

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

**FORM 10-Q**

**Quarterly Report Pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934  
For the quarterly period ended June 30, 2022.**

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: 001-37850

**ATOMERA INCORPORATED**  
(Exact name of registrant as specified in its charter)

**Delaware**

**30-0509586**

(State or other jurisdiction of  
incorporation or organization)

(I.R.S. Employer  
Identification No.)

**750 University Avenue, Suite 280  
Los Gatos, California 95032**  
(Address, including zip code, of registrant's principal executive offices)

**(408) 442-5248**  
(Registrant's telephone number, including area code)

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 \$0.001	ATOM	Nasdaq Capital Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically 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  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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  Accelerated Filer   
Non-accelerated Filer  Smaller reporting company   
Emerging Growth Company

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

Indicate by checkmark whether the registrant is a shell company (as defined in rule 12b-2 of the Exchange Act: Yes  No

The number of outstanding shares of the Registrant's Common Stock, par value \$.001 per share, as of July 28, 2022 was 23,627,796.

# Atomera Incorporated

## Index

	Page
<u>PART I. Financial Information</u>	
Item 1. <u>Financial Statements</u>	3
<u>Condensed Balance Sheets – June 30, 2022 (unaudited) and December 31, 2021</u>	3
<u>Unaudited Condensed Statements of Operations - For the Three and Six Months Ended June 30, 2022 and 2021</u>	4
<u>Unaudited Condensed Statements of Stockholders' Equity - For the Three and Six Months Ended June 30, 2022 and 2021</u>	5
<u>Unaudited Condensed Statements of Cash Flows - For the Six Months Ended June 30, 2022 and 2021</u>	6
<u>Notes to the Unaudited Condensed Financial Statements</u>	7
Item 2. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	13
Item 3. <u>Quantitative and Qualitative Disclosures about Market Risk</u>	17
Item 4. <u>Controls and Procedures</u>	17
<u>PART II. Other Information</u>	
Item 1A. <u>Risk Factors</u>	18
Item 6. <u>Exhibits</u>	18
<u>Signatures</u>	19

**PART I. Financial Information****Item 1. Financial Statements**

**Atomera Incorporated**  
**Condensed Balance Sheets**  
**(in thousands, except per share data)**

	<u>June 30,</u> <u>2022</u>	<u>December 31,</u> <u>2021</u>
	<u>(Unaudited)</u>	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 21,838	\$ 28,699
Prepaid expenses and other current assets	650	309
Total current assets	<u>22,488</u>	<u>29,008</u>
Property and equipment, net	176	196
Long-term prepaid maintenance and supplies	91	91
Security deposit	14	14
Operating lease right-of-use asset	801	900
Financing lease right-of-use-asset	<u>5,212</u>	<u>5,851</u>
<b>Total assets</b>	<u>\$ 28,782</u>	<u>\$ 36,060</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 434	\$ 338
Accrued expenses	213	203
Accrued payroll related expenses	510	601
Current operating lease liability	243	216
Current financing lease liability	<u>1,395</u>	<u>1,395</u>
Total current liabilities	<u>2,795</u>	<u>2,753</u>
Long-term operating lease liability	658	768
Long-term financing lease liability	<u>3,579</u>	<u>4,158</u>
<b>Total liabilities</b>	<u>7,032</u>	<u>7,679</u>
Commitments and contingencies (see Note 10)	–	–
Stockholders' equity:		
Preferred stock \$0.001 par value, authorized 2,500 shares; none issued and outstanding at June 30, 2022 and December 31, 2021	–	–
Common stock: \$0.001 par value, authorized 47,500 shares; 23,457 and 23,207 shares issued and outstanding as of June 30, 2022 and December 31, 2021, respectively;	23	23
Additional paid-in capital	196,148	194,212
Accumulated deficit	<u>(174,421)</u>	<u>(165,854)</u>
Total stockholders' equity	<u>21,750</u>	<u>28,381</u>
<b>Total liabilities and stockholders' equity</b>	<u>\$ 28,782</u>	<u>\$ 36,060</u>

The accompanying notes are an integral part of these condensed financial statements.

**Atomera Incorporated**  
**Condensed Statements of Operations**  
**(Unaudited)**  
**(in thousands, except per share data)**

	<b>Three Months Ended</b>		<b>Six Months Ended</b>	
	<b>June 30,</b>		<b>June 30,</b>	
	<b>2022</b>	<b>2021</b>	<b>2022</b>	<b>2021</b>
Revenue	\$ —	\$ —	\$ 375	\$ 400
Cost of revenue	—	—	(81)	—
Gross margin	—	—	294	400
Operating expenses				
Research and development	2,433	2,069	4,772	4,298
General and administrative	1,667	1,506	3,315	3,019
Selling and marketing	347	137	672	403
Total operating expenses	<u>4,447</u>	<u>3,712</u>	<u>8,759</u>	<u>7,720</u>
Loss from operations	(4,447)	(3,712)	(8,465)	(7,320)
Other income (expense)				
Interest income	35	3	38	5
Interest expense	(69)	—	(140)	—
Total other income (expense), net	<u>(34)</u>	<u>3</u>	<u>(102)</u>	<u>5</u>
Net loss before income taxes	(4,481)	(3,709)	(8,567)	(7,315)
Provision for income taxes	—	17	—	31
Net loss	<u>\$ (4,481)</u>	<u>\$ (3,726)</u>	<u>\$ (8,567)</u>	<u>\$ (7,346)</u>
Net loss per common share, basic	<u>\$ (0.20)</u>	<u>\$ (0.17)</u>	<u>\$ (0.37)</u>	<u>\$ (0.33)</u>
Net loss per common share, diluted	<u>\$ (0.20)</u>	<u>\$ (0.17)</u>	<u>\$ (0.37)</u>	<u>\$ (0.33)</u>
Weighted average number of common shares outstanding, basic	<u>22,936</u>	<u>22,492</u>	<u>22,894</u>	<u>22,292</u>
Weighted average number of common shares outstanding, diluted	<u>22,936</u>	<u>22,492</u>	<u>22,894</u>	<u>22,292</u>

The accompanying notes are an integral part of these condensed financial statements.

**Atomera Incorporated**  
**Statements of Stockholders' Equity**  
**For the Three and Six Months Ended June 30, 2022 and 2021**  
**(Unaudited)**  
**(in thousands)**

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance January 1, 2022	23,207	\$ 23	\$ 194,212	\$ (165,854)	\$ 28,381
Stock-based compensation	161	–	726	–	726
Stock option exercise	25	–	166	–	166
Net loss	–	–	–	(4,086)	(4,086)
Balance March 31, 2022	23,393	\$ 23	\$ 195,104	\$ (169,940)	\$ 25,187
Stock-based compensation	33	–	859	–	859
At-the-market sale of stock, net of commissions and expenses	31	–	185	–	185
Net loss	–	–	–	(4,481)	(4,481)
Balance June 30, 2022	23,457	\$ 23	\$ 196,148	\$ (174,421)	\$ 21,750

  

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance January 1, 2021	22,375	\$ 22	\$ 187,463	\$ (150,140)	\$ 37,345
Stock-based compensation	71	–	731	–	731
At-the-market sale of stock, net of commissions and expenses	14	–	243	–	243
Stock option exercise	398	1	2,514	–	2,515
Warrant Exercise	223	–	–	–	–
Forfeited restricted stock awards	(54)	–	–	–	–
Net loss	–	–	–	(3,620)	(3,620)
Balance March 31, 2021	23,027	\$ 23	\$ 190,951	\$ (153,760)	\$ 37,214
Stock-based compensation	18	–	847	–	847
Stock option exercise	59	–	354	–	354
Net loss	–	–	–	(3,726)	(3,726)
Balance at June 30, 2021	23,104	\$ 23	\$ 192,152	\$ (157,486)	\$ 34,689

The accompanying notes are an integral part of these condensed financial statements.

**Atomera Incorporated**  
**Condensed Statements of Cash Flows**  
**(Unaudited)**  
**(in thousands)**

	<b>Six Months Ended June 30,</b>	
	<b>2022</b>	<b>2021</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Net Loss	\$ (8,567)	\$ (7,346)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	39	26
Operating lease right of use asset amortization	99	88
Financing lease right of use asset amortization	638	–
Stock-based compensation	1,585	1,578
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(341)	(527)
Accounts payable	96	(31)
Accrued expenses	10	(27)
Accrued payroll expenses	(91)	(383)
Operating lease liability	(83)	(12)
Net cash used in operating activities	(6,615)	(6,634)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Acquisition of property and equipment	(19)	(79)
Net cash used in investing activities	(19)	(79)
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Proceeds from at-the-market sale of stock, net of commissions and expenses	185	243
Proceeds from exercise of stock options	166	2,869
Payments on principal of financing lease	(578)	–
Net cash provided (used) by financing activities	(227)	3,112
Net decrease in cash and cash equivalents	(6,861)	(3,601)
Cash and cash equivalents at beginning of period	28,699	37,942
Cash and cash equivalents at end of period	\$ 21,838	\$ 34,341
<b>Supplemental information:</b>		
Cash paid for interest	\$ 140	\$ –
Cash paid for taxes	\$ –	\$ 66

The accompanying notes are an integral part of these condensed financial statements.

**ATOMERA INCORPORATED**  
**NOTES TO THE UNAUDITED CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2022 and 2021**

**1. NATURE OF OPERATIONS**

Atomera Incorporated (“Atomera” or the “Company”) was incorporated in the state of Delaware in March 2007 under the name MEARS Technologies, Inc. and is engaged in the development, commercialization and licensing of proprietary processes and technologies for the semiconductor industry. On January 12, 2016, the Company changed its name to Atomera Incorporated.

Atomera is an early-stage company, having only recently begun limited revenue-generating activities, and is devoting substantially all its efforts toward technology research and development and to commercially licensing its technology to designers and manufacturers of integrated circuits.

**2. LIQUIDITY AND MANAGEMENT PLANS**

At June 30, 2022, the Company had cash and cash equivalents of approximately \$21.8 million and working capital of approximately \$19.7 million. The Company has generated only limited revenues since inception and has incurred recurring operating losses. Accordingly, it is subject to all the risks inherent in the initial organization, financing, expenditures, and scaling of a new business that is not generating positive cashflow.

The Company has primarily financed operations through private placements of equity and debt securities, the Company’s Initial Public Offering (the “IPO”) which was consummated on August 10, 2016, and subsequent public offerings of its common stock. On May 31, 2022, Atomera entered into an Equity Distribution Agreement with Oppenheimer & Co. Inc. and Craig-Hallum Capital Group LLC, as agents, under which the Company may offer and sell, from time to time at its sole discretion, shares of its \$0.001 par value common stock, in “at the market” offerings to or through the agent as its sales agent, having an aggregate offering price of up to \$50.0 million (the “ATM Facility”).

Based on the funds it has available as of the date of the filing of this report, the Company believes that it has sufficient capital to fund its current business plans and obligations over, at least, 12 months from the date that these financial statements have been issued. The Company’s future capital requirements and the adequacy of its available funds will depend on many factors, including the Company’s ability to successfully commercialize its technology, competing technological and market developments, and the need to enter into collaborations with other companies or acquire technologies to enhance or complement its current offerings. The Company’s operating plans for the next 12 months include increased research and development headcount. For capital needs beyond the next 12 months, the Company currently expects to rely on its ATM, but the terms on which any future stock sales will occur will depend on both market conditions and the Company’s business performance, so there can be no guarantee that funds will be available on commercially reasonable terms.

**3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

*Significant accounting policies*

There have been no material changes in the Company’s significant accounting policies to those previously disclosed in the Company’s Annual Report on Form 10-K filed with the Securities and Exchange Commission (“SEC”) on February 15, 2022.

### Basis of presentation of unaudited condensed financial information

The unaudited condensed financial statements of the Company for the three and six months ended June 30, 2022 and 2021 have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) for interim financial information and pursuant to the requirements for reporting on Form 10-Q and Article 8 of Regulation S-X. Accordingly, they do not include all the information and footnotes required by GAAP for complete financial statements. However, such information reflects all adjustments (consisting solely of normal recurring adjustments) which are, in the opinion of management, necessary for the fair presentation of the Company’s financial position and its results of operations. Results shown for interim periods are not necessarily indicative of the results to be obtained for a full fiscal year. The balance sheet information as of December 31, 2021, was derived from the audited financial statements included in the Company’s financial statements as of and for the year ended December 31, 2021, included in the Company’s Annual Report on Form 10-K filed with the SEC on February 15, 2022. These unaudited condensed financial statements should be read in conjunction with that report.

### Adoption of recent accounting standards

In August 2020, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2020-06, *Debt with Conversion and other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity’s Own Equity (Subtopic 815-40)*. The new guidance eliminates the beneficial conversion and cash conversion accounting models for convertible instruments. It also amends the accounting for certain contracts in an entity’s own equity that are currently accounted for as derivatives because of specific settlement provisions. In addition, the new guidance modifies how particular convertible instruments and certain contracts that may be settled in cash or shares impact the diluted earnings per share computation. The Company adopted this standard on January 1, 2022 and it did not have a material impact on its financial position, results of operations or financial statement disclosure.

## 4. REVENUE

The Company recognizes revenue in accordance with Accounting Standards Codification (“ASC”) No. 606. The amount of revenue that the Company recognizes reflects the consideration it expects to receive in exchange for goods or services and such revenue is recognized at the time when goods or services are transferred and/or delivered to its customers. Revenue is recognized when the Company satisfies a performance obligation by transferring the product or service to the customer. The Company generates revenues from engineering service contracts, integration license agreements and joint development agreements. When the Company’s performance obligation is the promise to grant a license, revenue is recognized either at a point in time or over time.

The following table provides information about disaggregated revenue by primary geographical markets and timing of revenue recognition (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Primary geographic markets				
North America	\$ –	\$ –	\$ 75	\$ –
Asia Pacific	–	–	300	400
Total	<u>\$ –</u>	<u>\$ –</u>	<u>\$ 375</u>	<u>\$ 400</u>
Timing of revenue recognition				
Products and services transferred at a point in time	\$ –	\$ –	\$ 375	\$ 400
Products and services transferred over time	–	–	–	–
Total	<u>\$ –</u>	<u>\$ –</u>	<u>\$ 375</u>	<u>\$ 400</u>

### Unbilled contracts receivable and deferred revenue

Timing of revenue recognition may differ from the timing of invoicing customers. Accounts receivable includes amounts billed and currently due from customers. Unbilled contracts receivable represents unbilled amounts expected to be received from customers in future periods, where the revenue recognized to date exceeds the amount billed, and the right to receive payment is subject to the underlying contractual terms. Unbilled contracts receivable amounts may not exceed their net realizable value and are classified as long-term assets if the payments are expected to be received more than one year from the reporting date.



## 5. BASIC AND DILUTED LOSS PER SHARE

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of shares outstanding for the period. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the sum of the weighted average number of shares of common stock outstanding and the dilutive common stock equivalent shares outstanding during the period. The Company's potentially dilutive common stock equivalent shares, which include incremental common shares issuable upon (i) the exercise of outstanding stock options and warrants and (ii) vesting of restricted stock units and restricted stock awards, are only included in the calculation of diluted net loss per share when their effect is dilutive. Since the Company has had net losses for all periods presented, all potentially dilutive securities are anti-dilutive. Accordingly, basic and diluted net loss per share are equal.

The following potential common stock equivalents were not included in the calculation of diluted net loss per common share because the inclusion thereof would be anti-dilutive (in thousands):

	<b>Six Months Ended June 30,</b>	
	<b>2022</b>	<b>2021</b>
Stock Options	3,008	3,033
Unvested restricted stock	456	515
Warrants	—	2
Total	<u>3,464</u>	<u>3,550</u>

## 6. LEASES

The Company accounts for leases over one year under ASC 842. Lease expense for the Company's operating leases consists of the lease payments recognized on a straight-line basis over the lease term. Expenses for the Company's financing leases consists of the amortization expenses recognized on a straight-line basis over the lease term and interest expense. The components of lease costs were as follows (in thousands):

	<b>Three Months Ended June 30,</b>		<b>Six Months Ended June 30,</b>	
	<b>2022</b>	<b>2021</b>	<b>2022</b>	<b>2021</b>
<b>Financing lease costs:</b>				
Amortization of ROU assets	\$ 319	\$ —	\$ 638	\$ —
Interest on lease liabilities	69	—	140	—
Total financing lease costs	<u>\$ 388</u>	<u>\$ —</u>	<u>\$ 778</u>	<u>\$ —</u>
<b>Operating lease costs:</b>				
Fixed lease costs	\$ 62	\$ 62	\$ 124	\$ 114
Variable lease costs	—	—	—	—
Short-term lease costs	9	11	20	22
Total operating lease costs	<u>\$ 71</u>	<u>\$ 73</u>	<u>\$ 144</u>	<u>\$ 136</u>

Future minimum payments under non-cancellable leases as of June 30, 2022 were as follows (in thousands):

<b>For the Year Ended December 31,</b>	<b>Financing leases</b>		<b>Operating leases</b>	
Remaining 2022	\$	718	\$	115
2023		1,436		296
2024		1,436		278
2025		1,436		284
2026 & thereafter		478		21
Total future minimum lease payments	\$	5,504	\$	994
Less imputed interest		(530)		(93)
Total lease liability	\$	4,974	\$	901

The below table provides supplemental information and non-cash activity related to the Company's operating and financing leases are as follows (in thousands):

	<b>Three Months Ended June 30,</b>		<b>Six Months Ended June 30,</b>	
	<b>2022</b>	<b>2021</b>	<b>2022</b>	<b>2021</b>
<b>Operating cash flow information:</b>				
Cash paid for amounts included in the measurement of operating lease liabilities	\$	54	\$	36
			\$	108
Cash paid for amounts included in the measurement of financing liabilities	\$	359	\$	-
			\$	718
<b>Non-cash activity:</b>				
Right-of-use assets obtained in exchange for operating lease obligations	\$	-	\$	-
			\$	382

The weighted average remaining discount rate is 5.25% for the Company's operating and financing leases. The weighted average remaining lease term is 3.6 years for operating leases and 4.1 years for the financing lease.

In October 2016, the Company entered into a lease agreement for approximately 200 square feet of office space in Cambridge, Massachusetts. The lease, with current monthly payments of \$2,942 per month, commenced on October 24, 2016. Because the lease is month to month and can be cancelled with a 30-day notice, the future lease payments are not included in the Company's lease accounting under ASC Topic 842.

## 7. WARRANTS

A summary of warrant activity for six months ended June 30, 2022 is as follows (in thousands except per share amounts and contractual term):

	<b>Number of Shares</b>	<b>Weighted Average Exercise Prices per Share</b>	<b>Weighted Average Remaining Contractual Term (In Years)</b>	<b>Intrinsic Value</b>
Outstanding at January 1, 2022	1	\$ 33.75		
Forfeited	(1)	\$ 33.75		
Outstanding and exercisable at June 30, 2022	-	\$ -	-	-

## 8. STOCK BASED COMPENSATION

In May 2017, the Company's shareholders approved its 2017 Stock Incentive Plan ("2017 Plan") after its 2007 Stock Incentive Plan ("2007 Plan") had expired in March 2017. The 2017 Plan provides for the grant of non-qualified stock options and incentive stock options to purchase shares of the Company's common stock and for the grant of restricted and unrestricted shares. The 2017 Plan provides for the issuance of 3,750,000 shares of common stock. All of the Company's employees and any subsidiary employees (including officers and directors who are also employees), as well as all of the Company's nonemployee directors and other consultants, advisors and other persons who provide services to the Company are eligible to receive incentive awards under the 2017 Plan. Generally, stock options and restricted stock issued under the 2017 Plan vest over a period of one to four years from the date of grant.

The following table summarizes the stock-based compensation expense recorded in the Company's results of operations during the three and six months ended June 30, 2022 and 2021 for stock options and restricted stock granted under the 2017 Plan and 2007 Plan (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Research and development	\$ 295	\$ 267	\$ 539	\$ 490
General and administrative	499	554	928	1,009
Selling and Marketing	65	26	118	79
Total	<u>\$ 859</u>	<u>\$ 847</u>	<u>\$ 1,585</u>	<u>\$ 1,578</u>

As of June 30, 2022, there was approximately \$7.9 million of total unrecognized compensation expense related to unvested share-based compensation arrangements. This cost is expected to be recognized over a weighted-average period of 2.3 years.

The weighted average grant date fair value per share of the options granted under the Company's 2017 Plan was \$10.60 for the six months ended June 30, 2022. The weighted average grant date fair value per share of the options granted under Company's 2017 Plan was \$14.78 and \$15.36 for the three and six months ended June 30, 2021, respectively.

The following table summarizes stock option activity during the six months ended June 30, 2022 (in thousands except exercise prices and contractual terms):

	Number of Shares	Weighted-Average Exercise Prices per Share	Weighted-Average Remaining Contractual Term (In Years)	Intrinsic Value
Outstanding at January 1, 2022	2,869	\$ 6.64		
Granted	175	\$ 14.54		
Exercised	(26)	\$ 6.55		
Forfeited	(3)	\$ 28.66		
Expired	(7)	\$ 33.09		
Outstanding at June 30, 2022	<u>3,008</u>	<u>\$ 7.01</u>	<u>5.6</u>	<u>\$ 9,419</u>
Exercisable at June 30, 2022	<u>2,454</u>	<u>\$ 6.37</u>	<u>4.9</u>	<u>\$ 7,809</u>

During the six months ended June 30, 2022, the Company granted options under the 2017 Plan to purchase approximately 175,000 shares of its common stock to its employees. The fair value of these options was approximately \$1.9 million at the time of grant.

The Company issues restricted stock to employees, directors and consultants and estimates the fair value based on the closing price on the day of grant. The following table summarizes all restricted stock activity during the six months ended June 30, 2022 (in thousands except per share data):

	<b>Number of Shares</b>	<b>Weighted-Average Grant Date Fair Value per Share</b>
Outstanding at January 1, 2022	386	\$ 6.75
Granted	194	\$ 14.41
Vested	(124)	\$ 7.62
Outstanding non-vested shares at June 30, 2022	<u>456</u>	<u>\$ 9.77</u>

During the six months ended June 30, 2022 the Company granted approximately 194,000 restricted stock awards under the 2017 Plan to its employees and directors. The fair value of these awards was approximately \$2.8 million at the time of grant.

## **9. PROVISION FOR INCOME TAXES**

The Company recorded a provision for income taxes of approximately \$17,000 and \$31,000 during the three and six months ended June 30, 2021, respectively. The provision is for withholding of income taxes accrued in foreign jurisdictions where we have income. The Company recorded the provision in accordance with ASC 740 using its estimated annual tax rate and applied it to the net loss for the three and six months ended June 30, 2021. The Company did not incur withholding of income taxes for the three or six months ended June 30, 2022.

## **10. COMMITMENTS AND CONTINGENCIES**

### *Litigation, Claims and Assessments*

The Company may be subject to periodic lawsuits, investigations and claims that arise in the ordinary course of business. The Company is not party to any material litigation as of June 30, 2022, or through the date these financial statements have been issued.

## **11. SUBSEQUENT EVENTS**

As of August 1, 2022 the Company has issued an additional 235,050 shares through its ATM offering at an average price per share of \$11.33 resulting in additional net proceeds of approximately \$2.6 million.

Management has evaluated subsequent events and transactions through the date these financial statements were issued.

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

*The following discussion and analysis of the financial condition and results of operations of Atomera Incorporated should be read in conjunction with our financial statements and the accompanying notes that appear elsewhere in this Quarterly Report. Statements in this Quarterly Report on Form 10-Q include forward-looking statements based upon current expectations that involve risks and uncertainties, such as our plans, objectives, expectations and intentions. We use words such as "anticipate," "estimate," "plan," "project," "continuing," "ongoing," "expect," "believe," "intend," "may," "will," "should," "could," and similar expressions to identify forward-looking statements. Although forward-looking statements in this Quarterly Report reflect the good faith judgment of our management, such statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks, uncertainties, and changes in condition, significance, value and effect, including those risk factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on February 15, 2022. Such risks, uncertainties and changes in condition, significance, value and effect could cause our actual results to differ materially from those expressed herein and in ways not readily foreseeable. Readers are urged not to place undue reliance on these forward-looking statements, which speak only as of the date of this Quarterly Report and are based on information currently and reasonably known to us. We undertake no obligation to revise or update any forward-looking statements in order to reflect any event or circumstance that may arise after the date of this Quarterly Report. Readers are urged to carefully review and consider the various disclosures made in this Quarterly Report, which attempt to advise interested parties of the risks and factors that may affect our business, financial condition, results of operations and prospects.*

### Overview

We are engaged in the business of developing, commercializing and licensing proprietary processes and technologies for the \$550+ billion semiconductor industry. Our lead technology, named Mears Silicon Technology™, or MST<sup>®</sup>, is a thin film of reengineered silicon, typically 100 to 300 angstroms (or approximately 20 to 60 silicon atomic unit cells) thick. MST can be applied as a transistor channel enhancement to CMOS-type transistors, the most widely used transistor type in the semiconductor industry. MST is our proprietary and patent-protected performance enhancement technology that we believe addresses a number of key engineering challenges facing the semiconductor industry. We believe that by incorporating MST, transistors can be made smaller, with increased speed, reliability and power efficiency. In addition, since MST is an additive and low-cost technology, we believe it can be deployed on an industrial scale, with machines commonly used in semiconductor manufacturing. We believe that MST can be widely incorporated into the most common types of semiconductor products, including analog, logic, optical and memory integrated circuits.

We do not intend to design or manufacture integrated circuits directly. Instead, we develop and license technologies and processes that we believe offer the designers and manufacturers of integrated circuits a low-cost solution to the industry's need for greater performance and lower power consumption. Our customers and partners include:

- foundries, which manufacture integrated circuits on behalf of fabless manufacturers;
- integrated device manufacturers, or IDMs, which are the fully integrated designers and manufacturers of integrated circuits;
- fabless semiconductor manufacturers, which are designers of integrated circuits that outsource the manufacture of their chips to foundries;
- original equipment manufacturers, or OEMs, that manufacture the epitaxial, or EPI, machines used to deposit semiconductor layers, such as the MST film, onto the silicon wafer; and
- electronic design automation companies, which make tools used throughout the industry to simulate performance of semiconductor products using different materials, design structures and process technologies.

Our commercialization strategy is to generate revenue through licensing arrangements whereby foundries, IDMs and fabless semiconductor manufacturers pay us a license fee for their right to use MST technology in the manufacture of silicon wafers as well as a royalty for each silicon wafer or device that incorporates our MST technology. To date we have generated revenue from (i) licensing agreements with two IDMs, one fabless manufacturer and one foundry, (ii) a joint development agreement, or JDA, with a leading semiconductor provider and (iii) engineering services provided to foundries, IDMs and fabless companies.

We were organized as a Delaware limited liability company under the name Nanovis LLC on November 26, 2001. On March 13, 2007, we converted to a Delaware corporation under the name Mears Technologies, Inc. On January 12, 2016, we changed our name to Atomera Incorporated.

On May 31, 2022, we entered into an Equity Distribution Agreement with Oppenheimer & Co. Inc and Craig-Hallum Capital Group LLC, as agents, under which we may offer and sell, from time to time at our sole discretion, shares of our common stock having an aggregate offering price of up to \$50.0 million in an “at-the-market” or ATM offering, to or through the agents. As of June 30, 2022, 31,652 shares had been sold at an average price per share of approximately \$11.24, resulting in approximately \$185,000 of net proceeds to us after deducting commissions and other offering expenses.

## Results of Operations

**Revenues.** To date, we have only generated limited revenue from customer engagements for integration engineering services, integration license agreements and a manufacturing license granted under a JDA. In the future, we expect to collect increased fees from license agreements and JDAs as well as royalties from customer sales of products that incorporate our MST technology, subject to our ability to enter into manufacturing and distribution license agreements with our current and future licensees. Our integration services consist of depositing our MST film on semiconductor wafers, delivering such wafers to customers to finalize building devices, and performing tests for customers evaluating MST. The integration license agreements we have entered into grant the licensees the right to build products that integrate our MST technology deposited by us onto their semiconductor wafers, but the agreements do not grant the licensees the rights to manufacture MST-enabled wafers in their facilities or to sell products incorporating MST. Our JDA included the grant of a manufacturing license to our customer and we were paid for such license upon delivery of our IP transfer package which enabled our customer to install MST in a tool in their facility and to use it to manufacture wafers for internal use. This JDA also contained targeted technical specifications that, if met, would result in payment of a success fee to us. Those technical objectives were met and we have collected the success fee.

For revenue recognition purposes, we have determined that the grant of rights in integration licenses is not distinct from the delivery of integration services, and therefore revenue from both integration licenses and integration services is recognized as the services are provided to the customer. In general, this is proportionate to the delivery of MST processed wafers to the customer, but if the agreements do not specify a time and quantity of wafer delivery, we will record revenue over the period of time of which we anticipate delivering an estimated quantity of wafers. We have also determined that the grant of our manufacturing license under the JDA confers a right to use our technology and accordingly revenue was recognized at the point in time when we delivered our IP transfer package. The success fee under our JDA was treated as engineering services revenue and recognized upon our customer’s confirmation that the JDA’s technical objectives had been met.

Revenue was not recorded for the three months ended June 30, 2022 or 2021. Revenue for the six months ended June 30, 2022 and 2021 was \$375,000 and \$400,000, respectively. Our revenue in 2022 consisted of a success fee pursuant to our JDA and a license fee paid under an integration license agreement. Our revenue in 2021 consisted of a manufacturing license fee pursuant to our JDA.

**Cost of revenue.** Cost of revenue consists of costs of materials, as well as direct compensation and expenses incurred to provide support for our success fee and wafers delivered as part of the integration license agreement. Cost of revenue was not recorded for the three months ended June 30, 2022 or 2021. Cost of revenue was approximately \$81,000 and \$0 for the six months ended June 30, 2022 and 2021, respectively. We anticipate that our cost of revenue will vary substantially depending on the mix of license and engineering services revenues we receive and the nature of products and/or services delivered in each customer engagement.

**Operating expenses.** Operating expenses consist of research and development, general and administrative, and selling and marketing expenses. For the three months ended June 30, 2022 and 2021, our operating expenses totaled approximately \$4.4 million and \$3.7 million, respectively. For the six months ended June 30, 2022 and 2021 our operating expenses totaled approximately \$8.8 million and \$7.7 million respectively.

**Research and development expense.** To date, our operations have focused on the research, development, patent prosecution, and commercialization of our MST technology and related technologies such as MSTcad. Our research and development costs primarily consist of payroll and benefit costs for our engineering staff and costs of outsourced fabrication (including epi tool leases) and metrology of semiconductor wafers incorporating our MST technology.

For the three months ended June 30, 2022 and 2021, we incurred approximately \$2.4 million and \$2.1 million, respectively, of research and development expense, an increase of approximately \$364,000, or 18%. The increase was primarily due to approximately \$400,000 of tool lease expense as the tool lease commenced in August 2021, offset by a reduction in payroll related expense of approximately \$45,000.

For the six months ended June 30, 2022 and 2021, we incurred approximately \$4.8 million and \$4.3 million, respectively, of research and development expense, an increase of approximately \$474,000, or 11%. The increase was primarily due to approximately \$810,000 of tool lease expense as the tool lease commenced in August 2021, offset by a reduction in payroll related expense of approximately \$194,000 and reduction of approximately \$287,000 in outsourced research and development expenses.

**General and administrative expense.** General and administrative expenses consist primarily of payroll and benefit costs for administrative personnel, office-related costs and professional fees. General and administrative costs for the three months ended June 30, 2022 and 2021 were approximately \$1.7 million and \$1.5 million, respectively, representing an increase of approximately \$161,000, or 11%. The increase in costs was primarily due to increases of approximately \$92,000 in employee-related costs and legal and approximately \$115,000 in patent fees, offset in part by a decrease of approximately \$55,000 in stock-based compensation.

General and administrative costs for the six months ended June 30, 2022 and 2021 were approximately \$3.3 million and \$3.0 million, respectively, representing an increase of approximately \$296,000, or 10%. The increase in costs was primarily due to increases of approximately \$40,000 in employee related costs, \$211,000 in legal and patent fees and \$94,000 in insurance expenses, offset in part by a decrease of approximately \$80,000 in stock-based compensation.

**Selling and marketing expense.** Selling and marketing expenses consist primarily of salary and benefits for our sales and marketing personnel and business development consulting services. Selling and marketing expenses for the three months ended June 30, 2022 and 2021 were approximately \$347,000 and \$137,000, respectively, representing an increase of approximately \$210,000, or 153%. The increase in costs is primarily related to increased spending in employee related costs of approximately \$87,000, an increase in outsourced marketing expenses of approximately \$39,000 and an increase in stock-based compensation of approximately \$38,000.

Selling and marketing expenses for the six months ended June 30, 2022 and 2021 were approximately \$672,000 and \$403,000, respectively, representing an increase of approximately \$269,000, or 67%. The increase in costs is primarily related to increased spending in employee related costs of approximately \$83,000, an increase in outsourced marketing expenses of approximately \$79,000 and an increase in stock-based compensation of approximately \$39,000.

**Interest income.** Interest income for three months ended June 30, 2022 and 2021 was approximately \$35,000 and \$3,000, respectively. Interest income for the six months ended June 30, 2022 was approximately \$38,000 and \$5,000, respectively. Interest income for each period related to interest earned on our cash and cash equivalents.

**Interest expense.** Interest expense for the three and six months ended June 30, 2022 was approximately \$69,000 and \$140,000 respectively and related to the new tool financing lease entered into in August 2021. There was no interest expense recorded for the three or six months ended June 30, 2021 because the tool financing lease commenced after those periods.

**Provision for income taxes.** The provision for income tax for the three and six months ended June 30, 2021 was approximately \$17,000 and \$31,000, respectively, and related to income taxes due to a foreign country arising from withholding taxes imposed on payments received for revenue. There was no provision for income tax recorded for the three or six months ended June 30, 2022.

## **Cash Flows from Operating, Investing and Financing Activities**

Net cash used in operating activities of approximately \$6.6 million for the six months ended June 30, 2022 resulted primarily from our net loss of approximately \$8.6 million and an increase in prepaid assets offset by stock-based compensation and amortization of right-of-use assets.

Net cash used in operating activities of approximately \$6.6 million for the six months ended June 30, 2021 resulted primarily from our net loss of approximately \$7.3 million, an increase of approximately \$527,000 in prepaid expenses and other assets and a decrease in accrued payroll expenses of approximately \$383,000, offset by approximately \$1.6 million of stock-based compensation.

Net cash used in investing activities of approximately \$19,000 for the six months ended June 30, 2022 and approximately \$79,000 for the six months ended June 30, 2021 consisted of the purchase of computers, lab tools and leasehold improvements for the remodeled Los Gatos office space and lab tools to use with the new equipment lease in Tempe, Arizona.

Net cash used by financing activities of approximately \$227,000 for the six months ended June 30, 2022 primarily related to principal payments on our financing lease offset by proceeds from the exercise of stock options and net proceeds from our ATM offering.

Net cash provided by financing activities of approximately \$3.1 million for the six months ended June 30, 2021 related to the exercise of approximately 458,000 stock options and net proceeds from a previous at-the-market offering which began in September 2020 and concluded in January 2021.

## **Liquidity and Capital Resources**

As of June 30, 2022, we had cash and cash equivalents of approximately \$21.8 million and working capital of approximately \$19.7 million. For the six months ended June 30, 2022, we had a net loss of approximately \$8.6 million and used approximately \$6.6 million of cash and cash equivalents in operations. Since inception, we have incurred recurring operating losses.

In June 2022, we conducted an at-the-market offering of our common shares through Oppenheimer & Co. Inc and Craig-Hallum Capital Group LLC, as agents, pursuant to which we sold 31,652 shares at an average price per share of approximately \$11.24, resulting in approximately \$185,000 of net proceeds to us after deducting commissions and other offering expenses.

We believe that our available working capital is sufficient to fund our presently forecasted working capital requirements for, at least, the next 12 months following the date of the filing of this report. However, our future capital requirements and the adequacy of our available funds will depend on many factors, including our ability to successfully commercialize our MST technology, competing technological and market developments, and the need to enter into collaborations with other companies or acquire technologies to enhance or complement our current offerings. If we are not able to generate sufficient revenue from license fees and royalties in a timeframe that satisfies our cash needs, we will need to raise more capital. In the event we require additional capital, we will endeavor to acquire additional funds through various financing sources, including our ATM Facility, follow-on equity offerings, debt financing and joint ventures with industry partners. In addition, we will consider alternatives to our current business plan that may enable us to achieve revenue-producing operations and meaningful commercial success with a smaller amount of capital. If we are unable to secure additional capital, we may be required to curtail our research and development initiatives and take additional measures to reduce costs in order to conserve its cash.



**Critical Accounting Estimates**

There have been no changes to our critical accounting estimates from those included in our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on February 15, 2022.

**Item 3. Quantitative and Qualitative Disclosure about Market Risk.**

Not applicable.

**Item 4. Controls and Procedures.*****Evaluation of Disclosure Controls and Procedures***

Our management, with the participation of our chief executive officer and principal financial and accounting officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934. Based on this evaluation, management concluded that our disclosure controls and procedures were effective as of June 30, 2022.

***Changes in Internal Control over Financial Reporting***

There have not been any changes to our internal controls over financial reporting (as defined by Rule 13a-15(f) and 15(d)-15(f) under the Exchange Act) during the three-month period ended June 30, 2022 that have material affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

## **PART II. Other Information**

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

The primary risk factors affecting our business have not changed materially from the risk factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on February 15, 2022.

### **Item 6. Exhibits**

The following is a list of exhibits filed as part of this Report on Form 10-Q:

<u>Exhibit No.</u>	<u>Description</u>	<u>Method of filing</u>
31.1	<a href="#">Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>	Filed electronically herewith
31.2	<a href="#">Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>	Filed electronically herewith
32.1	<a href="#">Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350)</a>	Filed electronically herewith
10.1	<a href="#">Equity Distribution Agreement dated May 31, 2022 between the Company and Oppenheimer &amp; Co. Inc. and Craig-Hallum Capital Group LLC</a>	Incorporated by reference from the Company's Current Report on Form 8-K filed on May 31, 2022
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)	Filed electronically herewith
101.SCH	Inline XBRL Taxonomy Extension Schema Document	Filed electronically herewith
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	Filed electronically herewith
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	Filed electronically herewith
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	Filed electronically herewith
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	Filed electronically herewith
104	Cover Page Interactive Data File (formatted in IXBRL, and included in exhibit 101).	Filed electronically herewith

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and the on the date indicated.

### ATOMERA INCORPORATED.

Date: August 2, 2022

By: /s/ Scott A. Bibaud  
Scott A. Bibaud  
Chief Executive Officer,  
(Principal Executive Officer)  
and Director

Date: August 2, 2022

By: /s/ Francis B. Laurencio  
Francis B. Laurencio  
Chief Financial Officer  
(Principal Financial and  
Accounting Officer)

**CERTIFICATIONS**

I, Scott A. Bibaud, certify that:

- (1) I have reviewed this Form 10-Q of Atomera Incorporated (the “Company”);
- (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 Company as of, and for, the periods presented in this report;
- (4) The Company’s other certifying officer(s) 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-15(f) and 15d-15(f)) for the company and 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 Company, 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 Company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the period covered by this report based on such evaluation; and
  - (d) disclosed in this report any change in the Company’s internal control over financial reporting that occurred during the Company’s most recent quarter that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting; And
- (5) The Company’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company’s auditors and the audit committee of the Company’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 Company’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 Company’s internal control over financial reporting.

**ATOMERA INCORPORATED**

Date: August 2, 2022

By: /s/ Scott A. Bibaud  
Scott A. Bibaud, Chief Executive Officer

**CERTIFICATIONS**

I, Francis B. Laurencio, certify that:

- (1) I have reviewed this Form 10-Q of Atomera Incorporated (the “Company”);
- (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 Company as of, and for, the periods presented in this report;
- (4) The Company’s other certifying officer(s) 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-15(f) and 15d-15(f)) for the company and 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 Company, 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 Company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the period covered by this report based on such evaluation; and
  - (d) disclosed in this report any change in the Company’s internal control over financial reporting that occurred during the Company’s most recent quarter that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting; And
- (5) The Company’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company’s auditors and the audit committee of the Company’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 Company’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 Company’s internal control over financial reporting.

**ATOMERA INCORPORATED**

Date: August 2, 2022

By: /s/ Francis B. Laurencio  
Francis B. Laurencio, Chief Financial Officer  
(Principal Financial Officer)

**CERTIFICATION PURSUANT TO 18  
U.S.C. 1350, AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Atomera Incorporated (the "Company") on Form 10-Q for the period ended June 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Scott A. Bibaud, the Chief Executive Officer, and Francis B. Laurencio, the Chief Financial Officer, of the Company, respectively, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ Scott A. Bibaud  
Scott A. Bibaud  
Title: President and Chief Executive Officer

Dated: August 2, 2022

By: /s/ Francis B. Laurencio  
Francis B. Laurencio  
Title: Chief Financial Officer

Dated: August 2, 2022

This certification is made solely for the purposes of 18 U.S.C. Section 1350, subject to the knowledge standard contained therein, and not for any other purpose.