipment term loans, along with $500,000 from the revolver, into a new $2,481,943 consolidated five year commercial term loan with a maturity date in November 2021. The interest rate on the loan is a fixed 4.65% per annum and the loan requires monthly payments of principal and interest of approximately $46,500.

Equipment line of credit

In November 2016, the Company entered into an equipment line of credit that allows for advances of up to $1.0 million under the Company's multi-year credit facility. The term of this equipment line of credit is six years, maturing in November 2022, inclusive of a maximum one-year draw period. Repayment shall consist of monthly interest only payments, equal to the bank's prime rate plus 0.25% as to each advance commencing on the date of the loan through the earlier of: (i) one year from the date of the loan or (ii) the date upon which the equipment line of credit is fully advanced (the "Conversion Date"). On the Conversion Date, principal and interest payments will be due and payable monthly in an amount sufficient to pay the loan in full based upon an amortization schedule commensurate with the remaining term of the loan.

At June 30, 2017, $504,781 has been drawn on the equipment line of credit. At December 31, 2016, $102,500 had been drawn on the equipment line of credit.

Debt issuance costs

The amount of the commercial term loan presented in the table above is net of debt issuance costs of $33,565 and $45,858 at June 30, 2017 and December 31, 2016 respectively.

Bank covenants

The credit facility contains both financial and non-financial covenants. The financial covenants include maintaining certain debt coverage and leverage ratios. The non-financial covenants relate to various matters including notice prior to executing further borrowings and security interests, mergers or consolidations, acquisitions, guarantees, sales of assets other than in the normal course of business, leasing, changes in ownership and payment of dividends. As of the June 30, 2017 testing date, the Company was in compliance with the terms of the credit facility except with respect to the debt service coverage ratio covenant. As a result, all of the Company's bank debt has been classified as current liabilities as of June 30, 2017. The Company is in discussions with the bank to obtain a waiver of non-compliance with the covenant.

Other Debt

Equipment notes

In January 2013, the Company entered into two equipment notes totaling $272,500 with a financing company to acquire production equipment. The notes bear interest at the fixed rate of 4.66% and require monthly payments of principal and interest of approximately $5,000 over a five year term maturing in January 2018.

Subordinated promissory notes

In December 2013, the Company completed a private offering in which the Company sold an aggregate of $500,000 in subordinated promissory notes. The unsecured notes required quarterly interest-only payments at a rate of 10% per annum for the first two years. In December 2015, the interest rate increased to 12% per annum. The Company's two largest beneficial owners of stock and a director participated in the private offering as follows: REF Securities, LLP, beneficial owner with Rodd E. Friedman of approximately 13% of the Company's common stock, invested $100,000 in the offering; the Chambers Medical Foundation (the "Foundation"), beneficial owner of approximately 10% of the Company's common stock, invested $100,000 in the offering; and Mr. E.P. Marinos, a director, invested $50,000 in the offering. The Company's Chairman of the Board is a co-trustee of the Foundation but has held no dispositive powers since his appointment as such. On July 21, 2017, Mr. Rodd E. Friedman, the principal of REF Securities, LLP was appointed to the Board of Directors of the Company (see Note 10).

In October 2016, the Company and six of the seven investors in the private offering, aggregating $450,000 of the notes, including the three related parties holding $250,000 of the notes, agreed to extend the maturity dates of the notes to December 31, 2018 at a rate of 10% per annum. One investor did not extend the maturity date and that $50,000 note was paid at maturity in December 2016. The notes are subordinated to all indebtedness of the Company pursuant to its multi-year bank credit facility.

In connection with the subordinated promissory notes, the Company issued 100,000 warrants to purchase the Company's common stock, including 20,000 warrants to REF Securities, LLP, 20,000 warrants to the Foundation and 10,000 warrants to Mr. Marinos. The warrants were exercisable through December 2016 at an exercise price of $3.51 per share. In 2014, 30,000 warrants were exercised, including 20,000 by the Foundation. No warrants were exercised in 2015 or 2016. In October 2016, in connection with the extension of the maturity dates of the subordinated promissory notes, the expiration date of the remaining 70,000 warrants

was extended to December 31, 2018. The exercise price remained unchanged at $3.51 per share. The 70,000 warrants remain unexercised at June 30, 2017.

In the fourth quarter of 2016, the Company calculated the incremental fair value of extending the expiration date of the Notes and Warrants and determined that the amendment represented a debt modification in accordance with the guidance outlined in ASC-470, "Debt". Using the Black-Scholes model, and the 10% test, the Company determined that the incremental fair value of the warrants to be $18,310 which was recorded as a reduction against the Notes and an increase in Additional Paid-in Capital.

The discount on the notes is being recognized as non-cash interest expense over the term of the notes. The Company recorded $6,146 and $6,921 for three and six months ended June 30, 2017 and 2016 of non-cash interest expense related to the amortization of the discount. The unamortized discount which is net against the outstanding balance of the subordinated promissory notes is $13,529 at June 30, 2017 and $17,989 at December 31, 2016.

7. Income Taxes

No provision for income taxes has been recorded in the three or six months ended June 30, 2017 or 2016, respectively. The Company has a full valuation allowance against its deferred tax assets as of June 30, 2017 and December 31, 2016.

At June 30, 2017, the Company has federal and state net operating loss carryforwards totaling $9,124,000 and $8,196,000, respectively, which begin to expire in 2030. The Company also has federal and state tax credit carryovers of $303,000 and $357,000 respectively. The federal and state tax credits begin to expire in 2026 and 2027, respectively.

8. Commitments and Contingencies

Legal matters

In the ordinary course of its business, the Company is involved in various legal proceedings involving a variety of matters. The Company does not believe there are any pending legal proceedings that will have a material impact on the Company's financial position or results of operations.

Off-balance sheet arrangements

In the second quarter of 2016 the Company consolidated its operating leases. Lease expense under all operating leases was approximately $5,884 and $5,113 for the three months ended June 30, 2017 and 2016, respectively, and $13,114 and $14,444 for the six months ended June 30, 2017 and 2016, respectively.

Micron Solutions, Inc. and Subsidiary
Period Ended June 30, 2017

Notes to the Condensed Consolidated Financial Statements (unaudited)

9. Shareholders' Equity

Stock options and share-based incentive plan

The following table sets forth the stock option transactions for the six months ended June 30, 2017:

	Number of options		Weighted Average Exercise Price	Weighted average remaining contractual term (in years)		Aggregate Intrinsic Value
Outstanding at December 31, 2016	214,500	$	5.96	7.12	$	17,340
Granted	—		—			
Exercised	—		—			
Forfeited	(4,000)		3.67			
Expired	—		—			
Outstanding at June 30, 2017	210,500	$	6.00	6.63	$	28,750
Exercisable at June 30, 2017	116,495	$	6.86	5.11	$	17,980
Exercisable at December 31, 2016	109,495	$	6.90	5.47	$	8,880

For the three months ended June 30, 2017 and 2016, share-based compensation expense related to stock options amounted to $6,196 and $15,133, respectively. For the six months ended June 30, 2017 and 2016, share based compensation expense related to stock options amounted to $21,167 and $30,591, respectively. Share based compensation is included in general and administrative expenses.

For the three months ended June 30, 2016 no options were granted, exercised or expired. For the three months ended June 30, 2017, 4,000 options were forfeited due to an employee termination.

For the six months ended June 30, 2017, no options were granted or expired and 4,000 options were forfeited. For the six months ended June 30, 2016, 15,000 options were exercised generating proceeds of $51,150.

Warrants

For the three months ended June 30, 2017 and 2016, there were no warrants exercised. As of June 30, 2017, 70,000 warrants remain unexercised, including 20,000 held by the Company's largest beneficial owner, REF Securities, LLP with Mr. Rodd E. Friedman, and 10,000 held by Mr. E. P. Marinos, a director of the Company. The warrants expire in December 2018.

Common Stock

For the three months ended June 30, 2017, the Company did not issue any shares. For the six months ended June 30, 2017, the Company issued 4,360 shares of the Company's common stock, pursuant to the 2010 Equity Incentive Plan, with a fair value of $11,250 for director fees in lieu of cash payments. For the six months ended June 30, 2016, there were no such stock grants.

10. Subsequent Events

Appointment of Director

On July 21, 2017, the Company appointed Mr. Rodd E. Friedman to the Board of Directors. Mr. Friedman is the principal of REF Securities, LLP. Mr. Friedman and REF Securities beneficially own approximately 13% of the outstanding shares of the Company as of June 30, 2017.

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

Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements that involve a number of risks and uncertainties. There are a number of factors that could cause the Company's actual results to differ materially from those forecasted or projected in such forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements which speak only as of the date hereof. The Company is under no obligation and does not intend to update, revise or otherwise publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of any unanticipated events. More information about factors that potentially could affect the Company's financial results is included in the Company's filings with the SEC, including its Annual Report on Form 10-K for the year ended December 31, 2016.

Critical Accounting Policies

The critical accounting policies utilized by the Company in preparation of the accompanying financial statements are set forth in Part II, Item 7 of the Company's Annual Report on Form 10-K for the year ended December 31, 2016, under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations". There have been no material changes to these policies since December 31, 2016.

Overview

Micron Solutions®, Inc., a Delaware corporation ("Micron Solutions"), through its wholly-owned Massachusetts subsidiary, Micron Products®, Inc. ("Micron" and together with Micron Solutions, the "Company"), is a diversified contract manufacturing organization ("CMO") that produces highly-engineered, innovative medical device components requiring precision machining and injection molding. The Company also manufactures components, devices and equipment for military, law enforcement, automotive and consumer product applications. The Company is engaged in the production and sale of silver/silver chloride coated and conductive resin sensors used as consumable component parts in the manufacture of integrated disposable electrophysiological sensors. These disposable medical devices are used worldwide in the monitoring of electrical signals in various medical applications. The Company's machining operations produce quick-turn, high volume patient-specific and off-the-shelf orthopedic implants and instruments. The Company's machining operations also include laser marking, automated polishing, passivation and coating. The Company has thermoplastic injection molding capabilities as well, and provides a full array of design, engineering, production services and management. The Company competes globally, with approximately thirty five percent of its revenue derived from exports.

Operating matters and liquidity

On June 16, 2017 the Company's credit facility (see Note 6) was renewed for 90 days, expiring September 30, 2017. At June 30, 2017, the outstanding balance on the Company's revolver was $2,670,000 with $728,879 of borrowing capacity. As of the June 30, 2017 testing date, the Company was in compliance with the terms of the credit facility except with respect to the debt service coverage ratio covenant. Non-compliance with the covenant entitles the bank to declare a default and seek immediate repayment of all outstanding balances. As of the date of these financial statements, the bank has indicated that they will not demand repayment of the outstanding balances. The Company is in discussion with the bank to obtain a waiver of non-compliance with the covenant. Concurrently, the Company is working with bank on extending the credit facility beyond September 30, 2017. As a result of the non-compliance with the debt service coverage ratio covenant, all of the Company's bank debt has been classified as current liabilities as of June 30, 2017.

The Company believes that it will be able to obtain the waiver of non-compliance and extension of the credit facility beyond September 30, 2017, and anticipates that cash flows from its operations, together with its existing working capital, increased booked orders and other resources will be sufficient to fund operations at current levels and repay debt obligations over the next twelve months; however, there can be no assurance that the Company will be able to do so.

Assessment of going concern

The Company follows accounting standard ASU No. 2014-15, — Presentation of Financial Statements - Going Concern (Subtopic 205-40), Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern. The new accounting standard requires management to evaluate whether there are conditions that give rise to substantial doubt as to the Company's ability to continue as a going concern within one year from the date of issuance of these financial statements. Substantial doubt exists when conditions and events, considered in the aggregate, indicate that it is probable that a company will be unable to meet its obligations as they become due within one year after the financial statement issuance date. Management evaluations include identifying relevant conditions and events that were known and reasonably knowable as of the date these financial statements have been issued.

At December 31, 2016, the Company identified certain conditions and events which in the aggregate required management to perform an assessment of the Company's ability to continue as a going concern. These conditions included the Company's ability to renew the credit facility which was maturing in June 2017, negative financial history and the Company's limited liquidity to meet the working capital needs to support the Company's operations. While the Company was successful in renewing the credit facility for an additional 90 days, to September 30, 2017, similar conditions exist as of June 30, 2017. As of the June 30, 2017 testing date, the Company was in compliance with the terms of the credit facility except with respect to the debt service coverage ratio covenant. The Company is in discussions with the bank to obtain a waiver of such non-compliance and extension of the credit facility beyond September 30, 2017.

Management's assessment included an analysis of the Company's first half 2017 results and financial forecasts looking forward twelve months from the date of these financial statements. During the first half of 2017, the Company made strategic decisions to take on new large orders, at aggressive initial pricing, in order to land follow-on orders with lower material costs. During this period the Company incurred extraordinary costs related to the starting up of these new customers, including increased scrap, tooling, labor, rework, expediting charges from suppliers, shift premiums and overtime, in order to meet customer delivery requirements. The Company landed the follow-on orders with the lower material costs and mitigated the start-up costs of these new products.

The second half 2017 and 2018 forecasts reflect the expected results of austerity measures and productivity improvements implemented, beginning in the second quarter of 2017, which are expected to improve gross margin, reduce operating expenses and return the Company to profitability. These include more efficient use of labor by reducing overtime and modifying production schedules, process improvements, improved material yields, and decreased overhead expenses in part by compensation reductions for all salaried personnel including executive officers. In July 2017 the Company engaged a manufacturing consultancy firm with a focus on plastics, medical devices, contract manufacturing and outsourcing to analyze and benchmark the Company's operations, suggest business development strategies and improve operating performance. Management's assessment also considered the Company's history of meeting financial covenants and being able to renew and refinance its debt obligations.

Based on the expected extension of the Company's credit facility beyond September 30, 2017, certain austerity measures and improvements as noted above, cash forecasts, the expected fulfillment of booked orders from existing customers and new customer prospects and the engagement of the manufacturing consultancy firm, the Company expects to continue to meet its obligations for the next twelve months. The financial statements do not include any adjustment that might result from the outcome of this uncertainty.

Prior period adjustment

In the three months ended June 30, 2017 the Company identified $84,721 of cost of goods sold related to revenue recognized in the first quarter of 2017. The statement of operations for the three months ended June 30, 2017 has been adjusted for these amounts so as to accurately present the results of operations for the second quarter of 2017. The statement of operations for the six months ended June 30, 2017 is presented including these amounts on a year to date basis. The Company concluded that the correction of this error was immaterial, both quantitatively and qualitatively, to all relevant periods. The impact of the adjustment on first quarter results is an increase in net loss to $298,436 from $213,715.

Results of Operations

The following table sets forth, for the periods indicated, the percentages of the net sales represented by certain items reflected in the Company's statements of operations.

	Three Months Ended June 30,				Six Months Ended June 30,			
	2017	%	2016	%	2017	%	2016	%
Net sales	100.0		100.0		100.0		100.0	
Cost of sales	92.9		81.6		90.3		83.9	
Gross profit	7.1		18.4		9.7		16.1	
Selling and marketing	4.4		5.9		4.7		5.9	
General and administrative	10.3		9.6		11.0		11.7	
Research and development	0.5		0.5		0.5		0.5	
Other expense	1.4		1.2		1.1		1.2	
Income (loss) before income taxes	(9.5)		1.2		(7.6)		(3.2)	
Income tax provision	—		—		—		—	
Net income (loss)	(9.5)	%	1.2	%	(7.6)	%	(3.2)	%

Net Sales

The Company's consolidated net sales for the three months ended June 30, 2017 was $5,390,726, an increase of $261,713, or 5.1%, when compared to the consolidated net sales of $5,129,013 for the three months ended June 30, 2016. The increase in net sales for the three months ended June 30, 2017 was due primarily to increases in net sales of sensors and net tooling revenue, largely offset by decreased net sales in thermoplastic injection molding and net sales of orthopedic implant components and instruments.

For the three months ended June 30, 2017, net sales of sensors increased 32.6% when compared to the three months ended June 30, 2016. The increase was due largely to a 41.0% increase in volume. The increased volume was due largely to an increase in a single customer's annual order as well as increased volume from the Company's largest sensor customer. Additionally, silver surcharge billed increased due in part to increased volume as well as an increase in the weighted average price of silver over the comparable period last year. Net tooling revenue for the three months ended June 30, 2017 increased 230% due in part to the recognition of previously deferred tooling revenue. The increase in tooling is largely related to new customers in the automotive and medical industries.

For the three months ended June 30, 2017, net sales of thermoplastic injection molding decreased 10.2% when compared to the three months ended June 30, 2016. The decrease was due largely to decreased demand from several customers in the medical industry product lines.

For the three months ended June 30, 2017, net sales of orthopedic implant components and instruments decreased 26.2% when compared to the three months ended June 30, 2016. The decrease was due in part to reduced orders from one customer as a result of relabeling of product to a longer expiration date. The decrease was also due to reduced demand for femoral components from one customer beginning in the third quarter of 2016.

The Company's consolidated net sales for the six months ended June 30, 2017 was $10,655,703, an increase of $543,409, or 5.4%, when compared to the consolidated net sales of $10,112,294 for the six months ended June 30, 2016. The increase in net sales for the six months ended June 30, 2017 was due primarily to increases in net sales of sensors, thermoplastic injection molding and net tooling revenue, partly offset by decreased net sales of orthopedic implant components and instruments.

For the six months ended June 30, 2017, net sales of sensors increased 9.4% due largely to a 7.0% increase in volume, due largely to increased volume from the Company's largest sensor customer and an increase in a large customer's annual order. Additionally, silver surcharge increased due in part to increased volume as well as an increase in the weighted average price of silver over the comparable period last year. Net tooling revenue for the six months ended June 30, 2016 increased due in part to the recognition of previously deferred tooling revenue. The increase in tooling was largely related to new customers in the automotive and medical industries.

For the six months ended June 30, 2017, net sales of thermoplastic injection molding increased 7.3% when compared to the six months ended June 30, 2016. The increase was due to increased sales volume of automotive components as well as increased sales volume of military and law enforcement components when compared to the same period in 2016, largely in the first quarter of 2017.

For the six months ended June 30, 2017, net sales of orthopedic implant components and instruments decreased 17.5% when compared to the same period 2016. The decrease was due in part to reduced orders from one customer as a result of relabeling of product to a longer expiration date. The decrease is also due to reduced demand of femoral components from one customer beginning in the third quarter of 2016. Partially offsetting the decrease was new business from three new customers for which the Company has expanded its machining operations to include surgical instrumentation including cutting guides, as well as hip stems, keel trays and other orthopedic components beginning in the second quarter of 2016.

Gross Profit

The Company's gross profit for the three months ended June 30, 2017 was $381,837, a decrease of $562,913, or 59.6%, when compared to gross profit of $944,750 for the same period in 2016. Gross profit as a percentage of sales for the three months ended June 30, 2017 decreased to 7.1%, or a decrease of 11.3 percentage points from 18.4% for the three months ended June 30, 2016. The decrease in gross profit was due primarily to a decrease in gross profit from orthopedic implant components and instruments as well as thermoplastic injection molding, partly offset by an increase in gross profit from sensors.

The decrease in gross profit for the three months ended June 30, 2017 was primarily due to a 73.3% decrease in gross profit from orthopedic implant components and instruments. The decrease was due in part to decreased sales due to lower demand from two customers, as noted above. The decrease was also due in part to the Company offering aggressive initial prices to secure new customers, as well the impact of reworking many of the related parts, as the Company refined its production process. The increased costs included costs related to increased scrap, tooling, labor, rework, expediting charges from suppliers, shift premiums and overtime,

in order to meet customer delivery requirements. Gross margin as a percent of sales decreased by 19.5 percentage points due to this rework and the investments in these new customers.

The decrease in gross profit for the three months ended June 30, 2017 was also due to a 23.8% decrease in gross profit from thermoplastic injection molding due largely to decreased sales volume from customers in the medical industry. Gross margin as a percent of sales decreased by 5.3 percentage points due to customer and product mix.

The decreases in gross profit above were partially offset by an increase in sensors gross profit of 5.8% for the three months ended June 30, 2017 when compared to the same period last year. The increase was due to the significant increase in volume compared to the same period last year, which was largely offset by price concessions resulting in margin deterioration. Additionally, while net sales from silver surcharge billed increased, gross profit from silver surcharge billed decreased 17.7% due to the increase in the weighted average cost of silver.

The decrease in gross profit for the three months ended June 30, 2017 versus the prior year period was also partly the result of a 31.2% increase in expenses for other indirect manufacturing overhead departments. The higher expenses were due largely to higher Quality expenses, largely associated with the machining product line, as well as higher mold shop maintenance and repairs due to an increase in machine utilization requirements as a result of increased volume of sensors and thermoplastic injection molding.

The Company's gross profit for the six months ended June 30, 2017 was $1,035,211, a decrease of $594,658, or 36.5%, when compared to gross profit of $1,629,869 for the same period in 2016. Gross profit as a percentage of sales for the six months ended June 30, 2017 decreased to 9.7%, or 6.4 percentage points from 16.1% for the six months ended June 30, 2016. The decrease in gross profit was due primarily to a decrease in gross profit from orthopedic implant components and instruments. Additionally, gross profit from sensors and thermoplastic injection molding decreased as well.

The decrease in gross profit for the six months ended June 30, 2017 was primarily due to a 60.5% decrease in gross profit from orthopedic implant components and instruments. The decrease was due in part to decreased sales due to lower demand from two customers, as noted above. The decrease was also due in part to the Company investing in loss leaders to secure new customers, as well as the impact of reworking many of the related parts, as the Company refined its production process. The increased costs included costs related to increased scrap, tooling, labor, rework, expediting charges from suppliers, shift premiums and overtime, in order to meet customer delivery requirements. Gross margin as a percent of sales decreased by 12.9 percentage points due to these investments in new customers.

The decrease in gross profit for the six months ended June 30, 2017 was also due to a 4.4% decrease in sensors due to price concessions resulting in margin deterioration, despite the increase in volume from the Company’s largest sensor customers. Additionally, while net sales from silver surcharge billed increased, gross profit from silver surcharge billed decreased 6.1% due to the increase in the weighted average cost of silver. Gross margin as a percent of sales decreased by 2.2 percentage points due to the aforementioned price concessions.

The decrease in gross profit for the six months ended June 30, 2017 was also due to a 2.1% decrease in gross profit from thermoplastic injection molding due largely to decreased sales volume as well as customer and product mix. Gross margin as a percent of sales decreased by 3.0 percentage points.

The decrease in gross profit for the six months ended June 30, 2017 versus the prior year period was also partly the result of a 27.9% increase in expenses for other indirect manufacturing overhead departments. The higher expenses were due largely to higher Quality expenses, largely associated with the machining product line, as well as higher mold shop maintenance and repairs due to an increase in machine utilization requirements as a result of increased volume of sensors and thermoplastic injection molding.

Selling and Marketing

The Company's consolidated selling and marketing expenses amounted to $234,820 (4.4% of net sales) for the three months ended June 30, 2017 as compared to $303,564 (5.9% of net sales) for the three months ended June 30, 2016, a decrease of $68,744, or 22.6%. For the three months ended June 30, 2017, the decrease was primarily due to decreased compensation of $62,387 as a result of the departure of a sales person and customer service representative in the first quarter of 2017. Additionally, commissions were lower by $1,879 due in part to the mix of commissionable parts. Additionally, travel, advertising and marketing expenses were lower by $6,732 due to reduced attendance at trade shows.

For the six months ended June 30, 2017, the Company's consolidated selling and marketing expenses amounted to $500,693 (4.7% of net sales) as compared to $596,910 (5.9% of net sales) for the six months ended June 30, 2016, a decrease of $96,217, or 16.1%. For the six months ended June 30, 2017, the decrease was primarily due to decreased compensation of $99,156 as a result of the departure of a sales person and customer service representative in the first quarter of 2017. Additionally, commissions were lower by $15,632 due in part to lower sales and the mix of commissionable parts. Additionally, travel expenses were lower by $8,750 due to

one less salesperson. Partly offsetting these decreases were increased marketing and advertising expenses related to trade shows and web site enhancements.

General and Administrative

The Company's consolidated general and administrative expenses increased to $552,678 (10.3% of net sales) for the three months ended June 30, 2017 as compared to $491,432 (9.6% of net sales) for the three months ended June 30, 2016 an increase of $61,246, or 12.5%. The increase in general and administrative expenses is due in part to increased compensation of $37,231, due largely to cost of living adjustments in January 2017 and the addition of a new full time employee in the Company's IT department. Additionally, directors' fees were higher by $39,750 compared to the prior year period due to the impact of the waiver of directors' fees as well as the voluntary 10% salary reduction by the executive officers in the second quarter of 2016. General and products liability insurance increased by $9,232 as a result of annual renewals and increased coverage for military and law enforcement products. Partially offsetting these increases was a decrease of $9,262 in stock based compensation expense due to stock options issued in 2011 becoming fully vested in the second quarter of 2016. Additionally, professional services for legal, consulting and accounting expense were lower by $15,108. There were additional smaller decreases in expenses for investor relations, travel and office supplies.

For the six months ended June 30, 2017, the Company's consolidated general and administrative expenses decreased to $1,169,508 (11.0% of net sales) as compared to $1,182,067 (11.7% of net sales) for the same period in 2016, a decrease of $12,559, or 1.1%. The decrease in general and administrative expenses is due in part to lower professional services expense of $103,359 due partly to the impact of $51,600 of recruiting agency fees in the second quarter of 2016 as well as lower legal fees of $53,416. Investor relations related expenses decreased by $13,697 due primarily to no longer using a professional investor relations firm. Additionally, bad debt expense, travel expenses and share based compensation were all lower in the six months ended June 30, 2017 when compared to the six months ended June 30, 2016. Partially offsetting these decreases was increased compensation of $55,815, due largely to cost of living increases and the addition of a new full time employee in the Company's IT department. Additionally, directors' fees were higher by $39,750 compared to the prior year period due to the impact of the waiver of directors' fees as well as the voluntary 10% salary reduction by the executive officers in the second quarter of 2016.

Research and Development

The Company's consolidated research and development expenses increased to $28,344 (0.5% of net sales) for the three months ended June 30, 2017 as compared to $24,415 (0.5% of net sales) for the three months ended June 30, 2016, an increase of $3,929, or 16.1%. Research and development expenses increased to $57,640 for the six months ended June 30, 2017 (0.5% of net sales) as compared to $50,258 for the six month ended June 30, 2016, an increase of $7,382 or 14.7%. The increases for the three and six month ended June 30, 2017 and 2016 respectively are due largely to cost of living increases in January 2017.

Other Expense, net

Other expense, net increased to $77,448 for the three months ended June 30, 2017, as compared to $63,226, for the three months ended June 30, 2016, an increase of $14,222. The increase in other expense was due largely to an increase in interest expense of $24,151, due to higher principal balances outstanding on the revolver, partially offset by a gain on the sale of fixed assets of $9,239.

For the six months ended June 30, 2017, other expense, net decreased $5,412 due in part to $21,554 of gains on the sale of fixed assets as well as $12,000 of other income related to extension fees related to the buildings held for sale, partially offset by an increase of $27,937 of interest expense due to higher principal balances outstanding on the revolver.

Income Tax Provision

The tax provisions for the three and six months ended June 30, 2017 and 2016 attributable to the U.S. federal and state income taxes are zero. The Company's combined federal and state effective income tax rate from continuing operations for both the three and six months ended June 30, 2017 and 2016 of 0% is due to the deferred tax assets being fully reserved for with a valuation allowance.

Earnings (Loss) Per Share

Consolidated basic and diluted loss per share for the three months ended June 30, 2017 was $0.18 per share as compared to basic and diluted earnings per share of $0.02 per share for the same period in 2016, a decrease in earnings per share of $0.20. The decreased earnings per share for the three months ended June 30, 2017, is due largely to a decrease of $562,913 in gross profit despite a $261,713 increase in net sales compared to the prior year period.

Consolidated basic and diluted loss per share for the six months ended June 30, 2017 was $0.29 per share as compared to $0.11 per share for the same period in 2016, an increase in loss per share of $0.18. The increased loss per share for the six months

ended June 30, 2017, is due largely to a decrease of $594,658 in gross profit despite a $543,409 increase in net sales compared to the prior year period.

Off-Balance Sheet Arrangements

Lease expense under all operating leases was approximately $5,884 and $5,113 for the three months ended June 30, 2017 and 2016, respectively and were approximately $13,114 and $14,444 for the six months ended June 30, 2017 and 2016, respectively.

Liquidity and Capital Resources

Working capital was $(1,183,184) as of June 30, 2017, as compared to $1,530,773 at December 31, 2016, a decrease of $2,713,957. The decrease in working capital is due largely to the reclassification of $1,749,009 of term notes from long term to short term as a result of the non-compliance with the debt service coverage ratio covenant. The decrease is also due to an increase of $884,205 in the revolver. Cash and cash equivalents were $338,069 and $380,381 at June 30, 2017 and December 31, 2016, respectively, a decrease of $42,312. Substantially all of these funds are maintained in bank deposit accounts.

Trade accounts receivable, net of allowance for doubtful accounts were $3,441,272 and $2,276,608 at June 30, 2017 and December 31, 2016, respectively, an increase of $1,164,664. The increase is due largely to the timing of payments related to certain large international shipments for which payment was received in the third quarter.

Inventories were $3,254,264 as of June 30, 2017, as compared to $3,060,085 at December 31, 2016, an increase of $194,179. Work-in-process inventory increased $87,125 primarily as a result of increased orthopedic implant components and instruments as well as an increase in silver in work-in-process. Finished goods inventory increased $334,830 due in part to higher inventory being held at customer locations as well as an increase in the value of silver in finished goods inventory and the timing of shipments at the end of the second quarter of 2017.

Accounts payable were $2,611,071 and $1,744,261 at June 30, 2017 and December 31, 2016, respectively, an increase of $866,810 due largely to the extension of our cash conversion cycle due to extended payment terms given to certain strategic customers and the timing of disbursements. Other non-current assets decreased $145,603 as a result of a decrease in prepaid cost of goods sold related to deferred tooling revenue. Accrued expenses and other current liabilities increased $117,361 for the six months ended June 30, 2017 as compared to December 31, 2016 increase in payroll accruals based on timing of quarter end. In addition, customer deposits increased $88,175 related to tooling. These increases were partly offset by decreases in the current portion of deferred revenue of $51,266 and other non-current liabilities of $156,953

Capital equipment expenditures were $759,546 for the six months ended June 30, 2017, due to investments in machinery and equipment primarily for the contract manufacturing of orthopedic implants and instruments as well as custom injection molding as compared to $960,144 in the same period in 2016.

At June 30, 2017, the Company's total debt was $5,828,732 as compared to $4,778,637 at December 31, 2016, an increase of $1,050,095. The increase is due largely to $884,205 in net borrowing from the revolver and $402,281 of borrowings from the equipment line of credit to fund working capital and finance investments in capital equipment, respectively, partially offset by payments of $253,145 on term debt.

At June 30, 2017, total outstanding balance of the Company's term debt was $2,251,044 as compared to $2,458,331 at December 31, 2016, a decrease of $207,287.

The Company has a multi-year credit facility with a Massachusetts based bank. At June 30, 2017, this credit facility consisted of a revolving line of credit (the "revolver"), a commercial term loan and an equipment line of credit. The bank facility contains both financial and non-financial covenants. On June 16, 2017, the Company's bank approved the renewal of the Company's credit facility for a 90 day term, expiring September 30, 2017. The Company is in discussions with the bank and expects to extend the credit facility beyond September 30, 2017.

The revolver provides for borrowings up to 80% of eligible accounts receivable and 50% of eligible raw materials inventory. The interest rate on the revolver is calculated at the bank's prime rate plus 0.25% (4.50% at June 30, 2017). The revolver has a maturity date of September 30, 2017. Amounts available to borrow under the revolver are $728,879 at June 30, 2017.

The commercial term loan has a remaining principal balance of $2,187,403 at June 30, 2017 and matures in November 2021. The interest rate on the loan is a fixed 4.65% per annum and the loan requires monthly payments of principal and interest of approximately $46,500.

In November 2016, the Company entered into an equipment line of credit that allows for advances of up to $1.0 million under the Company's multi-year credit facility. The term of this equipment line of credit is six years, maturing in November 2022,

inclusive of a maximum one-year draw period. Repayment shall consist of monthly interest only payments, equal to the bank's prime rate plus 0.25% as to each advance commencing on the date of the loan through the earlier of: (i) one year from the date of the loan or (ii) the date upon which the equipment line of credit is fully advanced (the "Conversion Date"). On the Conversion Date, principal and interest payments will be due and payable monthly in an amount sufficient to pay the loan in full based upon an amortization schedule commensurate with the remaining term of the loan. At June 30, 2017, $504,781 has been drawn on the equipment line of credit. At December 31, 2016, $102,500 had been drawn on the equipment line of credit.

The credit facility contains both financial and non-financial covenants. The financial covenants include maintaining certain debt coverage and leverage ratios. The non-financial covenants relate to various matters including notice prior to executing further borrowings and security interests, mergers or consolidations, acquisitions, guarantees, sales of assets other than in the normal course of business, leasing, changes in ownership and payment of dividends.

As of the June 30, 2017 testing date, the Company was in compliance with the terms of the credit facility except with respect to the debt service coverage ratio covenant. Non-compliance with the covenant entitles the bank to declare a default and seek immediate repayment of the outstanding balances. As of the date of these financial statements, the bank has indicated that they will not demand repayment of the outstanding balances. The Company is in discussion with the bank, and expects to obtain a waiver of non-compliance with the covenant. Concurrently, the Company is working with bank on extending the credit facility beyond September 30, 2017. As a result of the non-compliance with the debt service coverage ratio covenant, all of the Company's bank debt has been classified as current liabilities as of June 30, 2017.

In January 2013, the Company entered into two equipment notes totaling $272,500 with a financing company to acquire production equipment. The notes bear interest at the fixed rate of 4.66% and require monthly payments of principal and interest of approximately $5,000 over a five year term maturing in January 2018.

In December 2013, the Company completed a private offering in which the Company sold an aggregate of $500,000 in subordinated promissory notes. The unsecured notes required quarterly interest-only payments at a rate of 10% per annum for the first two years. In December 2015, the interest rate increased to 12% per annum. The Company's two largest beneficial owners of stock and a director participated in the private offering as follows: REF Securities, LLP, beneficial owner with Rodd E. Friedman of approximately 13% of the Company's common stock, invested $100,000 in the offering; the Chambers Medical Foundation (the "Foundation"), beneficial owner of approximately 10% of the Company's common stock, invested $100,000 in the offering; and Mr. E.P. Marinos, a director, invested $50,000 in the offering. The Company's Chairman of the Board is a co-trustee of the Foundation but has held no dispositive powers since his appointment as such. On July 21, 2017, Mr. Rodd E. Friedman, the principal of REF Securities, LLP, was appointed to the Board of Directors of the Company.

In October 2016, the Company and six of the seven investors in the private offering, aggregating $450,000 of the notes, including the three related parties holding $250,000 of the notes, agreed to extend the maturity dates of the notes to December 31, 2018 at a rate of 10% per annum. One investor did not extend the maturity date and that $50,000 note was paid at maturity in December 2016. The notes are subordinated to all indebtedness of the Company pursuant to its multi-year bank credit facility.

No dividends were declared or paid in the six months ended June 30, 2017 and 2016.

The Company believes that based on the expected extension of the Company's credit facility beyond September 30, 2017, certain austerity measures and improvements implemented, beginning in the second quarter 2017, which are expected to improve gross margin, reduce operating expenses and return the Company to profitability, cash forecasts and the expected fulfillment of booked orders from existing customers and new customer prospects and the engagement of a manufacturing consultancy firm, the Company expects to continue to meet its obligations for the next twelve months; however, there can be no assurance that the Company will be able to do so.

Summary of Changes in Cash Position

As of June 30, 2017, the Company had cash on hand of $338,069. For the six months ended June 30, 2017, net cash used in operating activities was $324,011. Net cash used in investing activities for the six months ended June 30, 2017 was $751,642. Net cash provided by financing activities for the six months ended June 30, 2017 was $1,033,341. The net cash flows for the six months ended June 30, 2017 are discussed in further detail below.

Operating Cash Flows

For the six months ended June 30, 2017, net cash used in operating activities was $324,011. Cash used in operating activities was primarily impacted by an increase of $1,152,664 in accounts receivable, the net loss of $809,890, an increase in inventory of $194,180, an increase in deferred revenue, current portion, of $51,266 as well as an increase in other non-current liabilities of $156,953.

These uses of cash were partly offset by non-cash add-backs for depreciation and amortization of $803,217 and share-based compensation of $32,417. Cash was provided by an increase of $866,811 in accounts payable, an increase of $106,111 in accrued expenses and other current liabilities, an increase in customer deposits of $88,175 and a decrease of $145,603 in other non-current assets.

Investing Cash Flows

For the six months ended June 30, 2017, net cash used in investing activities was $751,642. The net cash used was largely for capital expenditures of $759,546, largely for machinery and equipment, primarily for the contract manufacturing of orthopedic implants and instruments as well as custom injection molding equipment.

Financing Cash Flows

For the six months ended June 30, 2017, net cash provided by financing activities was $1,033,341. Cash was provided by net proceeds of $884,205 from the Company's revolver and proceeds of $402,281 from the equipment line of credit. These proceeds were partly offset by payments on term notes payable of $253,145.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Not Applicable.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our principal executive officer and principal financial officer (“the Certifying Officers”) have evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)). Based on such evaluation, our Certifying Officers have concluded the Company's disclosure controls and procedures, as of the end of the period covered by this report, were effective.

The effectiveness of a system of disclosure controls and procedures is subject to various inherent limitations, including cost limitations, judgments used in decision making, assumptions about the likelihood of future events, the soundness of internal controls, and fraud. Due to such inherent limitations, there can be no assurance that any system of disclosure controls and procedures will be successful in preventing all errors or fraud, or in making all material information known in a timely manner to the appropriate levels of management.

Changes in Internal Control over Financial Reporting

During the three months ended June 30, 2017 there have been no changes in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II - OTHER INFORMATION

Item 6. Exhibit Index

Exhibit Number	Description of Exhibit	*Page*
3.0	Certificate of Incorporation (incorporated by reference to the Company's Registration Statement on Form S-18 as filed with the Commission in April 1988, Registration Statement No. 33-20945-FW).	
3.1	Amended and Restated By-laws (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K as filed with the Commission on July 1, 2011).	
3.2	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q as filed with the Commission on August 13, 2015).	
4.0	Form of Certificate evidencing shares of the Company's Common Stock (incorporated by reference to the Company's Registration Statement on Form S-18 as filed with the Commission in April 1988, Registration Statement No. 33-20945-FW).	
4.1	Certificate of Amendment of Certificate of Incorporation dated March 8, 2017 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the Commission on March 14, 2017).	
4.10*	2010 Equity Incentive Plan (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-8 as filed with the Commission on May 6, 2010, Registration Statement No. 333-166600).	
4.11	Form of Subordinated Note (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the Commission on December 23, 2013).	
4.12	Form of Subordination Agreement (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K as filed with the Commission on December 23, 2013)	
4.13	Form of Warrant to Purchase Common Stock (incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K as filed with the Commission on December 23, 2013).	
4.14	Form of Amended and Restated Subordinated Promissory Note (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the Commission on October 17, 2016).	
4.15	Form of Amendment No. 1 to Warrant to Purchase Shares of Common Stock (incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K as filed with the Commission on October 17, 2016).	
10.51	Loan and Security Agreement between UniBank for Savings and Arrhythmia Research Technology, Inc. and Micron Products, Inc. dated March 29, 2013 (incorporated by reference to Exhibit 10.51 to the Company's Quarterly Report on Form 10-Q as filed with the Commission on July 1, 2013).	
10.59*	Employment Agreement between the Company and Salvatore Emma, Jr. dated as of January 20, 2015 (incorporated by reference to Exhibit 10.59 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2014 as filed with the Commission on March 20, 2015).	
10.60*	Employment Agreement between the Company and Derek T. Welch dated as of January 20, 2015 (incorporated by reference to Exhibit 10.60 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2014 as filed with the Commission on March 20, 2015).	
10.61	Fourth Amendment to Loan and Security Agreement and Commercial Equipment Line of Credit Promissory Note dated June 19, 2015 (incorporated by reference to Exhibit 10.61 to the Company's Quarterly Report on Form 10-Q as filed with the Commission on August 13, 2015).	
10.62	Fifth Amendment to Loan and Security Agreement dated as of November 15, 2016 (incorporated by reference to Exhibit 10.62 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 as filed with the Commission on March 22, 2017).	
10.63	Commercial Term Promissory Note dated November 15, 2016 (incorporated by reference to Exhibit 10.63 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 as filed with the Commission on March 22, 2017).	
10.64	Commercial Equipment Line of Credit Promissory Note dated November 15, 2016 (incorporated by reference to Exhibit 10.64 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 as filed with the Commission on March 22, 2017).	
10.65*	Executive Incentive Plan (incorporated by reference to Exhibit 10.65 to the Company's Current Report on Form 8-K as filed with the Commission on December 6, 2016).	
10.66*	Employment Agreement between the Company and Salvatore Emma, Jr. dated as of January 1, 2017 (incorporated by reference to Exhibit 10.66 to the Company's Annual Report on Form 10-K for fiscal year ended December 31, 2016 as filed with the Commission on March 22, 2017).	
10.67*	Employment Agreement between the Company and Derek T. Welch dated as of January 1, 2017 (incorporated by reference to Exhibit 10.67 to the Company's Annual Report on Form 10-K for fiscal year ended December 31, 2016 as filed with the Commission on March 22, 2017).	
10.68**	Sixth Amendment to Loan and Security Agreement dated June 16, 2017.	X-1

21	Subsidiaries (incorporated by reference to Exhibit 21.0 to the Company's Annual Report on Form 10-K for fiscal year ended December 31, 2010 as filed with the Commission on March 23, 2011).	
31.1**	Certification of the CEO pursuant to Rule 13a-14(a) or Rule 15(d)-14(a)	X-2
31.2**	Certification of the CFO pursuant to Rule 13a-14(a) or Rule 15(d)-14(a)	X-3
32.1**	Certification of the CEO pursuant to 18 U.S.C. §1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X-4
32.2**	Certification of the CFO pursuant to 18 U.S.C. §1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X-5
101.INS†	XBRL Instance Document	
101.SCH†	XBRL Taxonomy Extension Schema Document	
101.CAL†	XBRL Taxonomy Extension Calculation Linkbase Document	
101.PRE†	XBRL Taxonomy Extension Presentation Linkbase Document	
101.DEF†	XBRL Taxonomy Extension Definition Linkbase Document	

*Indicates a management contract or compensatory plan required to be filed as an exhibit.

**Filed herewith

† XBRL (Extensible Business Reporting Language) information is furnished and not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

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.

MICRON SOLUTIONS, INC.

August 11, 2017

By: /s/ Salvatore Emma, Jr.

Salvatore Emma, Jr.
President and Chief Executive Officer
(principal executive officer)

By: /s/ Derek T. Welch

Derek T. Welch
Chief Financial Officer
(principal financial and accounting officer)