U.S. SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

☑ Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the Quarterly Period Ended March 31, 2020

or

□ Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the Transition Period From

Commission file number 000-25727

to

IKONICS CORPORATION

(Exact name of registrant as specified in its charter)

Minnesota

(State or other jurisdiction of incorporation or organization)

4832 Grand Avenue Duluth, Minnesota

(Address of principal executive offices)

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

> **55807** (Zip code)

(218) 628-2217

(Registrant's telephone number, including area code)

Not Applicable

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

Securities registered pursuant to Section 12(b) of the Act:		
Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$.10 per share	IKNX	Nasdaq Capital Market LLC

Indicate by check mark whether the registrant (1) 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 \boxtimes No \square

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files.) Yes \boxtimes No \square

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.

Large accelerated filer \square Non-accelerated filer \square Accelerated filer \Box Smaller reporting company \boxtimes Emerging growth company \Box

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 🗵

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: Common Stock, \$.10 par value - 1,976,354 shares outstanding as of May 1, 2020.

QUARTERLY REPORT ON FORM 10-Q

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PART I - FINANCIAL INFORMATION

ITEM 1. Condensed Financial Statements

IKONICS CORPORATION CONDENSED BALANCE SHEETS

		March 31, 2020	D.	ecember 31, 2019
ASSETS	(unaudited)		
CURRENT ASSETS:				
Cash and cash equivalents	\$	1,605,440	\$	963,649
Short-term investments	ψ	980.000	ψ	2,205,000
Trade receivables, less allowance of \$115,000 in 2020 and \$58,000 in 2019		1,760,166		2,205,000
Inventories		2,588,769		2,180,536
Prepaid expenses and other assets		328,437		906,916
Income taxes receivable		245,623		1,369
Total current assets		7,508,435		8,692,188
1 otar current assets		7,508,455		8,092,188
PROPERTY, PLANT, AND EQUIPMENT, at cost:				
Land and building		9,556,586		9,556,984
Machinery and equipment		5,270,711		5,198,784
Office equipment		1,440,964		1,402,369
Vehicles		245,674		245,674
volicies		16,513,935		16,403,811
Less accumulated depreciation		(8,646,422)		(8,487,827
Total property, plant and equipment at cost, net		7,867,513		7,915,984
Total property, plant and equipment at cost, net		7,007,515	-	7,713,764
INTANGIBLE ASSETS, less accumulated amortization of \$188,397 in 2020 and \$181,609 in 2019		268,004		271,369
Total assets	\$	15,643,952	\$	16,879,541
LIABILITIES AND STOCKHOLDERS' EQUITY				
CURRENT LIABILITIES				
Current portion of long-term debt	\$	134,592	\$	133.287
Accounts payable	Ψ	763,216	Ψ	761,641
Accrued compensation		289,330		382,303
Other accrued liabilities		129,398		657,255
Total current liabilities		1,316,536		1,934,486
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LONG-TERM LIABILITIES				
Long-term debt, less current portion		2,654,036		2,688,357
Total liabilities		3,970,572		4,622,843
COMMITMENTS AND CONTINGENCIES				
STOCKHOLDERS' EQUITY				
Preferred stock, par value \$.10 per share; authorized 250,000 shares; issued none		—		_
Common stock, par value \$.10 per share; authorized 4,750,000 shares; issued and outstanding 1,976,354 shares in 2020 and 2019.		197.635		197,635
Additional paid-in-capital		2,725,650		2,721,962
Retained earnings		8,750,095		9,337,101
		11,673,380		12,256,698
Total stockholders' equity	\$	15,643,952	\$	16,879,541
Total liabilities and stockholders' equity	.D	1,04,97/	.D	10 0/9 341

See notes to condensed financial statements.

IKONICS CORPORATION CONDENSED STATEMENTS OF OPERATIONS (Unaudited)

		onths Ended ·ch 31,
	2020	2019
NET SALES	\$ 3,497,192	\$ 3,528,691
COST OF GOODS SOLD	2,343,960	2,519,572
GROSS PROFIT	1,153,232	1,009,119
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES	1,781,020	1,381,965
RESEARCH AND DEVELOPMENT EXPENSES	183,580	178,842
LOSS FROM OPERATIONS	(811,368) (551,688)
INTEREST EXPENSE	(21,484) (22,275)
OTHER INCOME	6,917	16,194
LOSS BEFORE INCOME TAXES	(825,935) (557,769)
INCOME TAX BENEFIT	(238,929) (102,738)
NET LOSS	<u>\$ (587,006</u>) <u>\$ (455,031</u>)
LOSS PER COMMON SHARE		
Basic	\$ (0.30) <u>\$ (0.23</u>)
Diluted	\$ (0.30) <u>\$ (0.23</u>)
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING		
Basic	1,976,354	1,983,553
Diluted	1,976,354	1,983,553

See notes to condensed financial statements.

STATEMENTS OF STOCKHOLDERS' EQUITY THREE MONTHS ENDED MARCH 31, 2020 and 2019 (unaudited)

For the three months ended March 31, 2020:

For the three months ended March 31, 2020:	Commo Shares	mon Stock P			Additional Paid-in Retained Capital Earnings			Total Stock- holders' Equity	
BALANCE AT DECEMBER 31, 2019	1,976,354	\$	197,635	\$	2,721,962	\$	9,337,101	\$	12,256,698
Net loss	—		—		2 699		(587,006)		(587,006)
Stock based compensation					3,688				3,688
BALANCE AT MARCH 31, 2020	1,976,354	\$	197,635	\$	2,725,650	\$	8,750,095	\$	11,673,380

For the three months ended March 31, 2019:

	Commo Shares	Additional <u>Common Stock</u> Paid-in res Amount Capital			Retained Earnings	Total Stock- holders' Equity	
	Shares		Amount		Capital	 Earnings	 Equity
BALANCE AT DECEMBER 31, 2018	1,983,553	\$	198,355	\$	2,723,024	\$ 10,189,651	\$ 13,111,030
Net loss	_		_		_	(455,031)	(455,031)
Stock based compensation					1,920	 	 1,920
BALANCE AT MARCH 31, 2019	1,983,553	\$	198,355	\$	2,724,944	\$ 9,734,620	\$ 12,657,919

IKONICS CORPORATION CONDENSED STATEMENTS OF CASH FLOWS (Unaudited)

	Thr	ree Months Ended March 31,
	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (58	37,006) \$ (455,031)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation		57,623 162,033
Amortization		9,454 8,932
Stock based compensation		3,688 1,920
Net gain on sale and disposal of equipment	((2,324) (7,487)
Loss on intangible asset abandonment		— 343
Changes in working capital components:		
Trade receivables		74,552 394,101
Inventories		(793,588)
Prepaid expenses and other assets		78,479 115,523
Income tax receivable		(110,553)
Accounts payable		1,575 212,578
Accrued expenses	(62	20,830) (146,767)
Net cash used in operating activities	(42	(617,996)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(13	35,125) (117,075)
Proceeds from sales of equipment	1	18,297 12,396
Purchases of intangible assets	((3,423) (2,797)
Purchases of short-term investments		— (1,715,000)
Proceeds on sale of short-term investments	1,22	1,470,000
Net cash provided by (used in) investing activities	1,10	04,749 (352,476)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payment on long-term debt	(3	35,682) (35,419)
Net cash used in financing activities		35,682) (35,419)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	64	41,791 (1,005,891)
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	96	53,649 1,623,137
CASH AND CASH EQUIVALENTS AT END OF PERIOD	<u>\$ 1,60</u>	05,440 \$ 617,246
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Cash paid for interest	\$ 1	19,105 \$ 19,367
Cash paid for income taxes, net		5,325 \$ 7,815
See notes to condensed financial statements.		

NOTES TO CONDENSED FINANCIAL STATEMENTS

(Unaudited)

1. Basis of Presentation

The condensed balance sheet of IKONICS Corporation (the "Company") as of March 31, 2020, and the related condensed statements of operations for the three months ended March 31, 2020 and 2019, the condensed statements of stockholders' equity for the three months ended March 31, 2020 and 2019, and condensed cash flows for the three months ended March 31, 2020 and 2019, 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 March 31, 2020, 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, 2019.

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

The Company has evaluated subsequent events occurring after the date of the financial statements for events requiring recording or disclosure in the financial statements. As a result of the novel strain of COVID-19 pandemic effect on the Company's business as well as the businesses of its customers and suppliers, a significant decline in the Company's business has occurred and that decline is expected to continue. Although the Company continues to operate, the Company has experienced a significant decrease in sales activity, the future financial impact and duration cannot be reasonably estimated at this time.

2. Short-Term Investments

The Company's \$980,000 of short-term investments at March 31, 2020 is comprised of 4 fully insured certificates of deposit with original maturities of five months and interest rates ranging from 1.60% to 1.70%.

3. Inventories

The major components of inventories as of March 31, 2020 and December 31, 2019 were as follows:

	 Mar 31, 2020	 Dec 31, 2019
Raw materials	\$ 1,436,769	\$ 1,667,154
Work-in-progress	459,370	419,906
Finished goods	2,023,640	1,449,854
Reduction to LIFO cost	 (1,331,010)	 (1,356,378)
Total Inventories	\$ 2,588,769	\$ 2,180,536

4. Earnings Per Common Share (EPS)

Basic EPS is calculated using net loss divided by the weighted average of common shares outstanding. Diluted EPS is calculated similarly 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. The options disclosed in Note 5 have been excluded from the computation because of their antidilutive effect.

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

	Three Mont	ns Ended
	Mar 31, 2020	Mar 31, 2019
Weighted average common shares outstanding	1,976,354	1,983,553
Dilutive effect of stock options		
Weighted average common and common equivalent shares outstanding	1,976,354	1,983,553
7		

NOTES TO CONDENSED FINANCIAL STATEMENTS

(Unaudited)

If the Company was in a net income position for the first three months of 2020, the computation of diluted income per share would exclude 23,750 options with a weighted average exercise price of \$8.01 because the inclusion of these options would be anti-dilutive.

If the Company was in a net income position for the first three months of 2019, the computation of diluted income per share would exclude 18,000 options with a weighted average exercise price of \$13.22 because the inclusion of these options would be anti-dilutive.

5. Stock-Based Compensation

The Company maintains the 2019 Equity Incentive Plan (the "2019 Plan"). The 2019 Plan replaced the 1995 Incentive Stock Option Plan (the "1995 Plan) upon its ratification by shareholders in April 2019. The 1995 plan authorized the issuance of up to 442,750 shares of common stock. Of those shares, 10,500 were subject to outstanding options as of March 31, 2020. Awards granted under the 1995 Plan will remain in effect until they are exercised or expire according to their terms. At the time the 2019 Plan was approved, there were 102,157 shares reserved for future grants under the 1995 Plan which will no longer be available for future grants.

Under the terms of the 2019 Plan, the number of shares of common stock that may be the subject of awards and issued under the 2019 Plan was initially set at 102,157. Subsequent to the approval of the 2019 Plan, 6,250 outstanding options granted under the 1995 were forfeited. Under the terms of the 2019 Plan, those forfeited options are added back to the 2019 Plan reserve pool bringing the number of shares of common stock available for future awards under the 2019 Plan to 108,407. As of March 31, 2020, 13,250 options have been granted under the 2019 Plan.

The Company charged compensation cost of approximately \$3,700 against the loss for the three months ended March 31, 2020 and approximately \$2,000 for the three months ended March 31, 2019. As of March 31, 2020, there was approximately \$37,400 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, which increases additional paid in capital and reduces income taxes payable.

No stock options were exercised during the three months ended March 31, 2020 or March 31, 2019.

There were 10,000 options granted during the three months ended March 31, 2020 and there were no options granted during the three months ended March 31, 2019. The fair value of options granted during the three months ended March 31, 2020 was estimated using the Black Scholes option pricing model with the following assumptions:

	2020	
Dividend yield	0	
Expected volatility	40.3	%
Expected life of option (years)	10	
Risk-free interest rate	1.4	%
Fair value of each option on grant date	\$ 2.90	

Stock option activity during the three months ended March 31, 2020 was as follows:

		Weighted Average Exercise
	Shares	 Price
Outstanding at January 1, 2020	19,250	\$ 11.32
Granted	10,000	5.67
Exercised	—	—
Expired and forfeited	(5,500)	 15.33
Outstanding at March 31, 2020	23,750	\$ 8.01
Exercisable at March 31, 2020	7,915	\$ 11.09

The aggregate intrinsic value of all options outstanding and exercisable at March 31, 2020 was \$0.

NOTES TO CONDENSED FINANCIAL STATEMENTS

(Unaudited)

6. Segment Information

The Company's reportable segments are strategic business units that offer different products and have varied customer bases. There are four reportable segments: Chromaline, IKONICS Imaging, Digital Texturing (DTX) and Advanced Material Solutions (AMS). Chromaline sells screen printing film, emulsions, and inkjet receptive film primarily to distributors and some end users. IKONICS Imaging sells photo resistant film, art supplies, glass, and related abrasive etching equipment to both end users and distributors. 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. 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, 2019.

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

For the three months ended March 31, 2020:

for the three months ended whiteh 51, 2020.			IKON	ICS		
		IKONICS				
	Chromaline	Imaging	DTX	AMS	Unalloc.	Total
Net sales	\$ 1,964,340	\$ 970,099	\$ 112,529	\$ 450,224	\$ —	\$ 3,497,192
Cost of goods sold	1,418,269	477,723	51,746	396,222		2,343,960
Gross profit	546,071	492,376	60,783	54,002		1,153,232
Selling general and administrative*	426,219	278,862	34,373	103,109	938,457	1,781,020
Research and development*	—	—		—	183,580	183,580
Income (loss) from operations	\$ 119,852	\$ 213,514	\$ 26,410	\$ (49,107)	\$ (1,122,037)	\$ (811,368)

For the three months ended March 31, 2019:

· · · · · · · · · · · · · · · · · · ·		IKONICS					
	Chromaline	IKONICS Imaging	DTX	AMS	Unalloc.	Total	
Net sales	\$ 2,029,341	\$ 1,088,806	\$ 92,760	\$ 317,784	\$	\$ 3,528,691	
Cost of goods sold	1,553,610	585,504	34,046	346,412		2,519,572	
Gross profit	475,731	503,302	58,714	(28,628)		1,009,119	
Selling general and administrative*	445,003	322,453	34,605	88,148	491,756	1,381,965	
Research and development*	—				178,842	178,842	
Income (loss) from operations	\$ 30,728	\$ 180,849	\$ 24,109	\$ (116,776)	\$ (670,598)	\$ (551,688)	

*The Company does not allocate all selling, general and administrative expenses or any research and development expenses to its operating segments for internal reporting.

NOTES TO CONDENSED FINANCIAL STATEMENTS

(Unaudited)

Trade receivables by segment as of March 31, 2020 and December 31, 2019 were as follows:

	Mar	31, 2020	Dec 31, 2019	
Chromaline	\$	1,114,214 \$	1,916,066	
IKONICS Imaging	Ŷ	282,082	304,791	
DTX		60,764	13,919	
AMS		416,284	252,363	
Unallocated		(113,178)	(52,421)	
Total	\$	1,760,166 \$	\$ 2,434,718	

7. Income Taxes

The Company records its interim provision for income taxes by applying its estimated annual effective tax rate to the year-to-date pre-tax income and adjusting for discrete tax items recorded in the period. Deferred income taxes result from temporary differences between the reporting of amounts for financial statement purposes and income tax purposes. These differences relate primarily to different methods used for income tax reporting purposes, including for depreciation and amortization, warranty and vacation accruals, and deductions related to allowances for doubtful accounts receivable and inventory reserves. The provision for income tax expense, as well as deferred federal and state income tax expense.

Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing deferred tax assets. A significant piece of objective negative evidence evaluated was the cumulative loss incurred over the three-year period ended March 31, 2020. Such objective evidence limits the ability to consider other subjective evidence, such as our projections for future growth.

On the basis of this evaluation, as of March 31, 2020, a valuation allowance of \$214,000 has been recorded to reserve for deferred tax assets, which are not expected to be realized. The valuation allowance will be reevaluated on a quarterly basis and may change if estimates of future taxable income during the carryforward period is increased or if objective negative evidence in the form of cumulative losses is no longer present and additional weight is given to subjective evidence such as our projections for growth

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") was signed into law. The CARES Act is a tax-and-spending package intended to provide economic relief to address the impact of the COVID-19 pandemic. The CARES Act includes several tax provisions that, among other things, allow businesses to carry back NOLs arising in 2018, 2019, and 2020 to the five prior tax years. The tax effect of a change in tax law or rates on taxes payable or refundable for a prior year should be recognized as of the enactment date as tax expense (benefit) for the current year. Accordingly, the Company has recorded a tax benefit in the current period to recognize certain eligible net operating loss carryback claims.

The effective tax rate for the three months ended March 31, 2020 was a benefit of 28.9%, compared to a benefit of 18.4% for the three months ended March 31, 2019. The primary driver of the change in the Company's effective tax rate is attributable to a tax benefit in the current period to recognize a net operating loss carryback claim. The Company recorded an income tax benefit of \$239,000 and a benefit of \$103,000 for the three months ended March 31, 2020 and 2019, respectively.

The Company recognized the financial statement benefit of a tax position only after determining that the relevant tax authority is more-likely -than-not to sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the condensed consolidated financial statements is the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with the relevant tax authority. As of March 31, 2020, the Company has no unrecognized tax benefits.

This Company is not currently under examination in any jurisdiction. In the event of any future tax assessments, the Company has elected to record the income taxes and any related interest and penalties as income tax expense on the statement of operations.

8. Long-Term Debt

On April 1, 2016, the Company entered into a financing agreement (the "Financing Agreement") under which the Duluth Economic Development Authority (the "Issuer") agreed to sell \$3,415,000 of its Tax Exempt Industrial Revenue Bonds, Series 2016 (IKONICS Project) (the "Bonds") to Wells Fargo Bank, National Association (the "Bank"), and the Bank agreed to lend to the Company the proceeds received from the sale of the Bonds (the "Loan").

The Company is subject to certain customary covenants set forth in the associated covenant agreement, including a requirement that the Company maintain a debt service coverage ratio as of the end of each calendar quarter of not less than 1.25 to 1.00 on a rolling four-quarter basis. As of December 31, 2019, the Company was not in compliance with the debt service coverage ratio covenant, but obtained a waiver for the non-compliance. There is no certainty that a waiver can be obtained in the future if similar violations occur. The Company amended the covenant terms in February of 2020 to change the debt service coverage ratio calculation from a rolling quarterly calculation to an annual calculation beginning March 31, 2020. If the Company has future violations of its covenants, and is unable to obtain appropriate waivers, it could have a significant adverse effect on the Company's liquidity. The Company believes that any adverse effect of such a possible outcome is mitigated by its strong working capital including cash, cash equivalents, and short-term investments of \$2.6 million along with the Company's \$2.0 million available line of credit as of March 31 2020. However, the Company cannot reasonably estimate the future financial impact on its operations or working capital position given the recent downturn in business due to the coronavirus (COVID-19) pandemic.

In addition to the \$3,415,000 in indebtedness pursuant to the Loan, the Company has a bank line of credit providing for borrowings of up to \$2,050,000 which expires on August 30, 2021 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 three months of 2020 or 2019 and there were no borrowings outstanding as of March 31, 2020 or December 31, 2019. There are no financial covenants related to the line of credit and the Company expects to obtain a similar line of credit when the current line of credit expires.

Both the \$3,415,000 financing pursuant to the Loan and the line of credit are collateralized by substantially all assets of the Company.

9. Subsequent Event

The Company evaluated its March 31, 2020 condensed consolidated financial statements for subsequent events through the date the condensed consolidated

financial statements were issued. As a result of the COVID-19 pandemic effect on the Company's business as well as the businesses of its customers and suppliers, a significant decline in the Company's business has occurred and that decline is expected to continue. Although the Company continues to operate, the Company has experienced a significant decrease in sales activity, the future financial impact and duration cannot be reasonably estimated at this time. On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") was signed into law. As part of The CARES Act, the Company secured a \$1.2 million loan under the Paycheck Protection Program through the Small Business Administration (SBA). The loan is designed to provide a direct incentive for small businesses to keep workers on their payroll. The loan can be used for payroll, rent, mortgage interest or utilities for the eight weeks following the loan origination date. The SBA may forgive all or part of the loan, if certain criteria are met.

Cautionary Note Regarding Forward-Looking Statements

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 but are not limited to statements relating to our future plans, objectives and results and the impact of the COVID-19 pandemic on our financial results and the effectiveness of the Company's responses to the pandemic. 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, 2019, 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 Analysis 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 first quarter of 2020 and 2019. It should be read in connection with the Company's condensed unaudited financial statements and notes thereto included in this Form 10-Q.

Potential Impact of the COVID-19 Pandemic

The Company is closely monitoring the novel strain of coronavirus (COVID-19) pandemic and its potential impact on its business. The outbreak and continuing spread of COVID-19 has resulted in a substantial curtailment of business activities worldwide and is causing weakened economic conditions, both nationally and globally. As part of intensifying efforts to contain the spread of COVID-19, a growing number of state, local and foreign governments have imposed various restrictions on the conduct of business and travel. Government restrictions, such as stay-at-home orders and quarantines and company remote work policies have led to a significant number of business closures and slowdowns. These business closures and slowdowns have already adversely impacted and will likely continue to adversely impact the Company directly, as well as cause its customers and suppliers to slow or stop production, which will likely significantly disrupt the Company's sales, production and supply chain. For example, as a result of the COVID-19 pandemic, the Company began to experience decreased demand for its products and services during the three months ended March 31, 2020. The Company anticipates a significant decrease in global demand for its products and services during second quarter of 2020 and beyond. This significant decrease in demand will likely have a material adverse impact on the Company's business, operating results and financial condition beginning with the second quarter of 2020. The Company has been deemed an essential operation. As a result, the Company's facilities continue to operate and are doing so safely, having implemented social distancing and enhanced health, safety and sanitization measures. The Company's leadership continues to address the rapidly evolving situation and is adjusting as necessary. The Company has also implemented necessary procedures to enable a significant portion of its employee base to work remotely. As the situation evolves into a more prolonged pandemic, the Company expects the COVID-19 pandemic to have a significant adverse effect on economies and financial markets globally, potentially leading to a significant worldwide economic downturn, which could have a significant adverse effect on the Company's business, operating results and financial condition. However, the duration of these trends and the magnitude of such impacts cannot be precisely estimated at this time, as they are affected by a number of factors (some of which are outside management's control), including those presented in Part II, Item 1A. "Risk Factors" below.

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 the Company 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 especially given the unpredictability of any effects related to the COVID-19 pandemic. 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 receivable 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 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 net realizable 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. Deferred tax assets and liabilities are presented as long-term on a net basis. 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 uncertaint ax 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. Revenue is measured based on consideration specified in the contract with a customer, adjusted for any applicable estimates of variable consideration and other factors affecting the transaction price, including noncash consideration, consideration paid or payable to customers and significant financing components. While most of the Company's revenue is contracted with customers through one-time purchase orders and short-term contracts, the Company does have long-term arrangements with certain customers. Revenue from all customers is recognized when a performance obligation is satisfied by transferring control of a distinct good or service to a customer.

Individually promised goods and services in a contract are considered a distinct performance obligation and accounted for separately if the customer can benefit from the individual good or service on its own or with other resources that are readily available to the customer and the good or service is separately identifiable from other promises in the arrangement. When an arrangement includes multiple performance obligations, the consideration is allocated between the performance obligations in proportion to their estimated standalone selling price. Costs related to products delivered are recognized in the period incurred, unless criteria for capitalization of costs are met. Costs of revenues consist primarily of direct labor, manufacturing overhead, materials and components. The Company does not incur significant upfront costs to obtain a contract were to become material, the costs would be recorded as an asset and amortized to expense in a manner consistent with the related recognition of revenue.

The Company excludes governmental assessed and imposed taxes on revenue transactions that are invoiced to customers from revenue. The Company includes freight billed to customers in revenue. Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as a fulfillment cost and are included in cost of goods sold.

The timing of revenue recognition, billings and cash collections results in accounts receivable on the balance sheet.

Performance obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. A contract's transaction price is allocated to each distinct performance obligation in proportion to its standalone selling price and recognized as revenue when, or as, the performance obligation is satisfied. The Company's various performance obligations and the timing or method of revenue recognition are discussed below:

The Company sells its products to both distributors and end-users. Each unit of product delivered under a customer order represents a distinct and separate performance obligation as the customer can benefit from each unit on its own or with other resources that are readily available to the customer and each unit of product is separately identifiable from other products in the arrangement.

The transaction price for the Company's products is the invoiced amount. The Company does not have variable consideration in the form of refunds, credits, rebates, price concessions, pricing incentives or other items impacting transaction price. The purchase order pricing in arrangements with customers is deemed to approximate standalone selling price; therefore, the Company does not need to allocate proceeds on a relative standalone selling price allocation between performance obligations. The Company applies the practical expedient in FASB ASC 606-10-50-14 and does not disclose information about remaining performance obligations that have original expected durations of one year or less. There are no material obligations that extend beyond one year.

Revenue is recognized when transfer of control occurs as defined by the terms in the customer agreement. The Company immediately recognizes incidental items that are immaterial in the context of the contract. The Company has also applied the practical expedient in FASB ASC 606-10-32-18 regarding the adjustment of the promised amount of consideration for the effects of a significant financing component when the customer pays for that good or service within one year or less, as the Company does not have any significant financing components in its customer arrangements as payment is received at or shortly after the point of sale, generally thirty to ninety days.

The Company estimates returns based on an analysis of historical experience if the right to return products is granted to its customers. The Company does not record a return asset as non-conforming products are generally not returned. The Company's return policy does not vary by geography. The customer has no rotation or price protection rights. The Company is not under a warranty obligation except as described below.

Sales commissions. Sales commissions paid to sales representatives are eligible for capitalization as they are incremental costs that would not have been incurred without entering into a specific sales arrangement and are recoverable through the expected margin on the transaction. The Company has elected to apply the practical expedient provided by FASB ASC 340-40-25-4 and recognize the incremental costs of obtaining contracts as an expense when incurred, as the amortization period of the assets that would have otherwise been recognized is one year or less. The Company records these costs in selling, general, and administrative expense.

Product warranty. The Company offers warranties on various products and services. These warranties are assurance type warranties that are not sold on a standalone basis; therefore, they are not considered distinct performance obligations. The Company estimates the costs that may be incurred under its warranties and records a liability in the amount of such costs at the time the revenue is recognized for the product sale.

International revenue. 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 31% of total sales during the first three months of 2020 and 26% during the first three months of 2019.

Results of Operations

Quarter Ended March 31, 2020 Compared to Quarter Ended March 31, 2019

Sales. The Company's 2020 first quarter sales of \$3.5 million were \$31,000, or 0.9%, lower than the 2019 first quarter sales of \$3.5 million. IKONICS Imaging 2020 first quarter sales of \$970,000 decreased by 10.9% from first quarter 2019 sales of \$1.1 million. The IKONICS Imaging 2020 first quarter sales decrease is due to a COVID-19 related slowdown in domestic sales towards the end of the first quarter of 2020. Chromaline sales for the first quarter of 2020 also decreased versus the first quarter due to COVID-19 related issues as 2020 Chromaline first quarter sales of \$2.0 million were \$65,000 lower than 2019 first quarter sales. Partially offsetting these sales decreases, 2020 first quarter AMS sales increased from \$318,000 in the first quarter of 2019 to \$450,000, a \$132,000 increase, due to higher sales to AMS' largest customers. The Company was notified by AMS' largest customer that it will reduce order volume beginning in the second quarter of 2020 due to the COVID-19 pandemic. DTX sales also increased in the first quarter from \$93,000 in 2019 to \$113,000 in 2020. IKONICS anticipates that the COVID-19 outbreak will continue to adversely impact sales in the second quarter of 2020 and beyond due to decreasing demand for its products and services.

Gross Profit. Gross profit was \$1.2 million, or 33.0% of sales, in the first quarter of 2020 compared to \$1.0 million, or 28.6% of sales, for the same period in 2019. The Chromaline gross margin increased from 23.4% in the first quarter of 2019 to 27.8% for the first quarter of 2020 while the IKONICS Imaging gross margin increased from 46.2% in the first quarter of 2019 to 50.8% in the first quarter of 2020. Both the Chromaline and IKONICS Imaging gross margins in 2019 were unfavorably impacted by production issues caused by raw material shortages related to cold weather shipping issues. Additionally, the Chromaline 2019 gross margin was negatively impacted by a \$60,000 credit related to cold weather product damage and a less favorable sales mix. An increase in sales volumes resulted in the AMS 2020 first quarter gross margin increased due to increase in material waste costs. IKONICS anticipates that the COVID-19 outbreak will adversely impact gross margins in the second quarter of 2020 and beyond as sales volumes decrease.

Selling, General and Administrative Expenses. Selling, general and administrative expenses were \$1.8 million, or 50.9% of sales, in the first quarter of 2020 compared to \$1.4 million, or 39.2% of sales, for the same period in 2019. Selling, general and administrative expenses for the first quarter of 2020 increased primarily due to \$365,000 of one-time costs related to the Chief Executive Officer transition which occurred in the first quarter of 2020. These costs include severance payments, a signing bonus, relocation expenses and executive search consulting expenses.

Research and Development Expenses. Research and development expenses during the first quarter of 2020 were \$184,000, or 5.2% of sales, versus \$179,000, or 5.1%, of sales for the same period in 2019. The 2020 first quarter increase is due to additional research and development costs related to DTX product development projects.

Interest Expense. Interest expense for the first quarter of 2020 and 2019 was \$21,000 and \$22,000, respectively.

Income Taxes. For the first quarter of 2020, the Company realized an income tax benefit of \$239,000, or an effective tax rate of 28.9%, compared to a benefit of \$103,000, or an effective tax rate of 18.4% for the three months ended March 31, 2019. The primary driver of the change in the Company's effective tax rate is attributable to a tax benefit in the current period to recognize a net operating loss carryback claim as a result from the recently passed CARES Act. The income tax provision for 2019 differs from the expected tax benefit due to unfavorable non-deductible items and 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 \$1.6 million and \$960,000 at March 31, 2020 and December 31, 2019, respectively. Operating activities used \$427,000 in cash during the first three months of 2020 compared to using \$618,000 of cash during the same period in 2019. Cash used in operating activities is primarily the result of net losses adjusted for non-cash depreciation, amortization, and certain changes in working capital components discussed in the following paragraph.

During the first three months of 2020, trade receivables decreased \$675,000. This decrease was due primarily to a slowdown in sales of products and services during the latter part of the 2020 first quarter, as a result of the aforementioned COVID-19 pandemic. 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 \$408,000 due to higher finished goods levels as the Company experienced lower than expected sales towards the end of the first quarter of 2020. Prepaid expenses and other assets decreased by \$578,000 reflecting a decrease in a receivable related to the reimbursement of 2019 medical insurance costs that the Company received from its stop-loss insurance carrier. Accrued expenses decreased \$621,000, reflecting a decrease in the accrual for health insurance costs. Accounts payable increased by \$2,000 due to the timing of vendor payments. Income taxes receivable increased by \$244,000 as the Company recognized an income tax benefit attributable to a net operating loss carryback claim.

During the first three months of 2019, trade receivables decreased \$394,000 from lower sales. 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 \$794,000 due to higher finished goods and raw material levels as the Company was ramping up inventory levels to meet demand for the remainder of 2019 in addition to lower than expected first quarter sales. Prepaid expenses and other assets decreased by \$116,000, reflecting a decrease in a receivable related to the reimbursement of 2018 medical insurance costs that the Company received from its stop-loss insurance carrier. Accounts payable increased by \$213,000 due to the timing of vendor payments. Accrued expenses decreased by \$147,000, reflecting the timing of compensation payments while income taxes receivable increased by \$111,000 due to the recognition of the 2019 first quarter tax benefit.

During the first three months of 2020, cash provided by investing activities was \$1.1 million. Five certificates of deposits totaling \$1.2 million matured during the first three months of 2020. The Company's purchases of equipment of \$135,000 were mainly for improvements to production and process capabilities and to replace a vehicle. The Company received \$18,000 in proceeds from the sale of a vehicle. Also, during the first three months of 2020, the Company incurred \$3,000 in patent application costs that the Company records as an asset and amortizes upon successful completion of the application process.

During the first three months of 2019, cash used in investing activities was \$352,000. Six certificates of deposits totaling \$1.5 million matured during the first three months of 2019. The Company purchased seven certificates of deposits totaling \$1.7 million. The Company's purchases of property and equipment of \$117,000 were mainly for improvements to production and process capabilities and to replace two vehicles. The Company received \$12,000 in proceeds from the sale of two vehicles. Also, during the first three months of 2019, the Company incurred \$3,000 in patent application costs that the Company records as an asset and amortizes upon successful completion of the application process.

On April 1, 2016, the Company entered into a financing agreement (the "Financing Agreement") under which the Duluth Economic Development Authority (the "Issuer") agreed to sell \$3,415,000 of its Tax Exempt Industrial Revenue Bonds, Series 2016 (IKONICS Project) (the "Bonds") to Wells Fargo Bank, National Association (the "Bank"), and the Bank agreed to lend to the Company the proceeds received from the sale of the Bonds (the "Loan"). Related to the Company's Loan, the Company made principal payments of \$36,000 during the first three months of 2020 and \$35,000 during the first three months of 2019.

The Company is subject to certain customary covenants set forth in the Loan, including a requirement that the Company maintain a debt service coverage ratio as of the end of each calendar quarter of not less than 1.25 to 1.00 on a rolling four-quarter basis. As of December 31, 2019, the Company was not in compliance with the debt service coverage ratio covenant, but obtained a waiver for the non-compliance. There is no certainty that a waiver can be obtained in the future if similar violations occur. The Company amended the covenant terms in February of 2020 to change the debt service coverage ratio calculation from a rolling quarterly calculation to an annual calculation beginning December 31, 2020. If the Company has future violations of its covenants, and is unable to obtain appropriate waivers, it could have a significant adverse effect on the Company's liquidity.

A bank line of credit providing for borrowings of up to \$2,050,000 expires August 30, 2021. 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 three months of 2020 or 2019, and there were no borrowings outstanding as of March 31, 2020 or December 31, 2019. There are no financial covenants related to the line of credit.

The Company anticipates a significant decrease in global demand for its products and services during second quarter of 2020 and beyond due to the COVID-19 pandemic. This significant decrease in demand will likely have a material adverse impact on the Company's business, operating results and financial condition beginning with second quarter of 2020. It is currently not possible to predict the future potential impact, or the extent of any impact, of the COVID-19 pandemic on the Company's business, and on the global economy as a whole. It is also currently not possible to predict how long the COVID-19 pandemic will last or the time that it will take for economic activity to return to prior levels.

The Company believes that its strong working capital position (including cash, cash equivalents, and short-term investments of \$2.6 million) along with the Company's \$2.0 million available line of credit as of March 31, 2020 and the recently secured \$1.2 million loan through the Small Business Administration (SBA) can help mitigate the negative impact of the COVID-19 pandemic. However, the Company cannot reasonably estimate the future financial impact on its operations or working capital position given the recent downturn in business due to the COVID-19 pandemic.

Capital Expenditures

Through the first three months of 2020, the Company incurred \$135,000 of capital expenditures mainly for improvements to production and process capabilities and to replace a vehicle.

The Company was planning additional capital expenditures in 2020 of approximately \$204,000 including improvements to the Company's production capabilities, process improvements, information technology upgrades and two replacement vehicles. With the recent downturn in business related to the COVID-19 pandemic, the Company anticipates that additional capital expenditures in 2020 will be significantly less than \$204,000. 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 31% of total sales during the first three months of 2020 and 26% during the first three months of 2019. International sales during the first quarter of 2020 increased in certain Asian markets and in Europe. The 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 due to uncertainties in 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, while a portion is transacted in Euros. The Company has not implemented an economic hedging strategy to reduce the risk of foreign currency translation or transaction 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. Furthermore, the impact of foreign exchange on the Company's balance sheet and operating results was not material in either 2020 or 2019.

Future Outlook

See the discussion under the heading "Potential Impact of the COVID-19 Pandemic" above for the Company's discussion of the COVID-19 pandemic.

IKONICS has spent an average of approximately 5.0% 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 is also continuing to pursue DTX-related business initiatives. 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 as part of its joint development agreement with AKK, a German manufacturer of high quality printers, 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 facilitate entry into the market for prototyping.

The Company continues to make progress on its AMS business. The Company has three long-term sales agreements in place for its technology with major aerospace companies. However, the Company was notified by AMS' largest customer that it will reduce order volume beginning in the second quarter of 2020 due to the COVID-19 pandemic.

Both the Chromaline 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 the Company believes will contribute to growth. Early in 2019, the Company introduced its new IKONART® product to positive reviews and is generating sales. IKONART® provides a new way to make custom reusable stencils for the creative arts markets. 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 international growth challenging.

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

Recent Accounting Pronouncements

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, which revises guidance for the accounting for credit losses on financial instruments within its scope, and in November 2018, issued ASU No. 2018-19 and in April 2019, issued ASU No. 2019-04 and in May 2019, issued ASU No. 2019-05, and in November 2019, issued ASU No. 2019-11, which amended the standard. The new standard introduces an approach, based on expected losses, to estimate credit losses on certain types of financial instruments and modifies the impairment model for available-for-sale debt securities. The new approach to estimating credit losses (referred to as the current expected credit losses model) applies to most financial assets measured at amortized cost and certain other instruments, including trade and other receivables, loans, held-to-maturity debt securities, net investments in leases and off-balance-sheet credit exposures. This ASU is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, with early adoption permitted. Entities are required to apply the standard's provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is adopted. The Company is still evaluating the impact of this ASU.

Off Balance Sheet Arrangements

The Company has no off-balance sheet arrangements.

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk

Not applicable

ITEM 4. Controls and Procedures

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 were no changes to the Company's internal control over financial reporting that occurred during the first three months of 2020 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. Legal Proceedings

None

ITEM 1A. Risk Factors

You should carefully review and consider the information regarding certain factors which could materially affect our business, financial condition or future results set forth under the heading "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019. There have been no material changes or additions to our risk factors discussed in such report, which could materially affect the Company's business, financial condition, or future results, with the exception of the following new risk factor:

A public health crisis or global outbreak of disease, including the pandemic caused by coronavirus disease 2019 ("COVID-19") has had, and could continue to have, a negative effect on the Company's operations, supply chain and workforce, creating business disruptions that could have a material adverse impact on the Company's financial condition, results of operations and cash flows.

The pandemic caused by COVID-19 was first reported in Wuhan, China, in December 2019 and has since spread to all geographic regions where the Company's products are produced and sold. The global, regional and local spread of COVID-19 has resulted in significant global mitigation measures, including government-directed quarantines, social distancing and shelter-in-place mandates, travel restrictions and/or bans, and restricted access to certain corporate facilities and manufacturing sites. Uncertainty with respect to the severity and duration of the pandemic, coupled with a significant drop in oil prices that began in early March 2020 driven by a collapse in demand due to the global spread of COVID-19 combined with increased supply from oil producers, has contributed to the volatility of financial markets. While the severity and duration of the COVID-19 pandemic cannot be reasonably estimated at this time, impacts to the Company may include, but are not limited to: fluctuations in the Company's stock price due to market volatility; a decrease in demand for the Company's products; reduced profitability; supply chain disruptions impeding the Company's ability to ship and/or receive product; potential interruptions or limitations to manufacturing operations imposed by local, state or federal governments; shortages of key raw materials; workforce absenteeism and distraction; labor shortages; customer credit concerns; cyber security and data accessibility disruptions due to remote working arrangements; reduced sources of liquidity; increased borrowing costs; and potential asset impairment charges. Business disruptions and market volatility resulting from the COVID-19 pandemic could have a material adverse impact on the Company's results of operations, financial condition and cash flows.

ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds

Not applicable Defaults upon Senior Securities

Not applicable

ITEM 4. Mine Safety Disclosures

Not applicable

ITEM 5. Other Information

None

ITEM 6. Exhibits

ITEM 3.

The following exhibits are filed as part of this Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020:

Exhibit	Description
3.1	Restated Articles of Incorporation of Company, as amended. (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).)
3.2	Amended and Restated By-Laws of the Company, as amended. (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on
	Form 8-K filed on April 30, 2018 (File No. 000-25757).)
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



SIGNATURES

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: May 13, 2020

By: /s/ Jon Gerlach

Jon Gerlach, Chief Financial Officer, and Vice President of Finance

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

I, Glenn Sandgren, 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: May 13, 2020

/s/ Glenn Sandgren Glenn Sandgren Chief Executive Officer

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.

Date: May 13, 2020

/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.

Date: May 13, 2020

Date: May 13, 2020

/s/ Glenn Sandgren Glenn Sandgren Chief Executive Officer

/s/ Jon Gerlach

Jon Gerlach Chief Financial Officer and Vice President of Finance