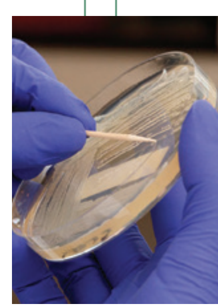
A Growth
MINDSET

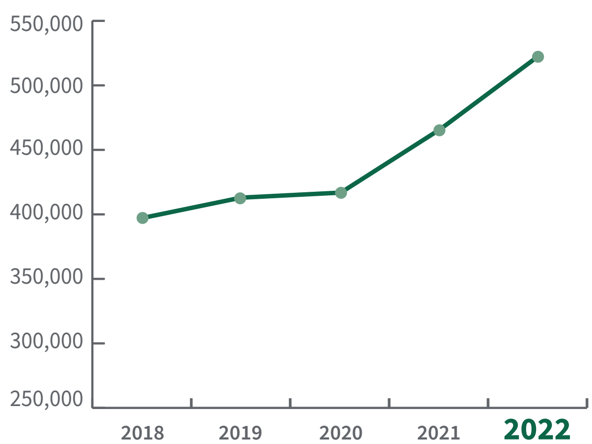
2022 ANNUAL REPORT



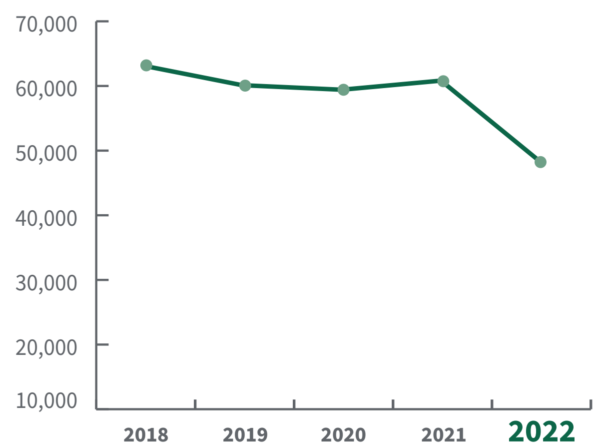
NEOGEN® CORPORATION

The ***mission*** *of Neogen Corporation is to be the leading company in the development and marketing of solutions for* ***food*** *and* ***animal*** *safety.*

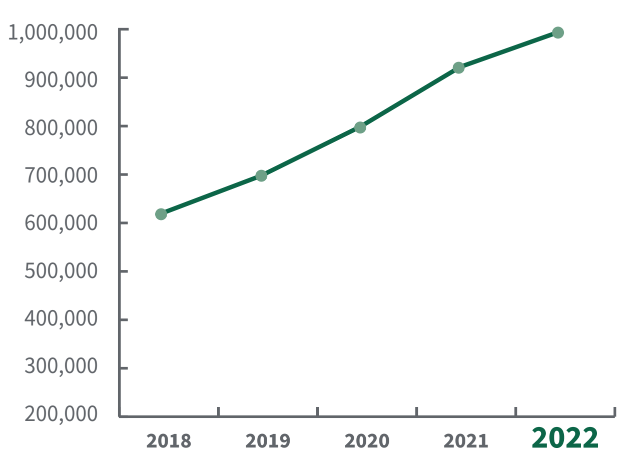
TOTAL REVENUES
Dollars in thousands



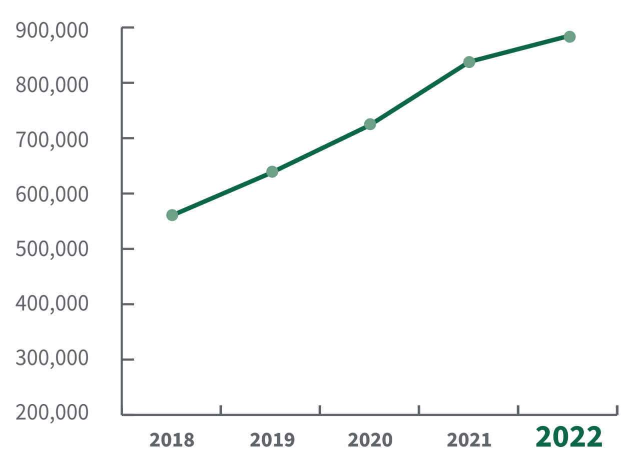
NET INCOME
Dollars in thousands



TOTAL ASSETS
Dollars in thousands



EQUITY
Dollars in thousands



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Financial Highlights

Amounts in thousands, except per share

Year Ended May 31	2022	2021	2020	2019	2018
Operations:					
Total Revenues*	$ 527,159	$ 468,459	$ 418,170	$ 414,186	$ 397,930
Food Safety*	259,979	234,244	212,691	213,474	194,477
Animal Safety*	267,180	234,215	205,479	200,712	203,453
Operating Income	58,618	74,169	67,523	68,094	70,194
Net Income Attributable to Neogen	48,307	60,882	59,475	60,176	63,145
Basic Net Income Per Share**	$ 0.45	$ 0.57	$ 0.57	$ 0.58	$ 0.62
Diluted Net Income Per Share**	$ 0.45	$ 0.57	$ 0.56	$ 0.57	$ 0.61
Average Diluted Shares Outstanding**	108,020	107,120	105,720	104,850	104,298

* Revised 2017–2018
** Restated due to June 2021 stock split

In thousands

Year Ended May 31	2022	2021	2020	2019	2018
Financial Strength:					
Cash and Marketable Securities	$ 381,051	$ 381,087	$ 343,673	$ 267,524	$ 210,810
Working Capital	584,954	537,852	488,917	411,278	337,101
Total Assets	992,929	920,192	797,182	695,740	618,009
Long-Term Debt	–	–	–	–	–
Equity	887,374	840,377	725,177	637,899	560,175

A MESSAGE FROM
John Adent, President and CEO

To Our Shareholders, Employees, and Friends,

This fiscal year brought a lot of “new” to Neogen.

With three major acquisitions and the big announcement in December 2021 of our plans to merge 3M’s Food Safety business with our existing operations, Neogen is poised to take a big step forward as a company.

This change isn’t sudden — it is the culmination of years of operating with a growth mindset, as our entire Neogen team has consistently been looking for new ways to grow the business and take Neogen to new heights within the industries that we serve. Since we began operations in 1982, Neogen has searched for ways to expand our portfolio and offer new solutions that allow us to better serve our customers across their many markets.

We recognize that our strength comes from the diversity of our portfolio and from our ability to serve all people and animals at every step of the food chain, from behind the farm gate to the dinner plate. As we look at continuing our growth trends going forward, we must focus on finding ways to make our current products and services better, offering more solutions across more industries, helping our team members grow in their careers with Neogen, and creating value for our shareholders.

As we enter our new fiscal year, we look to expand our position as a leader in food security, finding new ways to serve our customers around the world. We are excited to see how this new year furthers our growth and our pursuit of this goal.

A Year of Growth

For the 31st consecutive year, we are pleased to report revenue increases over the previous year, a testament to our ongoing commitment to operating with a growth mindset, even as we face hurdles. Our team has done an outstanding job in remaining flexible while consistently looking for new ways to reach our customers around the world.

Revenues for the full fiscal year were $527,159,000, compared to the prior year’s $468,459,000, an increase of 13%. Net income for the fiscal year was $48,307,000 or $0.45 per share; excluding $25.6 million in 3M deal-related costs, net income would have been $67,938,000, or $0.63, for the fiscal year, compared to the prior year’s $60,882,000, or $0.57, an overall increase of 12%. Per share amounts were adjusted to reflect our 2-for-1 stock split on June 4, 2021.

The outstanding results for the fiscal year give us momentum as we move into our 2023 fiscal year, with the anticipated close of the 3M transaction on the horizon. Our integration efforts have us well prepared, and we look forward to welcoming the 3M Food Safety team members to the Neogen family and beginning to build our new company together after the expected close of the transaction.

We have a lot to look forward to in our new fiscal year as we celebrate our 40th year of operations.

Segment Highlights

Our Food Safety segment recorded an increase of 11% over the 2021 fiscal year, driven by growth across our diagnostic testing portfolio, including natural toxins, food allergens, and culture media. The general sanitation product line also saw solid growth, led by strong placements of the AccuPoint® Advanced NG readers. Our Listeria Right Now™ 60-minute test system also saw strong increases over the prior year. Food safety diagnostics company Megazyme continued to drive growth as it was fully integrated across our distribution channels.

The Animal Safety segment rose 14% over the prior fiscal year. Growth in the insect control product line led this increase, enhanced by the StandGuard® insect control product line, which we acquired in July 2020. We also saw strong sales of veterinary instruments and animal care products, including veterinary biologics, further aided by sales of parasiticides from the September 2021 acquisition of CAPInnoVet.

Our worldwide genomics business recorded an 11% increase for the fiscal year, primarily driven by continued strength in bovine markets in the U.S., Australia, Brazil, and China, as well as increases in sheep and companion animal testing services in Australia. Integration of Genetic Veterinary Sciences, Inc., which we acquired in December 2021, continued, with revenues meeting expectations during its first six months under our ownership.

At our international locations, we also had a strong showing, recording an increase of 14% in the 2022 fiscal year.

In the U.K., we saw an increase of 13%, driven by strong sales of natural toxin test kits, the One Broth One Plate culture media solution, and cleaners and disinfectants sold to the U.K. and Asia. Sales in Australia grew by 25%, led by strong growth in beef, sheep, and companion animal genomic testing, as well as increases in allergen and pathogen test kits. Our Latin American operations saw a revenue increase of 11%, with growth in sales of veterinary instruments, general sanitation, natural toxins, and culture media.

In Brazil, revenues were flat compared to the prior year as increases in genomics testing and rodent control products were offset by declines in dairy drug residue tests. Revenues at our China operations were also flat in comparison to the prior year, as the country was impacted by COVID-19 lockdowns in the second half of the 2022 fiscal year.

Celebrating 40 Years of Operations

Our upcoming changes could not have happened at a more significant time in our journey, as we celebrate 40 years of operations in our 2023 fiscal year.

> *"In our 40 years, we have taken a vision and a $50,000 grant from Michigan State University and turned them into the company we are today, a leader in the food and animal safety industries, and we're nowhere near done yet."*

We have an incredible team here at Neogen, and together we are poised to continue driving the company onward and upward. It is an exciting time to be a part of Neogen, and we believe we are well-positioned to achieve our goals, continue expanding, and serve our customers around the world.

Neogen has a bright future, and we are grateful for your support as we move into our new fiscal year.

Sincerely,

John Adent
President and CEO

A *Growth* MINDSET

With the mission to "Be a leading company in the development and marketing of solutions for food and animal safety," growth is always top-of-mind at Neogen.

As we look to continue playing a key role in enhancing the safety, quality, quantity, efficiency, and sustainability of the global food supply for the rapidly growing world population, our team understands that everything we do needs to be approached with a growth mindset.

As we look toward a post-pandemic world, we see considerable opportunities for Neogen to capitalize on significant tailwinds within our industries as our world becomes increasingly health-conscious, aware of food safety concerns, and as technology evolves to fit the entire supply chain.

Together, we continually analyze our current business to determine what we can do to enhance our product offering and better serve our customer base while simultaneously advancing our research and development, manufacturing, technological, and commercial capabilities, as well as expanding our international presence as we look to the future.

We recognize that food security begins behind the farm gate and carries all the way to the dinner plate, making the role Neogen plays in providing solutions for that journey more important than ever. The combination of our Animal Safety and Food Safety business units creates a cohesive portfolio covering every aspect of food security. We continue to take steps to develop innovative new solutions that encourage growth, evolution, and security within the global food supply, protecting people and animals around the world.

Neogen is here to grow with you, no matter which part of the global food supply you serve.

Growing Our Animal Safety Solutions

Neogen offers a diverse range of animal safety solutions, helping to protect animals, people, and food through preventative care, stopping disease before it starts. With a broad range of products and formulations, Neogen offers a solution for nearly every situation.

Biosecurity

Our biosecurity suite includes our line of EPA-approved cleaners and disinfectants, which play a vital role in stopping the spread of disease within food and animal production facilities, veterinary clinics, and more, helping to keep animals, workers, and doctors safe and healthy.

Also included in our biosecurity offerings is our line of cleaners and disinfectants — including Neogen® Viroxide Super™, the BioSentry® and COMPANION™ product lines, Synergize®, Acid-A-Foam™ EVO, and Quik Clean — which are designed with high-quality chemistries, able to tackle bacteria, fungi, and viruses, maintaining sanitary conditions and limiting potential hazards.

In December 2021, we acquired Delf (UK) Ltd., a United Kingdom-based manufacturer and supplier of animal hygiene and industrial cleaning products. The acquisition will help us expand our offerings of performance dairy chemicals, complementing our existing disinfectant and cleaner offerings, and enhancing our portfolio.

Our water treatment solutions help maintain water quality in livestock production facilities, enabling proper digestion and nutrient absorption, optimal growth, and production.

Neogen also offers insect and rodent control solutions as part of our biosecurity suite.

Insects can carry and transmit disease, contaminate stored food and feed, and can cause stress and health concerns in animals, so controlling them through the use of our Prozap® product line, Surekill®, Catchmaster, and StandGuard® solutions helps to offer high levels of protection for beef and dairy cattle, poultry, and other production animals.

Rodents are one of the largest threats to the food supply. Every year, rodents cause millions of dollars of damage worldwide, harming crops, stored food, and farm equipment through their ability to thrive in small spaces, carry disease, play host to parasites, and deposit contaminants wherever they go. Our portfolio includes the globally trusted Ramik®, Havoc®, Cykill™, Rodex™, Prozap®, and DeciMax® solutions in several presentations, providing effective solutions for every problem.

Animal Health

Another important part of animal care and prevention are trustworthy and dependable tools. Neogen produces veterinary care products that help keep livestock, poultry, horses, and companion animals safe and healthy.

Our comprehensive line of solutions includes antibiotics, diagnostic tools, vaccines, immunostimulants, injectables, oral supplements, vitamins and minerals, wound care, and other topical solutions. Our BotVax® B vaccine is the only USDA-approved vaccine for the prevention of equine botulism Type B, and our USDA-approved EqStim® immunostimulant is proven to help combat equine bacterial and viral respiratory infections.

Other Neogen® Vet pharmaceuticals include PanaKare™, a digestive aid in replacement therapy due to exocrine pancreatic insufficiency in dogs and cats; ThyroKare™, an FDA-approved replacement therapy for diminished thyroid function in dogs; and RenaKare™, a supplement for potassium deficiency in dogs and cats.

Our Ideal® and Prima® lines of veterinary tools and over-the-counter products include surgical instruments, needles, syringes, reproductive and obstetrical instruments, personal protective equipment, and more. Our wide range of veterinary care products has been trusted by livestock producers, veterinarians, and pet owners to keep their animals healthy, with a long-established reputation of quality.

In September 2021, we acquired Atlanta-based CAPInnoVet, Inc., a companion animal health care company that provides pet medications to the veterinary market. This acquisition added to our line of veterinary care products, providing entry into the fast-growing retail parasiticide market, and has been integrated smoothly into our Animal Safety business segment.

Growing Our Genomic Services

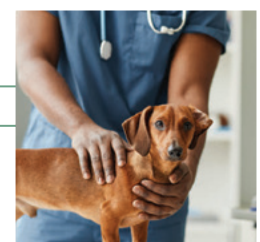
Genomics services are vital to the sustainable growth of the global food supply.

With the help of our state-of-the-art genomics laboratories around the world, producers, breeders, and researchers are able to translate the complex animal genome and view easy-to-understand identity and trait analysis, helping them to incorporate selective breeding practices into their operations. Our tests and laboratories help serve beef and dairy cattle, pig, sheep, poultry, companion animal, and aquatic species producers around the world to protect and improve the food chain at the earliest stages.

In December 2021, we acquired Spokane-based Genetic Veterinary Sciences, Inc., diversifying our companion animal portfolio. Their service offerings provide companion animal owners, breeders, and veterinarians with genetic information that enables optimal genetic health for dogs, cats, and birds.

This acquisition provided Neogen with a seventh global genomics laboratory and a third North American facility, playing a crucial role in providing improved services to all of our agrigenomics customers.

In April 2022, the Spokane facility earned ISO 17025:2017 accreditation from the American Laboratory Accreditation,



the highest standard in the world for testing and calibration laboratories, demonstrating Neogen's commitment to upholding rigorous quality management systems.

Neogen Genomics' Lincoln-based laboratory also received a CLIA Certificate of Compliance in April 2022, allowing the lab to conduct human genotyping services, which opens doors for us to participate in a broad range of clinical research projects and high-throughput genetic variant screening.

Growing Our Food Safety Solutions

Contamination threatens the global food supply at every stage of its journey, from behind the farm gate to the dinner plate. Having solutions for every step of that journey that ensure farmers, producers, processors, regulators, and everyone in between are able to detect potential hazards or unintended substances in their products before they get to people or animals is key to our continued growth strategy.

Quick, Efficient Testing

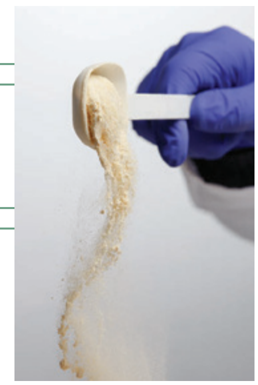
Neogen offers a comprehensive range of easy-to-use and accurate food safety tests, leading the way in helping to provide quick answers to the quality and safety of their products.

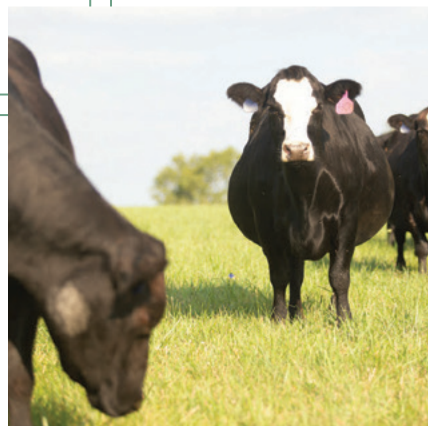
Our rapid food safety testing solutions are able to detect natural toxins, aflatoxin, aflatoxin M_1, deoxynivalenol, fumonisin, ochratoxin, zearalenone, T-2/HT-2 toxin, and ergot alkaloids; foodborne pathogens, including *E. coli*, *Salmonella*, *Listeria*, and *Campylobacter*; food allergens, including, among others, peanut, milk, egg, almond, gluten, soy, hazelnut, and coconut residues; seafood contaminants, and waterborne microorganisms.

Also included in our food safety testing portfolio are tests to detect spoilage microorganisms, including yeast and mold, which threaten the safety and quality of food and other consumer products, ensuring sterility, self-life, and the quality of both the raw materials and finished products.

Neogen also offers food quality diagnostic testing as a result of our December 2020 acquisition of Megazyme. Megazyme's diagnostic assay kits and reagents are used to measure dietary fiber, polysaccharides, acids, and sugars, such as lactose. In our 2022 fiscal year, we completed the integration of Megazyme products with our U.S. sales and marketing team, and we can now offer these diagnostic assay kits and reagents to customers across the entire company in the grain, cereal, wine, dairy, and food industries.

Our AccuPoint® Advanced Next Generation (NG) system, launched in May 2021, continues to grow within the sanitation monitoring market. The rapid sanitation test detects the presence of adenosine triphosphate (ATP), a chemical found in all living cells, and utilizes bioluminescence to quickly determine if a surface is clean. ATP monitoring is considered the gold standard for sanitation monitoring in food and beverage production facilities, the food service industry, and the healthcare market.




Digital Services

Another key area of growth for Neogen has been in our digital services.

Data is a key aspect of food safety, but without a way to manage or analyze it, the information can be overwhelming and lack effectiveness. Neogen Analytics, our food safety and risk management software-as-a-service, has seen significant growth in the fiscal year.

The digital, cloud-based program, which pairs with our ANSR® pathogen detection system and AccuPoint Advanced sanitation monitoring system, integrates into environmental monitoring programs to eliminate time-consuming and error-prone manual data entry, reduce the risks associated with delays or mishandled lab communications, and increase the transparency of organization-wide food safety metrics. Neogen Analytics automates testing and response workflows, assuring the appropriate testing and corrective actions are assigned and completed, improving food safety and quality for food companies and customers.

Neogen also offers blockchain solutions, a secure, digital record of data and transactions within agricultural supply chains. Our program collects data elements from both the dairy and beef cattle supply chains, creating a sharable, immutable, and intelligent database. Users can track each animal along every step of their journey, from parentage, origin, health records, animal husbandry practices, sustainability measurements, transportation, location, and processing.

Blockchain solutions enter Neogen into a new frontier of technology and provide an important service for our customers, allowing for increased sustainability and transparency across the food and animal safety markets.

Other Offerings

Neogen offers culture media and prepared media for varied purposes, including traditional bacterial testing and the growth of beneficial bacteria. Our innovative One Broth, One Plate solution saw increased placements in the 2022 fiscal year, allowing laboratories to test for pathogens in food and environmental samples using just one enrichment broth and one agar plate.

Providing support to our customers worldwide is incredibly important to Neogen, especially as we continue to grow. Our ISO-accredited laboratories located in the U.S., United Kingdom, and India offer food safety analysis to our global community.

The Neogen and 3M Food Safety Transaction

In December 2021, Neogen announced that we entered into a definitive agreement under which 3M will separate its Food Safety business and simultaneously combine it with Neogen's existing operations.

Upon completion of the transaction, we will expand our position as an innovative leader in the food safety sector, with a comprehensive product range and a strategic focus on the category's long-term growth opportunities.

This is an exciting time for Neogen as we look towards significant growth across our product offerings, employee footprint, and global operations, as well as the expansion of our research and development and innovation capabilities while enhancing revenue, margin, and earnings growth.

This combination will expand Neogen's leading position in this new era of food security as the world increasingly focuses on sustainability, food safety, and supply chain solutions.




We believe that this is the perfect time to combine to create a global innovator in food security, and this transaction is the culmination of years of operating with a growth mindset.

Combined, we will have a total of more than 70 years of helping our customers protect the world's food supply, and our newly bolstered team will be able to provide new and innovative solutions to our customer base, helping to grow and change the food security landscape moving forward.

Once the transaction closes, we will possess the digital capabilities to lead the growth and digitalization of the food and animal safety industries and will have an expanded offering in food safety, particularly in indicator organism testing and pathogen detection, which will complement Neogen's existing microbiology lines.

We are excited to welcome the 3M Food Safety employees to the Neogen team upon the anticipated closing. Our collective dedication to protecting the world's food supply, our shared values of serving our customers and communities, and the importance we place on creating environments in which our employees can thrive makes this transaction a great fit for both teams.

International Growth

Extending our solutions and expertise to as many people as possible is a key aspect of our continued growth, finding new markets to serve as we strive to protect the people and animals we care about.

Neogen maintains 10 locations in the United States, 14 international locations, and an extensive network of distributors who help us reach countries in which we do not have a physical presence; we see these numbers increasing, both domestically and internationally, with the absorption of the 3M Food Safety business.

We remain well-positioned to serve our markets, around the world, with sales in more than 140 countries in the 2022 fiscal year.

Ensuring Our Sustainable Growth

When Neogen looks at growth, it is critical that we ensure that we are growing in ways that benefit our customers, our employees, and our world.

Sustainability is a critical part of our mission to protect the people and animals we care about around the world.

We have a responsibility to our global community to grow and operate in a way that is responsible, socially conscious, and transparent, and we know that our continued growth and the growth of the markets we serve depends on how we manage our impact on the world.

Operating in a sustainable manner benefits all of Neogen, from our employees to our customers and shareholders. We lean on our Pillars of Trust — Openness, Honesty, Credibility, Respect, and Service — to guide our decisions as a company, as members of our communities, and as employees.

In our 2022 fiscal year, we continued our sustainability journey by increasing our Environmental, Social, and Governance (ESG) efforts.

Environmental Advances

During the 2022 fiscal year, we took an environmental inventory, determining our baseline utility usage at our U.S. sites, while working to document Neogen's current state of operations.

We also made significant strides toward increasing our use of renewable energy sources, including incorporating a solar array into our expansion in Australia and incorporating LEED certification into the design of our Lansing, Michigan, facility expansion. Sustainability has been incorporated into all of our design and research and development activities. We also invested in a low energy and low water usage pipette washing system in our Lincoln, Nebraska, genomics operation, which decreases plastic waste, and lowers utility usage and cost over time.

We also updated our Supplier Code of Conduct to motivate our suppliers to also act with sustainability in mind.

Social Advances

Over the past fiscal year, we made progress in inventorying our current state by collecting workforce demographic data and made important updates to our Employee Handbook and global Code of Conduct to ensure that our employees have the resources necessary to understand the expectations of the company.

We developed global compliance and Equity, Diversity, Inclusion, and Belonging (EDIB) training programs for our employees, which will launch in August 2022, and continued our Leadership Development series.

We have also made advances in soliciting and receiving employee feedback and engaging employees within the workplace.

Governance Advances

Neogen's governance documents were updated and posted to our Investor Relations webpage in fiscal 2022, ensuring transparency and accountability. We expanded our compensation disclosures in the 2021 proxy filing, tying a portion of management compensation to ESG initiatives.

We also made progress with our cybersecurity initiatives, enhancing our network capabilities, and preparing for a cybersecurity assessment, to be performed in our 2023 fiscal year.

Building Our New Company

As we look forward, we see a year of transformation ahead.

Neogen and our employees, customers, and shareholders are now entering a new era in the growth of our company. Together, we move forward with open-mindedness and a renewed focus on growing our business as two teams integrate into one.

The new company that we build together will be at the forefront of the food security industry, featuring an enhanced portfolio and expanded resources, capabilities, and solutions necessary for us to grow into a global industry leader.

We are incredibly confident in the future of Neogen and are focused on growing to better serve the entire global food supply chain, keeping our world safe and secure.

Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the consolidated financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K.

In addition, any forward-looking statements represent management's views only as of the day this Form 10-K was first filed with the Securities and Exchange Commission and should not be relied upon as representing management's views as of any subsequent date. While we may elect to update forward-looking statements at some point in the future, we specifically disclaim any obligation to do so, even if our views change.

Trends and Uncertainties

During fiscal 2022, we experienced higher than expected input cost inflation, including higher transportation, supply chain and labor costs, that negatively impacted operating results. Pricing actions taken during fiscal 2022 mitigated some, but not all, of the inflationary pressures. Ongoing inflation may also have an impact on our customer's purchasing decisions and order patterns. We estimate inflation will continue to affect us in fiscal 2023, although at this time it is impracticable to quantify the impact.

Although we have no operations in or direct exposure to Russia, Belarus and Ukraine, we have experienced intermittent shortages in materials and increased costs for transportation, energy and raw materials due, in part, to the negative impact of the Russia-Ukraine military conflict on the global economy. To date, our European operations and customer base have not been materially impacted by the conflict, however, as the conflict continues or worsens, it may impact our business, financial condition or results of operations in fiscal 2023.

As we continue to monitor the ongoing COVID-19 pandemic, our top priority remains protecting the health and safety of our employees, their families, and those in our communities. Safety guidelines and procedures have been developed for on-site employees and these policies are regularly monitored and updated by our internal Emergency Response Team.

In fiscal 2022, COVID-19, including new strains of the virus such as Delta and Omicron, continued to impact our business operations and financial results. A number of our food safety diagnostic product lines have been negatively impacted due to decreased demand in many of our customers' businesses around the world, particularly those serving restaurants, bars and other institutional food service markets. Many of our markets across the world are recovering, but the pandemic has continued to adversely impact our customers and ultimately, our revenues. We have also experienced supply chain difficulties including vendor disruptions, border closures, shipping issues and significantly increased shipping costs; labor shortages and higher labor costs, as we have had to use staffing agencies and increase our base pay in many areas of the Company to fill open positions; and restricted travel, which hinders our ability to connect with customers.

Overall, the impact of COVID-19 remains uncertain and ultimately depends on the length and severity of the pandemic, inclusive of the introduction of new strains of the virus; government actions taken in response; vaccination rates and effectiveness; the impact of vaccination requirements; extent of protection provided by prior viral infection; and the macroeconomic environment. We will continue to evaluate the nature and extent to which COVID-19 will impact our business, supply chain, including labor availability and attrition, consolidated results of operations, financial condition, and liquidity; we expect it to impact us through at least the end of our fiscal year ending May 31, 2023.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based on the consolidated financial statements that have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires that management make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, management evaluates the estimates, including but not limited to, those related to receivable allowances, inventories and intangible assets. These estimates are based on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Though the impact of the COVID-19 pandemic to our business and operating results presents additional uncertainty, we continue to use the best information available to inform our critical accounting estimates. Actual results may differ from these estimates under different assumptions or conditions.

The following critical accounting policies reflect management's more significant judgments and estimates used in the preparation of the consolidated financial statements.

Income Taxes

We account for income taxes using the asset and liability method. Under this method, deferred income tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities and for tax credit carryforwards and are measured using the enacted tax rates in effect for the years in which the differences are expected to reverse. Deferred income tax expense represents the change in net deferred income tax assets and liabilities during the year. The determination of income subject to income tax in each tax paying jurisdiction requires us to apply transfer pricing guidelines for certain intercompany transactions.

Our tax rate is subject to adjustment over the balance of the year due to, among other things, income tax rate changes by governments; the jurisdictions in which our profits are determined to be earned and taxed; changes in the valuation of our deferred tax assets and liabilities; adjustments to our interpretation of transfer pricing standards; changes in available tax credits or other incentives; changes in stock-based compensation expense; changes in tax laws or the interpretation of such tax laws; and changes in U.S. generally accepted accounting principles.

Although we believe our tax estimates are reasonable and we prepare our tax filings in accordance with all applicable tax laws, the final determination with respect to any audit, and any related litigation, could be materially different from our estimates or from our historical income tax provisions and accruals. The results of an audit or litigation could have a material effect on operating results and/or cash flows in the periods for which that determination is made. In addition, future period earnings may be adversely impacted by litigation costs, settlements, penalties, and/or interest assessments.

Our wholly owned foreign subsidiaries are comprised of Neogen Europe, Quat-Chem Ltd, Abbott Analytical Limited, Delf (UK) Limited, Delf-Chem Solutions Limited, Megazyme Ltd, Megazyme IP, Neogen Italia S.r.l., Neogen do Brasil, Rogama Industria e Comercio Ltda, Neogen Latinoamérica, Neogen Guatemala, Neogen Argentina, Neogen Uruguay, Neogen Chile SpA, Neogen Bio-Scientific Technology Co (Shanghai), Neogen Food and Animal Security (India), Neogen Canada, Neogen Canada Properties LLC and Neogen Australasia Pty Limited. Based on historical experience, as well as management's future plans, earnings from these subsidiaries are expected to be re-invested indefinitely for future expansion and working capital needs. Furthermore, our domestic operations have historically produced sufficient operating cash flow to mitigate the need to remit foreign earnings. On an annual basis, we evaluate the current business environment and whether any new events or other external changes might require a re-evaluation of the decision to indefinitely re-invest foreign earnings. It is not practicable to determine the income tax liability that would be payable if such earnings were not reinvested indefinitely.

Business Combinations and Contingent Consideration

We allocate the purchase price of acquired companies to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. The estimates used to value the net assets acquired are based in part on historical experience and information obtained from management of the acquired company. We generally value the identifiable intangible assets acquired using a discounted cash flow model. The significant estimates used in valuing certain of the intangible assets include, but are not limited to: future expected cash flows of the asset, discount rates to determine the present value of the future cash flows, attrition rates of customers, royalty rates and expected technology life cycles. We also estimate the useful lives of the intangible assets based on the expected period over which we anticipate generating economic benefit from the asset.

Our estimates of fair value are based on assumptions believed to be reasonable at that time. If we made different estimates or judgments, it may result in material differences in the fair values of the net assets acquired.

Certain business combinations involve potential payment of future consideration that is contingent upon the achievement of certain product development milestones and/or contingent on the acquired business reaching certain performance milestones. We record contingent consideration at fair value at the date of acquisition based on the consideration expected to be transferred, estimated as the probability weighted future cash flows, discounted back to present value. The fair value of contingent consideration is measured using projected payment dates, discount rates, probabilities of payment and projected revenues (for revenue-based considerations). Projected revenues are based on our most recent internal operational budgets and long-range strategic plans. The discount rate used is determined at the time of measurement in accordance with accepted valuation methodologies. Changes in projected revenues, probabilities of payment, discount rates and projected payment dates may result in adjustments to the fair value measurements. Contingent consideration is remeasured each reporting period using Level 3 inputs, and the change in fair value, including accretion for the passage of time, is recognized in other income (expense) in the consolidated statements of income. Contingent consideration payments made soon after the acquisition date are classified as investing activities in the consolidated statements of cash flows. Contingent consideration payments not made soon after the acquisition date that are related to the acquisition date fair value are reported as financing activities in the consolidated statements of cash flows, and amounts paid in excess of the original acquisition date fair value are reported as operating activities in the consolidated statements of cash flows.

Results of Operations

Executive Overview

(In thousands, except earnings per share)	2022	2021	Change
Consolidated			
Revenues	$ 527,159	$ 468,459	13%
Organic Sales Growth			9%
Food Safety			
Revenues	$ 259,979	$ 234,244	11%
Organic Sales Growth			7%
Animal Safety			
Revenues	$ 267,180	$ 234,215	14%
Organic Sales Growth			12%
% of International Sales	40%	39%	
Effective Tax Rate	19.8%	19.1%	
Net Income	$ 48,307	$ 60,882	(21)%
Earnings per Diluted Share	$ 0.45	$ 0.57	
Cash from Operations	$ 68,038	$ 81,089	

- Food Safety organic sales exclude revenues from the acquisitions of Megazyme (December 2020) and Delf/Abbott Analytical (November 2021).
- Animal Safety organic sales exclude revenues from the acquisitions of StandGuard (July 2020), CAPInnoVet (September 2021) and Genetic Veterinary Sciences (December 2021).
- Net income was negatively impacted by $25.6 million in the current fiscal year due to legal and consulting expenses for due diligence related to our recently announced agreement to combine with 3M's Food Safety business.

Neogen's international revenues were $209.3 million in fiscal 2022, compared to $183.2 million in fiscal 2021, an increase of 14%. Currency translation had a negligible impact on revenues for the full year, with gains in the U.K., Italy, Mexico, Brazil, China, and Canada partially offset by negative impact in Argentina, Chile, India and Australia. In a neutral currency environment, sales would have been $844,000 lower than reported in fiscal 2022.

Sales results for fiscal 2022 compared to the prior year are as follows for each of our international locations:

	Revenue Change — USD	Revenue Change – Local Currency
U.K. Operations (including Neogen Italia)	13%	12%
Brazil Operations	1%	(2)%
Neogen Latinoamerica	11%	9%
Neogen Argentina	34%	71%
Neogen Uruguay	9%	9%
Neogen Chile	33%	43%
Neogen China	0%	(3)%
Neogen India	19%	21%
Neogen Canada	37%	35%
Neogen Australasia	25%	27%

The 13% revenue increase at our combined U.K. operations in fiscal 2022 was led by a 25% increase in sales of cleaners and disinfectants, primarily from strong sales in the U.K. and Asia, and new culture media business with commercial laboratories in the U.K. that have adopted our recently launched One Broth One Plate workflow. Revenues in Brazil increased 1% in USD in fiscal 2022 but decreased 2% in local currency; market gains in genomics services in the beef market were offset by lower sales of dairy drug residue test kits, due to competitive pressures.

Neogen Latinoamerica revenues rose by 11% in USD in fiscal 2022, led by growth in natural toxins test kits, environmental sanitation products and culture media. China's sales were flat, as growth in the first half of the fiscal year was offset by lower sales in the last six months due to lockdowns and restrictions resulting from China's "Zero COVID" strategy. Sales at Neogen Australasia increased 25% for fiscal 2022, led by new genomics service business in the bovine, sheep and companion animal markets.

Service revenue, which consists primarily of genomics services sales to animal protein and companion animal markets, was $102.5 million in fiscal 2022, an increase of 11% over prior fiscal year sales of $92.2 million. The growth was led by the previously mentioned strength in Australia and Brazil, and was partially offset by lower volumes of domestic companion animal samples, the result of a difficult comparison due to large increases in the prior year.

Revenues

			Year Ended		
(Dollars in thousands)	May 31, 2022	Change	May 31, 2021	Change	May 31, 2020
Food Safety:					
Natural Toxins, Allergens & Drug Residues	$ 79,395	4%	$ 76,614	1%	$ 76,207
Bacterial & General Sanitation	47,282	7%	44,009	5%	41,780
Culture Media & Other	75,278	23%	61,245	28%	47,847
Rodenticides, Insecticides & Disinfectants	35,691	11%	32,219	12%	28,890
Genomics Services	22,333	11%	20,157	12%	17,967
	$ 259,979	11%	$ 234,244	10%	$ 212,691
Animal Safety:					
Life Sciences	5,685	(1)%	5,715	(10)%	6,322
Veterinary Instruments & Disposables	63,938	33%	48,128	12%	42,941
Animal Care & Other	39,805	11%	35,897	26%	28,389
Rodenticides, Insecticides & Disinfectants	83,610	8%	77,458	13%	68,815
Genomics Services	74,142	11%	67,017	14%	59,012
	$ 267,180	14%	$ 234,215	14%	$ 205,479
Total Revenue	$ 527,159	13%	$ 468,459	12%	$ 418,170

Year Ended May 31, 2022 Compared to Year Ended May 31, 2021

Food Safety

Natural Toxins, Allergens & Drug Residues – Sales in this category increased 4% in fiscal 2022, with a 6% increase in sales of natural toxin test kits and a 9% increase in sales of our allergens product line partially offset by a 33% decrease in sales of drug residue test kits, as we are discontinuing sales of certain lower margin products due to competitive market pressure.

Bacterial & General Sanitation – Sales in this category increased 7% in fiscal 2022 compared to the prior year. Sales of our AccuPoint® sanitation monitoring product line increased 12% aided by strong sales of our new reader. Sales of our Listeria Right Now™ product increased 25%, while sales of products to detect spoilage organisms in processed foods increased 4%.

Culture Media & Other – Sales in this category increased 23% in fiscal 2022 compared to fiscal 2021; excluding sales from the December 2020 acquisition of Megazyme, sales increased 11%. Sales of Neogen Culture Media products rose 16% as our new workflow, One Broth One Plate, continued to drive growth and increased sales to commercial labs in the U.K.; a large non-recurring sale to a domestic vaccine manufacturer in the first quarter also contributed to the current year growth.

Rodenticides, Insecticides & Disinfectants – Revenues of products in this category sold through our Food Safety operations increased 11% in fiscal 2022 compared to fiscal 2021. Excluding revenues from the November 2020 acquisition of Delf and Abbott Analytical, the growth was 3%. The increase was primarily due to continued strength in sales of cleaners and disinfectants to Asia resulting from the African swine fever outbreak in that region increasing demand, and higher sales to a U.K.-based toll manufacturer.

Genomics Services – Sales of genomics services sold through our Food Safety operations increased 11% in fiscal 2022 compared to the prior year, primarily due to increased beef business in Brazil and higher sample volumes from a large customer in China.

Animal Safety

Life Sciences – Sales in this category decreased 1% in fiscal 2022 compared to the same period in the prior year, primarily due to the loss of hair testing business with a large U.S. commercial laboratory that moved to a different testing platform.

Veterinary Instruments & Disposables – Revenues in this category increased 33% in fiscal 2022 compared to fiscal 2021, led by a large increase in sales of veterinary instruments, including needles and syringes, resulting from recently won private label business.

Animal Care & Other – Sales of these products increased 11% in fiscal 2022 compared to fiscal 2021; excluding the contribution of parasiticides from the September 2021 acquisition of CAPInnoVet, revenues in this category rose 6%. Growth in our biologics, small animal supplements and wound care product lines were partially offset by a large decline in sales of dairy supplies due to the June 2020 termination of an agreement under which we distributed these types of products for a large manufacturer of dairy equipment.

Rodenticides, Insecticides & Disinfectants – Sales in this category increased 8% in fiscal 2022, compared to the prior year. Insecticide sales increased 32%, led by strong demand in the farm and home channels, and cleaners and disinfectants sales rose 6%. These increases were partially offset by a 4% decline in rodenticide sales due to increased rodent pressure in the prior year, which resulted in a difficult comparison.

Genomics Services – Sales in this category increased 11% in fiscal 2022 compared to fiscal 2021; excluding the December 2021 acquisition of Genetic Veterinary Sciences, the organic increase was 5%. The growth was led by increases in beef and sheep testing in Australia, due to improved market conditions, and higher sample volumes from domestic dairy and beef cattle and poultry customers. The increase was partially offset by a decline in domestic companion animal revenues due to a difficult comparison from strong prior year sales growth.

Year Ended May 31, 2021 Compared to Year Ended May 31, 2020

The COVID-19 pandemic, which began in the second half of fiscal 2020, continued to cause difficult operating conditions in many of our key market segments in fiscal 2021. Shelter in place orders across the U.S. and in most of our international markets, the closure or reduced output of businesses due to quarantine and/or local legislation, disruption in the supply chain resulting from reduction in end-market demand and shipping issues, and the inability of some markets to react quickly to these changes, each disrupted our revenues.

Food Safety

Natural Toxins, Allergens & Drug Residues – Sales in this category increased 1% in fiscal 2021, with a 6% increase in sales of natural toxin test kits and a 5% increase in our allergens product line partially offset by a 30% decrease in sales of drug residue test kits. Sales of drug residue test kits have continued to decline as we ended an exclusive distributor agreement in Europe and faced competitive pressure and lower demand due to poor economic conditions.

Bacterial & General Sanitation – Sales in this category increased 5% in fiscal 2021 compared to the prior year. Sales of products to detect spoilage organisms in processed foods increased 19% in fiscal 2021, resulting from sales of our new instrument (Soleris NG), which launched in the first quarter, and increased consumables sales from new instrument placements. Sales of our AccuPoint sanitation monitoring product line were flat as many customers were shut down or operating at reduced capacity for a portion of the year, resulting in use of less consumables. A next generation reader for this product line was launched late in the fourth quarter; there will be significant sales and marketing focus on this product line in fiscal 2022. Sales of test kits to detect pathogens decreased 2%, as lower sales of ANSR equipment were only partially offset by increases from our Listeria Right Now test kit, which grew 21% in fiscal 2021.

Culture Media & Other – Sales in this category increased 28% in fiscal 2021 compared to fiscal 2020. Excluding sales from the December 2020 acquisition of Megazyme, sales increased 18%. This category includes sales of acquired inventory of non-Neogen manufactured products from our new businesses in Italy and the South American southern cone countries; these sales are not expected to continue long-term. This category also includes sales of veterinary instruments transferred to our U.K. sales team in fiscal 2021. Sales of Neogen Culture Media increased 1% as new business gained in the U.S. from a COVID-19 vaccine manufacturer offset the loss of some business due to competitor pricing.

Rodenticides, Insecticides & Disinfectants – Revenues of products in this category sold through our Food Safety operations increased 12% in fiscal 2021 compared to fiscal 2020, due primarily to continued strength in cleaners and disinfectant sales in China resulting from increased demand due to the African swine fever outbreak in that country and the COVID-19 pandemic. We also benefitted from strong sales of hand and skin sanitizing products at our U.K.-based Quat-Chem location in the first quarter of this fiscal year.

Genomics Services – Sales of genomics services sold through our Food Safety operations increased 12% in fiscal 2021 compared to the prior year, primarily due to higher sales in the Chinese porcine and bovine markets.

Animal Safety

Life Sciences – Sales in this category decreased 10% in fiscal 2021 compared to the same period in the prior year, primarily the result of lower forensic drug test kit sales to large commercial labs in the U.S. as the COVID-19 pandemic created less demand for testing; a reduction in sales of products to the U.S. horse racing industry in the U.S. also contributed to the decline, as racing activity was down.

Veterinary Instruments & Disposables – Revenues in this category increased 12% in fiscal 2021 compared to fiscal 2020. Veterinary instruments sales increased 16% for the year, led by increases in detectable needles and syringes as we gained new customers and market share from a key competitor. Partially offsetting this increase was a 9% decline in protective wear sales, as gloves were on backorder for much of the current year due to COVID related demand.

Animal Care & Other – Sales of these products increased 26% in fiscal 2021 compared to fiscal 2020; this category includes sales of food safety products sold through our Australian operation, the result of a February 2020 acquisition of a distributor. Excluding these sales, revenues in this category increased 21%. Sales of our small animal supplements, vitamin injectables, and joint pain products benefitted from growth in veterinary markets, as the COVID-19 pandemic has led to an increase in pet ownership, particularly dogs and cats. Additionally, sales rose for our equine supplements and antibiotics, due to strong demand in these markets. This category also includes sales of our thyroid treatment for dogs, which became available for sale late in the fourth quarter. Partially offsetting these gains was a 49% decline in sales of dairy supplies due to the June 2020 termination of an agreement in which we distributed these products for a large manufacturer of dairy equipment.

Rodenticides, Insecticides & Disinfectants – Sales in this category increased 13% in fiscal 2021, compared to the prior year. Rodenticide sales increased 42% as rodent pressure in certain areas of the U.S. increased significantly. Insecticide sales rose 15%, due in part to our acquisition of the StandGuard product line for fly control on July 31, 2020; organic sales in this category increased 7%. Cleaners and disinfectants sales decreased 15% resulting from lower sales of water treatment products and the transfer of a product line to our U.K. operation; additionally, opportunistic sales of sanitizing products in the fourth quarter of the prior year, due to extremely high demand early in the COVID-19 pandemic, did not continue at those levels in fiscal 2021.

Genomics Services – Sales in this category increased 14% in fiscal 2021 compared to fiscal 2020. The growth was led by strong increases to the U.S. and Australian companion animal markets, driven by increased pet adoption and higher consumer spending on pets during the COVID-19 pandemic. Gains in the commercial beef and beef association markets in the U.S., Canada and Australia also contributed to the growth, as well as the recent launch of a new high-density chip for white leg shrimp.

Cost of Revenues

(Dollars in thousands)	2022	Change	2021	Change	2020
Cost of Revenues	$ 284,146	12%	$ 253,403	14%	$ 221,891

Cost of revenues increased 12% in fiscal 2022 compared to fiscal 2021 and increased 14% in fiscal 2021 compared to fiscal 2020. This compares with revenue increases of 13% in fiscal 2022 and 12% in fiscal 2021. Expressed as a percentage of sales, cost of revenues was 53.9%, 54.1% and 53.1% in fiscal years 2022, 2021 and 2020, respectively. Gross margins were 46.1%, 45.9%, and 46.9% for fiscal years 2022, 2021, and 2020, respectively.

Fiscal 2022 – Our overall gross margin increased 20 basis points in fiscal 2022, primarily from a product mix shift to higher margin products in the Animal Safety segment. Partially offsetting this were higher raw material and freight costs within each segment, which resulted from continued supply chain disruptions, inflationary pressure, and ongoing issues related to COVID-19 and its variants across most of our markets. The Company has taken pricing actions where appropriate in response to these cost increases.

Fiscal 2021 – Our overall gross margin declined 100 basis points in fiscal 2021 as pressure on the worldwide supply chain caused by the COVID-19 pandemic resulted in increased overhead costs; in particular, freight costs on inventory purchases increased 53% in fiscal 2021 compared to the prior year. Additional cost increases resulted from personnel costs, in part from the increased volumes, but also due to labor shortages, contracted services primarily related to our recently launched instruments, and higher health insurance costs domestically, as employees and their families utilized elective medical services postponed from the fourth quarter of fiscal 2020 due to COVID-19. To a lesser extent, the shift in mix within the Food Safety segment towards products with lower gross margins negatively impacted the consolidated gross margin percentage.

Food Safety Gross Margins

Food Safety gross margins were 50.2%, 49.2% and 51.4% in fiscal years 2022, 2021 and 2020, respectively.

Fiscal 2022 – Food Safety margins increased 100 basis points in fiscal 2022, due to a product mix shift within the segment toward higher sales of diagnostic test kits in fiscal 2022; gross margin was also aided by a full year of sales of food quality products and enzymes from the Megazyme acquisition.

Fiscal 2021 – Food Safety margins decreased 220 basis points in fiscal 2021, primarily due to higher sales of equipment such as the Soleris NG, which was launched in the current year and has lower gross margins than our diagnostic test kits, and cleaners and disinfectants sold through our China location, which reports through the Food Safety segment. We were also negatively impacted by increased freight, labor and other overhead costs throughout the segment.

Animal Safety Gross Margins

Animal Safety gross margins were 42.1%, 42.6% and 42.3% in fiscal years 2022, 2021 and 2020, respectively.

Fiscal 2022 – Animal Safety gross margins decreased by 50 basis points in fiscal 2022, primarily due to significant product cost increases and international freight charges. Negative mix effects occurred from lower sales of higher margin rodenticide products and companion animal services.

Fiscal 2021 – Animal Safety gross margins increased by 30 basis points, primarily from strong sales of higher margin rodenticide and companion animal products and cost efficiencies; somewhat offsetting these gains, gross margin in this segment was negatively impacted by higher freight costs as rates to bring product into inventory rose significantly during the year, from both domestic and international sources.

Operating Expenses

(Dollars in thousands)	2022	Change	2021	Change	2020
Sales and Marketing	$ 84,604	$ 15%	$ 73,443	5%	$ 69,675
General and Administrative	82,742	62%	51,197	15%	44,331
Research and Development	17,049	5%	16,247	10%	14,750
Total Operating Expense	$ 184,395	31%	$ 140,887	9%	$ 128,756

Overall operating expenses increased by 31% in fiscal 2022 and 9% in fiscal 2021, each compared to the prior year. Legal, consulting and other professional fees totaling $25.6 million were incurred in conjunction with due diligence, negotiation of terms and integration planning for our proposed business combination with 3M's Food Safety business, which was announced on December 14, 2021. Excluding costs related to the 3M transaction, operating expenses were $158.8 million, an increase of 13% compared to the prior year.

Sales and Marketing

Sales and marketing expenses increased by 15% in fiscal 2022 compared to fiscal 2021 and increased 5% in fiscal 2021 compared to the prior year. As a percentage of sales, sales and marketing expense was 16.0%, 15.7% and 16.7% in fiscal years 2022, 2021 and 2020, respectively.

Fiscal 2022 – The $11.2 million, or 15%, increase in sales and marketing expenses in fiscal 2022 resulted primarily from increases in employee compensation expenses such as salaries, bonuses, and commissions, and shipping expense, both reflecting the increase in revenues. Travel, meals and entertainment, and tradeshow expense were also higher, with customer-facing activities increasing significantly, the result of the easing of COVID-19 restrictions.

Fiscal 2021 – The $3.8 million, or 5%, increase in sales and marketing expenses in fiscal 2021 resulted primarily from increases in employee compensation expenses such as salaries, bonuses, and commissions, reflecting the increase in sales for the year, as well as increased headcount as we returned to normal staffing levels. In addition, shipping costs rose in line with revenues, health insurance costs rose as employees and their families resumed receiving medical treatment and procedures which had been deferred in the fourth quarter of the prior fiscal year. Advertising and outside services also increased to support the launch of a number of new products during the year, most notably the Soleris NG and AccuPoint NG readers. Partially offsetting these increases was $3 million in decreased spending for travel and meals and entertainment for the year, the result of travel restrictions and reductions in face-to-face sales activities in most of our markets for the majority of the year. Travel and in person customer meetings did begin to pick up in some geographic areas in the second half of fiscal 2021 as COVID-19 restrictions were eased.

General and Administrative

General and administrative expenses rose 62% in fiscal 2022 compared to fiscal 2021 and by 15% in fiscal 2021 compared to fiscal 2020. Legal, consulting and other professional fees totaling $25.6 million were incurred in conjunction with due diligence, negotiation of terms and integration planning for our proposed transaction to combine with 3M's Food Safety business. Excluding costs related to the 3M transaction, general and administrative expenses increased 12% compared to the prior year. As a percentage of sales, general and administrative expense was 15.7% (10.8% excluding 3M transaction costs), 10.9% and 10.6% in fiscal years 2022, 2021 and 2020, respectively.

Fiscal 2022 – In fiscal 2022, we spent $25.6 million on strategic consulting, legal and other professional fees related to due diligence, negotiation of terms and integration planning for our proposed transaction to combine with 3M's Food Safety business. Excluding these costs, the increase in general and administrative expense in fiscal 2022 was 12%. Other increases in the current year included compensation related costs due to increased headcount and improved operating performance, incremental amortization expenses (non-cash) from recent acquisitions, higher levels of depreciation (non-cash) and related software and licensing costs from continued investments in information technology infrastructure and applications.

Fiscal 2021 – In fiscal 2021, we spent $3.1 million on strategic consulting, legal and other professional fees related to acquisition activity for businesses which we were ultimately not successful in acquiring. Excluding these costs, the increase in general and administrative expense in fiscal 2021 was 8%. Other increases in the current year included compensation increases due to increased headcount, including the addition of a number of senior management positions, incremental amortization expenses (non-cash) resulting from recent acquisitions, and higher levels of depreciation (non-cash) and related software and licensing costs from continued investments in information technology infrastructure and applications. Increases in this cost category resulting from the Megazyme acquisition totaled $957,000.

Research and Development

Research and development expenses increased 5% in fiscal 2022 and 10% in fiscal 2021, each compared to the prior year. As a percentage of revenue, these expenses were 3.2% in fiscal year 2022, 3.5% in fiscal year 2021 and 3.5% in fiscal year 2020; we expect to spend between 3% and 4% of total revenue on research and development annually as we continue to make investments in our future growth.

Fiscal 2022 – The 5% increase in research and development expenses in fiscal 2022 was primarily the result of increased compensation expense, resulting from scheduled annual increases and additional headcount, and increases in contracted services related to new product development. These increases were partially offset by a decrease in external reader development costs; these projects were completed in the prior fiscal year.

Fiscal 2021 – The 10% increase in research and development expenses in fiscal 2021 was primarily the result of increased compensation expense, resulting from scheduled annual increases and additional headcount from the Megazyme acquisition, project expense relating to new product innovation, spending with outside partners on the new readers launched in this fiscal year, and testing and approval costs for new product development.

Operating Income

(Dollars in thousands)	**2022**	**Change**	2021	Change	2020
Operating Income	**$ 58,618**	**(21)%**	$ 74,169	10%	$ 67,523

Operating income decreased 21% in fiscal 2022 compared to fiscal 2021 and increased by 10% in fiscal 2021 compared to fiscal 2020. Excluding the $25.6 million in transaction costs associated with 3M's Food Safety business, operating income increased 13% in fiscal 2022 compared to the prior year. Expressed as a percentage of revenues, operating income was 11.1% (16.0% excluding 3M transaction costs), 15.8% and 16.1% in fiscal years 2022, 2021 and 2020, respectively. Gross margins rose by $28.0 million, or 13% in fiscal 2022 compared to the prior fiscal year; this was more than offset by a $43.5 million increase in operating expenses (including $25.6 million of 3M transaction costs).

In fiscal 2021, gross margins rose by $18.8 million, or 10%; this increase was partially offset by an increase of $12.1 million, or 9%, in operating expenses, resulting in a $6.6 million, or 10%, increase in operating income compared to fiscal 2020.

Other Income (Expense)

Other Income (Expense) for the previous three fiscal years consisted of the following:

(Dollars in thousands)	**2022**	2021	2020
Interest income (net of expense)	**$ 1,267**	$ 1,614	$ 5,992
Foreign currency transactions	**(40)**	(541)	(1,178)
Licenses and settlements	**-**	9	(38)
Magiar contingent consideration	**-**	111	-
Quat-Chem contingent consideration	**356**	-	-
Livestock Genomics contingent consideration	**(136)**	37	-
Other	**142**	(131)	6
Total Other Income	**$ 1,589**	$ 1,099	$ 4,782

Interest income decreased by $347,000 in fiscal 2022 compared to fiscal 2021, due to lower interest rates in effect for most of the fiscal year. The loss from foreign currency translations in fiscal years 2022, 2021 and 2020 is the result of the changes in the value of foreign currencies relative to the U.S. dollar in countries in which we operate; the dollar strengthened against most of these currencies in all three years.

In fiscal 2022, we recorded adjustments totaling $220,000 for contingent consideration accruals related to acquisitions completed in prior years. In fiscal 2021, we received proceeds of $309,000 for a property loss settlement and recorded $300,000 of expense resulting from a legal settlement with a vendor. Additionally, adjustments to contingent consideration accruals in fiscal 2021 resulted in $148,000 of income. In fiscal 2020, we took a charge to expense and recorded a reserve of $600,000 to provide for potential fines or penalties resulting from an administrative subpoena issued by the U.S. Treasury Department's Office of Foreign Asset Control. This was partially offset by a $483,000 gain resulting from a settlement with the Brazilian government related to sales taxes charged over several years, and proceeds received for a property loss settlement.

Provision for Income Taxes

(Dollars in thousands)	2022	Change	2021	Change	2020
Provision for Income Taxes	$ 11,900	(17)%	$ 14,386	12%	$ 12,830

Income tax expense for fiscal 2022 was $11.9 million, an effective tax rate of 19.8%, compared to income tax expense of $14.4 million in 2021, an effective tax rate of 19.1%. For fiscal 2020, income tax expense of $12.8 million represented an effective tax rate of 17.7%.

Differences from the U. S. statutory rate of 21% to our effective rate are primarily due to provisions in the U.S. Tax Act and the exercise of stock options. Please refer to Note 6 to the consolidated financial statements for more information.

Net Income and Income Per Share

(Dollars in thousands—except per share data)	2022	Change	2021	Change	2020
Net Income	$ 48,307	(21)%	$ 60,882	2%	$ 59,475
Net Income Per Share—Basic	0.45		0.57		0.57
Net Income Per Share—Diluted	0.45		0.57		0.56

Net income decreased 21% in fiscal 2022 compared to fiscal 2021, due to $25.6 million of professional fees related to the 3M transaction. Excluding these costs and adjusting the tax rate accordingly, net income would have been $67.9 million, an increase of 12% compared to fiscal 2021.

Net income increased 2% in fiscal 2021 compared to fiscal 2020, primarily due to the $6.7 million increase in operating income. The increase in operating income was partially offset by lower other income and higher tax expense for the year.

Non-GAAP Financial Measures

This report includes certain financial information of Neogen that differs from what is reported in accordance with GAAP. These non-GAAP financial measures consist of EBITDA, Adjusted EBITDA and Adjusted EBITDA margin. These non-GAAP financial measures are included in this report because management believes that they provide investors with additional useful information to measure the performance of Neogen, and because these non-GAAP financial measures are frequently used by securities analysts, investors and other interested parties as common performance measures to compare results or estimate valuations across companies in Neogen's industries.

EBITDA

We define EBITDA as net income before interest, income taxes, and depreciation and amortization. We present EBITDA as a performance measure because it may allow for a comparison of results across periods and results across companies in the industries in which Neogen operates on a consistent basis, by removing the effects on operating performance of (a) capital structure (such as the varying levels of interest expense and interest income), (b) asset base and capital investment cycle (such as depreciation and amortization) and (c) items largely outside the control of management (such as income taxes). EBITDA also forms the basis for the measurement of Adjusted EBITDA (discussed below).

Adjusted EBITDA

We define Adjusted EBITDA as EBITDA, adjusted for stock-based compensation and certain transaction fees and expenses. We present adjusted EBITDA because it provides an understanding of underlying business performance by excluding the following:

- **Stock-based compensation.** We believe it is useful to exclude stock-based compensation to better understand the long-term performance of the respective core businesses and to facilitate comparison with the results of peer companies.
- **Certain transaction fees and expenses.** We exclude fees and expenses related to certain transactions because they are outside of Neogen's underlying core performance.

Adjusted EBITDA margin

We define Adjusted EBITDA margin as Adjusted EBITDA as a percentage of total revenues. We present Adjusted EBITDA margin as a performance measure to analyze the level of Adjusted EBITDA generated from total revenue.

These non-GAAP financial measures are presented for informational purposes only. EBITDA, Adjusted EBITDA and Adjusted EBITDA margin are not recognized terms under GAAP and should not be considered in isolation or as a substitute for, or superior to, net income (loss), operating income, cash flow from operating activities or other measures of financial performance. This information does not purport to represent the results Neogen would have achieved had any of the transactions for which an adjustment is made occurred at the beginning of the periods presented or as of the dates indicated. This information is inherently subject to risks and uncertainties. It may not give an accurate or complete picture of Neogen's financial condition or results of operations for the periods presented and should not be relied upon when making an investment decision.

The use of the terms EBITDA, Adjusted EBITDA and Adjusted EBITDA margin may not be comparable to similarly titled measures used by other companies or persons due to potential differences in the method of calculation.

These non-GAAP financial measures have limitations as analytical tools. For example, for EBITDA-based metrics:

- they do not reflect changes in, or cash requirements for, Neogen's working capital needs;
- they do not reflect Neogen's tax expense or the cash requirements to pay taxes;
- they do not reflect the historical cash expenditures or future requirements for capital expenditures or contractual commitments;
- they do not reflect any cash requirements for future replacements of assets that are being depreciated and amortized; and
- they may be calculated differently from other companies in Neogen's industries limiting their usefulness as comparative measures.

You should compensate for these limitations by relying primarily on the financial statements of Neogen and using these non-GAAP financial measures only as a supplement to evaluate Neogen's performance.

For each of these non-GAAP financial measures below, we are providing a reconciliation of the differences between the non-GAAP measure and the most directly comparable GAAP measure.

Reconciliation between net income and EBITDA and Adjusted EBITDA is as follows:

	Year ended May 31		
(Dollars in thousands)	**2022**	2021	2020
Net Income	**$ 48,307**	$ 60,882	$ 59,475
Net income margin %	**9.2%**	13.0%	14.2%
Provision for income taxes	**11,900**	14,386	12,830
Interest income, net	**(1,267)**	(1,614)	(5,992)
Depreciation and amortization	**23,694**	21,041	18,396
EBITDA	**$ 82,634**	$ 94,695	$ 84,709
Stock-based compensation	**7,154**	6,437	6,468
Certain transaction fees and expenses	**25,581**	3,085	-
Adjusted EBITDA	**$ 115,369**	$ 104,217	$ 91,177
Adjusted EBITDA margin %	**21.9%**	22.2%	21.8%

EBITDA, Adjusted EBITDA and Adjusted EBITDA Margin %

(Dollars in thousands)	**2022**	**Change**	2021	Change	2020
EBITDA	**$ 82,634**	**(13)%**	$ 94,695	12%	$ 84,709
Adjusted EBITDA	**115,369**	**11%**	104,217	14%	91,177
Adjusted EBITDA Margin %	**21.9%**		22.2%		21.8%

Adjusted EBITDA increased 11% in fiscal 2022 compared to fiscal 2021, due to revenue growth and improved gross margins. Adjusted EBITDA increased 14% in fiscal 2021 compared to fiscal 2020, the result of revenue growth and lower spending on travel and other customer-facing activities.

Future Operating Results

Neogen Corporation's future operating results involve a number of risks and uncertainties. Actual events or results may differ materially from those discussed in this report. Factors that could cause or contribute to such differences include, but are not limited to, the factors discussed below as well as those discussed elsewhere in this report. Management's ability to grow the business in the future depends upon our ability to successfully implement various strategies, including:

- developing, manufacturing and marketing new products with new features and capabilities, and having those new products successfully accepted in the marketplace;
- expanding our markets by fostering increased use of our products by customers;
- maintaining or increasing gross and net operating margins in changing cost environments;
- strengthening operations and sales and marketing activities in geographies outside of the U.S.;
- developing and implementing new technology development strategies; and
- identifying and completing acquisitions that enhance existing product categories or create new products or services, and successfully integrating completed acquisitions, including our previously announced proposed transaction to combine with 3M's Food Safety business.

Financial Condition and Liquidity

On May 31, 2022, we had $44.5 million in cash and cash equivalents, $336.6 million in marketable securities, and net working capital of $549.0 million. For the year ended May 31, 2022, cash generated from operating activities was $68.0 million, compared to $81.1 million generated in fiscal 2021; proceeds from stock option exercises provided an additional $7.9 million of cash. For the same period, additions to property, equipment and other non-current assets were $24.4 million and business acquisitions used cash of $38.7 million. We have a financing agreement with a bank providing for an unsecured revolving line of credit of $15.0 million, which expires on November 30, 2023. Upon close of the 3M Food Safety transaction, this credit facility will terminate and be replaced with a larger, revolving facility. There were no advances against this line of credit during fiscal years 2022, 2021 and 2020, and no balance outstanding at May 31, 2022 and 2021.

Net accounts receivable at May 31, 2022 were $99.7 million, compared to $91.8 million at May 31, 2021; the increase is primarily due to the increased sales in the fourth quarter of fiscal 2022 compared to the corresponding period a year ago. Our days sales outstanding, a measurement of the time it takes to collect receivables, improved to 62 days at May 31, 2022 compared to 66 days at May 31, 2021.

Inventory balances were $122.3 million at May 31, 2022, an increase of $21.6 million, or 21%, compared to $100.7 million at May 31, 2021, In addition to adding $1.7 million of acquired inventory in fiscal 2022, we also increased ordering quantities and inventory levels to overcome supply chain constraints and minimize delays to customers.

On December 13, 2021, Neogen, 3M, and Garden Spinco, a newly formed subsidiary of 3M created to carve out 3M's Food Safety business, announced that they had entered into a definitive agreement pursuant to which 3M would separate its Food Safety business and simultaneously combine it with Neogen in a Reverse Morris Trust transaction, which is intended to be tax-efficient to 3M and its shareholders for U.S. federal income tax purposes. Under the terms of the definitive agreements, at the completion of the transaction, Neogen will issue a number of shares to 3M shareholders such that 3M shareholders will receive approximately 50.1% of the combined company and existing Neogen shareholders will continue to own approximately 49.9% of the combined company. In connection with the transaction, 3M will also receive consideration valued at approximately $1 billion, subject to closing and other adjustments. The transaction is expected to close by the end of the third quarter calendar year 2022, subject to approval by Neogen shareholders and the satisfaction of other customary closing conditions.

On June 30, 2022, Garden Spinco entered into a credit agreement consisting of a five-year senior secured term loan facility in the amount of $650.0 million and a five-year senior secured revolving facility in the amount of $150.0 million (collectively, the "Credit Facilities"), which, subject to customary closing conditions, will be available in connection with the merger and related transactions. The Credit Facilities, together with the Notes below, when incurred, represent the financing contemplated in connection with the merger.

In July 2022 Garden SpinCo closed on an offering of $350.0 million aggregate principal amount of 8.625% senior notes due 2030 (the "Notes") in a private placement at par. The Notes were initially issued by Garden SpinCo to 3M and were transferred and delivered by 3M to the selling securityholder in the offering, in satisfaction of certain of 3M's existing debt. Garden SpinCo did not receive any proceeds from the sale of the Notes by the selling securityholder. Prior to the distribution of the shares of Garden SpinCo's common stock to 3M stockholders, the Notes will be guaranteed on a senior unsecured basis by 3M. Upon consummation of such distribution, 3M will be released from all obligations under its guarantee. Upon the effectiveness of the merger, the Notes will be guaranteed on a senior unsecured basis by Neogen and certain wholly-owned domestic subsidiaries of Neogen.

In addition to the 3M transaction described above, our future cash on hand and borrowing capacity may not be sufficient to meet cash requirements to commercialize products currently under development or execute our future plans to acquire additional businesses, technology and products that fit within our strategic plan. Accordingly, we may be required, or may choose, to issue additional equity securities or enter into other financing arrangements for a portion of our future capital needs.

We are subject to certain legal and other proceedings in the normal course of business that have not had, and, in the opinion of management, are not expected to have, a material effect on our results of operations or financial position.

Contractual Obligations

As of May 31, 2022, we have the following contractual obligations due by period:

(Dollars in thousands)	Total	Less than one year	1–3 years	3–5 years	More than 5 years
Long-Term Debt	$ –	$ –	$ –	$ –	$ –
Operating Leases	**3,316**	1,458	1,324	534	–
Unconditional Purchase Obligations [1]	**85,781**	83,031	2,750	4	–
	$ 89,097	$ 84,489	$ 4,074	$ 534	$ –

[1] Unconditional purchase obligations are primarily purchase orders for future inventory and capital equipment purchases.

We continue to make investments in our business and operating facilities. Our preliminary estimate for capital expenditures related to our existing operations in fiscal 2023 is $20 to $25 million; we also expect to spend $70 million over the next two fiscal years to construct a manufacturing facility and approximately $50 million over the next two fiscal years to implement a new enterprise resource planning solution. In conjunction with our planned transaction with 3M's food safety business, we will spend an additional $3 to $5 million on capital leases and capital improvements on leased facilities in fiscal 2023.

New Accounting Pronouncements

See discussion of any New Accounting Pronouncements in Note 1 to consolidated financial statements.

Neogen Corporation and Subsidiaries
Consolidated Balance Sheets

ASSETS *(In thousands)*	May 31 2022	2021
Current Assets		
Cash and cash equivalents	$ 44,473	$ 75,602
Marketable securities	336,578	305,485
Accounts receivable, net of allowance of $1,650 and $1,400 at May 31, 2022 and 2021, respectively	99,674	91,823
Inventories	122,313	100,701
Prepaid expenses and other current assets	23,760	17,840
Total Current Assets	626,798	591,451
Property and Equipment		
Land and improvements	9,485	7,783
Buildings and improvements	79,513	72,754
Machinery and equipment	114,180	108,194
Furniture and fixtures	6,307	6,270
Construction in progress	5,974	3,261
	215,459	198,262
Less accumulated depreciation	(104,875)	(97,809)
Net Property and Equipment	110,584	100,453
Other Assets		
Right of use assets	3,184	2,477
Goodwill	142,704	131,476
Other non-amortizable intangible assets	15,397	15,545
Amortizable intangible assets, net of accumulated amortization of $55,416 and $53,462 at May 31, 2022 and 2021, respectively	92,106	76,771
Other non-current assests	2,156	2,019
Total Other Assets	255,547	228,288
Total Assets	$ 992,929	$ 920,192

See accompanying notes to consolidated financial statements.

LIABILITIES AND STOCKHOLDERS' EQUITY *(In thousands, except shares and per share)*	May 31 2022	2021
Current Liabilities		
Accounts payable	$ 34,614	$ 23,900
Accruals		
Accrued compensation	11,123	11,251
Income tax payable	2,126	1,848
Deferred revenue	5,460	3,404
Other accruals	24,521	13,196
Total Current Liabilities	77,844	53,599
Deferred Income Tax Liability	17,011	21,917
Other Non-Current Liabilities	10,700	4,299
Total Liabilities	105,555	79,815
Commitments and Contingencies (Note 7)		
Stockholders' Equity		
Preferred stock, $1.00 par value – shares authorized 100,000; none issued and outstanding	–	–
Common stock, $0.16 par value — shares authorized 120,000,000; 107,801,094 and 107,468,304 shares issued and outstanding at May 31, 2022 and 2021, respectively	17,248	17,195
Additional paid-in capital	309,984	294,953
Accumulated other comprehensive loss	(27,769)	(11,375)
Retained earnings	587,911	539,604
Total Neogen Corporation and Subsidiaries Stockholders' Equity	887,374	840,377
Total Liabilities and Stockholders' Equity	$ 992,929	$ 920,192

See accompanying notes to consolidated financial statements.

Neogen Corporation and Subsidiaries
Consolidated Statements of Income

REVENUES *(In thousands, except per share)*	Year Ended May 31 2022	2021	2020
Product revenues	$ 424,664	$ 376,302	$ 335,539
Service revenues	102,495	92,157	82,631
Total Revenues	527,159	468,459	418,170
Cost of Revenues			
Cost of product revenues	228,017	201,348	173,566
Cost of service revenues	56,129	52,055	48,325
Total Cost of Revenues	284,146	253,403	221,891
Gross Margin	243,013	215,056	196,279
Operating Expenses			
Sales and marketing	84,604	73,443	69,675
General and administrative	82,742	51,197	44,331
Research and development	17,049	16,247	14,750
Total Operating Expenses	184,395	140,887	128,756
Operating Income	58,618	74,169	67,523
Other Income			
Interest income, net	1,267	1,614	5,992
Royalty income	-	-	-
Other, net	322	(515)	(1,210)
Total Other Income	1,589	1,099	4,782
Income Before Income Taxes	60,207	75,268	72,305
Provision for Income Taxes	11,900	14,386	12,830
Net Income	$ 48,307	60,882	59,475
Net Income per Share			
Basic	$ 0.45	$ 0.57	$ 0.57
Diluted	$ 0.45	$ 0.57	$ 0.56
Weighted Average Shares Outstanding			
Basic	107,684	106,499	105,100
Diluted	108,020	107,120	105,720

See accompanying notes to consolidated financial statements.

Neogen Corporation and Subsidiaries
Consolidated Statements of Comprehensive Income

(In thousands)	Year Ended May 31 2022	2021	2020
Net Income	$ 48,307	$ 60,882	$ 59,475
Other comprehensive income (loss):			
Foreign currency translations	(13,955)	8,602	(8,495)
Unrealized (loss) gain on marketable securities, net of tax of ($728), ($80) and $127	(2,439)	(268)	426
Comprehensive income	$ 31,913	$ 69,216	$ 51,406

See accompanying notes to consolidated financial statements.

Neogen Corporation and Subsidiaries
Consolidated Statements of Stockholders' Equity

(In thousands, except shares)	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Equity
Balance, June 1, 2019	104,433,178	$ 16,709	$ 213,583	$ (11,640)	$ 419,247	$ 637,899
Exercise of options, RSUs and share-based compensation expense	1,415,348	227	34,452	–	–	34,679
Issuance of shares under employee stock purchase plan	43,156	7	1,186	–	–	1,193
Net income for 2020	–	–	–		59,475	59,475
Other comprehensive loss	–	–	–	(8,069)	–	(8,069)
Balance, May 31, 2020	105,891,682	$ 16,943	$ 249,221	$ (19,709)	$ 478,722	$ 725,177
Exercise of options, RSUs and share-based compensation expense	1,410,948	226	39,454	–	–	39,680
Issuance of shares under employee stock purchase plan	38,406	6	1,382	–	–	1,388
Issuance of shares for Megazyme acquisition	127,268	20	4,896	–	–	4,916
Net income for 2021	–	–	–	–	60,882	60,882
Other comprehensive income	–	–	–	8,334	–	8,334
Balance, May 31, 2021	107,468,304	$ 17,195	$ 294,953	$ (11,375)	$ 539,604	$ 840,377
Exercise of options, RSUs and share-based compensation expense	289,334	46	13,162	–	–	13,208
Issuance of shares under employee stock purchase plan	43,456	7	1,869	–	–	1,876
Net income for 2022	–	–	–	–	48,307	48,307
Other comprehensive loss	–	–	–	(16,394)	–	(16,394)
Balance, May 31, 2022	**107,801,094**	**$ 17,248**	**$ 309,984**	**$ (27,769)**	**$ 587,911**	**$ 887,374**

See accompanying notes to consolidated financial statements.

Neogen Corporation and Subsidiaries
Consolidated Statements of Cash Flows

(In thousands)	Year ended May 31 2022	2021	2020
Cash Flows From Operating Activities			
Net income	$ 48,307	$ 60,882	$ 59,475
Adjustments to reconcile net income to net cash provided from operating activities:			
Depreciation and amortization	23,694	21,041	18,396
Deferred income taxes	(4,695)	(640)	1,601
Share-based compensation	7,154	6,437	6,468
Changes in operating assets and liabilities, net of business acquisitions:			
Accounts receivable	(7,798)	(2,595)	(2,881)
Inventories	(21,072)	2,450	(10,011)
Prepaid expenses and other assets	(4,054)	(3,386)	(1,017)
Accounts payable	10,215	(3,206)	6,745
Accruals and other changes	16,287	106	7,102
Net Cash From Operating Activities	68,038	81,089	85,878
Cash Flows For Investing Activities			
Purchases of property, equipment and other non-current intangible assets	(24,429)	(26,712)	(24,052)
Proceeds from the maturities of marketable securities	381,839	764,597	406,731
Purchases of marketable securities	(415,894)	(792,678)	(458,300)
Business acquisitions, net of cash acquired	(38,745)	(50,771)	(13,164)
Net Cash For Investing Activities	(97,229)	(105,564)	(88,785)
Cash Flows From Financing Activities			
Exercise of stock options and other	7,933	34,631	29,405
Payment of contingent consideration	(1,120)	(1,087)	–
Net Cash From Financing Activities	6,813	33,544	29,405
Effects of Foreign Exchange Rate on Cash	(8,751)	264	(1,917)
Net (Decrease) Increase In Cash and Cash Equivalents	(31,129)	9,333	24,581
Cash and Cash Equivalents, Beginning of Year	75,602	66,269	41,688
Cash and Cash Equivalents, End of Year	$ 44,473	$ 75,602	$ 66,269

(In thousands)	Year ended May 31 2022	2021	2020
Supplementary Cash Flow Information			
Income taxes paid, net of refunds	$ 17,242	$ 14,966	$ 7,364

See accompanying notes to consolidated financial statements.

1. Summary of Significant Accounting Policies

Nature of Operations

Neogen Corporation develops, manufactures and markets a diverse line of products and services dedicated to food and animal safety.

Basis of Consolidation

The consolidated financial statements include the accounts of Neogen Corporation and its subsidiaries, all of which are wholly-owned as of May 31, 2022.

All intercompany accounts and transactions have been eliminated in consolidation.

Share and per share amounts reflect the June 4, 2021 2-for-1 stock split as if it took place at the beginning of the periods presented.

Functional Currency

Our functional currency is the U.S. dollar. We translate our non-U.S. operations' assets and liabilities denominated in foreign currencies into U.S. dollars at current rates of exchange as of the balance sheet date and income and expense items at the average exchange rate for the reporting period. Translation adjustments resulting from exchange rate fluctuations are recorded in other comprehensive income (loss). Gains or losses from foreign currency transactions are included in other income (expense) on our consolidated statement of income.

Recently Adopted Accounting Standards

Income Tax Simplification

On June 1, 2021, the Company adopted ASU 2019-12, Income Taxes (Topic 740). This guidance provides amendments to simplify the accounting for income taxes by removing certain exceptions to the general principles in Topic 740. The amendments also improve consistent application of and simplify GAAP for other areas of Topic 740 by clarifying and amending existing guidance. The adoption of this guidance did not have a material impact on our consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

Reference Rate Reform

In March 2020, FASB issued Update 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting. This update provides temporary optional expedients to applying the reference rate reform guidance to contracts that reference LIBOR or another reference rate expected to be discontinued. Under this update, contract modifications resulting in a new reference rate may be accounted for as a continuation of the existing contract. This guidance is effective upon issuance of the update and applies to contract modifications made through December 31, 2022. We will adopt this standard when our new credit agreement goes into effect on the date of the 3M Food Safety business merger, currently expected to close in the third quarter of calendar year 2022. We are evaluating the impact the new standard will have on our consolidated financial statements and related disclosures, but do not anticipate a material impact.

Comprehensive Income

Comprehensive income represents net income and any revenues, expenses, gains and losses that, under U.S. generally accepted accounting principles, are excluded from net income and recognized directly as a component of stockholders' equity. Accumulated other comprehensive income (loss) consists of foreign currency translation adjustments and unrealized gains and losses on our marketable securities.

Changes in our Accumulated Other Comprehensive Income (Loss) ("AOCI") balances, net of tax, were as follows:

(In thousands)	Foreign Currency Translation Adjustments	Unrealized Gain (Loss) on Marketable Securities	Total AOCI
Balance, May 31, 2020	$ (20,135)	$ 426	$ (19,709)
Other comprehensive income (loss)	8,602	(268)	8,334
Balance, May 31, 2021	$ (11,533)	$ 158	$ (11,375)
Other comprehensive income (loss)	(13,955)	(2,439)	(16,394)
Balance, May 31, 2022	**$ (25,488)**	**$ (2,281)**	**$ (27,769)**

Fair Value of Financial Instruments

Fair value measurements are determined based upon the exit price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants exclusive of any transaction costs. The Company utilizes a fair value hierarchy based upon the observability of inputs used in valuation techniques as follows:

Level 1: Observable inputs such as quoted prices in active markets;
Level 2: Inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and
Level 3: Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

The carrying amounts of the Company's financial instruments other than cash equivalents and marketable securities, which include accounts receivable and accounts payable, approximate fair value based on either their short maturity or current terms for similar instruments.

Cash and Cash Equivalents

Cash and cash equivalents consist of bank demand accounts, savings deposits, certificates of deposit and commercial paper with original maturities of 90 days or less. Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. The Company has not experienced losses related to these balances and believes it is not exposed to significant credit risk regarding its cash and cash equivalents. The carrying value of these assets approximates fair value due to the short maturity of these instruments and is classified as Level 1 in the fair value hierarchy. Cash held by foreign subsidiaries was $17,057,000 and $15,246,000 at May 31, 2022 and 2021, respectively.

Marketable Securities

The Company has marketable securities held by banks or broker-dealers at May 31, 2022, consisting of commercial paper and corporate bonds rated at least A-1/P-1 (short-term) and A/A2 (long-term) with original maturities between 91 days and two years. Changes in market value are monitored and recorded on a monthly basis; in the event of a downgrade in credit quality subsequent to purchase, the marketable security investment is evaluated to determine the appropriate action to take to minimize the overall risk to our marketable security portfolio. As these securities are highly rated and short-term in nature, they have very little credit risk; therefore, the Company does not believe a reserve for expected credit losses on marketable securities is material. These securities are classified as available for sale. The primary objective of management's short-term investment activity is to preserve capital for the purpose of funding operations, capital expenditures and business acquisitions; short-term investments are not entered into for trading or speculative purposes. These securities are recorded at fair value based on recent trades or pricing models and therefore meet the Level 2 criteria. Interest income on these investments is recorded within other income on our consolidated statements of income. Adjustments in the fair value of these assets are recorded in other comprehensive income (loss).

Marketable Securities as of May 31, 2022 and 2021 are listed below by classification and remaining maturities.

		May 31	
(In thousands)	Maturity	**2022**	2021
Commercial Paper & Corporate Bonds	0 – 90 days	$ **106,497**	106,631
	91 – 180 days	**61,373**	78,727
	181 days – 1 year	**91,706**	87,590
	1 – 2 years	**77,002**	26,752
Certificates of Deposit	0 – 90 days	–	3,262
	91 – 180 days	–	1,260
	181 days – 1 year	–	1,263
	1 – 2 years	–	–
Total Marketable Securities		$ **336,578**	$ 305,485

The components of marketable securities as of May 31, 2022 are as follows:

(In thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Commercial Paper & Corporate Bonds	$ 339,540	$ 7	$ (2,969)	$ 336,578
Certificates of Deposit	–	–	–	–
Total Marketable Securities	**$ 339,540**	**$ 7**	**$ (2,969)**	**$ 336,578**

The components of marketable securities as of May 31, 2021 are as follows:

(In thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Commercial Paper & Corporate Bonds	$ 299,524	$ 209	$ (33)	$ 299,700
Certificates of Deposit	5,755	30	–	5,785
Total Marketable Securities	$ 305,279	$ 239	$ (33)	$ 305,485

Use of Estimates

The preparation of these consolidated financial statements requires that management make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities. On an ongoing basis, management evaluates the estimates, including, but not limited to, variable consideration related to revenue recognition, allowances for doubtful accounts, the market value of, and demand for, inventories, stock-based compensation, provision for income taxes and related balance sheet accounts, accruals, goodwill and other intangible assets. We believe that these estimates have the greatest potential impact on our financial statements, so we consider them to be our critical accounting policies and estimates. These estimates are based on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Though the impact of the COVID-19 pandemic to our business and operating results presents additional uncertainty, we continue to use the best information available to inform our critical accounting estimates. Actual results may differ from these estimates under different assumptions or conditions.

Accounts Receivable and Concentrations of Credit Risk

Financial instruments which potentially subject Neogen to concentrations of credit risk consist principally of accounts receivable. Management attempts to minimize credit risk by reviewing customers' credit histories before extending credit and by monitoring credit exposure on a regular basis. Collateral or other security is generally not required for accounts receivable. We maintain an allowance for customer accounts that reduces receivables to amounts that are expected to be collected. In estimating the allowance for doubtful accounts, management considers relevant information about past events, current conditions and reasonable and supportable forecasts that affect the collectability of financial assets. Once a receivable balance has been determined to be uncollectible, generally after all collection efforts have been exhausted, that amount is charged against the allowance for doubtful accounts. No customer accounted for more than 10% of accounts receivable May 31, 2022 or 2021, respectively. The activity in the allowance for doubtful accounts was as follows:

	May 31		
(In thousands)	**2022**	2021	2020
Beginning Balance	**$ 1,400**	$ 1,350	$ 1,700
Provision	**332**	239	393
Recoveries	**98**	139	49
Write-offs	**(180)**	(328)	(792)
Ending Balance	**$ 1,650**	$ 1,400	$ 1,350

Inventories

Inventories are stated at the lower of cost or net realizable value, determined on the first-in, first-out method. The components of inventories were as follows:

	May 31	
(In thousands)	**2022**	2021
Raw materials	**$ 58,667**	$ 47,588
Work-in-process	**6,388**	6,412
Finished goods	**57,258**	46,701
	$ 122,313	$ 100,701

The Company's inventories are analyzed for slow moving, expired and obsolete items on a quarterly basis and the valuation allowance is adjusted as required within cost of revenues expense. The valuation allowance for inventory was $4,050,000 and $3,100,000 at May 31, 2022 and 2021, respectively.

Property and Equipment

Property and equipment is stated at cost. Expenditures for major improvements are capitalized while repairs and maintenance are charged to expense as incurred. Depreciation is provided on the straight-line method over the estimated useful lives of the respective assets, which are generally seven to 39 years for buildings and improvements and three to ten years for furniture, fixtures, machinery and equipment. Depreciation expense was $14,094,000, $13,288,000 and $11,907,000 in fiscal years 2022, 2021 and 2020, respectively.

Goodwill and Other Intangible Assets

Goodwill represents the excess of purchase price over fair value of tangible net assets of acquired businesses after amounts are allocated to other identifiable intangible assets. Other intangible assets include customer relationships, trademarks, licenses, trade names, covenants not-to-compete and patents. Amortizable intangible assets are amortized on either an accelerated or a straight-line basis, generally over two to 25 years. The remaining weighted average amortization period for intangibles was eight years and 10 years at May 31, 2022 and 2021, respectively. Management reviews the carrying amounts of goodwill and other non-amortizable intangible assets annually, or when indications of impairment exist, to determine if such assets may be impaired. Events that would indicate impairment and trigger an interim impairment assessment include, but are not limited to, current economic and market conditions, including a decline in the Company's market capitalization, a significant adverse change in legal factors, business climate or operational performance of the business. In evaluating goodwill for impairment, we have the option to first assess the qualitative factors to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying amount as a basis. If the qualitative assessment leads to a determination that the reporting unit's fair value is less than its carrying value, or if we elect to bypass the qualitative assessment altogether, we are required to perform a quantitative impairment test by calculating the fair value of the reporting unit and comparing the fair value with its associated carrying value. In the fourth quarter of fiscal 2022, management performed our annual goodwill impairment analysis qualitatively.

In connection with our annual goodwill impairment assessment for 2022, 2021, and 2020, we determined that no impairment adjustments were necessary.

Long-lived Assets

Management reviews the carrying values of its long-lived assets to be held and used, including definite-lived intangible assets, for possible impairment whenever events or changes in business conditions warrant such a review. The carrying value of a long-lived asset is considered impaired when the anticipated separately identifiable undiscounted cash flows over the remaining useful life of the asset are less than the carrying value of the asset. In such an event, fair value is determined using discounted cash flows, and if lower than the carrying value, impairment is recognized through a charge to operations. No impairments of long-lived assets were identified during the years ended May 31, 2022, 2021 and 2020, respectively.

Business Combinations

We utilize the purchase method of accounting for business combinations. This method requires, among other things, that results of operations of acquired companies are included in Neogen's results of operations beginning on the respective acquisition dates and that assets acquired and liabilities assumed are recognized at fair value as of the acquisition date. Any excess of the fair value of consideration transferred over the fair values of the net assets acquired is recognized as goodwill. Contingent consideration liabilities are recognized at the estimated fair value on the acquisition date; these are recorded in either other accruals within current liabilities (for expected payments in less than a year) or other non-current liabilities (for expected payments in greater than a year), both on our consolidated balance sheets. Subsequent changes to the fair value of contingent consideration liabilities are recognized in other income (expense) in the consolidated statements of income. Contingent consideration payments made soon after the acquisition date are classified as investing activities in the consolidated statements of cash flows. Contingent consideration payments not made soon after the acquisition date that are related to the acquisition date fair value are reported as financing activities in the consolidated statements of cash flows, and amounts paid in excess of the original acquisition date fair value are reported as operating activities in the consolidated statements of cash flows. The fair value of assets acquired and liabilities assumed in certain cases may be subject to revision based on the final determination of fair value during a period of time not to exceed 12 months from the acquisition date. Legal costs, due diligence costs, business valuation costs and all other business acquisition costs are expensed when incurred.

Reclassifications

Certain immaterial amounts in the fiscal 2021 and 2020 consolidated financial statements have been reclassified to conform with the fiscal 2022 presentation.

Equity Compensation Plans

At May 31, 2022, the Company had stock option plans which are described more fully in Note 5 to the consolidated financial statements.

We measure stock-based compensation at the grant date, based on the estimated fair value of the award, and recognize the cost (net of estimated forfeitures) as compensation expense on a straight-line basis over the requisite service period. Our stock-based compensation expense is reflected in general and administrative expense in our consolidated statements of income.

The weighted-average fair value per share of stock options granted during fiscal years 2022, 2021 and 2020, estimated on the date of grant using the Black-Scholes option pricing model, was $8.49, $7.71 and $7.78, respectively. The fair value of stock options granted was estimated using the following weighted-average assumptions:

	Year ended May 31		
	2022	2021	2020
Risk-free interest rate	**0.4%**	0.2%	1.9%
Expected dividend yield	**0.0%**	0.0%	0.0%
Expected stock volatility	**32.8%**	31.3%	29.4%
Expected option life	**3.12 years**	3.25 years	3.5 years

The risk-free interest rate for periods within the expected life of options granted is based on the United States Treasury yield curve in effect at the time of grant. Expected stock price volatility is based on historical volatility of the Company's stock. The expected option life, representing the period of time that options granted are expected to be outstanding, is based on historical option exercise and employee termination data. We include recent historical experience in estimating our forfeitures. As employees terminate, grant tranches expire or as forfeitures are known, estimated expense is adjusted to actual. For options granted in fiscal years 2022, 2021 and 2020, the Company recorded charges in general and administrative expense based on the fair value of stock options using the straight-line method over the vesting period of three to five years.

The Company also issues restricted stock units (RSUs), which are described more fully in Note 5 to the consolidated financial statements.

The RSUs generally vest over three to five years and have a weighted average value of $37.28 in fiscal 2022 and $34.21 in fiscal 2021.

Income Taxes

We account for income taxes using the asset and liability method. Under this method, deferred income tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities and for tax credit carryforwards and are measured using the enacted tax rates in effect for the years in which the differences are expected to reverse. Deferred income tax expense represents the change in net deferred income tax assets and liabilities during the year. The Company's policy is to recognize both accrued interest expense and penalties related to unrecognized tax benefits in income tax expense.

Our wholly-owned foreign subsidiaries are comprised of Neogen Europe, Quat-Chem Ltd, Abbott Analytical Limited, Delf (UK) Limited, Delf-Chem Solutions Limited, Megazyme Ltd, Megazyme IP, Neogen Italia S.r.l., Neogen do Brasil, Rogama Industria e Comercio Ltda, Neogen Latinoamérica, Neogen Guatemala, Neogen Argentina, Neogen Uruguay, Neogen Chile SpA, Neogen Bio-Scientific Technology Co (Shanghai), Neogen Food and Animal Security (India), Neogen Canada and Neogen Australasia Pty Limited. Based on historical experience, as well as management's future plans, earnings from these subsidiaries are expected to be re-invested indefinitely for future expansion and working capital needs. Furthermore, our domestic operations have historically produced sufficient operating cash flow to mitigate the need to remit foreign earnings. On an annual basis, we evaluate the current business environment and whether any new events or other external changes might require a re-evaluation of the decision to indefinitely re-invest foreign earnings. It is not practicable to determine the income tax liability that would be payable if such earnings were not reinvested indefinitely.

Research and Development Costs

Research and development costs, which consist primarily of compensation costs, administrative expenses and new product development, among other items, are expensed as incurred.

Advertising Costs

Advertising costs are expensed within sales and marketing as incurred and totaled $2,018,000, $1,687,000 and $1,454,000 in fiscal years 2022, 2021 and 2020, respectively.

Net Income per Share

Basic net income per share is based on the weighted average number of common shares outstanding during each year. Diluted earnings per share is based on the weighted average number of common shares and dilutive potential common shares outstanding. Our dilutive potential common shares outstanding during the years result from dilutive stock options and restricted stock units. The following table presents the net income per share calculations:

	Year Ended May 31		
(In thousands, except per share)	**2022**	2021	2020
Numerator for basic and diluted net income per share – Net income	$ **48,307**	$ 60,882	$ 59,475
Denominator for basic net income per share – Weighted average shares	**107,684**	106,499	105,100
Effect of dilutive stock options	**336**	621	620
Denominator for diluted net income per share	**108,020**	107,120	105,720
Net income per share			
Basic	$ **0.45**	$ 0.57	$ 0.57
Diluted	$ **0.45**	$ 0.57	$ 0.56

At May 31, 2022, 383,000 shares from option exercises were excluded from the computation of diluted net income per share, as the option exercise prices exceeded the average market price of the common shares. At May 31, 2021, no potential shares were excluded from the computation. At May 31, 2020, 56,000 potential shares were excluded from the computation.

Leases

The Company recognizes in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. We recognized all leases with terms greater than 12 months in duration on our consolidated balance sheets as right-of-use assets and lease liabilities. Right-of-use assets are recorded in other assets on our consolidated balance sheets. Current and non-current lease liabilities are recorded in other accruals within current liabilities and other non-current liabilities, respectively, on our consolidated balance sheets.

We lease various manufacturing, laboratory, warehousing and distribution facilities, administrative and sales offices, equipment and vehicles under operating leases. We evaluate our contracts to determine if an arrangement is a lease at inception and classify it as a finance or operating lease. Currently, all of our leases are classified as operating leases. Leased assets and corresponding liabilities are recognized based on the present value of the lease payments over the lease term. Our lease terms may include options to extend when it is reasonably certain that we will exercise that option.

We have made certain assumptions and judgments when accounting for leases, the most significant of which are:

- We did not elect to use hindsight when considering judgments and estimates such as assessments of lessee options to extend or terminate a lease or purchase the underlying asset.
- For all asset classes, we elected to not recognize a right-of-use asset and lease liability for short-term leases (i.e. leases with a term of 12 months or less).
- For all asset classes, we elected to not separate non-lease components from lease components to which they relate and have accounted for the combined lease and non-lease components as a single lease component.
- The determination of the discount rate used in a lease is our incremental borrowing rate that is based on our estimate of what we would normally pay to borrow on a collateralized basis over a similar term an amount equal to the lease payments.

Supplemental balance sheet information related to operating leases was as follows:

(In thousands)		Year Ended May 31, 2022		Year Ended May 31, 2021
Right of use – assets	$	3,184	$	2,477
Lease liabilities – current		1,440		1,285
Lease liabilities – non-current		1,788		1,207

The weighted average remaining lease term and weighted average discount rate were as follows:

	May 31, 2022	May 31, 2021
Weighted average remaining lease term	3 years	2 years
Weighted average discount rate	1.7%	2.0%

Operating lease expenses are classified as cost of revenues or operating expenses on the consolidated statements of income. The components of lease expense were as follows:

(In thousands)		Year Ended May 31, 2022		Year Ended May 31, 2021
Operating leases	$	438	$	1,352
Short term leases		277		134
Total lease expense	$	715	$	1,486

Cash paid for amounts included in the measurement of lease liabilities for operating leases included in cash flows from operations on the statement of cash flows was approximately $1,407,000, $1,397,000 and $1,178,000 for the years ended May 31, 2022, 2021 and 2020, respectively. There were no non-cash additions to right-of-use assets obtained from new operating lease liabilities for the year ended May 31, 2022.

Maturities of operating lease liabilities as of May 31, 2022 are as follows:

(In thousands)		Amount
Years ending May 31, 2023	$	1,458
2024		887
2025		436
2026		345
2027 and thereafter		190
Total lease payments	$	3,316
Less: imputed interest		(88)
Total lease liabilities	$	3,228

Revenue Recognition

We determine the amount of revenue to be recognized through application of the following steps:

- Identification of the contract with a customer;
- Identification of the performance obligations in the contract;
- Determination of the transaction price;
- Allocation of the transaction price to the performance obligations in the contract; and
- Recognition of revenue when or as the Company satisfies the performance obligations.

Essentially all of Neogen's revenue is generated through contracts with its customers. A performance obligation is a promise in a contract to transfer a product or service to a customer. We generally recognized revenue at a point in time when all of our performance obligations under the terms of a contract are satisfied. Revenue is recognized upon transfer of control of promised products or services in an amount that reflects the consideration we expect to receive in exchange for those products or services. The collectability of consideration on the contract is reasonably assured before revenue is recognized. To the extent that customer payment has been received before all recognition criteria are met, these revenues are initially deferred in other accruals on the balance sheet and the revenue is recognized in the period that all recognition criteria have been met.

Certain agreements with customers include discounts or rebates on the sale of products and services applied retrospectively, such as volume rebates achieved by purchasing a specified purchase threshold of goods and services. We account for these discounts as variable consideration and estimate the likelihood of a customer meeting the threshold in order to determine the transaction price using the most predictive approach. We typically use the most-likely-amount method, for incentives that are offered to individual customers, and the expected-value method, for programs that are offered to a broad group of customers. Variable consideration reduces the amount of revenue that is recognized. Rebate obligations related to customer incentive programs are recorded in accrued liabilities; the rebate estimates are adjusted at the end of each applicable measurement period based on information currently available.

The performance obligations in Neogen's contracts are generally satisfied well within one year of contract inception. In such cases, management has elected the practical expedient to not adjust the promised amount of consideration for the effects of a significant financing component. Management has elected to utilize the practical expedient to recognize the incremental costs of obtaining a contract as an expense when incurred because the amortization period for the prepaid costs that would otherwise have been deferred and amortized is one year or less. We account for shipping and handling for products as a fulfillment activity when goods are shipped. Shipping and handling costs that are charged to and reimbursed by the customer are recognized as revenues, while the related expenses incurred by Neogen are recorded in sales and marketing expense; these expenses totaled $17,482,000, $15,180,000 and $13,514,000 in fiscal years 2022, 2021 and 2020, respectively. Revenue is recognized net of any tax collected from customers; the taxes are subsequently remitted to governmental authorities. Our terms and conditions of sale generally do not provide for returns of product or reperformance of service except in the case of quality or warranty issues. These situations are infrequent; due to immateriality of the amount, warranty claims are recorded in the period incurred.

The Company derives revenue from two primary sources — product revenue and service revenue.

Product revenue consists primarily of shipments of:

- Diagnostic test kits, culture media and related products used by food producers and processors to detect harmful natural toxins, foodborne bacteria, allergens and levels of general sanitation;
- Consumable products marketed to veterinarians, retailers, livestock producers and animal health product distributors; and
- Rodenticides, disinfectants and insecticides to assist in the control of rodents, insects and disease in and around agricultural, food production and other facilities.

Revenue for Neogen's products are recognized and invoiced when the product is shipped to the customer.

Service revenue consists primarily of:

- Genomic identification and related interpretive bioinformatic services; and
- Other commercial laboratory services.

Revenues for Neogen's genomics and commercial laboratory services are recognized and invoiced when the applicable laboratory service is performed and the results are conveyed to the customer.

Payment terms for products and services are generally 30 to 60 days.

The Company has no contract assets; contract liabilities represent deposits made by customers before the satisfaction of performance obligations(s) and recognition of revenue. Upon completion of the performance obligations(s) that the Company has with the customer, the liability for the customer deposit is relieved and revenue is recognized. These customer deposits are listed as Deferred revenue on the consolidated balance sheets.

The following table presents disaggregated revenue by major product and service categories for the years ended May 31, 2022, 2021 and 2020:

		Year Ended	
(Dollars in thousands)	**May 31, 2022**	May 31, 2021	May 31, 2020
Food Safety:			
Natural Toxins, Allergens & Drug Residues	$ **79,395**	$ 76,614	$ 76,207
Bacterial & General Sanitation	**47,282**	44,009	41,780
Culture Media & Other	**75,278**	61,245	47,847
Rodenticides, Insecticides & Disinfectants	**35,691**	32,219	28,890
Genomics Services	**22,333**	20,157	17,967
	$ **259,979**	$ 234,244	$ 212,691
Animal Safety:			
Life Sciences	**5,685**	5,715	6,322
Veterinary Instruments & Disposables	**63,938**	48,128	42,941
Animal Care & Other	**39,805**	35,897	28,389
Rodenticides, Insecticides & Disinfectants	**83,610**	77,458	68,815
Genomics Services	**74,142**	67,017	59,012
	$ **267,180**	$ 234,215	$ 205,479
Total Revenue	$ **527,159**	$ 468,459	$ 418,170

See Note 11 to the consolidated financial statements for disaggregated revenues by geographical location.

2. Goodwill and Other Intangible Assets

Management completed the annual impairment analysis of goodwill and intangible assets with indefinite lives using a qualtitative assessment as of the first day of the fourth quarter of fiscal years 2022, 2021 and 2020, respectively, and determined that recorded amounts were not impaired and that no write-down was necessary.

The following table summarizes goodwill by reportable segment:

(In thousands)	Food Safety	Animal Safety	Total
Balance, May 31, 2020	$ 47,215	$ 63,125	$ 110,340
Goodwill acquired	18,775	–	18,775
Goodwill and/or currency adjustments (1)	1,832	529	2,361
Balance, May 31, 2021	67,822	63,654	131,476
Goodwill acquired	4,152	11,752	15,904
Goodwill and/or currency adjustments (1)	(4,416)	(260)	(4,676)
Balance, May 31, 2022	**$ 67,558**	**$ 75,146**	**$ 142,704**

(1) Includes final purchase price allocation adjustments and currency adjustments for goodwill recorded at international locations.

At May 31, 2022, non-amortizable intangible assets included licenses of $569,000, trademarks of $13,604,000 and other intangibles of $1,224,000. At May 31, 2021, non-amortizable intangible assets included licenses of $569,000, trademarks of $13,752,000 and other intangibles of $1,224,000.

Amortizable intangible assets consisted of the following and are included in customer-based intangibles and other non-current assets within the consolidated balance sheets:

(In thousands)	Gross Carrying Amount	Less Accumulated Amortization	Net Carrying Amount
Licenses	$ 17,109	$ 5,682	$ 11,427
Covenants not to compete	846	671	175
Patents	8,347	4,583	3,764
Customer-based intangibles	75,000	33,662	41,338
Other product and service-related intangibles	46,220	10,818	35,402
Balance, May 31, 2022	**147,522**	**55,416**	**92,106**
Licenses	$ 16,913	$ 4,580	$ 12,333
Covenants not to compete	1,006	571	435
Patents	8,363	4,243	4,120
Customer-based intangibles	76,384	35,209	41,175
Other product and service-related intangibles	27,567	8,859	18,708
Balance, May 31, 2021	$ 130,233	$ 53,462	$ 76,771

Amortization expense for intangibles totaled $9,600,000, $7,753,000 and $6,489,000 in fiscal years 2022, 2021, and 2020, respectively. The estimated amortization expense for each of the five succeeding fiscal years is as follows: $9,634,000 in 2023, $9,189,000 in 2024, $8,686,000 in 2025, $8,585,000 in 2026 and $8,097,000 in 2027 and $47,915,000 thereafter. The amortizable intangible assets useful lives are 2 to 20 years for licenses, 3 to 10 years for covenants not to compete, 5 to 25 years for patents, 9 to 20 years for customer-based intangibles and 5 to 20 years for other product and service-related intangibles, which primarily consist of product formulations. All definite-lived intangibles are amortized on a straight-line basis with the exception of definite-lived customer-based intangibles and product and service-related intangibles, which are amortized on either a straight-line or an accelerated basis.

3. Business Combinations

The Consolidated Statements of Income reflect the results of operations for business acquisitions since the respective dates of purchase. All are accounted for using the acquisition method. Goodwill recognized in the acquisitions described below relates primarily to enhancing the Company's strategic platform for the expansion of available product offerings.

Fiscal 2020

On January 1, 2020, the Company acquired all of the stock of Productos Quimicos Magiar, a distributor of Neogen's Food Safety products for the past 20 years, located in Argentina. This acquisition gives Neogen a direct sales presence in Argentina. Consideration for the purchase was $3,776,000 in net cash, with $3,237,000 paid at closing and $540,000 payable to the former owner on January 1, 2022, and up to $979,000 of contingent consideration, payable in one year, based upon an excess net sales formula. The final purchase price allocation, based upon the fair value of these assets and liabilities determined using the income approach, included accounts receivable of $603,000, inventory of $446,000, machinery and equipment of $36,000, other current assets of $221,000, accounts payable of $383,000, other current liabilities of $312,000, contingent consideration accrual of $640,000, non-current deferred tax liabilities of $441,000, intangible assets of $1,471,000 (with an estimated life of 5-10 years) and the remainder to goodwill (non-deductible for tax purposes). These values are Level 3 fair value measurements. In February 2021, the former owner was paid $530,000 of contingent consideration based on the achievement of sales targets; the remaining $110,000 accrued but not earned was recorded as a gain in Other Income in the third quarter of fiscal 2021. In January 2022, the former owner was paid the remaining $540,000 of the purchase price. This operation continues to operate in Buenos Aires, Argentina, reporting within the Food Safety segment. It is managed through Neogen's Latin America operation.

On January 1, 2020, the Company acquired all of the stock of Productos Quimicos Magiar, a distributor of Neogen's Food Safety products for the past 20 years, located in Uruguay. This acquisition gives Neogen a direct sales presence in Uruguay. Consideration for the purchase was $1,488,000 in net cash, with $1,278,000 paid at closing and $210,000 payable to the former owner on January 1, 2022, and up to $241,000 in contingent consideration, payable in one year, based upon an excess net sales formula. The final purchase price allocation, based upon the fair value of these assets and liabilities determined using the income approach, included accounts receivable of $280,000, inventory of $174,000, machinery and equipment of $16,000, other current assets of $68,000, accounts payable of $204,000, other current liabilities of $11,000, contingent consideration accrual of $159,000, non-current deferred tax liabilities of $99,000, intangible assets of $398,000 (with an estimated life of 5-10 years) and the remainder to goodwill (non-deductible for tax purposes). These values are Level 3 fair value measurements. In February 2021, the former owner was paid $158,000 of contingent consideration based on the achievement of sales targets; the remaining $1,000 accrued but not earned was recorded as a gain in Other Income in the third quarter of fiscal 2021. In January 2022, the former owner was paid $184,000, after deducting $26,000 from the final payment for uncollectable accounts receivable balances. This operation continues to operate in Montevideo, Uruguay, reporting within the Food Safety segment. It is managed through Neogen's Latin America operation.

On January 9, 2020, the Company acquired all of the stock of Diessechem Srl, a distributor of food and feed diagnostics for the past 27 years, located in Italy. This acquisition gives Neogen a direct sales presence in Italy. Consideration for the purchase was $3,455,000 in net cash. The final purchase price allocation, based upon the fair value of these assets and liabilities determined using the income approach, included accounts receivable of $780,000, inventory of $5,000, other current assets of $160,000, accounts payable of $140,000, other current liabilities of $305,000, non-current deferred tax liabilities of $294,000, intangible assets of $1,225,000 (with an estimated life of 5-10 years) and the remainder to goodwill (non-deductible for tax purposes). These values are Level 3 fair value measurements. This operation continues to operate in Milan, Italy, reporting within the Food Safety segment. It is managed through Neogen's Scotland operation.

On January 31, 2020, the Company acquired all of the stock of Abtek Biologicals Limited, a manufacturer and supplier of culture media supplements and microbiology technologies. This acquisition enhances the Company's culture media product line offering for the worldwide industrial microbiology markets. Consideration for the purchase was $1,401,000 in net cash, with $1,282,000 paid at closing and $119,000 payable to the former owner on January 31, 2021. The final purchase price allocation, based upon the fair value of these assets and liabilities determined using the income approach, included accounts receivable of $135,000, inventory of $207,000, machinery and equipment of $105,000, prepayments of $6,000, accounts payable of $118,000, other current liabilities of $34,000, non-current deferred tax liabilities of $92,000, intangible assets of $484,000 (with an estimated life of 5-10 years) and the remainder to goodwill (non-deductible for tax purposes). These values are Level 3 fair value measurements. The final $119,000 owed was paid to the former owner in January 2021. This manufacturing operation continues to operate in Liverpool, England, reporting within the Food Safety segment. It is managed through Neogen's Scotland operation.

On February 28, 2020, the Company acquired the assets of Cell BioSciences, an Australian distributor of food safety and industrial microbiology products. This acquisition gives Neogen a direct sales presence across Australasia for its entire product portfolio. Consideration for the purchase was $3,768,000 in cash, with $3,596,000 paid at closing and $172,000 payable in one year. The final purchase price allocation, based upon the fair value of these assets and liabilities determined using the income approach, included inventory of $420,000, unearned revenue liability of $13,000, intangible assets of $1,338,000 (with an estimated life of 3 to 10 years) and the remainder to goodwill (non-deductible for tax purposes). These values are Level 3 fair value measurements. The final $172,000 owed was paid to the former owner in March 2021. The business operates in Gatton, Australia, reporting within the Australian operations in the Animal Safety segment.

On March 26, 2020, the Company acquired the assets of Chile-based Magiar Chilena, a distributor of food, animal and plant diagnostics, including Neogen products. This acquisition gives Neogen a direct sales presence in Chile. Consideration for the purchase was $400,000 in cash, with $350,000 paid at closing and $50,000 payable to the former owner on March 26, 2021. The final purchase price allocation, based upon the fair value of these assets and liabilities determined using the income approach, included inventory of $164,000, machinery and equipment of $53,000, and intangible assets of $183,000 (with an estimated life of 5-10 years). In April 2021, the former owner was paid $33,000, after deducting $17,000 from the final payment for inventory adjustments. The business continues to operate in Santiago, Chile, reporting within the Food Safety segment. It is managed through Neogen's Latin America operation.

Fiscal 2021

On July 31, 2020, the Company acquired the U.S. (including territories) rights to Elanco's StandGuard Pour-on for horn fly and lice control in beef cattle, and related assets. This product line fits in well with Neogen's existing agricultural insecticide portfolio and organizational capabilities. Consideration for the purchase was $2,351,000 in cash, all paid at closing. The final purchase price allocation, based upon the fair value of these assets determined using the income approach, included inventory of $51,000 and intangible assets of $2,300,000 (with an estimated life of 15 years). This product line is currently being toll manufactured for the Company but is eventually expected to be manufactured at Neogen's operation in Iowa; the sales are reported within the Animal Safety segment.

On December 30, 2020, the Company acquired all of the stock of Megazyme, Ltd, an Ireland-based company, and its wholly-owned subsidiaries, U.S.-based Megazyme, Inc. and Ireland-based Megazyme IP. Megazyme is a manufacturer and supplier of diagnostic assay kits and enzymes to measure dietary fiber, complex carbohydrates and enzymes in food and beverages as well as animal feeds. This acquisition will allow Neogen to expand its commercial relationships across food, feed and beverage companies, and provide additional food quality diagnostic products to commercial labs and food science research institutions. Consideration for the purchase was net cash of $39.8 million paid at closing, $8.6 million of cash placed in escrow payable to the former owner in two installments in two and four years, $4.9 million of stock issued at closing, and up to $2.5 million of contingent consideration, payable in two installments over the next year, based upon an excess net sales formula. The final purchase price allocation, based upon the fair value of these assets and liabilities determined using the income approach, included accounts receivable of $1,376,000, inventory of $5,595,000, net property, plant and equipment of $12,599,000, prepayments of $69,000, accounts payable of $4,000, other current liabilities of $1,815,000, contingent consideration accrual of $2,458,000, non-current liabilities of $319,000, non-current deferred tax liabilities of $3,306,000, intangible assets of $22,945,000 (with an estimated life of 15-20 years) and the remainder to goodwill (non-deductible for tax purposes). These values are Level 3 fair value measurements. In February 2021, the former owner was paid $1,229,000 for the first installment of contingent consideration, based upon the achievement of sales targets. In January 2022, the former owner was paid $1,120,000 for the second installment of contingent consideration, also based upon the achievement of sales targets, less a deduction of $120,000 related to a prior period tax adjustment. The Irish companies continue to operate in Bray, Ireland, reporting within the Food Safety segment and are managed through Neogen's Scotland operation. The Company's U.S. business is managed by our Lansing-based Food Safety team.

Fiscal 2022

On September 17, 2021, the Company acquired all of the stock of CAPInnoVet, Inc., a companion animal health business that provides pet medications to the veterinary market. This acquisition provides entry into the retail parasiticide market and enhances the Company's presence in companion animal markets. Consideration for the purchase was net cash of $17.9 million paid at closing, including $150,000 of cash placed in escrow payable to the former owners in twelve months. There is also the potential for performance milestone payments to the former owners of up to $6.5 million and the Company could incur up to $14.5 million in future royalty payments. The preliminary purchase allocation, based upon the fair value of these assets and liabilities determined using the income approach, included accounts receivable of $308,000, inventory of $531,000, prepayments of $296,000, accounts payable of $120,000, other current liabilities of $84,000, non-current liabilities of $6.5 million (contingent consideration accrual calculated using a Monte Carlo simulation utilizing inputs such as probability and timing of milestone achievements, revenue forecasts and volatility, and estimated discount rates relating to estimated future cash flows of the business), intangible assets of $19.2 million (with an estimated life of 15-20 years) and the remainder to goodwill (deductible for tax purposes). These values are Level 3 fair value measurements. The business is operated from our location in Lexington, KY, reporting within the Animal Safety segment.

On November 30, 2021, the Company acquired all of the stock of Delf (U.K.) Ltd., a United Kingdom-based manufacturer and supplier of animal hygiene and industrial cleaning products, and Abbott Analytical Ltd., a related service provider. This acquisition will expand the Company's line of dairy hygiene products and will enhance our cleaner and disinfectant product portfolio. Consideration for the purchase was net cash of $9.5 million paid at closing, including $722,000 of cash placed in escrow payable to the former owner in one year. The preliminary purchase price allocation, based upon the fair value of these assets and liabilities determined using the income approach, included accounts receivable of $1,059,000, inventory of $972,000, net property, plant and equipment of $152,000, prepayments of $31,000, accounts payable of $497,000, other current liabilities of $378,000, non-current deferred tax liabilities of $780,000, intangible assets of $3.1 million (with an estimated life of 10-15 years) and the remainder to goodwill (non-deductible for tax purposes). These values are Level 3 fair value measurements. The companies continue to operate in Liverpool, England, reporting within the Food Safety segment and are managed through Neogen's Scotland operation.

On December 9, 2021, the Company acquired all of the stock of Genetic Veterinary Sciences, Inc., a companion animal genetic testing business providing genetic information for dogs, cats and birds to animal owners, breeders and veterinarians. This acquisition will further expand the Company's presence in the companion animal market. Consideration for the purchase was $11.4 million in net cash. The preliminary purchase price allocation, based upon the fair value of these assets and liabilities determined using the income approach, included accounts receivable of $38,000, net inventory of $292,000, net property, plant and equipment of $399,000, prepayments of $54,000, accounts payable of $325,000, unearned revenue of $1.9 million, other current liabilities of $321,000, intangible assets of $5.5 million (with an estimated life of 5-15 years) and the remainder to goodwill (deductible for tax purposes). These values are Level 3 fair value measurements. The business continues to operate in Spokane, Washington, reporting within the Animal Safety segment.

Subsequent to the end of the fiscal year, on July 1, 2022, Neogen acquired all of the stock of Thai-Neo Biotech Co., Ltd., a longstanding distributor of Neogen's food safety products to Thailand and

Southeast Asia. This acquisition gives Neogen a direct sales presence in Thailand. Consideration for the purchase was $1,558,000, with $1,324,000 paid at closing and $234,000 payable on October 1, 2023. Due to the timing of the transaction, the details of the preliminary purchase price allocation are not available. The business continues to operate in Bangkok, Thailand, reporting within the Food Safety segment.

For the acquisitions listed above, revenues in the aggregate were $38.0 million, $27.0 million and $6.1 million in fiscal years 2022, 2021 and 2020, respectively. Earnings in the aggregate were $5.4 million, $4.2 million and $520,000 in fiscal years 2022, 2021 and 2020, respectively.

3M Food Safety transaction

On December 13, 2021, Neogen, 3M, and Garden Spinco, a newly formed subsidiary of 3M created to carve out 3M's Food Safety business, entered into a number of agreements, including the merger agreement, pursuant to which, among other things, 3M's Food Safety business will combine with Neogen in a Reverse Morris Trust transaction, intended to be tax-efficient to 3M and its shareholders for U.S. federal income tax purposes. Immediately following the transaction, Garden SpinCo stockholders will own, in the aggregate, approximately 50.1% of the issued and outstanding shares of Neogen common stock and pre-Merger Neogen shareholders will own, in the aggregate, approximately 49.9% of the issued and outstanding shares of Neogen common stock. The transaction implies an enterprise value for 3M's Food Safety business of approximately $3.4 billion based on Neogen's stock price on July 22, 2022, including $1 billion in new debt to be incurred by 3M's Food Safety business. 3M's Food Safety business will fund to 3M consideration valued at approximately $1 billion, subject to closing and other adjustments.

On June 30, 2022, Garden Spinco entered into a credit agreement consisting of a five-year senior secured term loan facility in the amount of $650.0 million and a five-year senior secured revolving facility in the amount of $150.0 million (collectively, the "Credit Facilities"), which, subject to customary closing conditions, will be available in connection with the merger and related transactions. The Credit Facilities, together with the Notes below, when incurred, represent the financing contemplated in connection with the Merger.

In July 2022 Garden SpinCo closed on an offering of $350.0 million aggregate principal amount of 8.625% senior notes due 2030 (the "Notes") in a private placement at par. The Notes will initially be issued by Garden SpinCo to 3M and are expected to be transferred and delivered by 3M to the selling securityholder in the offering, in satisfaction of certain of 3M's existing debt. SpinCo will not receive any proceeds from the sale of the Notes by the selling securityholder. Prior to the distribution of the shares of SpinCo's common stock to 3M stockholders, the Notes will be guaranteed on a senior unsecured basis by 3M. Upon consummation of such distribution, 3M will be released from all obligations under its guarantee. Upon the effectiveness of the Merger, the Notes will be guaranteed on a senior unsecured basis by Neogen and certain wholly-owned domestic subsidiaries of Neogen.

The transaction is expected to close by the end of the third calendar quarter in 2022, subject to approval by Neogen shareholders, receipt of required regulatory approvals and the satisfaction of other customary closing conditions.

4. Long-Term Debt

The Company has a financing agreement with a bank providing for a $15,000,000 unsecured revolving line of credit, which was amended in the second quarter to extend the expiration to November 30, 2023. There were no advances against the line of credit during fiscal years 2022 and 2021; there was no balance outstanding at May 31, 2022. Interest on any borrowings is LIBOR plus 100 basis points (rate under the terms of the agreement was 2.06% at May 31, 2022). See Note 1, Recent Accounting Pronouncements Not Yet Adopted, for information on reference rate reform. Financial covenants include maintaining specified levels of tangible net worth, debt service coverage, and funded debt to EBITDA; the Company believes it was in compliance with these covenants at May 31, 2022.

5. Equity Compensation Plans

Incentive and non-qualified options to purchase shares of common stock have been granted to directors, officers and employees of Neogen under the terms of the Company's stock option plans. These options were granted at an exercise price of not less than the fair market value of the stock on the date of grant. Remaining shares available for grant under share-based compensation plans were 5,386,000, 6,355,000 and 7,002,000 at May 31, 2022, 2021 and 2020, respectively. Options vest ratably over three and five-year periods and the contractual terms are generally five or ten years.

(Options in thousands)	Options	Weighted-Average Exercise Price	Weighted-Average Grant Date Fair Value
Outstanding at May 31, 2019 (1,234 exercisable)	4,770	$ 24.69	$ 6.35
Granted	1,124	31.96	7.78
Exercised	(1,438)	20.12	5.53
Forfeited	(132)	28.72	7.10
Outstanding at May 31, 2020 (972 exercisable)	4,324	$ 27.98	$ 6.98
Granted	403	34.23	7.71
Exercised	(1,389)	24.38	6.31
Forfeited	(381)	28.99	7.20
Outstanding at May 31, 2021 (643 exercisable)	2,957	$ 30.38	$ 7.36
Granted	615	36.42	8.49
Exercised	(281)	22.79	6.29
Forfeited	(47)	33.93	8.02
Outstanding at May 31, 2022 (1,191 exercisable)	**3,244**	**$ 32.13**	**$ 7.66**

The following is a summary of stock options outstanding at May 31, 2022:

(Options in thousands)	Options Outstanding			Options Exercisable	
Range of Exercise Price	Number	Average Contractual Life (in years)	Weighted-Average Exercise Price	Number	Weighted-Average Exercise Price
$10.75 – $20.00	49	2.3	$ 15.43	49	$ 15.43
$20.01 – $28.99	344	3.8	26.80	83	23.08
$29.00 – $30.99	493	0.9	30.16	332	30.13
$31.00 – $31.99	1,509	2.0	31.70	581	31.64
$32.00 – $42.45	849	3.7	37.16	146	33.88
	3,244	2.5	$ 32.13	1,191	$ 30.24

The weighted average exercise price of shares subject to options that were exercisable at May 31, 2021 and 2020 was $28.10 and $24.47, respectively.

Compensation expense related to share-based awards was $7,154,000, $6,437,000 and $6,468,000 in fiscal years 2022, 2021 and 2020, respectively. Remaining compensation cost to be expensed in future periods for non-vested options was $10,927,000 at May 31, 2022, with a weighted average expense recognition period of 2.9 years.

	Year Ended May 31		
(In thousands)	**2022**	2021	2020
Aggregate intrinsic value of options outstanding	**$ 850**	$ 46,667	$ 32,988
Aggregate intrinsic value of options exercisable	**$ 817**	$ 11,617	$ 10,814
Aggregate intrinsic value of options exercised	**$ 5,507**	$ 22,349	$ 19,597

The Company grants restricted stock units (RSUs) to directors, officers and employees under the terms of the 2018 Omnibus Incentive Plan, which vest ratably over three and five year periods. The RSUs are expensed straight-line over the remaining weighted-average period of 4.0 years. On May 31, 2022, there was $6,866,000 in unamortized compensation cost related to non-vested RSUs.

(RSU Grants in thousands)	RSUs	Weighted Average Grand Date Fair Value
Outstanding at May 31, 2020	-	$ -
Granted	122	34.21
Released	-	-
Forefeited	(1)	34.21
Outstanding at May 31, 2021	121	$ 34.21
Granted	169	37.28
Released	(25)	34.24
Forefeited	(8)	36.80
Outstanding at May 31, 2022	**257**	**$ 36.14**

The Company offers eligible employees the option to purchase common stock at a 5% discount to the lower of the market value of the stock at the beginning or end of each participation period under the terms of the 2011 Employee Stock Purchase Plan; the discount is recorded in general and administrative expense. Total individual purchases in any year are limited to 10% of compensation. Shares purchased by employees through this program were 43,456 in fiscal 2022, 38,406 in fiscal 2021 and 43,156 in fiscal 2020. As of May 31, 2022, common stock totaling 605,774 of the 1,425,000 authorized shares remained reserved for issuance under the plan.

6. Income Taxes

Income before income taxes by source consists of the following amounts:

(In thousands)	Year Ended May 31 2022	2021	2020
U.S.	$ 38,554	$ 55,753	$ 62,329
Foreign	21,653	19,515	9,976
	$ 60,207	$ 75,268	$ 72,305

The provision for income taxes consists of the following:

(In thousands)	Year Ended May 31 2022	2021	2020
Current:			
Domestic			
Federal	$ 8,579	$ 6,981	$ 6,886
Change in tax-related uncertainties	3	(75)	269
State	2,406	2,147	1,262
Foreign	5,140	4,875	2,475
Total Current	16,128	13,928	10,892
Deferred:			
Domestic			
Federal	(3,721)	479	1,964
State	(356)	44	195
Foreign	(151)	(65)	(221)
Total Deferred	(4,228)	458	1,938
Provision for Income Taxes	$ 11,900	$ 14,386	$ 12,830

The reconciliation of income taxes computed at the U.S. federal statutory tax rate to income tax expense is as follows:

(In thousands)	Year Ended May 31 2022	2021	2020
Tax at U.S. statutory rate	$ 12,643	$ 15,806	$ 15,184
Permanent differences	67	292	360
Global intangible low-taxed income (GILTI)	1,501	2,064	438
Foreign derived intangible income deduction (FDII)	(1,308)	(1,210)	(1,120)
Foreign rate differential	215	669	(182)
Subpart F income	397	628	634
Tax benefits on stock-based compensation	(462)	(2,651)	(1,998)
Provision for state income taxes, net of federal benefit	1,517	1,601	1,412
Tax Credits	(2,527)	(3,298)	(1,417)
Impact of tax rate changes	583	-	-
Other	(726)	485	(481)
Income Tax Expense	$ 11,900	$ 14,386	$ 12,830

Foreign tax credits, primarily offsetting taxes associated with Subpart F and GILTI income, were $1,747,000, $2,753,000 and $945,000 in fiscal years 2022, 2021 and 2020, respectively. The Company's research and development credits were $780,000, $545,000 and $472,000 in fiscal years 2022, 2021 and 2020, respectively.

Deferred income taxes reflect the tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred income tax liabilities and assets are as follows:

	May 31	
(In thousands)	2022	2021
Deferred income tax liabilities		
Indefinite and long-lived assets	$ (22,709)	$ (25,072)
Right of use asset	(344)	(213)
Prepaid expenses	(884)	(721)
	(23,937)	(26,006)
Deferred income tax assets		
Stock options	2,085	1,106
Inventories and accounts receivable	2,044	2,081
Tax loss carryforwards	561	662
Lease liability	382	211
Accrued expenses and other	2,422	570
Valuation allowance	(568)	(541)
	6,926	4,089
Net deferred income tax liabilities	$ (17,011)	$ (21,917)

The Company has the following net operating loss carryforwards:

(In thousands)	May 31, 2022	Expiry
U.S.	$ 281	2037
Foreign	2,831	2024 to 2039
	$ 3,112	

Valuation allowances against certain deferred tax assets are established based on management's determination of a more likely than not standard that the tax benefits will not be realized.

We are subject to income taxes in the U.S. (federal and state) and in numerous foreign jurisdictions. Significant judgment is required in evaluating our tax positions and determining our provision for income taxes. During the ordinary course of business, there are transactions and calculations for which the ultimate tax determination is uncertain. We establish reserves for tax-related uncertainties based on estimates of whether, and the extent to which, additional taxes will be due. These reserves are established when we believe that certain positions might be challenged despite our belief that our tax return positions are fully supportable. We adjust these reserves in light of changing facts and circumstances, such as the outcome of tax audits. The provision for income taxes includes the impact of reserve provisions and changes to reserves that are considered appropriate. The Company's policy is to recognize both accrued interest expense and penalties related to unrecognized tax benefits in income tax expense. The amount of interest and penalties included in the unrecognized tax benefits reserve was $69,321 at May 31, 2022 and $64,518 at May 31, 2021. Of the total unrecognized tax benefits at May 31, 2022 and May 31, 2021, $808,186 and $805,316 respectively, comprise unrecognized tax positions that would, if recognized, affect our effective tax rate.

The reconciliation of our unrecognized tax benefits is as follows:

		May 31	
(In thousands)	2022	2021	2020
Beginning balance	$ 764	$ 762	$ 541
Increase (decrease) related to prior periods	(75)	(182)	48
Increase related to current period	147	184	173
Lapses of applicable statute of limitations	(95)	-	-
Ending balance	$ 741	$ 764	$ 762

The Company is no longer subject to examination by the Internal Revenue Service for fiscal year 2018 and preceding years.

7. Commitments and Contingencies

The Company is involved in environmental remediation and monitoring activities at its Randolph, Wisconsin manufacturing facility and accrues for related costs when such costs are determined to be probable and estimable. The Company currently utilizes a pump and treat remediation strategy, which includes semi-annual monitoring and reporting, consulting, and maintenance of monitoring wells. We expense these annual costs of remediation, which have ranged from $63,000 to $131,000 per year from fiscal 2018 to fiscal 2021. The Company's estimated remaining liability for these costs was $916,000 at both May 31, 2022 and 2021, measured on an undiscounted basis over an estimated period of 15 years. In fiscal 2019, the Company performed an updated Corrective Measures Study on the site, per a request from the Wisconsin Department of Natural Resources (WDNR), and is currently in discussion with the WDNR regarding potential alternative remediation strategies going forward. The Company believes that the current pump and treat strategy is appropriate for the site. However, the Company has agreed to a pilot study in which chemical reagents are injected into the ground in an attempt to reduce on-site contamination; costs incurred in fiscal 2022 totaled $305,000 as of May 31, 2022, which included the cost of this study. At this time, the outcome of the pilot study is unknown, but a change in the current remediation strategy, depending on the alternative selected, could result in an increase in future costs and ultimately, an increase in the currently recorded liability, with an offsetting charge to operations in the period recorded. The Company has recorded $100,000 as a current liability, and the remaining $816,000 is recorded in other non-current liabilities in the consolidated balance sheet as of May 31, 2022.

On March 6, 2020, the Company received an administrative subpoena from the U.S. Treasury Department's Office of Foreign Assets Control (OFAC) regarding activities or transactions involving parties located in Iran. The Company subsequently conducted an internal investigation under the direction of outside legal counsel and disclosed information concerning certain genomic testing services provided to an unrelated U.S.-based party engaged in veterinary activities involving an Iranian party. The Company continues to cooperate with OFAC's investigation and is currently examining whether certain of these activities may be eligible for OFAC General Licenses authorizing agricultural and veterinary activities.

In addition to responding to the administrative subpoena, the Company has implemented additional compliance measures to prevent inadvertent dealings with restricted countries or parties. These measures further enhance the Company's international trade compliance program, which is designed to assure that the Company does not conduct business directly or indirectly with any countries or parties subject to economic sanctions and export control laws of the U.S. and other applicable jurisdictions. Although it is too early to predict what action, if any, that OFAC will take, the Company does not currently have any reason to believe that OFAC's pending investigation will have a material impact on its operations, the results of operations for any future period, or its overall financial condition. In fiscal 2020, the Company took a charge to expense and recorded a reserve of $600,000 to provide for potential fines or penalties on this matter. At this time, the Company believes that it is adequately reserved for this issue.

The Company has agreements with unrelated third parties that provide for the payment of royalties on the sale of certain products. Royalty expense, recorded in sales and marketing, under the terms of these agreements was $1,999,000, $2,129,000 and $2,524,000 for fiscal years 2022, 2021 and 2020, respectively. Some of these agreements provide for guaranteed minimum royalty payments to be paid each fiscal year by the Company for certain technologies. Future minimum royalty payments are as follows: 2023—$100,000, 2024—$100,000, 2025—$100,000, 2026—$75,000 and 2027—$75,000.

The Company has unconditional purchase obligations consisting primarily of purchase orders for future inventory and capital equipment purchase, totaling $85.8 million, of which $83.1 million is scheduled to be spent within the next 12 months, and $2.7 million is scheduled to be spent between one to three years in the future.

In conjunction with the 3M Food Safety transaction announced on December 13, 2021, Neogen has entered into a credit agreement with JPMorgan Chase for $650 million in term loans, and has incurred $9.8 million in debt issuance costs, which will be paid at close, and amortized over the five-year term of the loans. The loans are expected to be funded in the third calendar quarter of 2022. Interest on the loans will be at the Secured Overnight Financing Rate (SOFR) plus 225 basis points.

The Company is subject to certain legal and other proceedings in the normal course of business that, in the opinion of management, are not expected to have a material effect on its future results of operations or financial position.

8. Defined Contribution Benefit Plan

The Company maintains a defined contribution 401(k) benefit plan covering substantially all domestic employees. Employees are permitted to defer compensation up to IRS limits, with Neogen matching 100% of the first 3% of deferred compensation and 50% of the next 2% of deferred compensation. In the first quarter of fiscal 2021, the Company suspended the 401(k) match, while we assessed the potential financial impact of COVID-19 on the Company. The match was restored in September 2020. Neogen's expense under this plan was $1,834,000, $1,204,000, and $1,535,000 in fiscal years 2022, 2021 and 2020, respectively.

9. Derivatives

We operate on a global basis and are exposed to the risk that our financial condition, results of operations and cash flows could be adversely affected by changes in foreign currency exchange rates. To reduce the potential effects of foreign currency exchange rate movements on net earnings, we enter into derivative financial instruments in the form of foreign currency exchange forward contracts with major financial institutions.

Derivatives Not Designated as Hedging Instruments

We forecast our net exposure in various receivables and payables to fluctuations in the value of various currencies, and we enter into approximately 11 foreign currency forward contracts each month to mitigate that exposure. These contracts are recorded net at fair value on our consolidated balance sheets, classified as Level 2 in the fair value hierarchy; gains and losses from these contracts were recognized in other income in our consolidated statements of income. The notional amount of forward contracts in place was $4,424,000 and $19,984,000 as of May 31, 2022 and 2021, respectively.

(In thousands)

Fair Value of Deriviatives Not Designated as Hedging Instruments	Balance Sheet Location	May 31, 2022	May 31, 2021
Foreign currency forward contracts, net	Prepaid and Other	$ (78)	$ 515

The location and amount of gains from derivatives not designated as hedging instruments in our consolidated statements of income were as follows:

(In thousands)

Derivatives Not Designated as Hedging Instruments	Location in statements of income	Year ended May 31 2022	2021	2020
Foreign currency forward contracts	Other income (expense)	$ 1,218	$ 2,651	$ 1,111

10. Related Party Transactions

The Company has partnered with Corvium to develop a software-as-a-service offering for use in conjunction with several food safety product lines. Ralph Rodriguez is a member of Neogen's Board of Directors and also serves on the Board of Directors at Corvium. Neogen made payments to Corvium of $1,573,000, $788,000 and $1,833,000 in fiscal years 2022, 2021 and 2020, respectively.

11. Segment Information

The Company has two reportable segments: Food Safety and Animal Safety. The Food Safety segment is primarily engaged in the development, production and marketing of diagnostic test kits and related products used by food producers and processors to detect harmful natural toxins, foodborne bacteria, allergens and levels of general sanitation. The Animal Safety segment is primarily engaged in the development, production and marketing of products dedicated to animal safety, including a complete line of consumable products marketed to veterinarians and animal health product distributors; this segment also provides genomic identification and related interpretive bioinformatic services. Additionally, the Animal Safety segment produces and markets rodenticides, disinfectants and insecticides to assist in the control of rodents, insects and disease in and around agricultural, food production and other facilities.

Neogen's international operations in the United Kingdom, Mexico, Guatemala, Brazil, Argentina, Uruguay, Chile, China and India originally focused on the sales and marketing of our food safety products, and each of these units reports through the Food Safety segment. In recent years, these operations have expanded to offer the Company's complete line of products and services, including those usually associated with the Animal Safety segment such as cleaners, disinfectants, rodenticides, insecticides, veterinary instruments and genomics services. These additional products and services are managed and directed by existing management and are reported through the Food Safety segment.

Neogen's operation in Australia originally focused on providing genomics services and sales of animal safety products and reports through the Animal Safety segment. With the acquisition of Cell BioSciences in February 2020, this operation has expanded to offer our complete line of products and services, including those usually associated with the Food Safety segment. These additional products are managed and directed by existing management at Neogen Australasia and report through the Animal Safety segment.

The accounting policies of each of the segments are the same as those described in Note 1.

Segment information is as follows:

(In thousands)	Food Safety	Animal Safety	Corporate and Eliminations[1]	Total
Fiscal 2022				
Product revenues to external customers	**$ 231,626**	**$ 193,038**	**$ –**	**$ 424,664**
Service revenues to external customers	**28,353**	**74,142**	**–**	**102,495**
Total revenues to external customers	**259,979**	**267,180**	**–**	**527,159**
Operating income (loss)	**38,581**	**52,546**	**(32,509)**	**58,618**
Depreciation and amortization	**13,386**	**10,308**	**–**	**23,694**
Total assets	**304,461**	**307,417**	**381,051**	**992,929**
Expenditures for long-lived assets	**7,842**	**16,939**	**–**	**24,781**
Fiscal 2021				
Product revenues to external customers	$ 209,104	$ 167,198	$ –	$ 376,302
Service revenues to external customers	25,140	67,017	–	92,157
Total revenues to external customers	234,244	234,215	–	468,459
Operating income (loss)	33,725	48,685	(8,241)	74,169
Depreciation and amortization	11,575	9,466	–	21,041
Total assets	295,065	244,039	381,088	920,192
Expenditures for long-lived assets	13,730	12,982	–	26,712
Fiscal 2020				
Product revenues to external customers	$ 189,893	$ 145,646	$ –	$ 335,539
Service revenues to external customers	22,798	59,833	–	82,631
Total revenues to external customers	212,691	205,479	–	418,170
Operating income (loss)	33,526	39,051	(5,054)	67,523
Depreciation and amortization	10,173	8,223	–	18,396
Total assets	222,331	231,178	343,673	797,182
Expenditures for long-lived assets	15,867	8,185	–	24,052

[1] Includes corporate assets, including cash and cash equivalents, marketable securities, current and deferred tax accounts, and overhead expenses not allocated to specific business segments. Also includes the elimination of intersegment transactions and non-controlling interests.

The following table presents the Company's revenue disaggregated by geographical location:

	Year ended May 31	
(In thousands)	**2022**	2021
Domestic	**$ 317,820**	$ 285,262
International	**209,339**	183,197
Total revenue	**$ 527,159**	$ 468,459

11. Stock Repurchases

In October 2018, the Company's Board of Directors authorized a program to purchase, subject to market conditions, up to 6,000,000 shares of the Company's common stock. In December 2018, the Company purchased 100,000 shares under the new program in open market transactions for a total price, including commissions, of $3,134,727. Shares acquired under the program were retired. A total of 5,900,000 shares of common stock remained available for repurchase under this program as of May 31, 2022.

Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Neogen Corporation
Lansing, Michigan

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Neogen Corporation (the "Company") as of May 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended May 31, 2022, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at May 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended May 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of May 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") and our report dated July 27, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the 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 consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated 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 regarding the amounts and disclosures in the consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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

Valuation of Contingent Consideration

As described in Note 3 to the Company's consolidated financial statements, the Company has recorded a contingent consideration liability of approximately $6.5 million related to the acquisition of CAPInnoVet, Inc. A contingent consideration liability is recorded based on its estimated fair value as of the date of the acquisition and remeasured as of each balance sheet date.

We have identified the valuation of the contingent consideration liability as of the acquisition date as a critical audit matter. The contingent consideration liability is measured using a Monte-Carlo simulation utilizing significant unobservable inputs that considers the probability of achieving each of the potential milestones, including revenue volatility and an estimated discount rate associated with the risks of the expected cash flows. Due to the inherent uncertainty involved in estimating long-range revenue forecasts and the complexity of the Monte-Carlo simulation utilized by management, auditing the contingent consideration liability required increased auditor effort including the use of personnel with specialized knowledge and skills in valuation.

The primary procedures we performed to address this critical audit matter included:

- Testing the design and operating effectiveness of certain controls over the development of the significant assumptions used in the valuation model selected, including controls over assumptions related to: (i) long-range revenue forecasts and (ii) discount rates applied to the forecasts.
- Assessing management's estimated timing of milestone achievement and probabilities of success by corroborating with personnel knowledgeable of the current progression of the product candidates and reviewed filings with the applicable regulatory agencies.
- Assessing management's ability to forecast long-range revenue by analyzing historical accuracy of management's forecasts related to business combinations and comparing to industry data to validate the reasonableness of the growth assumption.
- Utilizing professionals with specialized knowledge and skills in valuation to assist in evaluating the valuation methodology selected by management as well as assessing the reasonableness of key inputs including the discount rate and revenue volatility.

We have served as the Company's auditor since 2014.

BDO USA, LLP

Grand Rapids, Michigan
July 27, 2022

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13-a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, an evaluation was conducted as to the effectiveness of internal control over financial reporting as of May 31, 2022, based on the framework in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on that evaluation, management concluded that internal control over financial reporting was effective as of May 31, 2022. The effectiveness of internal control over financial reporting as of May 31, 2022 has been audited by BDO USA, LLP, an independent registered public accounting firm, as stated in its attestation report, which is included on the following page and is incorporated into this Item 9A by reference.

John E. Adent, President and CEO

Steven J. Quinlan, Vice President and CFO

Changes in Internal Control over Financial Reporting

No changes in our internal control over financial reporting were identified as having occurred during the quarter ended May 31, 2022 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Neogen Corporation
Lansing, Michigan
Opinion on Internal Control over Financial Reporting

We have audited Neogen Corporation's (the "Company's") internal control over financial reporting as of May 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO criteria"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of May 31, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of May 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended May 31, 2022, and the related notes and schedules and our report dated July 27, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A, Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit of internal control over financial reporting in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

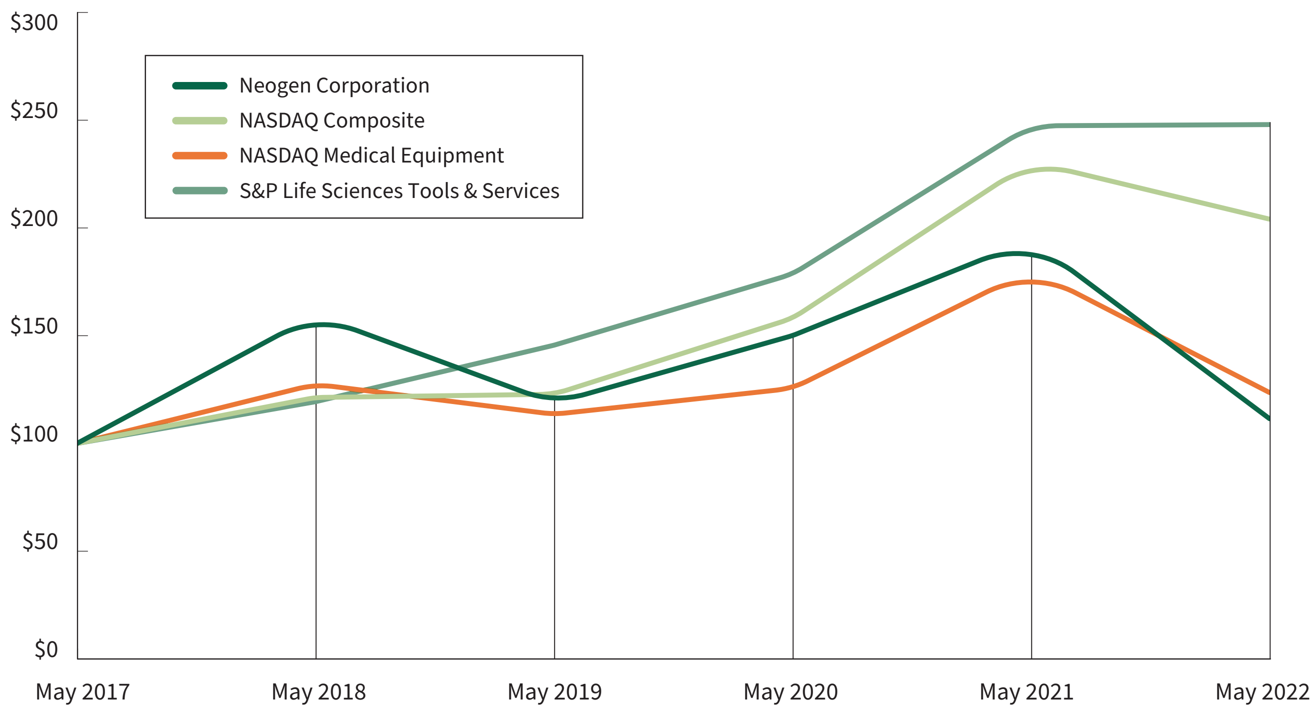
Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

BDO USA, LLP

Grand Rapids, Michigan
July 27, 2022

Neogen Corporation and Subsidiaries: Comparison of Five Year Cumulative Total Return and Stock Profile Activity

The graph below matches Neogen Corporation's cumulative 5-Year total shareholder return on common stock with the cumulative total returns of the NASDAQ Composite index and the NASDAQ Medical Equipment index. The graph tracks the performance of a $100 investment in our common stock and in each index (with the reinvestment of all dividends) from 5/31/2017 to 5/31/2022.



	May 31											
		2017		2018		2019		2020		2021		**2022**
Neogen Corporation	$	100.00	$	159.50	$	118.71	$	150.04	$	194.47	**$**	**111.49**
NASDAQ Composite		100.00		121.34		122.84		158.05		230.68		**204.09**
NASDAQ Medical Equipment		100.00		127.47		113.54		125.55		180.52		**123.62**
S&P Life Sciences Tools & Services		100.00		119.37		145.59		178.60		247.39		**247.97**

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

Market Information

Neogen Common Stock is traded on the NASDAQ Global Select Market under the symbol NEOG.

Holders

As of June 30, 2022, there were approximately 215 stockholders of record of our common stock. The actual number of holders is greater than this number and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. Management believes there are a total of approximately 10,000 beneficial holders.

Dividends

Neogen has never paid cash dividends on its common stock and does not expect to pay dividends in the foreseeable future.

Officers

John E. Adent
President and Chief Executive Officer

Robert S. Donofrio, Ph.D.
Vice President, Research and Development

Jerome L. Hagedorn
Vice President, North American Operations

Douglas E. Jones
Vice President, Chief Operating Officer

Jason W. Lilly, Ph.D.
Vice President, International Business

Julie L. Mann
Vice President, Chief Human Resources Officer

Steven J. Quinlan
Vice President, Chief Financial Officer

Amy M. Rocklin, Ph.D.
Vice President, General Counsel and Corporate Secretary

Directors

James C. Borel
Board Chair
E.I.DuPont de Nemours
Former Executive Vice President

William T. Boehm, Ph.D.
Kroger Company
Former Senior Vice President
President's Council of Economic Advisors
Former Senior Economist

Ronald D. Green, Ph.D.
University of Nebraska–Lincoln
Chancellor

Ralph A. Rodriguez
Daon
President & Chief Product Officer

James P. Tobin
Monsanto
Former Vice President

Darci L. Vetter
The Nature Conservancy
Global Head, Policy and Governmental Relations
Former Chief Agricultural Negotiator for the U.S. Trade Representative

Catherine E. Woteki, Ph.D.
Biocomplexity Institute at the University of Virginia
Distinguished Institute Professor
Former Undersecretary for the USDA's Research, Education, and Economics Mission

Form 10-K and the Company's Code of Ethics

Copies of Form 10-K and the Company's Code of Ethics will be provided upon request without charge to persons directing their request to:

Neogen Corporation
Attention: Investor Relations
620 Lesher Place, Lansing, MI 48912

Annual Meeting

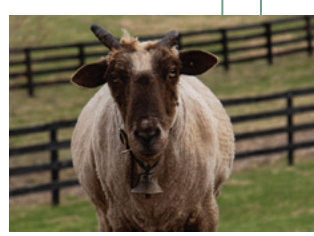
October 6, 2022 at 10:00 a.m.
www.virtualshareholdermeeting.com/NEOG2022

Independent Registered Public Accounting Firm

BDO USA, LLP
200 Ottawa Avenue N.W., Suite 300; Grand Rapids, MI 49503

Stock Transfer Agent and Registrar

American Stock Transfer and Trust Co.
6201 15th Avenue, Brooklyn, NY 11219



NEOGEN® CORPORATION

NASDAQ: NEOG