## U.S. SECURITIES AND EXCHANGE COMMISSION

## FORM 10-Q

## (Mark One)

$\boxtimes \quad$ 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
Commission file number 000-25727
IKONICS CORPORATION
(Exact name of registrant as specified in its charter)

Minnesota
(State or other jurisdiction of incorporation or organization)

41-0730027
(I.R.S. employer identification no.)

55807
(Zip code)
(218) 628-2217

Registrant's telephone number
Not Applicable
(Former name, former address and former fiscal year, if changed since last report)
Check whether the issuer (1) filed all reports required to be filed by Section 13 or $15(\mathrm{~d})$ of the Securities Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes $\boxtimes$ No $\square$

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 $\boxtimes$ No $\square$

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes $\square$ No $\boxtimes$
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 $12 \mathrm{~b}-2$ of the Exchange Act.

Large accelerated filer $\square$
Non-accelerated filer (Do not check if a smaller reporting company) $\square$

$$
\begin{aligned}
& \text { Accelerated filer } \square \\
& \text { Smaller reporting company } \boxtimes \\
& \text { Emerging growth company }
\end{aligned}
$$

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.

State the number of shares outstanding of each of the issuer's classes of common equity, as of the latest practicable date: Common Stock, $\$ .10$ par value per share 2,017,053 shares outstanding as of August 4, 2017.

## IKONICS Corporation

QUARTERLY REPORT ON FORM 10-Q

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## PART I -FINANCIAL INFORMATIO N

## ITEM 1. Condensed Financial Statement s

## IKONICS CORPORATION

## CONDENSED BALANCE SHEETS

|  | $\begin{gathered} \text { June 30, } \\ 2017 \\ \hline \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ |
| :---: | :---: | :---: |
|  | (unaudited) |  |
| ASSETS |  |  |
| CURRENT ASSETS: |  |  |
| Cash and cash equivalents | \$ 1,240,086 | \$ 1,048,713 |
| Short-term investments | 2,895,000 | 3,246,000 |
| Trade receivables, less allowance of \$52,000 in 2017 and \$54,000 in 2016 | 2,066,736 | 2,336,501 |
| Inventories | 2,276,601 | 1,986,172 |
| Prepaid expenses and other assets | 146,772 | 361,905 |
| Income taxes receivable | 273,973 | 66,181 |
| Total current assets | 8,899,168 | 9,045,472 |
| PROPERTY, PLANT, AND EQUIPMENT, at cost: |  |  |
| Land and building | 9,201,846 | 9,189,743 |
| Machinery and equipment | 4,950,091 | 4,884,814 |
| Office equipment | 1,600,760 | 1,566,856 |
| Vehicles | 269,941 | 272,144 |
|  | 16,022,638 | 15,913,557 |
| Less accumulated depreciation | $(7,397,569)$ | $(7,001,162)$ |
|  | 8,625,069 | 8,912,395 |
| INTANGIBLE ASSETS, less accumulated amortization of \$162,032 in 2017 and \$149,072 in 2016 | 340,211 | 338,127 |
|  | \$ 17,864,448 | \$ 18,295,994 |
| LIABILITIES AND STOCKHOLDERS' EQUITY |  |  |
| CURRENT LIABILITIES |  |  |
| Current portion of long-term debt, net | \$ 129,086 | \$ 127,303 |
| Accounts payable | 874,795 | 730,386 |
| Accrued compensation | 337,394 | 388,600 |
| Other accrued liabilities | 91,398 | 67,088 |
| Total current liabilities | 1,432,673 | 1,313,377 |
| LONG-TERM LIABILITIES |  |  |
| Long-term debt, less current portion, net | 3,012,299 | 3,077,457 |
| Deferred income taxes | 446,000 | 446,000 |
| Total long-term liabilities | 3,458,299 | 3,523,457 |
| Total liabilities | 4,890,972 | 4,836,834 |
| COMMITMENTS AND CONTINGENCIES |  |  |
| STOCKHOLDERS' EQUITY |  |  |
| Preferred stock, par value \$. 10 per share; authorized 250,000 shares; none issued | - | - |
| Common stock, par value $\$ .10$ per share; authorized $4,750,000$ shares; issued and outstanding | 201,705 | 201875 |
| Additional paid-in-capital | 2,742,659 | 2,732,006 |
| Retained earnings | 10,029,112 | 10,525,279 |
| Total stockholders' equity | 12,973,476 | 13,459,160 |
|  | \$ 17,864,448 | \$ 18,295,994 |

[^0]
## IKONICS CORPORATION <br> CONDENSED STATEMENTS OF OPERATION S (Unaudited)

|  | Three Months EndedJune 30, |  |  |  | Six Months EndedJune 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| NET SALES | \$ | 4,685,361 | \$ | 4,196,578 | \$ | 8,314,353 | \$ | 8,209,788 |
| COST OF GOODS SOLD |  | 3,242,097 |  | 2,674,367 |  | 5,780,861 |  | 5,390,903 |
| GROSS PROFIT |  | 1,443,264 |  | 1,522,211 |  | 2,533,492 |  | 2,818,885 |
| SELLING, GENERAL AND ADMINISTRATIVE EXPENSES |  | 1,393,636 |  | 1,325,170 |  | 2,904,250 |  | 2,764,286 |
| RESEARCH AND DEVELOPMENT EXPENSES |  | 184,704 |  | 147,125 |  | 350,474 |  | 324,989 |
| INCOME (LOSS) FROM OPERATIONS |  | $(135,076)$ |  | 49,916 |  | $(721,232)$ |  | $(270,390)$ |
| INTEREST EXPENSE |  | $(20,826)$ |  | $(14,999)$ |  | $(41,643)$ |  | $(14,999)$ |
| OTHER |  | 5,902 |  | 2,048 |  | 11,055 |  | 2,162 |
| INCOME (LOSS) BEFORE INCOME TAXES |  | $(150,000)$ |  | 36,965 |  | $(751,820)$ |  | $(283,227)$ |
| INCOME TAX BENEFIT |  | $(44,934)$ |  | $(2,260)$ |  | $(267,857)$ |  | $(129,640)$ |
| NET INCOME (LOSS) | \$ | $(105,066)$ | \$ | 39,225 | \$ | $(483,963)$ | \$ | $(153,587)$ |
| INCOME (LOSS) PER COMMON SHARE: |  |  |  |  |  |  |  |  |
| Basic | \$ | (0.05) | \$ | 0.02 | \$ | (0.24) | \$ | (0.08) |
| Diluted | \$ | (0.05) | \$ | 0.02 | \$ | (0.24) | \$ | (0.08) |
| WEIGHTED AVERAGE COMMON SHARES OUTSTANDING |  |  |  |  |  |  |  |  |
| Basic |  | 2,018,466 |  | 2,018,753 |  | 2,018,609 |  | 2,018,544 |
| Diluted |  | 2,018,466 |  | 2,018,833 |  | 2,018,609 |  | 2,018,544 |

See notes to condensed financial statements.

## IKONICS CORPORATION

CONDENSED STATEMENTS OF CASH FLOW S (Unaudited)

|  | Six Months EndedJune 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| CASH FLOWS FROM OPERATING ACTIVITIES: |  |  |  |  |
| Net loss | \$ | $(483,963)$ | \$ | $(153,587)$ |
| Adjustments to reconcile net loss to net cash provided by operating activities: |  |  |  |  |
| Depreciation |  | 421,412 |  | 352,000 |
| Amortization |  | 19,149 |  | 14,385 |
| Stock based compensation |  | 11,494 |  | 11,763 |
| Net gain on sale and disposal of property, plant and equipment |  | $(21,707)$ |  | $(5,750)$ |
| Changes in working capital components: |  |  |  |  |
| Trade receivables |  | 269,765 |  | 353,963 |
| Inventories |  | $(290,429)$ |  | $(95,743)$ |
| Prepaid expenses and other assets |  | 215,133 |  | $(55,625)$ |
| Income tax receivable |  | $(207,854)$ |  | $(28,882)$ |
| Accounts payable |  | 144,409 |  | 90,470 |
| Accrued expenses |  | $(26,896)$ |  | 45,214 |
| Net cash provided by operating activities |  | 50,513 |  | 528,208 |
|  |  |  |  |  |
| CASH FLOWS FROM INVESTING ACTIVITIES: |  |  |  |  |
| Purchases of property, plant, equipment and construction in progress |  | $(134,086)$ |  | $(1,843,879)$ |
| Proceeds from sale of property, plant and equipment |  | 21,707 |  | 21,000 |
| Purchases of intangibles |  | $(15,044)$ |  | $(22,395)$ |
| Purchases of short-term investments |  | $(1,915,000)$ |  | $(3,399,000)$ |
| Proceeds on sale of short-term investments |  | 2,266,000 |  | - |
| Net cash provided by (used in) investing activities |  | 223,577 |  | $(5,244,274)$ |
|  |  |  |  |  |
| CASH FLOWS FROM FINANCING ACTIVITIES: |  |  |  |  |
| Proceeds from long-term debt |  | - |  | 3,415,000 |
| Payment of debt issuance costs |  | - |  | $(139,418)$ |
| Payments on long-term debt |  | $(69,564)$ |  | $(10,858)$ |
| Repurchase of common stock |  | $(15,038)$ |  | - |
| Proceeds from exercise of stock options |  | 1,885 |  | 3,765 |
| Net cash provided by (used in) financing activities |  | $(82,717)$ |  | 3,268,489 |
| NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS |  | 191,373 |  | $(1,447,577)$ |
|  |  |  |  |  |
| CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD |  | 1,048,713 |  | 2,248,466 |
|  |  |  |  |  |
| CASH AND CASH EQUIVALENTS AT END OF PERIOD | \$ | 1,240,086 | \$ | 800,889 |
|  |  |  |  |  |
| SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION |  |  |  |  |
| Construction in progress included in accounts payable | \$ | - | \$ | 60,166 |
| Cash paid for interest | \$ | 35,776 | \$ | 6,699 |
| Cash received for income taxes, net | \$ | 60,003 | \$ | 100,758 |

See notes to condensed financial statements.

## IKONICS CORPORATION

## NOTES TO CONDENSED FINANCIAL STATEMENT S

(Unaudited)

1. Basis of Presentation

The condensed balance sheet of IKONICS Corporation (the "Company") as of June 30, 2017, and the related condensed statements of operations for the three and six months ended June 30, 2017 and 2016, and cash flows for the six months ended June 30, 2017 and 2016, have been prepared without being audited.

In the opinion of management, these statements reflect all adjustments (consisting of only normal recurring adjustments) necessary to present fairly the financial position of IKONICS Corporation as of June 30, 2017, and the results of operations and cash flows for all periods presented.

Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America, have been condensed or omitted. Therefore, these statements should be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

The results of operations for interim periods are not necessarily indicative of results that will be realized for the full fiscal year.
2. Short-Term Investments

The Company's $\$ 2.9$ million of short-term investments at June 30, 2017 is comprised of twelve fully insured certificates of deposit with original maturities ranging from six to twelve months and interest rates ranging from $0.65 \%$ to $1.25 \%$.
3. Inventories

The major components of inventories are as follows:

|  | Jun 30, 2017 |  | Dec 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Raw materials | \$ | 1,634,801 | , | 1,438,471 |
| Work-in-progress |  | 381,212 |  | 355,208 |
| Finished goods |  | 1,396,987 |  | 1,319,856 |
| Reduction to LIFO cost |  | $(1,136,399)$ |  | $(1,127,363)$ |
|  |  |  |  |  |
| Total Inventories | \$ | 2,276,601 | \$ | 1,986,172 |

4. Earnings Per Common Share (EPS)

Basic EPS is calculated using net income (loss) divided by the weighted average of common shares outstanding. Diluted EPS is similar to Basic EPS except that the weighted average number of common shares outstanding is increased to include the number of additional common shares that would have been outstanding if the potential dilutive common shares, such as those shares subject to options, had been issued.

## IKONICS CORPORATION

## NOTES TO CONDENSED FINANCIAL STATEMENT S

## (Unaudited)

Shares used in the calculation of diluted EPS are summarized below:


|  | Six Months Ended |  |  |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
|  | Jun 30, 2017 |  |  |
| Weighted average common shares outstanding | $2,018,609$ | $2,018,544$ |  |
| Dilutive effect of stock options | - | - |  |
| Weighted average common and common equivalent shares outstanding | $\frac{2,018,609}{}$ | $2,018,544$ |  |

Options to purchase 11,418 shares of common stock with a weighted average price of $\$ 15.99$ were outstanding during the three months ended June 30, 2016, but were excluded from the computation of common share equivalents because they were antidilutive. If the Company was in a net income position for the three months ended June 30, 2017, all 18,168 options outstanding with a weighted average exercise price of $\$ 13.81$ would have remained excluded from the computation of common share equivalents as the options were anti-dilutive.

If the Company was in a net income position for the first six months of 2017, 2,250 options outstanding with a weighted average exercise price of $\$ 8.91$ would have been included as part of the weighted average common and common equivalent shares outstanding as the options would have been dilutive while 15,918 options outstanding with a weighted average exercise price of $\$ 14.51$ would have remained excluded as the options were anti-dilutive.

If the Company was in a net income position for the first six months of $2016,4,750$ options outstanding with a weighted average exercise price of $\$ 10.59$ would have been included as part of the weighted average common and common equivalent shares outstanding as the options would have been dilutive while 11,418 options outstanding with a weighted average exercise price of $\$ 15.99$ would have remained excluded as the options were anti-dilutive.

## 5. Stock-Based Compensation

The Company maintains a stock incentive plan which authorizes the issuance of up to 442,750 shares of common stock. Of those shares, 18,168 were subject to outstanding options and 101,989 were reserved for future grants at June 30, 2017. The plan provides for granting eligible participants stock options or other stock awards, as described by the plan, at option prices ranging from $85 \%$ to $110 \%$ of fair market value at the date of grant. Options granted expire up to seven years after the date of grant. Such options generally become exercisable over a one- to three-year period.

## IKONICS CORPORATION

## NOTES TO CONDENSED FINANCIAL STATEMENT S

## (Unaudited)

The Company charged compensation cost of approximately \$6,000 against income for the three months ended June 30, 2017 and approximately $\$ 6,500$ for the three months ended June 30, 2016. For the first six months of 2017, the Company charged compensation cost of approximately $\$ 11,500$ and approximately $\$ 11,800$ for the same period in 2016. As of June 30, 2017, there was approximately $\$ 29,100$ of unrecognized compensation cost related to unvested share-based compensation awards. That cost is expected to be recognized over the next three years.

The Company receives a tax deduction for certain stock option exercises during the period in which the options are exercised, generally for the excess of the market price at the time the stock options are exercised over the exercise price of the options.

Proceeds from the exercise of 250 stock options were approximately $\$ 2,000$ for the six months ended June 30,2017 while proceeds from the exercise of 500 stock options were approximately $\$ 4,000$ for the six months ended June 30, 2016.

The fair value of options granted during the six months ended June 30, 2017 and 2016 was estimated using the Black-Scholes option pricing model with the following assumptions:

|  | $\mathbf{2 0 1 7}$ |  | $\mathbf{2 0 1 6}$ |
| :--- | :---: | :---: | :---: |
| Dividend yield | $0 \%$ | $0 \%$ |  |
| Expected volatility | $41.3 \%$ |  | $42.4 \%$ |
| Expected life of option | Five Years | Five Years |  |
| Risk-free interest rate | $1.8 \%$ | $1.3 \%$ |  |
| Fair value of each option on grant date | $\$ 3.43$ | $\$ 4.02$ |  |

There were 2,250 and 4,500 options granted during each of the six months ended June 30, 2017 and 2016, respectively.
Stock option activity during the six months ended June 30, 2017 was as follows:

|  | Shares | Weighted Average Exercise Price |  |
| :---: | :---: | :---: | :---: |
| Outstanding at January 1, 2017 | 16,168 | \$ | 14.40 |
| Granted | 2,250 |  | 8.91 |
| Exercised | (250) |  | 7.54 |
| Outstanding at June 30, 2017 | 18,168 | \$ | 13.81 |
| Exercisable at June 30, 2017 | 10,499 | \$ | 15.41 |

The aggregate intrinsic value of all options outstanding and for those exercisable at June 30, 2017 was approximately $\$ 1,000$ and $\$ 0$, respectively.

## IKONICS CORPORATION

## NOTES TO CONDENSED FINANCIAL STATEMENT S

(Unaudited)

## Segment Information

The Company's reportable segments are strategic business units that offer different products and have varied customer bases. There are five reportable segments: Domestic, Export, IKONICS Imaging, Digital Texturing (DTX) and Advanced Material Solutions (AMS). Domestic sells screen printing film, emulsions, and inkjet receptive film to distributors located in the United States and Canada. IKONICS Imaging sells photo resistant film, art supplies, glass, metal medium and related abrasive etching equipment to end user customers located in the United States and Canada. AMS provides sound deadening and weight reduction technology to the aerospace industry along with products and services for etched composites, ceramics, glass and silicon wafers. DTX includes products and customers related to patented and proprietary inkjet technology used for mold texturing and prototyping. Export sells primarily the same products as Domestic and the IKONICS Imaging products not related to AMS or DTX. The accounting policies applied to determine the segment information are the same as those described in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

Management evaluates the performance of each segment based on the components of divisional income. Assets and liabilities are not allocated to segments, except for trade receivables which are allocated based on the previous segmentation. Financial information with respect to the reportable segments follows:

## For the three months ended June 30, 2017:

|  | KOONICS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Domestic |  | Export |  | IKONICS Imaging |  | DTX |  | AMS |  | Unalloc. |  | Total |  |
| Net sales | \$ | 1,816,956 | \$ | 1,372,092 | \$ | 943,055 | \$ | 471,244 | \$ | 82,014 | \$ | - | \$ | 4,685,361 |
| Cost of goods sold |  | 1,034,059 |  | 1,096,279 |  | 453,213 |  | 358,937 |  | 299,609 |  | - |  | 3,242,097 |
| Gross profit (loss) |  | 782,897 |  | 275,813 |  | 489,842 |  | 112,307 |  | $(217,595)$ |  | - |  | 1,443,264 |
| Selling, general and administrative* |  | 334,071 |  | 189,741 |  | 253,746 |  | 50,861 |  | 104,325 |  | 460,892 |  | 1,393,636 |
| Research and development* |  | - |  | - |  | - |  | - |  | - |  | 184,704 |  | 184,704 |
| Income (loss) from operations | \$ | 448,826 | \$ | 86,072 | \$ | 236,096 | \$ | 61,446 | \$ | $(321,920)$ | \$ | $(645,596)$ | \$ | $(135,076)$ |

For the three months ended June 30, 2016:

|  | IKONICS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Domestic |  | Export |  | IKONICS Imaging |  | DTX |  | AMS |  | Unalloc. |  | Total |  |
| Net sales | \$ | 1,943,516 | \$ | 953,585 | \$ | 999,596 | \$ | 33,476 | \$ | 266,405 | \$ | - | \$ | 4,196,578 |
| Cost of goods sold |  | 1,105,206 |  | 735,169 |  | 425,120 |  | 35,062 |  | 373,810 |  | - |  | 2,674,367 |
| Gross profit (loss) |  | 838,310 |  | 218,416 |  | 574,476 |  | $(1,586)$ |  | $(107,405)$ |  | - - |  | 1,522,211 |
| Selling, general and administrative* |  | 345,000 |  | 159,621 |  | 247,682 |  | 39,630 |  | 123,286 |  | 409,951 |  | 1,325,170 |
| Research and development* |  | - |  | - |  | - |  | - |  | - |  | 147,125 |  | 147,125 |
| Income (loss) from operations | \$ | 493,310 | \$ | 58,795 | \$ | 326,794 | \$ | (41,216) | \$ | (230,691) | \$ | $(557,076)$ | \$ | 49,916 |

## IKONICS CORPORATION

## NOTES TO CONDENSED FINANCIAL STATEMENT S

(Unaudited)
For the six months ended June 30, 2017:

|  | IKONICS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Domestic |  | Export |  | IKONICS Imaging |  | DTX |  | AMS |  | Unalloc. |  | Total |  |
| Net sales | \$ | 3,120,525 | \$ | 2,427,097 | \$ | 1,933,041 | \$ | 586,475 | \$ | 247,215 | \$ | - | \$ | 8,314,353 |
| Cost of goods sold |  | 1,860,800 |  | 1,935,643 |  | 976,793 |  | 394,419 |  | 613,206 |  | - |  | 5,780,861 |
| Gross profit (loss) |  | 1,259,725 |  | 491,454 |  | 956,248 |  | 192,056 |  | $(365,991)$ |  | - |  | 2,533,492 |
| Selling, general and administrative* |  | 685,493 |  | 385,858 |  | 537,605 |  | 85,496 |  | 201,120 |  | 1,008,678 |  | 2,904,250 |
| Research and development* |  | - |  | - |  | - |  | - |  | - |  | 350,474 |  | 350,474 |
| Income (loss) from operations | \$ | 574,232 | \$ | 105,596 | \$ | 418,643 | \$ | 106,560 | \$ | (567,111) | \$ | $(1,359,152)$ | \$ | $(721,232)$ |

For the six months ended June 30, 2016:

|  | IKONICS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Domestic |  | Export |  | IKONICS Imaging |  | DTX |  | AMS |  | Unalloc. |  | Total |  |
| Net sales | \$ | 3,297,244 | \$ | 2,196,770 | \$ | 2,117,294 | \$ | 110,356 | \$ | 488,124 | \$ | - | \$ | 8,209,788 |
| Cost of goods sold |  | 1,951,605 |  | 1,697,658 |  | 964,902 |  | 70,486 |  | 706,252 |  | - |  | 5,390,903 |
| Gross profit (loss) |  | 1,345,639 |  | 499,112 |  | 1,152,392 |  | 39,870 |  | $(218,128)$ |  | - |  | 2,818,885 |
| Selling, general and administrative* |  | 704,397 |  | 302,652 |  | 499,053 |  | 74,373 |  | 227,189 |  | 956,622 |  | 2,764,286 |
| Research and development* |  | - |  | - |  | - |  | - |  | - |  | 324,989 |  | 324,989 |
| Income (loss) from operations | \$ | 641,242 | \$ | 196,460 | \$ | 653,339 | \$ | $(34,503)$ | \$ | $(445,317)$ | \$ | (1,281,611) | \$ | $(270,390)$ |

[^1]Trade receivables by segment as of June 30, 2017 and December 31, 2016 were as follows:

|  | Jun 30, 2017 |  | Dec 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Domestic | \$ | 863,407 | \$ | 1,206,866 |
| Export |  | 773,376 |  | 551,803 |
| IKONICS Imaging |  | 268,345 |  | 363,602 |
| DTX |  | 142,013 |  | 52,935 |
| AMS |  | 36,366 |  | 177,374 |
| Unallocated |  | $(16,771)$ |  | $(16,079)$ |
|  |  |  |  |  |
| Total | \$ | 2,066,736 | \$ | 2,336,501 |

7. Income Taxes

The Company reports a liability for unrecognized tax benefits taken or expected to be taken when they are uncertain. As of June 30, 2017 and June 30, 2016, there was no liability for unrecognized tax benefits.

The Company is subject to taxation in the United States and various states. The material jurisdictions that are subject to examination by tax authorities primarily include Minnesota and the United States, in each case for tax years 2014, 2015, and 2016.

## IKONICS CORPORATION

## NOTES TO CONDENSED FINANCIAL STATEMENT S

(Unaudited)
8. Subsequent Event

On August 3, 2017, the Company's board of directors approved a new repurchase authorization for 100,000 shares of the Company's common stock, which replaces all prior authorizations. The new share repurchase authorization does not have an expiration date.

## IKONICS CORPORATION

The information presented below in Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements within the meaning of the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended. Statements that are not historical or current facts, including statements about beliefs and expectations, are forward-looking statements. These forward-looking statements include statements relating to our future plans and objectives and results. Such statements are subject to risks and uncertainties, including those discussed elsewhere in this report and under the heading "Risk Factors" in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2016, as updated in our subsequent reports filed with the SEC, which could cause actual results to differ materially from those
projected. Because actual results may differ, readers are cautioned not to place undue reliance on these forward-looking statements.

## ITEM 2. Management's Discussion and Analysi s of Financial Condition and Results of Operations

The following management's discussion and analysis focuses on those factors that had a material effect on the Company's financial results of operations during the second quarter of 2017 and first six months of 2017, as well as the same periods of 2016. It should be read in connection with the Company's condensed unaudited financial statements and notes thereto included in this Form 10-Q.

## Critical Accounting Estimates

The Company prepares its financial statements in conformity with accounting principles generally accepted in the United States of America. Therefore, the Company is required to make certain estimates, judgments and assumptions that the Company believes are reasonable based upon the information available. These estimates and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods presented. The accounting estimates, which IKONICS believes are the most critical to aid in fully understanding and evaluating its reported financial results, include the following:

Trade Receivables. The Company performs ongoing credit evaluations of its customers and adjusts credit limits based upon payment history and the customer's current credit worthiness, as determined by review of the current credit information. The Company continuously monitors collections and payments from its customers and maintains a provision for estimated credit losses based upon historical experience and any specific customer collection issues that have been identified. While such credit losses have historically been within expectations and the provisions established, the Company cannot guarantee that it will continue to experience the same collection history that has occurred in the past. The general payment terms are net $30-45$ days for domestic customers and net 30-90 days for foreign customers. A small percentage of the trade receivables balance is denominated in a foreign currency with no concentration in any given country. At the end of each reporting period, the Company analyzes the receivable balance for customers paying in a foreign currency. These balances are adjusted to each quarter or year-end spot rate in accordance with the Financial Accounting Standards Board ("FASB") ASC 830, Foreign Currency Matters. The Company also maintains a provision for any customer related returns based upon historical experience of actual returns and any specifically identified product issues, refunds or credits.

Inventories. Inventories are valued at the lower of cost or market value using the last in, first out (LIFO) method. The Company monitors its inventory for obsolescence and records reductions from cost when required.

Income Taxes. Deferred taxes are provided on a liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment. The Company follows the accounting standard on accounting for uncertainty in income taxes, which addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under this guidance, the Company may recognize the tax
benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement. The guidance on accounting for uncertainty in income taxes also addresses derecognition, classification, interest and penalties on income taxes, and accounting in interim periods.

Revenue Recognition. The Company recognizes revenue on sales of products when title passes, which can occur at the time of shipment or when the goods arrive at the customer location depending on the agreement with the customer. The Company sells its products to both distributors and end-users. Sales to distributors and end-users are recorded based upon the criteria governed by the sales, delivery, and payment terms stated on the invoices from the Company to the purchaser. In addition to transfer of title / risk of loss, all revenue is recorded in accordance with the criteria outlined within Staff Accounting Bulletin No. 104 and FASB ASC 605, Revenue Recognition:
(a) persuasive evidence of an arrangement (principally in the form of customer sales orders and the Company's sales invoices);
(b) delivery and performance (evidenced by proof of delivery, e.g. the shipment of film and substrates with bill of lading used for proof of delivery for FOB shipping point terms, and the carrier booking confirmation report used for FOB destination terms). Once the finished product is shipped and physically delivered under the terms of the invoice and sales order, the Company has no additional performance or service obligations to complete;
(c) a fixed and determinable sales price (the Company's pricing is established and is not based on variable terms, as evidenced in either the Company's invoices or the limited number of distribution agreements; the Company rarely grants extended payment terms and has no history of concessions); and
(d) a reasonable likelihood of payment (the Company's terms are standard, and the Company does not have a substantial history of customer defaults or non-payment).

Sales are reported on a net basis by deducting credits, estimated normal returns and discounts. The Company's return policy does not vary by geography. The customer has no rotation or price protection rights and the Company is not under a warranty obligation. Freight billed to customers is included in sales. Shipping costs are included in cost of goods sold.

## Results of Operations

## Quarter Ended June 30, 2017 Compared to Quarter Ended June 30, 2016

Sales. The Company realized an $11.6 \%$ sales increase during the second quarter of 2017 with sales of $\$ 4.7$ million, compared to $\$ 4.2$ million in sales during the same period in 2016. Second quarter sales were favorably impacted by a DTX sales increase due to the sale of two printers and improved consumable sales. DTX sales for the second quarter of 2017 increased from $\$ 33,000$ in 2016 to $\$ 471,000$, a $\$ 438,000$ increase. Export sales also realized a $43.9 \%$ sales increase in the second quarter as sales grew from $\$ 954,000$ in 2016 to $\$ 1.4$ million in 2017 due mainly to increased sales to Asia and Latin America. Part of the second quarter sales increase was related to the timing of sales between the first and second quarter of 2017. Partially offsetting these sale increases was a $\$ 127,000$, or $6.5 \%$, decrease in Domestic sales for the second quarter of 2017 versus the same period in 2016 mainly related to softer artwork film sales. AMS also posted lower sales in the second quarter of 2017 as sales decreased from $\$ 266,000$ in the second quarter of 2016 to $\$ 82,000$. The AMS sales decrease was related to an anticipated temporary decrease in orders from AMS's largest customer. It is expected that this customer will return to its normal ordering pattern in the third quarter of 2017. IKONICS Imaging sales decreased from $\$ 1.0$ million in the second quarter of 2016 to $\$ 943,000$ in the second quarter of 2017 , a $\$ 57,000$, or $5.7 \%$ decrease.

Gross Profit. Gross profit was $\$ 1.4$ million, or $30.8 \%$ of sales, in the second quarter of 2017 compared to $\$ 1.5$ million, or $36.3 \%$ of sales, for the same period in 2016. The gross profit as a percentage of sales decreased due to a less favorable sales mix. Low margin Export sales comprised $29.3 \%$ of total 2017 second quarter sales compared to $22.7 \%$ of total sales in the second quarter of 2016. The 2017 second quarter gross margin percentage was also unfavorably impacted by lower AMS sales volumes and the sale of two low margin DTX printers.

Selling, General and Administrative Expenses. Selling, general and administrative expenses were $\$ 1.4$ million, or $29.7 \%$ of sales, in the second quarter of 2017 compared to $\$ 1.3$ million, or $31.6 \%$ of sales, for the same period in 2016. The increase in second quarter selling, general and administrative expense in 2017 versus the same period in 2016 is related to higher trade show expenses along with increased international sales consulting expenses.

Research and Development Expenses. Research and development expenses during the second quarter of 2017 were $\$ 185,000$, or $3.9 \%$ of sales, versus $\$ 147,000$, or $3.5 \%$ of sales, for the same period in 2016 . The higher 2017 second quarter costs were related to an increase in production trial expenses.

Interest Expense. Interest expense for the second quarter of 2017 was $\$ 21,000$ compared to interest expense of $\$ 15,000$ during the second quarter of 2016. The interest expense is related to a $\$ 3.4$ million financing agreement the Company entered into during 2016 to finance the construction of a 27,300 -square foot building as well as related equipment for use in the Company's manufacture of sound deadening technology used in the aerospace industry and products consisting of etched composites, ceramics, glass and silicon wafers.

Income Taxes. For the second quarter of 2017, the Company realized an income tax benefit of $\$ 45,000$, or an effective rate of $30.0 \%$, compared to income tax benefit of $\$ 2,000$, or an effective rate of $6.1 \%$ for the same period in 2016. The increase in the effective tax rate for 2017 over 2016 is primarily due to the impact of non-deductible items and pre-tax profit for second quarter in 2016 and its related impact on the forecasted annual rate. In 2017, the unfavorable non-deductible items decreased the effective tax rate due to estimated pre-tax losses. The income tax provision for the 2017 and 2016 periods differ from expected tax benefit due to unfavorable non-deductible items offset by the generation of research and development tax credits.

## Six Months Ended June 30, 2017 Compared to the Six Months Ended June 30, 2016

Sales. The Company realized a $1.3 \%$ sales increase during the first six months of 2017 with sales of $\$ 8.3$ million, compared to $\$ 8.2$ million in sales during the same period in 2016. Sales for the first six months of 2017 were favorably impacted by a DTX sales increase from the sale of two printers and improved consumable sales. DTX sales for the first six months of 2017 increased from $\$ 110,000$ during the same period in 2016 to $\$ 586,000$, a $\$ 476,000$, or $431 \%$ increase. Export sales also realized a $10.5 \%$ sales increase for the first half of 2017 as sales grew from $\$ 2.2$ million in 2016 to $\$ 2.4$ million in 2017 mainly due to increased sales to Asia and Latin America. Partially offsetting these sale increases was a $\$ 241,000$, or $49.4 \%$, decrease in AMS sales for the first half of 2017 versus the same period in 2016 due to the anticipated temporary decrease in orders from AMS's largest customer. It is expected that this customer will return to its normal ordering pattern in the third quarter of 2017. Compared to the first six months of 2016, IKONICS Imaging sales decreased by $\$ 184,000$ to $\$ 1.9$ million in 2017. IKONICS Imaging sales in the first six months of 2016 were favorably impacted by a large initial order from a new customer. For the most part, a more competitive market for artwork film sales resulted in a decrease in Domestic sales from $\$ 3.3$ million in the first half of 2016 to $\$ 3.1$ million in 2017.

Gross Profit. Gross profit was $\$ 2.5$ million, or $30.5 \%$ of sales, in the first six months of 2017 compared to $\$ 2.8$ million, or $34.3 \%$ of sales, for the same period in 2016. The gross profit as a percentage of sales decreased due to a less favorable sales mix. Low margin Export sales comprised $29.2 \%$ of total 2017 first half sales compared to $26.8 \%$ of total sales in the first half of 2016. The gross margin percentage for the first six months of 2017 was also unfavorably impacted by lower AMS sales volumes and the sale of two low margin DTX printers.

Selling, General and Administrative Expenses. Selling, general and administrative expenses were $\$ 2.9$ million, or $34.9 \%$ of sales, in the first six months of 2017 compared to $\$ 2.8$ million, or $33.7 \%$ of sales, for the same period in 2016. The increase in selling, general and administrative expenses reflects promotional and trade show expenses for both Export and IKONICS Imaging in addition to higher international sales consulting expenses.

Research and Development Expenses. Research and development expenses during the first six months of 2017 were $\$ 350,000$, or $4.2 \%$ of sales, versus $\$ 325,000$, or $4.0 \%$ of sales, for the same period in 2016 . The higher 2017 first half costs were related to an increase in production trial and supply expenses.

Interest Expense. Interest expense for the first six months of 2017 was $\$ 42,000$ compared to interest expense of $\$ 15,000$ during the first six months of 2016. The interest expense is related to a $\$ 3.4$ million financing agreement the Company entered into during 2016 to finance the construction of a 27,300-square foot building as well as related equipment for use in the Company's manufacture of sound deadening technology used in the aerospace industry and products consisting of etched composites, ceramics, glass and silicon wafers.

Income Taxes. For the first six months of 2017 , the Company realized an income tax benefit of $\$ 268,000$, or an effective rate of $35.6 \%$, compared to income tax benefit of $\$ 130,000$, or an effective rate of $45.8 \%$, for the same period in 2016 . The decrease in the effective tax rate for 2017 over 2016 is primarily due to higher pre-tax loss for the current year and the impact of non-deductible items. The income tax provision for the 2017 and 2016 periods differ from expected tax benefit due to unfavorable non-deductible items, offset by the generation of research and development tax credits.

Liquidity and Capital Resources
Outside of the building expansion, for which $\$ 3.4$ million in financing was obtained during 2016, the Company has financed its operations principally with funds generated from operations. These funds have been sufficient to cover the Company's normal operating expenditures, annual capital requirements, and research and development expenditures.

Cash and cash equivalents were $\$ 1.2$ million and $\$ 1.0$ million at June 30, 2017 and December 31, 2016, respectively. Operating activities provided $\$ 51,000$ in cash during the first six months of 2017 compared to $\$ 528,000$ of cash provided by operating activities during the same period in 2016. Cash provided by operating activities is primarily the result of a net loss adjusted for non-cash depreciation, amortization, gain on sale and disposal of property, and certain changes in working capital components discussed in the following paragraph.

During the first six months of 2017, the timing of collections resulted in a $\$ 270,000$ decrease in trade receivables. The Company believes that the quality of its receivables is high and that strong internal controls are in place to maintain proper collections. Inventories increased by $\$ 290,000$ due to higher raw material and finished goods levels. Prepaid expenses and other assets decreased $\$ 215,000$. The prepaid expense balance at December 31, 2016 included prepayments related to two DTX printers which have since been sold. Accounts payable increased $\$ 144,000$ due to the timing of vendor payments mainly related to raw material purchases. Accrued expenses decreased $\$ 27,000$, reflecting the timing of compensation payments while income taxes receivable increased $\$ 208,000$ due to the timing of estimated tax payments compared to the calculated 2017 tax liability.

During the first six months of 2016, the decrease in sales along with the timing of collections resulted in a $\$ 354,000$ decrease in trade receivables. Inventories increased by $\$ 96,000$ due to higher raw material levels. Prepaid expenses and other assets increased $\$ 56,000$, reflecting insurance premiums paid in advance. Accounts payable increased $\$ 90,000$ due to the timing of vendor payments. Accrued expenses increased $\$ 45,000$, reflecting the timing of compensation payments while income taxes receivable increased $\$ 29,000$ due to the timing of estimated tax payments compared to the calculated 2016 tax liability.

During the first six months of 2017, cash provided by investing activities was $\$ 224,000$. The Company obtained proceeds from ten certificates of deposits totaling $\$ 2.3$ million and purchased eight certificates of deposits totaling $\$ 1.9$ million. The Company's purchases of property and equipment of $\$ 134,000$ were mainly for improvements to production and process capabilities and a vehicle. Also, during the first six months of 2017, the Company incurred $\$ 15,000$ in patent application costs that the Company has recorded, as an asset and will amortize upon successful completion of the application process. In addition the Company sold a vehicle for $\$ 22,000$.

During the first six months of 2016, cash used in investing activities was $\$ 5.2$ million. The Company purchased fifteen certificates of deposits totaling $\$ 3.4$ million. The Company's cash purchases of property and equipment were $\$ 1.8$ million. Total building expansion expenditures were $\$ 1.4$ million but $\$ 23,000$ of the
expenditures were included as part of construction payable and not as cash used in investing activities. Similarly, expenditures on the new ERP system in the first six months of 2016 were $\$ 171,000$ of which $\$ 37,000$ was included as part of construction payable and not as cash used in investing activities. The remaining capital expenditures were mainly for upgrades to improve AMS production and process capabilities. Also during the first six months of 2016, the Company incurred $\$ 22,000$ in patent application costs that the Company records as an asset and amortizes upon successful completion of the application process. In addition, the Company sold equipment for $\$ 21,000$.

Related to the Company's loan, the Company made principal payments of $\$ 70,000$ during the first six months of 2017. During the first six months of 2017 , the Company received $\$ 2,000$ from financing activities from the issuance of 250 shares of common stock due to the exercise of stock options while the Company repurchased 270 shares of its own stock during the first half of 2017 for $\$ 15,000$.

During the first six months of 2016 the Company received $\$ 3.3$ million from financing activities. The Company secured a loan of $\$ 3.4$ million to finance the expansion of its AMS facility. Related to the securing of the loan, the Company paid $\$ 139,000$ in debt issuance costs and made a principal payment of $\$ 11,000$. During the first six months of 2016 , the Company received $\$ 4,000$ from the issuance of 500 shares of common stock from the exercise of stock options.

A bank line of credit exists providing for borrowings of up to $\$ 2,050,000$ and expires on June 30, 2019. The line of credit is collateralized by the Company's assets and bears interest at 1.8 percentage points over the 30 -day LIBOR rate. The Company did not utilize this line of credit during the first six months of 2017 or 2016 and there were no borrowings outstanding as of June 30, 2017 and December 31, 2016. There are no financial covenants related to the line of credit.

The Company believes that current financial resources, its line of credit, cash generated from operations and secured through debt financing, and short term investments, along with the Company's capacity for additional debt and/or equity financing will be sufficient to fund current and anticipated business operations. The Company also believes that it is unlikely that a decrease in demand for the Company's products would impair the Company's ability to fund operations given its excess cash and available line of credit.

## Capital Expenditures

Through the first six months of 2017, the Company incurred $\$ 134,000$ of capital expenditures mainly for improvements to production and process capabilities and a vehicle.

The Company expects additional capital expenditures in 2017 of approximately $\$ 450,000$ mainly for AMS process improvements, enhancements to emulsion and film production and replacement automobiles for sales personnel. Currently, the Company expects to fund its capital expenditures with existing cash and cash generated from operating activities.

## International Activity

The Company markets its products to numerous countries in North America, Europe, Latin America, Asia and other parts of the world. Foreign sales were approximately $33.6 \%$ of total sales during the first six months of 2017 compared to $29.3 \%$ of total sales for the same period in 2016. Foreign sales increased in 2017 due to the sale of two DTX printers into Europe along improved consumable sales to Asia and Latin America. Fluctuations of certain foreign currencies have not significantly impacted the Company's operations, as the Company's foreign sales are not concentrated in any one region of the world, although a strong U.S. dollar does make the Company's products less competitive internationally. The Company believes its vulnerability to uncertainties due to foreign currency fluctuations and general economic conditions in foreign countries is not significant.

The Company's foreign transactions are primarily negotiated, invoiced and paid in U.S. dollars, although a portion is transacted in Euros. IKONICS has not implemented an economic hedging strategy to reduce the risk of foreign currency translation exposures, as management does not believe this to be a significant risk based on the scope and geographic diversity of the Company's foreign operations as of June 30, 2017. Furthermore, the impact of foreign exchange on the Company's balance sheet and operating results was not material in either 2017 or 2016.

## Future Outlook

IKONICS has spent an average of approximately $4.0 \%$ of annual sales in research and development and has made capital expenditures related to new products and programs. The Company plans to maintain its efforts in these areas to expedite internal product development as well as to form technological alliances with outside entities to commercialize new product opportunities.

The Company continues to make progress on its AMS business initiative. Although AMS experienced a short-term drop in sales during the first six months of 2017 due to a temporary inventory overstocking by a major customer, these sales have returned and the Company anticipates continued growth over the long term. The Company has two long-term sales agreements in place for its technology with major aerospace companies and is negotiating a third. In anticipation of this growing business, the Company increased its AMS capacity with a 27,300 square foot expansion at its Morgan Park site in 2016.

The Company is also continuing to pursue DTX-related business initiatives and expects increased consumable sales as a result of the sale of two DTX printers in the second quarter of 2017. In addition to making efforts towards growing the inkjet technology business, the Company offers a range of products for creating texture surfaces and has introduced a fluid for use in prototyping. The Company is currently working on production improvements to enhance its customer offerings. The Company has been awarded European, Japanese, and United States patents on its DTX technologies. The Company has also modified its DTX technology to enter into the market for prototyping.

Both the Domestic and IKONICS Imaging units remain profitable in mature markets. Although these business units require aggressive strategies to grow market share, both are developing new products and business relationships that we believe will contribute to growth. In addition to its traditional emphasis on domestic markets, the Company will continue efforts to grow its business internationally by attempting to develop new markets and expanding market share where it has already established a presence. However, the strong U.S. dollar has made this challenging.

Other future activities undertaken to expand the Company's business may include acquisitions, building improvements, equipment additions, new product development and marketing opportunities.

## Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-09, Revenue from Contracts with Customers. ASU 2014-09 supersedes the revenue recognition requirements in Revenue Recognition (Topic 605), and requires entities to recognize revenue in a way that depicts the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. In August 2015, the FASB issued ASU 2015-14, Revenue from Contracts with Customers: Deferral of the Effective Date, which defers the adoption of ASU 2014-09 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. Earlier application is permitted only as of annual reporting periods beginning after December 15,2016 , including interim reporting periods within that reporting period. The standard permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the cumulative catch-up transition method). The standard also requires expanded disclosures relating to the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Additionally, qualitative and quantitative disclosures are required about customer contracts, significant judgments and changes in judgments, and assets recognized from the costs to obtain or fulfill a contract. While the Company is still in the process of evaluating the effect of adoption on its financial statements and is currently assessing its contracts with customers, the Company anticipates that it will expand its financial statement disclosures in order to comply with the new standard. The Company has established a timeline and process to evaluate the impact, transition and disclosure requirements of the ASU and believes the timeline is sufficient to allow the Company to effectively implement the
new standard. The Company has not yet concluded on a transition method upon adoption, but plans to select a transition method by the fourth quarter of 2017.

During February 2016, the FASB issued ASU No. 2016-02,Leases. ASU No. 2016-02 was issued to increase transparency and comparability among organizations by recognizing all lease transactions (with terms in excess of 12 months) on the balance sheet as a lease liability and a right-of-use asset (as defined). ASU No. 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, with earlier application permitted. Upon adoption, the lessee will apply the new standard retrospectively to all periods presented or retrospectively using a cumulative effect adjustment in the year of adoption. The Company is currently assessing the effect that ASU No. 2016-02 will have on its financial statements.

In March 2016, the FASB issued ASU No. 2016-09,Compensation-Stock Compensation (Topic 718). This standard makes several modifications to Topic 718 related to the accounting for forfeitures, employer tax withholding on share-based compensation and the financial statement presentation of excess tax benefits or deficiencies. ASU 2016-09 also clarifies the statement of cash flows presentation for certain components of share-based awards. The standard is effective for interim and annual reporting periods beginning after December 15, 2016, although early adoption is permitted. The Company adopted ASU No. 2016-09 in 2017 with minimal impact on the financial statements.

## Off-Balance Sheet Arrangements

The Company has no off-balance sheet arrangements.

## ITEM 3. Quantitative and Qualitative Disclosure s about Market Risk

Not applicable

## ITEM 4. Controls and Procedure $s$

As of the end of the period covered by this report, the Company conducted an evaluation, under the supervision and with the participation of the principal executive officer and principal financial officer, of the Company's disclosure control and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")). Based on this evaluation, the principal executive officer and principal financial officer concluded that the Company's disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and (ii) accumulated and communicated to the Company's management, including its principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

There was no change in the Company's internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and Rule 15d-15(d) of the Exchange Act that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATIO N
ITEM 1. Legal Proceedings
None
ITEM 1A. Risk Factors
Not applicable
ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds
The Company repurchased shares as indicated in the table below during the second quarter of $2017^{11}$ :

|  | (a) Total Number of Shares Purchased | (b) Average <br> Paid per Share |  | (c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs | (d) Maximum Number of Shares that May Yet Be Purchased Under The Plans or Programs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| April 1, 2017 through April 30, 2017 | - | \$ | - | - | - |
| May 1, 2017 through May 31, 2017 | - | \$ | - | - | - |
| June 1, 2017 through June 30, 2017 | 1,950 | \$ | 7.71 | 1,950 | 30,411 |

(1) In prior years, the Company's board of directors had authorized the repurchase of 250,000 shares of common stock. A total of 219,589 shares have been repurchased under this program including 1,950 shares repurchased during the second quarter of 2017. The plan allows for an additional 30,411 shares to be repurchased. On August 3, 2017, the Company's board of directors approved a new repurchase authorization for 100,000 shares of the Company's common stock, which replaces all prior authorizations. The new share repurchase authorization does not have an expiration date.

ITEM 3. Defaults upon Senior Securities

Not applicable
ITEM 4. Mine Safety Disclosures
Not applicable
ITEM 5. Other Information
None

## ITEM 6. Exhibits

The following exhibits are filed as part of this Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2017:

| Exhibit | Description |
| :---: | :---: |
| 3.1 | Restated Articles of Incorporation of Company, as amended. ${ }^{1}$ |
| 3.2 | By-Laws of the Company, as amended. ${ }^{2}$ |
| 31.1 | Rule 13a-14(a)/15d-14(a) Certifications of CEO |
| 31.2 | Rule 13a-14(a)/15d-14(a) Certifications of CFO |
| 32 | Section 1350 Certifications |
| 101 | Interactive Data Files Pursuant to Rule 405 of Regulation S-T | Exhibits.

(1) Incorporated by reference to the like numbered Exhibit to the Company's Registration Statement on Form 10-SB filed with the Commission on April 7, 1999 (File No. 000-25727).
(2) Incorporated by reference to the like numbered Exhibit to the Company's Current Report on Form 8-K filed with the Commission on February 22, 2007 (File No. 000-25727).

## IKONICS CORPORATION

## SIGNATURE S

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

IKONICS CORPORATION

DATE: August 14, 2017
By: /s/ Jon Gerlach Jon Gerlach,
Chief Financial Officer, and
Vice President of Finance

## INDEX TO EXHIBITS

| $\frac{\text { Exhibit }}{}$ | Description |  |
| :--- | :--- | :--- |
| 3.1  Pestated Articles of Incorporation of Company, as amended <br> 3.2  By-Laws of the Company, as amended. | Incorporated by reference |  |
| 31.1 |  | Rule 13a-14(a)/15d-14(a) Certifications of CEO. |

## RULE 13a-14(a)/15d-14(a) CERTIFICATIONS OF CEO

I, William C. Ulland, certify that:

1. I have reviewed this quarterly report on Form 10-Q of IKONICS Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15f and 15d-15(f)) for the registrant and we have:
a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
d) disclosed in this report any change in the registrant's internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.
Date: August 14, 2017
/s/ William C. Ulland
William C. Ulland
Chairman, Chief Executive Officer
and President

## RULE 13a-14(a)/15d-14(a)/CERTIFICATIONS OF CFO

I, Jon Gerlach, certify that:

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

## SECTION 1350 CERTIFICATIONS

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned certifies that this periodic report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in this periodic report fairly presents, in all material respects, the financial condition and results of operations of IKONICS Corporation.
/s/ William C. Ulland
William C. Ulland
Chairman, Chief Executive Officer
and President
/s/ Jon Gerlach
Jon Gerlach
Chief Financial Officer
and Vice President of Finance


[^0]:    See notes to condensed financial statements.

[^1]:    * The Company does not allocate all general and administrative expenses or any research and development expenses to its operating segments for internal reporting.

