SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-Q

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QUARTERLY REPORT PURSU 1934	ANT TO SECTION 13 OR 15(d) OF THE SEC	URITIES EXCHANGE ACT OF 1	934 SE	ECURITIES EXC	IAN	GE ACT OF
	For the quarterly period ended S	eptember 30, 2002, or				
☐ TRANSITION REPORT PURSU	ANT TO SECTION 13 OR 15(d) OF THE SEC	URITIES EXCHANGE ACT OF 1	934			
	For the transition period	from NA to NA.				
	Commission File Nur	nber 0-16106				
	APA Optic	c Inc				
	(Exact name of Registrant as s	•				
Mi	nnesota	41	-13472	35		
	of incorporation or organization)			ntification No.)		
	2950 N.E. 84 th Lane, Blaine (Address of principal executive					
	(763) 784-49 (Registrant's telephone number					
	istrant (1) has filed all reports required to be fil r period that the registrant was required to file s					
	Yes 🗷	No 🗆				
Indicate the number of shares outstandin	g of each of the issuer's classes of common stoc	k, as of the latest practicable date:				
	lass: k, par value \$.01	Outstanding at	Septen			
Common stoc	n, pui vuide 4.01	•••	072,55			
	PART I. FINANCIAL IN	FORMATION				
ITEM 1. FINANCIAL STATEMENT	<u>S</u>					
	APA OPTICS, CONDENSED BALAN (Unaudited	ICE SHEETS				
				September 30, 2002		March 31, 2002
Assets						
Current assets: Cash and cash equivalents			\$	28,967,391	\$	31,606,403
Accounts receivable			Ψ	21,300	Ψ	20,613
Inventories: Raw materials				10,665		21,448
Work-in-process				4,926		18,627
Prepaid expenses Bond reserve funds				40,820 37,500		103,588 70,000
Total current assets				29,082,602		31,840,679
Property, plant and equipment, net				3,593,535		3,748,004
Other assets				646,011		807,727
				0.0,011		001,121

33,322,148 \$

36,396,410

Total assets

Liabilities and shareholders' equity				
Current liabilities:				
Accounts payable	\$	61,033	\$	127,926
Accrued expenses		207,672		302,204
Current portion of long-term debt	_	1,802,381	_	1,996,345
Total current liabilities		2,071,086		2,426,475
Long-term debt		229,305		465,018
Shareholders' equity:				
Undesignated shares:				
Authorized shares - 4,999,500				
Issued - none		-		-
Common stock, \$.01 par value:				
Authorized shares - 50,000,000				
Issued and outstanding shares:				
11,872,331 shares on September 30, 2002 and				
11,875,881 shares on March 31, 2002		118,723		118,759
Additional paid-in capital		51,666,793		51,578,185
Accumulated deficit		(20,763,759)		(18,192,027)
Total shareholders' equity		31,021,757		33,504,917
	_		_	
Total liabilities and shareholders' equity	\$	33,322,148	\$	36,396,410

2

APA OPTICS, INC. CONDENSED STATEMENTS OF OPERATIONS (Unaudited)

		Three Months Ended September 30,			Six Months Ended September 30,			
		2002		2001	2002		2001	
Revenues	\$	38,900	\$	87,574	\$ 111,351	\$	521,909	
Costs and expenses:								
Cost of sales		718,944		957,316	1,476,677		1,900,168	
Research and development		336,680		236,299	689,847		418,892	
Selling, general and administrative		397,824		510,217	717,935		946,832	
		1,453,448		1,703,832	2,884,459		3,265,892	
Loss from operations		(1,414,548)		(1,616,258)	(2,773,108)		(2,743,983)	
Interest income		122,797		282,673	255,889		802,262	
Interest income Interest expense		(26,736)		(30,527)	(54,011)		(66,452)	
interest expense		(20,730)		(30,327)	(34,011)		(00,432)	
	<u> </u>	96,061		252,146	201,878		735,810	
Loss before income taxes		(1,381,487)		(1,364,112)	(2,571,230)		(2,008,173)	
Income taxes	_	250		387	500		1,387	
Net loss applicable to common								
shareholders	\$	(1,318,737)	\$	(1,364,499)	\$ (2,571,730)	\$	(2,009,560)	
Net loss per share:								
Basic and diluted	\$	(0.11)	\$	(0.11)	\$ (0.22)	\$	(0.17)	
Weighted average shares outstanding:								
Basic and diluted		11,874,957		11,917,465	11,875,396		11,917,378	

Six Months Ended

	Septem	ber 30,
	2002	2001
Operating activities		
Net loss	\$ (2,571,730)	\$ (2,009,560)
Adjustments to reconcile net loss to net cash used		
in operating activities:		
Depreciation and amortization	342,166	302,666
Write-off of patents	108,660	-
Deferred compensation expense	26,804	17,184
Changes in operating assets and liabilities:		
Accounts receivable	(687)	199,977
Inventories and prepaid expenses	87,252	80,146
Accounts payable and accrued expenses	(161,427)	(379,791)
Net cash used in operating activities	(2,168,962)	(1,789,378)
Investing activities		
Purchases of property and equipment	(65,937)	(859,684)
Investment in patents	(13,851)	(71,439)
Net cash used in investing activities	(79,788)	(931,123)
Financing activities		
Proceeds from the sale of common stock	-	24,433
Proceeds from the sale of short-term investments	-	15,759,000
Repayment of long-term debt	(429,677)	(350,929)
Repurchase of common stock	(5,991)	(92,639)
Bond reserve funds	45,406	39,396
Net cash provided by (used in) financing activities	(390,262)	15,379,261
		42.520.250
Increase (decrease) in cash and cash equivalents	(2,639,012)	12,658,760
Cash and cash equivalents at beginning of period	31,606,403	21,225,492
Cash and cash equivalents at end of period	\$ 28,967,391	\$ 33,884,252

During the six months ended September 30, 2002, the Company recorded the addition of land valued at \$67,760 to its balance sheet. Transfer of title to the land to the Company had been contingent upon the Company satisfying certain conditions that were meet at the end of June, 2002. Since the recording of the value of the land does not involve a transfer of cash, this transaction is not reflected in the Condensed Statements of Cash Flows.

4

NOTES TO CONDENSED FINANCIAL STATEMENTS

Note 1. Basis of Presentation

The accompanying condensed financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. For further information, refer to the financial statements and footnotes thereto included in the Company's annual report on Form 10-K for the year ended March 31, 2002.

In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Certain reclassifications of previously reported amounts have been made to conform that presentation to the current period presentation.

Note 2. Net loss Per Share

The following table sets forth the computation of basic and diluted net loss per share:

2001	2002	2001
(1,364,499)	\$ (2,571,730)	\$ (2,009,560)

Denominator for basic and diluted				
net loss per share-weighted-				
average shares outstanding	11,874,957	11,917,465	11,875,396	11,917,378
Basic and diluted net loss per share	\$ (0.11)	\$ (0.11)	\$ (0.22)	\$ (0.17)

Common stock options and warrants to purchase 785,872 and 655,872 shares of common stock with a weighted average exercise price of \$8.80 and \$10.15 were outstanding at September 30, 2002 and 2001, respectively, but were excluded from calculating the three months diluted net loss per share because they were antidilutive.

Common stock options and warrants to purchase 473,175 and 388,175 shares of common stock with a weighted average exercise price of \$13.08 and \$14.45 were outstanding at September 30, 2002 and 2001, respectively, but were excluded from calculating the six months diluted net loss per share because they were antidilutive.

Note 3. Stock Repurchase Plan

On October 1, 2002, the Board of Directors extended its plan authorizing the repurchase of up to the greater of \$2,000,000 or 500,000 shares of our common stock. For the six months ended September 30, 2002, we repurchased a total of 3,550 shares for \$5,991 at an average price of \$1.69 per share.

5

Note 4. Land

The Company acquired land in Aberdeen, SD as part of a financing package provided by the Aberdeen Development Corporation to locate a manufacturing facility in that city. Ownership of the land was contingent upon the Company remaining in the facility through June 23, 2002. After satisfying the contingent requirement, the Company added \$67,760 (the assessed value of the land for tax purposes) to its balance sheet and increased additional-paid-in capital by a like amount.

Note 5. Stock Option Grant

On August 22, 2002 the Company granted 2,500 options to every current employee with the exception of Anil Jain, the Chief Executive Officer and Ken Olsen, the Chief Operating Officer. A total of 122,500 options were granted at the FMV of the stock on the day of grant. The options are 60% exercisable when the Company achieves financial objectives and 40% exercisable when the Company achieves operational objectives set forth in their Short-Term Incentive Plan. Accordingly, these options are treated as variable awards, and we will reflect changes in their value in the general and administrative expense line until the options are exercised or expire.

Note 6. Write-off of Patent Costs

As a result of the slow down in the sale of fiber optic components and uncertainty regarding if and when demand for such components will recover, the Company expensed the unamortized balance of patents related to its dense wavelength multiplexer / demultiplexers or "DWDM" technology. As a result, expenses related to patents increased \$108,660 for the quarter and six months ended September 30, 2002.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Statements in this Report about future sales prospects and other matters to occur in the future are forward looking statements and are subject to uncertainties due to many factors, many of which are beyond our control. These factors include, but are not limited to, the continued development of our products, acceptance of those products by potential customers, our ability to sell such products at a profitable price, and our ability to fund our operations. For further discussion regarding these factors, see "Factors That May Affect Future Results."

OVERVIEW

We are engaged in designing, manufacturing, and marketing various optical components (including dense wavelength multiplexer / demultiplexers or "DWDMs" and splitters), ultraviolet (UV) detection and measurement devices, and optical components. For several years, we also received significant revenues from research and development services projects sponsored by various government agencies. Since fiscal 1998, we focused on product development, with the intent to manufacture and market both our own proprietary products and externally sourced products.

We received no revenues from government sponsored research in fiscal 2001 or in fiscal 2002 and do not expect any revenues from this source in fiscal 2003. However, one of our research and development areas, Gallium Nitride (GaN) based transistors, has drawn significant attention from various government agencies over the past few years. We may seek future involvement in government sponsored research projects that are closely related to our internal development efforts to capitalize on the synergies the two activities generate; but our primary focus will remain the commercialization of products based on this research.

6

Two of our GaN based products, the TRUVMETERTM and the Sun^{UV} Personal UV Monitor (SunWatch[®]), have required extended engineering and prototyping phases that have resulted in delays in their full rollout to the market. We have made good progress towards resolving development issues on both products and still anticipate launching sales to industrial customers for the meter, and to Internet customers and buyers for retail channels for the personal UV monitor, before the end of our third fiscal quarter on December 31, 2002. Production rampup and sales efforts to retail channels for the Sun^{UV} Personal UV Monitor will start in the fourth fiscal quarter.

Most companies in the communications equipment industry have been affected by the slowdown in telecommunications equipment spending. Continued weakness in the general economy, and the telecom sector in particular, have resulted in downward pressure on average selling prices of DWDMs and other optical components, leading to declining margins and profits. We do not know if or when demand will return to levels allowing profitable production of these components.

In response to these market conditions, we are expanding our optical components product offering primarily through externally sourced products. We are also seeking lower cost components and more efficient, less expensive assembly processes to reduce the manufacturing costs of our optical components. We have identified multiple sources for lower costs components and complementary products and expect to see some initial benefits of these efforts in the current fiscal year. We intend to utilize our experience in core technologies upon which various fiber optic components are based, our understanding of our customers' needs, our own products, our relationships with suppliers, and our experience in developing solutions to industry problems to develop future business opportunities in this arena.

RESULTS OF OPERATIONS

REVENUES

Revenues for the quarter ended September 30, 2002, were \$38,900, reflecting a 56% decrease from the comparable period in the preceding fiscal year, and were \$111,351 for the six months ended September 30, 2002, a decrease of 79% from the revenues for the comparable period in the preceding fiscal year. Lack of demand for DWDM components was the primary factor contributing to the decline in revenues during the quarter and for the six months ended September 30, 2002.

COST OF SALES

Cost of sales decreased \$238,372 to \$718,944 for the quarter ended September 30, 2002, reflecting a 25% decrease from the comparable period in the preceding fiscal year. For the six months ended September 30, 2002, cost of sales decreased \$423,491 or 22% over the comparable period in the preceding fiscal year. The decreases in the cost of sales were the result of reduced production staff and the transfer of production staff to research and development activities due to the lack of orders. Gross margins for sales were negative in both periods. We expect to continue experiencing negative gross margins until there is a significant increase in sales and production levels.

RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses increased by \$100,381 for the quarter ended September 30, 2002. This represents an increase of 42% from research and development expenses in the comparable period of the preceding fiscal year. For the six months ended September 30, 2002, research and development expenses increased \$270,955 or 65% from the comparable period in the preceding fiscal year. These increases are the result of increased research activity related to our GaN HFET effort and shifting of production personnel to research activities due to the lack of demand for our existing products. We expect research and development expenses to increase gradually for the foreseeable future.

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SELLING, GENERAL AND ADMINISTRATIVE

Selling, general and administrative expenses decreased \$112,393 for the quarter ended September 30, 2002, reflecting a 22% decrease over the comparable period in the preceding fiscal year. For the six months ended September 30, 2002, selling, general and administrative expenses decreased \$228,897 or 24% over the comparable period in the preceding fiscal year. The decreases were primarily due to the absence of any incentive compensation to employees, a decrease in personnel and savings from cost containment measures implemented in response to the lack of demand for our products.

LOSS FROM OPERATIONS

The loss from operations was \$1,414,548, a decrease of \$201,710 or 12% for the quarter ended September 30, 2002 over the comparable period in fiscal 2002. For the six months ended September 30, 2002, the loss from operations increased \$29,125 or 1% over the comparable period in the preceding fiscal year. The decreased loss in the quarter ended September 30, 2002, was the result of the cost containment measures, which more than offset the drop in revenues. For the six months ended September 30, 2002, the loss from operations was slightly higher than in the same period in the preceding year. The decline in sales was offset by the associated decline in the cost of sales.

Lack of demand for DWDM components was the major factor contributing to the decline in sales. We do not see demand for these components returning in the near future. In addition, declining average selling prices for these components will require demand to exceed prior levels for us to achieve unit sales sufficient to generate revenues consistent with prior periods.

OTHER INCOME AND EXPENSE

Other income decreased \$156,085 or 62% for the quarter ended September 30, 2002, from the comparable period in fiscal 2002. For the six months ended September 30, 2002, other income decreased \$533,932 or 73% from the comparable period in the preceding fiscal year. The decreases were due to the combination of a decline in the rate of interest earned on short-term investments and a lower average cash balance, as cash was consumed to fund operations, capital investment and debt service. Unless short-term interest rates increase, we anticipate continuing decreases in interest income as a result of the use of cash in operations, for capital expansion and for debt service.

NET LOSS

The net loss for the quarter ended September 30, 2002, was \$1,318,737 (or \$0.11 per basic and diluted share), a decrease of \$45,762 or 3% from the net loss reported for the same period in fiscal 2002. For the six months ended September 30, 2002, the net loss was \$2,571,730 (or \$0.22 per basic and diluted share), a 28% increase over the net loss for the comparable period in the preceding fiscal year. For the quarter, the decreased net loss was attributable to the cost containment measures implemented by the Company that more than offset the decline in interest income. For the six months ended September 30, 2002, the increased net loss was primarily attributable to the decline in interest income.

LIQUIDITY AND CAPITAL RESOURCES

APA's cash and cash equivalents consists primarily of certificates of deposits, US Government instruments or commercial paper with maturities of less than three months. The balance of cash and cash equivalents at September 30, 2002 is \$28,967,391 compared to \$31,606,403 at March 31, 2002. The decrease in cash was primarily the result of using cash to fund operations.

Cash used in operating activities was \$2,168,962 for the six months ended September 30, 2002, compared to \$1,789,378 for the comparable period in the preceding fiscal year. The increase reflects the lack of revenues and decreased interest income.

We used net cash of \$147,548 in investing activities in the six months ended September 30, 2002, compared to \$931,123 used in the same period of the preceding fiscal year. The funds were used for limited purchases of equipment, facility repairs and leasehold improvements. The decrease in the amount used for investing activities reflects our efforts to conserve cash by deferring the purchase of capital equipment for production until we experience an increase in the demand for our products. We do anticipate investing in equipment to support the HFET research and development activities over the next several quarters.

Net cash used in financing activities in the six months ended September 30, 2002 totaled \$322,502. We used a net of \$429,677 for the scheduled reduction of debt and \$5,991 to redeem common stock. We recognized a benefit of \$67,760 related to the addition of land to our balance sheet in connection with our Aberdeen, SD facility (see Note 4 to the financial statements) and \$45,406 from the reduction of bond reserve funds. We repurchased a total of 3,550 shares at an average cost of \$1.69 per share. For the six months ended September 30, 2001, net cash provided by financing activities totaled \$15,379,261. We raised \$15,759,000 from the sale of short-term investments, generated \$24,433 from the sale of common stock, generated \$39,396 from the reduction of bond reserve funds, used \$350,929 for the scheduled reduction of debt, and used \$92,639 to redeem common stock.

We anticipate a total of approximately \$1.0 million in capital expenditures in fiscal 2003, primarily for equipment. The majority of the capital expenditures relate to the expansion and automation of our production and research and development facilities. The expenditures will be made in phases to meet demand for our products and to allow us to respond to new business opportunities. We believe we have sufficient funds for operations for the remainder of fiscal 2003 and beyond.

Our contractual obligations and commitments are summarized in the table below (in 000's):

	Total	Less than 1 Year	1-3 years	4-5 years	After 5 years
Long-term debt	\$ 2,031 \$	1,802 \$	53 \$	36 \$	140
Operating leases	258	116	140	2	-
Total Contractual Cash					
Obligations	\$ 2,289 \$	1,918 \$	193 \$	38 \$	140

Application of Critical Accounting Policies

We have reviewed our use of estimates in applying our accounting policies and determined that significant changes in our various estimates would not have a material impact on the presentation of our financial condition, changes in financial condition or results of operations. Accordingly, we do not consider any of our estimates to be "critical estimates" as defined in the rules of the Securities and Exchange Commission. See Note A of Notes to Financial Statements under Item 8 of our Report on Form 10-K for descriptions of the use of estimates in our accounting policies. Our management and the audit committee of our board of directors have discussed our use of estimates and have approved our disclosure relating to it in this report.

In September 2001, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets". This statement supercedes SFAS 121 and was effective April 1, 2002 for the Company. This statement did not have a material effect on the financial statements of the Company, but could have a future effect in the event that an asset impairment occurs.

In April 2002, FASB issued SFAS No. 145, "Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections." The Company believes the adoption of SFAS No. 145 will not have a material effect on the Company's financial position or results of operations.

9

In June 2002, FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." SFAS No. 146 requires the recognition of a liability for a cost associated with an exit or disposal activity when the liability is incurred versus the date the Company commits to an exit plan. In addition, SFAS No. 146 states the liability should be initially measured at fair value. The requirements of SFAS No. 146 are effective for exit or disposal activities that are initiated after December 31, 2002. The Company believes the adoption of SFAS No. 146 will not have a material effect on the Company's financial position or results or operations

FACTORS THAT MAY INFLUENCE FUTURE RESULTS

 $\label{thm:continuous} \textit{Unless we generate significant revenues, our expenses and negative cash flow will significantly harm our financial position.}$

We have not been profitable since fiscal 1990. As of September 30, 2002, we had an accumulated deficit of \$20.8 million. We expect to incur operating losses for the foreseeable future, and these losses may be substantial. Further, we may continue to incur negative operating cash flow in the future. We have funded our operations primarily through the sale of equity securities and borrowings. We have significant fixed expenses and we expect to continue to incur significant and increasing manufacturing, sales and marketing, product development and administrative expenses. As a result, we will need to generate significant revenues while containing costs and operating expenses if we are to achieve profitability.

Declining demand and average selling prices for our DWDM products will require us to reduce production costs to effectively compete and market these products and could force us to discontinue domestic manufacturing of these products altogether.

Since the time we first introduced our DWDM components to the marketplace, we have seen the demand and the average selling price for this type of component decline. We expect the trend of declining average prices to continue. We cannot assure you that demand for these components will recover to prior levels. To achieve profitability in this environment, we must continually decrease our costs of production. In order to reduce our production costs, we will continue to seek lower cost suppliers of raw materials, components, or assemblies within the United States, or internationally.

We will also seek to form strategic alliances with companies that can supply these components or services. Decreases in average selling prices also require that we increase unit sales to maintain or increase our revenue. Our efforts to increase revenues could include:

- · Expansion of our product offerings, both through internally developed and externally sourced products; and
- Expansion of both domestic and international marketing efforts.

There can be no guarantee that we will achieve these objectives or goals. Our inability to significantly decrease production costs or increase our sales could seriously harm our business, financial condition and results of operations.

Our Sun^{UV} Watch® personal ultraviolet monitor is a relatively new consumer product concept that may be adopted more slowly than projected.

The Sun^{UV}Watch[®] is an innovative product that helps consumers monitor and plan their exposure to the UV radiation in sunlight. Personal UV monitoring is a relatively new concept for consumers. Adoption and widespread use of the product by consumers could take a substantial period of time and may not ever achieve levels of acceptance necessary to make commercial production viable. In addition, creation of brand identity and consumer awareness requires the commitment of substantial capital and could divert resources from our development efforts. Even if we are successful in developing a market for the Sun^{UV}Watch[®], large consumer product manufacturers with strong name brand identity could develop competing devices resulting in declining average selling prices and increased marketing costs for this type of product. Moreover, we have limited experience in designing for, and marketing to, the retail consumer market.

10

We have limited experience in the development, manufacturing, marketing and distribution of products internationally.

If our effort to reduce the development and manufacturing costs of our products and/or seek more international customers requires the expansion of offshore subcontracting or the establishment of facilities outside of the United States, we will be subject to inherent risks, including, without limitation:

- · Reduced protection of intellectual property rights in foreign countries in which we may choose to operate;
- Difficulties in attracting, training and retaining qualified staff;
- Political and economic instability, terrorism or war;
- · The increased burden of complying with foreign laws and tax structures; and
- Risks associated with fluctuations in the value of foreign currencies.
- Risk associated with trade barriers such as high duty placed on components imported from our partner countries.

Demand for our products is subject to significant fluctuation. Market conditions in the telecommunications market in particular may harm our financial condition.

Demand for our optical components is dependent on several factors including capital expenditures in the telecommunications industry. Capital expenditures can be cyclical in nature and there may be protracted periods of reduced demand for component parts. Similarly, periods of slow economic expansion or recession can result in periods of reduced demand for our products. The current economic slowdown has hit the telecommunications market particularly hard, resulting in a significant reduction in capital expenditures for products such as our DWDMs. It is impossible to predict how long the slowdown will last. Such periods of reduced demand harm our business, financial condition and results of operations.

We may be unable to increase our manufacturing capacity or we will not be able to deliver our products to our customers in a timely manner if demand for our products increases.

Manufacturing of our products is a complex and precise process. Should our products achieve broad based market acceptance, we will need to either ramp internal production rapidly or secure manufacturing services from third parties. We have limited experience in rapidly increasing our manufacturing capacity or in manufacturing products at high volumes. We, or a contract manufacture would be required to hire, train and manage additional manufacturing personnel and improve production processes in order to increase production capacity. There are numerous risks associated with rapidly increasing capacity, including:

- Difficulties in achieving adequate yields from new manufacturing lines;
- · Difficulty maintaining the precision manufacturing processes required by our products while increasing capacity;
- The inability to timely procure and install the necessary equipment;
- The lack of availability of qualified manufacturing personnel; and
- The inabilities to timely procure outsourced components.

In addition, competitive third party manufacturers may be located outside the United States. Some of the risks associated with doing business internationally are discussed under "We have limited experience in the development, manufacturing, marketing and distribution of products internationally," above.

Our dependence on outside manufacturers may result in product delivery delays.

We purchase components that are incorporated into our products and components for resale from outside vendors. If these vendors fail to supply us with components on a timely basis, we could experience significant delays in shipping our products. If components that are purchased for resale are not delivered on a timely basis or do not meet customer specifications, our sales and profitability could be adversely affected. Any significant interruption in the supply or support of any components could seriously harm our sales and our relationships with our customers.

1

Our products may have defects that are not detected before delivery to our customers.

Some of our products are designed to be deployed in large and complex optical networks and must be compatible with other components of the system, both current and future. In addition, our products may not operate as expected over long periods of time. Our customers may discover errors or defects in our products only after they have been fully deployed. If we are unable to fix errors or other problems, we could lose customers, lose revenues, suffer damage to our brand and reputation, and lose our ability to attract new customers or achieve market acceptance. Each of these factors would negatively impact cash flow and would seriously harm our business, financial condition and results of operations.

We must introduce new products and product enhancements to increase revenue.

The successful operation of our business depends on our ability to anticipate market needs and to develop and introduce new products and product enhancements that respond to technological changes or evolving industry standards on a timely and cost-effective basis. Our products are complex, and new products may take longer and/or cost more to develop than originally anticipated. These products may contain defects or have unacceptable manufacturing yields when first introduced or as new versions are released. Our products could quickly become obsolete as new technologies are introduced. We must continue to develop new products and introduce them to the commercial market quickly in order to be successful. Our addition of externally sourced components to our product offering reduces our ability to control this process increasing our dependency on our suppliers for product development activities. Our failure to produce or source technologically and economically competitive products in a cost-effective manner and on a timely basis will seriously harm our business, financial condition and results of operations.

Our markets are characterized by rapid technological changes and evolving standards.

The markets we serve are characterized by rapid technological change, frequent new product introductions, changes in customer requirements and evolving industry standards. In developing and sourcing our products, we have made, and will continue to make, assumptions with respect to which standards will be adopted within our industry. If the standards that are actually adopted are different from those that we have chosen to support, our products may not achieve significant market acceptance.

Our products may infringe on the intellectual property rights of others.

Our products are sophisticated and rely on complicated manufacturing processes. We have received several patents on certain aspects of our design and manufacturing processes and we have applied for several more. Third parties may still assert claims that our products or processes unlawfully utilize their intellectual property. Our decision to market externally sourced components forces us to rely on our suppliers' representations that their products do not infringe the intellectual property rights of others. Defense against such claims, even if they lack merit, may be time consuming, result in expensive litigation and divert management attention from operational matters. If such a claim was successful, we could be prevented from manufacturing or selling our current products, we could be forced to redesign our products, or we could be required to license the relevant intellectual property at a significant cost. Any of these actions could harm our business, financial condition or results of operations.

We may be required to litigate to enforce and protect our intellectual property rights.

Litigation against persons who infringe our intellectual property rights could be expensive and may divert management resources from operating the Company. Even if we prevail in such litigation, the costs incurred may adversely affect us.

Acquisitions or investments could have an adverse effect on our business

As part of our strategy to expand our product offerings, develop internal sources of components and materials, and acquire new technologies, we periodically review acquisition and investment prospects. There are inherent risks associated with making acquisitions and investments, including but not limited to:

12

- Challenges associated with integrating the operations, personnel, etc., of an acquired company;
- Potentially dilutive issuances of equity securities;
- Reduced cash balances and/or increased debt and debt service costs;
- · Large one-time write-offs of intangible assets;
- · Risks associated with geographic or business markets different than those we are familiar with; and
- Diversion of management attention from current responsibilities.

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk.

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio. We invest in short-term securities of high credit issuers with maturities ranging from overnight up to 24 months. The average maturity of the portfolio does not exceed 12 months. The portfolio includes only marketable securities with active secondary or resale markets to ensure liquidity. We have no investments denominated in foreign country currencies and, therefore, our investments are not subject to foreign exchange risk.

ITEM 4. CONTROLS AND PROCEDURES.

- a. Evaluation of disclosure controls and procedures. The Company's chief executive officer and chief financial officer have concluded that the Company's disclosure controls and procedures (as defined in Exchange Act Rule 13a-14(c)) are sufficiently effective to ensure that the information required to be disclosed by the Company in the reports it files under the Exchange Act is gathered, analyzed and disclosed with adequate timeliness, accuracy and completeness, based on an evaluation of such controls and procedures conducted within 90 days prior to the date hereof.
- b. Changes in internal controls. There have been no significant changes in the Company's internal controls or in other factors that could significantly affect these controls subsequent to the date of the evaluation referred to above.

PART II

- (a) The Company held its Annual Shareholders' meeting on August 22, 2002.
- (b) (1) The election of 5 directors to serve for one-year terms was approved. The individual results are as follows:

		Voting Authority	
Name	Affirmative Votes	Withheld	Abstain
Anil K. Jain	11,130,916	-	2,800
Kenneth A. Olsen	11,132,570	-	2,800
Gregory J Von Wald	10,929,389	13,700	2,800
Ronald G. Roth	10,943,089	-	2,800
Stephen R. Zuckerman, MD	11,130,313	3,000	2,800

ITEM 5. NOT APPLICABLE

13

ITEM 6. Exhibits and Reports on Form 8-K.

(a) Exhibits.

Exhibit 99.1 - Chief Executive Officer's certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Exhibit 99.2 - Chief Financial Officer's certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(b) Reports on Form 8-K.

On October 1, 2002, the Company filed a Report on Form 8-K reporting the resignation of Gregory Von Wald from the board of directors effective September 30, 2002.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

APA OPTICS, INC.

Date: 11/12/2002
/s/ Anil K. Jain
Anil K. Jain
President and Chief Executive Officer

Date: 11/12/2002
/s/ Robert M. Ringstad

Robert M. Ringstad Chief Financial Officer

14

CERTIFICATION

I, Anil K. Jain, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of APA Optics, Inc.;
- 2. Based on my knowledge, this quarterly 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 quarterly report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly represent 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 quarterly report;
- 4. APA Optics, Inc.'s other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for APA Optics, Inc. and we have:
 - a) Designed such disclosure controls and procedures to ensure that material information relating to APA Optics, Inc., including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;

- b) Evaluated the effectiveness of the our disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report (the "Evaluation Date"); and
- Presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date:
- 5. APA Optics, Inc.'s other certifying officers and I have disclosed, based on our most recent evaluation, to our auditors and the audit committee of our board of directors:
 - a) There are no known deficiencies in the design or operation of internal controls which could adversely affect APA Optics, Inc.'s ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) There has been no known fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
- 6. APA Optics, Inc.'s other certifying officers and I have indicated in this quarterly report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

November 12, 2002

Signature: /s/ Anil KL. Jain Print Name: Anil K. Jain

Print Title: Chief Executive Officer

15

CERTIFICATION

I, Robert M. Ringstad, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of APA Optics, Inc.;
- 2. Based on my knowledge, this quarterly 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 quarterly report:
- 3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly represent 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 quarterly report;
- 4. APA Optics, Inc.'s other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for APA Optics, Inc. and we have:
 - a) Designed such disclosure controls and procedures to ensure that material information relating to APA Optics, Inc., including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;
 - b) Evaluated the effectiveness of the our disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report (the "Evaluation Date"); and
 - c) Presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the
- APA Optics, Inc.'s other certifying officers and I have disclosed, based on our most recent evaluation, to our auditors and the audit committee of our board of directors:
 - a) There are no known deficiencies in the design or operation of internal controls which could adversely affect APA Optics, Inc.'s ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) There has been no known fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
- 6. APA Optics, Inc.'s other certifying officers and I have indicated in this quarterly report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

November 12, 2002

Signature: <u>/s/ Robert M. Ringstad</u> Print Name: <u>Robert M. Ringstad</u> Print Title: <u>Chief Financial Officer</u>

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

In connection with the Quarterly Report of APA Optics, Inc. (the "Company") on Form 10-Q for the period ending September 30, 2002, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Anil K. Jain, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

Signature: <u>/s/ Anil K. Jain</u> Print Name: <u>Anil K. Jain</u>

Print Title: Chief Executive Officer

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

In connection with the Quarterly Report of APA Optics, Inc. (the "Company") on Form 10-Q for the period ending September 30, 2002, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert M. Ringstad, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

Signature: <u>/s/ Robert M. Ringstad</u> Print Name: <u>Robert M. Ringstad</u> Print Title: <u>Chief Financial Officer</u>