

Cyanotech Corporation 2023 Annual Report

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 10-K

☑ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the Fiscal Year Ended March 31, 2023

Or

☐ Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 For the Transition Period From Commission File Number 0-14602

CYANOTECH CORPORATION

(Exact name of registrant as specified in its charter)

91-1206026 Nevada (State or other jurisdiction of incorporation or organization) (I. R. S. Employer Identification No.) 73-4460 Queen Kaahumanu Highway, Suite 102,

Kailua-Kona, Hawaii (Address of principal executive offices) 96740

(Zip Code)

Registrant's telephone number, including area code: (808) 326-1353 Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.02 par value per share	CYAN	NASDAQ Capital Market
Securities registered pursuant to Section 12(g)	of the Act: None	
Indicate by check mark if the registrant is a wel	ll-known seasoned issuer, as defined in R	ule 405 of the Securities Act. ☐ Yes ☒ No
Indicate by check mark if the registrant is not re	equired to file reports pursuant to Section	13 or Section 15(d) of the Act. \square Yes \boxtimes No
Indicate by check mark whether the registrant (Exchange Act of 1934 during the preceding 12 and (2) has been subject to such filing requirem	months (or for such shorter period that th	
Indicate by check mark whether the registrant has to Rule 405 of Regulation S-T ($\S 232.405$ of thi was required to submit such files). Yes \boxtimes No	s chapter) during the preceding 12 month	tive Data File required to be submitted pursuant s (or for such shorter period that the registrant
Indicate by check mark whether the registrant i company, or an emerging growth company. Secompany," and "emerging growth company" in	e the definitions of "large accelerated file	filer, a non-accelerated filer, a smaller reporting r," "accelerated filer," "smaller reporting
Large accelerated filer □		Accelerated filer □
Non-accelerated filer □		Smaller reporting company
		Emerging growth company □
If an emerging growth company, indicate by che complying with any new or revised financial ac	e e e e e e e e e e e e e e e e e e e	•
	er Section $404(b)$ of the Sarbanes-Oxley A	management's assessment of the effectiveness of Act (15 U.S.C. 7262(b)) by the registered public
	2(b) of the Act, indicate by check mark v	whether the financial statements of the registrant ements. \Box
Indicate by check mark whether any of those encompensation received by any of the registrant	•	· · · · · · · · · · · · · · · · · · ·
Indicate by check mark whether the registrant i	s a shell company (as defined in Rule 12b	o-2 of the Exchange Act). Yes □ No ⊠
The aggregate market value of the Registrant's approximately \$8,128,352.16 based on the clos		
Number of shares outstanding of Registrant's C	Common Stock at June 15, 2023 was 6,29	1,086.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Definitive Proxy Statement for its 2023 Annual Meeting of Stockholders, expected to be filed with the Securities and Exchange Commission on or prior to July 28, 2023 and to be used in connection with the Annual Meeting of Stockholders expected to be held on August 24, 2023, are incorporated by reference in Part III of this Form 10-K.

TABLE OF CONTENTS

Item

	Cautionary Note Regarding Forward-Looking Statements	3
	PART I	
1.	Business	4
1A.	Risk Factors	4 9
2.	Properties	18
3.	Legal Proceedings	18
	PART II	
5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	18
7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	19
8.	Financial Statements and Supplementary Data	26
9A	Controls and Procedures	48
9B	Other Information	48
	PART III	
10.	Directors and Executive Officers of the Registrant and Corporate Governance	49
11.	Executive Compensation	49
12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	49
13.	Certain Relationships and Related Transactions, and Director Independence	49
14.	Principal Accountant Fees and Services	49
	PART IV	
15.	Exhibits and Financial Statement Schedules	50
16.	Signatures	53

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Report and other presentations made by Cyanotech Corporation ("CYAN") and its subsidiary contain "forward-looking statements," which include statements that are predictive in nature, depend upon or refer to future events or conditions, and usually include words such as "expects," "anticipates," "intends," "plan," "believes," "predicts", "estimates" or similar expressions. In addition, any statement concerning future financial performance, ongoing business strategies or prospects and possible future actions are also forward-looking statements. Forward-looking statements are based upon current expectations and projections about future events and are subject to risks, uncertainties and the accuracy of assumptions concerning CYAN and its subsidiary (collectively, the "Company"), the performance of the industry in which CYAN does business, and economic and market factors, among other things. These forward-looking statements are not guarantees of future performance. You should not place undue reliance on forward-looking statements.

Forward-looking statements speak only as of the date of the Report, presentation or filing in which they are made. Except to the extent required by the Federal Securities Laws, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Our forward-looking statements in this Report include, but are not limited to:

- Statements relating to our business strategy;
- Statements relating to our business objectives; and
- Expectations concerning future operations, profitability, liquidity and financial resources.

These forward-looking statements are subject to risk, uncertainties and assumptions about us and our operations that are subject to change based on various important factors, some of which are beyond our control. The following factors, among others, could cause our financial performance to differ significantly from the goals, plans, objectives, intentions and expectations expressed in our forward-looking statements:

- Environmental restrictions, soil and water conditions, levels of sunlight and seasonal weather patterns, particularly heavy rain, wind and other hazards;
- Consumer perception of our products due to adverse scientific research or findings, publicity regarding dietary supplements, litigation, regulatory investigations or other events, conditions and circumstances involving the Company which receive national media coverage;
- Effects of competition, including tactics and locations of competitors and operating and market competition;
- Demand for our products, the quantities and qualities thereof available for sale and levels of customer satisfaction, including significant unforeseen fluctuations in global demand for products similar to our products;
- Changes in purchasing practices among our customers, particularly our largest customers;
- Our dependence on the experience, continuity and competence of our executive officers and other key employees;
- The added risks associated with or attributed to the current local, national and world economic conditions, including but not limited to, the volatility of crude oil prices, inflation and currency fluctuations;
- Labor shortages could restrict our ability to operate or grow our business or result in increased labor costs that could adversely affect our results of operations;
- The effects of global outbreaks of pandemics or contagious diseases or fear of such outbreaks, such as the coronavirus ("COVID-19") pandemic, including on our supply chain, the demand for our products, our ability to expand and produce in new geographic markets or the timing of such expansion efforts, and on overall economic conditions and consumer confidence and spending levels;
- Changes in domestic and/or foreign laws, regulations or standards, affecting nutraceutical products or our methods of operation;
- Access to available and reasonable financing on a timely basis;
- The availability of financing on acceptable terms to provide operating capital in the event of an unexpected cash shortfall;
- The Company's inability to generate enough revenues to meet its obligations or repay maturing indebtedness;
- Failure of capital projects to operate as expected or meet expected results;
- Changes in laws, corporate governance requirements and tax rates, regulations, accounting standards and the application to us or the dietary supplement products industry of new decisions by courts, regulators or other government authorities;
- Legal costs associated with any legal proceedings, and the potential direct and indirect cost and other effects on our business or financial condition resulting from any legal proceedings
- Risk associated with the geographic concentration of our business;
- Acts of war, terrorist incidents or natural disasters; and
- Other risks or uncertainties described elsewhere in this Report and in other periodic reports previously and subsequently filed by us with the Securities and Exchange Commission.

Item 1. Business

Unless otherwise indicated, all references in this report to the "Company", "we", "us", "our", and "Cyanotech" refer to Cyanotech Corporation and its wholly owned subsidiary, Nutrex Hawaii, Inc. ("Nutrex Hawaii" or "Nutrex"), a Hawaii corporation.

General

We are a world leader in the production of high value natural products derived from microalgae. Incorporated in 1983, we are guided by the principle of providing beneficial, quality microalgal products for health and human nutrition in a sustainable, reliable and environmentally sensitive operation. We are Good Manufacturing Practices ("GMP") certified by Merieux NutriSciences, reinforcing our commitment to quality in our products, quality in our relationships (with our customers, suppliers, employees and the communities we live in), and quality of the environment in which we work. Our products include:

- BioAstin® Hawaiian Astaxanthin® a powerful dietary antioxidant shown to support and maintain the body's natural inflammatory response, to enhance skin, and to support eye, joint and immune health*. It has expanding applications as a human dietary supplement and dietary ingredient; and
- Hawaiian Spirulina Pacifica® a nutrient-rich dietary supplement used for extra energy, a strengthened immune system, cardiovascular benefits and as a source of antioxidant carotenoids*

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

Microalgae are a diverse group of microscopic plants that have a wide range of physiological and biochemical characteristics and contain, among other things, high levels of natural protein, amino acids, vitamins, pigments and enzymes. Microalgae have the following properties that make commercial production attractive: (1) microalgae grow much faster than land grown plants, often up to 100 times faster; (2) microalgae have uniform cell structures with no bark, stems, branches or leaves, permitting easier extraction of products and higher utilization of the microalgae cells; and (3) the cellular uniformity of microalgae makes it practical to control the growing environment in order to optimize a particular cell characteristic. Efficient and effective cultivation of microalgae requires consistent light, warm temperatures, low rainfall and proper chemical balance in a very nutrient-rich environment, free of environmental contaminants and unwanted organisms. This is a challenge that has motivated us to design, develop and implement proprietary production and harvesting technologies, systems and processes in order to commercially produce human dietary supplement products derived from microalgae.

Our production of these products at the 96-acre facility on the Kona Coast of the island of Hawaii provides several benefits. We selected the Keahole Point location in order to take advantage of relatively consistent warm temperatures, sunshine and low levels of rainfall needed for optimal cultivation of microalgae. This location also offers us access to cold deep ocean water, drawn from an offshore depth of 2,000 feet, which we use in our *Ocean-Chill Drying* system to eliminate the oxidative damage caused by standard drying techniques and as a source of trace nutrients for microalgal cultures. The area is also designated a Biosecure Zone, with tight control of organisms allowed into the area and free of genetically modified organisms ("GMO"). We believe that our technology, systems, processes and favorable growing location generally permit year-round harvest of our microalgal products in a cost-effective manner.

Our Business

We operate entirely in one operating segment, the cultivation and production of microalgae into high-value, high-quality natural health and nutrition products. We cultivate, on a large-scale basis, two microalgal species from which our two major product lines, natural astaxanthin products and spirulina products, are derived. We record revenue and cost of sales information by product category, but do not record operating expenses by such product category.

The following table sets forth, for the three years ended March 31, 2023, the net sales contributed by each of our major product lines and extraction and research and development ("R&D") services (in thousands):

	Net Sales									
	2023			2022		2023 2022		2023 2022 2021		2021
Natural astaxanthin products:					_					
BioAstin®	\$	14,209	\$	17,378	\$	16,791				
Spirulina products:										
Hawaiian Spirulina Pacifica®		8,355		17,990		14,735				
Contract extraction and R&D services		614		600		819				
Total	\$	23,178	\$	35,968	\$	32,345				

Cost of sales for contract extraction and R&D services for the years ended March 31, 2023, 2022 and 2021 were \$441,000, \$439,000 and \$337,000, respectively.

Natural Astaxanthin Products

We commenced commercial production of natural astaxanthin in 1997 and in 1999 *BioAstin*®, our natural astaxanthin product was cleared for sale in the U.S. Dietary Supplement market, and in 2007, was approved for sale in Europe. Astaxanthin represented approximately 61% of our net sales in the fiscal year ended March 31, 2023. Astaxanthin's antioxidant properties are believed to surpass many of the antioxidant properties of vitamin C, vitamin E, beta-carotene and other carotenoids. Independent scientific studies indicate that in certain models, natural astaxanthin has up to 100 times the antioxidant activity of vitamin E and 4 times the antioxidant activity of beta-carotene. In addition, a growing body of scientific literature suggests that natural astaxanthin has beneficial properties as an anti-inflammatory, with additional benefits for joint, skin, eye and immune health.

BioAstin® is generally recognized as safe ("GRAS") as determined by the United States Food and Drug Administration ("FDA"). Our all natural BioAstin® is cultivated without the use of herbicides or pesticides and is not genetically modified ("non-GMO"). In fiscal 2012, we applied for a new dietary ingredient ("NDI"), with the United States FDA, providing for a daily dosage of 12mg of astaxanthin which was reviewed without comment. BioAstin® holds several independent third-party quality certifications including: iGen Non-GMO, Gluten Intolerance Group's Gluten Free, Detox Project Glyphosate Free, and Informed Choice, for products produced up to and including the fiscal year ended March 31, 2023.

We produce natural astaxanthin from *Haematococcus pluvialis* microalgae grown in a combination of fresh water and a metered amount of nutrient-rich deep ocean water (containing essential trace elements), drawn from a depth of 2,000 feet below sea level, supplemented with nutrients. As these algae are extremely susceptible to contamination by unwanted algae, protozoa and amoebae, we developed a proprietary system known as the *PhytoDome Closed Culture System* or *PhytoDome CCS* to overcome this problem. Using these large-scale photobioreactors, we have generally been able to grow consistently large volumes of contaminant-free *Haematococcus* culture, subject to quarterly seasonality.

For the final stage of cultivation, the *Haematococcus* algae is transferred to open ponds where an environmental stress is applied causing the algae to form spores which accumulate high levels of astaxanthin. The astaxanthin crop in each pond is circulated by paddlewheels to keep an even blend of nutrients in suspension and a uniform exposure of the algae to sunlight, which is a major component of cultivation. Once ready for harvest, the media containing these spores is transported through underground pipes to our astaxanthin processing building where the culture media and algal spores are separated. Astaxanthin is produced in a batch-mode and each cultivation pond must be completely drained and thoroughly cleaned between cycles.

The harvested algal spores are dried to flakes or a fine powder. During processing, the spores are cracked in a proprietary system to assure efficient extraction of astaxanthin. Natural astaxanthin is processed further utilizing a high-pressure supercritical carbon dioxide extraction process at our facility in Kona. The resulting product is a water insoluble lipid extract used in the production of gelcaps.

All natural astaxanthin products undergo a prescribed set of microbiological food product tests to ensure safety and quality. We use third party contract manufacturers for the encapsulation and packaging of gelcaps. All third-party contract manufacturers are audit inspected by our Quality Department and are required to comply with the FDA GMP regulations. These contract manufacturers hold independent third party GMP certifications.

BioAstin® is sold primarily as a packaged consumer product through Nutrex Hawaii to natural product distributors, retailers and online channels, or directly to consumers. It is also sold in liquid lipid form as a raw ingredient to dietary supplement manufacturers, health food formulators and cosmetic manufacturers. BioAstin® gelcaps are sold in bulk quantities to international distributors. In 2012, we began selling our 12 milligram BioAstin® consumer product and in fiscal 2016, we introduced vegetarian formulas of both 4 and 12 milligram consumer products. In fiscal 2021, we introduced BioAstin® water dispersible powder in 1% and 2% concentrations for worldwide bulk sales. This powder can be dissolved in hot or cold water, ready-to-drink beverages, such as teas, fruit juices or carbonated beverages, as well as incorporated into powder mixes, due to its neutral flavor profile.

BioAstin® competes directly with similar products marketed by other manufacturers including Fuji Chemical of Japan, AlgaTechnologies of Israel and BGG of China. In the general category of dietary supplements, BioAstin® also competes with a variety of vitamins, dietary supplements and other antioxidant products available to consumers. The dietary supplement products market is highly competitive and includes international, national, regional and local producers and distributors, many of whom have greater resources than we have, and many of whom offer a greater variety of products.

The potential benefits of astaxanthin to human health are continuing to emerge. As one of the most potent and bioactive biological antioxidants found in nature, the number of potential roles of natural astaxanthin for human health is growing. Much research has been published in recent years on the beneficial roles of antioxidants in our health, in the aging process and on specific health conditions. The full efficacy of *BioAstin®* as a human nutraceutical supplement requires further significant clinical study. Independent antioxidant research and prior clinical trials show promising human applications.

Spirulina Products

We have been producing a strain of spirulina microalgae marketed as *Hawaiian Spirulina Pacifica*[®] since 1984. *Hawaiian Spirulina Pacifica*[®] represents approximately 36% of our net sales in the fiscal year ended March 31, 2023. *Hawaiian Spirulina Pacifica*[®] provides a plant-based, highly absorbable source of protein, natural beta-carotene, mixed carotenoids, B vitamins, gamma linolenic acid, essential amino acids and other phytonutrients.

Hawaiian Spirulina Pacifica® is produced in two forms: powder and tablets. Powder is used as an ingredient in dietary supplements and health beverages. Powder and tablets are consumed as a daily dietary supplement. Both forms are sold in bulk quantities and as packaged consumer products under the Nutrex Hawaii label and as private label consumer packaged products.

Hawaiian Spirulina Pacifica® is GRAS for addition to a variety of foods as determined by the United States Food and Drug Administration. Our all natural Hawaiian Spirulina Pacifica® is cultivated without the use of herbicides or pesticides, is Non-GMO Project verified, is certified Kosher by Organized Kashrus Laboratories of Brooklyn, New York and is certified Halal by the Islamic Food and Nutrition Council of America. Hawaiian Spirulina Pacifica® holds additional independent third-party quality certifications including: Gluten Intolerance Group's Gluten Free, Detox Project Glyphosate Free, and is certified Vegan through Vegan.org. It also holds the highest, Class A safety rating from the Dietary Supplement Information Expert Committee (DSI-EC) of the United States Pharmacopeia.

Our *Hawaiian Spirulina Pacifica*® is cultivated in fresh water and supplemented with other major required nutrients. We recycle the media and all fresh water input in our spirulina production process.

The spirulina crop in each pond is circulated by paddlewheels to keep an even blend of nutrients in suspension and a uniform exposure of the algae to sunlight, which is a major component of cultivation. Our ponds are engineered to maintain the right media depth for sunlight to permeate each crop completely, facilitating rapid growth. The design of our cultivation ponds promotes efficient growing conditions, allowing the *Hawaiian Spirulina Pacifica*® algae to reproduce rapidly. Each pond can be harvested, on average, in nine days.

Once ready for harvest, a majority of the spirulina algae are pumped from a pond to our processing building where the crop is separated from the culture media. The culture remaining in the ponds serves as an inoculum for the next growth cycle. Harvested spirulina is washed with fresh water and filtered before moving to the drying stage. Culture media separated from spirulina algae during processing are conserved and recycled. Our *Integrated Culture Biology Management* ("ICBM") technology for microalgae cultivation has proven to be a reliable and stable operating environment, allowing us to grow and harvest spirulina without significant contamination by unwanted microorganisms and without associated loss of productivity.

Hawaiian Spirulina Pacifica® powder is dried via our low-oxygen Ocean-Chill Drying process, thereby preserving high levels of antioxidant carotenoids and other nutrients sensitive to heat and oxygen. The rapid drying process results in a dark green powder. Spirulina powder is generally difficult to form into tablets, and most tablet manufacturers either add high amounts (from 10% to 30%) of inert substances to "glue" the tablet together or use a heat granulation process that destroys nutrients. In contrast, our Hawaiian Spirulina Pacifica® tablets contain a maximum of 2% of such substances and are produced in cold press compression tablet-making machines.

Each production lot of *Hawaiian Spirulina Pacifica*® is sampled and subjected to thorough quality control analyses including testing for moisture, carotenoids, minerals, color and taste, among others. Further, each lot of our *Hawaiian Spirulina Pacifica*® undergoes a prescribed set of microbiological tests to ensure the absence of contaminants, including total aerobic bacteria, coliform bacteria, Salmonella and E. coli. The *Hawaiian Spirulina Pacifica*® powder and tablets are packaged to extend shelf life and ensure product freshness. Our packaged consumer products are bottled and labeled by third party contractors in California. These contractors are subject to regular government inspections and hold Drug Manufacturing Licenses & Processed Food Registrations with the State of California Department of Health. These contract manufacturers hold independent third party GMP certifications.

The majority of our bulk spirulina is sold to international health food manufacturers and formulators, many of whom identify and promote our *Hawaiian Spirulina Pacifica*® in their products. Such customers purchase bulk powder or bulk tablets and package these products under their brand label for sale to the health and natural food markets in their countries. Some of the brands produced by these customers are marketed and sold in direct competition with the packaged consumer products sold through our Nutrex Hawaii subsidiary in international channels. In the domestic market, Nutrex Hawaii packaged consumer products are sold through natural product distributors, retailers and online channels, or directly to consumers. In selected international markets, we have exclusive sales distributors for both our bulk and packaged consumer products.

Our *Hawaiian Spirulina Pacifica*® products compete with a variety of vitamins, dietary supplements, other algal products and similar nutritional products available to consumers. The dietary supplement products category is highly competitive and includes international, national, regional and local producers and distributors, many of whom have greater resources than Cyanotech and many of whom offer a greater variety of products.

Our direct competition in the spirulina market is currently from Dainippon Ink and Chemical Company's Earthrise facility in California, Parry Nutraceuticals, a division of Murugappa Group of India and several farms in China.

In addition, there are numerous other smaller farms throughout the world. As one of the largest producers of spirulina, and the only producer of spirulina in Hawaii, our challenge is to increase our market share among customers who seek the high-quality products we produce while concurrently adjusting our product mix to meet our revenue and profitability targets.

Contract Extraction and Research and Development Services ("contract services")

As a result of capacity improvements that we made to our best-in-class, 1,000 bar, supercritical carbon dioxide extraction system, we began offering contract extraction services to third-party producers of astaxanthin biomass in fiscal 2019.

Due to our knowledge and expertise in cultivating microalgae combined with excess production capacity, we began offering R&D services to third-parties to cultivate their products in our ponds in fiscal 2023.

Total contract services revenue represented approximately 3% of our net sales in fiscal year ended March 31, 2023.

Major Customers

Two customers individually accounted for 34% and 6% of our total net sales for the fiscal year ended March 31, 2023. Two customers individually accounted for 22% and 19% of our total net sales for the fiscal year ended March 31, 2022. Two customers individually accounted for 19% and 17% of our total net sales for the fiscal year ended March 31, 2021.

Research and Development

Our expertise for many years has been in the development of efficient, stable and cost-effective production systems for microalgal products. We have learned production levels from our systems may not be sustainable across periods of days, weeks, or even months. Accordingly, we typically investigate each specific microalgae identified in the scientific literature for potentially marketable products and for solutions to production stability and efficiency challenges, and then strive to develop the technology to grow such microalgae on a commercial scale or to incorporate procedures or technology to improve production stability and efficiency. Successful microalgal product developments and technical solutions are highly uncertain and dependent on numerous factors, many beyond our control. Products and solutions or improvements that appear promising in early phases of development may be found to be ineffective, may be uneconomical because of manufacturing costs or other factors, may be precluded from commercialization due to the proprietary rights of other companies, or may fail to receive necessary regulatory approvals. Our research and development expenses were \$0.8 million, \$0.7 million and \$0.6 million for the years ended March 31, 2023, 2022 and 2021, respectively.

Patents, Trademarks and Licenses

We previously held four United States patents: one on aspects of our production methods and three relating to usage of our *BioAstin®* products. Our production method patent, which was directed to microalgae production technology, expired in April 2016. Our other three patents, which were utility patents relating to the use of astaxanthin in our *BioAstin®* products, expired in December 2019, February 2020 and April 2020.

Although we view our proprietary rights as important, we currently believe that a loss of patent rights is not likely to have a material adverse effect on our present business as a whole. Instead, our commercial results mainly depend upon our trade secrets, know-how, other non-patent proprietary rights, customer relationships, our climate and our location. As a result, we feel that our competitors will not be able to implement competing technology covered by our former patents without our same combination of non-patented attributes.

We have registered trademarks in the U.S. and in some foreign markets, such as the European Union. Our operations are not dependent upon any single trademark, although some trademarks are identified with a number of our products and are important in the sale and marketing of such products.

Regulations

Several governmental agencies regulate various aspects of our business and our products in the United States, including the Food and Drug Administration, the Federal Trade Commission ("FTC"), the Consumer Product Safety Commission, the State of Hawaii Department of Health, the Department of Agriculture, the Environmental Protection Agency ("EPA"), the United States Postal Service, state attorney general offices and various agencies of the states and localities in which our products are sold. We believe we are in compliance with all material government regulations which apply to our products and operations. However, we are not able to predict the nature of any future laws, regulations, interpretations or applications, nor can we predict what effect future changes would have on our business.

Our international customers are subject to similar governmental agency regulations in their various geographic regions. Compliance by our customers with such local regulations is beyond our control and we cannot predict their ability to maintain such compliance. However, we strive to assist our customers in meeting local regulations pertaining to the use and sale of our products whenever possible.

Environmental Matters

In 2002, we were issued under the Endangered Species Act ("ESA") an Incidental Take Permit ("ITP") by the United States Department of Interior Fish and Wildlife Service ("FWS"). The ESA defines "incidental take" as "incidental to, and not for the purpose of, the carrying out of an otherwise lawful activity." This permit authorizes incidental take of the endangered Hawaiian stilt (*Himantopus mexicanus knudseni*) that is anticipated to occur as a result of ongoing operations and maintenance at our Kona facility. As a mandatory component for the issuance of such permit, we submitted and maintain a Habitat Conservation Plan ("HCP") to ensure that the effects of the permitted action on listed species are adequately minimized and mitigated.

The HCP called for the creation of a nesting and breeding ground for the Hawaiian stilt to offset any take activity. We have complied with these requirements since 2002. The breeding program was so successful that the increase in the Hawaiian stilt population in the area became a potential hazard for the adjacent State airport facility. We disassembled the stilt habitat and are mitigating "take" by using standard non-lethal hazing devices to discourage nesting and breeding.

A requirement of the ITP is to provide insurance coverage for funding the project for the term of the ITP. Our insurance broker was unable to locate an underwriter who would provide such a bond. As permitted by law, the FWS waived this requirement recognizing that this HCP did not involve a significant capital expenditure. However, under Hawaii state law, no waiver provision is available. A new ITP was issued by the US Department of the Interior effective June 1, 2019; the permit expires June 1, 2035.

Employees

As of March 31, 2023, we employed 86 people. Of the total, 30 are involved in harvesting, production and quality, with the remainder in maintenance, shipping, sales, administration and support. None of our employees are subject to collective bargaining agreements. Management believes that its relations with employees are good.

Company Website and SEC Filings

Our corporate website is www.cyanotech.com. There we make available copies of Cyanotech documents, news releases and our filings with the Securities Exchange Commission, or the "SEC", including financial statements. Also included are copies of the Board of Directors Code of Conduct, the Company's Code of Conduct and Ethics, the Nominating and Corporate Governance Committee Charter, the Compensation Committee Charter and the Charter and Powers of the Audit Committee. We also maintain the website www.nutrex-hawaii.com dedicated to our wholly owned subsidiary, Nutrex Hawaii, Inc. On that website, Hawaiian Spirulina Pacifica® and BioAstin® are sold directly online. The information found on our websites, unless otherwise indicated, is not part of this or any other report we file or furnish to the Securities and Exchange Commission.

Item 1A. Risk Factors

You should carefully consider the risks described below which we believe are significant but not the only ones we face. Any of the following risks could have a material adverse effect on our business, financial condition and operating results. You should also refer to the other information contained in this report, including our financial statements and the related notes.

General economic conditions affecting the dietary supplement industry and various operating factors and the health of the economy in general may affect our business and operating results.

Our operations and financial performance may be affected by general economic conditions such as volatility and disruptions, diminished liquidity and credit market conditions and the level of consumer confidence. Inflation may affect our business by reducing consumer spending, which may impact sales growth and our underlying costs. We have observed increased inflation during the past year with varying impacts on our business. If increases in energy costs and inflationary trends continue, our business and operating results could be adversely affected. We may also experience adverse impacts to our business as a result of consumers' perceptions of the economy, and a decrease in their personal financial condition could hurt overall consumer confidence and reduce demand for our products. Consumers may reduce non-essential items, purchase value-oriented products or increasingly rely on dietary supplement discounters in an effort to secure their products, which could impact our operating results. In addition, adverse changes in the U.S. economy, consumer confidence and economic conditions could have an adverse effect on our operating results.

Variants of COVID-19 or other future public health crisis may adversely affect our business, results of operations, financial condition, liquidity, and cash flow.

Spread of variants related to COVID-19 or future pandemics and the measures taken in response could adversely impact our business, financial condition and results of operation and heighten many of the other risks described throughout this report, including but not limited to those relating to our operating strategy, supply chain, increased labor costs, availability of labor, disruption in operations, loss of key employees, our indebtedness, and general economic conditions. We may also experience a negative impact from government mandated restrictions and community response measures which may disrupt our business and thus negatively impact our financial results.

Our production of algae involves an agricultural process, subject to such risks as weather, disease, contamination, water availability and climate change.

The production of our algae products involves complex agricultural systems with inherent risks including weather, disease, and contamination. These risks are unpredictable and also include such elements as the control and balance of necessary nutrients and other factors. The efficient and effective cultivation of microalgae requires consistent light, warm temperatures, low rainfall and proper chemical balance in a very nutrient-rich environment.

If the chemical composition of a pond changes from its required balance, unusually high levels of contamination due to the growth of unwanted organisms or other biological problems may occur and would result in a loss of harvestable output. These often arise without warning and sometimes there are few or no clear indicators as to appropriate remediation or corrective measures. We believe that our technology, systems, processes and favorable growing location generally permit year-round harvest of our microalgal products in a cost-effective manner. However, environmental factors cannot be controlled in an open-air environment, therefore, we cannot, and do not attempt to, provide any form of assurance with regard to our systems, processes, location, or cost-effectiveness. In the event that we need to take steps to correct any chemical imbalance or contamination of our ponds, including by re-inoculating the ponds, such measures may not be effective and could interrupt production. To the extent that our production is negatively impacted by environmental factors, we may be unable to fill large orders for one or more months until such time that production improves. The efficient and effective cultivation and processing of microalgae requires a consistent supply of fresh water and cold ocean water. If the availability and or quality composition of water changes from its required levels, problems may occur that could result in a loss of harvestable output.

Hawaii from time to time has experienced shortages of water, electric power and fuels. Future shortages could disrupt our operations and could result in additional expense. Our astaxanthin is cultivated in a combination of fresh water and deep ocean water. In the case of deep ocean water, although abundantly available at this location, the facility to pump and deliver the water to our location is owned by the State of Hawaii. The State of Hawaii sets the price for deep ocean water annually based on its cost to deliver the water. Any significant increase in the price could adversely affect our business. The availability and price of water could also be impacted by a significant population growth in the region as well as throughput constraints on the water delivery infrastructure. In June 2017, several fresh-water pumps owned by the County of Hawaii were disabled, and the county instituted restrictions on fresh water supply. We have adopted several water savings strategies to mitigate this challenge, but there is no guarantee that they will be effective or that they will not have unforeseen negative effects on the growth of spirulina. If we are unable to obtain enough fresh water at reasonable prices to cultivate our products, our business could be negatively impacted.

Climate change has not impacted weather at our location on Hawaii Island. We have experienced both dry and wet periods of weather, but it has not affected production. However, there can be no guarantee that future climate change will not affect our production.

There is risk in operating entirely in one business segment such as the cultivation and production of microalgae at a single production facility.

Single location agricultural and production facilities do not provide the protections and assurances afforded by operations in two or more widely separated locations. Our single location in Hawaii is susceptible to unfavorable weather patterns and catastrophic natural disasters such as earthquakes, tsunamis, hurricanes and volcanic eruptions. In the event of a natural disaster or localized extended outages of critical utilities or transportation systems, we could experience a significant business interruption. Also, a single agricultural facility provides limited biologic diversity protection against invasive, mutant, or harmful organisms.

Our facilities in Hawaii are located adjacent to a major airport, and an aircraft disaster could disrupt our operations.

Our production facility and corporate headquarters in Hawaii are located adjacent to the Keahole International Airport. In the event of an aircraft disaster, we could experience a significant business interruption, including loss of water, electrical and communication services as well as inability to access our facilities.

Unfavorable publicity or consumer perception of our products and any similar products distributed by other companies could have a material adverse effect on our business.

The dietary supplements market is highly dependent upon consumer perception regarding the safety, efficacy and quality of dietary supplements. Consumer perception of our products can be significantly influenced by scientific research and findings, as well as by national media attention and other publicity regarding the consumption of dietary supplements. There can be no assurance that future research or publicity will be favorable to the dietary supplements market or any product in particular, or consistent with earlier publicity. Our dependence on consumer perception means that any adverse reports, findings or publicity, whether or not accurate or with merit, could have a material adverse effect on the demand for our products and on our results of operations, cash flow and financial condition.

We may become subject to legal proceedings.

We may become subject to claims and legal proceedings in the ordinary course of business. The costs of such proceedings could vary from quarter to quarter based on the status of the proceedings and could have a material impact on our results in any given quarter.

The dietary supplement products industry is extremely competitive. Many of our significant competitors have greater financial and other resources than we do, and one or more of these competitors could use their greater resources to gain market share at our expense.

The dietary supplement products market includes international, national, regional and local producers and distributors, many of whom have substantially greater production, financial, research and development, personnel and marketing resources than we do, and many of whom offer a greater variety of products.

As a result, each of these companies could compete more aggressively and sustain that competition over a longer period of time than we could. Our lack of resources relative to our significant competitors may cause us to fail to anticipate or respond adequately to development of new products and changing consumer demands and preferences or may cause us to experience significant delays in obtaining or introducing new or enhanced products. These failures or delays could reduce our competitiveness and cause a decline in our market share and sales. Increased competition in our industry could result in price reductions, reduced gross profit margin or loss of market share, any of which could have a material effect on our business, results of operations and financial condition.

We depend heavily on the unique abilities and knowledge of our officers and key personnel. If we are unable to recruit and retain key personnel, we may be unable to achieve our goals.

Our success depends, to a significant extent, upon the services of our officers and key personnel, including qualified management, professional, scientific, and technical operating staff. The loss of any such personnel or the delay in the replacement of such personnel could significantly delay the achievement of our business objectives and could adversely affect our ability to do business or provide needed management. Attracting permanent skilled executives in Hawaii can be difficult due to limited local qualified applicants. If we are unable to attract qualified candidates, or if the search process takes longer than expected, it could adversely impact our business.

Labor shortages could restrict our ability to operate or grow our business or result in increased labor costs that could adversely affect our results of operations.

Our success depends in large part on our ability to attract, retain, train, manage and engage employees. The COVID-19 pandemic has negatively affected the labor market for employers. Post pandemic, labor shortages have affected the ability to hire or re-hire employees during the ongoing recovery from the downturn caused by the pandemic. For a large percentage of our business, our activities need to be performed in person at Kona. Our labor pool on the island of Hawaii is limited. Because payroll costs are a major component of the operating expenses a shortage of labor could also require higher wages that would increase labor costs, which could adversely affect our results of operations.

Our operations are vulnerable because we have limited personnel and redundancy and backup systems in our data management function.

Our internal order, inventory and product data management system is an electronic system through which orders are placed for our products and through which we manage product pricing, shipment, returns and other matters. This system's continued and uninterrupted performance is critical to our day-to-day business operations. Despite our precautions, unanticipated interruptions in our computer and telecommunications systems have, in the past, caused problems or stoppages in this electronic system. These interruptions, and resulting problems, could occur again in the future. We also have limited personnel available to process purchase orders and to manage product pricing and other matters in any manner other than through this electronic system. Any significant interruption or delay in the operation of this electronic management system could cause a decline in our sales and profitability.

The loss of a major customer, or a change in their procurement practices, could result in a material reduction in our revenues and profitability.

Our top ten customers generated 66% and 74% of our net sales for fiscal years 2023 and fiscal 2022, respectively. Two customers individually accounted for 34% and 6%, and 22% and 19% of our total net sales in the fiscal years ended March 31, 2023 and 2022, respectively. Accordingly, the loss of one or more of those customers or a substantial decrease in such customers' purchases from us could result in a material reduction in our revenues and profitability.

We could be subject to breaches of our information technology systems, which could damage our reputation and customer relationships. Such breaches could subject us to significant reputational, financial, legal, and operational consequences.

Our business relies on information systems to obtain, rapidly process, analyze and manage data to, among other things, facilitate the purchase and distribution of inventory items through numerous distributors; receive, process and ship orders on a timely basis; accurately bill and collect from customers; process payments to suppliers; and provide technical support to our customers.

A cyber-attack that bypasses our security, or employee error, malfeasance or other disruptions that cause a security breach could lead to a material disruption of our information systems and/or the loss of business information. Such an attack could result in, among other things, the theft, destruction, loss, misappropriation or release of confidential data and intellectual property; operational or business delays; liability for a breach of personal information belonging to our customers or our employees; and damage to our reputation any of which could have a material adverse effect on our business, financial condition, and results of operations. In the event of an attack, we would be exposed to a risk of loss or litigation and possible liability, including under laws that protect the privacy of personal information.

Compliance with new and existing governmental regulations could increase our costs significantly and adversely affect our results of operations.

The processing, formulation, manufacturing, packaging, labeling, advertising and distribution of our products are subject to federal laws and regulation by one or more federal agencies, including the FDA, the FTC, the United States Department of Agriculture ("USDA") and the EPA. These activities are also regulated by various state, local and international laws and agencies of the states and localities in which our products are sold. Regulations may prevent or delay the introduction, or require the reformulation, of our products, which could result in lost sales and increased costs to us. A regulatory agency may not accept the evidence of safety for any new ingredients that we may want to market, may determine that a particular product or product ingredient presents an unacceptable health risk, may determine that a particular statement of nutritional support on our products or that parties use on the products we manufacture for them, or that we want to use on our products or that third parties want to use on the products we manufacture for them, is an unacceptable drug claim or an unauthorized version of a food "health claim". A regulatory agency may determine that particular claims are not adequately supported by available scientific evidence. Any such regulatory determination would prevent us from marketing particular products or using certain statements on those products, which could adversely affect our sales of those products.

Additional or more stringent laws and regulations of dietary supplements and other products have been considered from time to time. These developments could require reformulation of some products to meet new standards, recalls or discontinuance of

some products not able to be reformulated, additional record-keeping requirements, increased documentation of the properties of some products, additional or different labeling, additional scientific substantiation, or other new requirements. Any of these developments could increase our costs significantly. In addition, regulators' evolving interpretation of existing laws could have similar effects.

If we fail to comply with the reporting obligations of the Exchange Act and Section 404 of the Sarbanes Oxley Act or fail to maintain adequate internal control over financial reporting, our business, financial condition, and results of operations, and investors' confidence in us, could be materially and adversely affected.

As a public company, we are required to comply with the periodic reporting obligations of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including preparing annual reports, quarterly reports, and current reports. Our failure to prepare and disclose this information in a timely manner and meet our reporting obligations in their entirety could subject us to penalties under federal securities laws and regulations of The Nasdaq Stock Market LLC ("NASDAQ"), expose us to lawsuits, and restrict our ability to access financing on favorable terms, or at all.

In addition, pursuant to Section 404 of the Sarbanes Oxley Act, we are required to evaluate and provide a management report of our systems of internal control over financial reporting. During the course of the evaluation of our internal control over financial reporting, we could identify areas requiring improvement and could be required to design enhanced processes and controls to address issues identified through this review. This could result in significant delays and costs to us and require us to divert substantial resources, including management time, from other activities. In addition, if we fail to maintain the adequacy of our internal control over financial reporting, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with the Sarbanes Oxley Act. Moreover, effective internal controls are necessary for us to produce reliable financial reports and are important to help prevent fraud. Any failure to maintain compliance with the requirements of Section 404 on a timely basis could result in the loss of investor confidence in the reliability of our financial statements, which in turn could, negatively impact the trading price of our stock, and adversely affect investors' confidence in the Company and our ability to access capital markets for financing.

Our two largest shareholders own a substantial portion of our common stock and could exert substantial influence over our business, particularly if any of them choose to work together.

Our two largest shareholders collectively own approximately 34.3% of our common stock. According to publicly filed beneficial ownership reports, as of the respective dates of such reports, Michael Davis, chairman of our board of directors, beneficially owned 1,234,598 of shares representing a 19.7% beneficial ownership and the Rudolf Steiner Foundation ("RSF"), beneficially owned 917,133 shares representing a 14.6% beneficial ownership. The shares held by RSF were originally donated by a foundation affiliated with Mr. Davis or acquired from the proceeds of donations made by that foundation. In addition, Mr. Davis and RSF filed a Schedule 13D with the SEC on March 17, 2017, announcing the formation of a "group" among the two of them and certain of Mr. Davis' affiliates under Section 13 of the Exchange Act. As part of the agreement between Mr. Davis and RSF, RSF has agreed not to sell, transfer or otherwise dispose of any of its shares in the Company unless RSF provides concurrent written notice to an affiliate of Mr. Davis and the Company at least three days prior to the consummation of any such sale, transfer or other disposition. In addition, on April 12, 2019, the Company borrowed \$1.5 million from an entity affiliated with Mr. Davis pursuant to an unsecured promissory note. In April 2021, the Company amended the loan, which extended the expiration to April 2024, converted \$500,000 into revolving loans, adjusted the interest rate to reflect a floor of 5%, and granted a security interest in substantially all of the Company's personal property assets, subject to limited exceptions. In December 2022, the Company amended the promissory note which extended the maturity to April 2025 and increased the revolving line amount from \$0.5 million to \$1.0 million. As of both March 31, 2023 and 2022, \$1.0 million remained due under this promissory note, and at March 31, 2023 and 2022, \$0.5 million and \$0 were outstanding on the revolving line, respectively.

Our significant stockholders, particularly if they choose to work together, may have the ability to exert significant influence over our business policies and affairs on matters submitted to our stockholders for approval, such as the election or removal of directors, amendments to our certificate of incorporation, the approval of a business combination or certain corporate financing activities. The interests of our significant stockholders could differ from those of other stockholders in ways that could be adverse to the interests of other shareholders. For example, this concentration of ownership could have the effect of delaying or preventing a change of control of our company even if such a transaction is at a premium to the prevailing market price of our common stock and is supported by other shareholders. Concentration of ownership could also harm the market price of our common stock because investors may perceive disadvantages in owning stock in a company that a substantial portion of common stock is controlled by a small number of stockholders.

Some provisions of our charter documents and Nevada law may discourage an acquisition of us by others, even if the acquisition may be in the best interest of our stockholders.

Provisions in our Restated Articles of Incorporation and Amended and Restated Bylaws, as well as certain provisions of Nevada law, could make it more difficult for a third-party to acquire us, even if doing so may benefit our stockholders. These provisions include the authorization of "blank check" preferred stock, the rights, preferences and privileges of which may be

established and shares of which may be issued by our board of directors at its discretion from time to time and without stockholder approval.

Because we are incorporated in Nevada, we may be governed by Nevada's statutes governing combinations with interested stockholders and control share acquisitions, which may discourage, delay or prevent someone from acquiring us or merging with us, whether or not it is desired by or beneficial to our stockholders. We have not opted out of the application of these laws but may elect to opt out in the future. Under Nevada's laws governing combinations with interested stockholders, a Nevada corporation may not, in general, engage in certain types of business combinations with any beneficial owner of 10% or more of the corporation who at any time within two years immediately prior to the date in question was the beneficial owner of 10% or more of the corporation's voting shares, unless the holder has held the stock for two years or the board of directors approved the beneficial owner's acquisition of its shares, the board of directors approved the transaction before the beneficial owner acquired its shares, or holders of at least a majority of the outstanding voting power approve the transaction after the beneficial owner acquired its shares. In addition, Nevada's control share acquisition laws prohibit a purchaser of the shares of an issuing corporation from voting those shares, under certain circumstances and subject to certain limitations, after crossing specified threshold ownership percentages, unless the purchaser obtains the approval of the issuing corporation's disinterested stockholders.

Any provision of our Restated Articles of Incorporation or Amended and Restated Bylaws or of Nevada law that is applicable to us that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock in the event that a potentially beneficial acquisition is discouraged and could also affect the price that some investors are willing to pay for our common stock.

A significant or prolonged economic downturn could have a material adverse effect on our results of operations.

Our results of operations are affected by the business activity of our customers who in turn are affected by the level of economic activity in the industries and markets that they serve. A decline in the level of business activity of our clients or the economy as a whole could have a material adverse effect on our revenues and profit margin.

The global cost of oil derived energy impacts us in several ways, and it may hinder our efforts to achieve profitability. Oil prices primarily impact us through the costs of electricity, transportation, materials and supplies which are tied to the cost of oil either directly or indirectly. The return of a high cost of oil on a global basis may signal a prolonged economic downturn resulting in a material adverse effect on our business.

Our quarterly operating results may vary from quarter to quarter, which may result in increased volatility of our share price.

We have experienced, and may in the future continue to experience, fluctuations in our quarterly operating results. These fluctuations could reduce the market price of our common stock. Factors that may cause our quarterly operating results to vary include, but are not limited to:

- weather-related cultivation difficulties;
- availability and cost of fresh water and ocean water;
- any non-routine legal fees;
- fluctuations in customer demand;
- business decisions of our customers regarding orders for our products;
- changes in energy costs;
- changes in raw material costs;
- production problems which we cannot solve technically or economically;
- contamination of our cultivation and production facilities;
- effects of weather on our ability to meet customer demand;
- timing of promotional activities;
- the introduction of new products by us or our competitors;
- changes in our pricing policies or those of our competitors;

- changes in seasonal and other trends in our customers' buying patterns;
- changes in government regulation, both domestic and foreign;
- fluctuation in foreign currency exchange rates;
- global economic and political conditions and related risks, including the impacts of a global pandemic and acts of terrorism; and
- other factors beyond our control.

A significant portion of our expense levels are relatively fixed. If net sales are below expectations in any given period, the adverse impact on results of operations may be magnified by our inability to reduce expenses quickly enough to compensate for the sales shortfall.

Our global operations expose us to complex management, foreign currency, legal, tax and economic risks, which we may not be able to address quickly and adequately.

Our products are marketed in a number of countries around the world. For the year ended March 31, 2023, approximately 27% of our net sales were from sales to foreign customers. As a result, we are subject to a number of risks which include, but are not limited to:

- the burden of complying with a wide variety of national and local laws;
- potentially longer payment cycles for foreign sales;
- restrictions (government and otherwise) on the movement of cash;
- the absence in some jurisdictions of effective laws protecting our intellectual and proprietary property rights, or of enforcement of such laws where they do exist;
- changes in government regulations, both domestic and foreign, including changes in trade tariffs;
- global economic and political conditions and related risks, including acts of terrorism; and
- fluctuations in foreign currency exchange rates.

Climate change initiatives could materially and adversely affect our business, financial condition, and results of operations.

Our manufacturing processes require that we purchase significant quantities of energy from third parties, which results in the generation of greenhouse gases, either directly onsite or indirectly at electric utilities. Both domestic and international legislation to address climate change by reducing greenhouse gas emissions and establishing a price on carbon could create increases in energy costs and price volatility. Considerable international attention is now focused on development of an international policy framework to address climate change. Proposed and existing legislative efforts to control or limit greenhouse gas emissions could affect our energy source and supply choices as well as increase the cost of energy and raw materials derived from sources that generate greenhouse gas emissions. If our suppliers are unable to obtain energy at a reasonable cost in the future, the cost of our raw materials could be negatively impacted which could result in increased manufacturing costs.

If we are unable to protect our intellectual property rights or if we infringe upon the intellectual property rights of others our business may be harmed.

We regard our proprietary technology, trade secrets, trademarks and similar intellectual property as important and we rely on a combination of trade secret, contract, copyright and trademark law to establish and protect our rights in our products and technology. However, there can be no assurance that we will be able to protect our technology adequately or that competitors will not be able to develop similar technology independently, particularly following the recent expiration of our patents relating to the use of astaxanthin. In addition, the laws of certain foreign countries may not protect our intellectual property rights to the same extent as the laws of the United States. Litigation in the United States or abroad may be necessary to enforce intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. Such litigation, even if successful, could result in substantial costs and diversion of resources and could have a material adverse effect on our business, results of operations and financial condition. Additionally, if any such claims are asserted against us, we may seek to obtain a license under the third party's intellectual property rights. There can be no assurance, however, that a license would be available on terms acceptable or favorable to us, if at all.

Our insurance liability coverage is limited and may not be adequate to cover potential losses.

In the ordinary course of business, we purchase insurance coverage (e.g., property and liability coverage) to protect us against loss of or damage to our properties and claims made by third parties and employees for property damage or personal injuries. However, the protection provided by such insurance is limited in significant respects and, in some instances, we have no coverage and certain of our insurance policies have substantial "deductibles" or limits on the maximum amounts that may be recovered. For example, if a volcanic eruption, tsunami, earthquake or other catastrophic natural disaster should occur, we may not be able to recover all facility restoration costs and revenues lost from business interruption. In addition, we maintain product liability insurance in limited amounts for all of our products involving human consumption; however, broader product liability coverage is prohibitively expensive. Insurers have also introduced new exclusions or limitations of coverage for claims related to certain perils including, but not limited to, mold and terrorism. If a series of losses occurred, such as from a series of lawsuits in the ordinary course of business each of which were subject to the deductible amount, or if the maximum limit of the available insurance were substantially exceeded, we could incur losses in amounts that would have a material adverse effect on our results of operations and financial condition.

Our ability to develop and market new products or modify existing products and production methods may be adversely affected if we lose the services of or cannot replace certain employees knowledgeable in advanced scientific and other fields.

Our products are derived from and depend on proprietary and non-proprietary processes and methods founded on advanced scientific knowledge, skills, and expertise. If the services of employees knowledgeable in these fields are lost and cannot be replaced in a reasonable time frame at reasonable costs, our ability to develop and market new products or modify existing products and production methods would be adversely impacted. At the same time, regulatory compliance surrounding our products and financial matters generally requires a basic knowledge and level of expertise related to production, quality assurance, and financial control. If we lose the services or cannot reasonably replace employees who have the necessary knowledge and expertise our ability to remain in regulatory compliance could be adversely affected.

We may need to raise additional capital in the future which may not be available.

We believe our cash to be provided from operations will be sufficient to meet our working capital and operating requirements for at least the next 12 months, but we may experience unexpected reductions in sales due to changes in customer demand, customer purchasing practices, or other factors described in these Risk Factors. If we have an unexpected decline in sales, or we have other unexpected capital needs, we may need to raise additional funds. There is no guarantee that we will be able to secure such funding on acceptable terms, if at all. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our then current stockholders may be reduced. If we raise additional funds through the issuance of convertible debt securities, or through additional debt or similar instruments, such securities, debt, or similar instruments could have rights senior to those of our common stockholders and such instruments could contain provisions restricting our operations. If adequate funds are not available to satisfy either short-term or long-term capital requirements, we may be required to limit operations with adverse results.

We may not be able to refinance, extend or repay our senior indebtedness, which would have a material adverse effect on our financial condition and ability to continue as a going concern.

As of March 31, 2023, we owed First Foundation Bank (the "Bank") approximately \$3.5 million under a Term Loan Agreement dated August 14, 2012, which requires monthly payments of principal and interest until its maturity on August 14, 2032. If we are unable to make payments when due under this agreement, or repay this obligation at maturity, and we are otherwise unable to extend the maturity date or refinance this obligation, we would be in default. We cannot provide any assurances that we will be able to generate the necessary amount of capital to make payments as they become due, or to repay this obligation, or that we will be able to extend the maturity date or otherwise refinance this obligation. In the event of default, the Bank would have the right to exercise its rights and remedies to collect, which would include foreclosing on our assets. Accordingly, a default would have a material adverse effect on our business and, if the Bank exercises its rights and remedies, we would likely be forced to seek bankruptcy protection.

In addition, the agreements governing our indebtedness include certain debt service and other financial covenants that we must satisfy. In previous years, we have defaulted on certain of these covenants and have received waivers of the defaults from the Bank. As of March 31, 2023, the Company was not in compliance with the required debt service coverage ratio, but the Bank provided a waiver of the default on June 22, 2023 and implemented an immediate freeze on any and all further advances of the Credit Agreement through the maturity date, with an outstanding balance in the amount of \$1,770.000 as of June 21, 2023. As of March 31, 2022, we were in compliance with all of the required annual financial and debt covenants. We cannot provide any assurance that the Bank would provide us with a waiver should we not be in compliance in the future. A failure to maintain compliance along with our lender not agreeing to a waiver for the non-compliance would cause the outstanding borrowings to be in default and payable on demand which would have a material adverse effect on us and our ability to continue as a going concern.

We have incurred significant losses in the past. If we incur significant losses in the future, we will experience negative cash flow which may hamper current operations and prevent us from sustaining or expanding our business.

As of March 31, 2023, we had an accumulated deficit of approximately \$17.6 million, primarily as a result of prior year losses. Historically, we have relied upon cash from operations and financing activities to fund all of the cash requirements of our business. However, no assurance can be provided that we will return to profitability and, even if we do return to profitability, extended periods of profitability and net income do not assure positive cash flows. Future periods of net losses from operations could result in negative cash flow, may cause us to default on certain covenants in our existing debt instruments and may hamper ongoing operations and prevent us from sustaining or expanding our business. We cannot assure you that we will achieve, sustain or increase profitability on a quarterly or annual basis in the future. If we do not achieve, sustain or increase profitability, our business will be adversely affected and our stock price may decline.

Our recurring losses from operations resulting in net cash outflows from operating activities, as well as current cash and liquidity projections, raise substantial doubt about our ability to continue as a going concern.

Based on our recurring losses from operations resulting in net cash outflows from operating activities for the fiscal year ended March 31, 2023, as well as current cash and liquidity projections, we have concluded that there is substantial doubt about our ability to continue as a going concern and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets, or the amounts and classification of liabilities that may result if we do not continue as a going concern. You should not rely on our consolidated balance sheet as an indication of the amount of proceeds that would be available to satisfy claims of creditors, and potentially be available for distribution to shareholders, in the event of liquidation.

Our stock price is volatile, which could result in substantial losses for investors purchasing shares of our common stock.

Stock markets have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock. In addition, the average daily trading volume of the securities of small companies can be very low. Limited trading volume of our stock may contribute to its future volatility. Price declines in our common stock could result from general market and economic conditions and a variety of other factors, including any of the following:

- volatility resulting from minimal trading activity;
- changes in market valuations of similar companies;
- stock market price and volume fluctuations generally;
- economic conditions specific to the dietary supplement products industry;
- economic conditions tied to global resource markets, such as fuel costs;
- announcements by us or our competitors of new or enhanced products or of significant contracts, acquisitions, strategic relationships, joint ventures or capital commitments;
- fluctuations in our quarterly or annual operating results;
- changes in our pricing policies or the pricing policies of our competitors;
- changes in foreign currency exchange rates affecting our product costs, pricing or our customers markets;
- regulatory developments effecting our specific products or industry; and
- additions or departures of key personnel.

The price at which you purchase shares of our common stock may not be indicative of the price that will prevail later in the trading market. You may be unable to sell your shares of common stock at or above your purchase price, which may result in substantial losses to you. As of March 31, 2023, there were approximately 6.3 million shares of our common stock outstanding and stockholders holding at least 5% of our stock, individually or with affiliated persons or entities, collectively beneficially owned or controlled approximately 34.3% of such shares. Sales of large numbers of shares by any of our large stockholders could adversely affect our trading price, particularly given our relatively small historic trading volumes. If stockholders holding shares of our common stock sell, indicate an intention to sell, or if it is perceived that they will sell, substantial amounts of their common stock in the public market, the trading price of our common stock could decline. Moreover, if there is no active trading market or if the volume of trading is limited, holders of our common stock may have difficulty selling their shares.

If we fail to maintain compliance with the continued listing standards of Nasdaq, our common stock may be delisted and have a material adverse effect on our business, results of operations, financial condition, liquidity and stock price.

On May 2, 2023, we were notified by Nasdaq that the Company is not in compliance with Nasdaq's Listing Rule 5550(a)(2), as the minimum bid price of our common stock had been below \$1.00 per share for 30 consecutive business days. On June 15, 2023, we received a notification letter from Nasdaq that we had regained compliance with Listing Rule 5500(a)(2), and we are in compliance with all applicable listing standards, but we can make no assurances that we will be able to maintain compliance with the continued listing standards of Nasdaq in the future.

If we are unable to cure any event of noncompliance with any continued listing standard of Nasdaq within the applicable timeframe and other parameters set forth by Nasdaq, it may result in the delisting of our common stock from Nasdaq, which could negatively impact the trading price, trading volume, liquidity, availability of price quotations, news and analyst coverage of, and have other material adverse effects on, our common stock. Additionally, delisting may adversely impact the perception of the Company's financial condition and cause reputational harm with investors and parties conducting business with the Company. The perceived decreased value of employee equity incentive awards may reduce their effectiveness in encouraging performance and retention. Each of these occurrences, individually or in the aggregate, could have a material adverse effect on our business.

Recent European Union regulations include stringent requirements for health claims on food and supplement labels.

The European Union has harmonized standards among Member States for health claims on food and supplement labels. The scientific assessment of health claims is performed by the European Food Safety Authority ("EFSA"), an advisory panel to the European Commission. The European Commission will consider the opinions of EFSA in determining whether to include a health claim on a Positive List of permissible claims. Once the list is published, only health claims for ingredients and products included on the list may be used in promotional materials for products marketed and sold in the European Union. This could severely decrease or limit the marketability for our products in this market area. We have implemented strategies that we believe will allow for continued and increasing sales of our products in the European Union. However, there can be no guarantee that such strategies will be successful.

Item 2. Properties

Our principal facility and corporate headquarters are located at the Natural Energy Laboratory of Hawaii Authority ("NELHA") at Keahole Point in Kailua-Kona, Hawaii. It encompasses approximately 96 fully developed acres containing microalgal cultivation ponds, processing facilities, research and quality control laboratories, and sales and administrative offices. The property is leased from the State of Hawaii under a 40-year commercial lease expiring in 2035 and a 19-year commercial lease expiring in 2037. Our lessee interest in the NELHA leases is encumbered by a mortgage securing approximately \$3.5 million of debt (see Note 5 in the notes to our consolidated financial statements). If we were to require additional land for expansion, we believe that there is sufficient available land at NELHA, provided a revised or additional NELHA lease can be negotiated with acceptable terms. Under the terms of the existing NELHA leases, we could be required to remove improvements at the end of the lease terms. Based upon our analysis, we do not believe the projected cost for such removal to be reasonably estimable, and we also believe we are unlikely to incur such costs, given historical practices. However, conditions could change in the future and it is not possible to predict such changes or estimate any impact thereof. We also rent warehouse space in Rancho Cucamonga, California.

Item 3. Legal Proceedings

From time to time, the Company may be involved in litigation and investigations relating to claims and matters arising out of its operations in the normal course of business. There were no significant legal matters outstanding at March 31, 2023.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock is listed and traded on the NASDAQ Capital Market under the symbol "CYAN". The approximate number of holders of record of our common stock was 389 as of June 15, 2023.

We are prohibited from declaring any common stock dividends without the prior written consent of a lender per the conditions of an existing term loan agreement with such lender. We have never declared or paid cash dividends on our common stock. We currently do not anticipate paying any cash dividends on common stock.

The following table sets forth the Company's common shares authorized for issuance under equity compensation plans as of March 31, 2023:

	Common shares to be issued upon exercise of options and restricted stock units outstanding (in shares)	Weighted- average exercise price of outstanding options and restricted stock units	Common shares available for future grant under equity compensation plans (in shares)
Equity compensation, plans approved by security holders	323,334	\$ 2.25	1,104,643

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to provide a reader of our financial statements with a narrative of our financial condition, results of operations, liquidity and certain other factors that may affect our future results from the perspective of management.

Our MD&A should be read in conjunction with the consolidated financial statements and notes thereto appearing elsewhere in this Form 10-K. A more comprehensive description of our products and markets for such products is provided in Part I. Item 1. Business.

Overview

We are an agricultural company and a world leader in the production of natural products derived from microalgae grown in complex and intricate agricultural systems on the Kona coast of Hawaii. We have a core competency in cultivating and processing microalgae into high-value, high-quality natural products for the human dietary supplement market. We are unique in that our microalgae are grown in open ponds which, similar to natural land and plant-based horticulture, require favorable weather conditions. In our case these conditions include consistent light, warm temperatures and low rainfall to achieve optimum production. Equally important is a nutrient-rich environment, which requires the proper control and balance of necessary nutrients to support growth and yields. Greater variability in these environmental factors more commonly occur in our winter growing season.

Our products are sold as consumer-packaged goods through natural products distributors, retailers and online channels, and direct to consumers, primarily in the U.S., as well as in bulk form to manufacturers, formulators and distributors worldwide in the health foods, nutraceuticals and dietary supplement markets.

We will continue to focus on growing the market for our high quality, higher margin consumer products by emphasizing the higher nutritional content of our *Hawaiian Spirulina Pacifica*® and the multiple health benefits of our *BioAstin*® *Hawaiian Astaxanthin*®. We generated 27%, 32% and 34% of our revenues outside of the United States during the years ended March 31, 2023, 2022 and 2021, respectively. Competing in a global marketplace, we are influenced by the general economic conditions of the countries in which our customers operate, including adherence to our customers' local governmental regulations and requirements. Since substantially all sales are made in U.S. currency, we have no material foreign exchange exposure.

Our production levels have a significant impact on our gross profit margin, as well as our ability to meet customer demand. Because our processes are agricultural and a large percentage of our production costs are fixed, it is important to maintain production volumes to support the minimal resource levels required to sustain a large-scale open culture agricultural facility. Our production costs include customary variables such as availability and costs of personnel, raw materials, energy, water and freight. These variables fluctuate based on changes in the local, national and world economies. More complex variables include cultivation methods, feeding formulations and harvesting processes, all of which include efforts to anticipate the extent of weather and environmental events and make timely and sufficient adjustments. Although the variability of such costs cannot be fully anticipated, we have focused increased effort in this area in order to produce both spirulina and astaxanthin at levels sufficient to fully absorb production costs into inventory.

Fresh water is critical for our natural astaxanthin and spirulina production, and while we have not experienced any long-term constraint on fresh water availability, future availability could be negatively impacted by significant growth in the local population as well as by throughput constraints on the water delivery infrastructure owned by the County of Hawaii. Given the criticality of fresh water to our operations and the community, we recycle fresh water where possible and have developed additional water recycling systems in our efforts to utilize fresh water efficiently. Both fresh and sea water require electricity for pumping; and the cost of our electricity depends on the cost of fuel which is, in turn, tied to the global price of crude oil.

Complex biological processes in the cultivation and processing of our microalgae are influenced by factors beyond our control—the weather, for example. As a result, we cannot assure that adequate production levels will be consistent period over period. To the extent that our production levels are not sufficient to absorb these costs on a period basis, we recognize abnormal and non-inventoriable production costs, including fixed cost variances from normal production capacity, as an expense in the period incurred. Abnormal amounts of freight, handling costs and wasted material (spoilage) are recognized as current-period charges and fixed production overhead costs are allocated to inventory based on the normal capacity of production facilities. Normal capacity is defined as the production expected to be achieved over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. To offset increased production costs, we seek ways to increase production efficiencies in volume yield, potency, and quality consistent with our commitment to produce high-value, high-quality products.

We utilize several third-party contractors for encapsulation of our gelcaps and for the packaging of our finished products. Although these services are available from a limited number of sources, we believe that we have the ability to use other parties if any of the current contractors become unavailable.

During fiscal year 2023, we experienced overall lower demand resulting from higher inflation and consumers reducing spend in non-discretionary areas. Earlier in the fiscal year, our international customers delayed, or reduced orders based on the appreciation of the U.S. dollar impacting exchange rates. Given the lower demand combined with global supply chain constraints experienced in fiscal year 2022, our bulk customers continue to have higher than normal inventory levels. For our packaged sales, in addition to the macroeconomic impacts, noted above, there was a decrease in sales due to the timing of shipments to a significant customer in the prior year. As a result, in the current fiscal year, consumer movement was not fully reflected in the packaged sales.

Fiscal 2023 Summary:

- Net sales for the year were \$23.2 million, a decrease of \$12.8 million, or 35.6% from the prior year, driven primarily by a \$9.6 million, or 53.6%, decrease in spirulina sales and \$3.2 million, or 18.2%, decrease in astaxanthin sales.
- The pretax loss for the year was \$3.4 million compared to pretax income of \$2.2 million in fiscal 2022.
- Cash at March 31, 2023 decreased by \$1.6 million compared to last year primarily due to the net loss for the year, an increase in inventories and investments in capital expenditures, offset by draws on the line of credit and line of credit related party.

Fiscal 2022 Summary:

- Net sales for the year were \$36.0 million, an increase of \$3.6 million, or 11.2% from the prior year, driven primarily by a \$3.3 million, or 22.1%, increase in spirulina sales and \$0.6 million, or 3.5%, increase in astaxanthin sales, offset by a decrease of \$0.2 million in contract extraction revenue.
- The pretax income for the year was \$2.2 million compared to pretax income of \$0.9 million in fiscal 2021.
- Cash at March 31, 2022 decreased by \$1.2 million compared to last year primarily due to payments on the line of credit, related party loan and term loans, as well as investment in capital expenditures, offset by net income for the year.

Results of Operations for the 2023, 2022, and 2021 Fiscal Years

The following tables present selected consolidated financial data for each of the past three fiscal years (\$ in thousands):

Consolidated Performance Summary	2023		2022	2021
Net sales	\$ 23,178	\$	35,968	32,345
Net sales (decrease) increase	(35.6)	%	11.2%	1.4%
Gross profit	\$ 7,259	\$	13,566	11,117
Gross profit as % of net sales	31.3%	ó	37.7%	34.4%
Operating expenses	\$ 10,179	\$	10,992	11,033
Operating expenses as % of net sales	43.9%	ó	30.6%	34.1%
Operating (loss) income	\$ (2,920)	\$	2,574	84
Operating (loss) income as % of net sales	$(12.6)^{\circ}$	%	7.2%	0.3%
Gain on extinguishment of debt	\$	\$	\$	1,389
Income tax expense	\$ (18)	\$	(28) \$	\mathcal{S} (3)
Net (loss) income	\$ (3,440)	\$	2,154	920

Net sales by product		2023		2022	2021		
Packaged sales							
Astaxanthin packaged	\$	12,227	\$	14,931	\$	14,512	
Astaxanthin packaged sales (decrease) increase		(18.1)%	6	2.9%		(18.5)%	
Spirulina packaged	\$	4,814	\$	7,604	\$	7,616	
Spirulina packaged sales (decrease) increase		(36.7)%	6	(0.2)%)	(4.6)%	
Total Packaged sales	\$	17,041	\$	22,535	\$	22,128	
Total Packaged sales (decrease) increase			1.8%		(14.2)%		
Bulk sales							
Astaxanthin bulk	\$	1,982	\$	2,447	\$	2,279	
Astaxanthin bulk sales (decrease) increase		(19.0)%	6	7.3%		98.0%	
Spirulina bulk	\$	3,541	\$	10,386	\$	7,119	
Spirulina bulk sales (decrease) increase		(65.9)%	6	45.9%		61.6%	
Total Bulk sales		5,523	\$	12,833	\$	9,398	
Total Bulk sales (decrease) increase		(57.0)%	6	36.6%		69.2%	
Contract extraction and R&D services revenue	\$	614	\$	600	\$	819	

Fiscal 2023 results compared with Fiscal 2022

Net Sales Net sales decreased \$12.8 million, or 35.6%, in fiscal year ended March 31, 2023 compared with fiscal year 2022. This decrease was primarily driven by a \$6.8 million, or 65.9%, decrease in spirulina bulk sales and \$5.5 million, or 24.4%, decrease in astaxanthin and spirulina packaged sales, when compared with fiscal year 2022. The overall sales decrease was primarily due to lower demand resulting from higher inflation and consumers shifting their spend from goods to experiences and services. Given the lower demand combined with global supply chain constraints in the prior year, our bulk customers continue to have higher than normal inventory levels. For our packaged sales, in addition to the macroeconomic impacts noted above, there was a decrease in sales due to the timing of shipments to a significant customer. As a result, in the current fiscal year, consumer movement was not fully reflected in the packaged sales.

Gross Profit Gross profit as a percent of net sales decreased by 6.4 percentage points compared to fiscal 2022, which was the result of higher cost per kilogram of astaxanthin and spirulina due to the impact of inflation on our underlying costs and lower spirulina production volumes.

Operating Expenses Operating expenses decreased \$0.8 million, or 7.4% compared to fiscal year 2022. Selling and general and administrative expenses decreased primarily due to lower incentive compensation expense resulting from net operating loss in the current year compared to the prior year.

Income Taxes We recorded an income tax expense of \$18,000 in fiscal 2023 for state taxes, compared to income tax expense of \$28,000 in fiscal 2022.

Fiscal 2022 results compared with Fiscal 2021

Net Sales Net sales increased \$3.6 million, or 11.2%, in fiscal year ended March 31, 2022 compared with fiscal year 2021. This increase was primarily driven by a \$3.3 million, or 45.9%, increase in spirulina bulk sales and \$0.4 million, or 2.9%, increase in astaxanthin packaged sales, offset by a decrease in contract extraction sales of \$0.2 million, when compared with fiscal year 2021. The bulk sales increase was primarily due to strong demand from our existing customers combined with higher production levels of spirulina.

Gross Profit Gross profit as a percent of net sales increased by 3.3 percentage points compared to fiscal 2021, which was the result of lower cost of both spirulina and astaxanthin due to higher production volumes and production efficiencies, respectively.

Operating Expenses Operating expenses remained flat in fiscal year 2022 as compared to fiscal year 2021 but decreased as a percentage of net sales by 3.5 percentage points. General and administrative expenses increased primarily due to higher bonus and profit sharing based on higher income from operations compared to the prior year, while sales and marketing expenses were lower as a result of overall lower advertising spend.

Income Taxes We recorded an income tax expense of \$28,000 in fiscal 2022 for state taxes, compared to income tax expense of \$3,000 in fiscal 2021.

Liquidity and Going Concern

The accompanying consolidated financial statements, as of and for the fiscal year ended March 31, 2023, have been prepared assuming we will continue as a going concern. The going concern assumption contemplates the realization of assets and satisfaction of liabilities in the normal course of business. We sustained operating losses and negative cash flows from operations for the fiscal year ended March 31, 2023. Further, as discussed below, we were not in compliance with a debt covenant requirement at March 31, 2023 and the Bank instituted a freeze on additional advances from the Credit Agreement. These conditions raise substantial doubt about our ability to continue as a going concern. The consolidated financial statements do not include any adjustments to the carrying amounts and classification of assets, liabilities, and reported expense that may be necessary if we were unable to continue as a going concern.

As of March 31, 2023, we had cash of \$1.0 million and working capital of \$5.4 million compared to \$2.6 million and \$11.4 million, respectively, at March 31, 2022. We have a Revolving Credit Agreement ("the Credit Agreement") with First Foundation Bank ("the Bank") that provided for borrowings up to \$2.0 million on a revolving basis. At March 31, 2023 and 2022, we had outstanding borrowings of \$1.5 million and \$0 million respectively, on the line of credit. The line of credit is subject to renewal on August 30, 2023, and we intend to renew or replace it with another line of credit on or before the expiration date.

We also have a loan facility with a related party that allows us to borrow up to \$1.0 million on a revolving basis (the "Revolver"). At March 31, 2023 and 2022, we had \$0.5 million and \$0, respectively, outstanding borrowings on the Revolver, which were included in line of credit – related party on the Consolidated Balance Sheets. The Revolver expires on April 12, 2025 (see Note 5 and 15 in the notes to our consolidated financial statements).

As of March 31, 2023, we had \$3.5 million of debt ("Term Loans") payable to the Bank that require the payment of principal and interest monthly through August 2032. Pursuant to the Term Loans and the Credit Agreement, we are subject to annual financial covenants, customary affirmative and negative covenants and certain subjective acceleration clauses. As of March 31, 2023, our debt service coverage ratio fell short of the Bank's annual requirement. On June 22, 2023, the Bank provided us with a letter waiving the covenant violation as of March 31, 2023, but noting that the Bank reserved its right to declare a default in the future if any covenants remain out of compliance at applicable measurement dates. In addition, the Bank's letter implemented an immediate freeze on any and all further advances of the Credit Agreement through the maturity date, with an outstanding balance in the amount of \$1.8 million as of June 21, 2023. As of March 31, 2022, we met all required annual financial and debt covenants.

In April 2019, we obtained a loan in the amount of \$1.5 million from a related party. The proceeds were used to pay down accounts payable and for general operating capital purposes. On April 12, 2021 and December 14, 2022, we amended this loan (see Note 5 and 15 in the notes to our consolidated financial statements). As of both March 31, 2023 and 2022, we had \$1.0 million outstanding on the loan. The loan matures on April 12, 2025.

We experienced a loss from operations resulting in net cash outflows from operating activities of \$2.1 million for the fiscal year ended March 31, 2023, primarily due to the macroeconomic environment which led to lower sales across all of our products. During the fiscal year, we drew \$1.5 million on our line of credit and \$0.5 million on the Revolver. To address the resulting cash flow challenges during fiscal year 2023, we implemented some cost savings initiatives, including stopping or slowing production of inventory in alignment with current customer demand, reducing headcount and compensation, primarily through attrition and furloughs, respectively, and eliminating certain discretionary selling, general and administrative expenses.

Funds generated by operating activities and available cash are expected to continue to be our most significant sources of liquidity for working capital requirements, debt service and funding of maintenance levels of capital expenditures. We have developed our operating plan to produce the cash flows necessary to meet all financial requirements through at least June 30, 2024. Although we have a history of either being in compliance with debt covenants, or obtaining the necessary waivers, execution of our operating plan is dependent on many factors, some of which are not within our control. However, no assurances can be provided that we will achieve our operating plan and cash flow projections for the next fiscal years or our projected consolidated financial position as of March 31, 2024. Such estimates are subject to change based on future results and such change could cause future results to vary significantly from expected results.

As further described in the Risk Factors located in Item 1A of this Annual Report on Form 10-K, our results of operations and financial condition can be affected by numerous factors, many of which are beyond our control and could cause future results of operations to fluctuate materially as it has in the past.

Future operating results may fluctuate as a result of changes in sales volumes to our largest customers, weather patterns, increased competition, increased materials, nutrient and energy costs, government regulations and other factors beyond our control.

A significant portion of our expense levels are relatively fixed, so the timing of increases in expenses is based in large part on forecasts of future sales. If net sales are below expectations in any given period, the adverse impact on results of operations may be magnified by our inability to adjust spending quickly enough to compensate for the sales shortfall. We may also choose to reduce

prices or increase spending in response to market conditions, which may have a material adverse effect on financial condition and results of operations.

Off-Balance Sheet Arrangements

As of March 31, 2023, we had no off-balance sheet arrangements or obligations.

Impact of Inflation

Inflationary factors such as increases in the costs of materials and labor directly affect our operations. Most of our leases provide for cost-of-living adjustments and require us to pay for insurance and maintenance expenses, all of which are subject to inflation. Additionally, our future lease costs for new facilities may include potentially escalating costs of real estate and construction. There is no assurance that we will be able to pass on increased costs to our customers.

Depreciation expense is based on our historical cost of fixed assets and is therefore potentially less than it would be if it were based on current replacement cost. While property and equipment acquired in prior years will ultimately have to be replaced at higher prices, it is expected that replacement will be a gradual process over many years.

Cash Flows The following table summarizes our cash flows from operating, investing and financing activities for each of the past three fiscal years (\$ in thousands):

	2023	2022	2021	
Total cash is provided by (used in):				
Operating activities	\$ (2,100)	\$ 2,379	\$ 2,400	
Investing activities	(1,068)	(1,270)	(760)	
Financing activities	1,553	(2,287)	(290)	
Increase (decrease) in cash	\$ (1,615)	\$ (1,178)	\$ 1,350	

Cash used in operating activities in fiscal 2023 was the result of a net loss of \$3.4 million, an increase of \$1.2 million in inventories and a decrease of \$1.7 million in accounts payables and other accruals, offset by non-cash charges of \$2.1 million and a decrease of \$2.2 million in accounts receivables.

Cash provided by operating activities in fiscal 2022 was the result of \$2.2 million net income and non-cash charges of \$2.4 million, offset by working capital of \$2.2 million. The changes in working capital were primarily due to a \$1.3 million increase in accounts receivable and \$0.7 million increase in inventories.

Cash used in investing activities in fiscal years 2023 and 2022 includes costs for acquiring equipment and leasehold improvements at our Kona facility, and for fiscal 2022, also included costs associated software implementation.

Cash provided by financing activities in fiscal 2023 consisted primarily of draws on the line of credit of \$1.5 million and on the related party line of credit of \$0.5 million, offset by debt service payments of \$0.7 million.

Cash used in financing activities in fiscal 2022 consists of \$0.7 million in principal payments on debt and payments on short-term contract obligations, \$1.0 million payments on the line of credit and \$0.5 million paydown of the related party loan.

Recent Accounting Pronouncements

Except as discussed in Note 2, Significant Accounting Policies, in the notes to our consolidated financial statements included in this Annual Report on Form 10-K, we have considered all new accounting pronouncements and have concluded that there are no new pronouncements that may have a material impact on our results of operations, financial condition, or cash flows, based on current information.

Application of Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The preparation of financial statements in conformity with those accounting principles requires management to make judgments and estimates that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates. Management regularly re-evaluates its judgments and estimates which are based upon historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Management believes that

of its significant accounting policies, policies that may involve a higher degree of judgment and complexity are inventory valuations, valuation of equipment and leasehold improvements and long-lived assets, and income taxes.

Revenue - We record revenue based on the five-step model which includes: (1) identifying the contract with the customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations; and (5) recognizing revenue when the performance obligations are satisfied. Substantially all of our revenue is generated by fulfilling orders for the purchase of our microalgal dietary supplements to retailers, wholesalers, or direct to consumers via online channels, with each order considered to be a distinct performance obligation. These orders may be formal purchase orders, verbal phone orders, e-mail orders or orders received online. Shipping and handling activities for which we are responsible under the terms and conditions of the order are not accounted for as performance obligations but as fulfillment costs. These activities are required to fulfill our promise to transfer the goods and are expensed when revenue is recognized.

Revenue is measured as the net amount of consideration expected to be received in exchange for fulfilling a performance obligation. We have elected to exclude sales, use and similar taxes from the measurement of the transaction price. The amount of consideration expected to be received and revenue recognized includes estimates of variable consideration, which includes costs for trade promotion programs, coupons, returns and early payment discounts. Such estimates are calculated using historical averages adjusted for any expected changes due to current business conditions and experience. We review and update these estimates at the end of each reporting period and the impact of any adjustments are recognized in the period the adjustments are identified. In assessing whether collection of consideration from a customer is probable, we consider the customer's ability and intent to pay that amount of consideration when it is due. Payment of invoices is due as specified in the underlying customer agreement, typically 30 days from the invoice date, which occurs on the date of transfer of control of the products to the customer. Revenue is recognized at the point in time that control of the ordered products is transferred to the customer. Generally, this occurs when the product is delivered, or in some cases, picked up from one of our distribution centers by the customer. Revenue from extraction services is recognized when control is transferred upon completion of the extraction process.

Customer contract liabilities consist of customer deposits received in advance of fulfilling an order and are shown separately on the consolidated balance sheets. During the years ended March 31, 2023 and 2022, we recognized \$94,000 and \$55,000, respectively, of revenue from deposits that were included in contract liabilities as of March 31, 2022 and 2021, respectively. Our contracts have a duration of one year or less and therefore, we have elected the practical expedient of not disclosing revenues allocated to partially unsatisfied performance obligations.

Inventories - We record inventories at the lower of cost or net realizable value. Cost is defined as the sum of the applicable expenditures and charges directly or indirectly incurred in bringing inventories to their existing condition and location. Our inventories are valued using the first-in, first-out method. Inventory values are subject to many critical estimates, including production levels and capacity, changes in the prices paid for raw materials, supplies, and labor, changes in yield, potency, and quality of biomass, changes in processing or production methods, and changes in the carrying value of our inventories resulting from the prices our customers are willing to pay for our products. Such estimates are revised quarterly. Changes in management's estimates could result in increases or decreases in the recorded amounts of inventory and cost of sales.

To the extent that our production levels are not sufficient to absorb all production costs on a period basis, we recognize abnormal production costs, including fixed cost variances from normal production capacity, fixed production overhead costs, idle facilities, freight handling costs and spoilage, as an expense in the period incurred, without adjusting overhead absorption rates. Normal capacity is defined as the production expected to be achieved over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. Changes in management's estimates could result in increases or decreases in the recorded amounts of inventory and cost of sales.

Beginning in fiscal 2021, cultivation of astaxanthin was completed in the first six months of the fiscal year during the most productive months of the year due to the best growing conditions, compared to year-round cultivation in the prior fiscal years. The same approach was followed in fiscal years 2022 and 2023. The Company calculates total production costs for the year based on normal capacity of production expected to be achieved in a year under normal circumstances. These costs are then allocated into inventory based on the period of production, not including abnormal production costs. Allocating fixed and overhead costs requires management's judgement to determine when production is outside of the normal range of expected variation in production.

Management reviews inventory levels, inventory turnover, product age and product marketability quarterly to evaluate recoverability and determine if a write-off of inventory is deemed necessary.

Equipment and leasehold improvements - Equipment and leasehold improvements are reported at cost less accumulated depreciation and amortization. Self-constructed leasehold improvements include design, construction and supervision costs. These costs are recorded in construction in progress and are transferred to equipment and leasehold improvements when construction is completed, and the facilities are placed in service. Long-lived assets, such as property and equipment and purchased intangibles subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset

exceeds its estimated future cash flows, an impairment charge is recognized to the extent that the carrying amount exceeds the asset's fair value. We recognized \$5,000 and \$21,000 impairment of long-lived assets as of March 31, 2023 and 2022, respectively, which are included in other income (expense) on the consolidated statements of operations.

Stock-Based Compensation - We provide compensation benefits in the form of stock options, restricted stock units and restricted stock grants to employees and non-employee directors. Our stock-based compensation expense is based on the fair value of awards, adjusted for estimated forfeitures, and amortized on a straight-line basis over the requisite service period for stock options and restricted stock units ("RSUs"). The fair value of stock options is estimated as of the date of grant using the Black-Scholes option-pricing model. This model requires input assumptions for our expected dividend yield, expected stock price volatility, risk-free interest rate and the expected option term. Restricted stock and RSUs are valued at the fair value of our common stock as of the date of the grant. See Note 9 in the notes to our consolidated financial statements.

Income taxes - Income taxes are accounted for under the asset and liability method. The asset and liability method require the recognition of deferred tax assets and liabilities for the expected future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using income tax rates applicable to the period in which the tax difference is expected to reverse.

Our judgment is required in determining any valuation allowance recorded against deferred tax assets, specifically net operating loss carryforwards, tax credit carryforwards and deductible temporary differences that may reduce taxable income in future periods. In assessing the need for a valuation allowance, we consider all available evidence including past operating results, estimates of future taxable income and tax planning opportunities. In the event we change our determination as to the amount of deferred tax assets that can be realized, we will adjust our valuation allowance with a corresponding impact to income tax expense in the period in which such determination is made.

Item 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders Cyanotech Corporation

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Cyanotech Corporation (a Nevada corporation) and subsidiary (the "Company") as of March 31, 2023 and 2022, the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended March 31, 2023, and the related notes and financial statement schedule included under Item 15(a) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of March 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended March 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

Going concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company experienced a loss from operations resulting in net cash outflows from operating activities of \$2.1 million for the year ended March 31, 2023, and as of that date, the Company was not in compliance with one of its debt covenants and may not be in compliance in future periods. Although the lender provided a waiver of the Company's obligation to meet and maintain the covenant, the lender implemented an immediate freeze on any and all further advances of credit on the revolving credit agreement through the maturity date. These conditions, along with other matters as set forth in Note 1, raise substantial doubt about the Company's ability to continue as a going concern. Management's plan in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical audit matters

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgements. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the credit audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Going Concern Analysis

As described in Note 1 to consolidated financial statements, the Company experienced a loss from operations resulting in net cash outflows from operating activities of \$2.1 million for the year ended March 31, 2023, primarily due to the macroeconomic environment which led to lower sales across all of the Company's products. Also, as of March 31, 2023, the Company was not in compliance with one of the three covenants of the Credit Agreement, and the Company may not be in compliance in future periods.

To assess their ability to meet obligations as they come due and assess future compliance with debt covenants for at least twelve months from the issuance date of the financial statements, the Company has forecasted future financial results which requires significant judgement and estimation. Additionally, there is significant judgement involved in determining that it is probable that management's plans will be effectively implemented and alleviate substantial doubt about the Company's ability to continue as a going concern.

We identified the going concern analysis and evaluation of the related disclosures as a critical audit matter. The principal consideration for our determination that the going concern analysis is a critical audit matter are the significant judgements involved in determining whether it is probable that management's plans will be effectively implemented and alleviate substantial doubt about the Company's ability to continue as a going concern. More specifically, the judgements and estimates in the Company's forecasted financial results and the Company's ability to obtain a debt covenant waiver involves especially subjective judgement and significant audit effort.

Our audit procedures related to the going concern analysis included the following, among others.

- We compared the Company's historical forecasted cash flows to actual results to assess the Company's ability to accurately forecast.
- We evaluated the Company's forecasted financial results and ability to meet obligations as they come due for at least twelve months from the issuance date of these financial statements by:
 - Testing management's key assumptions, including the ability to achieve forecasted results through increased revenues and executing cost savings initiatives.
 - o Comparing the Company's forecasted future financial results to (1) historical results and previous forecasts, (2) internal communications to management and the Board of Directors, (3) historical variances in forecasted balances against actual results of the first two months of fiscal year 2024, and (4) macroeconomic factors.
- We evaluated the completeness of the Company's future obligations and evaluated consistency of evidence obtained in other areas of the audit.
- We obtained the waiver of covenant violations from the Company's lender for the year ended March 31, 2023, and reviewed the historical pattern of obtaining waivers for past violations.
- We evaluated management's plans, including estimated cost savings and probability that the Company will be able to successfully implement these plans to alleviate substantial doubt about the Company's ability to continue as a going concern.
- We assessed the appropriateness of the disclosures included within the consolidated financial statements relating to liquidity and going concern.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2008.

Newport Beach, California June 27, 2023

CONSOLIDATED BALANCE SHEETS

March 31,

	2023		2022	
	 (in thousa	nds, ex data)	cept	
ASSETS		,		
Current assets:				
Cash	\$ 974	\$	2,589	
Accounts receivable, net of allowance for doubtful accounts of \$64 in 2023 and \$67 in				
2022	1,331		3,664	
Inventories	10,707		9,466	
Prepaid expenses and other current assets	 484		545	
Total current assets	13,496		16,264	
Equipment and leasehold improvements, net	11,366		11,885	
Operating lease right-of-use assets, net	4,776		3,787	
Other assets	 90		109	
Total assets	\$ 29,728	\$	32,045	
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$ 1,021	\$	2,362	
Accrued expenses	1,101		1,412	
Customer deposits	89		164	
Operating lease obligations, current portion	483		393	
Line of credit	1,540		_	
Line of credit – related party	500		_	
Current maturities of long-term debt	3,369		490	
Total current liabilities	8,103		4,821	
Long-term debt, less current maturities	1,000		4,336	
Long-term operating lease obligations	4,275		3,386	
Other long-term liabilities	3		15	
Total liabilities	13,381		12,558	
Commitments and contingencies				
Stockholders' equity:				
Preferred stock of \$0.01 par value, authorized 10,000,000 shares; no shares issued and				
outstanding	_		_	
Common stock of \$0.02 par value, authorized 50,000,000 shares; issued and				
outstanding 6,271,971 shares at March 31, 2023 and 6,202,223 shares at March 31,				
2022	125		124	
Additional paid-in capital	33,856		33,557	
Accumulated deficit	 (17,634)		(14,194)	
Total stockholders' equity	16,347		19,487	
Total liabilities and stockholders' equity	\$ 29,728	\$	32,045	

CONSOLIDATED STATEMENTS OF OPERATIONS

Years ended March 31,

	2023	2022	2021
	(in thous	hare data)	
Net sales	\$ 23,178	\$ 35,968	\$ 32,345
Cost of sales	15,919	22,402	21,228
Gross profit	7,259	13,566	11,117
Operating expenses:			·
General and administrative	4,659	5,367	4,876
Sales and marketing	4,750	4,913	5,518
Research and development	770	712	639
Total operating expense	10,179	10,992	11,033
(Loss) income from operations	(2,920)	2,574	84
Other income (expense):			
Interest expense, net	(502)	(392)	(550)
Gain on extinguishment of debt			1,389
Total other income (expense), net	(502)	(392)	839
(Loss) income before income taxes	(3,422)	2,182	923
Income tax expense	(18)	(28)	(3)
Net (loss) income	\$ (3,440)	\$ 2,154	\$ 920
Net (loss) income per share:			·
Basic	\$ (0.55)	\$ 0.35	\$ 0.15
Diluted	\$ (0.55)	\$ 0.35	\$ 0.15
Shares used in calculation of net (loss) income per share:			
Basic	6,244	6,157	6,070
Diluted	6,244	6,168	6,079

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

Years ended March 31, 2023, 2022 and 2021

	Common Stock Shares	Common Stock Amount (in thous	Additional Paid-in <u>Capital</u> ands, except p	Accumulated Deficit er share data)	Total Stockholders' Equity
Balances at March 31, 2020	6,011,885	\$ 120	\$ 32,994	\$ (17,268)	\$ 15,846
Issuances of common stock for Director Stock					
Grants	66,395	1	157	_	158
Issuance of common stock for exercise of stock					
options for cash	19,000	_	68	_	68
Issuance of common stock in connection with					
severance of former executive	11,400	_	_	_	_
Shares withheld from former executive for tax					
payments	(3,635)	_	_	_	_
Issuance of vested shares of restricted stock	17,469	1	(8)		(7)
Shares withheld for tax payments	(6,431)	_	_	_	_
Share-based compensation expense	_	_	56	_	56
Net income				920	920
Balances at March 31, 2021	6,116,073	122	33,267	(16,348)	17,041
Issuances of common stock for Director Stock					
Grants	55,438	1	157	_	158
Issuance of vested shares of restricted stock	46,963	1	(53)		(52)
Shares withheld for tax payments	(16,251)	_	_	_	_
Share-based compensation expense		_	186	_	186
Net income				2,154	2,154
Balances at March 31, 2022	6,202,223	124	33,557	(14,194)	19,487
Issuances of common stock for Director Stock					
Grants	64,489	1	157	_	158
Issuance of vested shares of restricted stock	8,312	_	(10)		(10)
Shares withheld for tax payments	(3,053)	_	_	_	_
Share-based compensation expense		_	152	_	152
Net loss				(3,440)	(3,440)
Balances at March 31, 2023	6,271,971	\$ 125	\$ 33,856	\$ (17,634)	\$ 16,347

CONSOLIDATED STATEMENTS OF CASH FLOWS

Years ended March 31,

	2023	2022	2021
		(in thousands)	
CASH FLOWS FROM OPERATING ACTIVITIES:		()	
Net (loss) income	\$ (3,440)	\$ 2,154	\$ 920
Adjustments to reconcile net (loss) income to cash provided by	(, ,	•	
(used in) operating activities:			
Depreciation and amortization	1,655	1,599	1,748
Gain from extinguishment of debt – PPP loan	_	_	(1,389)
Loss on impairment of assets	5	21	64
Amortization of debt issue costs and other assets	40	57	90
Amortization of operating leases right-of-use assets	440	322	317
Share-based compensation expense	310	344	214
Provision for doubtful accounts	64	35	46
Net (increase) decrease in assets:			
Accounts receivable	2,269	(1,263)	(328)
Inventories	(1,231)	(717)	1,238
Prepaid expenses and other assets	60	(74)	18
Net increase (decrease) in liabilities:		(, ,)	
Accounts payable	(1,422)	(358)	4
Accrued expenses		568	3
Customer deposits		40	(203)
Operating lease obligations		(331)	(320)
Deferred rent and other liabilities		(18)	(22)
Net cash (used in) provided by operating activities		2,379	2,400
CASH FLOWS FROM INVESTING ACTIVITIES:	(2,100)	2,377	2,400
Investment in equipment and leasehold improvements	(1,068)	(1,270)	(760)
		(1,270) $(1,270)$	
Net cash used in investing activities CASH FLOWS FROM FINANCING ACTIVITIES:	(1,008)	(1,270)	(760)
			(20)
Payments on short-term contract obligation	1.540	(1.000)	(38)
Net draws (payments) on line of credit	1,540	(1,000)	(1,000)
Net draws on line of credit – related party	500	(500)	_
Net (payments) draws on long-term debt – related party	_	(500)	1 201
Proceeds from long-term debt – PPP loan		(72.5)	1,381
Principal payments on long-term debt	(477)	(735)	(670)
Payments on finance leases	(10)	(52)	(24)
Taxes paid related to net share settlement of restricted stock units	(10)	(52)	(7)
Proceeds from issuance of common stock and exercise of stock			
options			68
Net cash provided by (used in) financing activities		(2,287)	(290)
Net (decrease) increase in cash	(1,615)	(1,178)	1,350
Cash at beginning of year	2,589	3,767	2,417
Cash at end of year	\$ 974	\$ 2,589	\$ 3,767
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid during the year for:			
Interest	\$ 408	\$ 342	\$ 446
Income taxes		\$ 2	\$ 14
meente taxes	ψ 32	Ψ	ψ 14

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. ORGANIZATION AND BASIS OF PRESENTATION

Cyanotech Corporation (the "Company"), located in Kailua-Kona, Hawaii, was incorporated in the state of Nevada on March 3, 1983 and is listed on the NASDAQ Capital Market under the symbol "CYAN". The Company is engaged in the production of natural products derived from microalgae for the dietary supplements market.

The Company is an agricultural company that produces high value natural products derived from microalgae grown in complex and intricate open-pond agricultural systems on the Kona coast of Hawaii. The Company's products include *Hawaiian Spirulina Pacifica*®, a superfood with numerous benefits, including boosting the immune system and overall cellular health; and *BioAstin*® *Hawaiian Astaxanthin*®, a powerful antioxidant shown to support and maintain the body's natural inflammatory response.

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. The accompanying consolidated financial statements include the accounts of Cyanotech Corporation and its wholly owned subsidiary, Nutrex Hawaii, Inc. ("Nutrex Hawaii" or "Nutrex"). Intercompany balances and transactions have been eliminated in consolidation.

Liquidity and Going Concern

The accompanying consolidated financial statements, as of and for the fiscal year ended March 31, 2023, have been prepared assuming the Company will continue as a going concern. The going concern assumption contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company sustained operating losses and negative cash flows from operations for the fiscal year ended March 31, 2023. Further, as discussed below, the Company was not in compliance with a debt covenant requirement at March 31, 2023 and the Bank instituted a freeze on additional advances from the Credit Agreement. These conditions raise substantial doubt about the Company's ability to continue as a going concern. The consolidated financial statements do not include any adjustments to the carrying amounts and classification of assets, liabilities, and reported expense that may be necessary if the Company was unable to continue as a going concern.

As of March 31, 2023, the Company had cash of \$974,000 and working capital of \$5,393,000 compared to \$2,589,000 and \$11,443,000, respectively, at March 31, 2022. The Company has a Revolving Credit Agreement (the "Credit Agreement") with First Foundation Bank ("the Bank") that provided for borrowings up to \$2,000,000 on a revolving basis. At March 31, 2023 and 2022, the Company had outstanding borrowings of \$1,540,000 and \$0, respectively, on the line of credit. The line of credit is subject to renewal on August 30, 2023, and the Company intends to renew or replace it with another line of credit on or before the expiration date.

The Company also has a loan facility with a related party that allows the Company to borrow up to \$1,000,000 on a revolving basis (the "Revolver"). At March 31, 2023 and March 31, 2022, the Company had \$500,000 and \$0, respectively, outstanding borrowings on the Revolver, which were included in line of credit – related party on the Consolidated Balance Sheets. The Revolver expires on April 12, 2025 (see Notes 5 and 15).

As of March 31, 2023, the Company had \$3,461,000 of debt ("Term Loans") payable to the Bank that require the payment of principal and interest monthly through August 2032. Pursuant to the Term Loans and the Credit Agreement, the Company is subject to annual financial covenants, customary affirmative and negative covenants and certain subjective acceleration clauses. As of March 31, 2023, the Company's debt service coverage ratio fell short of the Bank's annual requirement. On June 22, 2023, the Bank provided the Company with a letter waiving the covenant violation as of March 31, 2023, but noting that the Bank reserved its right to declare a default in the future if any covenants remain out of compliance at applicable measurement dates. In addition, the Bank's letter implemented an immediate freeze on any and all further advances of the Credit Agreement through the maturity date, with an outstanding balance in the amount of \$1,770,000 as of June 21, 2023. As of March 31, 2022, the Company met all required annual financial and debt covenants.

In April 2019, the Company obtained a loan in the amount of \$1,500,000 from a related party. The proceeds were used to pay down accounts payable and for general operating capital purposes. On April 12, 2021 and December 14, 2022, the Company amended this loan (see Notes 5 and 15). As of both March 31, 2023 and 2022, the Company had \$1,000,000 outstanding on the related party note. The loan matures on April 12, 2025.

The Company experienced a loss from operations resulting in net cash outflows from operating activities of \$2,100,000 for the fiscal year ended March 31, 2023, primarily due to the macroeconomic environment which led to lower sales across all of the Company's products. During the fiscal year, the Company drew \$1,540,000 on its line of credit and \$500,000 on the Revolver. To address the resulting cash flow challenges during fiscal year 2023, the Company implemented some cost savings initiatives,

including stopping or slowing production of inventory in alignment with current customer demand, reducing headcount and compensation, primarily through attrition and furloughs, respectively, and eliminating certain discretionary selling, general and administrative expenses.

Funds generated by operating activities and available cash are expected to continue to be the Company's most significant sources of liquidity for working capital requirements, debt service and funding of maintenance levels of capital expenditures. The Company has developed its operating plan to produce the cash flows necessary to meet all financial requirements through at least June 30, 2024. Although the Company has a history of either being in compliance with debt covenants, or obtaining the necessary waivers, execution of its operating plan is dependent on many factors, some of which are not within the control of the Company. However, no assurances can be provided that the Company will achieve its operating plan and cash flow projections for the next fiscal years or its projected consolidated financial position as of March 31, 2024. Such estimates are subject to change based on future results and such change could cause future results to vary significantly from expected results.

2. SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosures of any contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the periods reported. Management reviews these estimates and assumptions periodically and reflects the effect of revisions in the period that they are determined to be necessary. Actual results could differ from those estimates and assumptions.

Financial Instruments and Fair Value

The Company applies a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy are described below:

- Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Company has the ability to access.
- Level 2 Inputs to the valuation methodology include:
- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability; and
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified contractual term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 — Inputs to the valuation methodology are unobservable and significant to the fair value.

Cash, Accounts Receivable, Accounts Payable, Accrued Expenses and Customer Deposits - Due to the short-term nature of these instruments, management believes that the carrying amounts approximate fair value.

Line of Credit, Revolver and Long-Term Debt - The carrying amount of our lines of credit, Revolver and long-term debt approximates fair value as interest rates applied to the underlying debt are adjusted quarterly to market interest rates, which approximate current interest rates for similar debt instruments of comparable maturities.

Cash

Cash primarily consists of cash on hand and cash in bank deposits.

Concentration Risk

The Company maintains its cash accounts in banks located in Hawaii, which are insured by the Federal Deposit Insurance Corporation ("FDIC") up to \$250,000 per bank. The Company had cash balances at March 31, 2023 and 2022 that exceeded the balance insured by the FDIC by \$422,000 and \$2,089,000, respectively. A significant portion of revenues and accounts receivables are derived from a few major customers. For the year ended March 31, 2023, two customers individually accounted for 34% and 6% of the Company's total net sales and for the year ended March 31, 2022, two customers individually accounted for 22% and

19% of the Company's total net sales. Two customers accounted for 46% and 63% of the Company's accounts receivable balance as of March 31, 2023 and 2022, respectively.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount and do not accrue interest. Credit is extended based on evaluation of the customer's financial condition. Collateral is not required. The allowance for doubtful accounts reflects management's best estimate of probable credit losses inherent in the accounts receivable balance. Management determines the allowance based on historical experience, specifically identified nonpaying accounts and other currently available evidence. Management reviews its allowance for doubtful accounts monthly with a focus on significant individual past due balances over 90 days. All other balances are reviewed on a pooled basis. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. The Company does not have any off-balance sheet credit exposure related to its customers or otherwise.

Inventories

Inventories are stated at the lower of cost or net realizable value. Inventories are determined using the first-in, first-out ("FIFO") method. Net realizable value is defined as estimated sales price less cost to dispose. Inventory costs include materials, labor, overhead and third-party costs. Management reviews and writes down inventory for known or expected inventory obsolescence based on product age and quality which may affect salability.

The Company recognizes abnormal production costs, including fixed cost variances from normal production capacity, fixed production overhead costs, idle facilities, freight handling costs and spoilage, as an expense in the period incurred, without adjusting overhead absorption rates. Normal production capacity is defined as the production expected to be achieved over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance.

Equipment and Leasehold Improvements

Equipment and leasehold improvements are stated at cost. Depreciation and amortization are provided using the straightline method over the estimated useful lives for equipment and furniture and fixtures, and the shorter of the land lease term (see Notes 4 and 7) or estimated useful lives for leasehold improvements as follows (in years):

Equipment	3	to	10
Furniture and fixtures	3	to	7
Leasehold improvements	10	to	25

Capital project costs are accumulated in construction-in-progress until completed, at which time the costs are transferred to the relevant asset and commence depreciation. Repairs and Maintenance costs are expensed in the period incurred. Repairs and maintenance that significantly increase the useful life or value of the asset are capitalized and depreciated over the remaining life of the asset. The Company capitalizes interest cost incurred on funds used to construct property and equipment. The capitalized interest is recorded as part of the asset to which it relates and is amortized over the asset's estimated useful life.

Impairment of Long-Lived Assets

Management reviews long-lived assets, such as equipment, leasehold improvements and purchased intangibles subject to amortization for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized to the extent that the carrying amount exceeds the asset's fair value. Assets to be disposed of and related liabilities would be separately presented in the consolidated balance sheet. Assets to be disposed of would be reported at the lower of the carrying value or fair value less costs to sell and would not be depreciated.

Accounting for Asset Retirement Obligations

Management evaluates quarterly the potential liability for asset retirement obligations under the Company's lease for its principal facility and corporate headquarters. No liability has been recognized as of March 31, 2023 and 2022 (see Note 7).

Revenue Recognition

The Company records revenue based on the five-step model which includes: (1) identifying the contract with the customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations; and (5) recognizing revenue when the performance obligations are satisfied. Substantially all of the Company's revenue is generated by fulfilling orders for the purchase of its microalgal dietary supplements to retailers, wholesalers,

or direct to consumers via online channels, with each order considered to be a distinct performance obligation. These orders may be formal purchase orders, verbal phone orders, e-mail orders or orders received online. Shipping and handling activities for which the Company is responsible under the terms and conditions of the order are not accounted for as performance obligations but as fulfillment costs. These activities are required to fulfill the Company's promise to transfer the goods and are expensed when revenue is recognized.

Revenue is measured as the net amount of consideration expected to be received in exchange for fulfilling a performance obligation. The Company has elected to exclude sales, use and similar taxes from the measurement of the transaction price. The amount of consideration expected to be received and revenue recognized includes estimates of variable consideration, which includes costs for trade promotion programs, coupons, returns and early payment discounts. Such estimates are calculated using historical averages adjusted for any expected changes due to current business conditions and experience. The Company reviews and updates these estimates at the end of each reporting period and the impact of any adjustments are recognized in the period the adjustments are identified. In assessing whether collection of consideration from a customer is probable, the Company considers the customer's ability and intent to pay that amount of consideration when it is due. Payment of invoices is due as specified in the underlying customer agreement, typically 30 days from the invoice date, which occurs on the date of transfer of control of the products to the customer. Revenue is recognized at the point in time that control of the ordered products is transferred to the customer. Revenue from extraction services is recognized when control is transferred upon completion of the extraction process.

Customer contract liabilities consist of customer deposits received in advance of fulfilling an order and are shown separately on the consolidated balance sheets. During the years ended March 31, 2023 and 2022, the Company recognized \$94,000 and \$55,000, respectively, of revenue from deposits that were included in contract liabilities as of March 31, 2022 and 2021, respectively. The Company's contracts have a duration of one year or less and therefore, the Company has elected the practical expedient of not disclosing revenues allocated to partially unsatisfied performance obligations.

Research and Development

Research and development costs are expensed as incurred and consist primarily of labor, benefits and outside research.

Advertising

Advertising costs are expensed as incurred. Total advertising expense for the years ended March 31, 2023, 2022 and 2021 was \$1,513,000, \$1,458,000, and \$2,116,000, respectively.

Income Taxes

Income taxes are accounted for under the asset and liability method. The asset and liability method require the recognition of deferred tax assets and liabilities for the expected future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using income tax rates applicable to the period in which the tax difference is expected to reverse.

Judgment is required in determining any valuation allowance recorded against deferred tax assets, specifically net operating loss carryforwards, tax credit carryforwards and deductible temporary differences that may reduce taxable income in future periods. In assessing the need for a valuation allowance, the Company considers all available evidence including past operating results, estimates of future taxable income and tax planning opportunities. In the event the Company changes its determination as to the amount of deferred tax assets that can be realized, it will adjust its valuation allowance with a corresponding impact to income tax expense in the period in which such determination is made.

In evaluating a tax position for recognition, management evaluates whether it is more-likely-than-not that a position will be sustained upon examination, including resolution of related appeals or litigation processes, based on the technical merits of the position. If the tax position meets the more-likely-than-not recognition threshold, the tax position is measured and recognized in the Company's financial statements as the largest amount of tax benefit that, in management's judgment, is greater than 50% likely of being realized upon settlement. At March 31, 2023 and 2022, there were no liabilities for income tax associated with unrecognized tax benefits.

The Company recognizes accrued interest related to unrecognized tax benefits as well as any related penalties in interest expense in its consolidated statements of operations. During the years ended March 31, 2023 and 2022, there were no accrual for the payment of interest and penalties related to uncertain tax positions.

Share-Based Compensation

The Company accounts for share-based payment arrangements using fair value. The Company currently has no liability-classified awards. Equity-classified awards, including grants of restricted stock, restricted stock units and employee stock options, are measured at the grant-date fair value of the award and are not subsequently remeasured unless an award is modified. The cost of equity-classified awards is recognized in the statement of operations over the period during which an employee is required to provide the service in exchange for the award, or the vesting period. All of the Company's restricted stock, restricted stock units and stock options are service-based awards, and considered equity-classified awards; as such, they are reflected in Equity and Stock Compensation Expense accounts. All stock-based compensation has been classified as general and administrative expense in the consolidated statement of operations.

The Company utilizes the Black-Scholes option pricing model to determine the fair value of each option award. Expected volatilities are based on the historical volatility of the Company's common stock over a period consistent with that of the expected term of the options. The expected term of the options is estimated based on factors such as vesting periods, contractual expiration dates and historical exercise behavior. The risk-free rates for periods within the contractual life of the options are based on the yields of U.S. Treasury instruments with terms comparable to the estimated option terms. The forfeiture rate of the options is based on historical forfeitures of similar grants.

Per Share Amounts

Basic earnings (loss) per common share is calculated by dividing net income (loss) for the year by the weighted average number of common shares outstanding during the year. Diluted earnings per common share is calculated by dividing net income for the year by the sum of the weighted average number of common shares outstanding during the year plus the number of potentially dilutive common shares ("dilutive securities") that were outstanding during the year. Dilutive securities include restricted stock units and stock options granted pursuant to the Company's stock option plans. Dilutive securities related to the Company's stock option plans are included in the calculation of diluted earnings per common share using the treasury stock method. Potentially dilutive securities are excluded from the computation of earnings per share in periods in which a net loss is reported, as their effect would be antidilutive. A reconciliation of the numerators and denominators of the basic and diluted income (loss) per common share calculations for the years ended March 31, 2023, 2022 and 2021 is presented in Note 11.

Recent Accounting Pronouncements

In December 2019, the FASB issued ASU 2019-12, "Simplifying the Accounting for Income Taxes" ("ASU 2019-12"), which, as part of its Simplification Initiative to reduce the cost and complexity in accounting for income taxes, removes certain exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. ASU 2019-12 also amends other aspects of the guidance to help simplify and promote consistent application of GAAP. The guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. The Company adopted this standard as of April 1, 2021, with no impact on its consolidated financial statements and related disclosures.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses" ("Topic 326"), which was subsequently amended in November 2018 through ASU 2018-19, "Codification Improvements to Topic 326, Financial Instruments - Credit Losses" ("CECL"). CECL requires entities to estimate lifetime expected credit losses for trade and other receivables, net investment in leases, financing receivables, debt securities and other instruments, which will result in earlier recognition of credit losses. The guidance is effective for interim and annual periods beginning after December 15, 2022. The Company is currently evaluating the impact the adoption of this standard will have on its financial statements.

3. INVENTORIES

Inventories consist of the following as of March 31, 2023 and 2022:

	2023			2022
		(in thousands)		
Raw materials	\$	1,887	\$	1,490
Work in process		2,049		2,868
Finished goods		6,502		4,595
Supplies		269		513
Inventories	\$	10,707	\$	9,466

The Company recognizes abnormal production costs, including fixed cost variances from normal production capacity, fixed production overhead costs, idle facilities, freight handling costs and spoilage, as an expense in the period incurred, without

adjusting overhead absorption rates. Normal production capacity is defined as the production expected to be achieved over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. The Company expensed abnormal production costs of \$90,000, \$0 and \$110,000 to cost of sales for the fiscal years ended March 31, 2023, 2022 and 2021, respectively.

Beginning in fiscal 2021, cultivation of astaxanthin was completed in the first six months of the fiscal year during the most productive months of the year due to the best growing conditions, compared to year-round cultivation in the prior fiscal years. The same approach was followed in fiscal year 2022 and 2023. The Company calculates total production costs for the year based on normal capacity of production expected to be achieved in a year under normal circumstances. These costs are then allocated into inventory based on the period of production, not including abnormal production costs. Allocating fixed and overhead costs requires management's judgement to determine when production is outside of the normal range of expected variation in production.

Other non-inventoriable fixed costs of \$269,000, \$136,000 and \$179,000 were expensed to cost of sales for the fiscal years ended March 31, 2023, 2022 and 2021, respectively.

4. EQUIPMENT AND LEASEHOLD IMPROVEMENTS

Equipment and leasehold improvements consist of the following as of March 31, 2023 and 2022:

		2023	2022		
		s)			
Equipment	\$	21,649	\$	20,231	
Leasehold improvements		15,038		14,751	
Furniture and fixtures		407		394	
		37,094		35,376	
Less accumulated depreciation and amortization		(25,947)		(24,339)	
Construction in-progress		219		848	
Equipment and leasehold improvements, net	\$	11,366	\$	11,885	

Management has determined that \$5,000, \$21,000 and \$64,000 of asset impairment existed as of March 31, 2023, 2022 and 2021, and the impairment losses were included in other income (expense) on the consolidated statements of operations.

Depreciation and amortization expense were approximately \$1,655,000, \$1,599,000 and \$1,748,000 for the years ended March 31, 2023, 2022 and 2021, respectively.

5. LINE OF CREDIT AND LONG-TERM DEBT

Total debt consists of the following at March 31, 2023 and 2022 as follows:

	 2023		2022
	(in thou	usands)	
Line of credit	\$ 1,540	\$	_
Line of credit – related party	500		_
Long-term debt	3,369		3,938
Long-term debt – related party	1,000		1,000
Less current maturities	(5,409)		(490)
Long-term debt, excluding current maturities	1,000	<u> </u>	4,448
Less unamortized debt issuance costs	 		(112)
Total long-term debt, net of current maturities and unamortized debt issuance costs	\$ 1,000	\$	4,336

Line of Credit and Term Loans

On August 30, 2016, the Credit Agreement, which the Company entered into with the Bank on June 3, 2016, became effective after the Company and the Bank received the necessary approvals from the State of Hawaii to secure the lien on the Company's leasehold property in Kona, Hawaii. The Credit Agreement allows the Company to borrow up to \$2,000,000 on a revolving basis. Borrowings under the Credit Agreement bear interest at the Wall Street Journal prime rate (8.0% at March 31, 2023 and 3.25% at March 31, 2022) plus 2%, floating, provided that at no time shall the annual interest rate be less than 4.25%.

At March 31, 2023 and 2022, the outstanding balances under the Credit Agreement was \$1,540,000 and \$0, respectively, and at March 31, 2023 was included in current liabilities on the Consolidated Balance Sheets. The line of credit, which is subject to annual renewal, was renewed on August 30, 2022 and will be subject to renewal upon expiration on August 30, 2023.

The Credit Agreement grants the Bank the following security interests in the Company's property: (a) a lien on the Company's leasehold interest in its Kona facility; (b) an assignment of the Company's interest in leases and rents on its Kona facility; and (c) a security interest in all fixtures, furnishings and equipment related to or used by the Company at the Kona facility. Each security interest is further subject to the terms of the Credit Agreement.

In 2015, the Company executed a loan agreement with a lender providing for \$2,500,000 in aggregate credit facilities (the "2015 Loan") secured by substantially all the Company's assets, pursuant to a Term Loan Agreement dated July 30, 2015 (the "2015 Loan Agreement"). The 2015 Loan is evidenced by a promissory note in the amount of \$2,500,000, the repayment of which is partially guaranteed under the provisions of a United States Department of Agriculture ("USDA") Rural Development Guarantee program.

The provisions of the 2015 Loan required the payment of principal and interest until its maturity on September 1, 2022. Interest on the 2015 Loan accrued on the outstanding principal balance at an annual variable rate equal to the published Wall Street Journal prime rate (7.5% at March 31, 2023 and 3.25% at March 31, 2022) plus 2.0% and was adjustable on the first day of each calendar quarter and fixed for that quarter, provided that at no time shall the annual interest rate be less than 6.0%. The 2015 Loan was paid off in September 2022 and the balance under this loan was \$218,000 at March 31, 2022, which was included in the current maturities of long-term debt in the debt table above.

In 2012, the Company executed a loan agreement with a lender providing for \$5,500,000 in aggregate credit facilities (the "2012 Loan") secured by substantially all the Company's assets, including a mortgage on the Company's interest in its lease at the National Energy Laboratory of Hawaii Authority, pursuant to a Term Loan Agreement dated August 14, 2012 (the "2012 Loan Agreement"). The 2012 Loan is evidenced by promissory notes in the amounts of \$2,250,000 and \$3,250,000, the repayment of which is partially guaranteed under the provisions of a USDA Rural Development Guarantee. The proceeds of the 2012 Loan were used to acquire processing equipment and leasehold improvements at its Kona, Hawaii facility.

The provisions of the 2012 Loan required the payment of interest only for the first 12 months of the term; thereafter, and until its maturity on August 14, 2032, the obligation fully amortizes over nineteen (19) years. Interest on the 2012 Loan accrues on the outstanding principal balance at an annual variable rate equal to the published Wall Street Journal prime rate (7.5% at March 31, 2023 and 3.25% at March 31, 2022) plus 1.0% and is adjustable on the first day of each calendar quarter and fixed for that quarter, provided that at no time shall the annual interest rate be less than 5.5%. The balance under the 2012 Loan was \$3,461,000 and \$3,720,000 at March 31, 2023 and 2022, respectively, and was included in current maturities of long-term debt and long-term debt, respectively, in the debt table above. See Loan Covenants, Violations and Waiver below.

The 2015 Loan included a one-time origination and guaranty fee totaling \$113,900 and an annual renewal fee payable in the amount of 0.5% of the USDA guaranteed portion of the outstanding principal balance as of December 31 of each year, beginning December 31, 2015. The USDA guaranteed 80% of all amounts owing under the 2015 Loan. The 2012 Loan included a one-time origination and guaranty fees totaling \$214,500 and an annual renewal fee payable in the amount of 0.25% of the USDA guaranteed portion of the outstanding principal balance as of December 31 of each year, beginning December 31, 2012. The USDA guaranteed 80% of all amounts owing under the 2012 Loan. The balance in unamortized debt issuance costs was \$92,000 and \$112,000 at March 31, 2023 and 2022, respectively, and at March 31, 2023 was included in current maturities of long-term debt in the debt table above. See Loan Covenants, Violations and Waiver below.

Loan Covenants, Violations and Waiver

The Company's Credit Agreement, 2015 Loan and 2012 Loan are subject to annual debt service and other financial covenants, including covenants which require the Company to meet key financial ratios and customary affirmative and negative covenants. As of March 31, 2023, the Company was not in compliance with the required debt service coverage ratio, however, was in compliance with the two other covenants. Due to this violation, the Bank would be contractually entitled to require immediate repayment of the outstanding term loan amount of \$3,461,000 and the outstanding line of credit balance of \$1,540,000. However, on June 22, 2023, the Bank issued the Company a letter waiving the covenant violation as of March 31, 2023, and implemented an immediate freeze on any and all further advances of the Credit Agreement through the maturity date, with an outstanding balance in the amount of \$1,770,000 as of June 21, 2023. As of March 31, 2022, the Company was in compliance with all required covenants.

Although the Term Loans mature in August 2032, it is probable that a debt covenant violation occurs within the next twelve months. Therefore, the Term Loans and related unamortized debt issuance costs are classified as current on the Balance Sheet as of March 31, 2023.

Long-term Debt – PPP

In response to the coronavirus ("COVID-19") pandemic and the uncertainty surrounding the pandemic, in May 2020, the Company obtained a Paycheck Protection Program ("PPP") loan in the amount of \$1,381,000, under the Coronavirus Aid, Relief, and Economics Security Act ("CARES"), with an original maturity date of May 2022. In December 2020, the Company received notice of forgiveness of the PPP loan in whole, including all accrued unpaid interest. In fiscal year 2021, the Company recorded the

forgiveness of \$1,381,000 of principal and \$8,000 of accrued interest for a total of \$1,389,000, which was included in gain on extinguishment of debt on the Consolidated Statements of Operations. The Company has used the proceeds of the PPP loan for certain payroll costs in accordance with the PPP.

Line of Credit and Debt – Related Party

In April 2019, the Company obtained a loan in the amount of \$1,500,000 and the interest was payable quarterly. The loan was originally due in April 2021. In April 2021, the Company amended the loan, which extended the expiration to April 2024, converted \$500,000 into the Revolver, adjusted the interest rate to reflect a floor of 5%, and granted a security interest in substantially all of the Company's personal property assets, subject to limited exceptions. Concurrently, with the amendment and conversion of the original loan, the Company repaid in cash the principal amount of \$500,000 plus accrued interest to date of \$1,900 (see Note 15). In December 2022, the Company amended the loan to extend the expiration to April 2025 and increase the Revolver to \$1,000,000. At March 31, 2023 and 2022, the balance under this loan was \$1,000,000, which was included in long-term debt in the debt table above. At March 31, 2023 and 2022, the balance under the Revolver was \$500,000 and \$0, respectively, which was included in line of credit – related party in the debt table above. Interest accrues on the outstanding principal balance and the Revolver at an annual variable rate equal to the published Wall Street Journal prime rate (7.5% and 3.25% at March 31, 2023 and 2022, respectively) plus 1.0% and is adjustable on the first day of each calendar quarter and fixed for that quarter, provided that at no time shall the annual interest rate be less than 5.0%.

Future principal payments, excluding unamortized debt issuance costs, under the loans at March 31, 2023 are as follows:

Fiscal year ending March 31	(in th	ousands)_
2024	\$	3,461
2026		1,000
Total principal payments	\$	4,461

6. ACCRUED EXPENSES

Accrued expenses as of March 31, 2023 and 2022 consist of the following:

	2023			2022
		(in tho	usands))
Bonus and profit sharing	\$	143	\$	488
Wages		215		211
Vacation		393		392
Rent, interest and legal		30		108
Other accrued expenses		320		213
Total accrued expenses	\$	1,101	\$	1,412

7. OPERATING LEASES

The Company's principal facility and its corporate headquarters are located at the Natural Energy Laboratory of Hawaii Authority ("NELHA") at Keahole Point in Kailua-Kona, Hawaii. The Company leases two properties from the State of Hawaii under a 40-year commercial lease expiring in 2035 and a 19-year commercial lease expiring in 2037. Under the terms of the existing NELHA leases, the Company could be required to remove improvements at the end of the lease terms. Under generally accepted accounting principles in the United States, an entity should recognize the fair value of a liability for an asset retirement obligation in the period in which the retirement obligation is incurred, if a reasonable estimate of fair value can be made. If such an estimate cannot be made in the period the asset retirement obligation is incurred, the liability should be recognized when the fair value can be reasonably estimated. Based on communications with NELHA, management does not believe the projected cost for such removal to be material to the consolidated financial statements, or likely, given historical practices. However, conditions could change in the future. It is not possible to predict such changes or estimate any impact thereof.

The Company leases facilities, equipment and land under non-cancelable operating leases expiring through 2037. One of its facility leases contains price escalations and a renewal option for five years, which was renewed effective January 1, 2023. The NELHA land lease provides for contingent rentals in excess of minimum rental commitments based on a percentage of the Company's sales. Contingent rental payments for the years ended March 31, 2023, 2022 and 2021 were \$0, \$73,000 and \$50,000, respectively.

Right-of-use assets represent the right to use an underlying asset for the lease term and lease liabilities represent the obligation to make lease payments arising from the lease. Right-of-use assets and liabilities were recognized at April 1, 2019 based on the present value of lease payments over the lease terms, using the Bank's incremental borrowing rate based on the information

available at recognition, and the Company has elected to exclude non-lease components. The Company also leases two 84-month solar leases for two of its buildings and a 48-month lease for equipment, which are included in the right-of-use assets and liabilities. At March 31, 2023, the weighted average remaining lease terms of all operating leases was 9.8 years, the weighted average discount rate was 7.3% and the operating lease costs were \$719,000. At March 31, 2022, the weighted average remaining lease terms of all operating leases was 12.2 years, the weighted average discount rate was 7.2% and the operating lease costs were \$603,000. For fiscal year ended March 31, 2023, noncash right-of-use assets obtained in exchange for operating lease obligations was \$1,429,000, representing the lease renewal of one of the Company's facility leases.

Supplemental balance sheet information related to leases consist of the following as of:

Operating leases Balance Sheet Classification		M	March 31, 2023		March 31, 2022		
			(in thou	(sands			
	Operating lease right-of-use assets	\$	6,149	\$	4,720		
Accumulated lease amortization	Operating lease right-of-use assets		(1,373)		(933)		
Total right-of-use assets		\$	4,776	\$	3,787		
Current lease liabilities	Operating lease obligations	\$	483	\$	393		
Non-current lease liabilities	Long-term operating lease obligations		4,275		3,386		
Total lease liabilities		\$	4,758	\$	3,779		

Maturities of lease liabilities at March 31, 2023 are as follows:

Fiscal year ending March 31	(in thousa	ands)
2024	\$	810
2025		820
2026		797
2027		798
2028		683
Thereafter		2,760
Total undiscounted lease payments		6,668
Less: present value discount		(1,910)
Total lease liabilities balance	\$	4,758

Rent expense, including contingent rent, under operating leases were \$506,000, \$713,000 and \$616,000 for the years ended March 31, 2023, 2022 and 2021, respectively. Property taxes paid to the states of Hawaii and California were \$37,000, \$30,000 and \$28,000 for the years ended March 31, 2023, 2022 and 2021, respectively.

8. OTHER COMMITMENTS AND CONTINGENCIES

From time to time, the Company may be involved in litigation and investigations relating to claims and matters arising out of its operations in the normal course of business. There were no significant legal matters outstanding at March 31, 2023.

As of March 31, 2023, 2022 and 2021, the Company had purchase obligations of \$822,000, \$1,105,000 and \$1,005,000, respectively, including agreements to purchase goods or services that are enforceable, are legally binding and specify all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. The term of the minimum purchase agreement is for ten years, expiring in April 2026 and purchase obligations do not include agreements that are cancelable without penalty.

9. SHARE-BASED COMPENSATION

As of March 31, 2023, the Company had two equity-based compensation plans: the 2016 Equity Incentive Plan (the "2016 Plan") and the 2014 Independent Director Stock Option and Restricted Stock Grant Plan and Amendment (the "2014 Directors Plan"). The Company has also issued stock options, which remain outstanding as of March 31, 2022, under an equity-based compensation plan which have expired according to its terms: the 2004 Independent Director Stock Option and Stock Grant Plan (the "2004 Directors Plan"). This plan allowed the Company to award stock options and shares of restricted common stock to eligible employees, certain outside consultants and independent directors. No additional awards will be issued under the 2004 Directors Plan.

On August 25, 2016, the Company's shareholders approved the 2016 Plan, authorizing the Board of Directors to provide incentive to the Company's officers, employees and certain independent consultants through equity-based compensation in the form of stock options, restricted stock, restricted stock units, stock appreciation rights and other stock-based awards (together, "Stock Awards") and performance shares and performance units (together, "Performance Awards"). Awards under the 2016 Plan are limited to the authorized amount of 1,300,000 shares, up to 600,000 of which are available for issuance in connection with Performance Awards and Stock Awards. As of March 31, 2023, there were 881,437 shares available for grant under the 2016 Plan.

On August 28, 2014, the Company's shareholders approved the 2014 Directors Plan authorizing the Board of Directors to provide incentive to the Company's independent directors through equity-based compensation in the form of stock options and restricted stock. Awards under the 2014 Directors Plan are limited to the authorized amount of 350,000 shares. At the 2021 Annual Meeting of Shareholders, the stockholders of the Company approved an amendment to the 2014 Directors Plan to increase the number of shares of common stock available for issuance under the plan by 300,000 shares. As of March 31, 2023, there were 223,206 shares available for grant under the 2014 Directors Plan.

The following table presents shares authorized, available for future grant and outstanding under each of the Company's plans:

	A	8 01 March 31, 2023	
	Authorized	Available	Outstanding
2016 Plan	1,300,000	881,437	305,334
2014 Directors Plan	650,000	223,206	12,000
2004 Directors Plan	_	_	6,000
Total	1,950,000	1,104,643	323,334

Stock Options

All stock option grants made under the equity-based compensation plans were issued at exercise prices no less than the Company's closing stock price on the date of grant. Options under the 2016 Plan, 2004 Directors Plan and 2014 Directors Plan were determined by the Board of Directors or the Compensation Committee of the Board of Directors in accordance with the provisions of the respective plans. The terms of each option grant include vesting, exercise, and other conditions are set forth in a Stock Option Agreement evidencing each grant. No option can have a life in excess of ten (10) years. The Company records compensation expense for employee stock options based on the estimated fair value of the options on the date of grant using the Black-Scholes option-pricing model. The model requires various assumptions, including a risk-free interest rate, the expected term of the options, the expected stock price volatility over the expected term of the options, and the expected dividend yield. Compensation expense for employee stock options is recognized ratably over the vesting term. Compensation expense recognized for options issued under all Plans was \$90,000, \$63,000 and \$29,000 for the fiscal years ended March 31, 2023, 2022 and 2021, respectively.

A summary of option activity under the Company's stock plans for the years ended March 31, 2023, 2022 and 2021 is presented below:

Option Activity	Shares	Veighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	ggregate ntrinsic Value
Outstanding at March 31, 2020	318,300	\$ 4.08	3.0	\$ _
Granted	130,000	2.35		
Exercised	(19,000)	3.59		
Forfeited	(55,000)	 3.13		
Outstanding at March 31, 2021	374,300	\$ 3.64	3.9	\$ 129,700
Granted	50,000	2.96		
Forfeited	(5,000)	5.21		
Expired	(166,800)	3.84		
Outstanding at March 31, 2022	252,500	\$ 3.34	6.5	\$ 159,650
Granted	50,000	3.43		
Expired	(49,500)	 5.80		
Outstanding at March 31, 2023	253,000	\$ 2.88	7.5	\$
Exercisable at March 31, 2023	111,333	\$ 2.90	6.6	\$

The aggregate intrinsic value in the table above is before applicable income taxes and represents the excess amount over the exercise price optionees would have received if all options had been exercised on the last business day of the period indicated, based on the Company's closing stock price of \$0.88, \$3.37 and \$3.30 at March 31, 2023, 2022 and 2021, respectively. The total intrinsic value of stock options exercised during fiscal year 2021 was \$6,000. No stock options were exercised during fiscal year 2023 or 2022.

A summary of the Company's non-vested options for the year ended March 31, 2023 is presented below:

Nonvested Options	Shares	Average Grant-Date Fair Value
Nonvested at March 31, 2022	141,667	\$ 1.33
Granted	50,000	1.94
Expired	(50,000)	1.33
Nonvested at March 31, 2023	141,667	\$ 1.55

Waighted

The weighted average grant-date fair value of stock options granted during fiscal years 2023, 2022 and 2021 was \$97,000, \$80,000 and \$155,000, respectively. The total grant-date fair value of stock options that vested during fiscal years 2023, 2022 and 2021 were \$67,000, \$40,000 and \$6,000, respectively.

The following table summarizes the weighted average characteristics of outstanding stock options as of March 31, 2023:

_	0	utstanding Option	S		Exercisable Options		
Range of Exercise Prices	Number of Shares	Remaining Life (Years)		Weighted Average Exercise Price	Number of Shares		Weighted Average Exercise Price
\$ 2.11 - \$ 2.34	105,000	7.2	\$	2.28	55,000	\$	2.27
\$ 2.35 - \$2.76	30,000	7.5	\$	2.54	21,666	\$	2.53
\$ 2.77 - \$3.20	50,000	8.1	\$	2.96	16,667	\$	2.96
\$ 3.21 - \$5.91	68,000	7.3	\$	3.89	18,000	\$	5.18
Total stock options	253,000	7.5	\$	2.88	111,333	\$	2.90

The range of fair value assumptions related to options granted during the years ended March 31, 2023, 2022 and 2021 were as follows:

	2023	2022	2021
Exercise Price\$	1.94	\$ 1.60	\$ 1.20
Volatility	57.47%	58.23%	54.44%
Risk Free Rate	3.36%	1.06%	0.40%
Vesting Period (in years)	3.0	3.0	3.0
Forfeiture Rate	19%	0%	0%
Expected Life (in years)	6.0	6.0	6.2
Dividend Rate	0%	0%	0%

Total unrecognized stock-based compensation expense related to all unvested stock options was \$124,000 and \$139,000, at March 31, 2023 and 2022, respectively, which is expected to be expensed over a weighted average period of 1.6 years and 2.1 years, respectively.

Restricted Stock

Grants of fully vested restricted stock issued to Non-Employee Directors during fiscal years 2023, 2022 and 2021 was 64,489, 55,438 and 66,385 shares, respectively. Compensation expense recognized for fully vested restricted stock grants issued under the 2014 Directors Plan was \$158,000, \$158,000 and \$158,000 for the fiscal years ended March 31, 2023, 2022 and 2021, respectively.

To reduce the Company's ongoing cash expenses, the Nominating and Corporate Governance Committee of the Board of Directors adopted a resolution allowing each director to elect to receive his or her quarterly director fees in the form of restricted stock in lieu of cash. Two Board members elected to receive shares of restricted stock in lieu of cash for the third fiscal quarter of 2023. On April 3, 2023, 17,672 shares of fully vested restricted stock were issued to the two Board members. For the fiscal year ended March 31, 2023, compensation expense was earned and recognized for these fully vested restricted stock grants in the amount of \$15,500.

Restricted Stock Units ("RSUs")

RSUs are service-based awards granted to eligible employees under our 2016 Plan. Compensation expense recognized for RSUs issued under the 2016 Plan was \$62,000, \$123,000 and \$28,000 for the years ended March 31, 2023, 2022 and 2021, respectively.

XX7 - 2 - 1- 4 - J

The following table summarizes information related to awarded RSUs:

		W	eighted
		A	verage
Nonvested Restricted Stock Units	Shares	Gra	ant Price
Nonvested restricted stock units at March 31, 2020	12,766	\$	3.98
Granted	28,647	\$	2.15
Vested	(9,135)	\$	3.97
Forfeited	(4,090)	\$	2.21
Nonvested restricted stock units at March 31, 2021	28,188	\$	2.38
Granted	38,672	\$	2.91
Vested	(46,963)	\$	2.85
Forfeited	(5,432)	\$	2.51
Nonvested restricted stock units at March 31, 2022	14,465	\$	2.22
Granted	66,423	\$	3.13
Vested	(8,312)	\$	2.35
Forfeited	(2,242)	\$	2.91
Nonvested restricted stock units at March 31, 2023	70,334	\$	3.04

Total unrecognized stock-based compensation expense related to unvested restricted stock units was \$122,000 and \$19,000 at March 31, 2023 and 2022, respectively, which is expected to be expensed over a weighted average period of 2.3 years and 1.2 years, respectively.

On April 6, 2023, 7,900 RSUs were awarded to all eligible employees of the Company. This award is valued at \$0.94 per share, the closing market price of Cyanotech common stock on the grant date, and vests over a period of three years.

10. COMMON AND PREFERRED STOCK

The Company has authorized a total of sixty million shares of which fifty million shares are authorized common stock and ten million shares are authorized preferred stock. None of the preferred stock was issued or outstanding at March 31, 2023 and 2022. Under the terms of the Company's Amended and Restated Articles of Incorporation, the Board of Directors is authorized to determine or alter the rights, preferences, privileges and restrictions of the Company's authorized but unissued shares of preferred stock.

11. EARNINGS (LOSS) PER SHARE

Basic earnings (loss) per share is computed on the basis of the weighted average number of common shares outstanding. Diluted earnings per share is computed on the basis of the weighted average number of common shares outstanding plus the potentially dilutive effect of outstanding stock options and unvested restricted stock units using the treasury stock method.

Reconciliations between the numerator and the denominator of the basic and diluted income (loss) per share computations for the years ended March 31, 2023, 2022 and 2021 are as follows:

	Net Income (loss) (Numerator)		Shares	1	Per Share	
			(Denominator)		Amount	
		(in thousand	d <mark>s, except per sh</mark> ai	e am	nounts)	
Year ended March 31, 2023:						
Basic and diluted loss per share	\$	(3,440)	6,244	\$	(0.55)	
Year ended March 31, 2022:						
Basic income per share	\$	2,154	6,157	\$	0.35	
Effective dilutive securities—Common stock options						
and restricted stock units		_	11		_	
Diluted income per share	\$	2,154	6,168	\$	0.35	
Year ended March 31, 2021:	-			·		
Basic income per share	\$	920	6,070	\$	0.15	
Effective dilutive securities—Common stock options						
and restricted stock units		_	8		_	
Diluted income per share	\$	920	6,079	\$	0.15	
-			=======================================			

Basic and diluted per share amounts are the same in periods of a net loss because common share equivalents are antidilutive when a net loss is recorded. Diluted earnings per share does not include the impact of restricted stock units totaling 3,000 for the fiscal year ended March 31, 2023, as the effect of their inclusion would be anti-dilutive. Restricted stock units become dilutive within the period granted and remain dilutive until the units vest and are then included in the calculation of basic earnings per share.

12. PROFIT SHARING AND 401(K) PLAN

The Company sponsors a profit sharing plan for all employees not covered under a separate management incentive plan. Under the profit sharing plan, a percentage determined by the Board of Directors of pre-tax profits on a quarterly basis may be allocated to non-management employees at management's discretion. The profit sharing bonus may be distributed all in cash on an after-tax basis or distributed half in cash (on an after-tax basis) and the remainder deposited in an employee's 401(k) account on a pre-tax basis. Employees may also make voluntary pre-tax contributions to their 401(k) accounts. Compensation expense under this plan was approximately \$0, \$121,000 and \$25,000 for the fiscal years ended March 31, 2023, 2022 and 2021, respectively. Additionally, the Company makes a retirement contribution to all employees individual 401(k) accounts equal to two percent of each employee's base pay for each bi-weekly pay period on a pre-tax basis. Retirement expense under this plan was approximately \$138,000, \$135,000 and \$141,000 for fiscal years ended March 31, 2023, 2022 and 2021, respectively.

13. PRODUCT LINE AND GEOGRAPHIC INFORMATION

Disaggregation of Revenue

The following table represents revenue disaggregated by major product line and extraction services for the years ended March 31, 2023, 2022 and 2021 (in thousands):

	2023	2022	2021
Packaged sales			
Astaxanthin packaged	\$ 12,227	\$ 14,931	\$ 14,512
Spirulina packaged		7,604	7,616
Total packaged sales	17,041	22,535	22,128
Bulk sales			
Astaxanthin bulk	1,982	2,447	2,279
Spirulina bulk	3,541	10,386	7,119
Total bulk sales	5,523	12,833	9,398
Contract extraction and R&D services revenue	614	600	819
Total net sales	\$ 23,178	\$ 35,968	\$ 32,345

Cost of sales for contract extraction and R&D services for the years ended March 31, 2023, 2022 and 2021 were \$441,000, \$439,000 and \$337,000, respectively.

Net sales by geographic region for the years ended March 31, 2023, 2022 and 2021 are as follows:

	20:	23	20)22	20	021
		_	(dollars in	thousands)		
Net sales(1):						
United States	\$ 17,031	73%	\$ 24,468	68%	\$ 21,474	66%
Asia / Pacific	2,164	9%	7,102	20%	5,827	18%
Europe	2,440	11%	3,183	9%	3,416	11%
Other	1,543	7%	1,215	3%	1,628	5%
	\$ 23,178	100%	\$ 35,968	100%	\$ 32,345	100%

⁽¹⁾ Net sales are attributed to countries based on location of customer.

14. INCOME TAXES

On December 22, 2017, H.R. 1, originally known as the Tax Cuts and Jobs Act, ("the Tax Act") was enacted. As part of the Tax Act, for tax years beginning on or after January 1, 2022, taxpayers are required to capitalize research and experimental expenditures that qualify as Section 174 costs and recover them over five years for domestic expenditures, and 15 years for expenditures attributed for foreign research.

The Inflation Reduction Act of 2022 (the "IRA") was signed into law on August 16, 2022. Among other things, the IRA contained three key changes for corporations: a corporate minimum tax, a 1% excise tax on certain stock buybacks and certain clean energy incentives and initiatives. The enactment of the IRA did not result in any material impact to the Company's income tax provision for fiscal year 2023.

On August 9, 2022, the Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022 (the "CHIPS Act") was signed into law, which provides certain financial incentives with the intention of increasing American semi-conductor research, development and production and promoting domestic scientific and technological advances. The enactment of the CHIPS Act did not result in any material impact to the Company's income tax provision for fiscal year 2023.

Income tax (expense) benefit for the years ended March 31, 2023, 2022 and 2021 consisted of:

	2023	2022	2021
Current:			
Federal	\$ —	\$ —	\$ —
State	(18)	(28)	(3)
Total current (expense) benefit	(18)	(28)	(3)
Deferred:			
Federal	_	_	_
State			
Total deferred expense	_	_	
Income tax expense	\$ (18)	(28)	<u>\$ (3)</u>

The following table reconciles the amount of income taxes computed at the federal tax rate of 21% for each of the years ended March 31, 2023, 2022 and 2021, to the amount reflected in the Company's consolidated statements of operations for the years ended March 31, 2023, 2022 and 2021:

	2023	2022	2021
		(in thousands)	
Tax provision at federal statutory income tax rate	\$ 952	\$ (591)	\$ (263)
Stock-based compensation	(23)	(16)	(11)
Decrease (increase) in valuation allowance	(518)	557	(17)
State and local income taxes, net of federal tax benefit	(12)	(2)	1
Expired losses	(380)	_	_
Deferred tax true-up	(24)	34	27
CARES Act, PPP Loan Forgiveness	_	_	298
Other, net	(13)	(10)	(38)
Income tax expense	\$ (18)	\$ (28)	\$ (3)

The tax effects of temporary differences related to various assets, liabilities and carry forwards that give rise to deferred tax assets and deferred tax liabilities as of March 31, 2023 and 2022 are as follows:

	2023	2022	
	(in tho	usands)	
Deferred tax assets:			
Net operating loss carry forwards	\$ 3,570	\$ 3,140	
Inventory	50	175	
Compensation accrual	177	251	
Tax credit carry forwards	28	28	
Interest limitation	108	_	
Operating lease right-of-use assets	1,323	1,025	
Section 174 Costs	118	_	
Other	26	27	
Gross deferred tax assets	5,400	4,646	
Less valuation allowance	(2,990)	(2,473)	
Net deferred tax assets	2,410	2,173	
Deferred tax liabilities:			
Operating lease obligations	(1,328)	(1,027)	
Depreciation and amortization	(1,082)	(1,146)	
Net deferred tax liabilities		(2,173)	
Net deferred tax assets (liabilities)	\$	\$	

In assessing the valuation allowance for deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. Ultimately, the realization of deferred tax assets will depend on the existence future taxable income during the periods. In making this assessment, management considers past operating results, the scheduled reversal of deferred tax liabilities, estimates of future taxable income and tax planning strategies.

As of March 31, 2023, 2022 and 2021, the Company has concluded that a valuation allowance was appropriate in light of the significant negative evidence, which was objective and verifiable, primarily the cumulative losses in recent years.

While the Company's long-term financial outlook remains positive, the Company concluded that its ability to rely on its long-term outlook as to future taxable income was limited due to the relative weight of the negative evidence from its recent cumulative losses. The Company's conclusion regarding the need for a valuation allowance against its deferred tax assets could change in the future based on improvements in operating performance, which may result in the full or partial reversal of the valuation allowance.

At March 31, 2023, the Company has net operating loss carry forwards and tax credit carry forwards available to offset future federal income tax as follows (in thousands):

Expires March 31, Loss Losses	Research and Experimentation Tax Credit
(in thousands)	
2025\$ — \$ —	\$
<u>2026</u> <u>159</u> —	2
2027	_
Thereafter 4,379 11,150	18
Indefinite	
<u>\$ 14,053</u> <u>\$ 11,150</u>	\$ 28

At March 31, 2023, the Company has federal net operating loss carry forwards of \$14,053,000, of which \$7,203,000 of the losses carried forward were generated prior to the 2018 tax year and have a 20 year carry forward and are available to offset 100% of taxable income. The remaining \$6,850,000 of the losses were generated in tax years 2018 or later, which have an unlimited carry forward and are limited to 80% of taxable income. At March 31, 2023, the Company had state tax net operating loss carry forwards available to offset future California state taxable income of \$2,946,000. These carry forwards expire March 31, 2030 through 2040. At March 31, 2023, the Company had state tax net operating loss carry forwards available to offset future Hawaii state taxable income of \$7,914,000. These carry forwards expire March 31, 2030 through 2040. At March 31, 2023, the Company had \$290,000 of net operating loss carry forwards between the remaining states filed in.

The following, in general, represents the open tax years and jurisdictions that the Company used in its evaluation of tax positions. The Company has unused net operating losses carried forward, which cause the statute to remain open up to the amount of unused loss with the statute not begin until the year in which they are used.

Open tax years ending March 31,	Jurisdiction
2020 - 2023	. U.S. Federal
2020 - 2023	. State of Hawaii
2019 - 2023	. State of California

15. RELATED-PARTY TRANSACTIONS AND BALANCES

In April 2019, Company obtained an unsecured subordinated loan from Skywords Family Foundation, Inc. ("Skywords") in the principal amount of \$1,500,000 pursuant to a Promissory Note (the "Skywords Note") executed by the Company in favor of Skywords. Skywords is controlled by the Company's Chairman of the Board of Directors and largest stockholder. The Skywords Note bore interest at a rate of 1% plus the prime rate (as published by the Wall Street Journal), which was recalculated and payable on a quarterly basis. The principal amount and any accrued and unpaid interest will be due and payable on April 12, 2021. The proceeds of the Skywords Note were used to pay down accounts payable and for general operating capital purposes.

On April 12, 2021, the Company entered into an Amended and Restated Promissory Note (the "Skywords Amended Note") with Skywords. The Company and Skywords agreed to amend, restate, replace and otherwise modify without novation, the Skywords Note in order to convert \$500,000 of the outstanding principal amount into revolving loans that may be prepaid and reborrowed from time to time in principal amounts not to exceed \$500,000, extend the maturity date by three years, adjust the interest rate to reflect a floor of 5% and secure Skywords' interest by granting a security interest in substantially all of the Company's personal property assets, subject to limited exceptions (the "Collateral"). On April 12, 2021, concurrently with the conversion, the

Company repaid in cash to Skywords the principal amount of \$500,000 plus accrued interest to date of \$1,900. The Skywords Amended Note bears interest at a rate of 1% plus the prime rate (as published by the Wall Street Journal), which will be recalculated and payable on a quarterly basis, provided that at no time shall the annual interest rate be less than 5%. The Company may prepay the Skywords Amended Note at any time without penalty.

On April 12, 2021, in connection with the grant of a security interest in the Collateral, the Company also entered into an Intercreditor and Subordination Agreement with the Bank and Skywords. The Company is indebted to the Bank pursuant to two Term Loans and a Credit Agreement, each of which granted the Bank a security interest in substantially all of the Company's personal property assets. The Bank's security interest in the Company's personal property assets ranks senior to Skywords' security interest in the Collateral, and the Intercreditor and Subordination Agreement generally governs the relationship between the Bank and Skywords as secured lenders to the Company and includes customary terms.

On December 14, 2022, the Company entered into a First Amendment (the "Amendment") to the Skywords Amended Note. The Amendment extends the maturity date to April 12, 2025 and increases the revolving amount that the Company may borrow from time to time under the Skywords Note from \$500,000 to \$1,000,000. All other terms of the Skywords Note remain the same.

At both March 31, 2023 and 2022, the Skywords Note principal balance was \$1,000,000, and was included in long-term debt on the Consolidated Balance Sheets. At March 31, 2023 and 2022, the balance on the Revolver was \$500,000 and \$0, respectively, and was included in line of credit – related party on the Consolidated Balance Sheets. At March 31, 2023 and 2022, the interest rates were 7.5% and 5.0%, respectively.

16. SUBSEQUENT EVENTS

On May 2, 2023, the Company was notified by Nasdaq that the Company is not in compliance with Nasdaq's Listing Rule 5550(a)(2), as the minimum bid price of the Company's common stock had been below \$1.00 per share for 30 consecutive business days. Under Nasdaq's rules, the notification of noncompliance had no immediate effect on the listing or trading of the Company's common stock on Nasdaq under the symbol "CYAN". Under Nasdaq's rules, the Company was given 180 days, or until October 30, 2023, to achieve compliance with the minimum bid price requirement. To regain compliance, the minimum bid price of the Company's common stock must meet or exceed \$1.00 per share for a minimum of ten consecutive business days prior to the expiration of the 180-day grace period. Failure to regain compliance during this period could result in delisting.

On June 15, 2023, the Company was notified by Nasdaq that the Company has regained compliance with the Nasdaq's Listing Rule 5500(a)(2) and is in compliance with all applicable listing standards.

The Company had no additional subsequent events, other than those mentioned above, in Note 6 regarding the Bank waiver letter dated June 22, 2023, and in Note 9 for Restricted Stock and RSUs issued in April 2023.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our chief executive officer ("CEO") and chief financial officer ("CFO"), we have evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15(d)-15(e) of the Exchange Act as of the end of the period covered by this Report. Based on that evaluation, our CEO and CFO have concluded that our disclosure controls and procedures are effective to provide reasonable assurance that information we are required to disclose in reports we file or submit under the Exchange Act is (1) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (2) accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosures.

Management's Report on Internal Control over Financial Reporting.

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our management evaluated the effectiveness of our internal control over financial reporting as of March 31, 2023. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in "Internal Control - Integrated Framework" (2013 Framework). Based on our assessment, using those criteria, management concluded that our internal control over financial reporting was effective as of March 31, 2023.

Changes in Internal Control over Financial Reporting.

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the fiscal year ended March 31, 2023 that has materially affected, or was reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls.

Our management, including our CEO and CFO, do not expect that our disclosure controls and procedures or our internal controls over financial reporting will prevent all errors and all fraud. A control system no matter how well designed and implemented, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs.

The inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple errors or mistakes. Controls can also be circumvented by the individual acts of some persons, or by collusion of two or more people. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information

Not applicable

PART III

Item 10. Directors, Executive Officers of the Registrant and Corporate Governance

Information with respect to Directors may be found under captions "Proposal One: Election of Directors," "Board Meetings and Committees," "Director Compensation," "Security Ownership of Certain Beneficial Owners and Management: and "Compliance with Section 16(a) of the Exchange Act" contained in Cyanotech's definitive 2023 Proxy Statement. Information on Executive Officers may be found under the caption "Executive Officers" contained in Cyanotech's definitive 2023 Proxy Statement.

We have adopted the Cyanotech Code of Ethics for our officers and employees. We have also adopted the Board of Directors Code of Conduct. Both Codes are publicly available on our website at www.cyanotech.com. If we make any substantive amendments to or grant any waiver from such Codes relating to our Chief Executive Officer, Chief Financial Officer or Officers, we will disclose the nature of such amendment in a report on Form 8-K and amend the website disclosure.

Item 11. Executive Compensation

The information required by this Item is incorporated herein by reference from the sections captioned "Executive Compensation and Other Information," "Equity Compensation Plan Information" and "Option Grants in Fiscal Year 2023," contained in Cyanotech's definitive 2023 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The security ownership information required by this Item is incorporated herein by reference from the sections captioned "Equity Compensation Plan Information" and "Security Ownership of Certain Beneficial Owners and Management" contained in Cyanotech's definitive 2023 Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item, if any, is incorporated herein by reference from the sections captioned "Related Party Transactions" contained in Cyanotech's definitive 2023 Proxy Statement.

Item 14. Principal Accountant Fees and Services

Information concerning principal accountant fees and services appears under the heading "Independent Registered Public Accounting Firm's Fees" in Cyanotech's definitive 2023 Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statements Schedules

(a) Financial Statements and Schedule

(1) The following Financial Statements of Cyanotech Corporation and the Report of Independent Registered Public	
Accounting Firm are included in Item 8 of this report:	
Report of Independent Registered Public Accounting Firm (PCAOB ID Number 248)	26
Consolidated Balance Sheets as of March 31, 2023 and 2022	27
Consolidated Statements of Operations for the years ended March 31, 2023, 2022 and 2021	28
Consolidated Statements of Stockholders' Equity for the years ended March 31, 2023, 2022 and 2021	29
Consolidated Statements of Cash Flows for the years ended March 31, 2023, 2022 and 2021	30
Notes to Consolidated Financial Statements	31
(2) The following financial statement schedule is included in this report on the pages indicated below:	
Schedule II—Valuation and Qualifying Accounts	52

Financial statement schedules not listed above have been omitted since they are either not required, not applicable or the information is included in the consolidated financial statements or notes thereto.

Exhibit

Number Document Description

- 3.1 Restated Articles of Incorporation (Incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q, filed November 9, 2012, File No. 0-14602).
- 3.2 Amended and Restated Bylaws (Incorporated by reference to Exhibit 3.2 to the Company's Report on Form 8-K filed January 13, 2010, File No. 0-14602)
- 4.1 Specimen Common Stock (Incorporated by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K for the year ended March 31, 2007, File No. 0-14602)
- 4.2* Description of Registrant's Securities
- 10.1 Sub-Lease Agreement between the Company and Natural Energy Laboratory of Hawaii Authority dated December 29, 1995 (Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-QSB for the quarter ended December 31, 1995)
- 10.2 Supplemental Agreement effective February 1, 2012 to amend the Sub-Lease Agreement described in Exhibit 10.1 herein, (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated March 9, 2012).
- 10.3 2004 Independent Director Stock Option and Restricted Stock Grant Plan, amended and restated November 8, 2011 (Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q dated November 14, 2011 for the quarter ended September 30, 2011).
- 10.4 2005 Stock Option Plan, amended August 29, 2011 (Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2011).
- 10.5 Term Loan Agreement between Pacific Rim Bank ("Pacific Rim") and both the Company and Nutrex Hawaii, Inc. ("Nutrex"); Promissory Notes in favor of Pacific Rim in the amounts of \$2,250,000 and \$3,250,000, issued by the Company and Nutrex, dated September 7, 2012; Mortgage, Security Agreement and Financing Statement between the Company and Pacific Rim; Assignment of Lessor's Interest in Leases and Rents between the Company and Pacific Rim; Security Agreement and UCC Financing Statement between the Company and Pacific Rim; United States Department of Agriculture Rural Development ("USDA") Conditional Commitments; Hazardous Substances Certificate and Indemnity Agreement; Assignment of Construction Contract between the Company and No'Eau Construction LLC; Sublessor's Consent to Mortgage of Sublease K-4; Estoppel Certificate and Subordination Agreement, given by the Natural Energy Laboratory of Hawaii Authority, State of Hawaii, as Sublessor; Security Agreement and UCC Financing Statement between Nutrex and Pacific Rim. (Incorporated by reference as Exhibit 4.1 to the Company's Report on Form 10-Q filed on November 9, 2012)
- 10.6 Term Loan Agreement between First Foundation Bank ("First Foundation") and both the Company and Nutrex; Promissory Note in favor of First Foundation in the amount of \$2,500,000, issued by the Company and Nutrex, dated July 30, 2015; Mortgage, Security Agreement and Financing Statement between the Company and First Foundation; Assignment of Lessor's Interest in Leases and Rents between the Company and First Foundation; Security Agreement and UCC Financing Statement between the Company and First Foundation; Security Agreement and UCC Financing Statement between Nutrex and First Foundation; USDA Conditional Commitments; Hazardous Substances Certificate and Indemnity Agreement; Sublessor's Consent to Mortgage of Sublease K-4; Estoppel Certificate and Subordination Agreement. (Incorporated by reference as Exhibits 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9 to the Company's Report on Form 10-Q filed on November 12, 2015)
- 10.7 2014 Independent Director Stock Option and Restricted Stock Grant Plan (Incorporated by reference to the Company's Definitive Proxy Statement filed July 18, 2014)
- 10.8 2014 Independent Director Stock Option and Restricted Stock Grant Plan and Amendment (Incorporated by reference to the Company's Definitive Proxy Statement filed on July 15, 2021)
- 10.9 2016 Equity Incentive Plan (Incorporated by reference to the Company's Definitive Proxy Statement filed July 15, 2016.
- 10.10 Revolving Credit Agreement, by and between First Foundation Bank and the Company, dated June 3, 2016. (Incorporated by reference as Exhibit 10.1 to the Company's Current Report on Form 8-K filed September 1, 2016).
- 10.11 Supplemental Agreement No. 1 to Modify Sublease No. K-26, by and among LLC, the Natural Energy Laboratory of Hawaii Authority, and the Company, effective as of October 1, 2018 (Incorporated by reference as Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 7, 2018)
- 10.12 Sublease No. K-26, by and between the Natural Energy Laboratory of Hawaii Authority and Cellana LLC (assigned to the Company), effective as of October 1, 2018 (Incorporated by reference as Exhibit 10.2 to the Company's Current Report on Form 8-K filed December 7, 2018)
- 10.13 Promissory Note by and between Skywords Family Foundation, Inc. and Cyanotech Corporation, dated April 12, 2019 (Incorporated by reference as Exhibit 10.1 to the Company's Current Report on Form 8-K filed April 12, 2019)
- 10.14 Promissory note by and between First Hawaiian Bank and Cyanotech Corporation, dated April 30, 2020 (Incorporated by reference as Exhibit 10.1 to the Company's Current Report on Form 8-K filed May 11, 2020)
- 10.15 Executive Employment Agreement, dated as of September 28, 2020, by and between Felicia Ladin and Cyanotech Corporation (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on October 1, 2020)
- 10.16 Amended and Restated Promissory Note, dated April 12, 2021, by and between Skywords Family Foundation, Inc. and Cyanotech Corporation (Incorporated by reference as Exhibit 10.1 to the Company's Current Report on Form 8-K filed April 16, 2021)
- 10.17 Intercreditor and Subordination Agreement, dated April 12, 2021, by and between First Foundation Bank, Skywords Family Foundation, Inc. and Cyanotech Corporation (Incorporated by reference as Exhibit 10.2 to the Company's Current Report on Form 8-K file April 16, 2021)
- 10.18 Executive Employment Agreement, dated as of June 16, 2022, by and between Matthew K. Custer and Cyanotech Corporation (Incorporated by reference as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 22, 2022)
- 10.19 First Amendment to Amended and Restated Promissory Note, dated December 14, 2022, by and between Skywords Family Foundation, Inc. and Cyanotech Corporation (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 19, 2022)
- 21.1 Subsidiaries of the Company (Incorporated by reference to Exhibit 21.1 to the Company's Annual Report on Form 10-K for the year ended March 31, 2012, File No. 0-14602)
- 23.1* Consent of Independent Registered Public Accounting Firm
- 31.1* Certifications of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 signed as of June 27, 2023.
- 31.2* Certifications of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 signed as of June 27, 2023.
- 32.1* Certifications of Chief Executive Officer and Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 signed as of June 27, 2023.
- 99.1* Press Release dated June 27, 2023.
 - 101 The following financial information from our Annual Report on Form 10-K for fiscal year ended March 31, 2023, filed with the SEC on June 27, 2023, formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets at March 31, 2023 and 2022, (ii) the Consolidated Statements of Operations for the years ended March 31, 2023, 2022 and 2021, (iii) the Consolidated Statements of Stockholders' Equity for the years ended March 31, 2023, 2022 and 2021, (iv) the Consolidated Statements of Cash Flows for the years ended March 31, 2023 and 2022, and (v) Notes to Consolidated Financial Statements.
 - 104 Cover Page Interactive Data File (Formatted as Inline XBRL and contained in Exhibit 101)
 - * Included herewith. Other exhibits were filed as shown above.

Schedule II

Cyanotech Corporation Valuation and Qualifying Accounts

Years Ended March 31, 2023, 2022 and 2021 (in thousands)

	Additions							
	Balance at Beginning	Charged Costs an	nd	Ot	ged to her			 alance at End of
Description	of Year	Expens	se	Acco	ounts	Dedu	uctions	Year
Allowance for Doubtful Accounts:								
2023	<u>\$ 67</u>	\$	64	\$		\$	67	\$ 64
2022	32		40				5	67
2021	13		46				27	32

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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, on the 27 day of June, 2023.

CYANOTECH CORPORATION

By:	/s/ Matthew K. Custer
	Matthew K. Custer
	President and Chief Executive Officer

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

Signatures	Title	Date
/s/ Matthew K. Custer Matthew K. Custer	President and Chief Executive Officer (Principal Executive Officer)	June 27, 2023
/s/ Felicia Ladin Felicia Ladin	Chief Financial Officer, Vice President—Finance and Administration, and Treasurer (Principal Financial Officer)	June 27, 2023
/s/ Michael A. Davis Michael A. Davis	Chairman of the Board	June 27, 2023
/s/ Angela M. McElwee Angela M. McElwee	Director	June 27, 2023
/s/ Walter B. Menzel Walter B. Menzel	Director	June 27, 2023
/s/ David M. Mulder David M. Mulder	Director	June 27, 2023
/s/ David L. Vied David L. Vied	Director	June 27, 2023

Cyanotech Corporation 2023 Annual Report

Executive Officers

Matthew K. Custer

President and Chief Executive Officer

Gerald R. Cysewski, Ph.D. Chief Executive Officer Emeritus and Chief Scientific Officer

Felicia I. Ladin
Chief Financial Officer, Vice President
Finance and Administration and Treasurer

Charles J. Hartmann

Vice President Sales and Marketing

Glenn D. Jensen Vice President Operations

Jennifer M. Johansen
Vice President Quality, Regulatory
and Government Affairs

Amy B. Nordin

Vice President Human Resources
and Secretary

Board of Directors

Michael A. Davis Chairman

Angela M. McElwee

Walter B. Menzel

David M. Mulder

David L. Vied

Matthew K. Custer

Stock Listing

Our common stock is listed on NASDAQ under the ticker symbol "CYAN"

Transfer Agent and Registrar

Computershare Investor Services www.computershare.com

Investor Relations

Russell Communications Group brussell@cyanotech.com

Legal Counsel

Allen & Overy LLP

Independent Registered Public Accountants

Grant Thornton LLP

Annual Meeting

The 2023 Annual Meeting of Stockholders will be held on Thursday, August 24, 2023 at 3:00 pm Hawaii Standard Time, at the Cyanotech Innovation Center, 73-4185 Unaloha Point Drive, Kailua-Kona, HI 96740

Annual Report on Form 10-K

A copy of Cyanotech Corporation's Annual Report on Form 10-K for the fiscal year ended March 31, 2023 will be available to all stockholders at no charge. A copy can also be obtained by going to the following website: http://www.sec.gov or through our company website.

Company Website

www.cyanotech.com

USPS Mailing Address

73-4460 Queen Kaahumanu Hwy, Suite 102 Kailua-Kona, HI 96740