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

FORM 10-Q

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2004, or

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from NA to NA.

Commission File Number 0-16106

APA OPTICS, INC.
(Exact name of Registrant as specified in its charter)

MINNESOTA	41-1347235
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

2950 N.E. 84TH LANE, BLAINE, MINNESOTA 55449
(Address of principal executive offices and zip code)

(763) 784-4995
(Registrant's telephone number, including area code)

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 the filing requirement for the past 90 days.

Yes [X] No [ ]

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act).

Yes [ ] No [X]

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date:

Class:	Outstanding at August 9, 2004
Common stock, par value $.01	11,872,331

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

APA OPTICS, INC.

CONSOLIDATED CONDENSED BALANCE SHEETS
(UNAUDITED)

	June 30, 2004	March 31, 2004
ASSETS		
Current assets:		
Cash and cash equivalents	$ 13,043,040	$ 13,544,910
Accounts receivable, net of allowance for uncollectible accounts of $28,866 at June 30, 2004 and $49,038 at March 31, 2004	1,510,120	1,549,016
Inventories	1,638,066	1,574,188
Prepaid expenses	128,888	174,503
Bond reserve funds	44,174	133,865
Total current assets	16,364,288	16,976,482
Property, plant and equipment, net	4,383,201	4,550,956
Other assets:		
Bond reserve funds	333,101	332,433
Goodwill	3,422,511	3,422,511
Other	515,806	562,609
	4,271,418	4,317,553
Total assets	$ 25,018,907	$ 25,844,991
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	$ 1,469,755	$ 1,637,923
Accounts payable	761,683	812,165
Accrued compensation	821,839	645,293
Accrued expenses	176,655	212,713
Total current liabilities	3,229,932	3,308,094
Long-term debt	142,212	173,836
Shareholders' equity:		
Undesignated shares	-	-
Preferred Stock	-	-
Common Stock	118,723	118,723
Additional paid-in capital	51,967,484	51,980,946
Accumulated deficit	(30,439,444)	(29,736,608)
Total shareholders' equity	21,646,763	22,363,061
Total liabilities and shareholders' equity	$ 25,018,907	$ 25,844,991

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SEE ACCOMPANYING NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

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APA OPTICS, INC.
CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS
(UNAUDITED)

	Three Months Ended June 30,	
	2004	2003
Revenues	$ 3,687,718	$ 1,570,976
Costs and expenses:		
Cost of sales	3,086,843	1,871,865
Research and development	191,208	198,103
Selling, general and administrative	1,340,809	1,068,162
	4,618,860	3,138,130

Loss from operations	(931,142)	(1,567,154)
Gain on sale of operations	208,314	-
Other income	47,194	76,585
Other expense	(25,252)	(54,580)
	230,256	22,005
Loss before income taxes	(700,886)	(1,545,149)
Income taxes	1,950	250
Net loss	$ (702,836)	$(1,545,399)
Net loss per share:		
Basic and diluted	($0.06)	($0.13)
Weighted average shares outstanding:		
Basic and diluted	11,872,331	11,872,331

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SEE ACCOMPANYING NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

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APA OPTICS, INC.
CONSOLIDATED CONDENSED STATEMENTS OF CASH FLOWS
(UNAUDITED)

	Three Months Ended June 30,	
	2004	2003
<S>	<C>	<C>
OPERATING ACTIVITIES		
Net loss	$ (702,836)	$(1,545,399)
Adjustments to reconcile net loss to net cash used in operating activities, net of acquisition:		
Depreciation and amortization	239,481	213,092
Stock based compensation income	(13,462)	-
Changes in operating assets and liabilities:		
Accounts receivable	277,421	(174,908)
Inventories	(63,878)	(25,858)
Prepaid expenses and other	57,303	(69,871)
Accounts payable and accrued expenses	76,481	(45,920)
Net cash used in operating activities	(129,490)	(1,648,864)
INVESTING ACTIVITIES		
Purchases of property and equipment, net	(261,611)	(76,366)
Acquisition of business	-	(1,960,000)
Investment in patents	-	(7,375)
Net cash used in investing activities	(261,611)	(2,043,741)
FINANCING ACTIVITIES		

Repayment of long-term debt	(199,792)	(312,961)
Bond reserve funds	89,023	79,314
Net cash used in financing activities	(110,769)	(233,647)
Decrease in cash and cash equivalents	(501,870)	(3,926,252)
Cash and cash equivalents at beginning of period	13,544,910	22,235,686
Cash and cash equivalents at end of period	$13,043,040	$18,309,434
Noncash investing and financing activities		
Capital expenditure included in accounts payable	$ (225,000)	-

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SEE ACCOMPANYING NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

NOTES TO CONSOLIDATED 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 accounting principles generally accepted in the United States of America 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, 2004.

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:

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	Three Months Ended June 30,	
	2004	2003
<S>	<C>	<C>
Numerator for basic and diluted net loss	$ (702,836)	$(1,545,399)
Denominator for basic and diluted net loss per share- weighted-average shares outstanding	11,872,331	11,872,331
Basic and diluted net loss per share	($0.06)	($0.13)

</TABLE>

Common stock options and warrants to purchase 975,937 and 991,197 shares of common stock with a weighted average exercise price of $6.35 and $9.91 were outstanding at June 30, 2004 and 2003, respectively, but were excluded from calculating the three months diluted net loss per share because they were antidilutive.

NOTE 3. ACQUISITION

On June 27, 2003, the Company acquired certain assets of Americable, Inc. The acquisition was accounted for as a purchase and, accordingly, results of operations relating to the purchased assets have been included in the statement of operations from the date of acquisition. There are no contingent payments related to the acquisition. The Company reclassified certain balances from the original Americable purchase price allocation as part of an asset valuation adjustment. The adjustment was made after determining the fair value of the assets purchased. The result of the change was a decrease in inventory and property, an increase in accounts receivable, and an increase in goodwill. This did not change the purchase price of the transaction. The purchase price and assets acquired with purchase price adjustments are as follows:

	Original Purchase Price Allocation	Purchase Price Adjustment	Net Purchase Price Allocation
Accounts receivable	$ 594,000	$ 46,279	$ 640,279
Inventory	638,000	(13,944)	624,056
Property, plant and equipment	450,000	(49,186)	400,814
Assets purchased	1,682,000	(16,851)	1,665,149
Goodwill	278,000	16,851	294,851
Purchase price	$ 1,960,000	$ -	$ 1,960,000

Goodwill is expected to be fully deductible for tax purposes.

NOTE 4. SEGMENT REPORTING

The March 2003 and June 2003 acquisitions of assets from Computer System Products, Inc. and Americable, Inc. prompted the Company's management to adjust how it evaluates its business. As a result the Company established segments. This evaluation is based on the way segments are organized within the Company for making operating decisions and assessing performance. The Company has identified two reportable segments based on its internal organizational structure, management of operations, and performance evaluation. These segments are Optronics (historically referred to as the APA Optics, Inc. segment) and Cables and Networks (historically referred to as the APACN segment). Optronic's revenue is generated in the design, manufacture and marketing of ultraviolet (UV) detection and measurement devices and optical components. Cables & Network's revenue is derived primarily from standard and custom fiber optic cable assemblies, copper cable assemblies, value added fiber optics frames, panels and modules. Expenses are allocated between the companies based on detailed information contained in invoices. In addition, corporate overhead costs for management's time and other expenses are allocated. Segment detail is summarized as follows (unaudited, in thousands):

	Optronics	Cables & Networks	Eliminations	Consolidated
THREE MONTHS ENDED JUNE 30, 2004				
External sales	$ 143	$ 3,672	$ (127)	$ 3,688
Cost of sales	572	2,642	(127)	3,087
Operating income (loss)	(1,036)	105	-	(931)
Depreciation and amortization	185	54	-	239
Capital expenditures	234	28	-	262
Total assets	25,032	7,529	(7,542)	25,019
THREE MONTHS ENDED JUNE 30, 2003				
External sales	$ 62	$ 1,516	(7)	$ 1,571
Cost of sales	679	1,200	(7)	1,872
Operating loss	(1,364)	(203)	-	(1,567)
Depreciation and amortization	183	30	-	213
Capital expenditures	70	6	-	76
Total assets	29,785	6,945	(6,801)	29,929

NOTE 5. SALE OF OPTICS MANUFACTURING OPERATIONS

In January, 2004 the Company announced the discontinuance of optics

manufacturing at its Blaine facility. The closure was the result of aggressive off-shore pricing and continued lower demand for this product line. This

resulted in a charge of $171,000 taken in the 4th quarter ended March 31, 2004. The Company sold its optics manufacturing operations on April 14, 2004 for $220,000. The terms of the sale required the Company to restructure a loan with the City of Aberdeen which included an upfront loan payment of $89,305 and payment of the remaining $140,000 loan amount in seven annual installments of $20,000 each beginning June 30, 2004. Results of these manufacturing operations were not material to the consolidated financial statements for fiscal years 2004.

NOTE 6. STOCK BASED COMPENSATION

The Company has various incentive and non-qualified stock option plans which are used as an incentive for directors, officers, and other employees. The Company uses the intrinsic value method to value stock options issued to employees. Under this method, compensation expense is recognized for the amount by which the market price of the common stock on the date of grant exceeds the exercise price. The Company's stock based compensation expense also reflects the benefit of the cancellation of previously expensed options. The Company recognized compensation income of $13,462 for the three months ended June 30, 2004, and no expense or income for the prior year period. For those stock options granted where the exercise price was equal to the market value of the underlying common stock on the date of grant, no stock-based employee compensation cost is reflected in the net loss. Had the fair value method been applied, our compensation expense would have been different. The following table illustrates the effect on net loss and net loss per share if the Company had applied the fair value method, to stock-based employee compensation for the following three months ended:

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	Three Months Ended June 30,	
	2004	2003
Net loss to common shareholders - as reported	$ (702,836)	$(1,545,399)
Less: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(48,342)	(50,317)
Net loss - pro forma	$ (751,178)	$(1,595,716)
Basic and diluted net loss per common share - as reported	($0.06)	($0.13)
Basic and diluted net loss per common share - pro forma	($0.06)	($0.13)

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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 Influence Future Results."

OVERVIEW

APA Optics, Inc., consisting of the Optronics and Cables & Networks groups,

develops, designs, manufactures and markets a variety of fiber optics, copper and Gallium Nitride (GaN) based components and devices for industrial, commercial, consumer and scientific applications. Cables & Networks designs, manufactures and markets a variety of fiber optic and copper components to the data communication and telecommunication industries. Optronics is active in the development, design, manufacture and marketing of ultraviolet (UV) detection and measurement devices for consumers and industrial customers, and Gallium Nitride (GaN) based transistors for power amplifiers and other commercial applications. Both groups also source from third parties various components and devices for direct and value-added sales to our customers in all these technology areas.

Cables & Networks internally manufactured products primarily include a broad line of standard and custom fiber optic cable assemblies, copper cable assemblies, optical components, value added fiber optic distribution frames, panels and modules. These products are manufactured by our wholly owned subsidiary Cables & Networks and Optronic's facilities in Aberdeen, South Dakota, and marketed to broadband service providers, commercial data networks, and original equipment manufacturers. Cables & Networks acquired certain assets of Computer System Products, Inc. ("CSP") on March 14, 2003 and certain assets of Americable, Inc. ("Americable") on June 27, 2003. Several of the items discussed under "Results of Operations" show significant changes from the comparable periods in the preceding fiscal year as a result of these acquisitions.

In January 2004 Optronics terminated its optics manufacturing in Blaine, Minnesota as described in Note 5 above. Additionally in January 2004 Optronics consolidated its fiber optics operations within Blaine. Optronics plans to continue to market and sell fiber optic products using mainly Cables & Network's sales team and channels. We outsource several components from third parties including passive optical splitters, arrayed waveguides (AWGs) and wavelength division multiplexers (WDMs) based on Thin Film Filter (TFF) technology, which we combine with our internally manufactured products to create value added components for our customers. The majority of our outsourced product providers are located offshore.

Most companies in the communications industry have been affected by the slowdown in telecommunications equipment spending over the past several years. Decreased demand and competition have continued to put downward pressure on margins. This downward pressure is likely to continue and we will need to reduce operating costs and improve efficiencies to remain competitive in the marketplace.

Optronic's consumer UV detection product, the SunUVTM Personal UV Monitor (PUVM, formerly SunWatch) continues in low volume production. We shipped several hundred PUVM's to one customer in the quarter ended December 31, 2003, and are shipping small quantities to retailers and catalog customers on an ongoing basis. The offshore manufacturer is maintaining a flow of product, but low yield caused primarily by mechanical and cosmetic issues has limited our ability to pursue larger orders from our distribution channels. High volume manufacturing is being addressed with the current supplier. We have also begun seeking other suppliers.

In addition to PUVM's, Optronics initiated reconfiguration of its TrUVMeterTM for a specific market targeted for UV radiation printing and curing systems. This reconfiguration required detection and analysis of four bands (all in the UV spectral range) using four separate detector assemblies, as compared to only one in the TrUVMeterTM. We have now completed the design and preliminary development of this device called Profiler M. We are now performing detailed calibration and characterization of the profiler, prior to the delivery of the alpha units for customer evaluation.

Optronics continues to develop transistors based on GaN/AlGaN (gallium nitride/aluminum gallium nitride) while assessing commercialization opportunities. During the latter part of fiscal 2004 we purchased a multi-wafer (6 wafers, 2 inches in diameter) Metal Organic Chemical Vapor Deposition (MOCVD) System to supply high performance epitaxial wafers for internal requirements as well as other potential customers. This system will be installed at a leased facility that provides state-of-the-art characterization equipment. We are packaging and testing transistors and power amplifiers built from our material. Our plan is to continue characterizing demonstration power

amplifiers built using our packaged transistors while qualifying their long term reliability. Upon qualification the power amplifiers will be sent for customer evaluation.

RESULTS OF OPERATIONS

REVENUES

Sales at Cables & Networks for the first quarter of fiscal year 2005 were $3,671,812, compared to sales of $1,516,352 reported in the same quarter a year

ago, an increase of 142%. The increase is attributable to higher revenues in the 2005 quarter generated by the acquisition from Americable, Inc., which occurred at the end of the first quarter of fiscal 2004. The Americable assets contributed no corresponding revenues for the 2004 quarter. Sales increased $233,349, or 7%, from the sales of $3,438,463 during the prior quarter ended March 31, 2004. Sales for the current quarter to broadband service provider and commercial data networks were $2,484,000 or 68% of revenue, and sales to OEM's were $1,188,000, or 32% of revenue. We expect that future sales of Cables & Networks products will continue to account for a substantial portion of our revenue. We anticipate comparable revenue at Cables & Networks for the second quarter.

Gross revenues at Optronics were $142,494 for the quarter ended June 30, 2004, versus revenue of $61,794 in the same quarter a year ago. Gross revenues for the first quarter ended June 30, 2004 reflect $126,588 of sales to Cables & Networks for fiber optics products and subcontracted labor versus $7,170 in the comparable period last year. These sales are eliminated as intercompany sales in the consolidated financials in each quarter. The net decrease in revenues for the quarter as compared to the revenues of the quarter ended June 30, 2003 was due primarily to lower sales of fiber optics and optics products.

COST OF SALES AND GROSS PROFIT

Cables & Network's gross profit for the quarter ended June 30, 2004 was $1,029,940, or 28%, versus gross profit of $316,564, or 21%, in the comparable period last year. Gross profit increased $183,829 from the gross profit of $846,111, or 22%, during the prior quarter ended March 31, 2004. The increase in gross profit over the prior quarter was due to a combination of higher product margins and reduced overhead expenses related to personnel reductions.

Gross cost of sales at Optronics for the three months ended June 30, 2004 was $571,559 as compared to $679,247 in the same quarter a year ago. Gross cost of sales for the first quarter ended June 30, 2004 reflect $126,588 related to cost of sales to Cables & Networks for fiber optics products and subcontracted labor versus $7,170 in the comparable period last year. These costs are eliminated as intercompany cost of sales in the consolidated financials in each quarter. The net decrease in cost of sales is due to lower material and production expenses related to the closure of the optics manufacturing line.

We anticipate comparable gross margins and cost of sales for Cables & Networks and Optronics for the second quarter.

RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses decreased by $6,895, to $191,208, for the quarter ended June 30, 2004 compared to the same period for the preceding fiscal year, mainly due to lower personnel costs. We expect research and development expenses to remain relatively unchanged in the second quarter.

SELLING, GENERAL AND ADMINISTRATIVE

Selling, general and administrative expenses at Cables & Networks increased $405,844, or 78%, to $925,259 for the quarter ended June 30, 2004 versus $519,415 for the comparable period in the preceding fiscal year. The increase is attributable to higher expenses in the 2005 quarter generated by the acquisition from Americable, Inc., which occurred at the end of the first quarter of fiscal 2004 and had no expenses in the fiscal 2004 period. Expenses decreased $73,306, or 7%, from the expenses of $998,565 during the prior quarter ended March 31, 2004. The decrease from the prior quarter is due mainly to lower selling costs.

Selling, general and administrative expenses at Optronics decreased $133,197, or 24%, to $415,550 for the three months ended June 30, 2004 versus $548,747 for the three month period ending June 30, 2003. The decrease is due to lower personnel and related costs associated with cost reductions implemented over fiscal year 2004, offset slightly by higher professional fees.

INCOME (LOSS) FROM OPERATIONS

The income from operations at Cables & Networks was $104,681, an increase of $307,532 for the quarter ended June 30, 2004 over the comparable period in fiscal 2004. Income from operations increased $257,135, or 169%, from the operating loss of $152,454 during the prior quarter ended March 31, 2004. The increased income in the quarter was mainly the result of a combination of increased revenues and lower expenses in the quarter.

The loss from operations at Optronics for the three months ended June 30, 2004 was $1,035,823, a decrease of $328,480, or 24%, from the loss of $1,364,303 in the comparable period in the preceding year. The decrease in the loss is primarily the result of the cost reductions implemented over the prior fiscal year. We expect to incur losses at Optronics until we realize significant revenues from the sales of our PUVM product.

OTHER INCOME AND EXPENSE

Other income at Cables & Networks decreased $21,004 for the three months ended June 30, 2004 from the comparable period in fiscal 2004. Higher income in 2004 was due to management fee income earned in fiscal 2004 in relation to the acquisition of CSP. Interest expense at Cables & Networks increased $34,250 for the three months ended June 30, 2004 from the comparable period in fiscal 2004. The increase is due to a larger outstanding debt balance related due to the acquisition from Americable late in the second quarter in fiscal 2004.

Other income at Optronics increased $235,203 for the three months ended June 30, 2004 or 268% from the comparable period in the preceding fiscal year. The sale of the optics manufacturing operations in April 2004 and related facility income accounted for $220,000 of the increase. Interest income increased slightly due to a higher outstanding debt balance due from Cables & Networks. Other expenses decreased $28,302 for the three months ended June 30, 2004 to $22,831 from $51,133 in the three months ended June 30, 2003 due to lower interest expense in the prior year quarter.

NET LOSS

The consolidated net loss for the quarter ended June 30, 2004, was $702,836 (or $0.06 per basic and diluted share), a decrease of $842,563 or 55% from the net loss reported for the same period in fiscal 2004. Cables & Networks recorded net income of $33,199, compared to a loss of $217,379 in the comparable period last year, and a net loss of $298,364 in the prior quarter ended March 31, 2004. Optronics recorded a net loss of $736,035, a decrease of $591,985, or 45%, from the loss reported in the same period of fiscal 2004. While cost reductions implemented so far at Optronics will help lower the overall losses for the Company, achieving profitability in the future will strongly depend upon Optronic's ability to manufacture and market gallium-nitride products.

LIQUIDITY AND CAPITAL RESOURCES
- ---------------------------------

The Company's cash and cash equivalents consist primarily of money market funds, U.S. Government instruments or other government instruments with original maturities of less than three months.

Cash used in operating activities was $129,490 for the three month period ending June 30, 2004 compared to $1,648,864 used in the same period in fiscal 2004. The decrease in the cash used between the two periods reflects a decrease in loss from operations of $636,012, achieved by a combination of increased revenue and profitable operations at Cables & Networks and decreased costs at Optronics due to cost reduction efforts and a gain on the sale of the optics manufacturing business at Optronics in April 2004.

We used net cash of $261,611 in investing activities for the three months ended June 30, 2004 compared to $2,043,741 used in the same period of the preceding fiscal year. The use of cash in the quarter ended June 30, 2004 reflects capital expenditures mainly for production equipment at Optronics. For the quarter ended June 30, 2003, $1,960,000 was used to purchase the assets of Americable, Inc. We anticipate approximately $600,000 to $800,000 in capital expenditures in fiscal 2005.

Net cash used in financing activities for the three months ended June 30, 2004 totaled $110,769. We used $199,792 for the scheduled reduction of debt and generated $89,023 from the reduction of bond reserve funds. During the same period in fiscal 2004 we used $233,647 in financing activities, of which $312,961 was used for the scheduled reduction of debt and $79,314 was generated from the reduction of bond reserve funds.

We believe we have sufficient funds for operations for at least the next twelve months.

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

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<S>	Total <C>	Less than 1 Year <C>	1-3 years <C>	4-5 years <C>	After 5 years <C>
Long-term debt	$1,612	$ 1,470	$ 82	$ 40	$ 20
Leases	589	325	260	4	-
Total Contractual Cash Obligations	$2,201	$ 1,795	$ 342	$ 44	$ 20

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Application of Critical Accounting Policies

In preparing our consolidated financial statements, we make estimates, assumptions and judgments that can have a significant impact on our revenues, loss from operations and net loss, as well as on the value of certain assets and liabilities on our consolidated balance sheet. We believe that there are several accounting policies that are critical to an understanding of our historical and future performance, as these policies affect the reported amounts of revenues, expenses and significant estimates and judgments applied by management. While there are a number of accounting policies, methods and estimates affecting our consolidated financial statements, areas that are particularly significant include:

- Revenue recognition;

- Accounting for income taxes; and

- Valuation and evaluating impairment of long-lived assets and goodwill

Revenue Recognition

Revenue is recognized when persuasive evidence of an arrangement exists, the product has been shipped, acceptance by the customer is reasonably certain and collection is probable.

Accounting for Income Taxes

As part of the process of preparing our consolidated financial statements, we are required to estimate our income tax liability in each of the jurisdictions in which we do business. This process involves estimating our actual current tax expense together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities. We must then assess the likelihood that these deferred tax assets will be recovered from future taxable income and, to the extent we believe that recovery is not more likely than not or unknown, we must establish a valuation allowance.

Significant management judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our deferred tax assets. At March 31, 2004, we have recorded a full valuation allowance of $11,075,084 against our deferred tax assets, due to uncertainties related to our ability to utilize our deferred tax assets, consisting principally of certain net operating losses carried forward. The valuation allowance is based on our estimates of taxable income by jurisdiction and the period over which our deferred tax assets will be recoverable. The Company had U.S. net operating loss (NOL) carry forwards of approximately $27,899,000 which expire in fiscal years 2004 to 2024.

Realization of the NOL carry forwards and other deferred tax temporary differences are contingent on future taxable earnings. The deferred tax asset was reviewed for expected utilization using a "more likely than not" approach by assessing the available positive and negative evidence surrounding its recoverability. We will continue to assess and evaluate strategies that will enable the deferred tax asset, or portion thereof, to be utilized, and will reduce the valuation allowance appropriately at such time when it is determined that the "more likely than not" approach is satisfied.

Valuation and evaluating impairment of long-lived assets and goodwill

Goodwill represents the excess of the purchase price over the fair value of net assets acquired. Goodwill should not be amortized but reviewed for impairment at the fiscal year end or whenever conditions exist that indicate an impairment could exist. The Company performed the annual impairment test in fiscal years 2004 and 2003 and concluded that no impairment had occurred.

The Company evaluates the recoverability of its long-lived assets and requires recognition of impairment of long-lived assets in the event that events or circumstances indicate an impairment may have occurred and when the net book value of such assets exceeds the future undiscounted cash flows attributed to such assets. We assess the impairment of long-lived assets whenever events or changes in circumstances indicate that the carrying value may not be recoverable. No impairment of long-lived assets has occurred through June 30, 2004.

FACTORS THAT MAY INFLUENCE FUTURE RESULTS

The statements contained in this report on Form 10-Q that are not purely

historical are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including, without limitation, statements regarding the Company's expectations, hopes, beliefs, anticipations, commitments, intentions and strategies regarding the future. Forward-looking statements include, but are not limited to, statements contained in "Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations." Actual results could differ from those projected in any forward-looking statements for the reasons, among others, detailed below. We believe that many of the risks detailed here are part of doing business in the industry in which we compete and will likely be present in all periods reported. The fact that certain risks are characteristic to the industry does not lessen the significance of the risk. The forward-looking statements are made as of the date of this Form 10-Q and we

assume no obligation to update the forward-looking statements or to update the reasons why actual results could differ from those projected in the forward-looking statements.

Unless we generate significant revenue growth, our expenses and negative cash flow will significantly harm our financial position.

We have not been profitable since fiscal 1990. As of June 30, 2004, we had an accumulated deficit of $30.4 million. We may 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 significantly higher revenues while containing costs and operating expenses if we are to achieve profitability.

Declining average selling prices for our fiber optic products will require us to reduce production costs to effectively compete and market these products.

Since the time we first introduced our fiber optic components to the marketplace we have seen the average selling price of fiber optic components decline. We expect this trend to continue. 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 pursue one or more of the following:

- Seek lower cost suppliers of raw materials or components.
- Work to further automate our assembly process.
- Develop value-added components based on integrated optics.
- Seek offshore sources for assembly services.

We will also seek to form strategic alliances with companies that can supply these services. Decreases in average selling prices also require that we increase unit sales to maintain or increase our revenue. There can be no guarantee that we will achieve these objectives. Our inability to decrease production costs or increase our unit sales could seriously harm our business, financial condition and results of operations.

Demand for our products is subject to significant fluctuation. Adverse market conditions in the communications equipment industry and any slowdown in the United States economy may harm our financial condition.

Demand for our products is dependent on several factors, including capital expenditures in the communications industry. Capital expenditures can be cyclical in nature and result in 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 U.S. economic slowdown has been more profound in the telecommunications market, resulting in a significant reduction in capital expenditures for the Company's products. It is impossible to predict how long the slowdown will last. Such periods of reduced demand will harm our business, financial condition and results of operations. Changes to the regulatory requirements of the telecommunications industry could also affect market conditions, which could also reduce demand for our products. Moreover, some of our customers have experienced serious financial difficulties, which in certain cases have resulted in bankruptcy filings or cessation of operations.

Our industry is highly competitive and subject to pricing pressure.

Competition in the communications equipment market is intense. We have experienced and anticipate experiencing increasing pricing pressures from current and future competitors as well as general pricing pressure from our customers as part of their cost containment efforts. Many of our competitors have more extensive engineering, manufacturing, marketing, financial and personnel resources than we do. As a result, these competitors may be able to respond more quickly to new or emerging technologies and changes in customer

requirements or to offer more aggressive price reductions.

Our sales could be negatively impacted if one or more of our key customers substantially reduce orders for our products.

If we lose a significant customer, our sales and gross margins would be negatively impacted. In addition, the loss of sales may require us to record impairment, restructuring charges or exit a particular business or product line.

We may be required to rapidly increase our manufacturing capacity to deliver our products to our customers in a timely manner.

Manufacturing of our products is a complex and precise process. We have limited experience in rapidly increasing our manufacturing capacity or in manufacturing products at high volumes. If demand for our products increases, we will be required to hire, train and manage additional manufacturing personnel and improve our production processes in order to increase our production capacity. There are numerous risks associated with rapidly increasing capacity, including:

- Difficulties in achieving adequate yields from new manufacturing lines,

- Difficulty maintaining the precise manufacturing processes required by our products while increasing capacity,

- The inability to timely procure and install the necessary equipment, and

- Lack of availability of qualified manufacturing personnel.

If we apply our capital resources to expanding our manufacturing capacity in anticipation of increased customer orders, we run the risk that the projected increase in orders will not be realized. If anticipated levels of customer orders are not received, we will not be able to generate positive gross margins and profitability.

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

We purchase components and labor that are incorporated into our products from outside vendors. In the case of the SunUV(R) Personal UV Monitor, we supply components to an outside assembler who delivers the completed product. If these vendors fail to supply us with components or completed assemblies on a timely basis, or if the quality of the supplied components or completed assemblies is not acceptable, we could experience significant delays in shipping our products. Any significant interruption in the supply or support of any components or completed assemblies could seriously harm our sales and our relationships with our customers. In addition, we have increased our reliance on the use of contract manufacturers to make our products. If these contract manufacturers do not fulfill their obligations or if we do not properly manage these relationships, our existing customer relationships may suffer.

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

Some of the Company's products are designed to be deployed in large and complex networks and must be compatible with other components of the system, both current and future. Our customers may discover errors or defects in our products only after they have been fully deployed. In addition, our products may not operate as expected over long periods of time. In the case of the SunUV(R) Personal UV Monitor, a consumer product, customers could encounter a latent defect not detected in the quality inspection. 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.

Consolidation among our customers could result in our losing a customer or experiencing a slowdown as integration takes place.

It is likely that there will be increased consolidation among our customers in order for them to increase market share and achieve greater economies of scale. Consolidation is likely to impact our business as our customers focus on integrating their operations and choosing their equipment vendors. After a consolidation occurs, there can be no assurance that we will continue to supply the surviving entity.

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 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 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 or as other firms introduce lower cost alternatives. We must continue to develop leading-edge products and introduce them to the commercial market quickly in order to be successful. Our failure to produce technologically 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 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.

Customer payment defaults could have an adverse effect on our financial condition and results of operations.

As a result of adverse conditions in the telecommunications market, some of our customers have and may continue to experience financial difficulties. In the future, if customers experiencing financial problems default and fail to pay amounts owed to the Company, we may not be able to collect these amounts or recognize expected revenue. In the current environment in the telecommunications industry and in the United States and global economies, it is possible that customers from whom we expect to derive substantial revenue will default or that the level of defaults will increase. Any material payment defaults by our customers would have an adverse effect on our results of operations and financial condition.

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

Our products are sophisticated and rely on complicated manufacturing processes. We have received multiple patents on 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 infringe upon their intellectual property. Defending our interests against these 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 were successful, we could be prevented from manufacturing or selling our current products, be forced to redesign our products, or be forced to license the relevant intellectual property at a significant cost. Any of these actions could harm our business, financial condition or results of operations.

Acquisitions or investments could have an adverse affect on our business.

In March 2003, we completed the acquisition of the assets of CSP as part of our strategy to expand our product offerings, develop internal sources of components and materials, and acquire new technologies. We acquired the assets of Americable, Inc. in June 2003 and integrated them with the assets of CSP. We intend to continue reviewing acquisition and investment prospects. There are inherent risks associated with making acquisitions and investments including but not limited to:

- 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 as of the end of the fiscal period covered by this report the Company's disclosure controls and procedures (as defined in Exchange Act Rule 13a-14(c)) were sufficiently effective to ensure that the information required to be disclosed by the Company in the report was gathered, analyzed and disclosed with adequate timeliness, accuracy and completeness.

b. Changes in internal controls. There were no changes in the Company's internal controls over financial reporting during the fiscal period covered by this report that materially affected, or are likely to materially affect, the Company's control over financial reporting.

PART II

ITEMS 1 THROUGH 5. NOT APPLICABLE

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K.

(a) Exhibits.

Exhibit 31.1 - Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

Exhibit 32.1 - Certification required of Chief Executive Officer and Chief Financial Officer by Section 906 of the Sarbanes Oxley Act of 2002

(b) Reports on Form 8-K.

A report on Form 8-K dated April 19, 2004, reported the sale of APA Optics, Inc. optics manufacturing operations.

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.

	/s/ Anil K. Jain
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Date	Anil K. Jain President, Chief Executive Officer and Chief Financial Officer (Principal Executive and Principal Financial Officer)
	/s/ Daniel Herzog
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Date	Comptroller (Principal Accounting Officer)

Exhibit 31.1

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 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 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 and 15(e)) 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 report is being prepared;

   b) Evaluated the effectiveness of our disclosure controls and procedures as of a date and presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on our evaluation.

   c) Disclosed in this report any change in APA Optics, Inc.'s internal control over financial reporting that occurred during the most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's control over financial reporting.

5. APA Optics, Inc.'s other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to our auditors and the audit committee of our board of directors:

   a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect APA Optics, Inc.'s ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

August 12, 2004

Signature: /s/ Anil K. Jain

Print Name: Anil K. Jain

Print Title: Chief Executive Officer and Chief Financial Officer

Exhibit 32.1

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 June 30, 2004, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Anil K. Jain, Chief Executive Officer and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Sec. 1350, as adopted pursuant to Sec. 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.

August 12, 2004

Signature: /s/ Anil K. Jain

Print Name: Anil K. Jain

Print Title: Chief Executive Officer and Chief Financial Officer