



CHAMPIONX

Improving Lives

2020 Annual Report

We are ChampionX. We bring over a century of expertise and 6,600 global team members who deliver forward-thinking innovations, unmatched global supply chain capability, and market-shaping solutions in reservoir, drilling, production, midstream, and water applications. Our world-class safety culture fuels our purpose to improve lives through our commitment to deliver globally sustainable operations.

\$1.9B

FY 2020 Net Sales

\$265MM

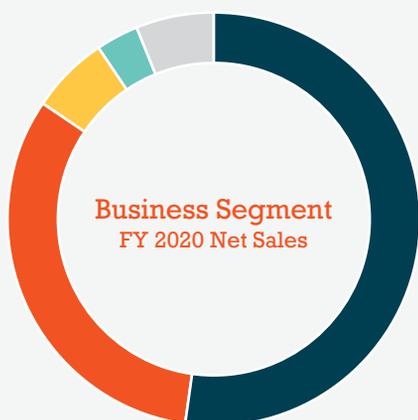
FY 2020 Free Cash Flow*

\$2.8B

FY 2020 Pro Forma Net Sales*

\$349MM

FY 2020 Adjusted Free Cash Flow*



\$283MM

FY 2020 Adjusted EBITDA*

14.9%

FY 2020 Adjusted EBITDA Margin*

\$404MM

FY 2020 Pro Forma Adjusted EBITDA*

For more ChampionX news and information, visit www.championX.com.

* Adjusted EBITDA, free cash flow, adjusted free cash flow, pro forma net sales and pro forma adjusted EBITDA are non-GAAP measures. A reconciliation of these non-GAAP measures to the comparable GAAP measures is included at the end of this document.

A Letter to Our Shareholders

The last 12 months have been a period in which our world and our energy industry have had to navigate uncharted waters given the health and safety challenges posed by COVID-19 and the unprecedented short-term energy market imbalances which resulted from the pandemic. Against this challenging market environment, we at ChampionX have remained committed to and focused on our organizational purpose of improving lives of our customers, employees, shareholders, and communities where we live and work.

We implemented a comprehensive response plan to protect the health of our employees while continuing to operate safely in our facilities and field operations to support our customers' vital energy assets and infrastructure. Lastly, we completed our transformational merger with legacy ChampionX and progressed ahead of schedule in integrating the two organizations and delivering on targeted cost synergies. Our combined ChampionX organization is well positioned for the energy transition given our high exposure to the production segment, a global customer base and geographic foot print, and the strong cash generation capability of the portfolio.

Improving Lives of Our Employees and Communities

During a year in which the COVID-19 pandemic has placed stress and strain on so many families, the health and safety of our 6,600 employees around the world has remained our highest priority at ChampionX. As the health crisis emerged in early 2020, we mobilized our Crisis Management Team which still meets regularly to manage our data-driven approach to managing through the pandemic. We continue to take precautions consistent with local, state, and national government health authorities' guidelines, and we have maintained flexible work schedules to support our employees.

Given ChampionX's operations are classified as critical infrastructure, our manufacturing and field locations have remained operational throughout the pandemic to support our customers. To protect our employees, we equipped them with additional personal protective equipment, and we enacted social distancing procedures, including staggered shifts. In addition, we implemented rotating work schedules, and modified workspaces and break areas, as needed. We are staying in close contact with our suppliers to safely and efficiently manage our supply chain.

Against these operational challenges, ChampionX improved lives in 2020, as we achieved our best safety performance ever, both in terms of the number of injuries (50% reduction) and the severity of injuries (30% reduction in lost time injury rate). As an organization, we remain committed to our journey toward Goal Zero (incident free workplace) to ensure that every ChampionX employee is "safe today and home tonight."

In our recent global employee engagement survey, we had a global participation rate of 71% from our employees. As an indication of how our employees feel about the company's culture and progress on key issues, 89% of the participants reported that they feel very aligned to the company's purpose and 88% of our employees reported that they feel the company is committed to upholding its operating principles. We feel our purpose and operating culture is a sustainable competitive advantage.

In the midst of the global pandemic and in the face of natural disasters, we are proud of the many ways in which ChampionX employees gave of themselves to help improve lives in the communities in which we live and do business. To share just a couple of examples, ChampionX team members organized food drives in communities which have been particularly hard hit by the pandemic, and our employees were actively involved in hurricane relief efforts to help local communities along the Louisiana and Texas Gulf Coast rebuild after last year's particularly active hurricane season. In Ghana, our ChampionX team helped update a local health clinic facility to provide better medical care to its community.

Improving Lives of Our Customers

As an organization, we are guided by our operating principle of being customer advocates, so we are encouraged that for the fifth consecutive year, ChampionX was the customer loyalty leader (net promotor score) within the artificial lift industry in 2020, based on Kimberlite's (third-party industry research firm)

survey feedback from over 200 oil and gas companies globally. Our merger with ChampionX enables us to further advocate for our customers by offering a full suite of production solutions to help them sustainably optimize the productivity and efficiency of their energy assets.

ChampionX is also driven to deliver technology with impact, which is evidenced by the following achievements of our businesses in 2020. As a result of our innovative chemistries, our Production Chemical Technologies team secured a sole-source contract with a leading E&P operator across their North America portfolio of assets. Our artificial lift team received a Quality Recognition Award in Australia from one of the major IOCs. Our Digital team completed the first predictive failure artificial intelligence model under our joint technology development agreement with DCP Midstream. Our Drilling Technologies team generated more than 70% of segment fourth quarter of 2020 revenue from products that were less than three years old.

Our products and technologies are helping our customers achieve their carbon reduction and ESG ambitions. For example, our Production Chemical Technologies team has developed a new product that significantly reduces the volume of chemical needed, while increasing treatment efficiency, saving approximately 231 metric tons of CO₂ per year. Our new AFFIRMED® PowerFit ESP motor is enabling customers to increase production in 5.5-inch wells by as much as 150%, while simultaneously helping them reach their carbon reduction goals by consuming 10% less electricity.

Improving Lives of Our Shareholders

In early 2019, we first introduced our algorithm for creating long-term shareholder value within the oilfield products and services industry. This included our intention of being a 'Top Box' performer (strong free cash flow, relative revenue stability, high EBITDA margin, balanced capital allocation) through the oil and gas industry cycles. Our merger with ChampionX in early June of 2020 further solidified the 'Top Box' positioning of our business portfolio, and, simultaneously, was a deleveraging event as it relates to our balance sheet.

In 2020, our pro forma revenue of \$2.8 billion declined only 20% vs. 2019, and our Production Chemical Technologies pro forma revenue of \$1.8 billion declined only 11% year-over-year, illustrating the through-cycle revenue stability that the legacy ChampionX businesses bring to our combined portfolio. In 2020, we delivered \$404 million of pro forma adjusted EBITDA with a pro forma adjusted EBITDA margin of 15%, which reflects the impact of the severe energy industry downturn precipitated by the global pandemic. Despite the challenging market environment, ChampionX generated \$349 million of adjusted free cash flow (excluding \$84 million of cash transaction expenses) and used its strong free cash flow generation to reduce debt.

We are proud of how our team is executing on our merger integration plans, and our strong execution is what gave us the confidence to increase our targeted cost synergies to \$125 million (previously \$75 million) as announced during our third

We are clear and focused on our strategic priorities

Realize Better Together potential

Accelerate digital and digitally-enabled revenue streams

Leverage global footprint to expand international sales

Build enterprise-wide continuous improvement rigor

Evolve portfolio for sustained growth

What we achieved in 2020:

Completed transformational merger with ChampionX

Record positive safety performance

Generated free cash flow to revenue ratio of 14%

Reduced debt by \$161 million since the merger date

Increased our targeted cost synergies target to \$125 million

Drove innovation and continuous improvement across our business



quarter of 2020 earnings call, which we still anticipate fully capturing within 24 months of the merger closing.

We are even more excited today about the possibilities for our combined company than we were at the closing of the merger. We are confident that our disciplined operating model, differentiated products and technology, strong free cash flow, and enhanced production-focused portfolio, combined with our talented and motivated team, will enable ChampionX to be a long-term winner in the evolving global oil and gas industry and create value for our shareholders.

Focusing on Our Strategic Priorities

Last fall, we shared for the first time our five ChampionX strategic priorities which will guide our capital and resource allocation decisions as this decade unfolds. Given the importance of these strategic priorities, I would like to share with you our approach to making progress toward achieving each of these key priorities.

Our first strategic priority is realizing our Better Together potential. Part of the reason why we are even more excited now about the set of opportunities ahead for our company than we were when we first closed the merger is the clear evidence of how culturally aligned the legacy Apergy and legacy ChampionX teams are. We will continue to build on our purpose of improving lives as we leverage our collective expertise to bring differentiated production, digital and diamond sciences solutions to our customers. We remain committed and laser-focused on realizing our cost synergy goals and we will thoughtfully leverage shared service opportunities where they make sense.

Our second strategic priority is to accelerate digital and digitally enabled revenue streams. For ChampionX, our strategic focus is on leveraging our proven digital capabilities to further expand our base of new digital revenue streams, which are natural extensions to our production optimization expertise, such as monitoring, modeling, failure analysis, and analytical services.

Third, we will leverage our global footprint to expand international sales. We have previously shared with you our plans to expand our artificial lift business in key international geo-markets by leveraging the already truly global footprint of our Chemical Technologies business. Our strategic priority is to execute superbly to deliver on this objective. We are continuing to see some early wins internationally, which speak to the opportunity set before us to grow our market share in both artificial lift and production chemicals with IOC and NOC customers.

Our fourth strategic priority is building enterprise-wide continuous improvement rigor. The beauty of the organizational lineage of legacy Apergy and legacy ChampionX is that both organizations have the well-honed mental muscle and industrial mindset to pursue continuous productivity improvement. We will leverage this mindset to drive automated workflows and the elimination of waste to ensure that we are perennially in the vanguard in terms of how we manage our

cost structure. Even as activity levels eventually improve this year and beyond, we will use digitization as an enabler to automate internal business processes to improve efficiency and reduce cost.

Lastly, we will evolve our portfolio for sustained growth. We will continue to leverage our core capabilities across energy markets and natural adjacencies to position ChampionX for sustained growth through the energy transition. As we continue to use our full cycle free cash flow generating ability to further pay down debt toward our target level, we will continue to allocate capital in ways which are consistent with our value creation framework, that includes a sustainable return mechanism to our shareholders over time. In addition, we have conducted an ESG priorities assessment, the results of which we are using to develop our ESG framework and roadmap, which will be consistent with our corporate purpose and business strategy.

Exercising Discipline and Balance in Allocating Capital

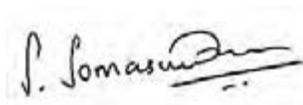
Following our successful transformational merger in June 2020 amid a challenging period for the energy industry, we were highly focused on managing our cash flow and preserving strong liquidity. Since the merger date, we have reduced debt by \$161 million and will continue to execute on our disciplined and balanced capital allocation framework. We will prioritize use of free cash flow to invest in technologies to support growth initiatives in our existing markets and for the energy transition, and we will use available excess cash to pay down debt, with an eye toward returning capital to shareholders.

Closing Remarks

I am grateful to our Board of Directors for their continuing support and guidance. In addition, I want to thank all of our dedicated employees around the world for their unending passion in improving the lives of our customers, our employees, our shareholders, and our communities. I am proud of their dedication and focus, and it is an honor for me to lead such a remarkable team.

We appreciate your support and confidence as ChampionX shareholders.

Sincerely,



Sivasankaran "Soma" Somasundaram
President and Chief Executive Officer

We are ChampionX

Our purpose is why we exist, and is defined by what we do and why it matters. Purpose describes what ChampionX does in an inspirational way, elevating the brand by communicating how our business results serve the greater good. Our unified purpose is to improve the lives of our employees, customers, shareholders, and communities through our commitment to safely deliver globally sustainable operations.

Our operating principles detail how we get things done, efficiently and with focus. They define the culture of ChampionX and how we work.

Customer advocates

We provide value to customers by understanding their challenges and delivering responsive, innovative solutions.

Technology with impact

We use the power of science, insights, and experience to design and deliver technology with impact.

People oriented

We prioritize our people and value a culture based on safe, ethical practices, relationships, and empowerment.

Driven to improve

We are passionate and purposeful about continuously improving our business and delivering energy responsibly.

Our culture guides how we work together. These are the fundamental beliefs on which our business is based.

Health, safety, and the environment

The safety of our employees, customers, shareholders, and communities is vitally important.

Corporate responsibility

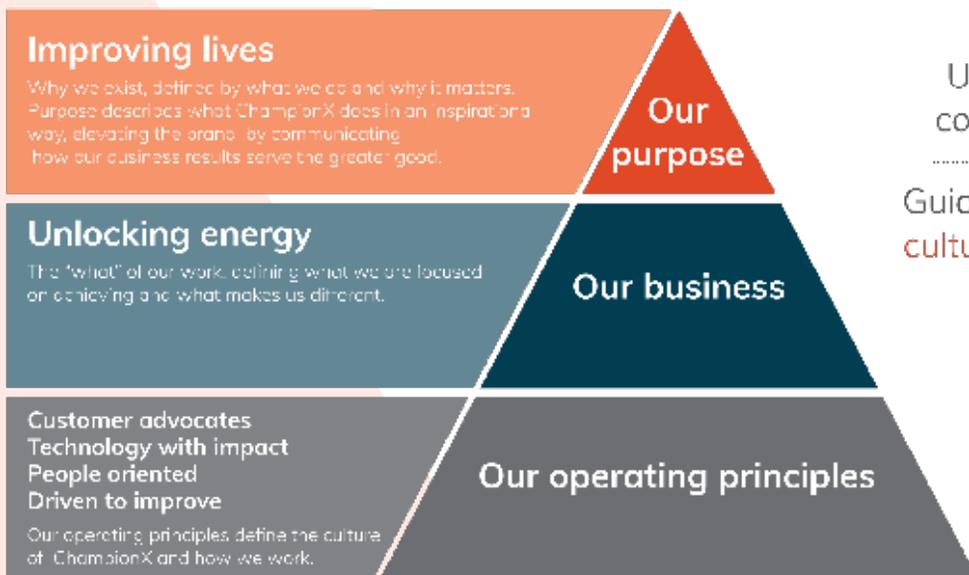
ChampionX believes that our performance as a corporate citizen is important to our success as a purpose-driven company.

Diversity and inclusion (D&I)

ChampionX is committed to building and fostering a diverse and inclusive workplace where all employees feel a sense of belonging to our organization's culture and purpose.

Sustainability

At ChampionX, we are passionate and purposeful about the safe and sustainable provision of energy for the world. Through our innovative products and processes, we help our customers and industry partners meet their goals of reducing their carbon footprint, overall waste production, and greenhouse gas emissions.



Sustainably unlocking energy is at the core of what we do on a global scale. This is how we deliver on our purpose, achieving industry-leading and market-shaping results that increase shareholder value and serve as the economic engine for our company. Our combined expertise is what differentiates us as an oilfield equipment and chemical and automation technology company. Our products and services build on our well-deserved reputation for delivering unrivaled value to oil and gas operations worldwide.

4,000+

associates working directly with customers every day

2,500+

owned & licensed patents

400+

scientists & technologists

250+

facilities around the world

60

countries

30+

manufacturing locations



ChampionX upstream and midstream chemical solutions and services provide chemistry, technology, engineering support, and onsite expertise to improve outcomes for upstream and midstream oil and gas operations. We partner with customers to reduce risk, create value, and produce more energy more safely and more responsibly. Our unparalleled chemical technologies portfolio includes Reservoir Chemical Solutions, Production Chemical Technologies, Midstream Chemical Technologies, and Water Treatment Solutions.

ChampionX Production & Automation Technologies offers products, technologies, and services that facilitate the safe, efficient, and cost-effective extraction of oil and gas through digitally enabled artificial lift solutions. Our complete artificial lift portfolio includes electrical submersible pumping systems (ESP), gas lift systems, jet pumps and multiplex surface pumps supporting hydraulic lift, plunger lift equipment, progressing cavity pumping (PCP) systems, and downhole rod lift systems.

Our proprietary digital capabilities create an end-to-end production-optimization platform that enable oil and gas operators to monitor, predict, and optimize equipment and well performance and drive improved return on investment during the production lifecycle. We are a leading provider of productivity tools and performance management software for artificial lift, chemical injection, and asset integrity management.

The ChampionX Drilling Technologies segment holds more than 500 patents gained as the drilling technologies team has perfected the manufacture of polycrystalline diamond cutters (PDCs) that drill faster and last longer—especially in tough conditions that test the limits of the most durable drilling equipment. Today, our drilling technologies team leads the industry in the development and production of innovative, top-quality PDC inserts that meet the highest standards and match the requirements of the most demanding oil exploration and development projects. This innovative team is also applying their knowledge of diamond science in new and novel ways—such as in the production of bearings used in power generation, water treatment and industrial settings.

Delivering on Our Better Together Potential

Since the formation of ChampionX, the strength of our purpose-driven culture, passion for innovation, and strong commercial offering have positioned us for success.

Developing Technology with Impact

In 2020, we continued evolving our products and services portfolio with a greater emphasis on incorporating digital offerings. We are committed to helping drive the energy transition efforts in our industry and enhancing both our customers' and our own operations by leveraging digital advancements—including through inventing new and innovative solutions.

For example, we developed and implemented a digital solution that allows us to fully automate chemical field inventory management and delivery. For our customers, this means their tanks never run dry, and their spending is optimized to ensure they only purchase the chemical they need to effectively run their operations. For ChampionX, these technologies drive efficiency, reduce risk, and lower costs across our value chain.

Our DREAM (Digital Remote Expert Access Manager) app was developed to digitally connect chemical technologies field personnel to our global technical resources. The app helps ChampionX deliver technical support to our customers faster, safer, and more effectively by maximizing how we deploy our resources—including the use of virtual and augmented reality for real-time problem solving. Using DREAM, fewer associates

are required to be in the field and on the road, which directly improves safety and minimizes exposure while reducing our carbon footprint.

In a year when economic headwinds are in every forecast, the uptake of any new technology can be challenging. But when you introduce a technology that solves a real problem—and works flawlessly—customers see the value. In the first year of commercialization, over 100 systems featuring our AFFIRMED™ PowerFit motor have been installed with zero motor failures.

In 2020, we also saw positive results from the initial pilot projects for XSPOC 3.0. This latest release of the industry leading XSPOC™ production optimization software includes automatic identification and application of optimal setpoints to protect equipment and eliminate unnecessary downtime. Using this software, one customer was able to reduce the number of rod lift cycles by 50%, which resulted in annualized savings of \$8.5 million from reduced workovers and deferred production. Leveraging autonomous control not only reduces HSE risks, with less travel and onsite personnel, but also lowers energy consumption at the rig site.



ChampionX supports our customers with fit-for-purpose digital solutions that deliver tangible value from our monitoring, predictive analytics, failure analysis and optimization software products. Our digital portfolio brings together modular solutions for production optimization, asset integrity management, process control, downhole monitoring and more in a single secure platform that's easy to deploy.

The modular nature of our digital solutions helps our customers choose the right solution for them depending on the economic value of their asset and their organization's digital maturity—with the goal of delivering an optimal return on our customers' investment.

ChampionX's investment in state-of-the-art RD&E resources enables us to develop the chemical technologies solutions our customers need to efficiently and effectively manage their operations.



Energy Transition Drives Market-Expanding Ideas

ChampionX has developed a suite of triple combination products containing our patented Clean n Cor® corrosion inhibitor, scale inhibitor, and new, non-acidic iron sulfide dissolver, which is non-corrosive and non-H₂S producing. These products protect assets, increase production, and reduce equipment and chemical footprint for assets that are declining in production. Last year, sales of these products increased greatly as customers saw the value in their all-in-one nature, as well as their exceptional performance in the field, and saved millions of dollars in CAPEX and operating costs using triple combination products.

In late 2020, ChampionX secured two contracts worth a combined \$3.9 million to deliver its next-generation, environmentally acceptable corrosion inhibitors to two major North Sea operators. These products are the result of a four-year R&D innovation project developed to enable producers to economically extend the life of their assets in an environmentally friendly way without sacrificing efficiency.

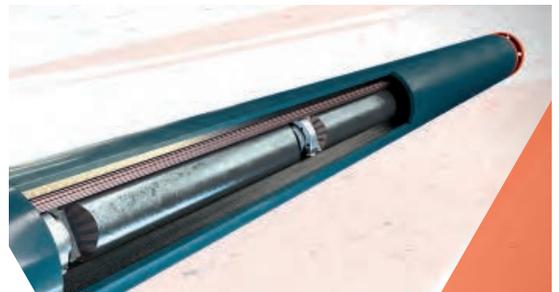
Millions of people worldwide rely on prohibitively expensive and environmentally problematic diesel generation for electricity. Forward-thinking companies have started using US Synthetic's polycrystalline diamond (PCD) radial bearing technology to capture and convert locally available, renewable hydrokinetic energy into safer, more sustainable and predictable emission-free electricity. The success of the bearing in this application showcases an increasing opportunity to deploy these products outside the traditional market.

Leveraging Relationships to Deliver Together

In the U.S., our teams have come together as one ChampionX to deliver multiple wins based on a joint sales strategy. In the Permian Basin, we leveraged the strong client relationship of our chemical technologies team to secure a new ESP customer, and in the Bakken, we extended our rod pump and sucker rod sales to two large operators. We have also expanded our chemical pump sales throughout the U.S. to independent and major oil companies.

Building on the international footprint of chemical technologies, we secured a large contract with a Romanian operator to supply downhole rod pumps, and we opened the Kazakhstan market to rod lift products. In Angola, we successfully demonstrated the value of a jet pump solution, which resulted in a large sale. Our Middle East team also capitalized on an opportunity to secure chemical sales for a customer in Oman where we now provide the chemical skids, automation technology, chemicals, and services.

The AFFIRMED® PowerFit motor delivers the winning combination of power and reliability for unconventional wells.



Advancing our Commitment to Environmental, Social and Governance Excellence

As a purpose-driven company, our performance as a corporate citizen is central to all we do. We continuously strive to communicate transparently with stakeholders about our focus on corporate responsibility, which includes environmental, social, and governance (ESG) matters. This is how we deliver on our purpose—achieving industry-leading and market-shaping results that increase shareholder value and serve as the economic engine for our company.

A strategic priority for the new, combined ChampionX is to evolve our portfolio for sustained growth, supported, in part, by the development of a framework and roadmap for ESG. In 2020, we formed an internal ESG Working Group comprised of team members identified by senior leadership who regularly engage with our customers, employees, shareholders, and communities.

Our ESG Working Group's initial focus has been an ESG priority assessment to identify company-wide issues which may pose business risks or present opportunities to engage with our key stakeholder groups. We look forward to the continued work of this group throughout 2021 as they complete the assessment which will form the foundation of our ESG strategy and framework and begin to report on ESG priorities and performance in active engagement with shareholders and other external stakeholders.

Sustainably Unlocking Energy

The world requires energy, and ChampionX is dedicated to supporting a lower-carbon future. We continuously look for avenues to improve our business practices and align operations to responsibly deliver solutions designed to reinforce our customers' commitments to sustainability.

Health, Safety and Environment

The safety of our employees, customers, shareholders, and communities is vitally important. We are driven by Goal Zero—our fundamental belief that all incidents are preventable. We empower employees with Stop Work Authority to stop a task if they observe an unsafe action or condition or have a concern about the control of a health, safety, or environmental risk.

Against the backdrop of the global pandemic, the health and safety of our employees has remained our most important priority and we will continue to take the necessary steps to protect our employees. As essential workers, their efforts helped our customers sustainably unlock the energy that our global economy needed to combat this pandemic while delivering a record year for our company in terms of safety performance in 2020.

A Workplace Offering a Sense of Belonging and Opportunities for Growth

ChampionX is committed to building and fostering a diverse and inclusive workplace for all levels of employees, including senior management, where all employees feel a sense of belonging and alignment with our organization's culture and purpose. Hiring and retaining top talent is important to our success and our purpose driven culture differentiates us as an employer of choice.

As part of our continuous improvement culture, we periodically conduct employee surveys to gauge how employees feel about our company's culture and our progress on key issues. Their feedback is valued and drives our efforts to improve. Approximately 4,600 (over 70%) of global employees participated in the most recent integration survey.

Importantly, 89% of the participants responded that they feel very aligned to the company's purpose and 88% reported that they feel our company is committed to upholding our operating principles. This is strong validation that our purpose-driven culture resonates with our employees and supports our continued commitment to improving lives.



Connecting with Our Communities

We are passionate about improving lives in the communities where our employees and customers live and work. We focus on education through STEM initiatives, civic and community development, and environment and sustainability through our volunteer and community giving programs, supporting needs for initiatives like local food banks and schools, humanitarian organizations, and disaster relief. Both the legacy Apergy and ChampionX organizations have long-standing records of support for education, health and human services, the arts, and humanities, and civic projects through direct contributions and employee volunteerism.

50% ▼

Recordable Injury Count (All)

38% ▼

Lost Time Injury Count

43% ▼

TRIR

As a combined company, we have strengthened and renewed our commitment to support these important activities. Here are a few examples of how we served our communities in 2020:

Advancing STEM Education: ChampionX has long supported STEM activities in the places where we live and work. In partnership with Junior Achievement, for example, last year we provided online video content for use with high school-age students in Navajo communities in Utah. In Houston, we work closely with the World Affairs Council of Houston's Student World Affairs Councils program (SWACs). The student councils provide opportunities for high school students to engage at a local and global level by meeting internationally acclaimed speakers and preparing for future career goals.

Supporting Access to Clean Water: ChampionX has partnered with a key customer and the WHOlives organization to develop and deploy the "Village Drill," a self-contained drilling kit to drill fresh water wells in rural locations where truck-mounted rigs are not practical. It is estimated conventional drilling rigs can only ever reach 20%-25% of the population in need. The smaller, lighter Village Drill solves that problem. This project saw 16 Village Drills delivered in 2020, with over 1,100 wells drilled—resulting in over 500,000 people gaining access to clean water last year.

Hurricane Relief: A dozen tropical storm systems made landfall on the U.S. coast in 2020, damaging many areas where ChampionX employees, customers, and suppliers live and work.

In response to the devastation, employees from across the Houston area pooled resources and efforts to provide much-needed support for families in need. Using touchless donation drop-offs, supply drives were quickly organized at our corporate office, Sugar Land complex, and our Norrisal-Wellmark operation, resulting in a semi-truck load full of relief supplies being distributed through local charities in the affected area.

Addressing Economic Hardship: Our Permian Artificial Lift and Chemical Technologies teams proudly partnered with the West Texas Food Bank.

Providing for a Brighter Future: We are committed to providing opportunities that help ensure all young adults are equipped and empowered with the knowledge and skills required to achieve career success, upward mobility, and a lifetime of economic self-sufficiency. That is the idea behind Genesys Works. We were excited to host our first class of Genesys Works interns at ChampionX this year in the Houston area. These interns are selected from high school students in largely underserved communities.

Global Reach and Impact: Our team in Ghana helped transform a local health clinic, making it possible for the facility to update electricity, floors, beds, doors, and ceiling fans for its patients. These updates will allow the clinic to continue providing the medical care its remote community needs.

Addressing the risk: Our response to COVID-19

As 2020 began, our ChampionX crisis management teams were actively preparing for a possible global pandemic.

At that time, the virus spread was somewhat contained – but every indication was that the risk would increase with each passing day. Driven to safeguard our employees and their families, we quickly adapted our work environment by following government guidelines and advice from our own outside medical advisor.

As COVID-19 cases globally began to mount in March and April, we drew on our supply chain resources to obtain the personal protective equipment and hygiene supplies needed to keep our team members safe and meet the needs of our customers. We also implemented a variety of restrictions and health protocols, such as moving meetings online and mandating masks, to limit the virus' spread.

Today we know the past year was marked by tragic loss and economic strain due to the coronavirus pandemic, as well as historic scientific achievement in the form of vaccines that promise to help protect us and restore economic opportunities. Our sustained efforts and the support of our team members helped limit infections among our employees. Thankfully, our case count remains below national averages. We are pledged to demonstrating care and vigilance even as the relative risk declines.

The pandemic revealed the very essential role our teams, products and services play in the larger economy. Energy is an enabling resource. Energy enables us to do things at a scale that was once impossible: empowering medical workers to heal the sick, first responders to protect the vulnerable, and all of us to communicate around the world.

During the COVID-19 crisis, the hardworking ChampionX employees continued to support our customers across the energy sector—ensuring there is fuel for our vehicles, power to our homes and businesses, and raw materials for manufacturing.



Looking ahead, we are committed to safe operations as we support energy delivery to the essential personnel who use that energy to propel the global economies back to normalcy. Our teams and our industry have powered us through the challenges we've faced before and are doing so again in the years ahead.

Governance and Leadership

Board of Directors



Daniel W. Rabun
Chairman of the Board; Director since 2018
Committees: Compensation, Governance and Nominating



Heidi S. Alderman
Director since 2020
Committees: Compensation



Mamatha Chamarthi
Director since 2018
Committees: Compensation



Gary P. Luquette
Director since 2018
Committees: Compensation, Governance and Nominating



Stuart Porter
Director Since 2020
Committees: Audit



Stephen M. Todd
Director since 2018
Committees: Audit



Stephen K. Wagner
Director since 2018
Committees: Audit, Governance and Nominating



Sivasankaran "Soma" Somasundaram
Director since 2018
Committees: None

Our Management

Sivasankaran ("Soma") Somasundaram
President & Chief Executive Officer, ChampionX

Ken Fisher
Executive Vice President and Chief Financial Officer

Deric Bryant
Chief Operating Officer and President, Chemical Technologies

Paul Mahoney
President, Production & Automation Technologies

Rob Galloway
President, Drilling Technologies

Syed "Ali" Raza
Senior Vice President and Chief Digital Officer

Julia Wright
Senior Vice President, General Counsel and Secretary

Jordan Zweig
Senior Vice President and Chief Human Resources Officer

Saurabh Nitin
Senior Vice President, Strategy and Corporate Development

Byron Pope
Vice President, ESG and Investor Relations

Ross O'Dell
President, Oilfield and Specialty Performance

Juan Alvarado
Vice President, Chemical Technologies, Safety, Health, Environment & Quality

Mark Eley
Senior Vice President, Marketing & Technology, Chemical Technologies and Corporate Communications

Kurt Kirchof
Senior Vice President, Integration

Alina Parast
Senior Vice President and Chief Information Officer

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

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2020

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission file number: 001-38441

ChampionX Corporation

(Exact name of registrant as specified in its charter)

Delaware

82-3066826

(State or other jurisdiction of incorporation or organization)

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

2445 Technology Forest Blvd

Building 4, 12th Floor

The Woodlands, Texas

77381

(Address of principal executive offices)

(Zip Code)

(Registrant's telephone number, including area code) (281) 403-5772

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Trading Symbol(s)

Name of each exchange on which registered

Common stock, \$0.01 par value

CHX

The Nasdaq Stock Market LLC

Securities registered pursuant to section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant, determined by multiplying the outstanding shares on June 30, 2020, by the closing price on such day of \$9.76 as reported on the New York Stock Exchange, was \$1,948,052,871. The registrant, solely for the purpose of this required presentation, deemed its Board of Directors and executive officers to be affiliates, and deducted their stockholdings in determining the aggregate market value.

The registrant had 200,463,940 shares of common stock, \$0.01 par value, outstanding as of February 22, 2021.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement relating to its 2021 annual meeting of stockholders are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated, or such information will be included in an amendment to this Form 10-K in accordance with Instruction G(3) of Form 10-K.

CHAMPIONX CORPORATION

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Cautionary Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K contains “forward-looking statements” intended to qualify for the safe harbors from liability established by the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact contained in this report are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Forward-looking statements usually relate to future events and anticipated revenues, earnings, cash flows or other aspects of our operations or operating results. Forward-looking statements are often identified by the words “believe,” “expect,” “anticipate,” “plan,” “intend,” “foresee,” “should,” “would,” “could,” “may,” “estimate,” “outlook,” “guidance,” “potential,” “target,” “forecast” and similar expressions, including the negative thereof. The absence of these words, however, does not mean that the statements are not forward-looking. These forward-looking statements are based on our current expectations, beliefs, and assumptions concerning future developments and business conditions and their potential effect on us. While management believes that these forward-looking statements are reasonable as and when made, there can be no assurance that future developments affecting us will be those that we anticipate.

All of our forward-looking statements involve risks and uncertainties (some of which are significant or beyond our control) and assumptions that could cause actual results to differ materially from our historical experience and our present expectations or projections. Known material factors that could cause our actual results to differ from those in the forward-looking statements are those described in Part I, Item 1A, “Risk Factors” of this Annual Report on Form 10-K. We caution you not to place undue reliance on any forward-looking statements, which speak only as of the date hereof. We undertake no obligation to publicly update or revise any of our forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise, except to the extent required by law.

PART I

ITEM 1. BUSINESS

OVERVIEW

ChampionX Corporation, a Delaware Corporation (“ChampionX,” “we,” “us,” “our,” or “Company”) is a global leader in chemistry solutions and highly engineered equipment and technologies that help companies drill for and produce oil and gas safely and efficiently around the world. ChampionX’s products provide efficient and safe operations throughout the lifecycle of a well with a focus on the production phase of wells.

On May 9, 2018, we became an independent, publicly traded company as a result of the spin-off (“Separation”) from Dover Corporation (“Dover”) and our common stock began “regular-way” trading on the New York Stock Exchange (“NYSE”) under the “APY” symbol.

On June 3, 2020, the Company and Ecolab Inc. (“Ecolab”) completed a Reverse Morris Trust transaction in which Ecolab transferred their upstream energy business to ChampionX Holding Inc. (“legacy ChampionX”) and, thereafter, distributed all of the shares of legacy ChampionX common stock to certain Ecolab stockholders (“the Distribution”). Immediately following the Distribution, a wholly owned subsidiary of the Company merged with and into legacy ChampionX, with legacy ChampionX continuing as the surviving company in the Merger and as a wholly owned subsidiary of the Company (“the Merger”). In association with the completion of the Merger, the Company changed its name from Apergy Corporation to ChampionX Corporation and its ticker symbol to “CHX”. See Note 3—Merger Transaction, Acquisitions, And Dispositions in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K for more information.

At the opening of trading on January 4, 2021, the Company transferred its listing from NYSE to The Nasdaq Stock Market LLC.

In connection with the Merger, we re-evaluated our reportable segments. As a result, we identified two new reportable segments, Production Chemical Technologies and Reservoir Chemical Technologies, which include the results of operations of legacy ChampionX. The legacy Apergy reportable segments remain unchanged. The results of operations of legacy ChampionX are reflected in our accompanying consolidated financial statements from the closing date of the Merger through December 31, 2020. Results for the periods prior to June 3, 2020 reflect the financial and operating results of legacy Apergy and do not include the financial and operating results of legacy ChampionX. As such, our historical results of operations are not comparable from period to period and may not be comparable to our financial results of operations in future periods.

BUSINESS STRATEGY

ChampionX has five clear strategic priorities, which drive our organization and are aligned with our operating principles of being customer advocates, people-oriented, delivering technology with impact, and being driven to improve.

Our strategic priorities include:

Realize Better Together Potential by continuing to build on our purpose of Improving Lives and maintaining a purpose-driven culture, seeking opportunities to leverage our production-optimization expertise into broader production solutions, and remaining focused on cost synergy initiatives.

Accelerate Digital and Digitally-enabled Revenue Streams by identifying opportunities to expand digitally-enabled products and digital revenue streams, and seeking to establish partnerships to leverage the industry digital ecosystem.

Leverage Global Footprint to Expand International Sales with a focus on opportunities to expand artificial lift products in targeted international areas and develop greater adoption of our artificial lift and chemical offerings by international oil companies and national oil companies.

Build Enterprise-wide Continuous Improvement Rigor expanding upon our ChampionX Operational Excellence model, further integrating productivity improvements, and automating workflows to eliminate waste in business processes.

Evolve Portfolio for Sustained Growth by seeking opportunities to leverage our core capabilities across the energy industry and natural adjacencies, developing an Environmental, Social and Governance framework and roadmap, and continuing to allocate capital consistent with our value creation framework.

BUSINESS SEGMENTS

Our business is organized into four reportable segments: Production Chemical Technologies, Production & Automation Technologies, Drilling Technologies, and Reservoir Chemical Technologies.

Production Chemical Technologies

Production Chemical Technologies offers products and services that cover a broad range of onshore and offshore chemical solutions in production and midstream operations that are built upon our foundation of deep expertise and capabilities in applications across the oil and natural gas value chain. The largest product lines in Production Chemical Technologies include corrosion inhibitors, scale inhibitors, emulsion breakers, and biocides. These offerings enhance the integrity of customer assets, ensure flow through pipelines and equipment, and effectively maximize production via efficiently separating oil, water, and gas. Our Production Chemical Technologies offerings include proprietary digital tools that monitor and optimize chemical treatment programs and enhance performance along with remotely connecting technical experts with field personnel to leverage our real-time expertise across the world.

Our reservoir modeling capability and chemistry expertise provides enhanced oil recovery solutions to oil producers. These solutions are intended to enable our customers to increase oil recovery in mature oilfields and improve return on investment by extending the economic life of such fields in a safe and responsible manner, both onshore and offshore.

The products and services within Production Chemical Technologies are sold and supported by our on-site experts and customer account leaders, as well as through distributors, sales agents, and joint ventures. More than half of our employees work directly with customers to provide expertise and support at their production sites or remotely. We support our customers directly by leveraging a global laboratory network and a team of more than 400 scientists, engineers, and technologists. Production Chemical Technologies has an extensive portfolio of intellectual property and provides differentiated solutions as a central theme of our commercial offering.

We help enable our customers to achieve their sustainability goals through maximizing production, minimizing environmental footprint, reducing emissions, and lowering fresh-water usage.

Production & Automation Technologies

Production & Automation Technologies offers products, technologies, and services that facilitate the safe, efficient, and cost-effective extraction of oil and gas through artificial lift and digital automation applications. We design, manufacture, market, and service a full range of artificial lift equipment, end-to-end automation and digital solutions, as well as other production equipment. Artificial lift equipment is critical to oil and gas operators for increasing pressure within the reservoir and improving oil and gas production. Our product offerings include electrical submersible pumping systems (“ESP”), gas lift systems, jet pumps, and multiplex surface pumps supporting hydraulic lift, plunger lift equipment, progressive cavity pumping (“PCP”) systems, and downhole rod lift systems.

Artificial lift is a key technology for increasing oil and gas production throughout the lifecycle of a producing well and is therefore directly linked to operator economics. Our comprehensive offering provides customers with cost effective solutions tailored to a well’s specific characteristics and production volumes. With sales, operations, and distribution networks around the globe, we offer all types of downhole equipment and industry-leading automation and optimization hardware and software to customers operating within the major oil and gas basins throughout the world.

Our proprietary digital products are aimed at creating an end-to-end production-optimization platform that enables oil and gas operators to monitor, predict, and optimize well performance and drive a higher return on investment during the production lifecycle. We are a leading provider of productivity tools and performance management software for artificial lift and asset integrity management. We provide advanced controls technology that allows operators to adjust the operation of downhole artificial lift systems to production rates either at the wellsite or remotely. Our optimization software has modular architecture that enables specific solutions to be tailored to meet exact customer needs. Real-time data is used by our customers to drive decisions, enhance well servicing and obtain an accurate picture of a well’s performance over time, resulting in a more connected, digital wellsite that operates more efficiently and safely. For operators that require support, we provide optimization teams that monitor customer wells and make timely adjustments to equipment operation to extend the life of the artificial lift system and mitigate production down time. In the current oil and gas industry, particularly in the current down cycle, operators are focused on lowering their total operating costs over the life of a well. We believe our combination of digital products and strong artificial lift presence enables us to drive continued adoption of digital solutions by our customers and will improve our long-term revenues.

We also offer other production equipment including chemical injection systems, flow control valves, and gauges. These products are complementary to our artificial lift and digital technologies offerings. A portion of Production & Automation Technologies revenue is derived from activity-based consumable products, as customers routinely replace items such as sucker rods, plunger lift, and pump parts.

Drilling Technologies

Drilling Technologies offers innovative, top-quality polycrystalline diamond cutter (“PDC”) inserts, bearings, valves, and mining tools to help customers drill the world’s most demanding oil exploration and development projects, and for use in other industries. These highly specialized products are developed and produced based on more than 40 years of innovation and intellectual property development in material science applications. We press our own synthetic diamonds, known as polycrystalline diamonds, that meet the highest standards and match the requirements of the most demanding engineering projects. Our highly trained team members work with customers to develop custom-designed PDC inserts and bearings through a consultative process, ensuring that we tailor the products to generate the best outcomes for their operations.

We believe our highly engineered PDCs are distinguished by their quality, durability, rate of penetration, and longevity. PDCs are a relatively small cost to the oil and gas operator in the context of overall drilling costs, but are critical to cost-effective and efficient drilling. Our PDCs are primarily custom designed to meet unique customer requirements and are finished to exact customer specification to ensure optimal performance. PDCs are utilized in both vertical and horizontal drilling and are replaced as they wear during the drilling process.

We manufacture long-lasting diamond bearings for down-hole drilling motors, pumps, and turbines running in the most challenging environments. These diamond bearings are also used by customers in renewable energy applications, mixers, and agitators. These bearings have a high thermal conductivity to reduce localized temperature extremes that lead to bearing degradation, and they are very resistant to wear from abrasive particles in lubricants or process fluids. These process-fluid lubricated applications include underwater applications, downhole drilling tools, and industrial pumps.

We also manufacture high-density ceramic roof bolt mining tools focused on improving the production and safety of underground mining operations. The technically advanced and unique diamond technology of these products makes these tools incredibly long lasting for their respective applications.

Reservoir Chemical Technologies

Reservoir Chemical Technologies offers chemistry-oriented solutions and technologies to help customers meet their performance, efficiency, sustainability, and financial objectives for well drilling, cementing, fracturing, acidizing, and other well interventions. For example, we design high performance integrated fracturing fluid systems to improve the customer’s operational efficiency, lower chemical program costs and enhance well productivity. We assist our customers in achieving their sustainability goals relating to fresh-water usage by increasing their ability to use recycled water, while mitigating the impact of fluid problems that can shorten the life of the well (e.g., scale, emulsion, and microbial growth).

We offer a range of fluid solutions that help our customers achieve more successful and efficient drilling and cementing operations and enhance well productivity. We also leverage our deep experience in water treatment and processing to offer our customers products that help to control scale and inhibit microbial growth and corrosion. Our expertise involves designing tailored products that help our customers create optimized fluid packages based on individual well dynamics. The largest product lines in Reservoir Chemical Technologies include fracturing fluid packages, drilling additives, cement additives and products that support acidizing activities.

See Note 5—Revenue in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K for revenue by geography for each of our reportable segments.

OTHER BUSINESS INFORMATION

Competition

The businesses in which we operate are highly competitive. Key competitive factors in our businesses are customer service, product availability, quality, and performance, price, breadth of product offering, local content and geographic footprint, market expertise and innovation. We believe we differentiate ourselves from our competitors through our model of high customer

intimacy, differentiated technology, innovation, supply assurance, a superior level of customer service, and a culture of continuous improvement.

We face competition from other manufacturers and suppliers of oil and gas production and drilling equipment. Key competitors for our Production Chemical Technologies and Reservoir Chemical Technologies segments include Baker Hughes Company; Clariant AG; Multi-Chem, a Halliburton Service; and M-I SWACO, a Schlumberger company. Production & Automation Technologies segment key competitors include Weatherford International plc, Baker Hughes, Halliburton, Schlumberger Ltd., BORETS, Tenaris, Novomet and Emerson. Drilling Technologies segment key competitors include DeBeers (Element 6), Schlumberger Ltd. (Mega Diamond) and various suppliers in China.

Customers, Sales and Distribution

We have built our businesses through high customer intimacy and high-touch customer service, and we view our intense customer focus as being central to the goal of creating value for all of our stakeholders. Drawing on our industry experience, application engineering expertise, and technical expertise, we strive to develop close, collaborative relationships with our customers to help them achieve peak performance throughout the life cycle of their assets by identifying and managing the challenges they face. We work closely with our customers' engineering teams to develop technologies and applications that help improve efficiency, reliability and productivity. Our business is sensitive to changes in customers' capital and operational expenditure budgets, including as they relate more directly to the exploration and development of new oil and natural gas reserves.

We have long-standing customer relationships with some of the largest operators in oil and gas drilling and production. Our customers include national oil and gas companies, large integrated operators as well as independent oil and gas companies, major oilfield equipment and service providers, and pipeline companies.

We market and sell our products and technologies through a combination of field sales personnel and corporate account leaders, technical seminars, trade shows, and various digital and print advertising. We sell directly to customers through our direct sales force and indirectly through independent distributors and sales representatives. Our sales employees partner with our customers to understand the customer's technical challenges and needs, and proactively work with customers to provide solutions and advise our customers on the advantages of our technologies and product offerings. We have developed an extensive network of sales and service locations globally to better serve our customers. In certain markets, we utilize joint ventures and independent third-party distributors and sales agents to sell and market products and services. We also host forums and training sessions, such as our Artificial Lift Academy, where our customers can share their experiences, learn best practices and accelerate the application of our technologies.

Our customer base is diverse. No single customer accounted for 10% or more of our 2020 consolidated revenue.

Intellectual Property

We own a large portfolio of patents, trademarks, licenses and other forms of intellectual property, which we acquired over many years and, to the extent applicable, expire at various times. A large portion of our intellectual property consists of patents, unpatented technology and proprietary information constituting trade secrets that we seek to protect in various ways, including confidentiality agreements with employees, customers, and suppliers where appropriate. We occasionally license third-party intellectual property to supplement our product and service offerings. We also have an active program to protect our intellectual property by filing for patents and registering trademarks around the world and pursuing legal action, when appropriate, to prevent infringement. While our intellectual property is important to our success, the loss or expiration of any of these rights, or any group of related rights, is not likely to materially affect our results of operations on a consolidated basis. We believe that our commitment to continuous engineering improvements, new product development and improved manufacturing techniques, as well as sales, marketing and service expertise, are significant to our leadership positions in the markets we serve.

Research and Development

We operate in markets that are characterized by changing technology and frequent new product introductions. As a result, our success is dependent on our ability to develop and introduce new technologies and products for our customers. Technology has become increasingly critical in our industry as global oil and natural gas reservoirs mature, depletion of production accelerates, customers utilize increasingly complex well designs, the industry witnesses an aging oil and gas industry workforce, while customers continue to stress higher operational efficiency from existing infrastructure and systems. Despite fluctuations in the number of wells drilled, Exploration & Production (E&P) companies have consistently increased their expenditures on technology to improve oil and natural gas recovery and lower their costs. We have invested substantially in building our research, development, and engineering capabilities and digital and other technology offerings, all of which we believe help our customers minimize risk, achieve production targets, extend field life and maximize profitability in a safe and responsible manner.

Our research and development program focuses on the following activities:

- Developing next-generation technology for all aspects of oil and natural gas production, including both conventional and unconventional, and across the entire life cycle of a producing asset.
- Accelerating digitally-enabled solutions to automate workflows and eliminate waste in business processes.
- Enhancing our ability to predict, identify and solve our customers' operational challenges with our portfolio of products and services.
- Increasing product reliability and decreasing the cost of the products and services that we bring to market by using innovation to drive operational efficiency.
- Expanding revenue opportunities domestically and internationally.
- Maintaining or extending competitive advantages.

Our key research and development disciplines include analytical and material science, chemical synthesis, formulation science, microbiology, reservoir engineering, software engineering, process and equipment. We also have a robust external innovation program that leverages the capabilities and knowledge of key suppliers and joint development programs with start-up companies. Furthermore, we have a number of technical specialists embedded in key geographies to provide an efficient channel to deploy our new technologies in the major oil and natural gas basins around the world. We believe maintaining a robust innovation and product pipeline will allow us to continue to increase our market share in key businesses and with key customers.

Raw Materials

We use a wide variety of raw materials in manufacturing our products, including inorganic chemicals such as alkalis, acids, biocides, phosphonates, phosphorous materials, silicates and salts. We also use organic chemicals, such as acids, alcohols, amines, fatty acids, surfactants, solvents, monomers, polymers, metals, and semi-processed or finished components. We also purchase packaging materials for our manufactured products and components for our specialized dispensing equipment and systems. We have not historically experienced material impacts to our financial results due to shortages or the loss of any single supplier. Although the required raw materials are generally available, commodity pricing for metals, such as nickel, chrome, molybdenum, vanadium, manganese, and steel scrap fluctuate with market conditions. Recently, tariffs have increased our material input costs, and further trade restrictions, retaliatory trade measures, or additional tariffs implemented could result in higher input costs to our products. Although cost increases in commodities may be recovered through increased prices to customers, our operating results are exposed to such fluctuations. We attempt to control such costs through short-duration, fixed-price contracts with suppliers and various other programs, such as our global supply chain initiatives. We source material internationally to achieve the most competitive cost structure. Our global supply chain is intended to provide us with cost-effective solutions for raw materials, however, our supply chain could be exposed to logistical disruptions. We maintain domestic suppliers in most cases to provide for contingencies and back-up sources. Despite contingencies and back-up supply optionality, sustained inflation and unpredictable disruptions to supply could have an adverse impact on our business.

Human Capital

We are a purpose-driven company with a distinctive strategic vision that is focused on improving the lives of our customers, our employees, our shareholders, and the communities where we live and work. We bring more than a century of expertise and the unique skills, perspectives, and experiences of our global team members enable us to realize opportunities for growth, drive unmatched excellence, and contribute exponentially to our success.

Health & Safety; COVID-19

The safety of our employees, customers, shareholders, and communities is vitally important. From the way we operate, to the products we develop, to how we partner with customers, our goal is zero: zero accidents, zero incidents, and zero environmental releases. ChampionX's Health, Safety, and Environmental (HSE) policy is to conduct business in a manner that protects people, assets, and the environment. All employees are committed to embody our safety culture through personal leadership, engagement, and empowerment. Our organization provides training and a culture of support for our employees to ensure they are equipped and prepared to do their jobs safely every day.

Our businesses are classified as critical infrastructure and it is important to us to protect the health and safety of our employees as we continue to support vital oil and gas infrastructure around the world. We responded to the novel coronavirus ("COVID-19") pandemic with a comprehensive plan including enacting social distancing policies, equipping employees with additional personal protective equipment, and following government and health authority recommended protocols, including those of the Centers for Disease Control and the World Health Organization. Employee surveys demonstrated positive feedback regarding our implementation of protocols, proactive communications and maintaining the safety and health of our employees. Our comprehensive plan included additional paid leave for our employees who needed to recover from the virus or provide care to

family members, adjusting the healthcare plan for employees and dependents for any COVID-19 related testing or healthcare expenditures, and implementing flexible-work programs to accommodate personal and family needs, especially as schools transitioned to remote learning, while maintaining business continuity. For additional information, refer to “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations-Response to the COVID-19 Pandemic.”

Merger Integration – Better Together

The Merger brought significant scale and depth to our leadership capabilities and talent bench. Our Driven to Improve principle is about eliminating waste, finding efficiencies, and getting better every day. To help us improve, employee feedback is important. We proactively engage with employees through surveys, including inquiries designed towards helping us measure our progress with integration efforts and maintaining our people-oriented, purpose-driven culture, which received positive results. We also created a “Pipeline to the CEO” for employees to give feedback and ask questions, which they may do anonymously if they choose. Our Chief Executive Officer is committed to reading and responding to every message submitted and these are made available to all employees through our internal intranet.

Employee Footprint

In the Merger, we grew our employee population and global footprint. At December 31, 2020, we had approximately 6,600 employees in 38 countries, with 66% in North America, approximately 10% in each of Latin America and Middle East/Africa, 9% in Europe and approximately 5% in Asia Pacific. Hiring and retaining top talent is important to our success and we believe our purpose-driven culture differentiates us as an employer of choice.

Diversity & Inclusion

ChampionX is committed to building and fostering a diverse and inclusive workplace where all employees feel a sense of belonging and alignment to our organization’s culture and purpose. We recognize the value of diversity and inclusion in increasing performance and cultivating strong teams. ChampionX currently supports several Employee Resource Groups (“ERG”) that are voluntary employee-led and leadership-supported groups representing unique cultures, experiences, backgrounds and ethnicities. ERGs allow for more purposeful alignment with our business strategy, enhance recruitment efforts and our talent pipeline, support professional development and improve retention, provide skill building and training and mentorship and guidance, and enhance engagement levels across the organization as well as with the communities in which our employees live and work. We are proud that nearly 700 employees are involved in our ERGs and participate in elevating our goal of creating a workplace culture where everyone feels a sense of belonging.

Training & Development

We invest in engaging and developing employees to enable us to realize opportunities for growth and contribute to advancing progress on our strategic priorities. Our ongoing efforts and initiatives are aimed at attracting, engaging, and developing employees in a thoughtful and meaningful way to support a diverse and inclusive culture. Training programs are deployed across the organization in technical skills, product expertise, and health and safety measures, as well as in soft skill development such as communication and other interpersonal skills. All employees participate in annual ethics and compliance training at least once a year and we sponsor advanced training in manager essentials and leadership development. We recognize employee performance through incentives tied to our financial goals and strategic objectives, together with employee’s individual achievement.

Regulatory Requirements and Environmental and Occupational Health and Safety Matters

Our operations are subject to a variety of international, national, state, and local laws and regulations, including those relating to the safety of the sale and distribution of chemical substances, the manufacture and use of certain substances, discharge of materials into the environment, costs associated with transporting and managing hazardous materials, waste disposal and plant site cleanup, worker health and safety, or otherwise relating to human health and environmental protection. While we cooperate with governmental authorities and take what we believe are appropriate measures to meet regulatory requirements and avoid or limit environmental effects, environmental risks are inherent in our businesses. Failure to comply with these laws or regulations may result in the assessment of administrative, civil, and criminal penalties, imposition of remedial or corrective action requirements, and the imposition of injunctions to prohibit certain activities or force future compliance.

In addition, we depend on the demand for our products and services from the oil and gas industry and, therefore, are affected by changing taxes, price controls, tariffs and trade restrictions, and other laws and regulations relating to the oil and gas industry in general, including those specifically directed to hydraulic fracturing, onshore production, and air pollution. The adoption of laws and regulations curtailing exploration, drilling, or production in the oil and gas industry, or the imposition of more stringent enforcement of existing regulations, could adversely affect our operations by limiting demand for our products and

services or restricting our customers' operations. Refer to Item 1A, Risk Factors for additional information related to certain risks regarding regulations and environmental matters.

We utilize behavioral-based safety practices to promote a safe working environment for all of our employees. Safety is prioritized, measured and promoted throughout all levels of our organization. We continued our "Journey to Zero" program which teaches that all incidents are preventable. The core tenets of our program advocate (i) constant awareness and education of safety principles, (ii) consistent safety behaviors and practices, and (iii) preventing and learning from incidents. Additionally, our operations are subject to a number of federal, state, and foreign laws and regulations relating to workplace safety and worker health, such as the Occupational Safety and Health Act and regulations promulgated thereunder.

Along with numerous other potentially responsible parties ("PRP"), we are currently involved with site clean-up activities pursuant to the federal Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA", also known as "Superfund") or state equivalents at 11 locations, the majority of which are in the U.S. Based on our experience with such environmental proceedings, and an analysis of the estimated share of investigation and remediation costs payable by the PRPs, we have accrued our best estimate of probable future costs relating to these sites. In establishing accruals, potential insurance reimbursements are not included in accruals and the accruals are not discounted. We are unable to predict when, or if, the amounts accrued will be paid due to the uncertainties inherent in the environmental remediation and associated regulatory processes.

We have incurred and will continue to incur operating and capital expenditures to comply with environmental, health and safety laws and regulations. Historically, there were no material effects upon our earnings and competitive position resulting from our compliance with such laws or regulations; however, there can be no assurance that such costs will not be material in the future or that such future compliance will not have a material adverse effect on our business or operational costs.

Website Access to Reports

Our Internet website address is <https://championx.com>. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to each of those reports, are available free of charge through our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Alternatively, our reports may be accessed through the website maintained by the U.S. Securities and Exchange Commission ("SEC") at www.sec.gov. Unless expressly noted, the information on our website or any other website is not incorporated by reference in this Annual Report on Form 10-K and should not be considered part of this Annual Report on Form 10-K or any other information we file with or furnish to the SEC.

Since January 4, 2021, our common stock has been listed and traded on The Nasdaq Stock Market LLC ("Nasdaq") under the symbol "CHX." Before January 4, 2021, our common stock was listed and traded on the NYSE.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Name	Age	Current Position and Business Experience
Sivasankaran Somasundaram	55	President and Chief Executive Officer (2018) Vice President of Dover Corporation and President and Chief Executive Officer of Dover Energy (2013)
Kenneth M. Fisher	59	Executive Vice President and Chief Financial Officer (2021) Chief Financial Officer, Noble Energy, Inc. (2009)
Deric Bryant	48	Chief Operating Officer and President, Chemical Technologies (2020) Executive Vice President and President, Upstream—Nalco Champion, an Ecolab company (2019) Executive Vice President and General Manager, Oilfield Chemicals—Nalco Champion, an Ecolab company (2017) Senior Vice President, Oilfield Chemicals—Nalco Champion, an Ecolab company (2016) Vice President, Oilfield Chemicals for Gulf of Mexico, West Africa and Latin America—Nalco Champion, an Ecolab company (2014)
Robert K. Galloway	54	President, Drilling Technologies (2018) President—US Synthetic of Dover Corporation (2010)
Paul E. Mahoney	56	President, Production & Automation Technologies (2018) President—Dover Artificial Lift of Dover Corporation (2014)
William O’Dell, Jr.	50	President, Oilfield and Specialty Performance (2020) Vice President, Oilfield Chemicals for Gulf of Mexico, Sub Sahara Africa and Latin America—Nalco Champion, an Ecolab company (2017) General Manager, Downstream Americas—Nalco Champion, an Ecolab company (2014)
Syed Raza	54	Senior Vice President and Chief Digital Officer (2018) President—Dover Energy Automation of Dover Corporation (2016) Vice President and General Manager—Advanced Solutions of Honeywell Process Solutions (2014)
Julia Wright	45	Senior Vice President, General Counsel and Secretary (2018) Senior Vice President, General Counsel and Secretary—Dover Energy of Dover Corporation (2018) Vice President and General Counsel of Nabors Industries Ltd. (2016) Interim General Counsel of Nabors Industries Ltd. (2016) Assistant General Counsel of Nabors Industries Ltd. (2013)
Jordan Zweig	51	Senior Vice President and Chief Human Resources Officer (2020) Vice President and Head of Global Human Resources—ChampionX, an Ecolab company (2020) Vice President, Global Human Resources—Ecolab Inc. (2019) Vice President and Head of Global Human Resources—Ecolab Inc. (2017) Vice President and Head of Global Human Resources—Nalco Champion, an Ecolab company (2013)

No family relationships exist among any of the above-listed officers, and there are no arrangements or understandings between any of the above-listed officers and any other person pursuant to which they serve as an officer. During the past ten years, none of the above-listed officers was involved in any legal proceedings as defined in Item 401(f) of Regulation S-K. All officers are elected by the Board of Directors to hold office until their successors are elected and qualified.

ITEM 1A. RISK FACTORS

In addition to other information in this Annual Report on Form 10-K, you should carefully consider the following risk factors. Each of these risk factors could materially and adversely affect our business, results of operations and financial condition, as well as affect the value of an investment in our common stock.

Risks Related to Our Business

Trends in crude oil and natural gas prices may affect the drilling and production activity, profitability and financial stability of our customers and therefore the demand for, and profitability of, our products and services.

The oil and gas industry is cyclical in nature and experiences periodic downturns of varying length and severity. The industry experienced a significant downturn in 2015 and 2016 as a result of a sharp decline in crude oil prices, followed by a slight recovery in late 2016 and into 2017, and a volatile decline again in late 2018. Price volatility continued throughout 2019 and, partially due to the emergence of the COVID-19 pandemic and failure of OPEC and other major producers to agree on production cuts, became more extreme in 2020. Demand for our products and services is sensitive to the level of capital spending by global oil and natural gas companies and the corresponding drilling and production activity. The level of drilling and production activity is directly affected by trends in crude oil and natural gas prices, which are influenced by numerous factors affecting the supply and demand for oil and gas, including:

- worldwide economic activity, including potential disruption to global trade;
- the level of exploration and production activity;
- the industry cost of, and access to, capital;
- environmental regulation;
- domestic and global political and economic uncertainty, socio-political unrest and instability, terrorism or hostilities;
- U.S. federal, state and foreign government policies and regulations regarding current and future exploration and development of oil and gas;
- the ability and/or desire of OPEC and other major international producers to set and maintain production levels and influence pricing;
- the cost of exploring and producing oil and gas;
- the availability, expiration date and price of onshore and offshore leases;
- the discovery rate of new oil and gas reserves in onshore and offshore areas;
- the success of drilling for oil and gas in unconventional resource plays such as shale formations;
- the depletion rate of existing oil and gas wells in productions;
- takeaway capacity within oil and gas producing basins;
- alternative investments in onshore exploration and production opportunities;
- shifts in business and personal travel with increased adoption of remote work arrangements;
- the COVID-19 pandemic or other health pandemics and epidemics;
- exceptional weather conditions, including severe weather events in the U.S. Gulf Coast; and
- the pace of adoption and cost of developing alternative energy sources.

We expect continued volatility in both crude oil and natural gas prices (including the possibilities that such prices could remain at current levels or decline further for an extended period of time), as well as in the level of drilling and production related activities as a result of the continuing COVID-19 pandemic, decisions of OPEC and other oil exporting nations regarding production, and the other factors listed above. Our ability to modify and adopt our operating activities in response to lower oilfield service activity levels during periodic industry downturns or in the transition to a lower carbon economy is important to our business, results of operations and prospects. However, a significant further decline and/or extended continuation of the recent downturn in the industry could continue to impact demand for our products and services and could have a material adverse effect on our business, results of operations, financial condition and cash flows, and could result in asset impairments, including an impairment of the carrying value of our goodwill, along with other accounting charges.

We might be unable to successfully compete with other companies in our industry.

The business in which we operate is highly competitive. The principal competitive factors are customer service, product quality and performance, price, breadth of product offering, local content and geographic footprint, technical expertise and innovation. In some of our product and service offerings, we compete with the oil and gas industry's largest oilfield service providers. These large national and multi-national companies may have longer operating histories, greater brand recognition, and a stronger presence in geographies than us. They may also have more robust organizational and technical capabilities. In addition, we compete with many smaller companies capable of effectively competing on a regional or local basis. Our competitors may be able to respond more quickly to new or emerging technologies and services and for changes in customer requirements. Many

contracts are awarded on a bid basis, which further increases competition based on price. As a result of the competitive environment in which we operate, we may lose competitive share, be unable to maintain or increase prices for our products and services, or be unable to develop new business opportunities, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

If we are unable to develop new products and technologies, our competitive position may be impaired, which could materially and adversely affect our sales and market share.

The businesses in which we operate are characterized by changing technologies and the introduction of new products and services. As a result, our success is dependent upon our ability to develop or acquire new products and services on a cost-effective basis, to introduce them into the marketplace in a timely manner, and to protect and maintain critical intellectual property assets related to these developments. Difficulties or delays in research, development or production of new products and technologies, or failure to gain customer acceptance of new products and technologies, may significantly reduce future revenue and materially and adversely affect our competitive position. While we intend to continue to commit financial resources and effort to the development of new products and services, our ability to do so may be impacted by the prolonged industry downturn and/or we may not be able to successfully differentiate our products and services from those of our competitors. Our customers may not consider our proposed products and services to be of value to them or may not view them as superior to our competitors' products and services. In addition, our competitors or customers may develop new technologies which are similar to, or improvements on, our existing technologies.

Further, we may not be able to adapt to evolving customer needs and technologies, including the transition to a lower-carbon economy and energy system by our customers, develop new products, and achieve and maintain technological advantages in developing products and services in support of the evolving industry. If we do not successfully compete through the development and introduction of new products and technologies, our business, results of operations, financial condition and cash flows could be materially adversely affected.

We could lose customers or generate lower revenue, operating profits and cash flows if there are significant increases in the cost of raw materials or if we are unable to obtain raw materials.

We purchase raw materials, sub-assemblies and components for use in manufacturing operations, which exposes us to volatility in prices for certain commodities. Significant price increases for these commodities could adversely affect our operating profits. While we generally attempt to mitigate the impact of increased raw material prices by endeavoring to make strategic purchasing decisions, broadening our supplier base and passing along increased costs to customers, there may be a time delay between the increased raw material prices and the ability to increase the prices of our products. Additionally, we may be unable to increase the prices of products due to the terms of existing contracts, a competitor's pricing pressure or other factors. The inability to obtain necessary raw materials on acceptable terms could affect our ability to meet customer commitments and satisfy demand for certain products. Certain of our product lines depend on a limited number of third-party suppliers and vendors. The ability of these third parties to deliver raw materials may be affected by events beyond our control. In addition, public health threats, such as COVID-19, severe influenza and other highly communicable viruses or diseases could limit access to vendors and their facilities, or the ability to transport raw materials from our vendors, which would adversely affect our ability to obtain necessary raw materials for certain of our products or increase the costs of such materials. A significant price increase in, raw materials of, tariffs imposed on, or unavailability of, may result in a loss of customers and/or adversely impact our business, results of operations, financial condition and cash flows, and could result in asset impairments, including an impairment of the carrying value of our goodwill.

Our growth and results of operations may be adversely affected if we are unable to complete third party acquisitions on acceptable terms and integrate such acquisitions.

Over time, it is expected that we will acquire value creating, bolt-on capabilities that broaden our existing technological, geographic and cost position, thereby complementing our businesses. However, there can be no assurance that we will be able to find suitable opportunities to purchase or acquire such capabilities on acceptable terms. If we are unsuccessful in our acquisition efforts, our revenue growth could be adversely affected. In addition, we face the risk that a completed acquisition may underperform relative to expectations. We may not achieve the synergies originally anticipated, may become exposed to unexpected liabilities, or may not be able to sufficiently integrate completed acquisitions into our then current business and growth model. These factors could potentially have an adverse impact on our business, results of operations, financial condition and cash flows.

Our products are used in operations that are subject to potential hazards inherent in the oil and gas industry and, as a result, we are exposed to potential liabilities that may affect our financial condition and reputation.

Our products are used in potentially hazardous drilling, completion and production applications in the oil and gas industry where an accident or a failure of a product can potentially have catastrophic consequences. Risks inherent in these applications, such as equipment malfunctions and defects, failures, equipment misuse, explosions, blowouts and uncontrollable flows of oil, natural gas or well fluids can cause personal injury, loss of life, suspension of operations, damage to formations, damage to facilities, business interruption and damage to or destruction of property, surface and drinking water resources, equipment and the environment. While we currently maintain insurance protection against some of these risks and seek to obtain indemnity agreements from our customers requiring them to hold us harmless from some of these risks, our current insurance and contractual indemnity protection may not be sufficient or effective enough to protect us under all circumstances or against all risks. The occurrence of a significant event not fully insured or indemnified against, or the failure of a customer to meet its indemnification obligations to us could adversely affect our business, results of operations, financial condition and cash flows.

A chemical spill or release could materially and adversely affect our business.

As a manufacturer and supplier of chemical products, there is a potential for chemicals to be accidentally spilled, released or discharged, either in liquid or gaseous form, during production, transportation, storage or use. Such a release could result in environmental contamination as well as a human or animal health hazard, and result in significant remediation costs for us and potential disruption for, and damage to, our manufacturing facilities, customers, communities, and other stakeholders. Accordingly, such a release could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our industry is undergoing continuing consolidation that may impact our results of operations.

The oil and gas industry continues to experience business consolidations and as a result, some of our largest customers have combined and are using their size and purchasing power to seek economies of scale and pricing concessions. This consolidation may result in reduced capital spending by some of our customers or the acquisition of one or more of our primary customers, which may lead to decreased demand for our products and services. There is no assurance that we will be able to maintain our level of sales to a customer that has consolidated, or replace that revenue with increased business activity with other customers. As a result, the acquisition of one or more of our primary customers may have a significant adverse impact on our business, results of operations, financial condition and cash flows. We are unable to predict what effect consolidations in the industry may have on prices, capital spending by our customers, our selling strategies, our competitive position, our ability to retain customers or our ability to negotiate favorable agreements with our customers.

The credit risks of our customer base could result in losses.

The majority of our customers are oil and gas companies that have faced or may in the future face liquidity constraints during adverse commodity price environments. These customers are also affected by prolonged changes in economic and industry conditions such as the COVID-19 pandemic and the current downturn in the oil and gas industry as a result of the lower crude oil and nature gas price environment. If a significant number of our customers experience prolonged business declines, disruptions, or bankruptcies, we may incur increased exposure to credit risk and losses from bad debts.

The loss of one or more significant customers could have an adverse impact on our financial results.

Our customers represent a combination of some of the largest operators in the oil and gas drilling and production markets, including major integrated, large, medium and small independents, and foreign national oil and gas companies, as well as oilfield equipment and service providers. While no single customer accounted for net sales equal to 10 percent or more of total revenues for the previous four years, and we are not dependent on any one customer or group of customers, the loss of one or more of our significant customers could have an adverse effect on our business, results of operations, financial condition and cash flows.

We are subject to information technology, cybersecurity and privacy risks.

We depend on various information technologies and other products and services to store and process business information and otherwise support our business activities. We also manufacture and sell hardware and software to provide monitoring, controls and optimization of customer critical assets in oil and gas production and distribution. In addition, certain of our customer offerings include digital components, such as remote monitoring of certain customer operations. We also provide services to maintain these systems. Additionally, our operations rely upon partners, suppliers and other third-party providers of information

technology and other products and services. If any of these information technologies, products or services are damaged, cease to properly function, are breached due to employee error, malfeasance, system errors, or other vulnerabilities, or are subject to cybersecurity attacks, such as those involving unauthorized access, malicious software and/or other intrusions, we and our partners, suppliers or other third parties could experience: (i) production downtimes, (ii) operational delays, (iii) the compromising of confidential, proprietary or otherwise protected information, including personal and customer data, (iv) destruction, corruption, or theft of data, (v) security breaches, (vi) other manipulation, disruption, misappropriation or improper use of our systems or networks, (vii) hydrocarbon pollution from loss of containment, (viii) financial losses from remedial actions, (ix) loss of business or potential liability, (x) adverse media coverage, and (xi) legal claims or legal proceedings, including regulatory investigations and actions, and/or damage to our reputation. While we attempt to mitigate these risks by employing a number of measures, including employee training, technical security controls and maintenance of backup and protective systems, the Company's and our customers', partners', vendors' and other third- parties' systems, networks, products and services remain potentially vulnerable to known or unknown cybersecurity attacks and other threats, any of which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We are subject to risks relating to existing international operations and expansion into new geographical markets.

We continue to focus on expanding sales globally as part of our overall growth strategy and expect sales from outside the United States to continue to represent a significant and growing portion of our revenue. Our international operations and global expansion strategy are subject to general risks related to such operations, including:

- political, social and economic instability and disruptions;
- export controls, economic sanctions, embargoes or trade restrictions;
- the imposition of duties and tariffs and other trade barriers;
- limitations on ownership and on repatriation or dividend of earnings;
- transportation delays and interruptions;
- labor unrest and current and changing regulatory environments;
- increased compliance costs, including costs associated with disclosure requirements and related due diligence;
- difficulties in staffing and managing multi-national operations;
- limitations on our ability to enforce legal rights and remedies;
- access to or control of networks and confidential information due to local government controls and vulnerability of local networks to cyber risks; and
- fluctuations in foreign currency exchange rates.

If we are unable to successfully manage the risks associated with expanding our global business or adequately manage operational risks of our existing international operations, these risks could have a material adverse effect on our growth strategy into new geographical markets, our reputation, our business, results of operations, financial condition and cash flows.

Dependence on joint ventures and other local partners could adversely affect our profits.

We conduct some operations through joint ventures in which unaffiliated third parties may control or have significant influence on the operations of the joint venture. As with any joint venture arrangement, differences in views among the joint venture participants may result in the joint venture operating in a manner that is contrary to our preference, delayed decisions or in failures to agree on major issues. These factors could have a material adverse effect on the business and results of operations of our joint ventures and, in turn, our business and consolidated results of operations.

In addition to joint ventures, we rely on local third-party partners in a number of foreign jurisdictions to provide various services in support of our product sales, including sales and distribution, installation, field service, technical support, and the provision of equipment and personnel. If a local partner is unwilling or unable to deliver its services for any reason including, but not limited to, a dispute with us, the deterioration of its financial condition or a loss of personnel, we may be unable to engage an alternative partner or subcontractors to perform the same services, or on terms substantially similar to those with our existing partners. The failure to do so may cause us to breach the terms of existing contracts, impede our ability to complete orders, and/or result in damage to our customer relationships in that jurisdiction, any of which may damage our reputation and have a material adverse effect on our business in the impacted jurisdiction.

The COVID-19 pandemic and related economic repercussions have had, and are expected to continue to have, a significant impact on our business, and depending on the duration of the pandemic and its effect on the oil and gas industry, could have a material adverse effect on our business, liquidity, consolidated results of operations and consolidated financial condition.

The ongoing COVID-19 pandemic has resulted in a significant reduction in demand for oil and gas commodities as various jurisdictions have attempted to implement or have implemented measures designed to contain the spread of the virus, including travel restrictions, stay-at-home or shelter-in-place orders and shutdowns of non-essential business. Oil demand has significantly deteriorated as a result of the virus outbreak and corresponding preventative measures taken around the world to mitigate the spread of the virus. Due to the uncertainty of the ongoing COVID-19 pandemic, production cuts may not be sufficient to support and stabilize commodity prices, and there is no assurance that any production cuts will be extended.

While the full impact of the COVID-19 pandemic is not yet known, potential risks associated with the COVID-19 outbreak could adversely impact our business, results of operations, financial condition and cash flows and include, but are not limited to:

- disruptions to our supply chain resulting from our limited access to our vendors, our vendors' limited access to their facilities or our ability to transport raw materials from our vendors, adversely affecting the price of, or our ability to obtain, materials essential to our products and our business which could result in a loss of customers and revenue;
- reduction in revenues as a result of lower demand for our products as upstream oil and gas companies across the industry reduce their drilling activities, lower budgeted capital expenditures and institute additional capital discipline measures;
- liquidity challenges, including impacts related to delayed customer payments and payment defaults associated with customer liquidity issues and bankruptcies, and, if a significant number of our customers experience a prolonged business decline or disruption, we may incur increased exposure to credit risk and bad debts;
- a credit rating downgrade of our corporate debt if COVID-19 and the current oil market have a significant impact on our long-term profitability, which could result in higher borrowing costs or reduced availability of sources of financing;
- workforce availability resulting from reductions to adjust to market conditions or due to restrictions that we and our customers impose, including limiting worksite access and facility shutdowns, to ensure the safety of employees and others, which could adversely affect our ability to timely fulfill customer orders and service requests;
- costs associated with the rationalization of our portfolio of real estate facilities, including possible exit of leases and facility closures to align with expected activity and workforce capacity;
- additional asset impairments, including an impairment of the carrying value of our goodwill, along with other accounting charges as demand for our services and products decreases;
- continuation of measures taken by various governments to try to contain the virus, such as travel bans and restrictions, quarantines, shelter in place orders, and shutdowns, as well as increased acceptance of remote work arrangements and decreased levels of personal travel; and
- compliance with financial covenants in the terms of our debt instruments if we experience a significant and prolonged decrease in our earnings before income tax, depreciation and amortization which would cause amounts borrowed to become due and payable.

Failure to attract, retain and develop personnel for key management could have an adverse effect on our results of operations, financial condition and cash flows.

Our growth, profitability and effectiveness in conducting our operations and executing our strategic plans depend in part on our ability to attract, retain and develop qualified personnel, and align them with appropriate opportunities for key management positions. Additionally, during periods of increased investment in the oil and gas industry, competition for qualified personnel may increase and the availability of qualified personnel may be challenged. If we are unsuccessful in our efforts to attract and retain qualified personnel, our business, results of operations, financial condition, cash flows, market share and competitive position could be adversely affected. Additionally, we could miss opportunities for growth and business efficiencies.

The inability to protect or obtain patent and other intellectual property rights could adversely affect our revenue, operating profits and cash flows.

We own patents, trademarks, licenses and other intellectual property related to our products and services, and we continuously invest in research and development that may result in innovations and intellectual property rights. We employ various measures to develop, maintain and protect our innovations and intellectual property rights. These measures may not be effective in capturing intellectual property rights, and they may not prevent our intellectual property from being challenged, invalidated, circumvented, infringed, misappropriated or otherwise violated, particularly in countries where intellectual property rights are not highly developed or protected. Unauthorized use of our intellectual property rights and any potential litigation we may

initiate or have initiated against us in respect of our intellectual property rights could adversely impact our competitive position and have a negative impact on our business, results of operations, financial condition and cash flows.

Natural disasters and unusual weather conditions could have an adverse impact on our business.

Our business could be materially and adversely affected by natural disasters or severe weather conditions. Hurricanes, tropical storms, flash floods, blizzards, cold weather and other natural disasters or severe weather conditions could result in evacuation of personnel, curtailment of services, damage to equipment and facilities, interruption in transportation of products and materials and loss of productivity. For example, certain of our manufactured products and components are manufactured at a single facility, and disruptions in operations or damage to any such facilities could reduce our ability to manufacture our products and satisfy customer demand. If our customers are unable to operate or are required to reduce operations due to natural disasters or severe weather conditions, our business could be adversely affected as a result of curtailed deliveries of our products and services. Our headquarters and certain manufacturing facilities are located in the U.S. Gulf Coast and this region is also home to many of our customers and suppliers. Hurricanes or other severe weather events impacting the Gulf Coast could materially and adversely affect our operations, our ability to obtain raw materials at reasonable cost, or at all, and our customers in the region.

Risks Related to Financial Condition and Markets

Restrictions imposed by our debt instruments may limit the ability of our subsidiaries to operate their business and to finance their future operations or capital needs or to engage in other business activities.

The terms of our debt instruments restrict certain of our subsidiaries from engaging in specified types of transactions. These covenants restrict the ability of the Company and our restricted subsidiaries, among other things, to:

- incur or guarantee additional indebtedness;
- pay dividends on capital stock or redeem, repurchase or retire capital stock or indebtedness, as applicable;
- make investments, loans, advances and acquisitions;
- engage in transactions with our affiliates;
- sell assets, including capital stock of subsidiaries; and
- consolidate or merge.

In addition, the debt instruments contain certain financial maintenance covenants. Our ability to comply with these restrictions can be affected by events beyond our control, and we may not be able to maintain compliance with them. A breach of any of these covenants would be an event of default.

In the event of a default under any of the debt instruments, the lenders could elect to declare all amounts outstanding under such debt instruments to be immediately due and payable, or in the case of our revolving credit facility, may terminate their commitments to lend additional money. If the indebtedness under any of our debt instruments were to be accelerated, our assets may not be sufficient to repay such indebtedness in full. In addition, our senior secured credit facilities are secured by substantially all of our and our domestic subsidiaries' assets. If an event of default occurs under our debt instruments, the lenders could exercise their rights under the related security documents, and an event of default may be triggered under other debt instruments. Any acceleration of amounts due under our debt instruments or the substantial exercise by the lenders of their rights under the security documents would have a material adverse effect on us.

Our indebtedness could adversely affect our financial condition and operating flexibility.

Our ability to make payments on, and to refinance, our indebtedness, as well as any future indebtedness that we may incur, will depend upon the level of cash flows generated by our operations, our ability to sell assets, availability under our revolving credit facility and our ability to access the capital markets and/or other sources of financing. Our ability to generate cash is subject to general economic, industry, financial, competitive, legislative, regulatory and other factors that are beyond our control. If we are not able to repay or refinance our indebtedness as it becomes due, we may be forced to sell assets or take other disadvantageous actions, including (i) reducing financing in the future for working capital, capital expenditures, acquisitions and general corporate purposes or (ii) dedicating an unsustainable level of cash flow from operations to the payment of principal and interest on the indebtedness. In addition, our ability to withstand competitive pressures and to react to changes in the oil and gas industry could be impaired.

Disruptions in the capital and credit markets, low commodity prices, our debt level and other factors may restrict our ability to raise capital on favorable terms, or at all.

Disruptions in the capital and credit markets, in particular with respect to companies in the energy sector, could limit our ability to access these markets or may significantly increase our cost to borrow. Continued low commodity prices, among other factors, have caused some lenders to increase interest rates, enact tighter lending standards which we may not satisfy as a result of our debt level or otherwise, refuse to refinance existing debt at maturity on favorable terms, or at all, and in certain instances have reduced or ceased to provide funding to borrowers. If we are unable to access the capital and credit markets on favorable terms or at all, it could adversely affect our business, financial condition, results of operations and cash flows.

Our exposure to exchange rate fluctuations on cross-border transactions and the translation of local currency results into U.S. dollars could negatively impact our results of operations.

A portion of our business is transacted and/or denominated in foreign currencies, and fluctuations in currency exchange rates or the inability to exchange or repatriate foreign currencies could have a significant impact on our results of operations, financial condition and cash flows, which are presented in U.S. dollars. Cross-border transactions, both with external parties and intercompany relationships, result in increased exposure to foreign exchange effects. Although the impact of foreign currency fluctuations on our results of operations has historically not been material, significant changes in currency exchange rates, could negatively affect our results of operations. Additionally, a future strengthening of the U.S. dollar potentially exposes us to competitive threats from lower cost producers in other countries and could result in unfavorable translation effects as the results of foreign locations are translated into U.S. dollars for reporting purposes.

Risks Related to the Merger

We may not realize the anticipated cost synergies and growth opportunities from the Merger.

We expect to realize cost synergies, growth opportunities and other financial and operating benefits as a result of the Merger. Our success in realizing these benefits, and the timing of this realization, depends on the successful integration of the business operations of legacy ChampionX with the Company. Even if we are able to integrate legacy ChampionX successfully, we cannot predict with certainty if or when these cost synergies, growth opportunities and benefits will occur, or the extent to which they will actually be achieved. For example, the benefits from the Merger may be offset by costs incurred in integrating the companies. Realization of any benefits and synergies could be affected by the factors described in other risk factors and a number of factors beyond our control, including, without limitation, general economic conditions, further consolidation in the industry in which we operate, increased operating costs and regulatory developments.

The integration of legacy ChampionX following the Merger may present significant challenges.

There is a significant degree of difficulty inherent in the process of integrating legacy ChampionX with the Company. These difficulties include:

- the integration of legacy ChampionX with our current businesses while carrying on the ongoing operations of all businesses;
- managing a significantly larger company than before the consummation of the Merger;
- coordinating geographically separate organizations;
- integrating the business cultures of each of legacy ChampionX and the Company, which may prove to be incompatible;
- creating uniform standards, controls, procedures, policies and information systems and controlling the costs associated with such matters;
- ability to ensure the effectiveness of internal control over financial reporting;
- integrating certain information technology, purchasing, accounting, finance, sales, billing, human resources, payroll and regulatory compliance systems; and
- the potential difficulty in retaining key officers and personnel.

The process of integrating operations could cause an interruption of, or loss of momentum in, the Company's activities. Members of senior management may be required to devote considerable amounts of time to this integration process, which will decrease the time they will have to manage business operations, serve the business, or develop new products or strategies. If our senior management is not able to effectively manage the integration process, or if any significant business activities are interrupted as a result of the integration process, our business could suffer.

The successful or cost-effective integration of legacy ChampionX cannot be assured. The failure to do so could have a material adverse effect on our business, financial condition or results of operations.

The Separation and Distribution Agreement limits our ability to engage in certain activities competitive with Ecolab.

The Separation and Distribution Agreement includes non-compete provisions pursuant to which the legacy ChampionX business is restricted from competing in the water and downstream fields of use for three years following the Distribution subject to certain exceptions set forth in the Separation and Distribution Agreement. In addition, Ecolab may have the ability to terminate certain rights, including patent licenses, if legacy ChampionX businesses begin to compete in the downstream or water fields of use even after the expiration of the non-compete period. These restrictions may limit our ability to engage in certain activities, may potentially lead to disputes and may materially and adversely affect our business, financial condition and results of operations.

The Distribution could result in significant tax liability, and we may be obligated to indemnify Ecolab for any such tax liability imposed on Ecolab.

Prior to the Distribution, Ecolab received an opinion of its counsel (the “Distribution Tax Opinion”), substantially to the effect that the contribution of Ecolab’s upstream energy business to legacy ChampionX (the “Contribution”) and the Distribution, taken together, will qualify as a transaction described in Sections 355 and 368(a)(1)(D) of the Internal Revenue Code (the “Code”), and an opinion from KPMG LLP (“KPMG”), that addressed the tax treatment of certain aspects of the Contribution, Distribution and the Merger (the “KPMG Tax Opinion”). Except for taxable income or gain possibly arising as a result of certain internal restructuring transactions undertaken in its separation of the upstream energy business (the “ChampionX Separation”), and with respect to any “intercompany transaction” required to be taken into account by Ecolab under the Treasury Regulations related to consolidated federal income tax returns, Ecolab will not recognize any gain or loss. None of Ecolab, legacy ChampionX or the Company has requested or intends to request any ruling from the Internal Revenue Service (“IRS”) as to the U.S. federal income tax consequences of the Contribution, the ChampionX Separation, the Distribution or the Merger. Neither the Distribution Tax Opinion nor the KPMG Tax Opinion are binding on the IRS (or any applicable foreign taxing authorities) or the courts, and the IRS (or any applicable foreign taxing authorities) or the courts may not agree with the conclusions reached therein. There can be no assurance that the IRS (or any applicable foreign taxing authorities) will not successfully assert that the Distribution, or certain internal restructuring transactions undertaken in the Separation, are taxable transactions, and that a court will not sustain such assertion, which could result in tax being incurred by Ecolab.

If the Contribution and Distribution, taken together, were determined not to qualify as a transaction described in Sections 355 and 368(a)(1)(D) of the Code, for U.S. federal income tax purposes, Ecolab would generally recognize gain with respect to the transfer of ChampionX common stock in the Distribution if the value of ChampionX stock transferred exceeds Ecolab’s tax basis in such ChampionX stock.

Even if the Contribution and Distribution, taken together, otherwise qualify as a transaction described in Sections 355 and 368(a)(1)(D) of the Code, the Distribution will nonetheless be taxable to Ecolab pursuant to Section 355(e) of the Code if one or more persons acquire a 50% or greater interest (measured by vote or value) in the stock of Ecolab or legacy ChampionX, directly or indirectly (including through acquisitions of the stock of the Company after the Merger), as part of a plan or series of related transactions that includes the Distribution. For purposes of this test, the Merger will be treated as part of a plan that includes the Distribution, but it is expected that the Merger, standing alone, will not cause the Distribution to be taxable to Ecolab under Section 355(e) of the Code because holders of legacy ChampionX common stock own more than 50% of the common stock of the Company following the Merger. However, if the IRS were to determine that other acquisitions of Ecolab stock, either before or after the Distribution, or the Company’s stock after the Merger, are part of a plan or series of related transactions that includes the Distribution, such determination could result in the recognition of gain by Ecolab for U.S. federal income tax purposes, and the amount of taxes on such gain could be substantial.

Under the Tax Matters Agreement, we may be obligated, in certain cases, to indemnify Ecolab against taxes and certain tax-related losses of the Contribution, Separation, Distribution or Merger (collectively, the “Transactions”) that arise as a result of our actions, or failure to act. Any such indemnification obligation would likely be substantial and would likely have a material adverse effect on us.

Under the Tax Matters Agreement, we are restricted from taking certain actions that could adversely affect the intended tax treatment of the Transactions, and such restrictions could significantly impair our ability to implement strategic initiatives that otherwise would be beneficial.

The Tax Matters Agreement generally restricts us from taking certain actions after the Distribution that could adversely affect the intended tax treatment of the Transactions. Failure to adhere to these restrictions could result in tax being imposed on Ecolab for which we could bear responsibility and for which we could be obligated to indemnify Ecolab. Any such indemnification obligation would likely be substantial and would likely have a material adverse effect on us. In addition, even if we are not responsible for tax liabilities of Ecolab under the Tax Matters Agreement, legacy ChampionX nonetheless could be liable under applicable tax law for such liabilities if Ecolab were to fail to pay such taxes. Because of these provisions in the Tax Matters Agreement, we are restricted from taking certain actions, particularly for the two (or, in certain cases three) years following the Merger, including (among other things) the ability to freely issue stock, to make acquisitions and to raise additional equity capital. These restrictions could have a material adverse effect on our liquidity and financial condition, and otherwise could impair our ability to implement strategic initiatives. Also, our indemnity obligation to Ecolab might discourage, delay or prevent a change of control that our shareholders may consider favorable.

The legacy ChampionX business may be negatively impacted if we are unable to provide benefits and services, or access to equivalent financial strength and resources, to legacy ChampionX that historically have been provided by Ecolab.

The legacy ChampionX business has historically received benefits and services from Ecolab and has benefited from Ecolab's financial strength and corporate support services. After the Transactions, legacy ChampionX as a subsidiary of the Company, no longer benefits from Ecolab's services, financial strength or business relationships to the extent not otherwise addressed in the other transaction documents contemplated by the Separation and Distribution Agreement, referred to as the Transaction Documents. While Ecolab has agreed to provide certain transition services to legacy ChampionX for a period of time following the consummation of the Transactions, it cannot be assured that we will be able to adequately replace or provide resources formerly provided by Ecolab or replace them at the same or lower cost. If we are not able to replace the resources provided by Ecolab or are unable to replace them without incurring significant additional costs, or are delayed in replacing the resources provided by Ecolab, our results of operations may be negatively impacted.

Legal and Regulatory Risks

War, terrorism or civil unrest could harm our business.

Due to the unsettled political conditions in many natural gas and oil-producing countries, our operations, revenue and profits are subject to adverse consequences of war, terrorism, civil unrest, strikes, currency controls, and governmental actions. These risks could result in the loss of our personnel or assets, cause us to evacuate our personnel from certain countries, cause us to increase spending on security worldwide, cause us to cease operating in certain countries, disrupt financial and commercial markets, including the supply of and pricing for oil and natural gas, and generate political and economic instability in some of the geographic areas in which we operate. Areas where we operate that have significant risks include, but are not limited to, the Middle East, North Africa, West Africa, the Caspian Sea region, Southeast Asia and Indonesia, Mexico, Russia, and Venezuela and other countries in South America. In addition, any possible reprisals as a consequence of military or other action, such as acts of terrorism in the United States or elsewhere, could have a material adverse effect on our business, results of operations and financial condition.

Federal, state and local legislative and regulatory initiatives relating to oil and gas development and the potential for related litigation could result in increased costs and additional operating restrictions or delays for our customers, which could reduce demand for our products.

Environmental laws and regulations could limit our customers' exploration and production activities. Although we do not directly engage in drilling or hydraulic fracturing activities, we provide products and services to operators in the oil and gas industry. There has been significant growth in opposition to oil and gas development both in the United States and globally. This opposition is focused on attempting to limit or stop hydrocarbon development in certain areas. Examples of such opposition include: (i) efforts to reduce access to public and private lands, (ii) delaying or canceling permits for drilling or pipeline construction, (iii) limiting or banning industry techniques such as hydraulic fracturing, and/or adding restrictions on the use of water and associated disposal, (iv) delaying or denying air-quality permits, and (v) advocating for increased regulations, punitive taxation, or citizen ballot initiatives or moratoriums on industry activity.

In addition, various state and local governments have implemented, or are considering, increased regulatory oversight of oil and gas development through additional permitting requirements, operational restrictions, including on the time, place and

manner of drilling activities, disclosure requirements and temporary or permanent bans on hydraulic fracturing or other facets of crude oil and natural gas exploration and development in certain areas such as environmentally sensitive watersheds. Increased regulation and opposition to oil and gas activities could increase the potential for litigation concerning these activities, and could include companies who provide products and services used in hydrocarbon development, such as us.

The adoption of new laws or regulations at the federal, state, or local levels imposing reporting obligations, or otherwise limiting or delaying hydrocarbon development, could make it more difficult for our customers to complete oil and gas wells, increase our customers' costs of compliance and doing business, and otherwise adversely affect the oil and gas activities they pursue. Such developments could negatively impact demand for our products and services. In addition, heightened political, regulatory and public scrutiny, including lawsuits, could expose us or our customers to increased legal and regulatory proceedings, which could be time-consuming, costly, or result in substantial legal liability or significant reputational harm. We could be directly affected by adverse litigation or indirectly affected if the cost of compliance or the risks of liability limit the ability or willingness of our customers to operate. Such costs and scrutiny could directly or indirectly, through reduced demand for our products and services, have a material adverse effect on our business, results of operations, financial condition and cash flows.

We and our customers are subject to extensive environmental and health and safety laws and regulations that may increase our costs, limit the demand for our products and services or restrict our operations.

Our operations and the operations of our customers are subject to numerous and complex federal, state, local and foreign laws and regulations relating to the protection of human health, safety and the environment. These laws and regulations may adversely affect us by limiting or curtailing our customers' exploration, drilling and production activities, impacting the products and services we design, market and sell and the facilities where we manufacture our products. For example, our operations and the operations of our customers are subject to numerous and complex laws and regulations that, among other things: may regulate the management and disposal of hazardous and non-hazardous wastes; may require acquisition of environmental permits related to our operations; may restrict the types, quantities and concentrations of various materials that can be released into the environment; may limit or prohibit operational activities in certain ecologically sensitive and other protected areas; may regulate specific health and safety criteria addressing worker protection; may require compliance with operational and equipment standards; may impose testing, reporting and record-keeping requirements; and may require remedial measures to mitigate pollution from former and ongoing operations. Sanctions for noncompliance with such laws and regulations may include revocation of permits, corrective action orders, administrative or civil penalties, criminal prosecution and the imposition of injunctions to prohibit certain activities or force future compliance.

Some environmental laws and regulations provide for joint and several strict liability for remediation of spills and releases of hazardous substances. In addition, we or our customers may be subject to claims alleging personal injury or property damage as a result of alleged exposure to hazardous substances, as well as damage to natural resources. These laws and regulations may expose us or our customers to liability for the conduct of or conditions caused by others, or for our acts or for the acts of our customers that were in compliance with all applicable laws and regulations at the time such acts were performed. Any of these laws and regulations could result in claims, fines or expenditures that could be material to our business, results of operations, financial condition and cash flows.

Environmental laws and regulations, and the interpretation and enforcement thereof, frequently change, and have tended to become more stringent over time. New laws, regulations treaties, or international agreements related to greenhouse gases and climate change, including incentives to conserve energy or use alternative energy sources, may have a material adverse effect on our customers by limiting or curtailing their exploration, drilling, and production activities, which may adversely affect our operations by limiting demand for our products and services. Additionally, the implementation of new laws and regulations may have a material adverse effect on our operating results by requiring us to modify our operations or products or shut down some or all of our facilities.

Various laws and regulations exist or are under development that seek to regulate the emission of greenhouse gases ("GHG"), including establishing GHG "cap and trade" programs, increased efficiency standards, participation in international climate agreements, issuance of executive orders by the U.S. presidential administration and incentives or mandates for pollution reduction, use of renewable energy sources, or use of alternative fuels with lower carbon content. Any regulation of GHG emissions could result in increased compliance costs or additional operating restrictions for us and/or our customers and limit or curtail exploration, drilling and production activities of our customers, which could directly or indirectly, through reduced demand for our products and services, adversely affect our business, results of operations, financial condition and cash flows.

Our reputation, ability to do business and results of operations may be impaired by violations of U.S. and international laws and regulations regarding, anti-bribery, trade control, trade sanctions, anti-corruption and similar laws.

Our operations require us to comply with a number of U.S. and international laws and regulations, including those relating to anti-corruption, anti-bribery, fair competition, export and import compliance, money laundering and data privacy. In particular, our international operations are subject to the regulations imposed by the Foreign Corrupt Practices Act and the United Kingdom Bribery Act 2010 as well as anti-bribery and anti-corruption laws of various jurisdictions in which we operate. While we strive to maintain high ethical standards and robust internal controls, we cannot provide assurance that our internal controls and compliance systems will always protect us from acts committed by our employees, agents or business partners that would violate such U.S. or international laws or regulations. Any such violations of law or improper actions could subject us to civil or criminal investigations in the United States or other jurisdictions, could lead to substantial civil or criminal, monetary and non-monetary penalties and related shareholder lawsuits, could lead to increased costs of compliance and could damage our reputation, business, results of operations, financial condition and cash flows.

Tariffs and other trade measures could adversely affect our results of operations, financial position and cash flows.

In 2020, the U.S. government continued to impose tariffs on steel and aluminum and a broad range of other products imported into the United States. In response to the tariffs imposed by the U.S. government, a number of jurisdictions, including the European Union, Canada, Mexico, India and China announced tariffs on U.S. goods and services. These tariffs have increased our material input costs, and any further trade restrictions, retaliatory trade measures and additional tariffs could result in higher input costs for our products. We may not be able to fully mitigate the impact of these increased costs or pass price increases on to our customers. While tariffs and other retaliatory trade measures imposed by other countries on U.S. goods have not yet had a significant impact on our business or results of operations, we cannot predict further developments, and such existing or future tariffs could have a material adverse effect on our results of operations, financial position and cash flows.

Changes in domestic and foreign governmental laws, regulations and policies, risks associated with emerging markets, changes in statutory tax rates and laws, and unanticipated outcomes with respect to tax audits could adversely affect our business, profitability and reputation.

Our domestic and international sales and operations are subject to risks associated with changes in laws, regulations and policies (including environmental and employment regulations, export/import laws, local content and local ownership requirements, tax policies such as export subsidy programs and research and experimentation credits, carbon emission regulations and other similar programs). Failure to comply with any of the foregoing laws, regulations and policies could result in civil and criminal, monetary and non-monetary penalties, as well as damage to our reputation. In addition, we cannot provide assurance that costs of complying with new and evolving regulatory reporting requirements and current or future laws, including environmental protection, employment, data security, data privacy and health and safety laws, will not exceed our estimates. In addition, we have made investments in certain countries, and we may in the future invest in other countries, which may carry high levels of currency, political, compliance, or economic risk. While these risks or the impact of these risks are difficult to predict, any one or more of them could adversely affect our business, results of operations and reputation.

We are subject to taxation in a number of jurisdictions. Accordingly, our effective tax rate is impacted by changes in the mix among earnings in countries with differing statutory tax rates. A material change in the statutory tax rate or interpretation of local law in a jurisdiction in which we have significant operations could adversely impact our effective tax rate and impact our financial results. For example, the U.S. Tax Cuts and Jobs Act (the "Tax Reform Act"), enacted in December 2017, significantly changed U.S. tax law by, among other things, imposing a repatriation tax on deemed repatriated earnings of foreign subsidiaries and imposing limitations on the ability to deduct interest expense.

Our tax returns are subject to audit and taxing authorities could challenge our operating structure, taxable presence, application of treaty benefits or transfer pricing policies. If changes in statutory tax rates or laws or audits result in assessments different from amounts estimated, then our business, results of operations, financial condition and cash flows may be adversely affected. In addition, changes in tax laws could have an adverse effect on our customers, resulting in lower demand for our products and services.

Certain of our subsidiaries are defendants in pending lawsuits alleging negligence and injury resulting from the use of COREXIT™ dispersant in response to the Deepwater Horizon oil spill, which could expose us to monetary damages or settlement costs.

As described in Note 9—Commitments And Contingencies in Part II, Item 8.—Financial Statements and Supplementary Data, certain of our subsidiaries (collectively the “COREXIT Defendants”) are among the defendants in a number of class action and individual plaintiff lawsuits arising from the use of COREXIT™ dispersant in response to the Deepwater Horizon oil spill, which could expose the Company to monetary damages or settlement costs. The plaintiffs in these matters have claimed damages under products liability, tort and other theories.

While three cases remain pending against the COREXIT Defendants and are expected to be dismissed pursuant to a November 28, 2012 order granting the COREXIT Defendants’ motion for summary judgment, we cannot predict whether there will be an appeal of the dismissal, the involvement we might have in these matters in the future or the potential for future litigation. Although we believe we have rights to contribution and/or indemnification from third parties in connection with these lawsuits, if an appeal by plaintiffs in these lawsuits is brought and won, these suits could have a material adverse effect on us and our financial condition, results of operations or cash flows.

The COREXIT Defendants continue to sell the COREXIT™ oil dispersant product and previously sold product remains in the inventories of individual customers and oil spill response organizations. We cannot predict the potential for future litigation with respect to such sales or inventory. However, if one or more of such lawsuits are brought and won, these suits could have a material adverse impact on our financial results.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease our corporate headquarters in The Woodlands, Texas. We lease or own technical customer support offices and operating facilities in North America, Australia, the Middle East, Asia Pacific, and Latin America. We operate research and technology centers in Sugar Land, Texas; Calgary, Canada; Aberdeen, Scotland; and Kazan, Russia. We have significant regional administrative facilities located in Singapore, The Republic of Singapore; Moscow, Russia; Dubai, United Arab Emirates; Buenos Aires, Argentina; Aberdeen, Scotland; and Kazan, Russia. We also have a network of small leased sales offices around the world.

We believe our properties and facilities are suitable for their present and intended purposes and are operating at a level consistent with the requirements of the industry in which we operate.

ITEM 3. LEGAL PROCEEDINGS

We are involved in various pending or potential legal actions in the ordinary course of our business. Management is unable to predict the ultimate outcome of these actions because of the inherent uncertainty of litigation. However, management believes the most probable, ultimate resolution of these matters will not have a material adverse effect on our consolidated financial position, results of operations or cash flows. See Note 9—Commitments And Contingencies in Part II, Item 8.—Financial Statements and Supplementary Data for a description of such proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

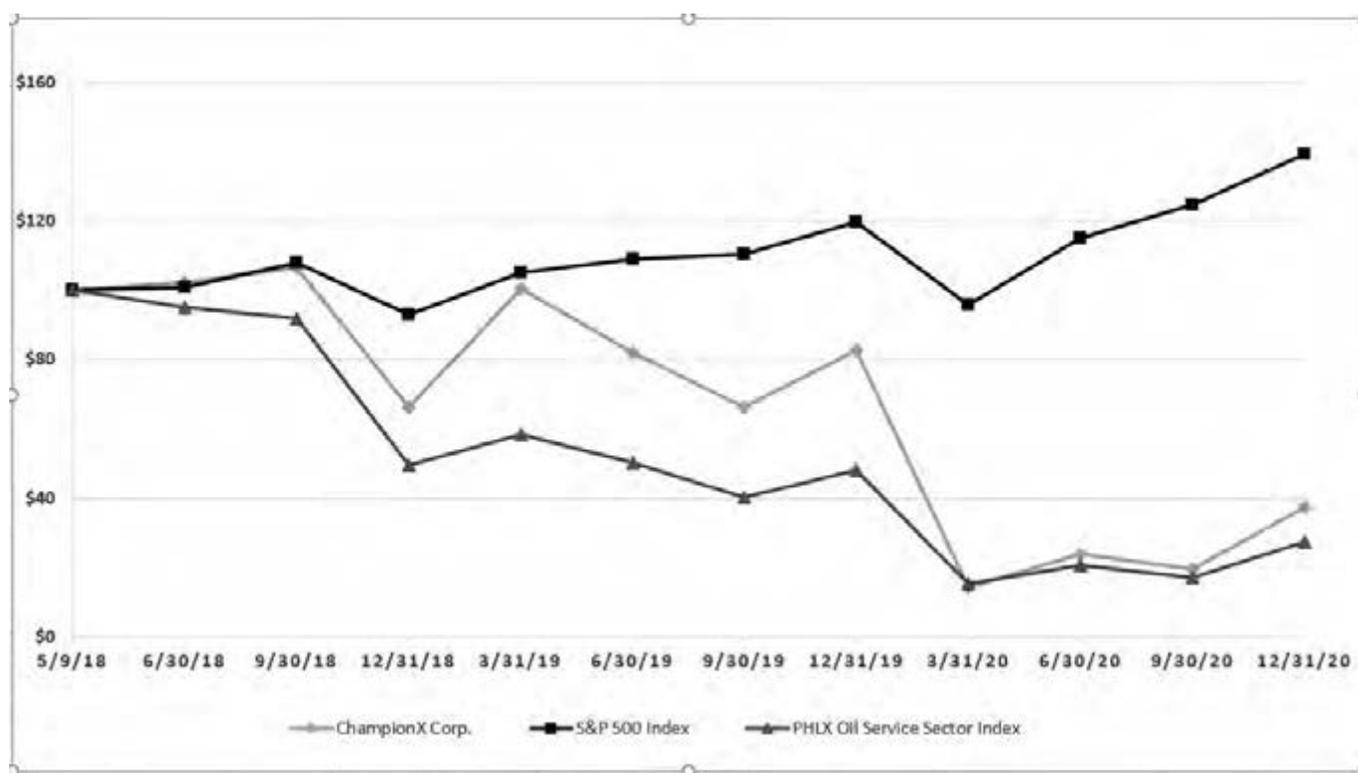
Our common stock is listed on Nasdaq under the "CHX" symbol. At January 31, 2021, our number of common stockholders of record was 1,135.

We have not declared or paid cash dividends in 2020, and we do not currently have a plan to pay cash dividends in the future.

We had no unregistered sales of equity securities during the year ended December 31, 2020. We had no repurchases of our common stock during the year ended December 31, 2020.

The following performance graph and related information shall not be deemed "soliciting material" or "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or the Exchange Act, each as amended, except to the extent that we specifically incorporate it by reference into such filing.

Comparison of Cumulative Total Return
Among ChampionX Corporation, the S&P 500 Index, and
the PHLX Oil Service Sector Index



The chart compares the percentage change in the cumulative stockholder return on our common stock against the cumulative total return of the Philadelphia Oil Service Sector Index, and the S&P Composite 500 Stock Index. The comparison is for a period beginning May 9, 2018 and ending December 31, 2020. The chart assumes the investment of \$100 on the closing price of May 9, 2018, and the reinvestment of all dividends.

ITEM 6. (REMOVED AND RESERVED)

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This discussion includes forward-looking statements. See “Cautionary Note Regarding Forward-Looking Statements” for certain cautionary information regarding forward-looking statements and see “Risk Factors” in Part I, Item 1A, for certain factors that could cause actual results to differ materially from those predicted in those statements. This discussion should also be read in conjunction with the consolidated financial statements included in “Item 8. Financial Statements and Supplementary Data.”

EXECUTIVE OVERVIEW

ChampionX is a global leader in chemistry solutions and highly engineered equipment and technologies that help companies drill for and produce oil and gas safely and efficiently around the world. ChampionX's products provide efficient and safe operations throughout the lifecycle of a well with a focus on the production phase of wells.

On May 9, 2018, we became an independent, publicly traded company as a result of our Separation from Dover.

A discussion of our consolidated results of operations and the results of operations of each of our reportable segments for the year ended December 31, 2020 compared to 2019 is contained herein. For discussion related to our consolidated results of operations and results of operations for each of our reportable segments for the year ended December 31, 2019 compared to 2018, please refer to Part II, Item 7 “Management's discussion and analysis of financial condition and results of operations” on Form 10-K for our fiscal year ended December 31, 2019, filed with the SEC on March 2, 2020.

Merger

On June 3, 2020, the Company and Ecolab completed a Reverse Morris Trust transaction in which Ecolab transferred their upstream energy business to legacy ChampionX and, thereafter, distributed all of the shares of legacy ChampionX common stock to certain Ecolab stockholders. Immediately following the Distribution, a wholly owned subsidiary of the Company merged with and into legacy ChampionX, with legacy ChampionX continuing as the surviving company in the Merger and as a wholly owned subsidiary of the Company. The Merger constitutes a business combination, with the Company (formerly known as Apergy) treated as the accounting acquirer and legacy ChampionX treated as the acquired company for accounting purposes. In association with the completion of the Merger, the Company changed its name from Apergy Corporation to ChampionX Corporation. See Note 3—Merger Transaction, Acquisitions, And Dispositions to our consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K for more information.

In connection with the Merger, we re-evaluated our reportable segments. As a result, we have identified two new reportable segments, Production Chemical Technologies and Reservoir Chemical Technologies, which include the results of operations of legacy ChampionX. The legacy Apergy reportable segments remain unchanged. The results of operations of legacy ChampionX are reflected in our accompanying consolidated financial statements from the closing date of the Merger through December 31, 2020. Results for the periods prior to June 3, 2020 reflect the financial and operating results of legacy Apergy and do not include the financial and operating results of legacy ChampionX. As such, our historical results of operations are not comparable from period to period and may not be comparable to our financial results of operations in future periods.

Business Environment

We focus on economic- and industry-specific drivers and key risk factors affecting our business segments as we formulate our strategic plans and make decisions related to allocating capital and human resources. Our business segments provide a broad range of technologies and products for the oil and gas drilling and production industry and, as a result, are substantially dependent upon activity levels in the oil and gas industry. Demand for our products, technologies and services is impacted by overall global demand for oil and gas, ongoing depletion rates of existing wells which produce oil and gas, and our customers' willingness to invest in the development and ongoing production of oil and gas resources. Our customers determine their operating and capital budgets based on current and future crude oil and natural gas prices, U.S. and worldwide rig count and U.S. well completions, among other factors. Crude oil and natural gas prices are impacted by supply and demand, which are influenced by geopolitical, macroeconomic, and local events, and have historically been subject to substantial volatility and cyclicity. Rig count, footage drilled, and exploration and production (E&P) investment by oil and gas operators have often been used as leading indicators for the level of drilling and development activity in the oil and gas sector.

Market Conditions and Outlook

During the first half of 2020, certain unprecedented events caused a rapid decline of oil prices. Decisions by the Organization of Petroleum Exporting Countries (“OPEC”) and other oil producing nations resulted in an oversupply of crude oil. Compounding this situation, demand for oil and gas commodities declined significantly as the world was impacted by the novel coronavirus (“COVID-19”) outbreak, which resulted in a sharp decline in crude oil prices. In response to the significant reduction in oil prices, customer spending associated with drilling and E&P activity deteriorated at a rapid pace due to significantly reduced capital and operating expenditures and cost cutting initiatives.

Although oil prices rebounded moderately, prices remain below the average oil price during 2019. We expect market conditions to remain challenging into 2021 as we believe it will take time for global oil demand to recover from the COVID-19 pandemic.

Response to the COVID-19 Pandemic

In response to impacts of the COVID-19 pandemic, we implemented a set of immediate actions to reduce operating costs and capital spending during fiscal year 2020, which included:

- reduction in total ChampionX headcount;
- temporary company-wide salary reductions, including steeper reductions for executive management and the highest reduction for our chief executive officer; and
- facility rationalization and elimination of non-essential expenses.

Additionally, during 2020, we significantly reduced capital expenditures within our Production & Automation Technologies and Digital Technologies segments by approximately \$41 million. Within our Chemical Technologies business, we reduced capital spend during 2020 by approximately 50% against prior year levels. Should we experience further declines in oilfield service activities as a result of the ongoing COVID-19 pandemic, we will take additional restructuring actions as necessary.

Ensuring the health and safety of our employees is paramount. As our businesses are classified as critical infrastructure, our manufacturing and field locations continue to operate and support the vital oil and gas infrastructure around the world. In order to protect our employees during this period, we mobilized our crisis management team and adopted a comprehensive response plan, which included:

- taking precautions consistent with local, state, and national government health authority guidelines, including the Centers for Disease Control and Prevention and the World Health Organization;
- meetings between the crisis management team and executive management to ensure real-time understanding of developments as they occur such that our communications and responses are appropriate and timely;
- equipping our employees with additional personal protective equipment;
- introducing new employee screening procedures in our operations; and
- enacting social distancing procedures, including staggering shifts, implementing rotating work schedules, and modifying workspaces and break areas.

As COVID-19 vaccines become available in the jurisdictions in which we have facilities and employees, we are making information available to employees about vaccine availability and encouraging employees to get vaccinated against COVID-19 where eligible.

CONSOLIDATED RESULTS OF OPERATIONS
YEARS ENDED DECEMBER 31, 2020 AND 2019

(dollars in thousands)	Years Ended December 31,		2020 vs. 2019	
	2020	2019	\$	%
Revenue	\$ 1,899,996	\$ 1,131,251	\$ 768,745	68 %
Cost of goods and services	1,490,824	754,147	736,677	98 %
Gross profit	409,172	377,104	32,068	9 %
Selling, general and administrative	463,767	274,268	189,499	69 %
Goodwill impairment	616,271	—	616,271	*
Long-lived asset impairment	40,980	1,746	39,234	*
Interest expense, net	51,731	39,301	12,430	32 %
Other (income) expense, net	(828)	2,603	(3,431)	(132)%
Income (loss) before income taxes	(762,749)	59,186	(821,935)	*
Provision for (benefit from) income taxes	(20,396)	6,226	(26,622)	*
Net income (loss)	(742,353)	52,960	(795,313)	*
Net income attributable to noncontrolling interest	1,577	796	781	98 %
Net income (loss) attributable to ChampionX	\$ (743,930)	\$ 52,164	\$ (796,094)	*
<i>Gross profit margin</i>	21.5 %	33.3 %		(1,180) bps.
<i>SG&A expense, percent of revenue</i>	24.4 %	24.2 %		20 bps.
<i>Effective tax rate</i>	2.7 %	10.5 %		(780) bps.

* Not meaningful

Outside of incremental revenues associated with the Merger, we experienced an increase in revenue in North America across all our business segments in the second half of 2020 as compared to the first half of 2020. This increase was driven by higher activity levels as customer spending began to recover from the compressed levels experienced during the second quarter, coupled with higher demand for our polycrystalline diamond cutters as U.S. land rig count activity began to increase later in the year. Internationally, markets were more resilient during 2020 given the longer sales cycles relative to North America.

Revenue. Revenue for the consolidated entity increased \$768.7 million, or 68%, in 2020 compared to the prior year driven by \$1.2 billion of incremental revenues associated with our acquired Chemical Technologies business. The increase in revenue was offset by a decrease in Drilling Technologies revenue of \$130.7 million year-over-year due to lower volumes and pricing pressure. Additionally, Production & Automation Technologies revenue decreased \$268.4 million year-over-year, driven by lower volumes in North America and internationally, and the disposition of our pressure vessel manufacturing business in the second quarter of 2019.

Gross profit. Gross profit increased \$32.1 million, or 9%, year-over year, primarily due to \$251.8 million generated subsequent to the Merger date by our acquired Chemical Technologies business. This was offset by lower sales volumes in our Production & Automation Technologies and Drilling Technologies segments as well as an increase in consolidated depreciation expense of \$74.1 million. The increase in depreciation expense is primarily due to a change in salvage value estimate for certain of our leased assets.

Selling, general and administrative expense. Selling, general and administrative expense increased \$189.5 million, or 69%, year-over-year, primarily due to \$168.5 million of incremental expenses associated with our acquired Chemical Technologies business as well as acquisition and integration costs of \$83.6 million related to the Merger. The increase also includes \$7.8 million for restructuring costs and \$5.8 million for professional fees incurred related to material weakness remediation. The increase in selling, general and administrative expense was largely offset by cost savings from restructuring actions taken in the second half of 2019 to mitigate the impact of lower drilling activity levels and the second quarter of 2020 to address the energy downturn and the impact of the COVID-19 pandemic.

Interest expense, net. Interest expense, net increased \$12.4 million, or 32%, year-over-year primarily due to incremental interest expense related to the term loan assumed as part of the Merger, partially offset by repayments of approximately \$125.0 million of the Company's term loan during the year.

Provision for (benefit from) income taxes. The effective tax rates for 2020 and 2019 were 2.7% and 10.5% respectively. The tax benefit recognized during 2020 reflects the loss before income taxes, largely due to goodwill and intangible asset impairment charges recorded during the first quarter. The effective tax rate was primarily impacted by the tax effects of impairment of non-taxable goodwill of \$560.1 million. Other items impacting the rate include the effects of valuation allowances in loss jurisdictions, foreign branch earnings, transaction costs associated with the Merger, and the impact of rates in foreign jurisdictions.

SEGMENT RESULTS OF OPERATIONS YEARS ENDED DECEMBER 31, 2020 AND 2019

Production Chemical Technologies

(dollars in thousands)	Year Ended December 31, 2020 ⁽¹⁾	
Revenue	\$	992,805
Operating profit		94,294
Operating profit margin		9.5 %
Depreciation and amortization	\$	58,328
Restructuring and other related charges		5,241

(1) The results of operations of the Production Chemical Technologies segment are reflected in the table above from the closing date of the Merger through December 31, 2020. As such, there are no results presented for the year ended December 31, 2019.

Revenue. Production Chemical Technologies revenue is primarily generated from providing E&P and other customers in the oil and natural gas production and midstream markets with solutions to manage and control corrosion, oil and water separation, flow assurance, sour gas treatment and a host of water-related issues. Revenue was \$992.8 million for the period. Deteriorating market conditions during 2020 have significantly impacted customer demand; however, as Production Chemical Technologies mostly supports existing production, sales are somewhat less sensitive to changes in customers' capital and operating expenditure budgets related to the exploration for and development of new oil and natural gas reserves, which are more directly affected by trends in oil and natural gas prices.

Operating profit. Production Chemical Technologies generated operating profit of \$94.3 million during the year ended December 31, 2020, which includes depreciation and amortization expense of \$58.3 million and an increase to cost of goods sold related to the step-up of inventory as part of the purchase price allocation as a result of the Merger of \$13.9 million.

Production & Automation Technologies

(dollars in thousands)	Years Ended December 31,		2020 vs. 2019	
	2020	2019	\$	%
Revenue	\$ 615,918	\$ 884,364	\$ (268,446)	(30)%
Operating profit (loss)	(697,937)	54,024	(751,961)	*
Operating profit margin	(113.3)%	6.1 %		(11,940) bps
Depreciation and amortization	\$ 130,725	\$ 110,131	20,594	19 %
Goodwill impairment	616,271	—	616,271	*
Long-lived asset impairment	40,980	1,746	39,234	*
Restructuring and other related charges	11,814	8,562	3,252	38 %
Environmental costs	—	1,988	(1,988)	(100)%
Acquisition transaction costs	1,173	589	584	99 %

* Not meaningful

Revenue. Production & Automation Technologies revenue decreased \$268.4 million, or 30%, in 2020 compared to the prior year, driven by lower volumes in North America and internationally due to the impact of deteriorating market conditions during the year, and the disposition of our pressure vessel manufacturing business in the second quarter of 2019.

Operating profit. Production & Automation Technologies operating profit decreased \$752.0 million in 2020 primarily driven by goodwill and long-lived asset impairment charges of \$616.3 million and \$41.0 million, respectively, in the first quarter of 2020. Excluding impairment charges, operating profit decreased \$96.5 million, primarily due to lower sales volume and an increase in depreciation and amortization expense of \$20.6 million, primarily related to a change in salvage value estimate for certain of our leased assets. These costs were partially offset by cost savings from restructuring actions as well as other cost reduction efforts in response to the COVID-19 pandemic.

Drilling Technologies

(dollars in thousands)	Years Ended December 31,		2020 vs. 2019	
	2020	2019	\$	%
Revenue	\$ 116,186	\$ 246,887	\$ (130,701)	(53) %
Operating profit	2,574	73,497	(70,923)	(97) %
Operating profit margin	2.2 %	29.8 %		(2,760) bps
Depreciation and amortization	\$ 7,940	\$ 9,263	\$ (1,324)	(14) %
Restructuring and other related charges	5,521	710	4,811	*

* Not meaningful

Revenue. Drilling Technologies revenue decreased \$130.7 million, or 53%, in 2020 compared to the prior year, primarily due to a steep decline in U.S. land-based rig count and associated decline in customer spending on drilling activities, which negatively impacted sales volumes of our polycrystalline diamond cutters and diamond bearings products.

Operating profit. Drilling Technologies operating profit decreased \$70.9 million, or 97%, in 2020 compared to the prior year due to lower revenue and increased restructuring charges of \$4.8 million associated with employee severance and related benefits, partially offset by productivity savings.

Reservoir Chemical Technologies

(dollars in thousands)	Year Ended December 31, 2020 ⁽¹⁾
Revenue	\$ 61,507
Operating profit (loss)	(6,198)
Operating profit (loss) margin	(10.1)%
Depreciation and amortization	\$ 5,741
Restructuring and other related charges	348

(1) The results of operations of the Reservoir Chemical Technologies segment are reflected in the table above from the closing date of the Merger through December 31, 2020. As such, there are no results presented for the year ended December 31, 2019.

Revenue. Reservoir Chemical Technologies revenue is primarily comprised of the sale of specialty products that support well stimulation, construction (including drilling and cementing), and remediation needs to service and equipment companies that support global E&P companies. Revenue was \$61.5 million for the period. Reservoir Chemical Technologies products are sensitive to changes in its customers' capital expenditure budgets as they relate closely to the exploration and development of new oil and natural gas reserves. This exploration and development activity is affected by trends in oil and natural gas prices and its customers' corresponding levels of drilling activity, capital investment and well development.

Operating profit/loss. Reservoir Chemical Technologies generated operating loss of \$6.2 million for the year ended December 31, 2020, which includes depreciation and amortization expense of \$5.7 million and an increase in cost of goods sold related to the step-up of inventory as part of the purchase price allocation as a result of the Merger of \$0.6 million.

CAPITAL RESOURCES AND LIQUIDITY

As of December 31, 2020, approximately \$88.0 million, or 44%, of our cash balances were held outside the U.S. for the primary purpose of working capital and operational support needs. All of our cash held outside the U.S. could be repatriated and could be subject to foreign withholding taxes; however, we have determined that such earnings are indefinitely reinvested. In addition, we have approximately \$15.7 million in deferred tax liabilities associated with foreign withholding taxes on our foreign earnings from jurisdictions which are not asserted to be permanently reinvested.

Cash Flows

(in thousands)	Years Ended December 31,	
	2020	2019
Cash provided by operating activities	\$ 310,040	\$ 155,899
Cash provided by (used for) investing activities	22,130	(49,876)
Cash used for financing activities	(175,366)	(112,403)
Effect of exchange rate changes on cash and cash equivalents	9,327	(162)
Net increase (decrease) in cash and cash equivalents	\$ 166,131	\$ (6,542)

Operating Cash Flows

Cash provided by operating activities in 2020 increased \$154.1 million compared to 2019. The increase in cash provided by operating activities was primarily driven by increases from changes in our operating assets and liabilities in 2020 as compared to 2019, largely due to collection of trade receivables and a reduction in our cash outflows for inventory procurement and cash outflows on leased assets due to strict adherence to cost and capital discipline.

Expenditures for assets that are placed into our leased asset program expected to be recovered through sale are reported in leased assets in the operating section of our consolidated statements of cash flows. All other capitalizable expenditures for assets that are placed into our leased asset program are classified as capital expenditures in the investing section of our consolidated statements of cash flows.

Investing Cash Flows

Cash provided by investing activities was \$22.1 million in 2020 and was primarily comprised of cash acquired in the Merger of \$57.6 million and \$9.7 million of cash proceeds on sale of fixed assets, partially offset by capital expenditures of \$45.2 million. See Note 3—Merger Transaction, Acquisitions, And Dispositions in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K for additional information on the Merger.

Cash used for investing activities was \$49.9 million in 2019 and was primarily comprised of capital expenditures of \$39.8 million, a \$12.5 million payment to acquire a provider of digital technology strategic to our artificial lift product offering and a \$2.2 million payment to dispose of our pressure vessel manufacturing business. These cash outflows were partially offset by \$4.6 million of cash proceeds on sale of fixed assets, primarily due to the sale of two of our properties during 2019. See Note 3—Merger Transaction, Acquisitions, And Dispositions in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K for additional information related to these acquisitions and dispositions.

Capital expenditures in the investing cash flows section of our consolidated statement of cash flows include expenditures for long-term equipment expected to be placed into our leased asset program. During the years ended December 31, 2020 and 2019, capital expenditures consisted mostly of infrastructure related capital spending and investment in assets for our leased asset program of \$20.9 million and \$16.0 million, respectively.

Financing Cash Flows

Cash used for financing activities of \$175.4 million in 2020 was primarily the result of repayments totaling \$161.5 million on our long-term debt, \$4.4 million in debt issuance costs related to the amendment of the credit agreement in contemplation of the Merger, \$5.1 million of payments of finance lease obligations, and a distribution of \$2.2 million to non-controlling interest. Net borrowings under our revolving credit facility totaled zero in 2020 as we borrowed and fully repaid the borrowing within the same period. See Note 8—Debt included in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K.

Cash used for financing activities of \$112.4 million in 2019 was primarily the result of \$105.0 million of debt repayment on the principal balance of our term loan and payments totaling \$5.6 million for finance lease obligations. Net borrowings under our revolving credit facility totaled zero in 2019.

Debt and Liquidity

Total borrowings were comprised of the following:

(in thousands)	December 31,	
	2020	2019
2018 Credit Facility	\$ —	\$ —
2018 Term Loan Facility	140,000	265,000
2020 Term Loan Facility	523,575	—
6.375% Senior Notes due 2026	277,041	300,000
Total borrowings	\$ 940,616	\$ 565,000

2018 Credit Facility

On May 9, 2018, we entered into a credit agreement (“credit agreement”) governing the terms of our senior secured credit facilities, consisting of (i) a 7-year senior secured term loan B facility (“term loan facility”) and (ii) a 5-year senior secured revolving credit facility (“revolving credit facility,” and together with the term loan facility, the “senior secured credit facilities”), with JPMorgan Chase Bank, N.A. as administrative agent. The net proceeds of the senior secured credit facilities were used (i) to pay fees and expenses in connection with the Separation from Dover, (ii) partially fund the cash payment to Dover and (iii) provide for working capital and other general corporate purposes. The senior secured credit facilities are jointly and severally guaranteed by ChampionX and certain of ChampionX’s wholly owned U.S. subsidiaries, including, upon the consummation of the Merger, certain legacy ChampionX wholly owned U.S. subsidiaries, (“guarantors”), on a senior secured basis, and are secured by substantially all tangible and intangible assets of ChampionX and the guarantors, except for certain excluded assets.

At our election, outstanding borrowings under the senior secured credit facilities will accrue interest at a per annum rate of (i) LIBOR plus a margin or (ii) a base rate plus a margin. Interest on borrowings in which interest is accrued at a base rate plus an applicable margin is payable on the last business day of each quarter. The senior secured credit facilities contain a number of customary covenants that, among other things, limit or restrict the ability of ChampionX and the restricted subsidiaries to, subject to certain qualifications and exceptions, perform certain activities which include, but are not limited to (i) incur additional indebtedness, (ii) make acquisitions and (iii) pay dividends or other payments in respect of our capital stock. Additionally, ChampionX is required to maintain (a) a minimum interest coverage ratio, as defined in the credit agreement, of 2.50 to 1.00 and (b) a maximum total leverage ratio, as defined in the credit agreement, of 4.00 to 1.00 through the fiscal quarter ending March 31, 2021, then 3.75 to 1.00 thereafter.

On February 14, 2020, the Company entered into an amendment to the credit agreement (as amended, the “2018 Credit Facility”), which (i) provided for the incurrence of an additional \$150.0 million of revolving commitments under the 2018 Credit Facility, upon consummation of the Merger with legacy ChampionX, (ii) permitted the consummation of the Merger and the incurrence of a senior secured term loan facility (“2020 Term Loan Facility”) in an aggregate amount up to \$537.0 million by legacy ChampionX, and (iii) continued to provide that all obligations under the 2018 Credit Facility are guaranteed by the guarantors. The weighted average interest rate on borrowings during the period was 4.00%.

The revolving credit facility consists of a 5-year senior secured facility with aggregate commitments in an amount equal to \$400.0 million, of which up to \$100.0 million is available for the issuance of letters of credit. Amounts repaid under the revolving credit facility may be re-borrowed. The revolving credit facility matures in May 2023.

A summary of our revolving credit facility as of December 31, 2020 was as follows:

(in millions)	Amount	Debt Outstanding	Letters of Credit	Unused Capacity	Maturity
Five-year revolving credit facility	\$ 400.0	\$ —	\$ 50.4	\$ 349.6	May 2023

As of December 31, 2020, we were in compliance with all restrictive covenants under our revolving credit facility.

2018 Term Loan Facility

The term loan facility had an initial commitment of \$415.0 million. The full amount of the term loan facility was funded on May 9, 2018. Amounts borrowed under the term loan facility that are repaid or prepaid may not be re-borrowed. The term loan facility matures in May 2025. Net proceeds of \$408.7 million from the term loan facility were utilized to partially fund the cash payment to Dover at the Separation and to pay fees and expenses incurred in connection with the Separation.

The term loan is subject to mandatory amortization payments of 1% per annum of the initial commitment of \$415.0 million paid quarterly. Additionally, subject to certain exceptions, the term loan facility is subject to mandatory prepayments, including the amount equal to: 100% of the net cash proceeds of all non-ordinary course asset sales subject to (i) reinvestment periods and (ii) step-downs to 75% and 50% based on certain leverage targets; and 50% of excess cash flow, as defined in the credit agreement, with step-downs to 25% and 0% based on certain leverage targets. ChampionX may voluntarily prepay amounts outstanding under the term loan facility in whole or in part at any time without premium or penalty, as defined in the credit agreement. The weighted average interest rate on borrowings during the period was 3.18%.

2020 Term Loan Facility

On June 3, 2020, legacy ChampionX entered into a term loan facility for \$537.0 million ("2020 Term Loan Facility"). Proceeds from the 2020 Term Loan Facility were utilized to fund a cash payment of \$527.4 million from legacy ChampionX to Ecolab upon the completion of the Merger. We assumed the 2020 Term Loan Facility upon completion of the Merger, which is fully and unconditionally guaranteed by the Company and the guarantors, which also guarantee the obligations under the 2018 Credit Facility. The 2020 Term Loan Facility matures at the earlier of (i) June 3, 2027 or (ii) January 30, 2026 in the event the Company's senior unsecured notes due May 1, 2026 remain outstanding. Amounts outstanding under the 2020 Term Loan Facility bear interest, at the option of the Company, at a rate equal to (a) LIBOR plus 5.0% for eurocurrency rate loans (to the extent LIBOR is less than 1%, the LIBOR rate will be deemed to be 1%) or (b) the highest of (i) the Federal Funds Rate plus 1/2 of 1%, (ii) the "prime rate" quoted by Bank of America, N.A., (iii) LIBOR plus 1.00% and (iv) 1.00%, plus 4.0%. The 2020 Term Loan Facility contains customary representations and warranties, covenants, and events of default for loan facilities of this type. The weighted average interest rate on borrowings during the period was 6.02%.

The term loan is subject to mandatory amortization payments of \$6.7 million paid quarterly, which began on September 30, 2020. Any voluntary prepayment of the 2020 Term Loan Facility which occurs prior to June 3, 2022, is subject to a make-whole prepayment premium on the aggregate prepaid principal amount of the 2020 Term Loan Facility.

Senior Notes

On May 3, 2018, and in connection with the Separation, we completed the offering of \$300.0 million in aggregate principal amount of 6.375% senior notes due May 2026 ("Senior Notes"). Interest on the Senior Notes is payable semi-annually in arrears on May 1 and November 1 of each year and commenced on November 1, 2018. Net proceeds of \$293.8 million from the offering were utilized to partially fund the \$700.0 million cash payment to Dover at the Separation and to pay fees and expenses incurred in connection with the Separation.

Payment obligations of the Senior Notes are fully and unconditionally guaranteed by the guarantors on a joint and several basis. On June 18, 2020, the wholly owned subsidiaries of legacy ChampionX that guarantee the 2018 Credit Facility and the 2020 Term Loan Facility, delivered a Supplemental Indenture to join as guarantors of the Senior Notes.

The terms of the Senior Notes are governed by the indenture dated as of May 3, 2018, between the Company and Wells Fargo Bank, N.A., as trustee, and are guaranteed, on a senior unsecured basis, by the guarantors. At any time prior to May 1, 2021, we may redeem all or part of the Senior Notes at a redemption price equal to 100% of the principal amount of the Senior Notes redeemed plus a premium, as defined in the indenture, plus accrued and unpaid interest. Beginning on or after May 1, 2021, we may redeem the Senior Notes, in whole or in part, at certain tiered redemption prices as defined in the indenture, plus accrued and unpaid interest. The Senior Notes are our senior unsecured obligations. The Senior Notes rank equally in right of payment with our future and existing senior debt but are effectively subordinated to our future and existing debt to the extent of the assets securing such senior debt. The Senior Notes rank senior in right of payment to all of our future subordinated debt.

Tender Offer

During the fourth quarter of 2020, the Company initiated a tender offer to purchase certain of the Senior Notes (the “Tender Offer”). Approximately \$23.0 million in aggregate principal amount of the Senior Notes was repurchased for \$23.4 million in cash, including principal, and \$0.2 million in accrued interest. In connection with these repurchases, we recognized a net loss of approximately \$0.9 million for the year ended December 31, 2020 and is included in other expense, net in our consolidated statement of income (loss).

See Note 8—Debt included in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K.

Outlook

Our primary source of cash is from operating activities. We have historically generated, and expect to continue to generate, positive cash flow from operations. Cash generated from operations is generally allocated to working capital requirements, investments in facilities and systems, acquisitions that create value with bolt-on capabilities that broaden our existing business offerings and overall growth strategy, and debt repayments.

We expect to generate our liquidity and capital resources through operations and, when needed, through our revolving credit facility. The volatility in credit, equity and commodity markets resulting from current market conditions can create uncertainty for our businesses. However, the Company believes, based on our current financial condition and current expectations of future market conditions, that we will meet our short- and long-term needs with a combination of cash on hand, cash generated from operations, our use of our revolving credit facility and access to capital markets.

Over the next year, we expect to fund our capital expenditures and reduce outstanding debt through earnings and working capital improvements. In 2021, we project capital spending to be approximately three percent of revenue for infrastructure related capital expenditures, inclusive of capital investments directed at expanding our portfolio of electric submersible pump leased assets.

Additionally, we have other purchase obligations as well as operating and finance leases for real estate, vehicles and equipment that include future minimum payments with initial terms of one year or more. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. See Note 9—Commitments And Contingencies and Note 10—Leases included in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K.

We continue to evaluate acquisitions that meet our strategic priorities, expand our technology and product portfolio, improve our cost position or productivity, or broaden our geographic reach.

As of December 31, 2020, we had approximately \$88.8 million in outstanding letters of credit, surety bonds, and guarantees which expire at various dates through 2026. These financial instruments are primarily maintained as security for insurance, warranty, and other performance obligations. Generally, we would only be liable for the amount of these letters of credit and surety bonds in the event of default in the performance of our obligations, the probability of which we believe is remote.

CONDENSED CONSOLIDATING FINANCIAL INFORMATION

Senior Notes

See Note 8—Debt, included in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K, for information related to our Senior Notes, which are fully and unconditionally guaranteed by certain wholly owned subsidiaries (the “Guarantors”) of ChampionX on a joint and several basis. On June 18, 2020, the wholly owned subsidiaries of legacy ChampionX that guarantee the 2018 Credit Facility and the 2020 Term Loan Facility, delivered a Supplemental Indenture to join as guarantors of the Senior Notes.

The Senior Notes indenture restricts the ability of the Guarantors to pay dividends or other distributions, make loans or advances, or sell, lease or otherwise transfer property and other assets to certain restricted subsidiaries or the Company. As part of the Senior Notes indenture, a guarantee of the Senior Notes by ChampionX or a Guarantor is subject to release in the following circumstances:

- the sale, exchange or transfer (by merger or otherwise) of (i) the capital stock of the Guarantor after which the Guarantor is no longer a restricted subsidiary or (ii) all or substantially all of the assets of such Guarantor made in a manner not in violation of the indenture;
- the release or discharge of the guarantee by, or direction obligation of, such Guarantor with respect to the senior secured credit facilities or capital markets debt securities that resulted in the creation of such guarantee, except a discharge by or as a result of payment under such guarantee;
- the designation of the subsidiary as an unrestricted subsidiary under the indenture;
- the legal defeasance or covenant defeasance of the Senior Notes in accordance with the terms of the indenture;
- the merger or consolidation of any Guarantor with and into the Company or another Guarantor that is the surviving person in such merger or consolidation, or upon the liquidation of such Guarantor following the transfer of all its assets to the Company or another Guarantor; or
- an amendment of the Senior Note indenture agreement.

The obligations of each Guarantor under its note guarantee are limited as necessary to prevent such note guarantee from constituting a fraudulent conveyance under applicable law.

The following summarized financial information presents the Company and Guarantors (collectively and together with the Parent, the “Obligor Group”) on a combined basis:

Condensed Combined Statement of Loss of the Obligor Group

(dollars in thousands)	Year Ended December 31, 2020	
Total Revenue	\$	1,791,463
Cost of goods and services		1,399,575
Selling, general and administrative expense		447,127
Goodwill impairment		396,017
Long-lived asset impairment		40,980
Loss before income taxes		(541,394)
Net loss	\$	(502,990)

Condensed Combined Balance Sheets of the Obligor Group

(dollars in thousands)	December 31,	
	2020	2019
Current assets:		
Current assets	\$ 1,195,251	\$ 419,692
Noncurrent assets:		
Goodwill	631,184	639,280
Advances due from affiliates	16,558	18,534
Other non-current assets	1,473,605	430,553
Total assets	\$ 3,316,598	\$ 1,508,059
Current liabilities:		
Current liabilities	\$ 591,625	\$ 173,372
Noncurrent liabilities:		
Advances due to affiliates	91,495	87,682
Other non-current liabilities	1,210,016	664,581
Total Liabilities	\$ 1,893,136	\$ 925,635

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make certain estimates, judgments and assumptions about future events that affect the reported amounts of assets and liabilities at the date of the financial statements, the reported amounts of revenue and expenses during the periods presented and the related disclosures in the accompanying notes to the consolidated financial statements. Management reviewed these critical accounting estimates with the Audit Committee of the Board of Directors. We believe the following critical accounting estimates used in preparing our consolidated financial statements address all important areas where the nature of the estimates or assumptions is material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change. See Note 1—Basis Of Presentation And Summary Of Significant Accounting Policies in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K for a description of our significant accounting policies.

Determination of Fair Value in Business Combinations

Accounting for the acquisition of a business requires allocation of the purchase price to the various assets acquired and liabilities assumed at their respective fair values. The determination of fair value requires the use of significant estimates and assumptions, and in making these determinations management uses all available information. If necessary, we have up to one year after the acquisition closing date to finalize these fair value determinations. For tangible and identifiable intangible assets acquired in a business combination, the determination of fair value utilizes several valuation methodologies including discounted cash flows which has assumptions with respect to the timing and amount of future revenue and expenses associated with an asset. The assumptions made in performing these valuations include, but are not limited to, discount rate, future revenues and operating costs, projections of capital costs, royalty rate, and other assumptions believed to be consistent with those used by principal market participants. Due to the specialized nature of these calculations, we engage third-party specialists to assist management in evaluating our assumptions as well as appropriately measuring the fair value of assets acquired and liabilities assumed.

Inventory Valuation

Inventory is recorded at the lower of cost or net realizable value. We evaluate the components of inventory on a regular basis for excess and obsolescence. We record the decline in the carrying value of estimated excess or obsolete inventory as a reduction of inventory and as an expense included in cost of goods and services in the period in which it is identified. Our estimate of excess and obsolete inventory is susceptible to change from period to period and requires management to make judgments about the future demand of inventory. Factors that could materially impact our estimate include changes in crude oil prices and its effect on the oil and gas industry, which would impact the demand for our products and services, as well as changes in the pattern of demand for the products that we offer. We believe our inventory valuation reserve is adequate to

properly value potential excess and obsolete inventory as of December 31, 2020. However, any significant changes to the factors mentioned above could lead our estimate to change. See Note 1—Basis Of Presentation And Summary Of Significant Accounting Policies in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K for additional information related to inventory.

Long-Lived and Intangible Assets Valuation

Long-lived assets to be held and used, including property, plant and equipment, identifiable intangible assets being amortized and capitalized software costs are reviewed for impairment whenever events or circumstances indicate the carrying amount of the long-lived asset may not be recoverable. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. If it is determined that an impairment loss occurred, the loss is measured as the amount by which the carrying amount of the long-lived asset exceeds its fair value. The determination of future cash flows as well as the estimated fair value of long-lived assets involves significant estimates on the part of management. Because there usually is a lack of quoted market prices for long-lived assets, the fair value of impaired assets is typically determined based on the present values of expected future cash flows using discount rates believed to be consistent with those used by principal market participants, or based on a multiple of operating cash flow validated with historical market transactions of similar assets, where possible. The expected future cash flows used for impairment reviews and related fair value calculations are based on judgmental assessments of future productivity of the asset, operating costs and capital decisions and all available information at the date of review. If future market conditions deteriorate from our current expectations or assumptions, impairment of long-lived assets may be identified if we conclude that the carrying amounts are no longer recoverable. Long-lived assets classified as held for sale are reported at the disposal group's fair value, less cost to sell, beginning in the period in which the held-for-sale criteria have been met. An impairment loss is recognized in the amount in which the carrying amount of the disposal group exceeds its fair value. The fair value of a disposal group is measured based on market information when available, such as negotiated selling price. Because there usually is a lack of quoted market prices for long-lived assets, the fair value of impaired held for sale assets is typically determined based on the present values of expected future cash flows using discount rates believed to be consistent with those used by principal market participants. In the first quarter of 2020, we determined that certain events as discussed below in Valuation of Goodwill constituted a triggering event which caused us to review all asset groups within our Artificial Lift and Automation reporting units. As a result of this analysis, we recorded a long-lived asset impairment charge of \$41.0 million, related to definite-lived intangible assets during 2020. During 2019 and 2018, we recognized impairment charges of \$1.7 million and \$1.0 million, respectively, related to tangible long-lived assets.

Valuation of Goodwill

Goodwill is not subject to amortization but is tested for impairment on an annual basis, or more frequently if impairment indicators arise. Goodwill is tested at the reporting unit level, which is at or one level below our operating segments. We have established October 1 as the date of our annual test for impairment of goodwill for the legacy Apergy reporting units which consist of (i) Artificial Lift, (ii) Automation, and (iii) Drilling Technologies. Artificial Lift and Automation are reported in our Production & Automation Technologies reportable segment, and Drilling Technologies in our Drilling Technologies reportable segment. As a result of the Merger, we added two reporting units (i) Production Chemical Technologies and (ii) Reservoir Chemical Technologies for which the goodwill annual testing date is May 31.

Determining the fair value of a reporting unit is judgmental in nature and involves the use of significant estimates and assumptions. The goodwill impairment test involves comparing management's estimate of fair value of a reporting unit with its carrying value, including goodwill. If the fair value of the reporting unit is less than the carrying value, then goodwill is impaired to the extent of the difference; however, the impairment may not exceed the balance of goodwill assigned to that reporting unit.

Fair value of reporting units is determined using a combination of two valuation methods: an income approach and a market approach, with each method given equal weight in determining the fair value assigned to each reporting unit. Absent an indication of fair value from a potential buyer or similar specific transaction, we believe the use of these two methods provides a reasonable estimate of a reporting unit's fair value.

The income approach is based on forecasted future debt-free cash flows that are discounted to present value using factors that consider timing and risk of future cash flows. We believe this approach is appropriate because it provides a fair value estimate based upon the reporting unit's expected long-term operating cash flow performance. Discounted cash flow projections are based on financial forecasts developed from operating plans and economic outlooks, growth rates, estimates of future expected changes in operating margins, terminal value growth rates, future capital expenditures and changes in working capital requirements. Estimates of discounted cash flows may differ from actual cash flows due to, among other things, changes in

economic conditions which are inherently uncertain, unpredictable, and do not reflect unanticipated events and circumstances that may occur, changes to business models, regulatory or political environment changes, changes in customer demand, changes in our weighted average cost of capital (“WACC”), or changes in operating performance. The discount rate applied to the estimated future cash flows is one of the most significant assumptions utilized under the income approach. We determine the appropriate discount rate for each reporting unit based on the WACC for each individual reporting unit. The WACC takes into account both the pre-tax cost of debt and cost of equity, as well as, company-specific risks associated with each reporting unit.

The market approach estimates fair value by first determining earnings before interest, taxes, depreciation and amortization (“EBITDA”) multiples for comparable publicly traded companies with similar characteristics of the reporting unit. The EBITDA multiples for comparable companies are based upon current enterprise value. The enterprise value is based upon current market capitalization and includes a control premium. We believe this approach is appropriate as it provides a fair value estimate using multiples from entities with operations and economic characteristics comparable to its reporting unit; however, past performance may not be indicative of future performance, especially in our current market environment.

Certain of the inherent estimates and assumptions used in determining fair value of the reporting units are outside of the control of management. While the Company believes it has made reasonable estimates and assumptions to calculate the fair values of the reporting units, actual results may differ from those used in the Company’s valuations and could result in impairment charges. The Company will continue to monitor its reporting units for any triggering events or other signs of impairment. The Company may be required to perform interim impairment tests based on changes in the economic environment, further sustained deterioration of the Company’s market capitalization, and other factors in the future.

During the first quarter of 2020, we performed an interim quantitative analysis as certain events, such as the COVID-19 pandemic and the unprecedented decline in oil prices, impacted our future revenues and cash flows and were deemed to be a triggering event. In performing the quantitative assessment, we estimated the fair value of each of our reporting units using a combination of the income and market approaches, which determined that the fair values were less than the respective carrying values for our Artificial Lift and Automation reporting units. Significant assumptions used in our March 31, 2020 goodwill impairment review included: (i) WACC ranging from 14.5% to 16.5%; (ii) annual revenue growth rates generally ranging from (56%) to 42% in the short term and 3% to 25% in the long term; (iii) operating margins ranging from (11%) to 25% in the short term associated with market declines, but sustained or slightly increased gross margins long term; (iv) terminal values for each reporting unit using a long-term growth rate of 3%; and (v) peer group EBITDA multiples. As a result, we recorded a goodwill impairment charge totaling \$616.3 million, which consisted of a \$539.2 million charge in Artificial Lift and a \$77.1 million charge in Automation. As part of our annual goodwill impairment analysis, on October 1, we performed a qualitative goodwill impairment analysis for each of our legacy Apergy reporting units. We concluded that goodwill related to those reporting units was not impaired and further quantitative testing was not required. In addition, there were no negative conditions, or triggering events, that occurred subsequent to our annual goodwill impairment analysis requiring us to perform additional impairment reviews.

Accounting for Income Taxes

Our income tax expense, and deferred tax asset and liability balances reflect management’s best assessment of estimated future taxes to be paid. We are subject to income taxes in the United States and certain foreign jurisdictions. Significant judgments and estimates are required in determining our consolidated income tax expense. In determining our current income tax provision, we assess temporary differences resulting from differing treatments of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are recorded on our consolidated balance sheets. Deferred tax assets and liabilities are measured using the tax rates that are expected to apply to taxable income for the years in which those tax assets and liabilities are expected to be realized or settled. When we maintain deferred tax assets, we must assess the likelihood that these assets will be recovered through adjustments to future taxable income. To the extent we believe recovery is not likely, we establish a valuation allowance to reduce the asset to a value we believe will be recoverable based on our expectation of future taxable income. We believe the accounting estimate related to the valuation allowance is a critical accounting estimate because it is susceptible to change from period to period, requires management to make assumptions about our future income over the lives of the deferred tax assets, and because the impact of increasing or decreasing the valuation allowance is potentially material to our results of operations.

The calculation of our income tax expense involves dealing with uncertainties in the application of complex tax laws and regulations in numerous jurisdictions in which we operate. We recognize tax benefits related to uncertain tax positions when, in our judgment, it is more likely than not that such positions will be sustained on examination, including resolutions of any related appeals or litigation, based on the technical merits. We adjust our liabilities for uncertain tax positions when our judgment changes as a result of new information previously unavailable. We routinely monitor the potential impact of these

situations. The total amount of unrecognized tax benefits at December 31, 2020 was \$0.9 million. The total balance of unrecognized tax benefit would impact the Company's future effective income tax rate if recognized.

Recently Issued Accounting Standards

See Note 2—New Accounting Standards in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We may be exposed to certain market risks arising from the use of financial instruments in the ordinary course of business. This risk arises primarily as a result of potential changes in the fair value of financial instruments due to adverse fluctuations in commodity prices, foreign currency exchange rates, and interest rates as discussed below. We do not use derivative financial instruments where the objective is to generate profits solely from trading activities.

Commodity Price Risk

We use a variety of raw materials, primarily metals and semi-processed or finished components, that are generally available from various sources. Commodity pricing for metals, such as nickel, chrome, molybdenum, vanadium, manganese and steel scrap, fluctuate with the market. As a result, our earnings are exposed to commodity market price fluctuations. Although some cost increases may be recovered through increased prices to customers, we attempt to control such costs through fixed-price contracts with suppliers and various other programs, such as our global supply chain activities.

Foreign Currency Risk

We conduct operations around the world in a number of different currencies. Many of our foreign subsidiaries have designated the local currency as their functional currency. Our earnings are therefore subject to change due to fluctuations in foreign currency exchange rates when the earnings in foreign currencies are translated into U.S. dollars. We do not hedge this translation impact on earnings. A 10% increase or decrease in the average exchange rates of all foreign currencies would have changed our revenue and income before income taxes by approximately 3.3% and 0.2%, respectively, for the year ended December 31, 2020.

When transactions are denominated in currencies other than our subsidiaries' respective functional currencies, both with external parties and intercompany relationships, these transactions result in increased exposure to foreign currency exchange effects. The Company uses foreign currency forward contracts to manage risks associated with foreign currency exchange rates. As of December 31, 2020, the amount of gain or loss in the fair value of derivative instruments that would have resulted from a 10% increase or decrease in the underlying price of the contracts was not material.

Interest Rate Risk

Our use of fixed- or variable-rate debt directly exposes us to interest rate risk. Fixed-rate debt, such as the Senior Notes, exposes us to changes in the fair value of our debt due to changes in market interest rates. Fixed-rate debt also exposes us to the risk that we may need to refinance maturing debt with new debt at higher rates, or that we may be obligated to pay rates higher than the current market rate. Variable-rate debt, such as our term loans or borrowings under our revolving credit facility, exposes us to short-term changes in market rates that impact our interest expense.

As of December 31, 2020, we had unhedged variable rate debt of \$140.0 million related to our 2018 Term Loan Facility with a weighted average interest rate of 3.18%. A hypothetical 10% adverse movement in the interest rate, or 32 basis points, would result in an increase to interest expense of \$0.8 million on an annualized basis.

We also had unhedged variable rate debt of \$523.6 million related to our 2020 Term Loan Facility with an interest rate of 6.02%. A hypothetical 10% adverse movement in the interest rate, or 60 basis points, would result in an increase to interest expense of \$1.1 million. As the 2020 Term Loan Facility was acquired as part of the Merger on June 3, 2020, we have calculated the interest rate sensitivity on the interest expense expected to be incurred for the period subsequent to the Merger date through December 31, 2020.

Fair Value of Financial Instruments

The fair value of our fixed-rate long-term debt and variable rate debt is estimated based on quoted market prices or prices quoted from third-party financial institutions. We do not currently intend to enter into any interest rate hedging agreements, but will continue to monitor interest rate exposure. See Note 16—Fair Value Measurements in Part II, Item 8.—Financial Statements and Supplementary Data of this Annual Report on Form 10-K for further discussion of our financial instruments.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of ChampionX Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of ChampionX Corporation and its subsidiaries (the “Company”) as of December 31, 2020 and 2019, and the related consolidated statements of income (loss), comprehensive income (loss), changes in stockholders’ equity and cash flows for each of the three years in the period ended December 31, 2020, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2020 appearing under Item 16 (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements 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. Our audit of internal control over financial reporting 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Management’s Annual Report on Internal Control over Financial Reporting, management has excluded ChampionX Holding Inc. (“legacy ChampionX”) from its assessment of internal control over financial reporting as of December 31, 2020, because it was acquired by the Company in a purchase business combination during 2020. We have also excluded legacy ChampionX from our audit of internal control over financial reporting. Legacy ChampionX, whose total assets and total revenues excluded from management’s assessment and our audit of internal control over financial reporting, represent approximately 62% and 53%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2020.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) 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 matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Goodwill and Long-lived Intangible Asset Interim Impairment Assessments – Artificial Lift and Automation Reporting Units and Artificial Lift Customer Relationships Intangible Assets

As described in Note 7 to the consolidated financial statements, the Company's consolidated goodwill balance was \$680.6 million as of December 31, 2020, of which \$191.5 million relates to the Production & Automation Technologies reportable segment. The Company's consolidated net carrying amount of definite-lived intangible assets was \$475.4 million as of December 31, 2020, of which \$271.8 million relates to customer relationships. As disclosed by management, goodwill is tested for impairment on an annual basis, or more frequently if impairment indicators arise. Goodwill is tested at the reporting unit level, which is at or one level below the operating segments. The goodwill impairment test involves comparing management's estimate of fair value of a reporting unit with its carrying value, including goodwill. If the fair value of the reporting unit is less than the carrying value, then goodwill is impaired to the extent of the difference; however, the impairment may not exceed the balance of goodwill assigned to that reporting unit. Fair value of reporting units is determined by management using a combination of two valuation methods: an income approach and a market approach. As disclosed by management, long-lived assets to be held and used, including identifiable intangible assets being amortized, are reviewed for impairment whenever events or circumstances indicate the carrying amount of the long-lived asset may not be recoverable. If it is determined that an impairment loss has occurred, the loss is measured as the amount by which the carrying amount of the long-lived asset exceeds its fair value. The fair value of impaired assets is typically determined by management using an income approach based on the present values of expected future cash flows using discount rates believed to be consistent with those used by principal market participants, or based on a multiple of operating cash flow validated with historical market transactions of similar assets where possible. Management determined that events and negative market indicators and their related impact to future revenues and cash flows constituted a triggering event in the first quarter of 2020, requiring management to perform a recoverability test of the long-lived assets and an interim impairment assessment of goodwill as of March 31, 2020. As a result of these analyses, during the first quarter of 2020, management recorded a long-lived asset impairment charge of \$40.4 million to customer relationships and an impairment charge to goodwill consisting of \$539.2 million and \$77.1 million in the Artificial Lift reporting unit and the Automation reporting unit, respectively, both of which are part of the Production & Automation Technologies reportable segment. Determining the fair value of a reporting unit as well as estimating the fair value of long-lived intangible assets is judgmental in nature and involves the use of significant estimates and assumptions on the part of management. Management's significant assumptions used in estimating the reporting unit fair values under the income-based valuation method include the annual revenue growth rates, operating margins, risk-adjusted discount rate, and terminal value determined using a long-term growth rate. Under the

market approach, management estimated fair value based on comparable companies' market multiples of revenues and earnings before interest, taxes, depreciation and amortization. Management's significant assumptions used in determining the fair value of long-lived intangible assets include operating margins, peer group EBITDA multiples, and the discount rate.

The principal considerations for our determination that performing procedures relating to the interim goodwill and long-lived intangible asset impairment assessments, specifically related to the Artificial Lift and Automation reporting units and Artificial Lift customer relationships intangible assets, is a critical audit matter are (i) the significant judgment by management when determining the fair value measurements of the reporting units and customer relationships intangible assets; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to the annual revenue growth rates, operating margins, and the risk-adjusted discount rate for goodwill and the operating margins and discount rate for customer relationships; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill and long-lived intangible asset impairment assessments, including controls over the valuation of the Artificial Lift and Automation reporting units and Artificial Lift customer relationships intangible assets. These procedures also included, among others, testing management's process for determining the fair value estimates, including evaluating the appropriateness of the income approaches; testing the completeness and accuracy of the underlying data used in the income approaches; and evaluating the significant assumptions used by management related to the annual revenue growth rates, operating margins, and the risk-adjusted discount rate for goodwill and the operating margins and discount rates for customer relationships. Evaluating management's significant assumptions related to the annual revenue growth rates and operating margins for goodwill and the operating margins for customer relationships involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting units; (ii) the consistency with external market and industry data; and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's valuation methods and the risk-adjusted discount rate significant assumption for goodwill and discount rate for customer relationships.

Consolidated Financial Statements - Impact of Resources and Controls Related to Control Environment and Risk Assessment

The completeness and accuracy of the consolidated financial statements, including the financial condition, results of operations and cash flows, is dependent on, in part, (i) maintaining a sufficient complement of personnel with the appropriate level of knowledge, experience and training in financial reporting, (ii) designing and maintaining effective information technology general controls for systems used in the preparation of the financial statements, including access to system capabilities and (iii) journal entries being completely and accurately recorded to the appropriate accounts.

The principal considerations for our determination that performing procedures relating to the consolidated financial statements—impact of resources and controls related to control environment and risk assessment is a critical audit matter are the high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating audit evidence related to business processes and information systems, which affect substantially all financial statement account balances and disclosures. As disclosed by management, material weaknesses existed during the year related to this matter.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to segregation of duties around creation and posting of journal entries and review of manual journal entries. These procedures included, among others, (i) evaluating and determining the nature and extent of audit procedures performed and evidence obtained that are responsive to the material weaknesses previously identified, and (ii) testing transactions to evaluate whether segregation of duties was maintained with respect to the Company's information technology systems. Professionals with specialized skill and knowledge were used to assist in selecting journal entries for purposes of examining the underlying documentation and evaluating the appropriateness of the journal entries recorded.

Leased Asset Program - ESP

As described in Notes 1, 10 and 20 to the consolidated financial statements, the Company had \$64.6 million of leased assets in the electric submersible pump (“ESP”) leased asset program, which is reported in the Production & Automation Technologies segment as of December 31, 2020. At the time of purchase, assets are recorded to inventory and are transferred to property, plant, and equipment when a customer contracts for an asset under the leased asset program and are depreciated over their estimated useful lives. During the year ended December 31, 2020, management transferred \$15.3 million of inventory into property, plant, and equipment as a result of assets entering the Company’s lease program. The lease arrangements generally allow customers to rent equipment on a daily basis with no stated end date. Management accounts for these arrangements as a daily renewal option beginning on the lease commencement date, with the lease term determined as the period in which it is reasonably certain the option will be exercised. The lease arrangements generally include lease and non-lease components for which revenue is recognized based on each component’s standalone price. Lease revenue is recognized on a straight-line basis over the term of the lease and is included in lease and other revenue in the consolidated statement of income (loss). Certain contracts allow for leased equipment damaged in operation to be charged to the customer. Charges for damaged leased equipment is recorded as product revenue and the remaining net book value of the leased asset is expensed as costs of goods and services in the consolidated statements of income (loss).

The principal considerations for our determination that performing procedures relating to the ESP leased asset program is a critical audit matter are the high degree of auditor judgment, subjectivity, and effort in performing procedures and in evaluating the audit evidence obtained related to management’s accounting for ESP leased assets. As disclosed by management, material weaknesses existed during the year related to this matter.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the ESP leased asset program. These procedures included, among others, for a selection of leased asset arrangements: (i) evaluating the terms and conditions of leased asset arrangements, (ii) confirmation of leased asset arrangements with customers, (iii) performing physical inventory observations for a sample of assets not currently included in lease asset arrangements, (iv) evaluating the timing of revenue recognition for damaged leased equipment, and (v) evaluating the period end reserve related to product revenue from damaged leased equipment.

Merger with Legacy ChampionX – Valuation of Intangible Assets

As described in Note 3 to the consolidated financial statements, on June 3, 2020 the Company completed the acquisition of the legacy ChampionX business through the merger of one of its wholly owned subsidiaries with legacy ChampionX. The fair value of consideration transferred was \$1,294.9 million and resulted in \$290.0 million of identifiable intangible assets being recognized. As disclosed by management, accounting for the acquisition of a business requires allocation of the purchase price to the various assets acquired and liabilities assumed at their respective fair values. The determination of fair value requires the use of significant estimates and assumptions by management. For identifiable intangible assets acquired in a business combination, the determination of fair value utilizes valuation methodologies including discounted cash flows. The assumptions made by management in performing these valuations include the discount rate, future revenues and operating costs, projections of capital costs, and the royalty rate.

The principal considerations for our determination that performing procedures relating to the merger with legacy ChampionX is a critical audit matter are (i) the high degree of auditor judgment and subjectivity in applying procedures relating to the fair value measurement of intangible assets acquired due to the significant judgment by management when developing the estimate; (ii) significant audit effort in evaluating the significant assumptions relating to the estimate, such as the future revenues, operating costs, and the discount rate; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the accounting for the merger, including controls over the significant assumptions used in management’s valuation of the intangible assets. These procedures also included, among others reading the purchase agreement and testing management’s process for estimating the fair value of intangible assets. Testing management’s process included evaluating the appropriateness of the valuation methods, testing the completeness and accuracy of data provided by management, and evaluating the reasonableness of significant assumptions related to the future revenues, operating costs, and the discount rate for the intangible assets. Evaluating the reasonableness of the future revenues and operating costs involved considering the past performance of the

acquired business, as well as economic and industry forecasts. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's discounted cash flows method and the discount rate significant assumption.

/s/ PricewaterhouseCoopers LLP
Houston, Texas
March 1, 2021

We have served as the Company's auditor since 2017.

CHAMPIONX CORPORATION
CONSOLIDATED STATEMENTS OF INCOME (LOSS)

(in thousands, except per share data)	Years Ended December 31,		
	2020	2019	2018
Product revenue	\$ 1,623,464	\$ 986,341	\$ 1,072,917
Service revenue	218,089	96,310	100,634
Lease and other revenue	58,443	48,600	44,605
Total revenue	1,899,996	1,131,251	1,218,156
Cost of goods and services	1,490,824	754,147	801,152
Gross profit	409,172	377,104	417,004
Selling, general and administrative expense	463,767	274,268	263,957
Goodwill impairment	616,271	—	—
Long-lived asset impairment	40,980	1,746	990
Interest expense, net	51,731	39,301	27,648
Other expense, net	(828)	2,603	3,056
Income (loss) before income taxes	(762,749)	59,186	121,353
Provision for (benefit from) income taxes	(20,396)	6,226	28,162
Net income (loss)	(742,353)	52,960	93,191
Less: Net income attributable to noncontrolling interest	1,577	796	454
Net income (loss) attributable to ChampionX	\$ (743,930)	\$ 52,164	\$ 92,737
Earnings (losses) per share attributable to ChampionX: *			
Basic	\$ (5.01)	\$ 0.67	\$ 1.20
Diluted	\$ (5.01)	\$ 0.67	\$ 1.19
Weighted-average shares outstanding: *			
Basic	148,370	77,427	77,342
Diluted	148,370	77,624	77,692

* See Note 15—Earnings Per Share.

The accompanying notes are an integral part of the consolidated financial statements.

CHAMPIONX CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(in thousands)	Years Ended December 31,		
	2020	2019	2018
Net income (loss)	\$ (742,353)	\$ 52,960	\$ 93,191
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments ⁽¹⁾	20,245	936	(14,210)
Cash flow hedges	(2,320)	—	—
Pension and other post-retirement benefit plans:			
Net actuarial gain (loss) arising during period	(5,526)	(2,521)	856
Prior service cost arising during period	22	(190)	—
Reclassification adjustment for net actuarial loss included in net income	356	272	247
Reclassification adjustment for prior service costs included in net income	—	1	—
Reclassification adjustment for settlement losses included in net income	505	371	353
Total pension and other post-retirement benefit plans ⁽²⁾	(4,643)	(2,067)	1,456
Other comprehensive income (loss)	13,282	(1,131)	(12,754)
Comprehensive income (loss)	(729,071)	51,829	80,437
Less: Comprehensive income attributable to noncontrolling interest	1,577	796	454
Comprehensive income (loss) attributable to ChampionX	<u>\$ (730,648)</u>	<u>\$ 51,033</u>	<u>\$ 79,983</u>

⁽¹⁾ Net of income tax (expense) benefit of nil for the years ended December 31, 2020, 2019, and 2018, respectively.

⁽²⁾ Net of income tax (expense) benefit of \$1,878, \$347, and \$352 for the years ended December 31, 2020, 2019, and 2018, respectively.

The accompanying notes are an integral part of the consolidated financial statements.

CHAMPIONX CORPORATION
CONSOLIDATED BALANCE SHEETS

(in thousands)	December 31,	
	2020	2019
Assets		
Cash and cash equivalents	\$ 201,421	\$ 35,290
Receivables, net	559,545	219,874
Inventories, net	430,112	211,342
Prepaid expenses and other current assets	74,767	26,934
Total current assets	1,265,845	493,440
Property, plant and equipment, net of accumulated depreciation	854,536	248,181
Operating lease right-of-use assets	122,481	24,289
Goodwill	680,594	911,113
Intangible assets, net	479,009	238,707
Other non-current assets	73,311	7,095
Total assets	\$ 3,475,776	\$ 1,922,825
Liabilities and Equity		
Current portion of long-term debt	\$ 26,850	\$ —
Accounts payable	299,666	120,291
Accrued compensation and employee benefits	70,303	38,470
Current portion of operating lease liabilities	33,234	7,620
Accrued distributor fees	37,465	—
Accrued expenses and other current liabilities	155,042	33,300
Total current liabilities	622,560	199,681
Long-term debt	905,764	555,291
Deferred income taxes	156,283	84,060
Operating lease liabilities	83,553	19,419
Other long-term liabilities	95,041	28,160
Total liabilities	1,863,201	886,611
Stockholders' equity:		
Common stock (2.5 billion shares authorized, \$0.01 par value) 200.4 million shares and 77.5 million shares issued and outstanding in 2020 and 2019, respectively	2,004	775
Capital in excess of par value of common stock	2,293,179	969,174
Retained earnings (accumulated deficit)	(638,457)	107,048
Accumulated other comprehensive loss	(30,755)	(44,037)
ChampionX stockholders' equity	1,625,971	1,032,960
Noncontrolling interest	(13,396)	3,254
Total equity	1,612,575	1,036,214
Total liabilities and equity	\$ 3,475,776	\$ 1,922,825

The accompanying notes are an integral part of the consolidated financial statements.

CHAMPION X CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)	Years Ended December 31,		
	2020	2019	2018
Cash provided by (used for) operating activities:			
Net income (loss)	\$ (742,353)	\$ 52,960	\$ 93,191
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation	142,647	68,557	72,569
Amortization	71,715	51,381	51,892
Stock-based compensation	19,536	10,250	5,375
Loss (gain) on disposal of fixed assets	8,037	(2,046)	113
Loss on goodwill and long-lived asset impairment	657,251	1,746	990
Loss (gain) on sale of business	—	2,475	(1,286)
Provision for losses on accounts receivable	3,523	4,955	2,007
Provision for inventory obsolescence and write-downs	23,841	(141)	1,457
Amortization of deferred loan costs and accretion of discount	3,799	2,590	1,671
Deferred income taxes	(41,998)	(13,874)	1,492
Employee benefit plan expense	3,054	1,883	3,340
Other	3,306	3,733	428
Changes in operating assets and liabilities (net of effects of acquisitions and foreign exchange):			
Receivables	58,210	25,948	(55,378)
Inventories	85,893	19,065	(40,018)
Prepaid expenses and other current assets	17,539	(10,742)	(3,750)
Accounts payable	(18,389)	(20,526)	40,393
Accrued compensation and employee benefits	9,669	(6,358)	8,454
Accrued expenses and other liabilities	6,674	4,406	12,095
Leased assets	(4,606)	(40,700)	(25,867)
Other	2,692	337	(5,268)
Net cash provided by operating activities	310,040	155,899	163,900
Cash provided by (used for) investing activities:			
Capital expenditures	(45,163)	(39,780)	(57,918)
Acquisitions, net of cash acquired	57,588	(12,500)	—
Proceeds from sale of fixed assets	9,705	4,598	1,187
Proceeds from (payment on) sale of business	—	(2,194)	2,473
Purchase price adjustments on acquisition	—	—	53
Net cash provided by (used for) investing activities	22,130	(49,876)	(54,205)
Cash provided by (used for) financing activities:			
Proceeds from long-term debt	125,000	36,500	713,963
Payment of debt issue costs	(4,356)	—	(16,006)
Repayment of long-term debt	(286,493)	(141,500)	(45,000)
Distributions to Dover Corporation, net	—	—	(736,557)
Distribution to noncontrolling interest	(2,175)	—	(2,720)
Payment of finance lease obligations	(5,139)	(5,555)	(4,518)
Payments related to taxes withheld on stock-based compensation	(3,089)	(1,848)	—
Proceeds from exercise of stock options	886	—	—
Net cash used for financing activities	(175,366)	(112,403)	(90,838)
Effect of exchange rate changes on cash and cash equivalents	9,327	(162)	(737)
Net increase (decrease) in cash and cash equivalents	166,131	(6,542)	18,120
Cash and cash equivalents at beginning of period	35,290	41,832	23,712
Cash and cash equivalents at end of period	\$ 201,421	\$ 35,290	\$ 41,832

The accompanying notes are an integral part of the consolidated financial statements.

CHAMPIONX CORPORATION
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(in thousands)	Common stock		Retained Earnings (Accum. Deficit)	Net Parent Investment	Accum. Other Comp. Loss	Non-controlling Interest	Total
	Par Value	Capital in excess of par value					
December 31, 2017	\$ —	\$ —	\$ —	\$1,657,176	\$ (26,416)	\$ 4,749	\$1,635,509
Cumulative effect of accounting changes	—	—	—	1,315	(1,315)	—	—
Net income	—	—	54,884	37,853	—	454	93,191
Other comprehensive loss	—	—	—	—	(12,754)	—	(12,754)
Net transfers to Dover	—	—	—	(739,633)	(2,421)	—	(742,054)
Reclassification of net parent investment	—	956,711	—	(956,711)	—	—	—
Issuance of common stock	773	(773)	—	—	—	—	—
Stock-based compensation	1	4,835	—	—	—	—	4,836
Distributions to noncontrolling interest	—	—	—	—	—	(2,720)	(2,720)
Other	—	—	—	—	—	(25)	(25)
December 31, 2018	<u>774</u>	<u>960,773</u>	<u>54,884</u>	<u>—</u>	<u>(42,906)</u>	<u>2,458</u>	<u>975,983</u>
Net income	—	—	52,164	—	—	796	52,960
Other comprehensive loss	—	—	—	—	(1,131)	—	(1,131)
Stock-based compensation	1	10,249	—	—	—	—	10,250
Taxes withheld on issuance of stock-based awards	—	(1,848)	—	—	—	—	(1,848)
December 31, 2019	<u>775</u>	<u>969,174</u>	<u>107,048</u>	<u>—</u>	<u>(44,037)</u>	<u>3,254</u>	<u>1,036,214</u>
Cumulative effect of accounting changes (Note 2)	—	—	(1,575)	—	—	—	(1,575)
Issuance of common stock related to the Merger	1,223	1,262,708	—	—	—	—	1,263,931
Issuance of replacement awards related to the Merger	—	43,964	—	—	—	—	43,964
Non-controlling interest acquired in the Merger	—	—	—	—	—	(16,052)	(16,052)
Net income (loss)	—	—	(743,930)	—	—	1,577	(742,353)
Other comprehensive loss	—	—	—	—	13,282	—	13,282
Stock-based compensation	4	19,536	—	—	—	—	19,540
Stock options exercised	2	886	—	—	—	—	888
Taxes withheld on issuance of stock-based awards	—	(3,089)	—	—	—	—	(3,089)
Distributions declared and paid to noncontrolling interest	—	—	—	—	—	(2,175)	(2,175)
December 31, 2020	<u>\$ 2,004</u>	<u>\$2,293,179</u>	<u>\$ (638,457)</u>	<u>\$ —</u>	<u>\$ (30,755)</u>	<u>\$ (13,396)</u>	<u>\$1,612,575</u>

The accompanying notes are an integral part of the consolidated financial statements.

CHAMPIONX CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

ChampionX Corporation is a global leader in chemistry solutions and highly engineered equipment and technologies that help companies drill for and produce oil and gas safely and efficiently around the world. Our products provide efficient functioning throughout the lifecycle of a well with a focus on the production phase of wells.

Unless the context requires otherwise, references in this report to “we,” “us,” “our,” “the Company,” or “ChampionX” mean ChampionX Corporation, together with our subsidiaries where the context requires.

On May 9, 2018, we became an independent, publicly traded company as a result of the spin-off (“Separation”) from Dover Corporation (“Dover”).

On June 3, 2020, the Company and Ecolab Inc. (“Ecolab”) completed a Reverse Morris Trust transaction in which Ecolab transferred their upstream energy business to ChampionX Holding Inc. (“legacy ChampionX”) and, thereafter, distributed all of the shares of legacy ChampionX common stock to certain Ecolab stockholders (“the Distribution”). Immediately following the Distribution, a wholly owned subsidiary of the Company merged with and into legacy ChampionX, with legacy ChampionX continuing as the surviving company in the Merger and as a wholly owned subsidiary of the Company (“the Merger”). In association with the completion of the Merger, the Company changed its name from Apergy Corporation (“Apergy” or “legacy Apergy”) to ChampionX Corporation.

Basis of Presentation

Our consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). All intercompany accounts and transactions have been eliminated.

Prior to the Separation, our results of operations, financial position, and cash flows were derived from the consolidated financial statements and accounting records of Dover and reflect the combined historical results of operations, financial position, and cash flows of certain Dover entities conducting its upstream oil and gas energy business within Dover’s Energy segment, including an allocated portion of Dover’s corporate costs. As such, our consolidated statement of income, comprehensive income and cash flows for the year ended December 31, 2018 consist of the consolidated results of legacy Apergy on a stand-alone basis from May 9, 2018 to December 31, 2018, and the combined results of operations and cash flows for periods prior to May 9, 2018.

For periods prior to the Separation, our combined financial statements include expense allocations for certain corporate functions historically performed by Dover and not allocated to its operating segments, including corporate executive management, human resources, information technology, facilities, tax, shared services, finance, and legal, including the costs of salaries, benefits and other related costs. These expense allocations were based on direct usage or benefit, where identifiable, with the remainder allocated on the basis of revenue, headcount, or other measures. Management believes the assumptions underlying these consolidated financial statements, including the assumptions regarding the allocation of corporate expenses from Dover for periods prior to the Separation, are reasonable. The allocations may not, however, reflect the expense we would have incurred as an independent, publicly traded company for the periods presented prior to the Separation. Actual costs that would have been incurred if we had been a stand-alone public company would depend on a variety of factors, including organizational structure and strategic decisions made in various areas, including information technology and infrastructure.

Prior to the Separation, transactions with Dover, with the exception of transactions discussed in Note 19—Related Party Transactions, are reflected in the combined statements of cash flows as a financing activity in Distributions to Dover Corporation, net. See Note 19—Related Party Transactions for additional information.

As a result of the Merger, the results of operations of legacy ChampionX have been reflected in our accompanying consolidated financial statements from the closing date of the Merger through December 31, 2020. Results for the periods prior to June 3, 2020 reflect the financial and operating results of Apergy and do not include the financial and operating results of legacy ChampionX. See Note 3—Merger Transaction, Acquisitions, And Dispositions for additional information on the Merger.

Significant Accounting Policies

Use of estimates—The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. Such estimates include, but are not limited to, net realizable value of inventories, allowance for doubtful accounts, pension and post-retirement plans, future cash flows associated with impairment testing of goodwill, indefinite-lived intangible assets and other long-lived assets, estimates related to income taxes, and estimates related to contingencies.

Cash and cash equivalents—Cash equivalents are highly liquid, short-term investments with original maturities of three months or less from their date of purchase.

Receivables, net of allowances—Accounts receivable are carried at the invoiced amounts, less an allowance for doubtful accounts, and generally do not bear interest. The Company estimates the allowance for doubtful accounts for expected credit losses by analyzing accounts receivable balances by applying historical write-off and collection trend rates, as well as current economic and market conditions. Specific allowance amounts are established to record the appropriate provision for customers that have a higher probability of default. Account balances are written off against the allowance when it is determined the receivable will not be recovered.

The following table provides a rollforward of our allowance for credit losses balance:

(in thousands)	Allowance for Credit Losses	
December 31, 2019	\$	8,072
Impact of adoption on January 1, 2020 ⁽¹⁾		2,042
Provision for expected credit losses		6,107
Accounts written off		(3,230)
Recoveries		(2,463)
Foreign currency translation		(336)
December 31, 2020	\$	10,192

(1) Represents the impact of adoption of ASU 2016-13. See Note 2—New Accounting Standards for additional information.

Inventories—Inventories are stated at the lower of cost or net realizable value. The majority of our inventory costs are determined on the first-in, first-out (FIFO) basis. As of December 31, 2020 and 2019, approximately 35% and 23%, respectively, of our total net inventories were accounted for using the last-in, first-out (LIFO) basis, or market. Under the LIFO method, the cost assigned to items sold is based on the cost of the most recent items purchased. As a result, the costs of the first items purchased remain in inventory and are used to value ending inventory.

Inventories consisted of the following:

(in thousands)	December 31, 2020	December 31, 2019
Raw materials	\$ 137,038	\$ 50,099
Work in progress	9,509	13,325
Finished goods	323,144	175,774
	469,691	239,198
Inventory reserve	(24,769)	(12,067)
LIFO adjustments ⁽¹⁾	(14,810)	(15,789)
Inventories, net	\$ 430,112	\$ 211,342

(1) Represents the amount by which LIFO inventories exceeded their carrying value.

Property, plant and equipment—Property, plant and equipment is recorded at cost or fair value in connection with those assets acquired in a business combination. Depreciation is provided on the straight-line basis over the estimated useful lives of our assets as follows: buildings and improvements 5 to 40 years; machinery and equipment 1 to 20 years; and software 3 to 7 years. Expenditures for maintenance and repairs are expensed as incurred. Gains and losses are realized upon the sale or disposition of assets and are recorded in other expense, net on our consolidated statements of income (loss).

Property, plant and equipment are reviewed for impairment whenever events or changes in circumstances indicate the carrying value of the long-lived asset may not be recoverable. The carrying value of a long-lived asset is not recoverable if it exceeds the sum of undiscounted cash flows expected to result from the use and eventual disposition of the asset. If it is determined that an impairment loss has occurred, the impairment loss is measured as the amount by which the carrying value of the long-lived asset exceeds its fair value.

Goodwill and other intangible assets—We review goodwill for impairment annually or more frequently if events or changes in circumstances indicate that the carrying amount of such goodwill allocated to reporting units may exceed their fair value. We have established October 1 as the date of our annual test for impairment of goodwill for our legacy Apergy reporting units and May 31 for the acquired Chemical Technologies reporting units. We initially assess goodwill for impairment based on qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of one or more of our reporting units is less than its carrying amount. If the carrying amount exceeds the fair value, an impairment charge will be recognized in an amount equal to the excess; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit.

Our finite-lived acquired intangible assets are amortized on a straight-line basis over their estimated useful lives, which generally range from 3 to 15 years. Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount of the intangible asset may not be recoverable. The carrying amount of an intangible asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. If it is determined that an impairment loss has occurred, the loss is measured as the amount by which the carrying amount of the intangible asset exceeds its fair value. We have one intangible asset with an indefinite life which is tested annually for impairment.

See Note 7—Goodwill And Intangible Assets for additional information related to our impairment analysis.

Revenue Recognition—Revenue is recognized to depict the transfer of control of the related goods and services to the customer. The majority of our revenue is generated through the manufacture and sale of a broad range of specialized products and components, with revenue recognized upon transfer of control, which typically occurs as title and risk of loss transfers. We account for shipping and handling activities performed after control of a good has been transferred to the customer as a contract fulfillment cost rather than a separate performance obligation. Revenue arrangements with customers in many instances require delivery, installation, testing, or other acceptance provisions to be satisfied before revenue is recognized. Service revenue is recognized as the services are performed. Software product revenue is recorded when the software product is shipped to the customer or over the term of the contract on a subscription based model.

Estimates are used to determine the amount of variable consideration in contracts, as well as the determination of the standalone selling price among separate performance obligations. Some contracts with customers include variable consideration primarily related to volume rebates. We estimate variable consideration at the most likely amount to determine the total consideration which we expect to be entitled. Estimated amounts are included in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. Our estimates of variable consideration and the determination of whether to include estimated amounts in the transaction price are largely based on an assessment of our anticipated performance and all information that is reasonably available. We exclude all taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction and collected from a customer (e.g., sales, use, value added, and some excise taxes) from the determination of the transaction price.

Lessor accounting—Our lease arrangements generally allow customers to rent equipment on a daily basis with no stated end date. Customers may return the equipment at any point subsequent to the lease commencement date without penalty. We account for these arrangements as a daily renewal option beginning on the lease commencement date, with the lease term determined as the period in which it is reasonably certain the option will be exercised. Based on our assessment of the lease classification criteria, our lease arrangements have been classified as operating leases. Our lease arrangements generally include lease and non-lease components for which revenue is recognized based on each component's standalone price. Lease revenue is recognized on a straight-line basis over the term of the lease and is included in lease and other revenue in the consolidated statements of income (loss). Non-lease revenue related to our lease arrangements is recognized in accordance with our revenue

recognition accounting policy. Assets in our lease program are reported in property, plant, and equipment, net on our consolidated balance sheets and are depreciated over their estimated useful lives. Certain contracts allow for leased equipment damaged in operation to be charged to the customer. Charges for damaged leased equipment is recorded as product revenue and the remaining net book value of the leased asset is expensed as costs of goods and services in the consolidated statements of income (loss).

Lessee accounting—Lease liabilities are measured at the lease commencement date and are based on the present value of remaining payments contractually required under the contract. Payments that are variable in nature are excluded from the measurement of our lease liabilities and are recorded as an expense as incurred. Options to renew or extend a lease are included in the measurement of our lease liabilities only when it is reasonably certain that we will exercise these rights. In estimating the present value of our lease liabilities, payments are discounted at our incremental borrowing rate (“IBR”), which we applied utilizing a portfolio approach. We utilized information publicly available from companies within our industry with similar credit profiles to construct a company-specific yield curve in order to estimate the rate of interest we would pay to borrow at various lease terms. At lease commencement, we recognize a lease right-of-use asset equal to our lease liability, adjusted for lease payments paid to the lessor prior to the lease commencement date, and any initial direct costs incurred. Operating lease expense is recorded on a straight-line basis over the lease term. For finance leases, we amortize our right-of-use assets on a straight-line basis over the shorter of the asset’s useful life or the lease term. Additionally, interest expense is recognized each period related to the accretion of our lease liabilities over their respective lease terms.

Stock-based compensation—The cost of stock-based awards is measured at the grant date and are based on the fair value of the award. The value of the portion of the award that is expected to ultimately vest is recognized as expense on a straight-line basis, generally over the explicit service period and is included in selling, general and administrative expense in our consolidated statements of income. Forfeitures are accounted for as they occur. Expense for awards granted to retirement-eligible employees is recorded over the period from the date of grant through the date the employee first becomes eligible to retire and is no longer required to provide service.

Research and development costs—Research and development costs are expensed as incurred and amounted to \$31.2 million, \$12.9 million, and \$16.0 million for the years ended December 31, 2020, 2019, and 2018, respectively.

Income Taxes—Prior to the Separation, our operations were historically included in Dover’s consolidated federal tax return and certain combined state returns. The income tax expense in our combined financial statements for these pre-Separation periods was determined on a stand-alone return basis which requires the recognition of income taxes using the liability method. Under this method, we assume to have historically filed a return separate from Dover, reporting our taxable income or loss and paying applicable tax based on our separate taxable income and associated tax attributes in each tax jurisdiction. Income taxes payable prior to Separation were computed under the stand-alone return basis. Accordingly, changes in income taxes payable for periods prior to the Separation are presented as a component of financing activities in the statement of cash flows. The calculation of income taxes on the separate return basis requires considerable judgment and the use of both estimates and allocations. As a result, our effective tax rate and deferred tax balances will significantly differ from those in the periods prior to the Separation.

The Global Intangible Low-Taxed Income (“GILTI”) provisions of the Tax Reform Act, enacted in December 2017, require us to include in our U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary’s tangible assets. We have elected to account for GILTI tax in the period in which it is incurred.

Deferred tax assets and liabilities are measured using the tax rates that are expected to apply to taxable income for the years in which those tax assets and liabilities are expected to be realized or settled. We record valuation allowances related to our deferred tax assets when we determine it is more likely than not the benefits will not be realized. Interest and penalties related to unrecognized tax benefits are recorded as a component of our provision for income taxes. We have approximately \$15.7 million of foreign withholding taxes on our undistributed foreign earnings from jurisdictions which impose such taxes to the extent these amounts were repatriated to the U.S. by way of intercompany loan.

Earnings per share (“EPS”)—Basic EPS is computed using the weighted-average number of common shares outstanding during the year. We use the treasury stock method to compute diluted EPS which gives effect to the potential dilution of earnings that could have occurred if additional shares were issued for awards granted under our incentive compensation and stock plan. The treasury stock method assumes proceeds that would be obtained upon exercise of awards granted under our incentive compensation and stock plan are used to purchase outstanding common stock at the average market price during the period.

Investments in Affiliated Companies—Investments in companies in which ChampionX does not have a controlling financial interest, but over which it has significant influence, are accounted for using the equity method. ChampionX’s share of the after-tax earnings of equity method investees is included in Interest and other income.

Fair value measurements—We record our financial assets and financial liabilities at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The fair value framework requires the categorization of assets and liabilities into three levels based upon the assumptions (inputs) used to price the assets or liabilities, with the exception of certain assets and liabilities measured using the net asset value practical expedient, which are not required to be leveled. Level 1 provides the most reliable measure of fair value, whereas Level 3 generally requires significant management judgment. The three levels are defined as follows:

- Level 1: Unadjusted quoted prices in active markets for identical assets and liabilities.
- Level 2: Observable inputs other than quoted prices included in Level 1. For example, quoted prices for similar assets or liabilities in active markets or quoted prices for identical assets or liabilities in inactive markets.
- Level 3: Unobservable inputs reflecting management’s own assumptions about the assumptions market participants would use in pricing the asset or liability.

Derivative financial instruments—The Company uses foreign currency forward contracts to manage risks associated with foreign currency exchange rates. The Company does not hold derivative financial instruments of a speculative nature or for trading purposes. See Note 17—Derivatives And Hedging Transactions for further information.

Foreign currency—Financial statements of operations for which the U.S. dollar is not the functional currency, and are located in non-highly inflationary countries, are translated into U.S. dollars prior to consolidation. Assets and liabilities are translated at the exchange rate in effect at the balance sheet date, while income statement accounts are translated at the weighted-average monthly exchange rates. For these operations, translation gains and losses are recorded as a component of accumulated other comprehensive income (loss) in stockholders’ equity until the foreign entity is sold or liquidated. Assets and liabilities of an entity that are denominated in currencies other than an entity’s functional currency are remeasured into the functional currency using end of period exchange rates or historical rates when applicable to certain balances. Gains and losses related to these re-measurements are recorded in our consolidated statements of income (loss) as a component of other expense, net.

Change in accounting estimate—During the second quarter of 2020, we entered into new commercial agreements, which changed the economics of the leased asset program of our Electrical Submersible Pump (“ESP”) subsidiary in our Production & Automation Technologies segment. As such, we re-evaluated the estimated useful life and salvage value of our assets based on the combination of new commercial contracts and historical operating trends related to the aging of our lease fleet, including functioning assets beyond original expected life. Based on our analysis, effective April 1, 2020, we changed our estimate of useful life and salvage values for certain equipment to better reflect the useful life and estimated values of these assets at the end of their useful life. The estimated useful life, previously estimated at 12 months, was increased to 18 months. The estimated salvage value of the equipment, previously estimated at 50% of the original purchase price, was decreased to 0%. The effect of the changes in estimate for the year ended December 31, 2020, was an increase in depreciation expense of \$37.6 million, a decrease in net income of \$26.4 million, and a decrease in basic and diluted earnings per share of \$0.18 per share, respectively. See Note 10—Leases for additional information related to our leased assets.

NOTE 2—NEW ACCOUNTING STANDARDS

Accounting Standards Adopted

Effective January 1, 2019, we adopted Financial Accounting Standards Board (“FASB”) Accounting Standards Update (“ASU”) 2016-02, “Leases (Topic 842)” using the modified retrospective method of adoption. See Note 10—Leases for additional information related to our lease accounting.

Effective January 1, 2020, we adopted ASU 2016-13, “Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.” This update amends the impairment model to utilize an expected credit loss methodology in place of the incurred credit loss methodology for financial instruments. We applied the provisions of this ASU to our financial instruments, mostly consisting of trade receivables, as of January 1, 2020. We utilized the modified retrospective method of adoption; therefore, prior period amounts have not been adjusted and continue to be reflected in accordance with our historical accounting policies. As of January 1, 2020, we recorded a cumulative adjustment to retained earnings of \$1.6 million, net of \$0.4 million of income tax benefit.

NOTE 3—MERGER TRANSACTION, ACQUISITIONS, AND DISPOSITIONS

Merger Transaction

On June 3, 2020 we completed the acquisition of the legacy ChampionX business through the merger of one of our wholly owned subsidiaries with legacy ChampionX. Immediately prior to the Merger, Ecolab transferred their upstream energy business to legacy ChampionX. Pursuant to the Merger, shares of Ecolab common stock that were tendered through an exchange offer were converted into common shares of legacy ChampionX on a 1-for-24.6667 basis, with each share of legacy ChampionX automatically converting into one share of the Company. To complete the acquisition, we issued 122.2 million shares of common stock, at a share price of \$10.34 per share, in exchange for 100% equity ownership of legacy ChampionX. The transaction resulted in legacy ChampionX equityholders owning approximately 62% of the Company on a fully diluted basis, with equityholders of the Company prior to the Merger owning approximately 38% on a fully diluted basis.

Acquisition-related costs associated with the Merger were expensed as incurred and total \$61.8 million and \$9.3 million for the years ended December 31, 2020, and 2019, respectively, and are included in selling, general and administrative expense in our consolidated statements of income (loss). The acquisition-related transaction costs consisted primarily of investment banker fees and legal and accounting costs.

The Merger constitutes a business combination, with the Company (formerly known as Apergy) treated as the accounting acquirer and legacy ChampionX treated as the acquired company for accounting purposes. Legacy ChampionX provides on-site, technology-driven chemistry programs and value-enabling solutions and services to the global upstream oil and natural gas industry.

Preliminary Purchase Price Allocation

The acquisition-date fair value of the consideration transferred consisted of the following:

(in thousands)

Equity consideration	\$	1,263,931
Replacement awards attributable to pre-combination services ⁽¹⁾		43,964
Unfavorable supply agreement ⁽²⁾		46,000
Favorable supply agreement ⁽²⁾		(59,000)
Fair value of consideration transferred	\$	<u>1,294,895</u>

(1) Represents the fair value of the replacement equity awards to the extent services were provided by employees of legacy ChampionX prior to closing. See Note 13—Equity And Cash Incentive Programs for additional information about the replacement equity awards.

(2) As part of the Merger, the Company entered into a Cross Supply and Product Transfer Agreement with Ecolab in which over a period of approximately three years from the merger date, certain products will be manufactured by one party for the other. The cross selling prices at which each party will transfer their products, and include a take-or-pay element, have been set forth within this agreement and are not reflective of market terms. As a result, we recognized an intangible asset recorded at fair value for the favorable terms and a liability recorded at fair value for the unfavorable terms. The intangible asset will be amortized on a straight-line basis over a three-year period into cost of goods and services and the liability will be amortized as a component of product revenue.

The purchase price was allocated to the tangible and intangible assets acquired and liabilities assumed based on their preliminary fair value estimates as of the acquisition date. The measurements of assets acquired and liabilities assumed, other than debt which was measured using Level 2 measurements, are based on inputs that are not observable in the market and thus represent Level 3 inputs. The excess of the purchase price over such fair values was recorded as goodwill. The purchase price allocation is based upon a preliminary valuation only and will be finalized upon completion of certain valuation procedures. The primary areas in which the preliminary purchase price allocation is not yet finalized relate to filing of income tax returns that provide taxes payable and receivable from tax authorities as well as under the Tax Matters Agreement with Ecolab, deferred income taxes and residual goodwill. We will complete the purchase price allocation and valuation during the 12-month period following the Merger date.

The following table provides the preliminary allocation of the purchase price as of the acquisition date.

(in thousands)	
Cash and cash equivalents	\$ 57,588
Receivables	394,432
Inventories	340,000
Prepaid expenses and other current assets	63,576
Property, plant, and equipment	687,085
Identifiable intangible assets ⁽¹⁾	290,000
Other non-current assets	156,427
Total identifiable assets acquired	1,989,108
Accounts payable	184,028
Other current liabilities ⁽¹⁾	172,997
Long-term debt ⁽²⁾	537,000
Deferred tax liabilities	103,956
Other liabilities ⁽¹⁾	98,970
Total liabilities assumed	1,096,951
Net identifiable assets acquired	892,157
Add: Negative fair value of non-controlling interests	16,052
Goodwill	386,686
Total net assets acquired	\$ 1,294,895

(1) The fair value of the consideration transferred related to the favorable and unfavorable terms of the cross supply agreement has been excluded.

(2) In connection with the Merger, we assumed a term loan from legacy ChampionX, of which approximately \$26.9 million has been classified as short-term representing the mandatory amortization payments due within the next twelve months. See Note 8—Debt for further information.

Summary of Significant Fair Value Methods

Inventories

Acquired inventory is comprised of raw materials and finished goods. The preliminary fair value of finished goods was calculated as the estimated selling price, adjusted for costs of the selling effort and a reasonable profit allowance relating to the selling effort. The preliminary fair value of raw materials and supplies was determined based on replacement cost which approximates historical carrying value. The preliminary fair value step-up of \$14.5 million of inventories measured on a FIFO basis was amortized to cost of goods and services in the consolidated financial statements during the year ended December 31, 2020 as the inventory was sold. For inventories measured on a LIFO basis, the acquired inventory becomes the LIFO base layer inventory.

Property, Plant, and Equipment

The preliminary fair value of identifiable fixed assets was calculated using a combination of valuation approaches, primarily the cost approach which adjusts estimates of replacement cost for the age, condition and utility of the associated assets, as well as the market approach to value asset types where market comparable data is available, and is summarized below:

(in thousands)	Fair Value	Useful Life (years)
Land and land improvements	\$ 125,375	-
Buildings and leasehold improvements	208,649	5 to 40
Machinery, equipment, and other	333,478	3 to 20
Capitalized software and computer hardware	19,583	3 to 7
Total property, plant, and equipment acquired	\$ 687,085	

Identifiable Intangible Assets

The preliminary fair values of trademarks, trade names, and developed technology were determined using a relief from royalty methodology which estimates cost savings generated by a company related to the ownership of an asset for which otherwise have had to pay royalties or license fees on revenues earned through the use of the asset. Customer relationships were determined using the multi-period excess earnings method which involves isolating the net earnings attributable to the asset being measured based on the present value of the incremental after-tax cash flows attributable solely to the intangible assets over its remaining useful life. Preliminary fair values are summarized below:

(in thousands)	Fair Value	Useful Life (years)
Trademarks and trade names	\$ 25,000	15
Developed technology	120,000	7
Customer relationships	145,000	15
Total identifiable intangible assets acquired	290,000	
Favorable supply agreements	59,000	3
Total identifiable intangible assets recognized	<u>\$ 349,000</u>	

The weighted average amortization period for identifiable intangible assets recognized is 10.2 years.

Leases

Lease-related assets and liabilities acquired were remeasured at the present value of the future minimum lease payments over the remaining lease term utilizing an updated incremental borrowing rate of the Company as if the acquired leases were new leases as of the acquisition date. Right-of-use assets were further adjusted for any off-market terms of the lease. The remaining lease term is based on the remaining term at the acquisition date plus any renewal or extension options that the Company is reasonably certain will be exercised. Additionally, the Company has elected short-term lease treatment for those acquired lease contracts which, at the acquisition date, have a remaining lease term of 12 months or less. For the leases acquired through the Merger, the Company will retain the previous lease classification. This resulted in legacy ChampionX assets and liabilities of \$101.0 million and \$93.2 million, respectively, as of the acquisition date.

Goodwill

Goodwill of \$386.7 million arising from the acquisition consisted largely of the expected synergies and economies of scale from combining the operations of the Company and legacy ChampionX. Goodwill recognized as a result of the acquisition is not deductible for tax purposes. We have allocated goodwill of \$349.8 million and \$36.9 million to our Production Chemical Technologies and Reservoir Chemical Technologies operating segments, respectively. See Note 7—Goodwill And Intangible Assets for a rollforward of our goodwill balance by operating segment.

Pro forma financial information

The results of operations for legacy ChampionX that have been included in our consolidated financial statements from the June 3, 2020 acquisition date through December 31, 2020 include revenue of \$1.2 billion and net income of \$57.0 million. The following unaudited pro forma results of operations have been prepared as though the Merger was completed on January 1, 2019. Pro forma amounts are based on the preliminary purchase price allocation of the acquisition and are not necessarily indicative of results that may be reported in the future. Non-recurring pro forma adjustments including acquisition-related costs directly attributable to the Merger are included within the reported pro forma revenue and net income (loss).

(in thousands, except per share data)	Years Ended December 31,	
	2020	2019
Revenues	\$ 2,775,027	\$ 3,456,354
Net income (loss) attributable to ChampionX	(777,553)	229,126

Transactions with Ecolab

Certain agreements have been entered into between the Company and Ecolab, including, among others, a Tax Matters Agreement, an Intellectual Property Matters Agreement, a Cross Supply and Product Transfer Agreement, and a Transition Services Agreement, each entered into on the closing date; as well as the Employee Matters Agreement entered into on

December 18, 2019. Pursuant to the Transition Services Agreement, Ecolab and its subsidiaries as well as legacy ChampionX and its subsidiaries will provide each other with specified support services and other assistance for a limited time following the closing of the Merger. Charges for services under the agreement are representative of our best estimate of market price and will be determined on an allocated cost basis, subject to an overall annual aggregate cap. Revenue recognized under the Cross Supply and Product Transfer Agreement for the year ended December 31, 2020 was \$113.6 million.

Other Acquisitions

On July 31, 2019, ChampionX entered into an asset purchase agreement to acquire certain assets, which meet the definition of a business, used in the manufacturing of downhole monitoring systems. The acquisition is included among the consolidated subsidiaries reported in our Production & Automation Technologies segment and provides digital technology strategic to our artificial lift product offering.

The acquisition-date fair value of the consideration transferred consisted of the following:

(in thousands)	
Cash	12,500
Contingent consideration ⁽¹⁾	1,500
Total consideration transferred	14,000

(1) Contingent consideration is payable to the seller based on the acquired business exceeding a revenue target over an eighteen month period ending January 2021. Achievement of the revenue target was finalized and consideration was paid in February 2021.

The following table summarizes the final fair values of the assets acquired at the acquisition date:

(in thousands)	
Inventory	\$ 1,840
Customer relationships	2,650
Technology - Technical know-how	4,000
Goodwill	5,510
Total assets acquired	\$ 14,000

The amortization period is 15 years for acquired customer relationships and technology. The goodwill recognized as a result of the acquisition is tax deductible and primarily reflects the expected benefits to be derived from operational synergies.

Results of operations of the acquired business has been included in our consolidated financial statements from the acquisition dates. Pro forma results of operations have not been presented as the effects of the acquisition are not material to our consolidated financial statements.

Dispositions

During March 2019, we classified our pressure vessel manufacturing business in our Production & Automated Technologies segment as held for sale. We recognized an impairment loss of \$1.7 million, which was recorded in selling, general and administrative expense in the consolidated statements of income (loss), to adjust the carrying amount of the disposal group to fair value. See Note 7—Goodwill And Intangible Assets for additional information. In June 2019, we completed the sale of our pressure vessel manufacturing business and made a cash payment of \$2.2 million, resulting in a loss on disposition of \$2.5 million, which was recorded in other expense, net in the consolidated statements of income (loss) for the year ended December 31, 2019.

NOTE 4—SEGMENT INFORMATION

Upon completion of the Merger, the Company re-evaluated its reportable segments. Our determination of reportable segments was made on the basis of our strategic priorities within each segment and corresponds to the manner in which our chief operating decision maker reviews and evaluates operating performance to make decisions about resources to be allocated to the segment. In addition to our strategic priorities, segment reporting is also based on differences in the products and services we provide. As a result, we added two new reportable segments - Production Chemical Technologies and Reservoir Chemical Technologies. The legacy Apergy reportable segments remain unchanged.

Our reportable segments are:

- Production Chemical Technologies—provides oil and natural gas production and midstream markets with solutions to manage and control corrosion, oil and water separation, flow assurance, sour gas treatment and a host of water-related issues.
- Production & Automation Technologies—designs, manufactures, markets and services a full range of artificial lift equipment, end-to-end digital automation solutions, as well as other production equipment. Production & Automation Technologies' products are sold under a collection of brands including Harbison-Fischer, Norris, Alberta Oil Tool, Oil Lift Technology, PCS Ferguson, Pro-Rod, Upco, Unbridled ESP, Norriseal-Wellmark, Quartzdyne, Spirit, Theta, Timberline and Windrock.
- Drilling Technologies—designs, manufactures and markets polycrystalline diamond cutters and bearings for use in oil and gas drill bits under the US Synthetic brand.
- Reservoir Chemical Technologies—manufactures specialty products that support well stimulation, construction (including drilling and cementing) and remediation needs in the oil and natural gas industry.

Business activities that do not meet the criteria of an operating segment have been combined into Corporate and other. Corporate and other includes (i) corporate and overhead expenses, and (ii) revenue and costs for activities that are not operating segments.

Segment revenue and segment operating profit

(in thousands)	Years Ended December 31,		
	2020	2019	2018
Segment revenue:			
Production Chemical Technologies	\$ 992,805	\$ —	\$ —
Production & Automation Technologies	615,918	884,364	932,591
Drilling Technologies	116,186	246,887	285,565
Reservoir Chemical Technologies	61,507	—	—
Corporate and other ⁽¹⁾	113,580	—	—
Total revenue	<u>\$ 1,899,996</u>	<u>\$ 1,131,251</u>	<u>\$ 1,218,156</u>
Income (loss) before income taxes:			
Segment operating profit:			
Production Chemical Technologies	\$ 94,294	\$ —	\$ —
Production & Automation Technologies	(697,937)	54,024	74,187
Drilling Technologies	2,574	73,497	98,620
Reservoir Chemical Technologies	(6,198)	—	—
Total segment operating profit (loss)	<u>(607,267)</u>	<u>127,521</u>	<u>172,807</u>
Corporate and other ⁽¹⁾	103,751	29,034	23,806
Interest expense, net	51,731	39,301	27,648
Income (loss) before income taxes	<u>\$ (762,749)</u>	<u>\$ 59,186</u>	<u>\$ 121,353</u>

(1) Corporate and other includes costs not directly attributable or allocated to our reportable segments such as corporate executive management and other administrative functions, and the results attributable to our noncontrolling interest. Additionally, the sales and expenses related to the Cross Supply Agreement with Ecolab are included within Corporate and other. See Note 3—Merger Transaction, Acquisitions, And Dispositions for further information.

Geographic information

(in thousands)	December 31,	
	2020	2019
Property, plant, and equipment, net:		
United States	\$ 547,662	\$ 238,464
Singapore	111,184	—
Canada	85,487	5,749
Other Countries	110,203	3,968
Total property, plant, and equipment, net	<u>\$ 854,536</u>	<u>\$ 248,181</u>

See Note 5—Revenue for information related to revenue by geography and end markets.

Other business segment information

Capital Expenditures
Years Ended December 31,

(in thousands)	2020	2019	2018
Chemical Technologies ⁽¹⁾	\$ 10,498	\$ —	\$ —
Production & Automation Technologies	32,100	30,291	45,190
Drilling Technologies	1,736	9,061	11,123
Corporate and other	829	428	1,605
Total	<u>\$ 45,163</u>	<u>\$ 39,780</u>	<u>\$ 57,918</u>

(1) Our Chemical Technologies business has an integrated supply chain function that serves the Production Chemical Technologies and Reservoir Chemical Technologies reportable segments. As such, capital expenditure information by each reportable segment has not been provided and is not available, since the Company does not produce or utilize such information.

Depreciation & Amortization
Years Ended December 31,

(in thousands)	2020	2019	2018
Production Chemical Technologies	\$ 58,328	\$ —	\$ —
Production & Automation Technologies	130,725	110,131	112,955
Drilling Technologies	7,940	9,263	11,037
Reservoir Chemical Technologies	5,741	—	—
Corporate and other	11,628	544	469
Total	<u>\$ 214,362</u>	<u>\$ 119,938</u>	<u>\$ 124,461</u>

NOTE 5—REVENUE

Our revenue is generated primarily from product sales. Service revenue is generated from providing services to our customers. These services include installation, repair and maintenance, laboratory and logistics services, chemical management services, troubleshooting, reporting, water treatment services, technical advisory assistance and other field services. Lease revenue is derived from rental income of leased production equipment. These lease arrangements generally allow customers to rent equipment on a daily basis with no stated end date. Management accounts for these arrangements as a daily renewal option beginning on the lease commencement date, with the lease term determined as the period in which it is reasonably certain the option will be exercised. As our costs are shared across the various revenue categories, cost of goods sold is not tracked separately and is not discretely identifiable.

In certain geographical areas, the Company utilizes joint ventures and independent third-party distributors and sales agents to sell and market products and services. Amounts payable to independent third-party distributors and sales agents may fluctuate based on sales and timing of distributor fee payments. For services rendered by such independent third-party distributors and sales agents, the Company records the consideration received on a net basis within product revenue in our consolidated statements of income (loss). As of December 31, 2020, accrued distributor fees were \$37.5 million and nil at December 31, 2019.

Revenue disaggregated by geography was as follows:

Year Ended December 31, 2020						
(in thousands)	Production Chemical Technologies	Production & Automation Technologies	Drilling Technologies	Reservoir Chemical Technologies	Corporate and other ⁽¹⁾	Total
United States	\$ 318,460	\$ 458,690	\$ 82,812	\$ 31,907	\$ 72,948	\$ 964,817
Middle East & Africa	164,480	45,026	1,146	14,292	15,254	240,198
Latin America	202,177	21,679	22	4,283	3,650	231,811
Canada	129,210	32,709	9,029	1,414	640	173,002
Europe	116,192	10,521	11,840	1,990	12,052	152,595
Australia	13,225	41,233	110	274	—	54,842
Asia-Pacific	28,023	5,549	9,141	2,267	9,041	54,021
Other	21,038	511	2,086	5,080	(5)	28,710
Total revenue	\$ 992,805	\$ 615,918	\$ 116,186	\$ 61,507	\$ 113,580	\$ 1,899,996

(1) Revenues associated with sales under the Cross Supply Agreement with Ecolab are included within Corporate and other. See Note 3—Merger Transaction, Acquisitions, And Dispositions for further information.

Year Ended December 31, 2019						
(in thousands)	Production Chemical Technologies	Production & Automation Technologies	Drilling Technologies	Reservoir Chemical Technologies	Corporate and other	Total
United States	\$ —	\$ 679,280	\$ 181,721	\$ —	\$ —	\$ 861,001
Canada	—	52,647	17,667	—	—	70,314
Middle East	—	59,051	1,013	—	—	60,064
Europe	—	19,752	32,213	—	—	51,965
Latin America	—	32,389	19	—	—	32,408
Australia	—	30,702	139	—	—	30,841
Asia-Pacific	—	9,727	12,975	—	—	22,702
Other	—	816	1,140	—	—	1,956
Total revenue	\$ —	\$ 884,364	\$ 246,887	\$ —	\$ —	\$ 1,131,251

Year Ended December 31, 2018						
(in thousands)	Production Chemical Technologies	Production & Automation Technologies	Drilling Technologies	Reservoir Chemical Technologies	Corporate and other	Total
United States	\$ —	\$ 731,416	\$ 227,751	\$ —	\$ —	\$ 959,167
Canada	—	60,256	19,560	—	—	79,816
Middle East	—	53,315	201	—	—	53,516
Europe	—	12,686	25,983	—	—	38,669
Latin America	—	33,967	9	—	—	33,976
Australia	—	33,138	109	—	—	33,247
Asia-Pacific	—	7,176	10,430	—	—	17,606
Other	—	637	1,522	—	—	2,159
Total revenue	\$ —	\$ 932,591	\$ 285,565	\$ —	\$ —	\$ 1,218,156

Revenue is attributed to regions based on the location of our direct customer, which in some instances is an intermediary and not necessarily the end user.

Performance Obligations

The majority of our contracts have a single performance obligation which represents, in most cases, the equipment or product sold to the customer. Some contracts include multiple performance obligations, often satisfied at or near the same time, such as a product and the related installation, extended warranty and/or maintenance services. For contracts with multiple performance obligations, we allocate the transaction price to each performance obligation based on the estimated relative standalone selling

prices of the promised goods or services underlying each performance obligation. We typically use observable prices to determine the stand-alone selling price of a performance obligation and utilize a cost plus margin approach when observable prices are not available.

Within our Production & Automation Technologies and Drilling Technologies reportable segments, substantially all of our performance obligations are recognized at a point in time and are primarily related to our product revenue derived from the sale of drilling and production equipment. Revenue is recognized when control transfers to the customer upon shipment or completion of installation, testing, or certification as required under the contract. Within our Production Chemical Technologies and Reservoir Chemical Technologies segments, revenue recognized from the sale of products is recognized at the point in time when the obligations in the contract with the customer are satisfied, which generally occurs with the delivery of the product. Within our ESP leased asset program, equipment damaged in operation is generally charged to the customer and recognized as product revenue. Service and lease revenue are recognized over time when the services are provided to the customer or when the customer receives the benefit of the leased equipment.

Warranties

Within our Production & Automation Technologies and Drilling Technologies reportable segments, the majority of our contracts contain customary warranties in connection with the sale of a product to a customer which provide a customer assurance that the related product will function for a period of time as the parties intended. In addition to our customary warranties, we also offer extended warranties to our customers. Warranties that represent a distinct service are recognized as service revenue over the related warranty period.

Remaining performance obligations

As of December 31, 2020, we did not have any contracts with an original length of greater than a year from which revenue is expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied).

Contract Balances

The beginning and ending contract asset and contract liability balances from contracts with customers were as follows:

(in thousands)	December 31,		
	2020	2019	2018
Contract assets	\$ —	\$ 285	\$ 4,571
Contract liabilities	16,668	6,148	5,863

Contract assets primarily relate to work completed for performance obligations that are satisfied over time and are recorded in prepaid expenses and other current assets on our consolidated balance sheets. Contract assets are transferred to receivables when the right to consideration becomes unconditional. Contract liabilities relate to billings or consideration received in advance of performance (obligation to transfer goods or services to a customer) under the contract. Contract liabilities are recognized as revenue when the performance obligation has been performed, which primarily occurs during the subsequent quarter. Current contract liabilities are recorded in accrued expenses and other current liabilities on our consolidated balance sheets.

NOTE 6—PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following:

(in thousands)	December 31,	
	2020	2019
Land and land improvements	\$ 140,209	\$ 14,419
Buildings and improvements	316,529	106,993
Software	37,638	15,323
Machinery, equipment and other	854,650	538,168
	<u>1,349,026</u>	<u>674,903</u>
Accumulated depreciation	(494,490)	(426,722)
Property, plant and equipment, net	<u>\$ 854,536</u>	<u>\$ 248,181</u>

Depreciation expense was \$142.6 million, \$68.6 million, and \$72.6 million for the years ended December 31, 2020, 2019, and 2018, respectively.

NOTE 7—GOODWILL AND INTANGIBLE ASSETS

During the first quarter of 2020, certain unprecedented events caused the rapid decline of several market indicators in the oil and gas industry. Decisions by the Organization of Petroleum Exporting Countries (“OPEC”) and other oil producing nations resulted in an oversupply of crude oil. Compounding this situation, demand for oil and gas commodities declined significantly as the world was impacted by the COVID-19 pandemic, which resulted in a sharp decline in crude oil prices. Consequently, our market capitalization was negatively impacted as a result of these market conditions and overall impact to our industry.

The Company determined that these events and their related impact to future revenues and cash flows constituted a triggering event in the first quarter of 2020, requiring us to perform a recoverability test of our long-lived assets and an interim impairment assessment of goodwill as of March 31, 2020.

Long-lived Asset Impairment

Long-lived assets, which include property, plant and equipment, right-of-use assets, and identified intangible assets, comprise a significant amount of our total assets. The Company makes judgments and estimates in conjunction with the carrying value of these assets, including amounts to be capitalized, depreciation and amortization methods and estimated useful lives.

The negative market indicators described above were triggering events indicating that certain of our long-lived tangible and intangible assets may not be recoverable. We performed recoverability tests on our asset groups as of March 31, 2020, which indicated that long-lived assets associated with two of our asset groups within Production & Automation Technologies were not recoverable as the aggregate amount of estimated undiscounted cash flows of these asset groups was determined to be below their respective carrying values. We estimated the fair value of these intangible and fixed assets using an income approach that required us to make long-term forecasts of our future revenues and costs related to the assets subject to review. These forecasts utilized assumptions about demand for our products and services, future market conditions and technological developments. The forecasts are dependent upon assumptions including those regarding oil prices and the general outlook for the global oil and gas industry, among other factors. We consider the inputs for our long-lived asset and goodwill impairment calculations to be Level 3 inputs in the fair value hierarchy. Significant assumptions used in determining the fair value of our intangible and fixed assets are operating margins, peer group EBITDA multiples and the discount rate. Financial and credit market volatility directly impacts our fair value measurement through our income forecast. Changes to these assumptions, including, but not limited to: variability of spot and futures prices for crude oil; sustained declines in worldwide rig counts below current analysts’ forecasts; significant deterioration of external financing for our customers; higher risk premiums or higher cost of equity; or any other significant adverse economic news could require a provision for impairment.

Accordingly, the recoverable value of each of these asset groups was below their respective carrying value and as a result, we recorded a long-lived asset impairment charge of \$41.0 million in the first quarter of 2020 based on the estimated fair value of these asset groups, consisting of \$40.4 million to customer relationships and \$0.6 million to trademarks. We did not identify impairment triggering events at any of our asset groups during the remainder of 2020.

Intangible Assets

The components of our definite- and indefinite-lived intangible assets were as follows:

(in thousands)	December 31, 2020			December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Definite-lived intangible assets:						
Customer relationships ⁽¹⁾	\$ 593,068	\$ 321,298	\$ 271,770	\$ 560,316	\$ 353,189	\$ 207,127
Trademarks ⁽¹⁾	59,881	27,565	32,316	35,695	24,830	10,865
Patents	38,635	29,289	9,346	38,436	26,838	11,598
Unpatented technologies	133,700	19,958	113,742	13,700	9,811	3,889
Favorable supply agreements ⁽²⁾	59,000	11,308	47,692	—	—	—
Drawings and manuals	1,783	1,783	—	2,558	1,758	800
Other	5,374	4,831	543	5,332	4,504	828
	<u>891,441</u>	<u>416,032</u>	<u>475,409</u>	<u>656,037</u>	<u>420,930</u>	<u>235,107</u>
Indefinite-lived intangible assets:						
Trademarks	3,600	—	3,600	3,600	—	3,600
Total	<u>\$ 895,041</u>	<u>\$ 416,032</u>	<u>\$ 479,009</u>	<u>\$ 659,637</u>	<u>\$ 420,930</u>	<u>\$ 238,707</u>

(1) 2020 includes impairment of customer relationships and trademarks intangible assets of \$40.4 million and \$0.6 million, respectively, all of which relate to asset groups included within our Artificial Lift business.

(2) Favorable supply agreements were entered into as part of the Merger transaction. See Note 3—Merger Transaction, Acquisitions, And Dispositions for further information.

We recorded \$349.0 million of acquired intangible assets, including \$59.0 million for favorable supply agreements, in 2020. We recorded \$6.7 million of acquired intangible assets in 2019. See Note 3—Merger Transaction, Acquisitions, And Dispositions, for additional information. Additional changes to the gross carrying amount of intangible assets during the year ended December 31, 2020 were the result of foreign currency translation adjustments.

Amortization expense related to our intangible assets was \$70.9 million, \$51.4 million, and \$51.9 million for the years ended December 31, 2020, 2019, and 2018, respectively. Estimated future amortization expense related to intangible assets held as of December 31, 2020, is as follows:

(in thousands)	Estimated Amortization
2021	\$ 87,698
2022	86,181
2023	60,855
2024	47,506
2025	36,396

Goodwill

The carrying amount of goodwill, including changes therein, by reportable segment is below:

(in thousands)	Production Chemical Technologies	Production & Automation Technologies	Drilling Technologies	Reservoir Chemical Technologies	Total
December 31, 2018	\$ —	\$ 803,849	\$ 101,136	\$ —	\$ 904,985
Acquisition ⁽¹⁾	—	5,510	—	—	5,510
Foreign currency translation	—	618	—	—	618
December 31, 2019	—	809,977	101,136	—	911,113
Acquisition ⁽¹⁾	349,821	—	—	36,865	386,686
Impairment	—	(616,271)	—	—	(616,271)
Foreign currency translation	1,236	(2,169)	—	(1)	(934)
December 31, 2020	<u>\$ 351,057</u>	<u>\$ 191,537</u>	<u>\$ 101,136</u>	<u>\$ 36,864</u>	<u>\$ 680,594</u>

(1) See Note 3—Merger Transaction, Acquisitions, And Dispositions for additional information related to the acquisitions completed during July 2019 and June 2020.

Goodwill is not subject to amortization but is tested for impairment on an annual basis or more frequently if impairment indicators arise.

During the first quarter of 2020, we performed a quantitative analysis for each of our reporting units to determine the existence of goodwill impairment and the amount of the impairment loss. In performing the quantitative assessment, we estimated the fair value of each of our reporting units using a combination of the income and market approaches, which determined that the fair values were less than the respective carrying values for our Artificial Lift and Automation reporting units.

Our income-based valuation method determines the present value of estimated future cash flows to estimate the fair value of a reporting unit, which require the use of significant unobservable inputs, representative of a Level 3 fair value measurement. Significant assumptions used in estimating our reporting unit fair values include: (i) annual revenue growth rates; (ii) operating margins; (iii) risk-adjusted discount rate; and (iv) terminal value determined using a long-term growth rate. If the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to the reporting unit. Given the unprecedented uncertainty of both short-term and long-term market conditions, we utilized a weighted-average projection for estimated future cash flows that consisted of three estimated future cash flows scenarios with the following weightings: (i) low case scenario with a 40% weighting, (ii) base case scenario with a 40% weighting, and (iii) high case scenario with a 20% weighting.

Under the market approach, we estimated a fair value based on comparable companies' market multiples of revenues and earnings before interest, taxes, depreciation and amortization and factored in a control premium. Finally, we compared our estimates of fair values to our total public market capitalization as of March 31, 2020 and assessed an implied control premium based on the 20-day average trading price of our common stock.

The reporting unit carrying values were adjusted based on the long-lived asset impairment assessment noted above. Financial and credit market volatility directly impacted our fair value measurement through the weighted average cost of capital used to determine a discount rate. During times of volatility, significant judgment must be applied to determine whether credit market changes are a short-term or long-term trend. We utilized discount rates of 14.5% and 16.5% for our Artificial Lift and Automation reporting units, respectively.

During the first quarter of 2020, we recorded a \$616.3 million impairment charge to goodwill, consisting of \$539.2 million and \$77.1 million in our Artificial Lift reporting unit and our Automation reporting unit, respectively. Both reporting units are within our Production & Automation Technologies reportable segment. The goodwill impairment charge includes \$560.1 million of non-taxable goodwill, which was recognized as a discrete item in determining our effective tax rate for the period.

As part of our annual goodwill impairment analysis, on October 1, we performed a qualitative goodwill impairment analysis for each of our legacy Apergy reporting units. We concluded that goodwill related to those reporting units was not impaired and further quantitative testing was not required. As a result of the Merger, we added two reporting units (i) Production Chemical Technologies and (ii) Reservoir Chemical Technologies for which the goodwill annual testing date is May 31. In addition, there

were no negative conditions, or triggering events, that occurred subsequent to our annual goodwill impairment analysis requiring us to perform additional impairment reviews.

NOTE 8—DEBT

Long-term debt consisted of the following:

(in thousands)	December 31,	
	2020	2019
2018 Credit Facility	\$ —	\$ —
2018 Term Loan Facility	140,000	265,000
2020 Term Loan Facility	523,575	—
6.375% Senior Notes due 2026	277,041	300,000
Total	940,616	565,000
Net unamortized discounts and issuance costs	(8,002)	(9,709)
Total long-term debt	932,614	555,291
Current portion of long-term debt ⁽¹⁾	(26,850)	—
Long-term debt, less current portion	\$ 905,764	\$ 555,291

(1) Includes the mandatory amortization payments due within twelve months related to the 2020 Term Loan Facility.

2018 Credit Facility

On May 9, 2018, we entered into a credit agreement (“credit agreement”) governing the terms of our senior secured credit facilities, consisting of (i) a 7-year senior secured term loan B facility (“term loan facility”) and (ii) a 5-year senior secured revolving credit facility (“revolving credit facility,” and together with the term loan facility, the “senior secured credit facilities”), with JPMorgan Chase Bank, N.A. as administrative agent. The net proceeds of the senior secured credit facilities were used (i) to pay fees and expenses in connection with the Separation, (ii) partially fund the cash payment to Dover and (iii) provide for working capital and other general corporate purposes. The senior secured credit facilities are jointly and severally guaranteed by ChampionX and certain of ChampionX’s wholly owned U.S. subsidiaries, including, upon the consummation of the Merger, certain legacy ChampionX wholly owned U.S. subsidiaries, (“guarantors”), on a senior secured basis, and are secured by substantially all tangible and intangible assets of ChampionX and the guarantors, except for certain excluded assets.

At our election, outstanding borrowings under the senior secured credit facilities will accrue interest at a per annum rate of (i) LIBOR plus a margin or (ii) a base rate plus a margin. Interest on borrowings in which interest is accrued at a base rate plus an applicable margin is payable on the last business day of each quarter. The senior secured credit facilities contain a number of customary covenants that, among other things, limit or restrict the ability of ChampionX and the restricted subsidiaries to, subject to certain qualifications and exceptions, perform certain activities which include, but are not limited to (i) incur additional indebtedness, (ii) make acquisitions and (iii) pay dividends or other payments in respect of our capital stock. Additionally, ChampionX is required to maintain (a) a minimum interest coverage ratio, as defined in the credit agreement, of 2.50 to 1.00 and (b) a maximum total leverage ratio, as defined in the credit agreement, of 4.00 to 1.00 through the fiscal quarter ending March 31, 2021, then 3.75 to 1.00 thereafter.

On February 14, 2020, the Company entered into an amendment to the credit agreement (as amended, the “2018 Credit Facility”), which (i) provided for the incurrence of an additional \$150.0 million of revolving commitments under the 2018 Credit Facility, upon consummation of the Merger, (ii) permitted the consummation of the Merger and the incurrence of a senior secured term loan facility (“2020 Term Loan Facility”) in an aggregate amount up to \$537.0 million by legacy ChampionX, and (iii) continued to provide that all obligations under the 2018 Credit Facility are guaranteed by the guarantors. The weighted average interest rate on borrowings during the period was 4.00%.

The revolving credit facility consists of a 5-year senior secured facility with aggregate commitments in an amount equal to \$400.0 million, of which up to \$100.0 million is available for the issuance of letters of credit. Amounts repaid under the revolving credit facility may be re-borrowed. The revolving credit facility matures in May 2023.

2018 Term Loan Facility

The term loan facility had an initial commitment of \$415.0 million. The full amount of the term loan facility was funded on May 9, 2018. Amounts borrowed under the term loan facility that are repaid or prepaid may not be re-borrowed. The term loan facility matures in May 2025. Net proceeds of \$408.7 million from the term loan facility were utilized to partially fund the cash payment to Dover at the Separation and to pay fees and expenses incurred in connection with the Separation.

The term loan is subject to mandatory amortization payments of 1% per annum of the initial commitment of \$415.0 million paid quarterly. Additionally, subject to certain exceptions, the term loan facility is subject to mandatory prepayments, including the amount equal to: 100% of the net cash proceeds of all non-ordinary course asset sales subject to (i) reinvestment periods and (ii) step-downs to 75% and 50% based on certain leverage targets; and 50% of excess cash flow, as defined in the credit agreement, with step-downs to 25% and 0% based on certain leverage targets. ChampionX may voluntarily prepay amounts outstanding under the term loan facility in whole or in part at any time without premium or penalty, as defined in the credit agreement. The weighted average interest rate on borrowings during the period was 3.18%.

2020 Term Loan Facility

On June 3, 2020, legacy ChampionX entered into a term loan facility for \$537.0 million (“2020 Term Loan Facility”). Proceeds from the 2020 Term Loan Facility were utilized to fund a cash payment of \$527.4 million from legacy ChampionX to Ecolab upon the completion of the Merger. We assumed the 2020 Term Loan Facility upon completion of the Merger, which is fully and unconditionally guaranteed by the Company and the guarantors, which also guarantee the obligations under the 2018 Credit Facility. The 2020 Term Loan Facility matures at the earlier of (i) June 3, 2027 or (ii) January 30, 2026 in the event the Company’s senior unsecured notes due May 1, 2026 remain outstanding. Amounts outstanding under the 2020 Term Loan Facility bear interest, at the option of the Company, at a rate equal to (a) LIBOR plus 5.0% for eurocurrency rate loans (to the extent LIBOR is less than 1%, the LIBOR rate will be deemed to be 1%) or (b) the highest of (i) the Federal Funds Rate plus 1/2 of 1%, (ii) the “prime rate” quoted by Bank of America, N.A., (iii) LIBOR plus 1.00% and (iv) 1.00%, plus 4.0%. The 2020 Term Loan Facility contains customary representations and warranties, covenants, and events of default for loan facilities of this type. The weighted average interest rate on borrowings during the period was 6.02%.

The term loan is subject to mandatory amortization payments of \$6.7 million paid quarterly, which began on September 30, 2020. Any voluntary prepayment of the 2020 Term Loan Facility which occurs prior to June 3, 2022, is subject to a make-whole prepayment premium on the aggregate prepaid principal amount of the 2020 Term Loan Facility.

Senior Notes

On May 3, 2018, and in connection with the Separation, we completed the offering of \$300.0 million in aggregate principal amount of 6.375% senior notes due May 2026 (“Senior Notes”). Interest on the Senior Notes is payable semi-annually in arrears on May 1 and November 1 of each year and commenced on November 1, 2018. Net proceeds of \$293.8 million from the offering were utilized to partially fund the \$700.0 million cash payment to Dover at the Separation and to pay fees and expenses incurred in connection with the Separation.

Payment obligations of the Senior Notes are fully and unconditionally guaranteed by the guarantors on a joint and several basis. On June 18, 2020, the wholly owned subsidiaries of legacy ChampionX that guarantee the 2018 Credit Facility and the 2020 Term Loan Facility, delivered a Supplemental Indenture to join as guarantors of the Senior Notes.

The terms of the Senior Notes are governed by the indenture dated as of May 3, 2018, between the Company and Wells Fargo Bank, N.A., as trustee, and are guaranteed, on a senior unsecured basis, by the guarantors. At any time prior to May 1, 2021, we may redeem all or part of the Senior Notes at a redemption price equal to 100% of the principal amount of the Senior Notes redeemed plus a premium, as defined in the indenture, plus accrued and unpaid interest. Beginning on or after May 1, 2021, we may redeem the Senior Notes, in whole or in part, at certain tiered redemption prices as defined in the indenture, plus accrued and unpaid interest. The Senior Notes are our senior unsecured obligations. The Senior Notes rank equally in right of payment with our future and existing senior debt but are effectively subordinated to our future and existing debt to the extent of the assets securing such senior debt. The Senior Notes rank senior in right of payment to all of our future subordinated debt.

Tender Offer

During the fourth quarter of 2020, the Company initiated a tender offer to purchase certain of the Senior Notes (the “Tender Offer”). Approximately \$23.0 million in aggregate principal amount of the Senior Notes was repurchased for \$23.4 million in cash, including principal, and \$0.2 million in accrued interest. In connection with these repurchases, we recognized a net loss of approximately \$0.9 million for the year ended December 31, 2020 and is included in other expense, net in our consolidated statement of income (loss).

As of December 31, 2020, aggregate contractual future principal payments on long-term debt are as follows:

(in thousands)	Principal Payments⁽¹⁾
2021	\$ 26,850
2022	—
2023	—
2024	—
2025	140,000
Thereafter	773,766
Total	<u>\$ 940,616</u>

⁽¹⁾ Principal payments included relate to our 2020 Term Loan Facility and Senior Notes. See Note 10—Leases for future payments related to finance lease obligations.

NOTE 9—COMMITMENTS AND CONTINGENCIES

The Company is subject to various claims and contingencies related to, among other things, workers’ compensation, general liability (including product liability), automobile claims, health care claims, environmental matters, and lawsuits. We record liabilities where a contingent loss is probable and can be reasonably estimated. If the reasonable estimate of a probable loss is a range, the Company records the most probable estimate of the loss or the minimum amount when no amount within the range is a better estimate than any other amount. In accordance with applicable GAAP, the Company discloses a contingent liability even if the liability is not probable or the amount is not estimable, or both, if there is a reasonable possibility that a material loss may have been incurred.

Lease Commitments

See Note 10—Leases for a schedule of future minimum payments on our operating and finance lease arrangements.

Guarantees and Indemnifications

We have provided indemnities in connection with sales of certain businesses and assets, including representations and warranties, covenants and related indemnities for environmental health and safety, tax, and employment matters. We do not have any material liabilities recorded for these indemnifications and are not aware of any claims or other information that would give rise to material payments under such indemnities.

In connection with the Company’s Separation from Dover in 2018, we entered into agreements with Dover that govern the treatment between Dover and us for certain indemnification matters and litigation responsibility. Generally, the separation and distribution agreement provides for cross-indemnities principally designed to place financial responsibility for the obligations and liabilities of our business with us and to place financial responsibility for the obligations and liabilities of Dover’s business with Dover. The separation and distribution agreement also establishes procedures for handling claims subject to indemnification and related matters. In addition, pursuant to the tax matters agreement, we have agreed to indemnify Dover and its affiliates against any and all tax-related liabilities incurred by them relating to the Separation and/or certain related transactions to the extent caused by an acquisition of ChampionX stock or assets or by any other action or failure to act undertaken by ChampionX or its affiliates.

Pursuant to the provisions of the tax matters agreement with Dover, we recorded an indemnification liability of \$3.4 million as of December 31, 2019, with respect to certain liabilities related to tax audits for the 2012-2016 tax years. We received notification in February 2020 that the tax audits and related assessments were completed, resulting in a final settlement amount of \$3.0 million, which was paid in April 2020.

In connection with the Merger, we entered into agreements with Ecolab that govern the treatment between Ecolab and us for certain indemnification matters and litigation responsibility. Generally, the separation and distribution agreement provides for cross-indemnities principally designed to place financial responsibility for the obligations and liabilities of our business with us and to place financial responsibility for the obligations and liabilities of Ecolab's business with Ecolab. The separation and distribution agreement also establishes procedures for handling claims subject to indemnification and related matters. In addition, pursuant to the Tax Matters Agreement, we have agreed to indemnify Ecolab and its affiliates for (i) all taxes for which ChampionX is responsible as defined within the Tax Matters Agreement, (ii) all taxes resulting from a breach by ChampionX of any of its representations (but only to the extent relating to a breach occurring after the consummation of the Merger) or any of its covenants under the Tax Matters Agreement, (iii) all taxes resulting from an acquisition after the Merger of any of the stock or assets of ChampionX, other than as a result of the Merger or a repayment of the ChampionX Credit Facilities and (iv) reasonable costs and expenses (including reasonable attorneys' fees and expenses) related to the foregoing.

As of December 31, 2020 and December 31, 2019, we had \$88.8 million and \$15.7 million, respectively, of outstanding letters of credit, surety bonds, and guarantees which expire at various dates through 2025. These financial instruments are primarily maintained as security for insurance, warranty, and other performance obligations. Generally, we would only be liable for the amount of these letters of credit and surety bonds in the event of default in the performance of our obligations, the probability of which we believe is remote.

Supply Agreements

Cross Supply and Product Transfer Agreement

As discussed in Note 3—Merger Transaction, Acquisitions, And Dispositions, certain agreements were entered into between the Company and Ecolab, including, among others, a Cross Supply and Product Transfer Agreement. The Cross Supply and Product Transfer Agreement includes a take-or-pay element which requires the Company to purchase a minimum of 13.7 million kilograms of product over a ten-year period, approximately \$23.3 million. The Company has the option to terminate early beginning in the fifth year upon a two-year's notice, subject to a termination fee which declines over the contract term.

Vendor Supply Agreement

We also acquired a Vendor Supply Agreement from Ecolab as part of the Merger discussed in Note 3—Merger Transaction, Acquisitions, And Dispositions. Ecolab made payments in the aggregate of \$25.0 million and the Company assumed the receivable for the repayment of this loan. The loan is required to be repaid with 4% interest on the unapplied discount, totaling \$30.0 million to be paid back in discounts. The fair value of the expected future cash flows as of December 31, 2020 was \$14.9 million.

Litigation and Environmental Matters

We are involved in various pending or potential lawsuits, claims and environmental actions that have arisen in the ordinary course of our business. These proceedings primarily involve claims by private parties alleging injury arising out of use of our products, patent infringement, employment matters, and commercial disputes, as well as possible obligations to investigate and mitigate the effects on the environment of the disposal or release of certain chemical substances at various sites, such as Superfund sites and either operating or owned facilities. We review the probable outcome of such proceedings, the costs and expenses reasonably expected to be incurred and accrued to date, and the availability and extent of insurance coverage. We accrue a liability for legal matters that are probable and can be reasonably estimated. If the reasonable estimate of a probable loss is a range, the Company records the most probable estimate of the loss or the minimum amount when no amount within the range is a better estimate than any other amount. We are unable to predict the ultimate outcome of these actions because of the inherent uncertainty of litigation and unfavorable rulings or developments could occur, and there can be no certainty that the Company may not ultimately incur changes in excess of recorded liabilities. However, we believe the most probable, ultimate resolution of these matters will not have a material adverse effect on our consolidated financial position, results of operations or cash flows.

Environmental Matters

The Company is currently participating in environmental assessments and remediation at approximately 11 locations, the majority of which are in the U.S., and environmental liabilities have been accrued reflecting our best estimate of future costs. Potential insurance reimbursements are not anticipated in the Company's accruals for environmental liabilities. As of December 31, 2020 environmental liability accruals related to these locations were \$9.2 million.

Prior to the Separation, groundwater contamination was discovered at the Norris Sucker Rods plant site located in Tulsa, Oklahoma ("Norris"). Initial remedial efforts were undertaken at the time of discovery of the contamination and Norris has since coordinated monitoring and remediation with the Oklahoma Department of Environmental Quality ("ODEQ"). As part of the ongoing long-term remediation process, Norris contracted an engineering and consulting firm to develop a range of possible additional remedial alternatives in order to accelerate the remediation process and associated cost estimates for the work. In October 2019, we received the firm's preliminary remedial alternatives for consideration. We have submitted our long-term remediation plan and it was approved by ODEQ. We are now in discussion with ODEQ to finalize a consent order. Because we have not yet finalized the consent order for further remediation at the site and discussions with ODEQ remain ongoing, we cannot fully anticipate the timing, outcome or possible impact of such further remedial activities, financial or otherwise. As a result of the recommendations in the report, we accrued liabilities for these remediation efforts of approximately \$2.0 million as of December 31, 2019. Liabilities could increase in the future at such time as we ultimately reach agreement with ODEQ on our remediation plan and such liabilities become probable and can be reasonably estimated, however, there have been no changes to our estimated liability as of December 31, 2020.

Matters Related to Deepwater Horizon Incident Response

On April 22, 2010, the deepwater drilling platform, the Deepwater Horizon, operated by a subsidiary of BP plc, sank in the Gulf of Mexico after an explosion and fire, resulting in a massive oil spill. Certain entities that are now subsidiaries of ChampionX as a result of the Merger (collectively the "COREXIT Defendants") supplied COREXIT™ 9500, an oil dispersant product listed on the U.S. EPA National Contingency Plan Product Schedule, which was used in the response to the spill. In connection with the provision of COREXIT™, the COREXIT Defendants were named in several lawsuits. Cases arising out of the Deepwater Horizon accident were administratively transferred and consolidated for pre-trial purposes under In Re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010, Case No. 10-md-02179 in the United States District Court in the Eastern District of Louisiana (E.D. La.) ("MDL 2179"). Claims related to the response to the oil spill were consolidated in a master complaint captioned the "B3 Master Complaint." In 2011, Transocean Deepwater Drilling, Inc. and its affiliates (the "Transocean Entities") named the COREXIT Defendants and other unaffiliated companies as first party defendants (In re the Complaint and Petition of Triton Asset Leasing GmbH, et al, MDL No. 2179, Civil Action 10-2771). In April and May 2011, the Transocean Entities, Cameron International Corporation, Halliburton Energy Services, Inc., M-I L.L.C., Weatherford U.S., L.P. and Weatherford International, Inc. (collectively, the "Cross Claimants") filed cross claims in MDL 2179 against the COREXIT Defendants and other unaffiliated cross defendants. In April and June 2011, in support of its defense of the claims against it, the COREXIT Defendants filed counterclaims against the Cross Claimants. On May 18, 2012, the COREXIT Defendants filed a motion for summary judgment as to the claims in the B3 Master Complaint. On November 28, 2012, the Court granted the COREXIT Defendants' motion and dismissed with prejudice the claims in the B3 Master Complaint asserted against the COREXIT Defendants. There currently remain three cases pending against the COREXIT Defendants relating to the Deepwater Horizon oil spill, all of which are expected to ultimately be dismissed pursuant to the Court's November 28, 2012 order granting the COREXIT Defendants' motion for summary judgment.

The Company believes the claims asserted against the COREXIT Defendants are without merit and intends to defend these lawsuits vigorously. The Company also believes that it has rights to contribution and/or indemnification (including legal expenses) from third parties. However, we cannot predict the outcome of these lawsuits, the involvement it might have in these matters in the future, or the potential for future litigation.

NOTE 10—LEASES

Lessee Accounting

We have operating and finance leases for real estate, vehicles and equipment. Certain of our vehicle leases include residual value guarantees, which have been excluded from the measurement of our lease liabilities as we do not believe it is probable the residual value guarantees will be paid at the end of the lease. Our real estate and vehicle leases generally include options to renew or extend the lease term at our discretion. These options are included in the measurement of our lease liabilities only when it is reasonably certain that we will exercise these rights.

Balance sheet presentation—Leases are presented in our consolidated balance sheet as follows:

(in thousands)	Balance Sheet Classification	December 31,	
		2020	2019
Right-of Use Assets:			
Finance leases	Property, plant, and equipment, net	\$ 7,337	\$ 9,406
Operating leases	Operating lease right-of-use assets	122,481	24,289
Total lease right-of-use assets		<u>129,818</u>	<u>33,695</u>
Lease Liabilities:			
Finance leases - current	Accrued expenses and other current liabilities	\$ 4,326	\$ 4,845
Finance leases	Other long-term liabilities	4,188	4,530
Operating leases - current	Current portion of operating lease liabilities	33,234	7,620
Operating leases	Operating lease liabilities	83,553	19,419
Total lease liabilities		<u>\$ 125,301</u>	<u>\$ 36,414</u>

Components of total lease cost—Components of total lease cost were as follows:

(in thousands)	Year Ended December 31,	
	2020	2019
Finance lease cost:		
Amortization of right-of-use assets	\$ 5,266	\$ 5,200
Interest on lease liabilities	567	439
Operating lease cost	31,850	11,191
Short-term and variable lease cost	12,917	5,045
Sublease income	(3,584)	(463)
Total lease cost	<u>\$ 47,016</u>	<u>\$ 21,412</u>

Lease term and discount rate—Our weighted-average remaining lease term and weighted-average discount rate for operating and finance leases are as follows:

	December 31,	
	2020	2019
Weighted-average remaining lease term (years):		
Operating lease	6.3	4.6
Finance lease	2.7	2.1
Weighted-average discount rate:		
Operating lease	6.7 %	6.7 %
Finance lease	6.0 %	5.3 %

Maturity Analysis—Future minimum payments, as determined in accordance with ASC 842, on our operating and finance leases as of December 31, 2020 are as follows:

(in thousands)	Operating	Finance
2021	\$ 40,594	\$ 4,727
2022	34,933	2,354
2023	21,994	973
2024	16,510	676
2025	5,745	443
Thereafter	24,877	529
Total future minimum lease payments	144,653	9,702
Interest included within lease payments	(27,866)	(1,188)
Total lease liabilities	\$ 116,787	\$ 8,514

Lessors Accounting

Lease revenue is primarily generated from our electric submersible pump (“ESP”) leased asset program within our Production & Automation Technologies segment. An ESP rental unit has components consisting of surface, downhole and cable equipment. Our lease arrangements generally allow customers to rent equipment on a daily basis with no stated end date. Customers may return the equipment at any point subsequent to the lease commencement date without penalty. We account for these arrangements as a daily renewal option beginning on the lease commencement date, with the lease term determined as the period in which it is reasonably certain the option will be exercised. The average length of these arrangements generally range from six months to nine months. Lease revenue for our leased asset programs was \$54.0 million and \$44.7 million for the years ended December 31, 2020 and 2019, respectively.

Leased assets—Components of our leased asset program, all of which are included within Property, plant, and equipment, net on our consolidated balance sheet, are as follows:

(in thousands)	Useful life	December 31, 2020
Cable equipment	18 months	\$ 48,755
Downhole equipment	18 months	35,174
Surface equipment	5 years	69,172
Other lease equipment	3 - 5 years	21,773
		174,874
Accumulated depreciation		(110,299)
Leased assets, net		\$ 64,575

Depreciation expense on our leased assets was \$67.6 million and \$37.1 million for the year ended December 31, 2020 and 2019, respectively.

NOTE 11—RESTRUCTURING

Restructuring and other related charges as classified in our consolidated statements of income (loss) were as follows:

(in thousands)	Years Ended December 31,		
	2020	2019	2018
Segment restructuring charges ⁽¹⁾:			
Production Chemical Technologies	\$ 5,241	\$ —	\$ —
Production & Automation Technologies	11,814	4,467	5,632
Drilling Technologies	5,521	710	—
Reservoir Chemical Technologies	348	—	—
Corporate and other	367	—	—
Total	<u>\$ 23,291</u>	<u>\$ 5,177</u>	<u>\$ 5,632</u>
Statements of Income (Loss) classification:			
Cost of goods and services	\$ 13,955	\$ 3,592	\$ 4,693
Selling, general and administrative expense	9,336	1,585	939
Total ⁽¹⁾	<u>\$ 23,291</u>	<u>\$ 5,177</u>	<u>\$ 5,632</u>

(1) Total restructuring expenses include asset write-downs, which are not included in the restructuring accrual below.

Restructuring and other related charges during the years ended December 31, 2020, 2019, and 2018, included the following activities, which the Company expects will be completed by early 2021:

Production Chemical Technologies. Production Chemical Technologies incurred restructuring charges of \$5.2 million during the year ended December 31, 2020, primarily due to costs associated with employee severance and related benefits as a result of workforce reductions to better align the cost base with the significantly lower demand environment.

Production & Automation Technologies. Production & Automation Technologies incurred restructuring charges of \$11.8 million, \$4.5 million, and \$5.6 million during the years ended December 31, 2020, 2019, and 2018, respectively, related to various programs, primarily focused on facility closures and consolidations, exit of certain nonstrategic product lines, and workforce reductions.

Drilling Technologies. Drilling Technologies incurred restructuring charges of \$5.5 million and \$0.7 million during the years ended December 31, 2020 and 2019, respectively, primarily due to costs associated with employee severance and related benefits as a result of workforce reductions, as well as equipment disposal costs related to exiting certain non-strategic product lines.

Reservoir Chemical Technologies. Reservoir Chemical Technologies incurred restructuring charges of \$0.3 million during the year ended December 31, 2020, primarily due to costs associated with employee severance and related benefits as a result of workforce reductions to better align the cost base with the significantly lower demand environment.

The following table details our restructuring accrual activities during the year ended December 31, 2020:

(in thousands)	Restructuring Accrual Balance
December 31, 2019	<u>\$ 130</u>
Restructuring charges	15,630
Payments	(19,004)
Liabilities assumed in the Merger	6,208
Other, including foreign currency translation	(13)
December 31, 2020	<u>\$ 2,951</u>

Our liability balance for restructuring and other related charges at December 31, 2020, reflects employee severance and related benefits initiated during the period as well as liabilities assumed in the Merger. Additional programs may be initiated during 2021 with related restructuring charges.

NOTE 12—EMPLOYEE BENEFIT PLANS

The Company sponsors several pension and post-employment benefit plans in the U.S. and internationally, of which, approximately half of the plans are frozen to new participants. In conjunction with our acquisition of the legacy ChampionX business in June 2020, we acquired the assets and liabilities of several defined benefit pension plans. The unfunded liability of the acquired plans was \$8.3 million as of December 31, 2020 and our net periodic benefit expense was \$1.5 million for the year ended December 31, 2020.

We recognized net actuarial losses in the amount of \$5.5 million and \$2.5 million and a gain of \$0.9 million during the years ended December 31, 2020, 2019, and 2018, respectively. The actuarial gains and losses are reflected in our consolidated statements of comprehensive income (loss). The unfunded liability of the plans as of December 31, 2020 and 2019 was approximately \$24.9 million and \$15.1 million, respectively, and is included in other long-term liabilities within our consolidated balance sheets. The net periodic benefit expense was \$3.2 million, \$2.0 million, and \$1.7 million for the years ended December 31, 2020, 2019, and 2018, respectively.

NOTE 13—EQUITY AND CASH INCENTIVE PROGRAMS

Prior to the Separation, Dover granted share-based awards to its officers and other key employees, including certain ChampionX individuals. The principal awards issued under Dover's stock-based compensation plans included stock options, stock-settled stock appreciation rights, restricted stock units, and performance share awards. All awards granted under the program consisted of Dover common shares and are not necessarily indicative of the results that ChampionX (formerly Apergy) would have experienced as a stand-alone public company for the periods presented prior to the Separation. Effective with the Separation, outstanding Dover share-based awards were converted to ChampionX share-based awards, with the exception of outstanding Dover performance share awards that relate to performance periods ending after the Separation. Such performance share awards were cancelled effective with the Separation.

In connection with the Separation, our Board of Directors adopted the 2018 Equity and Cash Incentive Plan ("2018 Plan"). The 2018 Plan was also approved by Dover in its capacity as the sole stockholder of ChampionX at the time of adoption. The 2018 Plan was amended and restated in 2020 to increase the shares of common stock reserved for issuance under the 2018 Plan to 18.2 million (subject to customary adjustments arising from stock splits and other similar changes), along with other amendments.

The 2018 Plan authorizes the grant of stock options, stock-settled stock appreciation rights ("SARs"), restricted stock awards, restricted stock units, performance share awards, cash performance awards, directors' shares and deferred stock units. The ChampionX Compensation Committee determines the exercise price for options and the base price of SARs, which may not be less than the fair value of ChampionX common stock on the date of grant. Generally, stock options or SARs vest after 3 years of service and expire at the end of 10 years. Performance share awards vest if ChampionX achieves certain pre-established performance targets based on specified performance criteria over a performance period of not less than 3 years.

In connection with the Merger, the Company entered into the Employee Matters Agreement dated December 18, 2019, which provided the terms in which certain Ecolab share-based awards held by legacy ChampionX employees were replaced with share-based awards of the Company on the merger date. The fair value of the replacement awards has been allocated between each employee's pre-combination and post-combination services. Amounts allocated to pre-combination services have been included as consideration transferred as part of the Merger. See Note 3—Merger Transaction, Acquisitions, And Dispositions for a summary of consideration transferred. Compensation costs of \$15.8 million allocated to post-combination services will be recorded as stock-based compensation expense over each employees' remaining service period of approximately two years.

Stock-based compensation expense is reported within selling, general and administrative expense in the consolidated statements of income (loss). Stock-based compensation expense relating to all stock-based incentive plans was as follows:

	Years Ended December 31,		
	2020	2019	2018
Stock-based compensation expense	\$ 19,536	\$ 10,250	\$ 5,375
Tax benefit	(4,478)	(2,153)	(1,141)
Stock-based compensation expense, net of tax	\$ 15,058	\$ 8,097	\$ 4,234

SARs

We did not issue SARs during 2020, 2019 or 2018. A summary of activity relating to SARs outstanding for the year ended December 31, 2020, is as follows:

	SARs			
	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2020	422,361	\$ 29.75		
Forfeited / expired	(7,030)	34.13		
Exercised	—	—		
Outstanding at December 31, 2020	<u>415,331</u>	\$ 29.67	5.1	\$ —
Exercisable at December 31, 2020	<u>415,331</u>	\$ 29.67	5.1	\$ —

There is no unrecognized compensation expense related to SARs, as all SARs are exercisable as of December 31, 2020.

Other information regarding the exercise of SARs is presented below:

(in thousands)	<u>2020</u>	<u>2019</u>	<u>2018</u>
SARs:			
Fair value of SARs that became exercisable	\$ 878	\$ 662	\$ 310
Aggregate intrinsic value of SARs exercised	—	629	40

Performance Share Awards - ChampionX

Market Vesting Conditions

We granted 121,261, 46,459, and 86,817 performance share awards subject to market vesting conditions during 2020, 2019, and 2018, respectively, under the 2018 Plan. These awards vest if ChampionX achieves certain pre-established performance targets based on specified performance criteria over a performance period of not less than 3 years. The performance targets for these awards are classified as a market vesting condition, therefore the compensation cost was calculated using the grant date fair value, as estimated using a Monte Carlo simulation, and is not subject to change based on future events. The fair value used in determining stock-based compensation expense of the performance share awards issued in 2020, 2019, and 2018, is as follows:

Performance shares:	<u>2020</u>	<u>2019</u>	<u>2018</u>
Fair value per share at date of grant	\$ 14.55	\$ 57.43	\$ 56.32

Performance Vesting Conditions

We granted 46,460 performance share awards subject to performance vesting conditions during 2019 under the 2018 Plan. We did not grant any of this type of award in 2020 or 2018. These awards are considered performance condition awards as attainment is based on ChampionX's performance relative to established internal metrics. The fair value of these awards was determined using ChampionX's closing stock price on the date of grant.

The fair value and average attainment used in determining stock-based compensation expense of the performance shares issued in 2020 and 2019 are as follows:

Performance shares:	<u>2020</u>	<u>2019</u>
Fair value per share at date of grant	\$ —	\$ 40.22
Average attainment rate reflected in expense	— %	100 %

A summary of activity for ChampionX's performance share awards under the 2018 Plan for the year ended December 31, 2020, is as follows:

	Shares	Weighted-Average Grant-Date Fair Value
Unvested at January 1, 2020	174,726	\$ 52.44
Granted	121,261	14.55
Forfeited	(5,011)	52.60
Vested	(12,213)	52.51
Unvested at December 31, 2020	<u>278,763</u>	\$ 35.95

Unrecognized compensation expense related to unvested performance share awards as of December 31, 2020, was \$3.5 million, which will be recognized over a weighted average period of 1.5 years.

Restricted Stock Units

Restricted stock units may be granted at no cost to certain officers and key employees. Restricted stock units generally vest over a three- or four-year period.

A summary of activity for restricted stock units for the year ended December 31, 2020, is as follows:

	Shares	Weighted-Average Grant-Date Fair Value
Unvested at January 1, 2020	440,048	\$ 41.07
Granted	655,584	14.13
Replacement awards ⁽¹⁾	2,357,733	10.34
Forfeited	(29,272)	31.61
Vested	(754,314)	17.64
Unvested at December 31, 2020	<u>2,669,779</u>	\$ 14.04

⁽¹⁾ In connection with the Merger, the Company entered into the Employee Matters Agreement dated December 18, 2019, which provided the terms in which certain Ecolab share-based awards held by legacy ChampionX employees were replaced with share-based awards of the Company on the merger date. The fair value of the replacement awards has been allocated between each employee's pre-combination and post-combination services. Amounts allocated to pre-combination services have been included as consideration transferred as part of the Merger. See Note 3—Merger Transaction, Acquisitions, And Dispositions for a summary of consideration transferred.

Unrecognized compensation expense relating to unvested restricted stock as of December 31, 2020, was \$18.9 million, which will be recognized over a weighted average period of 1.3 years.

Non-Qualified Stock Options

A summary of activity for non-qualified stock options for the year ended December 31, 2020 is as follows:

	Non-Qualified Stock Options			
	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2020	—	\$ —		
Granted	—	—		
Replacement awards ⁽¹⁾	7,324,853	6.02		
Forfeited / expired	(14,381)	7.20		
Exercised	(135,432)	6.56		
Outstanding at December 31, 2020	<u>7,175,040</u>	\$ 6.01	5.3	\$ 65,431
Exercisable at December 31, 2020	<u>6,534,024</u>	\$ 5.85	5.1	\$ 60,571

⁽¹⁾ In connection with the Merger, the Company entered into the Employee Matters Agreement dated December 18, 2019, which provided the terms in which certain Ecolab share-based awards held by legacy ChampionX employees were replaced with share-based awards of the Company on the merger date. The fair value of the replacement awards has been allocated between each employee's pre-combination and post-combination services. Amounts allocated to pre-combination services have been included as consideration transferred as part of the Merger. See Note 3—Merger Transaction, Acquisitions, And Dispositions for a summary of consideration transferred.

The weighted-average grant-date fair value of stock options granted during 2020 was \$6.02 per option. Unrecognized compensation expense relating to unvested stock options as of December 31, 2020, was \$1.6 million, which will be recognized over a weighted average period of 0.9 years.

During the year ended December 31, 2020, the total intrinsic value of stock options exercised was approximately \$1.0 million and cash received from stock options exercised was approximately \$0.9 million. The cash tax benefit from stock options exercised during the year ended December 31, 2020 was approximately \$0.2 million.

NOTE 14—STOCKHOLDERS' EQUITY

Capital stock—The following is a summary of our capital stock activity:

(in thousands)	Common Stock
December 31, 2018	77,353
Shares issued—share-based compensation	107
December 31, 2019	77,460
Issuance of common stock - Merger	122,237
Shares issued—share-based compensation	683
December 31, 2020	<u>200,380</u>

We have 250 million shares of preferred stock authorized, with a par value of \$0.01 per share.

Accumulated other comprehensive loss—Accumulated other comprehensive loss consisted of the following:

(in thousands)	Foreign Currency Translation	Defined Pension and Other Post- Retirement Benefits	Cash Flow Hedges	Accumulated Other Comprehensive Loss
December 31, 2018	\$ (36,146)	\$ (6,760)	\$ —	\$ (42,906)
Other comprehensive income (loss) before reclassifications, net of tax	936	(2,711)	—	(1,775)
Reclassification adjustment for net losses included in net income, net of tax	—	644	—	644
Other comprehensive income (loss), net of tax	936	(2,067)	—	(1,131)
December 31, 2019	(35,210)	(8,827)	—	(44,037)
Other comprehensive income (loss) before reclassifications, net of tax	20,245	(5,504)	(2,320)	12,421
Reclassification adjustment for net losses included in net income, net of tax	—	861	—	861
Other comprehensive income (loss), net of tax	20,245	(4,643)	(2,320)	13,282
December 31, 2020	<u>\$ (14,965)</u>	<u>\$ (13,470)</u>	<u>\$ (2,320)</u>	<u>\$ (30,755)</u>

Reclassifications from accumulated comprehensive loss—Reclassification adjustments from accumulated other comprehensive loss to net income related to defined pension and other post-retirement benefits consisted of the following:

(in thousands)	Years Ended December 31,			Affected line items on the consolidated statements of income
	2020	2019	2018	
Amortization of actuarial loss and net transition obligation ⁽¹⁾	\$ 492	\$ 364	\$ 330	Other expense, net
Amortization of prior service cost ⁽¹⁾	—	2	1	Other expense, net
Settlement loss ⁽¹⁾	698	508	479	Other expense, net
	1,190	874	810	Income before income taxes
	(329)	(230)	(210)	Provision for (benefit from) income taxes
	\$ 861	\$ 644	\$ 600	Net income

⁽¹⁾ These accumulated comprehensive loss components are included in the computation of net periodic benefit cost (See Note 12—Employee Benefit Plans for additional information).

NOTE 15—EARNINGS PER SHARE

On May 9, 2018, 77.3 million shares of our common stock were distributed to Dover stockholders in conjunction with the Separation. See Note 1—Basis Of Presentation And Summary Of Significant Accounting Policies for additional information. For comparative purposes, and to provide a more meaningful calculation of weighted-average shares outstanding, we have assumed the shares issued in conjunction with the Separation to be outstanding as of the beginning of the year ended December 31, 2018.

On June 3, 2020, 122.2 million shares of our common stock were issued in conjunction with the acquisition of the legacy ChampionX business. See Note 3—Merger Transaction, Acquisitions, And Dispositions for additional information.

A reconciliation of the number of shares used for the basic and diluted earnings (loss) per share calculation was as follows:

(in thousands, except per share data)	Years Ended December 31,		
	2020	2019	2018
Net income (loss) attributable to ChampionX	\$ (743,930)	\$ 52,164	\$ 92,737
Weighted-average number of shares outstanding	148,370	77,427	77,342
Dilutive effect of stock-based compensation	—	197	350
Total shares and dilutive securities	148,370	77,624	77,692
Basic earnings per share attributable to ChampionX	\$ (5.01)	\$ 0.67	\$ 1.20
Diluted earnings per share attributable to ChampionX	\$ (5.01)	\$ 0.67	\$ 1.19

For all periods presented, the computation of diluted earnings (losses) per share excludes awards with an anti-dilutive impact. For the year ended December 31, 2020, we excluded all outstanding equity awards from the calculation of weighted-average shares outstanding, because their inclusion would be anti-dilutive as we were in a loss position. For the years ended December 31, 2019, and December 31, 2018, the diluted shares include the dilutive impact of equity awards except for approximately 0.4 million shares and 0.2 million shares that were excluded because their inclusion would be anti-dilutive.

NOTE 16—FAIR VALUE MEASUREMENTS

The carrying amount and the estimated fair value for assets and liabilities measured on a recurring basis are as follows:

(in thousands)	December 31, 2020			
	Carrying Amount	Fair Value Measurements		
		Level 1	Level 2	Level 3
Assets				
Foreign currency forward contracts	\$ 4,576	\$ —	\$ 4,576	\$ —
Liabilities				
Foreign currency forward contracts	\$ 6,561	\$ —	\$ 6,561	\$ —

The carrying value of foreign currency forward contracts is at fair value, which is determined based on foreign currency exchange rates as of the balance sheet date and is classified within Level 2. For purposes of fair value disclosure above, derivative values are presented gross. See Note 17—Derivatives And Hedging Transactions for further discussion of gross versus net presentation of the Company's derivatives.

The carrying amounts of cash and cash equivalents, trade receivables, accounts payable, as well as amounts included in other current assets and other current liabilities that meet the definition of financial instruments, approximate fair value due to their short-term nature.

The fair value of our Senior Notes is based on Level 1 quoted market prices. The fair value of our term loan facilities are based on Level 2 quoted market prices for the same or similar debt instruments. The carrying amount and the estimated fair value of long-term debt, including current maturities, held by the Company were:

(in thousands)	December 31, 2020		December 31, 2019	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
2018 Term Loan Facility	\$ 140,000	\$ 137,200	\$ 265,000	\$ 266,161
2020 Term Loan Facility	\$ 523,575	\$ 530,120	\$ —	\$ —
6.375% Senior Notes due 2026	\$ 277,041	\$ 277,054	\$ 300,000	\$ 316,710

Impairment of Goodwill and Long-lived Assets

During 2020, we recorded a \$616.3 million impairment charge to goodwill in our Artificial Lift and Automation reporting units. Additionally, we recorded a long-lived asset impairment charge of \$41.0 million in our Production & Automation Technologies asset group. We consider the inputs for our long-lived asset and goodwill impairment calculations to be Level 3 inputs in the fair value hierarchy. See Note 7—Goodwill And Intangible Assets for additional information.

Merger Transaction

On June 3, 2020 we completed the acquisition of the legacy ChampionX business through the merger of one of our wholly owned subsidiaries with legacy ChampionX. The measurements of assets acquired and liabilities assumed, other than debt which was measured using Level 2 measurements, are based on inputs that are not observable in the market and thus represent Level 3 inputs. See Note 3—Merger Transaction, Acquisitions, And Dispositions for additional information.

Credit Risk

By their nature, financial instruments involve risk, including credit risk, for non-performance by counterparties. Financial instruments that potentially subject us to credit risk primarily consist of trade receivables. See Note 1—Basis Of Presentation And Summary Of Significant Accounting Policies for additional information on the mitigation of credit risk.

NOTE 17—DERIVATIVES AND HEDGING TRANSACTIONS

The Company uses foreign currency forward contracts to manage risks associated with foreign currency exchange rates. The Company does not hold derivative financial instruments of a speculative nature or for trading purposes. Derivative contracts are recorded as assets and liabilities on the balance sheet at fair value. We evaluate hedge effectiveness at contract inception and thereafter on a quarterly basis. If a derivative is no longer expected to be effective, hedge accounting is discontinued. Changes in fair value are recognized immediately in earnings unless the derivative qualifies and is designated as a hedge. Changes in fair value attributable to changes in spot exchange rates for derivative contracts that have been designated as cash flow hedges are recognized in accumulated other comprehensive income (loss) (“AOCI”) and reclassified into earnings in the same period the hedged transaction affects earnings and are presented in the same income statement line as the earnings effect of the hedged item. Cash flows from derivatives are classified in the statement of cash flows in the same category as the cash flows from the items subject to designated hedge or undesignated (economic) hedge relationships.

The Company is exposed to credit risk in the event of nonperformance of counterparties for foreign currency forward exchange contracts. We monitor our exposure to credit risk by using major global banks and financial institutions as counterparties and monitoring their financial condition and credit profile. The Company does not anticipate nonperformance by any of these counterparties, and therefore, recording a valuation allowance against the Company’s derivative balance is not considered necessary.

Derivative Positions Summary

Certain of the Company’s derivative transactions are subject to master netting arrangements that allow the Company to settle with the same counterparties. These arrangements generally do not call for collateral and as of the applicable dates presented in the following table, no cash collateral had been received or pledged related to the underlying derivatives. We have elected to present our derivative balances on a gross basis on the consolidated balance sheet.

The following table summarizes the gross fair value of the Company’s outstanding derivatives and the lines in which they are presented on the consolidated balance sheet. We did not have outstanding derivatives at December 31, 2019.

(in thousands)	December 31, 2020	
	Derivative Assets	Derivative Liabilities
Prepaid expenses and other current assets	\$ 4,576	\$ —
Accrued expenses and other current liabilities	—	6,561
	<u>\$ 4,576</u>	<u>\$ 6,561</u>

The following table summarizes the notional values of the Company’s outstanding derivatives:

(in thousands)	December 31, 2020
Notional value of foreign currency forward contracts	\$ 483,377

Cash Flow Hedges

The Company utilizes foreign currency forward contracts to hedge the effect of foreign currency exchange rate fluctuations on forecasted foreign currency transactions, primarily related to inventory purchases. These forward contracts are designated as cash flow hedges. The changes in fair value of these contracts attributable to changes in spot exchange rates are recorded in AOCI until the hedged items affect earnings, at which time the gain or loss is reclassified into the same line item in the consolidated statements of income (loss) as the underlying exposure being hedged. The forward points are marked-to-market monthly and recognized in the same line item in the consolidated statements of income (loss) as the underlying exposure being hedged.

Derivatives Not Designated as Hedging Instruments

The Company also uses foreign currency forward contracts to offset its exposure to the change in value of certain foreign currency denominated assets and liabilities, primarily receivables and payables, which are remeasured at the end of each period. Although the contracts are effective economic hedges, they are not designated as accounting hedges. Therefore, changes in the

value of these derivatives are recognized immediately in earnings, thereby offsetting the current earnings effect of the related foreign currency denominated assets and liabilities.

Effect of Derivative Instruments on Income

The loss of all derivative instruments recognized is summarized below:

(in thousands)	<u>Year Ended December 31, 2020</u>
Loss reclassified from AOCI to income on cash flow hedges:	
Cost of goods and services	\$ 171
Loss on derivatives not designated as hedging instruments:	
Other (income) expense, net	692
Total loss of derivative instruments	<u>\$ 863</u>

NOTE 18—INCOME TAXES

Components of income (loss) before income taxes—Domestic and foreign components of income before income taxes were as follows:

(in thousands)	<u>Years Ended December 31,</u>		
	<u>2020</u>	<u>2019</u>	<u>2018</u>
Domestic	\$ (811,995)	\$ 51,073	\$ 104,234
Foreign	49,246	8,113	17,119
Income (loss) before income taxes	<u>\$ (762,749)</u>	<u>\$ 59,186</u>	<u>\$ 121,353</u>

Provision for (benefit from) income taxes—The provision for (benefit from) income taxes consisted of:

(in thousands)	<u>Years Ended December 31,</u>		
	<u>2020</u>	<u>2019</u>	<u>2018</u>
Current:			
U.S. federal	\$ 1,578	\$ 15,327	\$ 24,221
State and local	1,579	1,196	1,598
Foreign	20,264	4,264	4,362
Total current	<u>23,421</u>	<u>20,787</u>	<u>30,181</u>
Deferred:			
U.S. federal	(32,454)	(12,815)	(2,255)
State and local	(6,738)	(1,156)	2,735
Foreign	(4,625)	(590)	(2,499)
Total deferred	<u>(43,817)</u>	<u>(14,561)</u>	<u>(2,019)</u>
Provision for (benefit from) income taxes	<u>\$ (20,396)</u>	<u>\$ 6,226</u>	<u>\$ 28,162</u>

Effective income tax rate reconciliation—The effective income tax rate was different from the statutory U.S. federal income tax rate due to the following:

	Years Ended December 31,		
	2020	2019	2018
Statutory U.S. federal income tax rate	21.0 %	21.0 %	21.0 %
Net difference resulting from:			
State and local taxes, net of federal income tax benefit	0.5	3.2	3.4
Foreign withholding tax	(1.2)	1.8	0.3
Foreign derived intangible income	—	(0.8)	(1.9)
Foreign operations tax effect	(0.4)	—	0.3
Research and experimentation tax credits	0.4	(1.2)	(0.6)
Foreign tax credit	—	(8.0)	(1.5)
Nondeductible expenses	(0.6)	2.5	0.7
Branch income	(0.7)	0.6	—
Tax return to accrual adjustments	0.1	(9.4)	—
State deferred taxes	0.2	(7.9)	—
Goodwill Impairment	(15.5)	—	—
Foreign Inclusions (Including Global intangible low-taxed income)	(0.7)	—	2.3
Transaction Costs	(0.6)	—	—
Change in valuation allowance	(0.5)	9.0	—
Other	0.7	(0.3)	(0.8)
Effective income tax rate	<u>2.7 %</u>	<u>10.5 %</u>	<u>23.2 %</u>

Deferred tax assets and liabilities—Significant components of deferred tax assets and liabilities were as follows:

(in thousands)	December 31,	
	2020	2019
Deferred tax assets attributable to:		
Accrued compensation	\$ 13,437	\$ 8,725
Accrued expenses	3,950	455
Net operating loss and other carryforwards	25,879	5,937
Inventories	—	1,380
Accounts receivable	19,930	1,699
Lease liability	17,180	5,649
Long-term liabilities	1,470	529
Other assets	2,110	1,202
Deferred tax assets	<u>83,956</u>	<u>25,576</u>
Valuation allowance	(26,786)	(6,027)
Deferred tax assets, net of valuation allowance	<u>\$ 57,170</u>	<u>\$ 19,549</u>
Deferred tax liabilities attributable to:		
Inventories	\$ (2,124)	\$ —
Intangible assets, including goodwill	(80,634)	(66,736)
Property, plant and equipment	(73,507)	(31,240)
Foreign withholding taxes	(15,673)	—
Lease asset	(18,293)	(5,633)
Investment in Subsidiary	(10,189)	—
Deferred tax liabilities	<u>(200,420)</u>	<u>(103,609)</u>
Net deferred tax liabilities	<u>\$ (143,250)</u>	<u>\$ (84,060)</u>
Classified as follows in the consolidated balance sheets:		
Other non-current assets	\$ 13,033	\$ —
Deferred income taxes	(156,283)	(84,060)
Net deferred tax liabilities	<u>\$ (143,250)</u>	<u>\$ (84,060)</u>

Effective Tax Rate. Our effective tax rate was 2.7% for 2020 compared to 10.5% for 2019. The effective tax rate for 2020 was primarily impacted by goodwill impairments which included \$560.1 million of non-taxable goodwill.

Net operating loss carryforwards. As of December 31, 2020, our deferred tax asset balance included U.S. net operating loss carryforwards of \$2.2 million and non-U.S. net operating loss carryforwards of \$17.3 million. This entire balance is available to be carried forward; U.S. carryforwards do not expire and non-U.S. carryforwards will expire during the years 2024 through 2038.

Foreign tax credit carryforwards. As of December 31, 2020, our deferred tax asset balance included U.S. foreign tax credit carryforwards of \$4.2 million. This entire balance is available to be carried forward and will expire during 2029.

Valuation allowance. Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing deferred tax assets. A significant piece of objective negative evidence evaluated was the cumulative loss incurred over the three-year period ended December 31, 2020. Such objective evidence limits the ability to consider other subjective evidence, such as our projections for future growth. On the basis of this evaluation, as of December 31, 2020, we recorded a valuation allowance of \$26.8 million to recognize only the portion of the deferred tax asset that is more likely than not to be realized. The amount of the deferred tax asset considered realizable, however, could be adjusted if estimates of future taxable income during the carryforward period are reduced or increased if objective negative evidence in the form of cumulative losses are no longer present and additional weight is given to subjective evidence such as our projections of future growth.

Unrecognized tax benefits. We file federal, state, and local tax returns in the United States as well as foreign tax returns. We are routinely audited by the tax authorities in these jurisdictions, and a number of audits are currently underway. We believe all income tax uncertainties have been properly accounted.

The Company accounts for uncertain tax positions in accordance with guidance in FASB ASC 740, “*Income Taxes (Topic 740)*”, which prescribes the minimum recognition threshold a tax position taken or expected to be taken in a tax return is required to meet before being recognized in the financial statements. A reconciliation of the beginning and ending amount of uncertain tax positions is as follows:

(in thousands)	Uncertain Tax Position
Balance at January 1, 2019	\$ —
Additional based on tax positions related to prior years	868
Balance at December 31, 2020	\$ 868

The total amount of unrecognized tax benefits at December 31, 2020 was \$0.9 million. The total balance of unrecognized tax benefit would impact the Company’s future effective income tax rate if recognized. The Company recognizes interest and penalties related to uncertain tax positions within the provision for income taxes in its consolidated statements of income (loss) and comprehensive income (loss). As of December 31, 2020, no interest and penalties have been accrued.

The Company is subject to U.S. federal income tax as well as income tax in multiple state jurisdictions. The earliest period the Company is subject to examination of federal income tax returns by the Internal Revenue Service is 2017. The state income tax returns and other state tax filings of the Company are subject to examination by the state taxing authorities for various periods, generally up to four years after they are filed.

Undistributed Earnings. As of December 31, 2020, the Company has \$15.7 million of deferred tax liabilities primarily associated with withholding taxes on undistributed earnings generated by foreign subsidiaries. The Company continues to assert permanent reinvestment of the remaining undistributed earnings for which deferred taxes have not been provided for as of December 31, 2020. If there are policy changes, the Company would record the applicable taxes in the period of change. No deferred taxes have been provided for withholding taxes and other taxes on the remaining earnings as of December 31, 2020 as computation of the potential deferred tax liability associated with these undistributed earnings and any other basis differences is not practicable.

CARES Act. On March 27, 2020, as part of the business stimulus package in response to the COVID-19 pandemic, the U.S. federal government enacted the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”) to provide relief to businesses impacted by the disruptions of the COVID-19 pandemic. The CARES Act did not have a material impact to our consolidated financial statements.

Tax Holidays. The Company has a tax incentive awarded by the Singapore Economic Development Board. This incentive provides 0% tax rate on manufacturing profits generated at the Company's facility located on Jurong Island which expires in December 2024. The tax incentive provided no benefit in 2020 as the manufacturing income was not profitable.

NOTE 19—RELATED PARTY TRANSACTIONS

Dover Corporation

Prior to the Separation, Dover provided certain services to us, including corporate executive management, human resources, information technology, facilities, tax, shared services, finance and legal services. Dover continued to provide us certain of these services on a temporary basis following the Separation under a transition services agreement. Under the transition services agreement, ChampionX paid a fee to Dover for services under the transition services agreement, which fee was intended to allow Dover to recover all of its direct and indirect costs generally without profit. The transition services agreement was terminated on January 31, 2019, consistent with the initial term provided within the agreement.

Financial information presented prior to the Separation does not include all the expenses that would have been incurred had ChampionX been a stand-alone public company. The corporate expenses allocated by Dover to these financial statements were \$7.4 million for the year ended December 31, 2018 and were recorded in selling, general and administrative expense in the consolidated statements of income (loss).

For periods prior to the Separation, transactions between ChampionX and Dover, with the exception of transactions discussed below with Dover's affiliates, are reflected in distributions to Dover Corporation, net in the consolidated statements of cash flows for the year ended December 31, 2018 as a financing activity. Revenue with Dover and its affiliates were not material for the periods presented. We recognized royalty expense of \$2.3 million for the year ended December 31, 2018, related to the use of Dover's intellectual property and patents which are included in other expense, net in the consolidated statements of income (loss). On April 1, 2018, patents and other intangibles owned by Dover related to our operations transferred to ChampionX, and consequently, ChampionX no longer incurred royalty charges related to these assets from Dover.

Noncontrolling Interest and Unconsolidated Affiliates

For the years ended December 31, 2020, 2019, and 2018, we declared and paid \$2.2 million, none, and \$2.7 million, respectively, of distributions to the noncontrolling interest holder in Apergy Middle East Services LLC, a subsidiary in the Sultanate of Oman. We have a commission arrangement with our noncontrolling interest for 5% of certain annual product sales.

In the ordinary course of business, we enter into certain transactions with our unconsolidated affiliates at market prices. These transactions primarily related to inventory sales and amounted to approximately \$4.0 million for the year ended December 31, 2020.

NOTE 20—CASH FLOW INFORMATION

Cash payments for income taxes and cash payments for interest incurred related to our debt are as follows:

(in thousands)	Years Ended December 31,		
	2020	2019	2018
Cash information:			
Cash paid for income taxes	\$ 18,179	\$ 26,464	\$ 27,191
Cash paid for interest	\$ 39,746	\$ 36,085	\$ 21,899

Supplemental cash flow information related to our lease liabilities is as follows:

(in thousands)	Statement of Cash Flows Classification	December 31, 2020	December 31, 2019
Cash paid for amounts included in measurement of lease liabilities:			
Operating leases ⁽¹⁾	Operating	\$ 30,256	\$ 12,026
Finance leases - interest	Operating	\$ 550	\$ 439
Finance leases - principal	Financing	\$ 5,139	\$ 5,555
Supplemental non-cash information on lease liabilities arising from obtaining right-of-use assets:			
Operating leases	Non-cash	\$ 37,631	\$ 38,225
Finance leases	Non-cash	\$ 4,017	\$ 6,412

⁽¹⁾ Cash required by operating leases is reported net of operating lease expense in the operating section of our consolidated statements of cash flows in accrued expenses and other liabilities.

Leased Asset Program

Our ESP leased asset program is reported in our Production & Automation Technologies segment. At the time of purchase, assets are recorded to inventory and are transferred to property, plant, and equipment when a customer contracts for an asset under our leased asset program. During the years ended December 31, 2020, 2019, and 2018, we transferred \$15.3 million, \$75.7 million, and \$97.0 million, respectively, of inventory into property, plant, and equipment as a result of assets entering our lease program.

Expenditures for assets that are placed into our leased asset program expected to be recovered through sale are reported in leased assets in the operating section of our consolidated statements of cash flows. All other capitalizable expenditures for assets that are placed into our leased asset program are classified as capital expenditures in the investing section of our consolidated statements of cash flows. During the years ended December 31, 2020, 2019, and 2018, we made cash payments of \$20.8 million, \$16.0 million, and \$26.7 million, respectively, for surface equipment.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of December 31, 2020, and under the direction of our principal executive officer and principal financial officer, we have evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based upon this evaluation, our principal executive officer and principal financial officer have concluded as of December 31, 2020, that our disclosure controls and procedures were effective.

In conducting management's evaluation of the effectiveness of our disclosure controls and procedures as of December 31, 2020, we have excluded ChampionX Holding Inc. ("legacy ChampionX") as permitted by SEC Staff guidance because it was acquired by the Company in a purchase business combination during 2020. The total revenues and total assets of legacy ChampionX subsidiaries represent approximately 62% and 53%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2020.

Remediation of Previously Reported Material Weaknesses in Internal Control over Financial Reporting

As disclosed in Part II, Item 9A, Controls and Procedures in our Annual Report on Form 10-K for the year ended December 31, 2019, we identified a material weakness in the control environment component of internal control as the Company did not maintain a sufficient complement of personnel with the appropriate level of knowledge, experience and training in internal control over financial reporting commensurate with its financial reporting requirements to allow for the consistent execution of control activities at its Artificial Lift business within the Production and Automation Technologies ("PAT") segment. Further, management identified a material weakness in the risk assessment component of internal control as the Company did not appropriately design controls in response to the risk of misstatement at its Electrical Submersible Pump ("ESP") subsidiary, a subsidiary within the PAT segment and part of the Artificial Lift business, to ensure that the subsidiary had the proper resources to operate a complex business model, which was experiencing significant growth and turnover in personnel. These material weaknesses contributed to additional material weaknesses including (i) controls within certain of its Artificial Lift businesses over the completeness, accuracy, occurrence and cut-off of revenue and within ESP over the valuation of accounts receivable; (ii) controls over the recording of manual journal entries at ESP; (iii) controls over the completeness, accuracy, existence and presentation and disclosure of inventory and fixed assets at ESP; and (iv) controls related to the granting of access to system capabilities to authorized users within the general ledger system across the Company. Management, with oversight from the Audit Committee, developed a remediation plan to address the material weaknesses. As part of our remediation plan, we implemented new and enhanced processes, procedures, and controls to address the control deficiencies that led to the material weaknesses, and operated these new and enhanced processes, procedures, and controls for a sufficient period of time. Specifically, management:

- Reviewed staffing competencies and resource requirements at ESP and within the Artificial Lift business and used the results of our review as part of our overall financial statement risk assessment process.
- Made personnel changes, including terminations and hiring of staff for both existing and newly created positions, at ESP and within the Artificial Lift business in order to strengthen the control environment and to ensure we have a sufficient complement of personnel with the appropriate level of knowledge, expertise and skills in internal control over financial reporting commensurate with our financial statement requirements.
- Engaged third party experts to assist management in assessing, designing, and implementing new and enhanced processes, procedures, and controls, including automation of certain processes and controls, at ESP and within the Artificial Lift business.
- Implemented policies, procedures and controls at ESP and within the Artificial Lift business to (i) ensure price and quantity are accurately recorded and supported by agreements with customers as part of the revenue recognition process and (ii) properly calculate and support management's review and assessment for the valuation of accounts receivable reserves.
- Implemented policies, procedures and controls at ESP to (i) ensure manual journal entries are properly prepared and reviewed for accuracy and appropriate supporting documentation and (ii) properly account for inventory transfers and fixed asset deployments and disposals as part of ESP's leased asset program.

- Conducted policies and procedural training for all personnel responsible for the performance of control activities over financial reporting as well as specific training for personnel responsible for control activities associated with manual journal entries, revenue recognition, accounts receivable, inventory and fixed assets at ESP and within the Artificial lift business.
- Enhanced and formalized certain elements of our Enterprise Risk Management program, including our review and response to significant business changes, within our risk assessment process.
- Implemented controls to ensure proper segregation of duties associated with user access rights to system capabilities within the general ledger, specifically the restriction of a system user's ability to both prepare and post journal entries.

Changes in Internal Control Over Financial Reporting

Except as described above, there were no changes in internal control over financial reporting identified in the evaluation for the quarter ended December 31, 2020, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of our CEO and CFO, or persons performing similar functions, and effected by the Company's board of directors, management and other personnel 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. 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.

Management of the Company has assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2020. In making its assessment of internal control over financial reporting, management used the criteria described in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2020.

We have excluded ChampionX Holding Inc. ("legacy ChampionX") from our assessment of internal control over financial reporting as of December 31, 2020 because it was acquired by the Company in a purchase business combination during 2020. The total revenues and total assets of legacy ChampionX subsidiaries represent approximately 62% and 53%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2020.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2020 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in its report which is included herein.

ITEM 9B. OTHER INFORMATION

Iran Threat Reduction and Syria Human Rights Act of 2012

Under the Iran Threat Reduction and Syria Human Rights Act of 2012, which added Section 13(r) of the Securities Exchange Act of 1934, the Company is required to disclose in its periodic reports if it or any of its affiliates knowingly engaged in certain activities, transactions or dealings relating to Iran or with entities or individuals designated pursuant to certain Executive Orders. Disclosure is required even where the activities are conducted outside the U.S. by non-U.S. affiliates in compliance with applicable law, and even if the activities are not covered or prohibited by U.S. law.

As authorized by the U.S. Treasury's Office of Foreign Assets Control (OFAC), a non-U.S. subsidiary of the Company which is part of legacy ChampionX completed sales of products used for process and water treatment applications in upstream oil and gas production related to the operation of and production from the Rhum gas field off the Scottish coast (Rhum) totaling \$0.13 million during the period from October 1, 2020 to December 31, 2020. The net profit before taxes associated with these sales for each period were nominal. Rhum is jointly owned by Serica Energy plc and Iranian Oil Company (U.K.) Limited. Our non-U.S. subsidiary intends to continue the Rhum-related activities, consistent with a specific license obtained from OFAC by its customers, and such activities may require additional disclosure pursuant to the above mentioned statute.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information about our executive officers is presented under the caption “Information about our Executive Officers” in Part I, Item 1 of this Annual Report on Form 10-K.

The remaining information required by Part III, Item 10 of this Annual Report on Form 10-K is incorporated herein by reference from our Proxy Statement for the 2021 Annual Meeting of Stockholders, or will be included in an amendment to this Form 10-K.*

ITEM 11. EXECUTIVE COMPENSATION

The information required by Part III, Item 11 of this Annual Report on Form 10-K is incorporated herein by reference from our 2021 Proxy Statement, or will be included in an amendment to this Form 10-K.*

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by Part III, Item 12 of this Annual Report on Form 10-K is incorporated herein by reference from our 2021 Proxy Statement, or will be included in an amendment to this Form 10-K.*

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Part III, Item 13 of this Annual Report on Form 10-K is incorporated herein by reference from our 2021 Proxy Statement, or will be included in an amendment to this Form 10-K.*

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by Part III, Item 14 of this Annual Report on Form 10-K is incorporated herein by reference from our 2021 Proxy Statement, or will be included in an amendment to this Form 10-K.*

* Except for information or data specifically incorporated herein by reference under Items 10 through 14, other information in our 2021 Proxy Statement are not deemed to be a part of this Annual Report on Form 10-K.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Annual Report on Form 10-K:

1. Financial Statements:

Our consolidated financial statements are included under Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K.

2. Financial Statement Schedule and related Report of Independent Registered Public Accounting Firm:

See “Schedule II—Valuation and Qualifying Accounts” and the related Report of Independent Registered Public Accounting Firm included herein. All other financial statement schedules are omitted because of the absence of conditions under which they are required or because information required is shown in the consolidated financial statements and notes thereto in Part II, Item 8 of this Annual Report on Form 10-K.

3. Index of Exhibits:

Exhibit No	Exhibit Description	Incorporated by Reference		
		Form	Exhibit No.	Filing Date
2.1	Separation and Distribution Agreement, dated May 9, 2018, by and between Dover Corporation and ChampionX Corporation.	8-K	2.1	May 11, 2018
2.2	Agreement and Plan of Merger and Reorganization, dated as of December 18, 2019, by and among Ecolab Inc., ChampionX Holding Inc., ChampionX Corporation, and Athena Merger Sub, Inc.	8-K	2.1	December 20, 2019
2.3	Separation and Distribution Agreements, dated as of December 18, 2019, by and among Ecolab Inc., ChampionX Holding Inc., and ChampionX Corporation.	8-K	2.2	December 20, 2019
2.4	Tax Matters Agreement, dated as of June 3, 2020, by and among Ecolab Inc., ChampionX Holding Inc. and ChampionX Corporation.	8-K	2.4	June 4, 2020
2.5	Transition Services Agreement, dated as of June 3, 2020, by and among Ecolab Inc. and ChampionX Holding Inc.	8-K	2.5	June 4, 2020
2.6	Intellectual Property Matters Agreement, dated as of June 3, 2020, by and among Ecolab Inc. and ChampionX Holding Inc.	8-K	2.6	June 4, 2020
2.7	Master Cross Supply and Product Transfer Agreement, dated as of June 3, 2020, by and among Ecolab Inc. and ChampionX LLC.	8-K	2.7	June 4, 2020
3.1	Amended and Restated Certificate of Incorporation of the Company.	8-K	3.1	May 11, 2018
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company.	8-K	3.1	June 4, 2020
3.3	Amended and Restated By-Laws of the Company.	8-K	3.2	May 11, 2018
3.4	Amendment to Amended and Restated By-Laws of the Company.	8-K	3.2	June 4, 2020
4.1	Indenture, dated as of May 3, 2018, between Apergy Corporation, as Issuer, and Wells Fargo Bank, National Association, as Trustee.	8-K	4.1	May 7, 2018
4.2	Form of 6.375% Senior Notes due 2026 (included as Exhibit 1 to the Indenture filed as Exhibit 4.1).	8-K	4.2	May 7, 2018
4.3	Effective Date Supplemental Indenture, dated as of May 9, 2018, among the Guarantors named therein and Wells Fargo Bank, National Association, as Trustee.	8-K	4.1	May 11, 2018
4.4	Supplemental Indenture, dated as of November 5, 2019, among Apergy Corporation, the Guarantor named therein and Wells Fargo Bank, National Association, as Trustee.	10-K	4.5	March 2, 2020
4.5	Supplemental Indenture, dated as of June 18, 2020, among the Guarantors named therein and Wells Fargo Bank, National Association, as Trustee.	10-Q	4.1	August 7, 2020
4.6*	Description of ChampionX Corporation Common Stock	10-K	4.6	March 1, 2021
10.1	Credit Agreement, dated May 9, 2018, among the Company, as borrower, the lenders and issuing banks party thereto and JPMorgan Chase Bank, N.A., as administrative agent.	8-K	10.4	May 11, 2018
10.2	Amendment No. 1, dated February 14, 2020, amending that certain Credit Agreement dated as of May 9, 2018, by and among the Company, as borrower, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent.	8-K	10.1	February 18, 2020
10.3	Amendment No. 2, dated June 24, 2020, amending that certain Credit Agreement dated as of May 9, 2018, by and among the Company, as borrower, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent.	10-Q	10.2	August 7, 2020

10.4	Credit Agreement, dated June 3, 2022, among ChampionX Holding Inc., as borrower, the lenders party thereto and Bank of America, N.A., as administrative agent	8-K	10.2	June 4, 2020
10.5	Tax Matters Agreement, dated May 9, 2018, by and between the Company and Dover Corporation	8-K	10.2	May 11, 2018
10.6+	ChampionX Corporation Amended and Restated 2018 Equity and Cash Incentive Plan.	10-Q	10.3	August 7, 2020
10.7+	ChampionX Corporation Executive Officer Annual Incentive Plan.	8-K	10.6	May 11, 2018
10.8+	Apergy USA, Inc. Executive Deferred Compensation Plan.	8-K	10.7	May 11, 2018
10.9+	ChampionX Corporation Executive Severance Plan.	8-K	10.8	May 11, 2018
10.10+	ChampionX Corporation Senior Executive Change-in-Control Severance Plan.	8-K	10.9	May 11, 2018
10.11+	Form of award grant letter for restricted stock unit awards made under the ChampionX Corporation 2018 Equity and Cash Incentive Plan.	8-K	10.10	May 11, 2018
10.12+	Form of award grant letter for performance share awards made under the ChampionX Corporation 2018 Equity and Cash Incentive Plan.	8-K	10.11	May 11, 2018
10.13+*	ChampionX Mirror Savings Plan	10-K	10.13	March 1, 2021
21.1*	Subsidiaries of ChampionX Corporation.			
22.1	List of Issuer and Subsidiary Guarantor of Guaranteed Securities	10-Q	22.1	August 7, 2020
23.1*	Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm.			
31.1*	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.			
31.2*	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.			
32.1**	Certification of Chief Executive Officer Under Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1350.			
32.2**	Certification of Chief Financial Officer Under Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1350.			
101.INS*	XBRL Instance Document			
101.SCH*	XBRL Taxonomy Extension Schema Document			
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document			
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document			
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document			
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document			
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)			

*Filed herewith

**Furnished herewith

+ Denotes management contract or compensatory plan or arrangement

ITEM 16. FORM 10-K SUMMARY

None.

Schedule II—Valuation and Qualifying Accounts

Allowance for Doubtful Accounts	Balance at Beginning of Year	Charged to Cost and Expense⁽¹⁾	Accounts Written Off	Other	Balance at End of Year
Year Ended December 31, 2020	\$ 8,072	3,644	(3,230)	1,706	\$ 10,192
Year Ended December 31, 2019	\$ 4,745	4,955	(1,447)	(181)	\$ 8,072
Year Ended December 31, 2018	\$ 4,753	2,007	(1,489)	(526)	\$ 4,745

⁽¹⁾ Net of recoveries on previously reserved or written-off balances.

Deferred Tax Valuation Allowance	Balance at Beginning of Year	Additions	Reductions	Other	Balance at End of Year
Year Ended December 31, 2020	\$ 6,027	21,101	(342)	—	\$ 26,786
Year Ended December 31, 2019	\$ 722	5,556	(251)	—	\$ 6,027
Year Ended December 31, 2018	\$ 1,280	331	(889)	—	\$ 722

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CHAMPIONX CORPORATION
(Registrant)

Date: March 1, 2021

By: /s/ KENNETH M. FISHER

Kenneth M. Fisher

Executive Vice President and Chief Financial Officer

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

<u>Date</u>	<u>Signature</u>
March 1, 2021	<hr/> <p>/s/ SIVASANKARAN SOMASUNDARAM</p> <hr/> <p>Sivasankaran Somasundaram President and Chief Executive Officer Director (Principal Executive Officer)</p>
March 1, 2021	<hr/> <p>/s/ KENNETH M. FISHER</p> <hr/> <p>Kenneth M. Fisher Executive Vice President and Chief Financial Officer (Principal Financial Officer)</p>
March 1, 2021	<hr/> <p>/s/ ANTOINE MARCOS</p> <hr/> <p>Antoine Marcos Vice President, Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)</p>
March 1, 2021	<hr/> <p>/s/ HEIDI S. ALDERMAN</p> <hr/> <p>Heidi S. Alderman Director</p>
March 1, 2021	<hr/> <p>/s/ MAMATHA CHAMARTHI</p> <hr/> <p>Mamatha Chamarthi Director</p>
March 1, 2021	<hr/> <p>/s/ GARY P. LUQUETTE</p> <hr/> <p>Gary P. Luquette Director</p>
March 1, 2021	<hr/> <p>/s/ STUART PORTER</p> <hr/> <p>Stuart Porter Director</p>
March 1, 2021	<hr/> <p>/s/ DANIEL W. RABUN</p> <hr/> <p>Daniel W. Rabun Chairman of the Board of Directors</p>
March 1, 2021	<hr/> <p>/s/ STEPHEN M. TODD</p> <hr/> <p>Stephen M. Todd Director</p>
March 1, 2021	<hr/> <p>/s/ STEPHEN K. WAGNER</p> <hr/> <p>Stephen K. Wagner Director</p>

CHAMPIONX CORPORATION

RECONCILIATIONS OF GAAP TO NON-GAAP FINANCIAL MEASURES (UNAUDITED)

ChampionX Corporation presents its financial results in accordance with U.S. GAAP. However, management believes that adjusted EBITDA and adjusted EBITDA margin reflect the core operating results of our businesses and help facilitate comparisons of operating performance across periods. In addition, free cash flow is used by management to measure our ability to generate positive cash flow for debt reduction and to support our strategic objectives.

Additionally, we are providing the unaudited supplemental historical financial information of the Company on a non-GAAP adjusted basis for the years ended December 31, 2020 and 2019 as if the Merger was completed on January 1, 2019, to assist investors in assessing ChampionX's historical performance on a basis that includes the combined results of operations of both legacy Apergy Corporation and legacy ChampionX. The unaudited pro forma historical financial information has been prepared using assumptions that we believe provides a reasonable basis for presenting the combination of the historical financial information of legacy Apergy and legacy ChampionX. Management believes this unaudited supplemental historical financial information helps investors understand the long-term profitability trends of its newly combined business giving effect to the Merger and facilitates comparisons of our profitability to prior and future periods and to our peers. The supplemental unaudited financial information herein may not be comparable to similarly titled measures reported by other companies. The supplemental unaudited pro forma combined financial information does not purport to represent what the actual results of operations or the financial position of the combined company would have been had the Merger occurred on the dates assumed, nor are they indicative of future results of operations or financial position of the combined company.

The following tables reconcile our GAAP financial information with non-GAAP financial information used in this annual report for the years ended December 31, 2020 and 2019.

(in thousands)	Year Ended December 31, 2020		
	As Reported	Adjustments ⁽¹⁾	Pro Forma
Revenue	\$ 1,899,996	\$ 875,031	\$ 2,775,027
Net loss attributable to ChampionX	\$ (743,930)	\$ (33,623)	\$ (777,553)
Pre-tax adjustments:			
Goodwill and long-lived asset impairment	657,251	147,760	805,011
Separation and supplemental benefit costs	539	—	539
Restructuring and other related charges	23,291	4,688	27,979
Acquisition and integration related costs	84,779	(83,645)	1,134
Acquisition-related inventory step-up	6,463	(14,513)	(8,050)
Professional fees related to material weakness remediation and impairment analysis	6,240	—	6,240
Intellectual property defense	1,278	—	1,278
Tax impact of adjustments	(63,368)	34,465	(28,903)
Adjusted net income (loss) attributable to ChampionX	(27,457)	55,132	27,675
Tax impact of adjustments	63,368	(34,465)	28,903
Net income attributable to noncontrolling interest	1,577	1,321	2,898
Depreciation and amortization	214,362	46,568	260,930
Provision for (benefit from) income taxes	(20,396)	38,994	18,598
Interest expense, net	51,731	13,703	65,434
Adjusted EBITDA	<u>\$ 283,185</u>	<u>\$ 121,253</u>	<u>\$ 404,438</u>

(in thousands)	Year Ended December 31, 2019		
	As Reported	Adjustments ⁽¹⁾	Pro Forma
Revenue	\$ 1,131,251	\$ 2,325,103	\$ 3,456,354
Net income attributable to ChampionX	\$ 52,164	\$ 176,962	\$ 229,126
Pre-tax adjustments:			
Goodwill and long-lived asset impairment	1,746	—	1,746
Separation and supplemental benefit costs	6,377	—	6,377
Restructuring and other related charges	9,307	14,667	23,974
Environmental costs	1,988	—	1,988
Acquisition and integration related costs	10,145	(9,323)	822
Professional fees related to material weakness remediation and impairment analysis	2,780	—	2,780
Intellectual property defense	400	—	400
Tax impact of adjustments	(7,777)	(941)	(8,718)
Adjusted net income attributable to ChampionX	77,130	181,365	258,495
Tax impact of adjustments	7,777	941	8,718
Net income attributable to noncontrolling interest	796	7,420	8,216
Depreciation and amortization	119,938	111,764	231,702
Provision for income taxes	6,226	44,921	51,147
Interest expense, net	39,301	38,440	77,741
Adjusted EBITDA	\$ 251,168	\$ 384,851	\$ 636,019

(1) Includes the impact of the historical legacy ChampionX business on a stand-alone basis adjusted to give effect to the Merger under the acquisition method of accounting in accordance with Accounting Standards Codification 805, Business Combinations ("ASC 805"). The adjustments were prepared on the same basis as the adjustments included in our Registration Statement on Form S-4 (File No. 333-236379) and include a decrease in amortization and depreciation resulting from the preliminary purchase price adjustments, an increase in interest expense associated with the new term loan facility, removal of acquisition and integration related costs attributable to the Merger as well as the tax impact of those adjustments.

(in thousands)	Year Ended
	December 31, 2020
Cash provided by operating activities	\$ 310,040
Less: Capital expenditures	(45,163)
Free cash flow	\$ 264,877
Cash transaction expenses	84,136
Adjusted free cash flow	\$ 349,013

Shareholder Information

Investor Information

Shareholders, brokers, securities analysts or portfolio managers seeking information about ChampionX Corporation should contact Byron Pope either by email at byron.pope@championx.com or by phone at 713-230-8031.

Forward-Looking Statements

Any statements included in this 2020 Annual Report that are not historical facts, including without limitation regarding future market trends and results of operations are forward-looking statements within the meaning of applicable securities law. Please see "Forward-Looking Statements" in this 2020 Annual Report for more information.

Corporate Information

Transfer Agent

Computershare Trust Company, N.A.
462 South 4th Street
Suite 1600
Louisville, KY 40202
+1 (800) 522-6645

Independent Registered Public
Accounting Firm

PricewaterhouseCoopers LLP
Houston, Texas

Shares Listed on The Nasdaq Stock Market
Trading Symbol "CHX"

Stockholder Information Website

Additional information on ChampionX, including securities filings, press releases, Code of Business Conduct and Ethics, Corporate Governance Guidelines and Board Committee Charters, is available on our website at www.championx.com.



CHAMPIONX

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