

CDTI ADVANCED MATERIALS, INC.

Form 10-K

April 02, 2018

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, 2017

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 No.: 001-33710

CDTi ADVANCED MATERIALS, INC.

(Exact name of registrant as specified in its charter)

Delaware 06-1393453

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

1700 Fiske Place

Oxnard, CA 93033

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (805) 639-9458

Securities registered pursuant to Section 12(b):

Title of each class Name of each exchange on which registered

Common Stock, \$0.01 par value The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g): 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 and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Non-accelerated filer ☐

Large Accelerated filer ☐ Accelerated filer ☐ (Do not check if a Smaller reporting company ☒
smaller reporting company)

Emerging growth company ☐

Edgar Filing: CDTI ADVANCED MATERIALS, INC. - Form 10-K

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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the common equity held by non-affiliates of the registrant, computed by reference to the closing price as of the last business day of the registrant's most recently completed second fiscal quarter, June 30, 2017, was \$28,052,767. This calculation does not reflect a determination that persons are affiliates for any other purposes. The registrant does not have non-voting common stock outstanding.

As of March 22, 2018, the registrant had 15,803,736 shares of common stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

CDTi ADVANCED MATERIALS, INC.

Annual Report on Form 10-K

For the Year Ended December 31, 2017

Table of Contents

PART I

<u>Item 1. Business</u>	<u>1</u>
<u>Item 1A. Risk Factors</u>	<u>5</u>
<u>Item 1B. Unresolved Staff Comments</u>	<u>16</u>
<u>Item 2. Properties</u>	<u>16</u>
<u>Item 3. Legal Proceedings</u>	<u>16</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>16</u>

PART II

<u>Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>17</u>
<u>Item 6. Selected Financial Data</u>	<u>17</u>
<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>18</u>
<u>Item 7A. Quantitative and Qualitative Disclosures about Market Risk</u>	<u>25</u>
<u>Item 8. Financial Statements and Supplementary Data</u>	<u>25</u>
<u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>26</u>
<u>Item 9A. Controls and Procedures</u>	<u>26</u>
<u>Item 9B. Other Information</u>	<u>26</u>

PART III

<u>Item 10. Directors, Executive Officers and Corporate Governance</u>	<u>27</u>
<u>Item 11. Executive Compensation</u>	<u>31</u>
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>37</u>
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	<u>40</u>
<u>Item 14. Principal Accounting Fees and Services</u>	<u>42</u>

PART IV

<u>Item 15. Exhibits, Financial Statement Schedules</u>	<u>44</u>
<u>Item 16. Form 10-K Summary</u>	<u>50</u>

<u>SIGNATURES</u>	<u>50</u>
-------------------	-----------

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains 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, adopted pursuant to the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve risks and uncertainties, as well as assumptions that could cause our results to differ materially from those expressed or implied by such forward-looking statements. Forward-looking statements generally are identified by the words “may,” “will,” “project,” “might,” “expects,” “anticipates,” “believes,” “intends,” “estimates,” “should,” “could,” “would,” “strategy,” “plan,” or the negative of these words or other words or expressions of similar meaning. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements. These forward-looking statements are based on information available to us, are current only as of the date on which the statements are made, and are subject to numerous risks and uncertainties that could cause our actual results, performance, prospects or opportunities to differ materially from those expressed in, or implied by, the forward-looking statements. For a discussion of such risks and uncertainties, please see the discussion under the caption “Risk Factors” contained in this Annual Report on Form 10-K and in other information contained in this annual report and our publicly available filings with the Securities and Exchange Commission. You should not place undue reliance on any forward-looking statements. Except as otherwise required by federal securities laws, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, changed circumstances or any other reason.

You should read this Annual Report on Form 10-K and the documents that we reference in this Annual Report on Form 10-K and have filed with the Securities and Exchange Commission as exhibits thereto with the understanding that our actual future results and circumstances may be materially different from what we expect.

EXPLANATORY NOTE

The terms “Clean Diesel Technologies, Inc.”, “CDTi” or the “Company” or “we,” “our” and “us” means CDTi Advanced Materials, Inc. and its consolidated subsidiaries as of the date of this Annual Report on Form 10-K. We changed our name from Clean Diesel Technologies, Inc. to CDTi Advanced Materials, Inc. in March 2018. References to “Notes” are notes included in the consolidated financial statements included in this Annual Report on Form 10-K.

TRADEMARKS

The Clean Diesel Technologies name with logo, CDT logo, CDTi name with logo, CSI®, CATALYTIC SOLUTIONS®, CSI logo, ARIS®, BARETRAP®, BMARS™, CATRAP®, COMBICLEAN®, COMBIFILTER®, MPC®, P2C™, PATFLUID®, PLATINUM PLUS®, PURIFIER and design, PURIFILTER®, PURIMUFFLER®, SPGM™, SPINEL™, THREE-WAY ZPGM™, TWO-WAY ZPGM™, ZPGM™, ZPGM TWC™, TERMINOX® and UNIKA among others, are registered or unregistered trademarks of CDTi Advanced Materials, Inc. (including its subsidiaries).

PART I

ITEM 1. BUSINESS

Company Overview

CDTi Advanced Materials, Inc. is a leading provider of technology and solutions to the automotive emissions control markets. We possess market leading expertise in emissions catalyst design and engineering for automotive and off-road applications. In particular, we have a proven ability to develop proprietary materials incorporating various base metals that replace costly platinum group metals ("PGM") and rare earth metals in coatings on vehicle catalytic converters. Our business is driven by increasingly stringent global emission standards for internal combustion engines, which are major sources of a variety of harmful pollutants.

We deliver our catalyst technology through the supply of materials and technology used in the catalyst coating process as well as finished products such as coated substrates and emission control systems. We supply our proprietary catalyst technologies to major automakers, heavy duty truck manufacturers, catalyst manufacturers, distributors, integrators and retrofitters.

We produce coated substrates at our ISO certified manufacturing facility in Oxnard, California. In some instances, the coated substrates we produce are integrated into exhaust systems by third-party manufacturers before being shipped to our end customer. We also supply coated substrates directly to exhaust systems manufacturers for incorporation in their own products.

Over the past decade, we have developed and produced several generations of high performance catalysts for automotive and off-road applications. Over the last two years we have developed the ability to deliver our catalyst technology to other catalyst manufacturers in the form of functional powders or material systems. Most catalytic systems require significant amounts of costly PGMs to operate effectively. Our material systems, featuring inexpensive base-metals with low PGM content deliver like or better performance than competing higher-PGM catalysts.

The ability to supply our technology to other market participants has vastly expanded the addressable market for our products and allowed us to redeploy resources that were previously invested in capital intensive catalyst manufacturing activities. During 2017 we completed manufacturing commitments to Honda for production catalysts and sold our Durafit product line. These initiatives completed our repositioning as a supplier of materials and technology to the global catalyst market.

Strategy

Over more than twenty years, we have developed the emissions control technology and manufacturing know-how that allows us to deliver enabling technology to catalyst manufacturers globally. In support of this strategy, we have filed approximately 228 patents that underpin next-generation technology for our advanced zero-PGM or ZPGM and low-PGM catalysts. The ability to supply our advanced materials to other catalyst producers as functional powders allows us to achieve greater scale and higher return on our technology investment than would be possible solely as a manufacturer.

The strategy to provide our technology to other manufacturers has significantly increased the size of our addressable market and provides access to markets that would not be achievable as a catalyst producer. In the short term, we are focusing our efforts and resources by pursuing opportunities in fast growing OEM automotive markets in China and India, as well as in selected segments of the European and North American aftermarket.

China remains the world's single largest automotive market with more than 29 million vehicles sold in 2017 and offers significant opportunity for CDTi products. There is an extensive emission control systems supply chain serving domestic and international automobile manufacturers in China. Somewhat unique to China, there are many domestic catalyst manufacturers serving the automotive market in competition with the large global catalyst producers. This segment of the market requires technology and know-how to adhere to increasingly stringent emissions standards and to deliver competitively priced catalysts. In addition, there is significant pressure for the Chinese automotive market to address increasing air pollution, an issue that has escalated to become a matter of public policy. We believe these factors provide a highly favorable environment for our products and technology.

Air quality is also an important market driver in India where annual vehicle production was over 4.4 million in 2017 with an additional 21 million two and three wheel vehicles also produced. India has a number of domestic vehicle manufacturers that are served by both global and local catalyst manufacturers. There is significant opportunity to

provide enabling technology to local catalyst producers with the appropriate manufacturing expertise.

We have focused our resources in North America and Europe on providing our materials and technology to catalyst manufacturers serving the automotive aftermarket.

Evolving Global Emissions Standards

For heavy-duty diesel, China, India and Europe are all working towards achieving Eu-6 based emissions standards by 2020. China 6, Euro-6 and BS6 require very low PM, PN, CO, HC and NOx. The system and catalyst implications are now well understood and in all three markets the Diesel Oxidation Catalyst, Catalyzed Diesel Filter and SCR catalysts are the key catalyst components to enable compliance. Test cycles, such as WHTC, are becoming more real-world focused with the introduction of the Worldwide Harmonized Test Cycle.

In the US the future regulations for heavy-duty vehicles are focused on Greenhouse Gas Standards for 2021, with Environmental Protection Agency, or EPA, regulations in place, and the California Air Resources Board, or CARB, close to finalizing their requirements. Air Districts are publicly petitioning the EPA to create an Ultra Low NOx standard.

For light-duty passenger cars, China, India and Europe are all working towards achieving Eu-6 based emissions standards by 2020 but with some variations between the markets. China has a 6b category which is more stringent than any European standard and may be implemented early in some regions of China. The Eu-6 basis will require improved conversion efficiency and some level of adoption of particulate filters to meet the required particle number. The test cycles used to validate Euro 6c compliance are also becoming more real world focused, eventually moving to Worldwide Harmonized Light Vehicles Test Cycle (WLTC) transient cycle.

In the US the EPA and CARB standards are converging for passenger cars, with the most stringent standard, Tier3 bin 30, phased in by 2023. Tier 3 represents a very significant tightening of tailpipe emissions over the current standard.

The current US administration is reviewing the Tier 3 regulation plan and timing.

China and India, the world's two largest two-wheel markets, have transitioned from carbureted systems to closed loop, fuel injected systems containing three-way catalysts.

Technology

We have succeeded in developing a broad technology portfolio of new materials and catalysts that allow for a significant reduction in the use of PGM, and as a result, cost.

Our Spinel™ technology is a unique clean emissions exhaust technology which we believe will dramatically reduce the cost of attaining more stringent clean air standards. Spinel was the name initially given to naturally-occurring magnesium aluminate ($MgAl_2O_4$) and is now used to describe any composition with the same structure. Our Spinel™ technology can employ numerous low-cost metals in the spinel structure enabling use in a wide range of engine and vehicle applications, both gasoline and diesel, as well as other potential vertical markets. Our unique Spinel™ technology utilizes various base metals, which when combined together in a common structure, achieve unusual and very effective catalytic conversion activity. Spinel™ technology is ideal for the coating of catalytic converters, an alternative to those utilizing costly PGMs and rare earth materials. The base metals we use are common and inexpensive compared to PGMs, such as platinum, palladium and rhodium, and rare earth metals, such as cerium, lanthanum and neodymium. We believe Spinel™ technology will provide significant cost savings over conventional coating formulations. In addition, the Spinel™ technology structure is extremely versatile and stable. The versatility is critical for optimizing future generations of products to meet changing catalytic conversion needs for rapidly evolving engine technologies and increasingly stringent clean air standards. The stability of Spinel™ is critical to provide superior catalytic performance over time and at extreme temperatures for lifetime durability. In addition to SPGM™ and ZPGM™ catalysts, we currently have oxygen storage material, or OSM, under development, which synergizes PGM function and enables functionality of the critical vehicle on-board diagnostic system.

We have developed powder materials that can be used to produce SPGM™DOC, synergized PGM diesel oxidation catalyst. The unique materials developed enable a low PGM and high performance DOC for use in a range of applications, including systems utilizing particulate filters and SCR for advanced emission standards.

We protect our proprietary technologies, along with our other intellectual property, through the use of patents, trade secrets and registered and common law trademarks. For additional information, refer to the "Intellectual Property" discussion below.

Competitive Advantages

Through a focused technology development campaign, we have developed a full suite of materials for gasoline and diesel engines. We believe that our technologies and products represent a fundamentally different solution, and the following competitive strengths position us as a leading provider of emission control products and systems.

-

Superior Catalyst Performance. Our proprietary technology enables us to produce catalytic coatings capable of significantly better catalytic performance than those previously available. We have achieved this demonstrated performance advantage by creating catalysts using unique nanostructures with superior stability under prolonged exposure to high temperatures. As a result, in heavy duty diesel and automotive applications, our catalyst formulations

are able to maintain high levels of performance over time using substantially lower, or zero, PGMs than products previously available.

Catalyst Cost Advantage—Addressing Global PGM Supply and Demand. Expensive PGMs, which include palladium, platinum and rhodium, and rare earth metals such as cerium, neodymium and lanthanum, are used in the manufacture of emission control catalysts, with palladium being the primary component used in catalysts serving the global light duty vehicle market. According to Johnson Matthey PLC's "Platinum 2013 Interim Review", in 2013, over 70% of all primary platinum and 80% of all primary rhodium produced originated in South Africa. Russia and South Africa combined supplied over 75% of palladium. We believe that the continued growth in supply of these metals from the mines in South Africa and Russia will be critical in order to meet the increasingly stringent global emission control standards. According to the same report, it is estimated that more than \$6 billion is spent annually by OEMs on PGM purchases for catalysts. The global auto industry is expected to produce over 100 million vehicles by 2018, according to IHS Automotive. These production levels are expected to result in a continued increase in PGM demand for the foreseeable future. In addition, continued tightening of emission standards by regulators globally will require increased loading of PGM in emission catalysts. The new materials developed at CDTI enable OEMs and their suppliers to drastically reduce the PGM loadings in the DOC and TWC products that currently require the high cost of elevated PGM usage.

Highly Customizable Catalyst Formulations. We have developed our technology since inception as a platform that can be tailored for a range of different catalyst applications. Specifically, our formulations can be tailored in two distinct ways. First, the oxide compounds used in our formulations can be adapted for specific applications by adding a wide range of chemical elements to them. Second, we are able to vary the mixtures of our compounds to create customized solutions for specific applications for different vehicle platforms within the auto industry, complex heavy duty diesel equipment for OEMs, aftermarket and retrofit markets, and for different applications in the energy sector, such as selective catalytic reduction nitrogen oxide control for industrial and utility boilers, process heaters, gas turbines and generator sets. These could also include applications in the fuel cell, petrochemical and refinery, and thermoelectric industries.

Compatibility with Existing Manufacturing Infrastructure and Operating Specifications. Catalytic converters using our catalyst technologies are compatible with existing automotive manufacturing processes as well as specific vehicle operating specifications. Our customers generally do not need to change their manufacturing operations, processes, or how their products operate in order to utilize our proprietary technology.

Sales and Marketing

In the OEM segment, we utilize a business development team, with technical backgrounds, to pursue customers that can benefit from the use of our technology in the manufacture of their own catalysts. Extensive interaction is required between catalyst manufacturers and the auto-maker in the course of developing an effective, reliable catalyst for a particular application. We produce coated catalysts and continue to be an approved supplier of catalysts for major automotive manufacturers. Our ability to deliver our technology in powder form to catalyst manufacturers has enhanced our ability to market our products globally and to other catalyst manufacturers.

In the automotive aftermarket segment, our commercial efforts are concentrated on providing materials and technology to catalyst manufacturers in North America and Europe. We also serve niche markets including mining, oil and gas, and materials handling, as well as retrofit projects.

Competition

We believe our market position as a supplier of enabling materials and technology to catalyst manufacturers is unique. Where we supply coated catalysts and emission control systems, we compete against BASF GmbH, Johnson Matthey PLC, Umicore N.V., Donaldson Company, Inc., ESW, Inc., Hug Filtersystems, and DCL International, Inc. among others.

In the worldwide market, the key competitive factors are:

- Ability to provide a solution that satisfies emission reduction regulations;
- Total cost of product (inclusive of PGM);
- Ability to transition new products from development to production;
- Quality control that guarantees 100% compliance with specifications; and
- On-time delivery to support customer production requirements

Research and Development

Our research and development in catalyst technology is our core strength and has resulted in a broad array of products for the light duty vehicle and heavy duty diesel markets. We believe that the technical sophistication and cost-to-performance ratio of our products truly distinguishes our company. As a supplier of advanced materials, we must continually invest in the advancement of our technology.

Intellectual Property

Our intellectual property includes patent rights, trade secrets and registered and common law trademarks.

In order to more broadly commercialize our technology in new business models, we have sought patent protection in relation to any new industries and new countries in which we expect to do business. We have filed approximately 228 patents covering the following main technologies: fundamental catalyst formulations based on perovskite mixed metal oxides applicable to all catalyst markets, Spinel™ technology, Mixed Phase Catalyst (MPC®) technology, PGM-free catalyzed diesel particulate filter, selective catalytic reduction, diesel oxidation catalyst, ZPGM™ three-way catalyst formulations, ZPGM™ diesel oxidation catalyst, palladium three-way catalyst formulations, fuel-borne catalysts, optimization and stabilization of oxygen storage materials without rare earth materials, exhaust gas recirculation with selective catalytic reduction and exhaust systems for diesel engines incorporating particulate filters. Currently, our patents have expiration dates ranging from 2018 through 2033.

We have conducted an analysis of our technologies and intellectual property and have decided to aggressively patent our important technologies going forward. While we continue to rely on a combination of trade secrets, know-how, trademark registrations, confidentiality and other agreements with employees, customers, partners and others, we intend to strengthen our position through the prosecution of patents to protect our intellectual property rights pertaining to our products and technology.

Manufacturing Operations

Our manufacturing processes are designed to provide a high level of quality control at every step of our unique manufacturing process. We coat our proprietary catalyst products at our Oxnard, California manufacturing facility as well as support our downstream partners in deploying coating processes in their global facilities to enable them to correctly apply our unique products.

We maintain ISO 9001:2008, ISO/TS 16949:2009 and ISO 14001:2004 certifications for our facilities.

The availability of raw materials is generally dictated by global market supply of key materials. Delivery of key materials such as rare earth metals and PGMs have been at times constricted due to global supply constraints.

Changing suppliers for some raw materials may require regulatory or customer approval. For further discussion of risk of supply, refer to "Item 1.A. Risk Factors".

Regulations

We are committed to complying with all federal, state and international environmental laws governing production, use, transport and disposal of substances and control of emissions. In addition to governing our manufacturing and other operations, these laws often impact the development of our emissions control products, including, but not limited to, required compliance with emissions standards applicable to new product diesel, gasoline and alternative fuel engines. These regulations include those developed in Japan, in the United States by the EPA and CARB and in the E.U. by the European Environment Agency, including standards from the Verification of Emission Reduction Technologies, or VERT, Association.

In the United States, regulatory approval is obtained from the EPA or CARB through a verification process. The verification process includes a thorough review of the technology as well as tightly controlled testing to quantify statistically significant levels of emission reductions.

Company History

We are a Delaware corporation formed in 1994 as a wholly-owned subsidiary of Fuel Tech, Inc., a Delaware corporation (formerly known as Fuel-Tech N.V., a Netherlands Antilles limited liability company) ("Fuel Tech"), and were spun off by Fuel Tech in a rights offering in December 1995 on the NASDAQ Stock Market (Symbol CDTI). On October 15, 2010, we completed a business combination with Catalytic Solutions, Inc. ("CSI"), a California corporation formed in 1996, when our wholly-owned subsidiary, CDTI Merger Sub, Inc., merged with and into CSI. We refer to this transaction as the "Merger." The Merger was accounted for as a reverse acquisition and, as a result,

our Company's (the legal acquirer) consolidated financial statements are now those of CSI (the accounting acquirer), with the assets, liabilities, revenues and expenses of CDTI being included effective from October 15, 2010, the closing date of the Merger. From November 22, 2006 through the closing date of

the Merger, CSI's common stock was listed on the AIM of the London Stock Exchange (AIM: CTS and CTSU). We changed our name from Clean Diesel Technologies, Inc. to CDTi Advanced Materials, Inc. in March 2018.

Employees

As of December 31, 2017, we had 46 full time employees and 1 part time employee. None of our employees is a party to a collective bargaining agreement. We also retain outside consultants and sales and marketing consultants and agents.

ITEM 1A. RISK FACTORS

We are subject to risks and uncertainties that may affect our future financial performance and our stock price. Some of the risks and uncertainties that may cause our financial performance to vary or that may materially or adversely affect our financial performance or stock price are discussed below. Any of these risks, as well as other risks and uncertainties not known to us or that we believe to be immaterial, could harm our financial condition, results of operations or cash flows. You should carefully consider the risks described below in addition to the cautionary statements and risk factors described elsewhere and the other information contained in this Annual report on Form 10-K and in our other filings with the SEC, including subsequent reports on Forms 10-K, 10-Q and 8-K, before deciding to purchase, hold, or sell our stock.

Risks Related to Our Financial Condition

We have limited cash and experience negative cash flows from operations, and may need to raise additional capital to sustain our operations. If we are unable to raise additional capital when needed, we may be forced to seek to reorganize under bankruptcy laws or liquidate. As a result, our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.

As of December 31, 2017, we had cash of \$2.8 million. Additionally, we have historically operated with negative cash flows from operations and had operating cash flow deficits of \$5.3 million and \$7.0 million for the years ended December 31, 2017 and 2016, respectively. Due to these conditions, substantial doubt exists as to our ability to continue as a going concern. If necessary, we will seek to raise additional capital from the sale of equity securities or the incurrence of indebtedness to allow us to continue operations. There can be no assurance that additional financing will be available to us on acceptable terms, or at all. Our inability to raise capital when needed may cause us to reorganize our balance sheet and operations, or liquidate, under the protection of the U.S. Bankruptcy Code, which could result in a loss of your entire investment. Consistent with the foregoing, our auditors have rendered a going concern opinion in respect of our financial statements.

We may require additional working capital to maintain our operations in the form of funding from outside sources which may be limited, difficult to obtain, or unavailable on acceptable terms or not available at all, or in the case of an offering of common stock or securities convertible into or exercisable for common stock, may result in dilution to our existing stockholders.

We have historically relied on outside sources of funding in the form of debt or equity. If necessary, we will seek to raise capital from the sale of equity securities or the incurrence of indebtedness to allow us to continue operations. We believe that debt financing would be difficult to obtain because of our limited assets and cash flows. Any additional offering of shares of our common stock or of securities exercisable for or convertible into shares of our common stock may result in further dilution to our existing stockholders. Our ability to consummate a financing will depend not only on our ability to achieve positive operating results, but also on conditions then prevailing in the relevant capital markets. There can be no assurance that such funding will be available if needed, or on acceptable terms. In the event that we are unable to raise such funds, we may be required to delay, reduce or severely curtail or cease our operations or the implementation of our business strategies or otherwise impede our on-going business efforts and/or seek reorganization under the U.S. Bankruptcy Code, any of which could have a material adverse effect on our business, operating results, financial condition and long-term prospects.

Our business depends, in part, on the general availability of funding for emissions control programs, enforcement of existing emissions-related environmental regulations, further tightening of emission standards worldwide, market acceptance of our catalyst products, and successful product verifications.

Although retrofit is a declining part of our business, future growth of our business depends in part on the general availability of funding for emissions control programs, which can be affected by economic as well as political reasons. Future funding remains uncertain as budget discussions continue to be debated in the U.S. Congress. Funding under

the U.S. Congestion Mitigation and Air Quality program, or CMAQ, can be used by states for a variety of emission reduction programs including purchase of new vehicles, building high occupancy travel lanes (car-pool lanes) and retrofit programs. To the extent that these funds are not used for retrofit programs, it limits our sales opportunities. Funding for these types of emissions control projects

drives demand for our products. If such funding is not available, it can negatively affect our future growth prospects. In addition to funding, we also expect that our future business growth will be driven, in part, by the enforcement of existing emissions-related environmental regulations, further tightening of emissions standards worldwide, market acceptance of our catalyst products and successful product verifications. If such standards do not continue to become stricter or are loosened or are not enforced by governmental authorities due to commercial and business pressure or otherwise, it could have a material adverse effect on our business, operating results, financial condition and long-term prospects.

The pursuit of opportunities relating to special government mandated retrofit programs requires cash investment in operating expenses and working capital such as inventory and receivables prior to the realization of profits and cash from sales and, if we are not successful in accessing cash resources to make these investments, we may miss out on these opportunities; further, if we are not successful in generating sufficient sales from these opportunities, we will not realize the benefits of the investments in inventory, which could have an adverse effect on our business, financial condition and results of operations.

Although retrofit is a declining part of our business, we are pursuing revenue generating opportunities relating to special government mandated retrofit programs such as those in California and potentially others in various jurisdictions in North America, Europe and Asia. Opportunities such as these require cash investment in operating expenses and working capital such as inventory and receivables prior to realizing profits and cash from sales. If we are not successful in accessing cash resources to make these investments, we may miss out on these opportunities. Further, if we are not successful in generating sufficient sales from these opportunities, we will not realize the benefits of the investments in inventory, which would have an adverse effect on our business, financial condition and results of operations.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results, which will likely result in significant legal and accounting expense and diversion of management resources, and current and potential stockholders may lose confidence in our financial reporting and the market price of our stock will likely decline.

We are required by the SEC to establish and maintain adequate internal control over financial reporting that provides reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. We are likewise required, on a quarterly basis, to evaluate the effectiveness of our disclosure controls and to disclose any changes and material weaknesses in those internal controls.

Any failure to maintain internal controls could adversely affect our ability to report our financial results on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations. If we do not file our financial statements on a timely basis as required by the SEC and The NASDAQ Capital Market, we could face negative consequences from those authorities. In either case, there could be a material adverse effect on our business. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock. We can give no assurance that material weaknesses or restatements of financial results will not arise in the future due to a failure to implement and maintain adequate internal control over financial reporting or circumvention of these controls. In addition, in the future our controls and procedures may no longer be adequate to prevent or identify irregularities or errors or to facilitate the fair presentation of our consolidated financial statements. Responding to inquiries from the SEC or The NASDAQ Capital Market, regardless of the outcome, is likely to consume a significant amount of our management resources and cause us to incur significant legal and accounting expense. Further, many companies that have restated their historical financial statements have experienced a decline in stock price and related stockholder lawsuits.

Our ability to use our net operating loss carryforwards and other tax attributes to offset future taxable income is, and may continue to be, limited.

In connection with the debt conversion completed in the third quarter of 2016, we performed a study to evaluate the status of our net operating loss carryforwards ("NOLs"). Under Sections 382 and 383 of Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOLs and other pre-change tax attributes, such as R&D tax credits, to offset its post-change income and taxes may be

limited. In general, an "ownership change" occurs if there is a cumulative change in our ownership by "5% shareholders" that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. Because the debt conversion caused an "ownership change", our ability to use our NOLs and credits in future tax years has been significantly limited. In addition, due to the "ownership change," our federal R&D credits have also been limited and, consequently, we do not anticipate being able to use any of these credits that existed as of the date of the debt conversion in future tax years. Our limited ability to use these NOLs and tax credits, including as a result of equity offerings subsequent to the debt conversion, could have an adverse effect on our results of operations once we become profitable.

Changes in U.S. tax laws and regulations, including the Tax Cuts and Jobs Act of 2017, could have a material adverse effect on our business, cash flow, operating results, and financial condition.

Changes in tax laws and regulations, or changes in the interpretation of tax laws and regulations by federal or state authorities, may have a material adverse effect on our business, cash flows, operating results or financial condition. The federal government recently enacted the Tax Cuts and Jobs Act of 2017, which contains many significant changes to federal income tax laws, the consequences of which have not yet been fully determined. Changes in corporate tax rates and the deductibility of expenses contained in the 2017 Tax Act or other tax reform legislation could have a material impact on the future value of our deferred tax assets and deferred tax liabilities, could result in significant one-time costs or expenses in the current or future taxable years, and could increase our future U.S. tax expense. In addition, foreign governments or U.S. states may enact tax laws in response to the 2017 Tax Act that could result in further changes to taxation applicable to us and materially affect our operating results and financial condition. Foreign currency fluctuations could impact financial performance.

Because of our activities in the United Kingdom, Europe, Canada and Asia, we are exposed to fluctuations in foreign currency rates. We do not manage the risk to such exposure by entering into foreign currency futures and option contracts. Foreign currency fluctuations may have a significant effect on our operations in the future.

Risks Related to Our Business

We cannot assure you that our transition into an advanced materials supplier will have the intended effect of increasing profitability.

We have completed our operating strategy transition, however, we are still in process with our business strategy transition. We believe that the transition to a powder-to-coat business model will allow us to achieve greater scale and higher return on our technology investment than in the past. In the short term, we expect to focus our efforts and resources in pursuing opportunities in fast growing markets in China and India, as well as North America, which we believe that we can serve profitably with our powder-to-coat business model. However, we cannot assure you that these efforts will be successful and, if they are, that they will have the intended effect of increasing profitability. We may not be able to successfully implement this strategy for a number of reasons, including, but not limited to:

- Unforeseen costs and delays;

- Unexpected legal, regulatory, or administrative hurdles;

- Our customers' unfamiliarity with this business model;

- Restrictions on our technology; and

- Our inability to:

 - Obtain additional capital to pursue such strategies on favorable terms or at all;

 - Protect our intellectual property;

 - Develop products that meet or exceed the qualification standards of OEMs and partners and provide greater value than alternatives;

 - Persuade other catalyst manufacturers to incorporate our technology in their products;

 - Find suitable third parties with whom to enter into partnering arrangements or invest in our business;
 - and

 - Compete successfully or enter new markets.

Furthermore, in attempting to execute this strategy, we may harm our relationships with customers, suppliers, employees or other third parties, any of which could be significant. The process of exploring, financing, and realigning our strategic path may also be disruptive to our business. While we believe the pursuit of this strategy will have a positive effect on our profitability in the long-term, there is no assurance that this will be the case. If we are not successful in our efforts to carry out this strategy, our business, financial condition, and results of operation may be adversely affected.

Our sales of coated catalysts to Honda, which historically has represented a substantial portion of our revenues, began to significantly decline in the fourth quarter of 2017 and will substantially end in the first quarter of 2018, which will adversely affect our operations and financial results if we are unable to secure new sources of revenue.

Historically, we have derived a significant portion of our revenue from sales to Honda, which represented 52% and 59% of consolidated revenues for the years ended December 31, 2017 and 2016, respectively. While we continually seek to broaden our customer base, we have remained dependent on Honda for a substantial portion of our revenue. Our supply of coated catalysts to Honda began to significantly decline in the second half of 2017, as certain vehicle models were phased out and will substantially end with the first quarter of 2018. Accordingly, it will be critical that our powder-to-coat business strategy produces revenues with new customers to replace revenues from our current core catalyst business with Honda.

Historically, we have been dependent on a few major customers for a significant portion of our revenue and our revenue would decline if we are unable to maintain those relationships, if customers reduce their orders for our products, or if we are unable to secure new customers.

We expect to continue to derive a significant portion of our revenue from a limited number of customers. If we are unable to maintain our relationships with customers, or if customers reduce their orders for our products, our revenues will decline.

In addition, manufacturers typically seek to have two or more sources of critical components; however, there can be no assurance that manufacturers for which we are a shared supplier will not sole source the products we supply. Once our product is designed into a vehicle model, we generally supply our component for the life of that model. There can be no assurance, however, that our customers will retain us for a full model term. In this regard, relationships with our customers are based on purchase orders rather than long-term formal supply agreements and customers can discontinue or materially reduce orders without warning or penalty. In addition, while new models tend to remain relatively stable for a few years, there can be no assurance that manufacturers will not change models more rapidly, or change the performance requirements of components used in those models, and use other suppliers for these new or revised models. Demand for our products is tied directly to demand for vehicles. Accordingly, factors that affect the truck and automobile markets have a direct effect on our business, including factors outside of our control, such as vehicle sales slowdowns due to economic concerns, or as a result of natural disasters, including earthquakes and/or tsunamis. The loss of one or more of our significant customers, or reduced demand from one or more of our significant customers, would have an adverse effect on our revenue, and could affect our ability to become profitable or continue our business operations.

An expired agreement between us and Honda may limit our rights to commercialize certain technology within the scope of that agreement and adversely affect our technology licensing strategy.

In conjunction with our longstanding relationship with Honda, we entered into a joint research agreement with the motorcycle division of Honda regarding the development of ZPGM™ catalysts for motorcycles. The agreement was signed in 2010, extended in 2012 and expired in March 2014, although confidentiality provisions continue to survive. The agreement provides that technology within the scope of the agreement developed solely by one party is owned by that party, and that technology within the scope of the agreement that is jointly developed by both parties is jointly owned. While we believe that core technology within the scope of the agreement was developed solely by us, there can be no assurance that our belief will not be challenged or invalidated. To the extent that Honda is a joint owner of critical technology developed under the agreement, Honda (including its automotive division) might not be required to pay us a license or royalty fee for use of the jointly owned technology; Honda may be able to manufacture its own catalysts based on the jointly owned technology; and Honda may be able to license the jointly owned technology to others without our consent. In addition, under the terms of the agreement, we may not be able to license jointly owned technology to others without Honda's consent. Our inability to license jointly owned technology to others could adversely affect the ability to license certain technology.

We may not be able to successfully market new products that are developed or obtain verification or approval of our new products.

Our advanced material products are still in the development or testing stage with targeted customers. We are developing technologies in areas that are intended to have a commercial application; however, there is no guarantee that such technologies will actually result in any commercial applications. In addition, we plan to market other

emissions reduction devices used in combination with our current products. There are numerous development and verification issues that may preclude the introduction of these products for commercial sale. These proposed operations are subject to all of the risks inherent in a developing business enterprise, including the likelihood of continued operating losses. If we are unable to demonstrate the feasibility of these proposed commercial applications and products or obtain verification or approval for the products from regulatory agencies, we may have to abandon the products or alter our business plan. Such modifications to our business plan will likely delay achievement of revenue milestones and profitability.

PGMs and rare earth metals price fluctuations could impact financial performance.

Because our catalysts contain platinum, palladium and rhodium, or platinum group metals (PGMs), and rare earth metals, fluctuations in prices could have an adverse impact on our profits as it may not be possible to recover price increases from customers. Additionally, increased prices could result in increased working capital requirements which we may not be able to finance. Conversely, reductions in PGM prices could reduce the competitive advantage our catalyst technologies have over conventional catalysts which rely on significantly higher PGM loadings to achieve emissions targets.

We depend on intellectual property and the failure to protect our intellectual property could adversely affect our future growth and success.

We rely on patent, trademark and copyright law, trade secret protection, and confidentiality and other agreements with employees, customers, partners and others to protect our intellectual property. In addition, some of our intellectual property is not protected by any patent or patent application. The lack of patent and trademark protection may be intentional as we may lack sufficient resources to protect our intellectual property in every applicable jurisdiction. As a result, it may be possible for third parties to obtain and use our intellectual property without the need to obtain our authorization.

We do not know whether any patents will be issued from our pending or future patent applications or whether the scope of any issued patents is or will be sufficiently broad to protect our technologies. Moreover, patent applications and issued patents may be challenged or invalidated. We could incur substantial costs in prosecuting or defending patent infringement suits. In addition, the laws of some foreign countries may not protect or enforce intellectual property rights to the same extent as do the laws of the United States.

The patents protecting our proprietary technologies expire after a period of time. Certain of our patents have expired and others have expiration dates ranging from 2018 through 2033. Although we have attempted to incorporate technology from our core patents into specific patented product applications, product designs and packaging, there can be no assurance that this building block approach will be successful in protecting our proprietary technology and products. If we are not successful in protecting our proprietary technology, it could have a material adverse effect on our business, financial condition and results of operations. Questions have arisen regarding our exclusive ownership and control of certain technologies, including by our principal customer, Honda, and a former employee, who claims ownership in a patent relating to ZPGM™. In addition, we have sold technology for exclusive use in Asia to another party. For additional information, refer to “An expired agreement between us and Honda may limit our rights...” above and “We are subject to restrictions and must pay a royalty on certain sales of our products and technology in specified countries in Asia” below. Past or future weaknesses in control of our intellectual property could render our current strategies unachievable, require that we change our strategies which could prove unsuccessful, result in litigation over ownership issues including the costs thereof and potential adverse findings, require that we pay to license back technology that we developed or co-developed, or otherwise material adversely affect us, our business and our financial performance.

As part of our confidentiality procedures, we generally have entered into nondisclosure agreements with employees, consultants and corporate partners. We also have attempted to control access to and distribution of our technologies, documentation and other proprietary information. We plan to continue these procedures. Despite these procedures, third parties could copy or otherwise obtain and make unauthorized use of our technologies or independently develop similar technologies. The steps that we have taken and that may occur in the future might not prevent misappropriation of our solutions or technologies, particularly in foreign countries where laws or law enforcement practices may not protect the proprietary rights as fully as in the United States.

There can be no assurance that we will be successful in enforcing our proprietary rights. For example, from time to time we have become aware of competing technologies employed by third parties who might be covered by one or more of our patents. In such situations, we may seek to grant licenses to such third parties or seek to stop the infringement, including through the threat of legal action. There is no assurance that we would be successful in negotiating a license agreement on favorable terms, if at all, or able to stop the infringement. Any infringement upon our intellectual property rights could have an adverse effect on our ability to develop and sell commercially competitive systems and components.

If we fail to obtain the right to use the intellectual property rights of others which are necessary to operate our business, our ability to succeed will be adversely affected.

From time to time, we may choose to or be required to license technology or intellectual property from third parties in connection with the development of our products. We cannot assure you that third-party licenses will be available to us on commercially reasonable terms, if at all. Generally, a license, if granted, would include payments of up-front fees, ongoing royalties or both. These payments or other terms could have an adverse impact on our results of operations. The inability to

obtain a necessary third-party license required for our product offerings or to develop new products and product enhancements could require us to substitute technology of lower quality or performance standards, or of greater cost, either of which could adversely affect our business. If we are not able to obtain licenses from third parties, if necessary, then we may also be subject to litigation to defend against infringement claims from these third parties. Our competitors may be able to obtain licenses or cross-license their technology on better terms than we can, which could put us at a competitive disadvantage. If we are unable to obtain or maintain any third-party license required to develop new products and product enhancements, on favorable terms, our results of operations may be harmed.

If third parties claim that our products infringe upon their intellectual property rights, we may be forced to expend significant financial resources and management time litigating such claims and our operating results could suffer. Third parties may claim that our products and systems infringe upon their patents and other intellectual property rights. Identifying third-party patent rights can be particularly difficult, notably because patent applications are generally not published until up to 18 months after their filing dates. If a competitor were to challenge our patents, or assert that our products or processes infringe their patent or other intellectual property rights, we could incur substantial litigation costs, be forced to make expensive product modifications, pay substantial damages or even be forced to cease some operations. Third-party infringement claims, regardless of their outcome, would not only drain financial resources but also divert the time and effort of management and could result in customers or potential customers limiting or deferring their purchase or use of the affected products or services until resolution of the litigation.

We are subject to restrictions and must pay a royalty on certain sales of our products and technology in specified countries in Asia.

In February 2008, we established a joint venture in Japan called TC Catalyst, Inc., or TCC, with Tanaka Holdings Co., Ltd. (formerly Tanaka Holdings K.K.), a Japanese company, which, together with its subsidiary Tanaka Kikinzoku Kogyo K.K., is referred to herein as TKK. Initially, we and TKK each owned 50% of TCC, but since formation we have sold most of our stake in the venture to TKK and now own 5%. In connection with these transactions, we also sold to TKK certain proprietary technology for sale, licensing or use in various countries in Asia, which we refer to as the Territory. In general, the technology covers our catalyst formulations (including platinum and zero platinum) developed for heavy-duty commercial vehicles and other applications through 2013, and for non-commercial light vehicles through 2012. In addition, TKK has a right to cause us to license heavy-duty commercial technology to TKK or TCC in exchange for a royalty if TKK or TCC desire to sell related products or services outside the Territory to subsidiaries of OEM customers located within the Territory. We have also agreed not to compete in the Territory with TKK or TCC in connection with heavy-duty commercial vehicles and applications and light duty vehicles.

Subsequent to these arrangements, we discovered that an exception allowing us to continue to supply catalysts in Japan to our largest customer, Honda, had been omitted in an amendment to the original transaction documents with TKK. We have shipped approximately \$5.6 million of catalysts covered by the agreements since such amendment through December 31, 2014. In this regard, in December 2014 we made a good faith payment of \$0.3 million to TKK with respect to such prior shipments.

In addition, on March 13, 2015, we further amended our agreements with TKK and TCC to, among other things, enable us to sell in the Territory (i) coated substrates or certain catalytic materials utilizing the technology we sold to TKK for a 4% royalty to TKK; (ii) coated substrates and certain catalytic materials utilizing solely new technology developed by us after we sold TKK the prior technology, as well as licenses of such technology related to catalysts for heavy-duty commercial vehicles and applications and light duty vehicles, for a 3% royalty to TKK; (iii) products used in vehicles without a royalty, provided that the ultimate user of the vehicle which contains the product purchases the vehicle outside the Territory; (iv) limited quantities of coated substrates or certain catalytic materials sold for the purpose of customer testing, evaluation and approval without a royalty; and (v) limited quantities of coated substrates sold during an extended period of time after mass production ends for a specified vehicle model year program without a royalty.

Pursuant to the terms of the amendment, once an aggregate amount of approximately \$16.6 million in royalties has been paid by us to TKK, we may commercialize any technology without a royalty, including inside the Territory.

Consequently, if we or third parties desire to sell our products or otherwise commercialize certain of our technology in the Territory, we currently would have to pay a royalty to TKK in order to do so, which could adversely affect our ability to expand. In addition, although we believe that the amendment to the parties' agreements will generally enable us to pursue our business strategies in the Territory and that, based on discussions with TKK, our non-binding, good faith payment relieves us from further obligations to TKK with respect to past shipments of catalysts covered by the agreements, there can be no assurance that TKK will not assert claims and pursue available remedies, any of which could have an adverse effect on our business.

If we fail to comply with anti-bribery laws, including the U.S. Foreign Corrupt Practices Act we could be subject to civil and/or criminal penalties.

As a result of our international operations, we may be subject to anti-bribery laws, including the U.S. Foreign Corrupt Practices Act, which prohibits companies from making improper payments to foreign officials for the purpose of obtaining or keeping business. If we fail to comply with these laws, the U.S. Department of Justice, the Securities and Exchange Commission, or SEC, or other U.S. or foreign governmental authorities could seek civil and/or criminal sanctions, including monetary fines and penalties against us or our employees, as well as additional changes to our business practices and compliance programs, which could have a material adverse effect on our business, results of operations, or financial condition.

Developments stemming from changes in Government administrations, both foreign and domestic, could adversely affect our business.

Changes in administration could result in changes to political, regulatory and economic laws, policies and conditions that could severely and negatively impact our business. For example, the current U.S. administration has expressed doubt regarding existing trade agreements, such as the North American Free Trade Agreement, and has raised the possibility of imposing tariffs on goods imported into the United States. Our customers are located around the world. Changes in U.S. political, regulatory and economic conditions or laws and policies governing U.S. tax laws, foreign trade, manufacturing, and development and investment in the countries where we or our customers operate could adversely affect our operating results and our business.

Failure of one or more key suppliers to timely deliver could prevent, delay or limit us from supplying products. Delays in delivery times for PGM purchases could also result in losses due to fluctuations in prices. Delays in the delivery times and the cost impact of the world-wide shortage of rare earth metals could delay us from supplying products and could result in lower profits.

Due to customer demands and specifications, we are required to source critical materials and components such as ceramic substrates from a sole supplier. Our three largest suppliers accounted for over 39% of our raw material purchases during the year ended December 31, 2017. Failure of one or more of the key suppliers to deliver timely could prevent, delay or limit us from supplying products because we would be required to qualify an alternative supplier. For certain products and customers, we are required to purchase PGM materials. As commodities, PGM materials are subject to daily price fluctuations and significant volatility, based on global market conditions.

Historically, the cost of PGMs used in the manufacturing process has been passed through to the customer. This limits the economic risk of changes in market prices to PGM metal usage in excess of nominal amounts allowed by the customer. However, going forward there can be no assurance that we will continue to be successful in passing PGM price risk onto our current and future customers to minimize the risk of financial loss. Additionally, PGM material is accounted for as inventory and therefore subject to lower of cost or market adjustments on a regular basis. A drop in market prices relative to the purchase price of PGMs could result in a write-down of inventory. Due to the high value of PGM materials, special measures have been taken to secure and insure the inventory. There is a risk that these measures may be inadequate and expose us to financial loss. We utilize rare earth metals in the production of some of our catalysts. Due to a reduction in export from China of these materials, there has been a world-wide shortage, leading to a lack of supply and higher prices. We risk delays in shipment due to this constrained supply and potentially lower margins if we are unable to pass the increased costs on to our customers.

Qualified management, marketing, and sales personnel are difficult to locate, hire and train, and if we cannot attract and retain qualified personnel, it will harm the ability of the business to grow.

Our success depends, in part, on our ability to retain current key personnel, attract and retain future key personnel, additional qualified management, marketing, scientific, and engineering personnel, and develop and maintain relationships with research institutions and other outside consultants. Competition for qualified management, technical, sales and marketing employees is intense. In addition, some employees might leave our Company and go to work for competitors. The loss of key personnel or the inability to hire or retain qualified personnel, or the failure to assimilate effectively such personnel could have a material adverse effect on our business, operating results and financial condition.

We may have difficulty managing growth in our business.

Because of our size, growth in accordance with our business plan, if achieved, will place a significant strain on our financial, technical, operational and management resources. As we expand our activities, there will be additional demands on these resources. The failure to continue to upgrade our technical, administrative, operating and financial control systems or the occurrence of unexpected expansion difficulties, including issues relating to our research and development activities and retention of experienced scientists, managers and engineers, could have a material adverse effect on our business, financial condition and results of operations and our ability to timely execute our business plan. If we are unable to implement these actions in a timely manner, our results may be adversely affected.

Our transition from a niche manufacturer of emissions control solutions to an advanced materials technology provider of proprietary powders will increase our reliance on third-party manufacturers and could harm our business.

In connection with our efforts to realign our manufacturing footprint, we closed our Canadian manufacturing facility in 2016. As a result of this action, we now rely on third-party service providers to manufacture certain of our products. This reliance generates a number of risks, including decreased control over the production process, which could lead to production delays or interruptions, and inferior product quality control. In addition, performance problems at these third-party providers could lead to cost overruns, shortages or other problems, which could increase our costs of production or result in delivery delays to our customers.

If one or more of our third-party manufacturers becomes insolvent or unwilling to continue to manufacture products of acceptable quality, at acceptable costs, in a timely manner, our ability to deliver products to our retail customers could be significantly impaired. Substitute manufacturers might not be available or, if available, might be unwilling or unable to manufacture the products we need on acceptable terms. Moreover, if customer demand for our products increases, we may be unable to secure sufficient additional capacity from our current third-party manufacturers, or others, on commercially reasonable terms, or at all.

Any liability for environmental harm or damages resulting from technical faults or failures of our products could be substantial and could adversely affect our business and results of operations.

Customers rely upon our products to meet governmental emissions control standards. Failure of our products to meet such standards could expose us to claims from customers. Our products are also integrated into goods manufactured by our customers, and therefore, a malfunction or the inadequate design of our products could subject us and our customers to product liability claims. We have agreed to indemnify and hold harmless certain of our customers against losses arising from environmental harm and product liability claims. Any liability for environmental harm or damages resulting from technical faults or failures could be substantial and could adversely affect our business and results of operations. In addition, a well-publicized actual or perceived problem could adversely affect the market's perception of our products, which would materially impact our financial condition and operating results.

By email dated June 26, 2015, the California Air Resources Board (CARB) asserted that we had deficiencies in compliance with the Verification Procedure, Aftermarket Parts Regulations and the Vehicle Code. The penalty calculated by CARB for these alleged violations was \$1.8 million, with the largest component relating to the use of empty center bodies to allow trucks to be placed back in service while warranty claims are being evaluated. This process is now explicitly permitted regulation, but was not permitted at the time of the alleged violation. Although we disagreed, and continue to disagree, with CARB's findings, we cooperated with CARB's investigation and discussed with CARB whether and to what extent the payment of monetary penalties would be appropriate. After review and evaluation of CARB's findings and publicly available CARB settlements for similar matters, we accrued an expense of less than \$0.1 million as of December 31, 2015 to resolve this matter. During 2016, CARB responded to our proposed settlement with a counter-proposal of \$0.8 million by cutting certain components of their initial penalty in half and reducing certain penalties. We ultimately reached a settlement for approximately \$0.1 million that was paid in 2017. We have entered into contractual agreements in connection with past sales of certain of our assets, which may expose us to liability for claims for indemnification under such agreements.

We have entered into various agreements by which we may be obligated to indemnify the other party with respect to certain matters. Generally, these indemnification provisions provide that we agree to hold the indemnified party harmless against losses arising from a breach of the contract terms. Payments by us under such indemnification clauses are generally conditioned on the other party making a claim. Such claims are generally subject to challenge by us and to dispute resolution procedures specified in the particular contract. Further, our obligations under these arrangements may be limited in terms of time and/or amount and, in some instances, we may have recourse against third parties for certain payments made by us. It is not possible to predict the maximum potential amount of future payments under these indemnification agreements due to the conditional nature of our obligations and the unique facts of each particular agreement.

Risks Related to Our Industry

Future growth of our business depends, in part, on market acceptance of our catalyst products, successful verification of our products and retention of our verifications.

While we believe that there exists a viable market for our developing catalyst products, there can be no assurance that such technology will succeed as an alternative to competitors' existing and new products. The development of a market for the products is affected by many factors, some of which are beyond our control. The adoption cycles of our key customers are

12

lengthy and require extensive interaction with the customer to develop an effective and reliable catalyst for a particular application. While we continue to develop and test products with key customers, there can be no guarantee that all such products will be accepted and commercialized. Our relationships with our customers are based on purchase orders rather than long-term formal supply agreements. Once a catalyst has successfully completed the testing and certification stage for a particular application, it is generally the only catalyst used on that application and therefore unlikely that, unless there are any defects, the customer will try to replace that catalyst with a competing product. However, our customers usually have alternate suppliers for their products and there is no assurance that we will continue to win the business. Also, although we work with our customers to obtain product verifications in accordance with their projected production requirements, there is no guarantee that we will be able to receive all necessary approvals for our catalysts by the time a customer needs such products, or that a customer will not accelerate its requirements. If we are not successful in having verified catalyst products to meet customer requirements, it will have a negative effect on our revenues, which could have a material adverse effect on our results of operations.

If a market fails to develop or develops more slowly than anticipated, we may be unable to recover the costs we will have incurred in the development of our products and may never achieve profitability. In addition, we cannot guarantee that we will continue to develop, manufacture or market our products or components if market conditions do not support the continuation of the product or component.

We believe that it is an essential requirement of the U.S. retrofit market that emissions control products and systems are verified under the EPA and/or CARB protocols to qualify for funding from the EPA and/or CARB programs. Funding for these emissions control products and systems is generally limited to those products and technologies that have already been verified. Verification is also useful for commercial acceptability. Notably, EPA verifications were withdrawn on two of our products in January 2009 because available test results were not accepted by the EPA as meeting new emissions testing requirements for nitrogen dioxide (NO₂) measurement. As a general matter, we have no assurance that our products will be verified by the CARB or that such a verification will be acceptable to the EPA. If we are not able to obtain or maintain necessary product verifications, it will limit our ability to commercialize such products, which could have a negative effect on our revenues and on our results of operations.

Our results may fluctuate due to certain regulatory, marketing and competitive factors over which we have little or no control.

The factors listed below, some of which we cannot control, may cause our revenue and results of operations to fluctuate significantly:

- Actions taken by regulatory bodies relating to the verification, registration or health effects of our products;
- The extent to which our products obtain market acceptance;
- The timing and size of customer purchases;

• Customer concerns about the stability of our business, which could cause them to seek alternatives to our solutions and products; and

• Increases in raw material costs, particularly platinum group metals and rare earth metals.

We face constant changes in governmental standards by which our products are evaluated.

We believe that, due to the constant focus on the environment and clean air standards throughout the world, requirements in the future to adhere to new and more stringent regulations are possible as governmental agencies seek to improve standards required for certification of products intended to promote clean air. In addition, while the EPA has adopted rules under existing provisions of the U.S. Clean Air Act that requires a reduction in emissions of greenhouse gases from motor vehicles, the U.S. President has signed an executive order directing the EPA and other executive agencies to review their existing regulations, orders, guidance documents and policies. It remains unclear how and to what extent these executive actions will impact the regulation of emissions at the federal level. Even if federal efforts in this area are slow, state, local and/or foreign governments may enact legislation or regulations that attempt to control or limit motor vehicle emissions. In the event our products fail to meet these ever-changing standards, some or all of our products may become obsolete.

We face competition and technological advances by competitors.

There is significant competition among companies that provide solutions for pollutant emissions from internal combustion engines. Several companies market products that compete directly with our products. Other companies

offer products that potential customers may consider to be acceptable alternatives to our products and services, including products that are verified

by the EPA, the CARB or other environmental authorities. We face direct competition from companies with greater financial, technological, manufacturing and personnel resources. Newly developed products could be more effective and cost-efficient than our current or future products. We also face indirect competition from vehicles using alternative fuels, such as methanol, hydrogen, ethanol and electricity.

New standards, lower environmental limits or stricter regulation for health reasons of platinum or cerium metals could be adopted and affect use of our products.

New standards or environmental limits on the use of platinum or cerium metals by a governmental agency could adversely affect our ability to use our Platinum Plus® fuel-borne catalyst in some applications. Government or regulatory bodies in countries where we sell our Platinum Plus® fuel-borne catalyst could adopt limits or regulations with regards to platinum and cerium metals that could impact our ability to sell Platinum Plus® and related fuel borne catalysts.

Security breaches and improper access to or disclosure of our proprietary information, or other hacking attacks on our systems, could adversely affect our business.

Our industry is prone to cyber-attacks, with third parties seeking unauthorized access to our proprietary information and technology. Computer malware, viruses, and hacking and phishing attacks by third parties have become more prevalent in our industry and may occur on our systems in the future. We believe such attempts are increasing in number and in technical sophistication, and in some instances we may be unable to anticipate these techniques or to implement adequate preventative measures. Additionally, we may be unaware of an incident or its magnitude and effects. Although we have developed systems and processes that are designed to protect our proprietary information and to prevent other cybersecurity breaches, we cannot guarantee that such measures will provide absolute security. Any failure to prevent or mitigate security breaches and improper access to or disclosure of our proprietary information could result in the loss or misuse of such proprietary information, which could harm our business and diminish our competitive position. Such attacks may also create system disruptions or cause shutdowns. Any of these events could have a material and adverse effect on our business, reputation, and operating results.

Risks Related to Our Common Stock

We could be delisted from NASDAQ, which could seriously harm the liquidity of our stock and our ability to raise capital.

During 2016, we received two separate notifications from the Listing Qualifications staff of The NASDAQ Stock Market LLC indicating that we no longer met the requirements to maintain a minimum bid price of \$1 per share and a minimum stockholders' equity of \$2.5 million. We remedied both deficiencies by August 30, 2016 and regained compliance with NASDAQ's requirements for continued listing on the exchange.

While currently we are in compliance with NASDAQ's rules for continued listing, in the future we may again fail to comply with the minimum bid price, minimum stockholders' equity or other NASDAQ listing requirement, in which case our common stock will be subject to delisting. If that were to occur, there can be no assurance that we will be able to again regain compliance, or that we would be eligible for listing on any comparable trading market. The effects of losing the NASDAQ listing could materially harm our ability to raise capital, by, among other things, negatively affecting the market liquidity of our common stock. Investors would likely find it more difficult to purchase, dispose of or obtain accurate quotations as to the market value of our common stock, and the price of our common stock may be adversely affected. Delisting from NASDAQ could also result in negative publicity and a loss of confidence by investors, customers, suppliers or employees.

The requirements of being a public company may strain our resources, divert our management's attention and affect our ability to attract and retain qualified board members.

As a public company, we are subject to the reporting requirements of the Exchange Act and are required to comply with the applicable requirements of the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The NASDAQ Stock Market and other applicable securities rules and regulations. Compliance with these rules and regulations have increased our legal and financial compliance costs, made some activities more difficult, time-consuming or costly and increased demand on our systems and resources. Among other things, the Exchange Act requires that we file annual, quarterly and current reports with respect to our business and results of operations and maintain effective disclosure controls and procedures and internal controls over financial reporting. In order to maintain and, if required, improve our disclosure controls and procedures and internal

controls over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could harm our business and results of operations. Although we have already hired additional employees to comply with these requirements, we may need to hire even more employees or retain professional service providers in the future, which will increase our costs and expenses. In addition, we expect that these new rules and regulations will make it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or

incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation and nominating committee, and qualified executive officers.

The risk of dilution, perceived or actual, may contribute to downward pressure on the trading price of our stock. We have outstanding warrants and stock options to purchase shares of our common stock, and additional shares or warrants or options to acquire shares of our common stock may be issued in the future. At December 31, 2017, we had outstanding options and warrants to purchase an aggregate of approximately 1.9 million shares of our common stock. The exercise of these securities will result in the issuance of additional shares of our common stock. We may also issue additional shares of our common stock or securities exercisable for or convertible into shares of our common stock, whether in the public market or in a private placement to fund our operations, or as compensation. These issuances, particularly where the exercise price or purchase price is less than the current trading price for our common stock, could be viewed as dilutive to the holders of our common stock.

To provide us with additional flexibility to access capital markets for general corporate purposes, we filed a shelf registration statement which was declared effective by the SEC on November 17, 2015. The shelf registration statement permits us to sell, from time to time, up to an aggregate \$50.0 million of various securities, including common stock, preferred stock, warrants to purchase common stock or preferred stock and units consisting of one or more of the foregoing or any combination of such securities, not to exceed one-third of our public float in any 12-month period. As of December 31, 2017, we had sold an aggregate of \$3.1 million using the shelf registration statement. To the extent that we raise additional capital by issuing equity securities under our shelf registration statement, our stockholders may experience dilution.

The risk of dilution, perceived or actual, may cause existing stockholders to sell their shares of stock, which could contribute to a decrease in the price of shares of our common stock. In that regard, downward pressure on the trading price of our common stock may also cause investors to engage in short sales, which could further contribute to downward pressure on the trading price of our stock.

We do not intend to pay dividends for the foreseeable future and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any dividends on our common stock. We intend to retain any earnings to finance the operation and expansion of our business, and we do not anticipate paying any cash dividends in the future. As a result, you may only receive a return on your investment in our common stock if the market price of our common stock increases.

There has been and may continue to be significant volatility in the volume and price of our common stock on the NASDAQ Capital Market and an investment in our stock could suffer a decline in value.

Our stock historically has experienced high levels of volatility. The trading price of our common stock may continue to fluctuate substantially, depending on many factors, some of which are beyond our control and may not be related to our operating performance. These fluctuations could cause you to lose all or part of your investment in our common stock. Factors that could cause fluctuations in the trading price of our common stock include, but are not limited to, the following:

- fluctuations in demand for our products;
- product development efforts;
- the loss of any customer relationship;
- the addition of a new customer relationship;
- mergers and acquisitions involving us, our customers or our competitors;
- price and volume fluctuations in the overall stock market from time to time;
- fluctuations in the trading volume of our shares or the size of our public float;
- actual or anticipated changes or fluctuations in our results of operations;
- whether our results of operations meet the expectations of securities analysts or investors;
- actual or anticipated changes in the expectations of investors or securities analysts;
- litigation involving us, our industry, or both;
- regulatory developments in the United States, foreign countries, or both;

• general economic conditions and trends;
• major catastrophic events;
• sales of large blocks of our common stock;
• departures of key employees; or
• an adverse impact on the company from any of the other risks cited herein.

In addition, if the stock market, in general, experiences a loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, results of operations or financial condition. The trading price of our common stock might also decline in reaction to events that affect other companies in our industry even if these events do not directly affect us. Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company's securities. We may be the target of securities-related litigation, which could divert our management's attention and resources, result in substantial costs, and have an adverse effect on our business, results of operations and financial condition.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We use approximately 52,000 square feet of space in Oxnard, California under three separate lease agreements, one that is month-to-month, one that expires on June 30, 2018 and one that expires on April 30, 2019. Our Oxnard facilities include our corporate headquarters, contain a warehouse that is used for shipping and receiving, and are also used for manufacturing and research and development. We also lease approximately 4,300 square feet of space in Malmö, Sweden for administrative, research and development and European sales and marketing; and an office in a shared office suite complex in Whyteleafe, Surrey, United Kingdom (outside London) for administrative and sales and marketing which we lease on a month-to-month basis.

We do not anticipate the need to acquire additional space in the near future and consider our current capacity to be sufficient for current operations and projected growth. As such, we do not expect that our rental costs will increase substantially from the amounts historically paid in 2017.

ITEM 3. LEGAL PROCEEDINGS

Refer to Note 18, "Commitments and Contingencies".

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

Market Information

Our common stock is traded on The NASDAQ Capital Market under the symbol "CDTI". The following table sets forth for the periods indicated the high and low sale prices of our common stock as reported on the NASDAQ Capital Market.

On July 22, 2016, we effected a one-for-five reverse stock split of our common stock. All share and per share information has been retroactively adjusted to reflect the reverse stock split.

NASDAQ
Capital
Market
High Low

2017

1st Quarter	\$3.05	\$1.62
2nd Quarter	\$3.72	\$2.26
3rd Quarter	\$3.17	\$1.52
4th Quarter	\$2.59	\$1.26

2016

1st Quarter	\$5.00	\$2.55
2nd Quarter	\$3.80	\$1.50
3rd Quarter	\$5.21	\$1.60
4th Quarter	\$3.72	\$1.98

Holders

At March 22, 2018, there were 129 holders of record of our common stock, which excludes stockholders whose shares were held by brokerage firms, depositories and other institutional firms in "street name" for their customers.

Dividends

No dividends have been paid on our common stock and we do not anticipate paying dividends in the foreseeable future.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Recent Sale of Unregistered Securities

None.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements, the accuracy of which involves risks and uncertainties. See "Cautionary Statement Concerning Forward-Looking Statements" included elsewhere in this Annual Report on Form 10-K. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, as a result of many important factors, including those set forth in Part I-Item 1A "Risk Factors".

References to "Notes" are notes included in the consolidated financial statements included in this Annual Report on Form 10-K.

Overview

The Company is a leading provider of technology and solutions to the automotive emissions control markets. We possess market leading expertise in emissions catalyst design and engineering for automotive and off-road applications. In particular, we have a proven ability to develop proprietary materials incorporating various base metals that replace costly platinum group metals ("PGM") and rare earth metals in coatings on vehicle catalytic converters. Our business is driven by increasingly stringent global emission standards for internal combustion engines, which are major sources of a variety of harmful pollutants.

We deliver our catalyst technology through the supply of materials and technology used in the catalyst coating process, as well as finished products such as coated substrates and emission control systems. We supply our proprietary catalyst technologies to catalyst manufacturers, vehicle and equipment manufacturers, integrators and retrofitters.

We produce coated substrates at our ISO Technical Specifications certified manufacturing facility in Oxnard, California. In some instances, the coated substrates we produce are integrated into exhaust systems by third-party manufacturers, before being shipped to our end customer. We also supply coated substrates directly to exhaust systems manufacturers for incorporation in their own products.

Over the past decade, we have developed and produced several generations of high performance catalysts for automotive and off-road applications. Over the last two years we have developed the ability to deliver our catalyst technology to other catalyst manufacturers in the form of functional powders or material systems. Most catalytic systems require significant amounts of costly PGMs to operate effectively. Our material systems, featuring inexpensive base-metals with low PGM content deliver like or better performance than competing higher-PGM catalysts.

The ability to supply our technology to other market participants has vastly expanded the addressable market for our products and allowed us to redeploy resources that were previously invested in capital intensive catalyst manufacturing activities. During 2017 we completed manufacturing commitments to Honda for production catalysts and sold our Durafit product line. These initiatives completed our repositioning as a supplier of materials and technology to the global catalyst market.

Strategy

Over more than twenty years, we have developed the emissions control technology and manufacturing know-how to allow us to progress to delivering enabling technology for manufacturers serving the emissions catalyst market. The ability to deliver our advanced materials to other catalyst producers as functional powders allows us to achieve greater scale and higher return on our technology investment than would be possible as a manufacturer of emission control systems. The strategy to provide our technology to other manufacturers has significantly increased the size of our addressable market and provides access to markets that would not be achievable as a catalyst producer. In the short term, we are focusing our efforts and resources by pursuing opportunities in fast growing markets in China and India, as well as North America, where we believe that we can rapidly leverage our technology provider business model. China remains the world's single largest automotive market with more than 29 million vehicles sold in 2017 and offers significant opportunity for CDTi products. There is an extensive emission control systems supply chain serving domestic and international automobile manufacturers in China. Somewhat unique to China, there are many domestic catalyst manufacturers serving the automotive market in competition with the large global catalyst producers. This

segment of the market requires technology and know-how to adhere to increasingly stringent emissions standards and to deliver competitively priced catalysts. In addition, there is significant pressure for the Chinese automotive market to address increasing air pollution, an issue that has escalated to become a matter of public policy. We believe these factors provide a highly favorable environment for our products and technology.

Air quality is also an important market driver in India where annual vehicle production was over 4.4 million in 2017 with an additional 21 million two and three wheel vehicles also produced. India has a number of domestic vehicle manufacturers that are served by both global and local catalyst manufacturers. There is significant opportunity to provide enabling technology to domestic catalyst producers with the appropriate manufacturing expertise.

In North America and in Europe, our transition to a technology provider business model includes an initial commercial focus on aftermarket catalyst manufacturers. In North America, there is important opportunity for us to provide our advanced materials to producers of diesel particulate filters ("DPF") and diesel oxidation catalysts ("DOC") for the heavy duty diesel aftermarket and to manufacturers of aftermarket catalysts for the passenger car market. In Europe, we have begun commercialization of our technology for selective catalytic reduction ("SCR") de-nox applications to catalyst manufacturers and systems integrators serving the heavy duty diesel aftermarket.

During the third quarter of 2017, we sold substantially all of the assets of our DuraFit and private label OEM replacement DPF and DOC business, completing the final step in facilitating our transformation into a provider of enabling technology to the emissions catalyst market by the end of 2017. Our advanced materials and specialty coating business model streamlines our infrastructure, supports higher margins and improves profitability. While we will begin with less revenue than under our previous model, we expect to drive growth in our new powder-to-coat business as we exit 2018 and into 2019 by providing technology to our manufacturing partners in the U.S., China, India and Europe and to OEMs around the world. We believe our technology provider model is highly scalable, allowing us to contend for the more than 90 million vehicle market globally.

In support of this strategy, we have filed approximately 228 patents that underpin next-generation technology for our advanced zero-PGM or ZPGM and low-PGM catalysts, and from 2015 and 2016, we completed an initial series of vehicle tests to validate our next-generation technologies. Based on the success of these tests, we are beginning to make our new catalyst technologies available to OEMs, catalyst coaters and other participants in the emission reduction supply chain for use in proprietary powder form, and we foresee multiple paths to market our new technologies.

2017 Financial Overview

For the year ended December 31, 2017 revenues were \$28.4 million, a decrease of approximately \$8.5 million, or 23% from the prior year, loss from operations was \$5.9 million, a decrease of approximately \$9.8 million from the prior year, and basic and diluted net loss from operations per share was \$0.34 compared to \$3.84 in the prior year. The decrease in revenues is primarily driven by the sale of our DuraFit product line in September 2017, continued contraction of the retrofit market ahead of the catalyst industry's shift to an after-market model, and the decrease in orders for our coated catalyst products by Honda. We do not anticipate significant revenue from Honda in 2018. The decrease in the loss from operations is primarily due to a goodwill impairment charge of \$4.7 million in the fourth quarter of 2016, benefits realized from our 2016 cost reduction initiatives, as well as a decrease in severance and other charges for our remaining liability related to our closed Canadian manufacturing facility.

Net cash used in operations was \$5.3 million for the year ended December 31, 2017.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures in the financial statements. Critical accounting policies are those accounting policies that may be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and that have a material impact on financial condition or operating performance. While we base our estimates and judgments on our experience and on various other factors that we believe to be reasonable under the circumstances, actual results may differ from these estimates under different assumptions or conditions.

We believe that the assumptions, judgments and estimates involved in the accounting for revenue recognition, allowance for doubtful accounts, inventory valuation, product warranty reserves, accounting for income taxes,

goodwill, impairment of long-lived assets other than goodwill, stock-based compensation and liability-classified warrants have the greatest potential impact on our unaudited condensed consolidated financial statements. Please refer to Note 3, "Significant Accounting Policies" in the accompanying notes to the consolidated financial statements for a more complete discussion of our critical accounting policies and estimates.

Impact of Recent Accounting Pronouncements

For information with respect to recent accounting pronouncements and the impact of these pronouncements see Note 3, "Significant Accounting Policies" in the accompanying notes to the consolidated financial statements.

Customer Dependency and Relationship with Honda

Historically, we have derived a significant portion of our revenues from a limited number of customers. Sales to Honda represented 52% and 59% of our revenues for the year ended December 31, 2017 and 2016, respectively. Our sale of coated catalysts to Honda significantly declined in the second half of 2017. We do not anticipate significant revenue from Honda in 2018. Accordingly, it will be critical that our advanced materials business strategy produces revenue from new customers, which may include Honda, directly or indirectly, to replace revenues from our legacy core catalyst business.

Results of Operations

Comparison of Operations for the years ended December 31, 2017 and 2016

Revenues

	Year Ended December 31,						Change	
	2017	% of Total Revenues		2016	% of Total Revenues		\$	%
	(\$ in thousands)							
Coated catalysts	\$15,627	55 %		\$22,520	61 %		\$(6,893)	(31)%
Emission control systems	11,116	39 %		12,970	35 %		(1,854)	(14)%
Technology and advanced materials	1,610	6 %		1,349	4 %		261	19 %
Total revenues	\$28,353	100 %		\$36,839	100 %		\$(8,486)	(23)%

Coated catalyst revenues are generated from the sale of our high performance catalysts which reduce emissions from gasoline, diesel and natural gas combustion engines. Emission control systems revenues were generated from the sale of products in our extensive line of heavy duty diesel aftertreatment systems for retrofit and aftermarket applications including the Purafilter™

and DuraFit brands. In September 2017, we sold our DuraFit product line although we continue to provide technology and materials to aftermarket participants. Technology and advanced materials revenues included licenses and royalties, as well as sales of our advanced materials platform. The timing and amounts of revenue generated from licensing agreements will fluctuate.

For the year ended December 31, 2017 our lower coated catalysts revenues are largely attributable to decreased sales to Honda. Our sales to Honda will substantially end in the first quarter of 2018. The decline in revenues from our emission control systems is due to the sale of the DuraFit product line in September 2017 and the ongoing contraction of the retrofit market. An increase in royalty payments under our licensing agreements drove the increase in revenue from technology and advanced materials.

Cost of revenues

	Year Ended December 31,						Change	
	2017	% of Total Revenues		2016	% of Total Revenues		\$	%
	(\$ in thousands)							
Cost of revenues	\$22,455	79 %		28,773	78 %		\$(6,318)	(22)%

Cost of revenues includes the costs of materials and assembly labor, as well as assembly services, and labor and overhead costs associated with manufacturing and product procurement, planning and quality assurance. Our cost of

revenues is affected by various factors, including product mix, volume, and provisions for excess and obsolete inventories, materials, labor and overhead costs, as well as manufacturing efficiencies. Our cost of revenues as a percentage of revenues is affected by these factors, as well as customer mix, volume, pricing and competitive pricing programs.

The decrease in our coated catalyst revenue impacted the absorption of overhead resulting in an increase in cost of revenues as a percentage of revenues which was further impacted by a significant increase in the price of palladium in 2017. The increase in the price of palladium impacted our PGM liability.

Operating expenses

	Year Ended December 31,						Change	
	2017	% of Total Revenues	2016	% of Total Revenues			\$	%
	(\$ in thousands)							
Research and development	\$3,970	14 %	\$4,657	13 %			\$(687)	(15)%
Selling, general and administrative	8,292	29 %	11,837	32 %			(3,545)	(30)%
Goodwill impairment	—	— %	4,675	13 %			(4,675)	*
Severance and other charges	(480)	(2)%	2,555	7 %			(3,035)	(119)%
Total operating expenses	\$11,782	42 %	\$23,724	64 %			\$(11,942)	(50)%

*Percentage not meaningful

Research and development expenses consist primarily of compensation expense for employees and contractors engaged in research, design and development activities, as well costs paid to outside parties for testing, validation and certification of our products. We also incur legal fees specific to the acquisition and maintenance of our patents. Selling, general and administrative expenses consist primarily of compensation expense, legal and professional fees, facilities expenses, and communication expenses. Goodwill impairment charge in 2016 relates to the impact of our annual impairment analysis. Severance and other charges relate primarily to the closure of our Canadian facility and the transfer of operations to our California facility, the sale of our DuraFit product line, and the decrease in operations personnel in response to the decrease in sales to Honda and include severance costs, equipment disposal, moving costs, and building exit costs.

Research and development expenses

The decrease is primarily a result of reduced spending on supplies for new product development, as well as decreased legal spending for patent support. Legal fees vary with the timing of new patent filings and updates. Although, the fundamental research of our new key materials, such as SPGM-DOC™ and Spinel™, have largely transitioned out of fundamental research into applications development for specific market opportunities, research and development expenses may still be significantly impacted by the timing of outside testing requirements as we work with new customers to implement our products.

Selling, general and administrative expenses

We decreased general and administrative costs including payroll, benefits, and stock compensation expenses as a result of the closure of our Canadian facility and changes made at our California location, as well as consulting fees. In the third quarter of 2017, we further decreased our sales and support staff upon the sale of our DuraFit product line.

Goodwill impairment

In connection with our annual impairment analysis performed during the fourth quarter of 2016, we determined that our goodwill was impaired. As a result, we recognized an impairment charge of \$4.7 million. See Note 15 for further details.

Severance and other charges

The decrease was due primarily to the closure of our Canadian facility in the second quarter of 2016 partially offset by severance expense recognized in 2017 related to the elimination of sales and support positions impacted by the sale of our DuraFit product line, as well as the decrease in our operations personnel in response to the decrease in our coated catalyst revenues. In addition, during the second quarter of 2017, we reached an agreement with the property owner of our former Canadian facility to exit our lease prior to its December 2018 termination which resulted in a decrease in our severance liability for the year ended December 31, 2017.

Other income (expense)

	Year Ended December 31,						Change		
	2017	% of Total Revenues		2016	% of Total Revenues		\$	%	
	(\$ in thousands)								
Interest expense, net	\$(260)	(1	)%	\$(1,535)	(4	)%	\$1,275	(83)%
Gain on change in fair value of bifurcated derivative liability	—	—	%	2,754	7	%	(2,754)	*	
Loss on extinguishment of debt	(194)	(1)%	(12,410)	(34)%	12,216	*
Gain on change in fair value of liability - classified warrants	523	2	%	1,554	4	%	(1,031)	(66)%	
Gain on sale of DuraFit business	805	3	%	—	—	%	805	*	
Other (expense) income, net	(188)	(1)%	863	2	%	(1,051)	*
Total other income (expense)	\$686	2	%	\$(8,774)	(24	)%	\$9,460	*

*Percentage not meaningful

For the year ended December 31, 2017, the increase in other income was primarily due to a loss on extinguishment of debt related to the Kanis S.A. \$2.0 million promissory note and amendment of the Kanis S.A. loan agreement during the second quarter of 2016, lower interest expense due to a decrease in debt outstanding during the respective periods as well as the gain on sale of the DuraFit business. These benefits were offset by a lower gain on the remeasurement of liability-classified warrants as well as the gain on bifurcated derivative liability recognized in the second quarter of 2016.

Income Tax Expense (Benefit)

On December 22, 2017, the U.S. government enacted comprehensive tax reform commonly referred to as the Tax Cuts and Jobs Act ("TCJA"). Under FASB Accounting Standards Codification ("ASC 740"), the effects of changes in tax rates and laws are recognized in the period which the new legislation is enacted. The TCJA makes broad and complex changes to the U.S. tax code, including, but not limited to: (1) reducing the U.S. federal corporate tax rate from 35% to 21%; (2) changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017; (3) bonus depreciation that will allow for full expensing of qualified property; (4) creating a new limitation on deductible interest expense; (5) eliminating the corporate alternative minimum tax ("AMT"); (6) limitation on the deductibility of executive compensation under Internal Revenue Code §162(m); and (7) new tax rules related to foreign operations.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin ("SAB") No. 118, which provides guidance on accounting for the tax effects of TCJA. The purpose of SAB No. 118 was to address any uncertainty or diversity of view in applying ASC Topic 740, Income Taxes in the reporting period in which the TCJA was enacted. SAB No. 118 addresses situations where the accounting is incomplete for certain income tax effects of the TCJA upon issuance of a company's financial statements for the reporting period that includes the enactment date. SAB No. 118 allows for a provisional amount to be recorded if it is a reasonable estimate of the impact of the TCJA. Additionally, SAB No. 118 allows for a measurement period to finalize the impacts of the TCJA, not to extend beyond one year from the date of enactment.

In connection with the initial analysis of the impact of the TCJA, we recorded a provisional decrease in our deferred tax assets and liabilities with a corresponding adjustment to its valuation allowance. While we are able to make a reasonable estimate of the impact of the reduction in the corporate rate, it is subject to further analysis, interpretation and clarification of the TCJA, which could result in changes to this estimate during 2018.

We incurred income tax expense (benefit) of \$0.1 million and \$(1.0) million during the years ended December 31, 2017 and 2016, respectively. Our effective income tax rate was approximately 2% for the year ended December 31, 2017, compared to 4% for the year ended December 31, 2016. The differences between our effective tax rate and the U.S. statutory tax rate were primarily related to the valuation allowance offsetting the deferred tax assets in both the U.S. and U.K. jurisdictions, as well as Swedish and Canadian foreign tax rate differentials.

Liquidity and Capital Resources

Historically, the revenue that we have generated has not been sufficient to fund our operating requirements and debt servicing needs. Notably, we have suffered recurring losses since inception. As of December 31, 2017, we had an accumulated deficit of \$228.3 million compared to \$223.1 million at December 31, 2016. We have also had negative cash flows from operations from

inception through the year ended December 31, 2017. Our primary sources of liquidity in recent years have been asset sales, credit facilities and other borrowings and equity sales.

We had \$2.8 million in cash at December 31, 2017 compared to \$7.8 million at December 31, 2016. At December 31, 2017 and 2016, \$0.4 million and \$1.1 million, respectively, of our cash was held by foreign subsidiaries in Canada, Sweden and the U.K. We anticipate most of the cash held by foreign subsidiaries will be used to fund our subsidiaries' continued operations. If we decide to repatriate unremitted foreign earnings in the future, it could have negative tax implications.

2016 Debt Transactions

On April 1, 2016, we executed a Promissory Note (the "Kanis Note") and entered into an amendment of existing loan agreements (the "Kanis Agreement") with Kanis S.A. Pursuant to the terms of the Kanis Note, Kanis S.A. agreed to lend the Company \$2.0 million at 8% per annum with a maturity date of September 30, 2017. Pursuant to the terms of the Kanis Agreement, we and Kanis S.A. agreed to amend prior loans with an aggregate outstanding principal balance of \$7.5 million (collectively, the "Loan Agreements"), such that: (i) Kanis S.A. had the right to convert the principal balance of the Loan Agreements and any accrued interest thereon into common stock of the Company at any time prior to maturity at a conversion price equal to the lower of the closing price of CDTI's common stock on the date before the date of the Kanis Agreement or as of the date when Kanis S.A. exercises its conversion right; and (ii) we had the right to mandatorily convert the \$7.5 million principal balance and any accrued interest thereon into its common stock upon maturity of the Loan Agreements or earlier upon the occurrence of a Liquidity Event at a conversion price equal to the lower of the closing price of CDTI as of the date immediately before the date of the Kanis Agreement or at a 25% discount to the Liquidity Event price. A Liquidity Event was defined as a strategic investment in CDTI or a public stock offering by CDTI. The Company could prepay the principal and any interest due on the Loan Agreements at any time before their maturity date without penalty.

On April 11, 2016, we executed a Convertible Promissory Note (the "Director Note") with Lon E. Bell, Ph.D., one of the Company's Directors. Pursuant to the terms of the Director Note, Dr. Bell agreed to lend \$0.5 million at 8% per annum and a maturity date of September 30, 2017. Dr. Bell had the right to convert the principal balance of the Director Note and any accrued interest thereon into common stock of the Company at any time prior to maturity.

On June 30, 2016, we also entered into a Note Purchase Agreement with Haldor Topsøe A/S, a company organized under the laws of Denmark ("Haldor Topsøe"). We agreed to sell and issue (i) a Senior Convertible Promissory Note (the "Senior Note") in the principal amount of \$0.75 million and (ii) a Convertible Promissory Note (the "Note", and with the Senior Note, the "Convertible Notes") in the principal amount of \$0.5 million, each of which was convertible into our equity securities.

Change in Control/Debt Conversion

On August 25, 2016, we held a special meeting of our stockholders to consider and vote to approve (i) in exchange for outstanding promissory notes and other evidences of debt in the aggregate principal amount of \$7.5 million plus accrued but unpaid interest thereon owed by us to Kanis S.A., the issuance of a number of shares of our common stock determined by dividing the Kanis S.A. indebtedness as of the date of the exchange by \$1.6215, and (ii) in exchange for an outstanding promissory note in the aggregate principal amount of \$0.5 million plus accrued but unpaid interest thereon owed by us to Dr. Lon Bell, one of our directors, the issuance of a number of shares of our common stock determined by dividing the Bell indebtedness as of the date of the exchange by \$1.6215. Our stockholders approved the issuance of shares in exchange for the Kanis S.A. and Bell indebtedness, and we also exercised our right to mandatorily convert an additional \$0.5 million in principal of indebtedness owed by us to Haldor Topsøe A/S at the conversion price of \$1.6215 per share. We issued an aggregate of 5,498,339 shares of our common stock in exchange for the extinguishment of \$8.9 million of indebtedness.

Settlement of the Kanis S.A. and Bell debt exchange transactions and the conversion of the Haldor Topsøe A/S promissory note increased the number of shares of common stock issued and outstanding by approximately 5.5 million shares, resulting in substantial dilution of the percentage ownership of CDTi held by stockholders prior to the settlement. Settlement of the Kanis S.A exchange also resulted in a change in control of the Company with Kanis S.A. being the largest owner of our common stock, our only outstanding voting securities, in an amount greater than 50% of the issued and outstanding shares of common stock. Kanis S.A.'s percentage ownership of our common stock was subsequently reduced below 50% following our issuance of 6.2 million shares of our common stock in the fourth quarter of 2016. Kanis S.A. continues to hold a significant percentage of our common stock and is our single largest stockholder. Consequently, Kanis S.A will be able to influence, among other matters presented to our stockholders for a vote, the individuals elected to our Board, and our current stockholders will have a limited ability to influence significant corporate decisions requiring stockholder approval. In addition, Kanis S.A.'s ownership of a significant percentage of our voting securities could, under certain circumstances, discourage or make more difficult and expensive a third party's pursuit of a change of control of the Company.

On December 16, 2016, Haldor Topsøe elected to convert the Senior Note for which we issued an aggregate of 462,535 shares of common stock in conversion of \$0.75 million in principal amount of indebtedness.

2016 Equity Transactions

On May 19, 2015, we filed a shelf registration statement on Form S-3 with the SEC which was declared effective on November 17, 2015. Shelf registration statements are intended to provide us with additional flexibility to access capital markets for general corporate purposes, subject to market conditions and our capital needs. The form S-3 permits us to sell in one or more registered transactions up to an aggregate of \$50.0 million of various securities not to exceed one-third of our public float in any 12-month period. As of December 31, 2017, we had sold an aggregate of \$3.1 million using the Form S-3. For additional information, refer to Note 12, "Stockholders' Equity".

On November 3, 2016, we entered into a securities purchase agreement with institutional and individual accredited investors and certain of our officers and directors to raise gross proceeds of approximately \$10.3 million in a private placement of common stock at a per-share price of \$2.00. The offering was consummated in two closings. The initial closing for 949,960 shares of common stock, for gross proceeds of approximately \$1.9 million, was completed on November 4, 2016. The second closing for approximately 4.2 million shares, for gross proceeds of approximately \$8.4 million, was completed on December 16, 2016.

We believe the equity raise and the debt conversions completed in 2016, and the sale of our DuraFit product line in the third quarter of 2017, improved our overall net cash positions; however, there is no assurance that we will be able to achieve projected levels of revenue and maintain access to sufficient working capital. As a result there is substantial doubt as to whether our existing cash resources and working capital are sufficient to enable us to continue operations within one year from the financial statement issuance date. If necessary, we will seek to raise additional capital from the sale of equity securities or the increase of indebtedness. There can be no assurance that additional financing will be available to us on acceptable terms, or at all. Additionally, if we issue additional equity securities to raise funds, whether to potential customers or other investors, the ownership percentage of our existing stockholders would be reduced. New investors may demand rights, preferences or privileges senior to those of existing holders of common stock. Additionally, we may be limited as to the amount of funds we can raise pursuant to SEC rules and the continued listing requirements of NASDAQ. If we cannot raise needed funds, we might be forced to make substantial reductions in our operating expenses, which could adversely affect our ability to implement our business plan and ultimately our viability as a company. These consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might result from this uncertainty.

The following table and discussion summarizes our cash flows from continuing operations for the years ended December 31, 2017 and 2016.

	Year Ended December 31,		Change	
	2017	2016	\$	%
	(\$ in thousands)			
Cash provided by (used in):				
Operating activities	\$(5,333)	\$(7,004)	\$1,671	(24)%
Investing activities	\$3,313	\$(67)	\$3,380	(5,045)%
Financing activities	\$(3,294)	\$12,135	\$(15,429)	(127)%

Cash used in operating activities

Our largest source of operating cash flows is cash collections from our customers following the sale of our products and services. Our primary uses of cash for operating activities are for purchasing inventory in support of the products that we sell, personnel related expenditures, facilities costs and payments for general operating matters. During the year ended December 31, 2017, cash used in operations was \$5.3 million. Cash flows were largely impacted by the

loss from operations, adjusted for non-cash items, including depreciation and amortization, stock-based compensation, change in the fair value of the liability-classified warrants, gain on sale of DuraFit as well as the net effect of changes in net working capital and other balance sheet accounts. These changes include decreases in operating cash flows associated with lower accounts payable and accrued expenses. This decrease was partially offset by decreases in our accounts receivable and inventory balances.

Cash used in investing activities

Cash provided by investing activities in the year ended December 31, 2017 represented the cash received from the sale of the DuraFit business discussed in Note 4.

Cash provided by financing activities

Cash used in financing activities was \$3.3 million due primarily to the repayment of outstanding debt as well as net payments under our demand line of credit during the year ended December 31, 2017.

Cash provided by financing activities for the year ended December 31, 2016 was due to \$2.0 million generated from the promissory note entered into with Kanis S.A. on April 1, 2016, \$0.5 million generated from the promissory note entered into with Lon E. Bell, Ph.D., one of our directors, on April 11, 2016 and \$1.3 million generated from the convertible notes entered into with Haldor Topsøe on June 30, 2016. We also received \$0.2 million from the exercise of outstanding warrants during the year ended December 31, 2016. Cash provided by financing activities was partially offset by a \$2.1 million decrease in net borrowings under our demand line of credit during the year ended December 31, 2016.

On November 3, 2016, we entered into a securities purchase agreement with institutional and individual accredited investors and certain of our officers and directors to raise gross proceeds of approximately \$10.3 million in a private placement of common stock at a per-share price of \$2.00. The offering was consummated in two closings. The initial closing for 949,960 shares of common stock, for gross proceeds of approximately \$1.9 million, was completed on November 4, 2016. The second closing for approximately 4.2 million shares, for gross proceeds of approximately \$8.4 million, was completed on December 16, 2016. We paid approximately \$0.1 million of transaction costs related to the equity offerings.

Description of Indebtedness

	December 31, 20172016 (\$ in thousands)
Line of credit with FGI	\$ —\$ 1,458
\$2.0 million, 8% shareholder note due 2017	— 1,803
Total borrowings	\$ —\$ 3,261

Until September 2017, we maintained a \$7.5 million secured demand facility with Faunus Group International, Inc. ("FGI") backed by our receivables and inventory. We also granted FGI a first lien collateral interest in substantially all of our assets. On September 8, 2017, concurrent with the sale of the DuraFit business (see Note 4), we repaid all outstanding balances under this demand facility and terminated the loan agreements and all commitments thereunder. In connection with termination of the loan agreements, FGI terminated and released all of its security interests in and liens on all of our assets and those of our subsidiaries.

Capital Expenditures

As of December 31, 2017, we had no material commitments for capital expenditures and no material commitments are anticipated in the near future.

Off-Balance Sheet Arrangements

As of December 31, 2017 and 2016, we had no off-balance sheet arrangements.

Commitments and Contingencies

As of December 31, 2017 and 2016, other than office leases, we had no material commitments other than the liabilities reflected in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. For additional information, refer to Note 18, "Commitments and Contingencies".

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

25

See "Index to Financial Statements", located on page F-1 of this Annual Report on Form 10-K.

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The phrase "disclosure controls and procedures" refers to controls and procedures designed to ensure that information required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934, as amended, or the Exchange Act, such as this Annual Report on Form 10-K, is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the U.S. Securities and Exchange Commission, or SEC. Disclosure controls and procedures are also designed to ensure that such information is accumulated and communicated to our management, including our chief executive officer, or CEO, and chief financial officer, or CFO, as appropriate to allow timely decision regarding required disclosure.

Our management, with the participation of our CEO and CFO, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a- 15(e) and 15d- 15(e) under the Exchange Act), as of December 31, 2017, the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our CEO and CFO have concluded that as of December 31, 2017, our disclosure controls and procedures were designed at a reasonable assurance level and were effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Controls over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2017 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. Our management, with the participation of our CEO and CFO, has assessed the effectiveness of the internal control over financial reporting as of December 31, 2017. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control - Integrated Framework (2013 Framework). Based on this evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2017.

This Annual Report on Form 10-K does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to rules of the SEC that permit us to provide only management's report in this Annual Report on Form 10-K.

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

ITEM 9B. OTHER INFORMATION

None

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The following table sets forth the name, age and positions with CDTi of individuals who are currently our Directors and executive officers. Following the table is a brief biography of each Director and executive officer. There are no family relationships among any of our Directors or executive officers.

Name	Age	Company Position
Lon E. Bell, Ph.D.	77	Chairman of the Board of Directors
Matthew Beale	51	President, Chief Executive Officer and Director
Dr. Till Becker	60	Director
Mungo Park	62	Director
Peter J. Chase	50	Chief Operating Officer
Stephen J. Golden	56	Chief Technology Officer and Vice President
Tracy A. Kern	50	Chief Financial Officer and Secretary

Directors

Lon E. Bell, Ph.D., Chairman of the Board. Dr. Bell joined the CDTi Board of Directors in June 2013, and was appointed Chairman of the Board in May 2016. He founded Gentherm Inc. (NASDAQ:THRM), formerly Amerigon Inc., a global developer and marketer of innovative thermal management technologies for a broad range of heating and cooling and temperature control applications, in 1991, and was a consultant to Gentherm from December 2010 to December 2012. Dr. Bell served many roles at Gentherm, including Chief Technology Officer until December 2010, Director of Technology until 2000, Chairman and Chief Executive Officer until 1999, and President until 1997. Dr. Bell served as the Chief Executive Officer and President of BSST LLC, a subsidiary of Gentherm, from September 2000 to December 2010. He served as a Director of Gentherm from 1991 to 2012. Previously, Dr. Bell co-founded Technar Incorporated, which developed and manufactured automotive components, and served as Technar's Chairman and President until selling majority ownership to TRW Inc. in 1986. Dr. Bell continued managing Technar, then known as TRW Technar, as its President until 1991. Dr. Bell co-founded Mahindra REVA Electric Vehicle Pvt Ltd in 1994 and served as a Director from 1994 to 2016. He has served as a director for Ideal Power Converters, Inc. (NASDAQ:IPWR) since 2012 and ClearSign Combustion Corporation (NASDAQ:CLIR) since November 2011. Dr. Bell was a founder of the non-profit CALSTART in 1991 and was its first president. Dr. Bell received a BS degree in Mathematics, MS degree in Rocket Propulsion, and a Ph.D. in Mechanical Engineering from the California Institute of Technology.

Dr. Bell's experience as a director of public companies, significant business acumen, technology and commercialization experience and first-hand understanding of the automotive industry led the Board to conclude that he should be nominated to continue to serve as a Director of CDTi.

Matthew Beale, President, Chief Executive Officer and Director. Mr. Beale was appointed Chief Executive Officer in October 2015 and President in December 2015. He joined the CDTi Board of Directors in September 2014. From May 2013 until September 2015, Mr. Beale served as Group Strategy Officer at Landi Renzo SpA (MIL:LR), a multinational engineering and manufacturing company based in Italy focused on alternative fuel systems and components for OEM and aftermarket automotive applications. From July 2012 to April 2013, Mr. Beale was a strategy consultant to the alternative fuel systems industry focused on business and capital markets strategies. Prior to that, he held several leadership positions at Fuel Systems Solutions, Inc. (NASDAQ:FSYS), a producer of fuel systems and components for automotive and industrial markets, including: Co-President and Head of IMPCO Operations from April 2011 to June 2012; Chief Financial Officer from May 2009 to March 2011; President and Secretary from May 2008 to March 2011; and Vice President of Business Development from February 2007 to April 2008. Previously, Mr. Beale held international corporate finance and banking positions with CVS Partners from 2005 to 2007; with Citigroup Inc. from 2000 to 2004; and with JP Morgan (NYSE:JPM) from 1994 to 2000. Mr. Beale received a BA in English Literature from the University of London, a Diploma in Accounting and Finance from the London School of Economics, and an MBA from IESE Business School.

Mr. Beale's experience as an executive officer of public companies and his finance and operations leadership experience in the automotive industry provides him with the continued business experience and acumen to guide CDTi on its financial and strategic initiatives and led the Board to conclude that he should be nominated to continue to serve as a Director of CDTi.

Dr. Till Becker, Director. Dr. Becker joined the CDTi Board of Directors in February 2015. Dr. Becker has over 25 years of international experience in the automotive, consumer goods and energy industries, including 19 years in leadership roles at Daimler AG, and an extensive background in corporate restructuring and M&A transactions. In addition, Dr. Becker currently serves as the Strategic Advisor to the Board of DHL AG; Director and co-investor of Vantage Power Ltd, London; Chairman of Vigil365 Limitada, Lisbon; Chairman of MPS Holding AS, Oslo; Chairman of ProRail Ltd, Johannesburg; and Senior Consultant to Artris Management Ltd. Dr. Becker has previously served as a Senior Advisor at Global Board Room Advisors, an Asia-focused M&A consulting firm; as a Senior Advisor to Holland Private Equity Growth Capital; as CEO of Hess AG, a provider of world-class lighting systems; as Chairman of Armonic AudioMotive Limited; as Interim CEO of MPS Micropaint Holding AS; as Chairman of the Board of PAS Management Holding; as Chairman to RealEyes GmbH; and as a Senior Advisor to Capital Dynamics Ltd., an independent, global asset management firm. From 1987 to 2006, Dr. Becker served in numerous roles at Daimler AG, including Chairman and CEO of Daimler Northeast Asia, Mercedes-Benz Türk A.S., Istanbul, Mercedes-Benz India Pvt. Ltd. And Mercedes-Benz Portugal SA as well as Executive Vice President of the parent company. Dr. Becker received a law degree from the University of Münster, PHD in patent law and admission to the judge's office.

Dr. Becker's experience as a director and extensive international leadership experience, technology and commercialization experience and first-hand understanding of the automotive industry led the Board to conclude that he should be nominated to continue to serve as a Director of CDTi.

Mungo Park, Director. Mr. Park has been a Director of CDTi since September 2009 and served as Chairman from September 2009 to October 2010. Mr. Park is the Chairman and Founder of Innovator Capital Limited, a financial services company of London, England established in 2003. He has over 30 years of investment banking experience, focusing primarily on the technology, industrial technology and the biomedical industries.

Mr. Park's fundraising experience and experience in advising "Greentech" companies on financial matters led the Board to conclude that he should be nominated to continue to serve as a Director of CDTi.

Executive Officers

Biographical information for Mr. Beale is included above under "-Directors."

Peter J. Chase, Chief Operating Officer. Mr. Chase joined CDTi as Chief Operating Officer in January 2017.

Mr. Chase has more than 25 years of experience in the automotive and industrial engine industries. Since 2005, he has served in key positions at IMPCO Technologies, Inc., now a division of Nasdaq-listed Westport Fuel Systems, including Director of Engineering, COO, Executive Vice President, Operations and Strategy, and most recently as General Manager. From 2004 to 2005, Mr. Chase was a Senior Engineer (Automotive) at Cummins Engine Company Australia, and from 2002 to 2004 he was Specialist Engineer at General Motors Holden, Australia. From 1999 to 2002, he was the Director of Engineering - GFP Division, at IMPCO Technologies, Inc. in the US and from 1997 to 1999, Technical Services Manager at IMPCO Technologies (Australia) Pty. Ltd. He served as Product Manager, Business/Product Planning at Perkins Engines (Peterborough) Ltd. in the United Kingdom from 1995 to 1997; as Project Manager at the Gas and Fuel Corporation of Victoria in Australia from 1992 to 1995; and as Research and Development Engineer at NGV Australia from 1990 to 1992. Mr. Chase holds a degree in Mechanical Engineering from the University of Melbourne, Australia.

Stephen J. Golden, Ph.D., Chief Technology Officer and Vice President. Dr. Golden has served as Chief Technology Officer and Vice President-Business Development and Strategy since April 2012. Dr. Golden joined CDTi as Chief Technical Officer in October 2010, immediately following the business combination of CDTi and Catalytic Solutions, Inc. Dr. Golden is one of the founders of Catalytic Solutions, Inc. and the developer of its technology and had served as the Chief Technical Officer and Director of Catalytic Solutions, Inc. since 1996. From 1994 to late 1995, Dr. Golden was the Research Director for Dreisbach Electromotive Incorporated, a developer of advanced batteries based in Santa Barbara, California. Dr. Golden received his doctorate in Material Science at Imperial College of Science and Technology in London, England. Dr. Golden did extensive post-doctoral work at the University of California, Santa Barbara, and the University of Queensland, Australia in ceramic oxide and mixed metal oxide materials.

Tracy A. Kern, Chief Financial Officer and Corporate Secretary. Ms. Kern joined CDTi as Chief Financial Officer and Corporate Secretary in June 2016. Ms. Kern has over 15 years of business experience in public accounting. Ms. Kern most recently served as Chief Financial Officer of Interlink Electronics, Inc. (NASDAQ: LINK), a provider of

force-sensing technologies, from June 2015 to May 27, 2016. From July 2008 until April 2015, Ms. Kern was Corporate Controller of Vitesse Semiconductor Corporation (NASDAQ:VTSS), a global provider of high performance integrated circuit solutions for carrier, enterprise and internet-of-things networks. Prior to Vitesse, from January 2003 to June 2008, Ms. Kern was the Chief Financial Officer for Chad Therapeutics, a publicly traded medical device manufacturing company headquartered in Chatsworth,

California. Ms. Kern also was a manager at the public accounting firm KPMG, and is a Certified Public Accountant. She holds a Bachelor of Science degree in Accounting from California Lutheran University.

Corporate Governance

Role and Composition of the Board of Directors

The Board of Directors, which is elected by the stockholders, is the ultimate decision-making body of the Company, except with respect to those matters reserved to the stockholders. It selects the Chief Executive Officer, or person or persons performing similar functions, and other members of the senior management team, and provides an oversight function for the Chief Executive Officer's execution of overall business strategy and objectives. The Board acts as an advisor and counselor to senior management and validates business strategy and direction. The Board's primary function is to monitor the performance of senior management and facilitate growth and success by providing mentoring and actionable business advice honed by substantial substantive knowledge of the Company's business and history tempered with significant outside business experience.

Our By-laws state that the number of Directors shall be determined from time to time by the Board of Directors or by the stockholders.

Each Director shall be elected for a term of one year and until a successor is duly elected or until the Director shall sooner resign, retire, become deceased or be removed by the stockholders. Any Director may be removed by the stockholders with or without cause at any time. Any Director may resign at any time by submitting an electronic transmission or by delivering a written notice of resignation, signed by such Director to the Chairman, the Chief Executive Officer or the Secretary. Unless otherwise specified therein, such resignation shall take effect upon delivery. Vacancies in the Board may be filled by a majority of the Directors then in office (although less than a quorum), by the sole remaining Director, or by the stockholders. Any decrease in the authorized number of Directors shall not become effective until the expiration of the term of the Directors then in office unless, at the time of such decrease, there shall be vacancies on the Board that are being eliminated by the decrease. The Board is currently comprised of a Non-Executive Chairman, two Non-Executive Directors and our Chief Executive Officer.

During 2017, the Board held 9 meetings. All Directors attended at least 75% of the aggregate number of meetings of the Board and the Board Committee on which they served.

Committees of the Board of Directors

The standing Committees of the Board of Directors are an Audit Committee and Compensation and Nominating Committee. During 2017, the Board also had a Technology Committee until December 31, 2017. Special committees may be formed from time to time as determined by the Board of Directors. The Charters of the Audit Committee and Compensation and Nominating Committee are available on CDTi's website at www.cdti.com under "Investor Relations". The following table sets out the current membership of the standing Committees of our Board of Directors and the number of committee meetings held in 2017:

Name	Audit	Compensation and Nominating	Technology
Dr. Till Becker	X	X	X
Lon E. Bell, Ph.D.	X	Chairman	Chairman
Mungo Park	Chairman	--	X
Number of meetings in 2017	9	5	2

Audit Committee

The Audit Committee is responsible for oversight of accounting and financial reporting processes, audits of the financial statements, internal control and audit functions, and compliance with legal and regulatory requirements and ethical standards adopted by the Company. For audit services, the Audit Committee is responsible for the engagement and compensation of independent auditors, oversight of their activities and evaluation of their independence. The Audit Committee has instituted procedures for receiving reports of improper record keeping, accounting or disclosure. The Audit Committee is also responsible

for reviewing transactions with related parties, regardless of the amount of such transaction. The Board has also constituted the Audit Committee as a qualified legal compliance committee in accordance with SEC regulations. In the opinion of the Board, each of the members of the Audit Committee has both business experience and an understanding of generally accepted accounting principles and financial statements enabling them to effectively discharge their responsibilities as members of that Committee.

Audit Committee Financial Expert

The Board has determined that Mungo Park is an audit committee financial expert within the meaning of SEC regulations. In making this determination the Board considered Mr. Park's formal training, extensive experience in accounting and finance and his prior service with other reporting companies under the Securities Exchange Act of 1934. The Board has also determined that Mr. Park is "independent," as independence for audit committee members is defined in the NASDAQ listing standards.

Compensation and Nominating Committee

The Compensation and Nominating Committee is responsible for the oversight and determination of executive compensation. For outside adviser services, the Compensation and Nominating Committee is responsible for the engagement and compensation of independent compensation consultants, legal advisors and other advisers, and the oversight of their activities and evaluation of their independence. Among other things, the Committee reviews, recommends and approves salaries and other compensation of the Company's eligible employees, administers the Company's Management Short Term Incentive Plan and the Company's long-term incentives under the Company's stock incentive plans (including reviewing, recommending and approving equity grants to eligible employees). Executive compensation awards are approved by the Compensation and Nominating Committee on recommendation of the Chief Executive Officer, except that the compensation of the Chief Executive Officer is determined by the Committee itself. Compensation of executives is considered for final approval by the Board of Directors upon the recommendation of the Compensation and Nominating Committee.

In determining executive compensation, the Committee considers:

- the executive's performance in light of Company goals and objectives;
- competitive market data at comparable companies;
- our overall budget for base salary increases; and
- such other factors as it shall deem relevant.

The Compensation and Nominating Committee is authorized to engage and retain independent third party compensation and legal advisors to obtain advice and assistance on all matters related to executive compensation and benefit plans, as well as external consultants to provide independent verification of market position and consider the appropriateness of executive compensation.

The Compensation and Nominating Committee also identifies Director Nominees for election to fill vacancies on CDTi's Board. Nominees are considered for approval by the Board on recommendation of the Committee. In evaluating nominees, the Committee seeks candidates of high ethical character with significant business experience at the senior management level who have the time and energy to attend to Board responsibilities. Candidates should also satisfy such other particular requirements that the Committee may consider important to CDTi's business at the time. When a vacancy occurs on the Board, the Committee will consider nominees from all sources, including stockholders, nominees recommended by other parties, and candidates known to the Directors or CDTi's management. The Committee may, if appropriate, make use of a search firm and pay a fee for services in identifying candidates. The best candidate from all evaluated will be recommended to the Board to consider for nomination.

The Compensation and Nominating Committee does not have a formal affirmative diversity policy for identifying nominees for the Board of Directors. When evaluating nominees, however, the Committee considers itself diversity neutral and examines a candidate's background, experience, education, skills and individual qualities that could contribute to heterogeneity and perspective in Board deliberations.

Stockholders who wish to recommend candidates for consideration as nominees should furnish in writing detailed biographical information concerning the candidate to the Committee addressed to the Secretary of CDTi at 1700 Fiske Place, Oxnard, California, 93033, U.S.A. No material changes have been made to the procedures by which security holders may recommend nominees to CDTi's Board of Directors.

Technology Committee

The Technology Committee's responsibility was to represent and assist the Board of Directors in its review and oversight of the Company's technology strategy and investment in research and development and technological and scientific initiatives and to review and identify specific technology, science and innovation matters that could have a significant impact on Company operations. The Board determined to disband the Technology Committee in May 2017 effective December 31, 2017, and its responsibilities are now performed by the full Board of Directors.

Code of Business Conduct and Ethics

The Board has adopted a Code of Ethics and Business Conduct (the "Code") that applies to all employees, executive officers and Directors. A copy of the Code is available free of charge on written or telephone request to Secretary, CDTi, 1700 Fiske Place, Oxnard, California 93033, U.S.A., or +1 805-639-9458. The Code is also available on CDTi's website at www.cdti.com under "Investor Relations". Changes to the Code or waivers granted under the Code will be posted on CDTi's website at www.cdti.com under "Investor Relations".

Corporate Governance Materials

Materials relating to corporate governance at CDTi are published on our website at www.cdti.com under "Investor Relations".

Board of Directors-Background and Experience

Audit Committee Charter

Compensation and Nominating Committee Charter

Code of Ethics and Business Conduct

By-laws

Restated Certificate of Incorporation, as amended

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires the Company's Directors and executive officers, and persons who own more than ten percent of a registered class of the Company's equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Officers, Directors and greater than ten percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms they file.

To the Company's knowledge, based solely on a review of the copies of such reports furnished to the Company, all Section 16(a) filing requirements applicable to CDTi's executive officers, Directors and greater than ten percent beneficial owners during the year ended December 31, 2017 were complied with.

ITEM 11. EXECUTIVE COMPENSATION

Summary Compensation Table

The following table provides information regarding the compensation of our named executive officers during 2016 and 2017. As a "smaller reporting company," as such term is defined in the rules promulgated under the Securities Act of 1933, as amended, or the Securities Act, we are required to provide compensation disclosure for our principal executive officer and the two most highly compensated executive officers other than our principal executive officer. Throughout this proxy statement, these three officers are referred to as our "Named Executive Officers."

Name and Principal Position	Year	Salary \$(1)	Bonus \$(2)	Option Awards \$(3)	All Other Compensation \$(4)	Total (\$)
Matthew Beale	2017	298,077	—	—	25,392	323,469
President, Chief Executive Officer and Director	2016	270,192	37,500	1,019,324	33,392	1,360,408
Stephen J. Golden, Ph.D.	2017	249,039	—	—	392	249,431
Chief Technology Officer and Vice President	2016	245,192	37,500	254,830	392	537,914
Peter Chase ⁽⁵⁾	2017	221,154	50,000	226,000	23,264	470,418
Chief Operating Officer	2016	—	—	—	—	—

The Company has entered into employment agreements with each of Mr. Beale, Dr. Golden and Mr. Chase.

- (1) Consistent with the terms of each employment agreement, the Company reviews the base salaries of executive officers employed by the Company on an annual basis, and has and may from time to time make adjustments to the base salary amount.
- (2) Consists of discretionary bonuses awarded to Mr. Beale and Dr. Golden based upon individual performance for the year, and a guaranteed bonus to Mr. Chase pursuant to his employment agreement.

These amounts represent the grant date fair value of the stock and stock option awards determined in accordance with ASC Topic 718. These amounts may not correspond to the actual value eventually realized by the officer,

- (3) which depends in part on the market value of our common stock in future periods. Assumptions used in calculating these amounts are set forth in the Notes to Consolidated Financial Statements included in this annual report on Form 10-K for the year ended December 31, 2017.

Consists of the dollar value of premiums paid by CDTi for group term life and accidental death and

- (4) dismemberment insurance. In addition, the amounts for Mr. Beale include, for 2016, \$33,000 as a housing allowance and for 2017, \$25,000 as a housing allowance. The amounts for Mr. Chase include, for 2017, \$22,916 as a housing allowance.

- (5) Mr. Chase commenced service as an executive officer on January 30, 2017.

Narrative Disclosure to Summary Compensation Table

Employment Agreements

We entered into an employment agreement with Mr. Beale on October 22, 2015 and Mr. Chase on January 30, 2017. Our subsidiary, Catalytic Solutions, Inc. (“CSI”), entered into an employment agreement with Dr. Golden on October 17, 2006.

The employment agreements provide for an annual base salary of \$325,000 for Mr. Beale, \$250,000 for Mr. Chase and \$257,500 for Dr. Golden, subject to potential adjustments based on an annual review of each named executive officer’s salary. Mr. Beale also receives a monthly housing allowance, which was \$3,000 through October 2016 and \$2,083 from January 1, 2017 through December 31, 2017.

On March 29, 2016, Mr. Beale and Dr. Golden agreed to a reduction in their annual base salaries to \$250,000 and \$225,000, respectively, to support the Company’s efforts to reduce its overall cost structure. On December 16, 2016, following completion of our recapitalization, our Compensation and Nominating Committee approved an increase in the base salaries payable to Mr. Beale and Dr. Golden to \$300,000 and \$250,000, respectively, effective January 1, 2017.

The employment agreements also provide for certain incentive compensation, including:

•

for Mr. Beale, (i) 100,000 non-qualified stock options, with 50% vesting on each of March 31, 2016 and December 31, 2016, and (ii) an annual bonus based on the Company's achievement of financial objectives established by the Board and Mr. Beale's achievement of agreed upon personal business objectives, which varies from 0% to 119% of base salary with a target of 70% of such base salary;

for Dr. Golden, (i) the opportunity to obtain a bonus of up to 60% of his base salary, dependent on the attainment of certain goals and objectives, and (ii) any equity incentive awards that may be granted to Dr. Golden under our current equity incentive plan; and

for Mr. Chase (i) 100,000 stock options, with 25% of these options vesting on each anniversary of his appointment beginning January 30, 2018, and (ii) an annual bonus based on the Company's achievement of financial objectives established by the Board and Mr. Chase's achievement of agreed upon personal business objectives, with a target bonus of 50% of his base salary.

Short Term Incentives

All executive officers of the Company are eligible to participate in CDTi's Management Short Term Incentive Plan, or STIP. Participation levels, business and personal objectives, and financial targets are established and determined by our board of directors upon recommendation of the Compensation and Nominating Committee and may include an incremental pay scale that includes linear payout levels. Aggregate plan payments are calculated by CDTi's senior management and approved by the Compensation and Nominating Committee and our board of directors. Individual employee payment recommendations are then submitted to the Company's Chief Executive Officer, Compensation and Nominating Committee and Board for final approval before any payments can be made. Cash incentives under the STIP are paid out on an annual basis by the end of the second quarter of each year upon review of financial results from the previous year. To be eligible for the cash incentive payout, participants must remain employed by CDTi on the date of the payout.

Due to the fact, the Company was in the process of transitioning from being a manufacturer of emissions control solutions for the automotive and heavy-duty diesel markets to becoming an advanced materials technology provider of proprietary powders for these markets, management recommended to the Compensation and Nominating Committee that there should be no STIP for 2017.

Long Term (Equity) Incentives

In December 2016, the Board of Directors and stockholders of CDTi approved the 2016 Omnibus Incentive Plan (the "2016 Plan"), pursuant to which we may issue up to 2,250,000 shares of our common stock pursuant to awards granted thereunder. The 2016 Plan replaced the stock incentive plan (formerly known as the 1994 Incentive Plan) originally adopted in 1994 and amended in 2002, 2012 and 2015 (collectively, the "Prior Plan"). With the adoption of the 2016 Plan, no further awards will be made under the Prior Plan.

Pursuant to the 2016 Plan, awards may be granted to participants in the form of non-qualified stock options, incentive stock options, stock appreciation rights, restricted stock, restricted share units, performance awards, or any combination of the foregoing. Participants in the Plan may be CDTi's Directors, employees, consultants or advisors (except consultants or advisors in capital raising transactions) as the Directors determine are key to the success of our business. The Compensation and Nominating Committee grants stock options and restricted stock (or restricted stock units) as long-term equity incentive awards. These awards are designed to focus management on the long-term success of CDTi and thereby align the interests of the recipients with the interests of our stockholders.

The 2016 Plan is administered by the Compensation and Nominating Committee of our Board. Awards are generally granted annually during the first half of the calendar year. Stock options are granted for a term of not more than ten years and at an exercise price per share equal to fair market value on the grant date.

The following table sets out information as to the grant of awards made to the Named Executive Officers during fiscal year 2017.

Name and Award Type	Grant Date	Number of Shares	Vesting
Matthew Beale	—	—	
Stephen J. Golden, Ph.D.	—	—	
Peter J. Chase			
NQ Stock Option	February 24, 2017	100,000	The shares will vest in four equal installments of 25,000 shares on each of January 30, 2018, January 30, 2019, January 30, 2020 and January 30, 2021.

Executive Compensation Consultant

The Company did not use the services of a compensation consulting firm during 2017.

Potential Payments upon Termination of Employment or Change in Control

As of December 31, 2017, the following summarizes the potential payments upon employment termination and change in control events provided for in each of the Named Executive Officer's employment agreements:

Reason for Termination	Benefit
Without Cause or Resignation for Good Reason	6 months of annual base salary and health benefits; pro rata bonus; and accrued and unpaid salary and other benefits through the date of separation
Disability	3 months of annual base salary and health benefits; pro rata bonus; and accrued and unpaid salary and other benefits through the date of separation
With Cause, Resignation Without Good Reason, or Upon Mutual Agreement of the Company and Named Executive Officer	Accrued and unpaid salary and other benefits through the date of separation
Without Cause or Resignation for Good Reason Concurrent with or Subsequent to a Change in Control	6 months of annual base salary and health benefits; pro rata bonus; accrued and unpaid salary and other benefits through the date of separation; and immediate vesting of any equity awards

The Named Executive Officers' outstanding stock options and restricted share units were issued under CDTi's stock incentive plans. Under the terms of the stock incentive plans, in the event of termination of employment due to resignation, vested options continue to be exercisable for a period of 90 days and unvested restricted share units cancel. In the event of termination for cause, as provided in the award agreement, all options and restricted share units terminate immediately. In the case of termination of employment due to death, total disability or normal retirement, the treatment of options and restricted share units varies by award, with some awards providing for additional vesting and, in the case of options, an extension of the period of time for exercise. Additionally, in the event of a "Change in Control," our board of directors may, in its discretion, take actions as it deems appropriate to provide for the acceleration, assumption, continuation, substitution or cash out of outstanding awards if not so determined in each Named Executive Officer's employment agreement. Additionally, our board of directors or the Compensation and Nominating Committee may modify, terminate or grant waivers and accelerations with respect to awards under our current stock incentive plans, subject to the terms and conditions contained therein.

Outstanding Equity Awards at Fiscal Year End

The following table presents certain information concerning equity awards held by our named executive officers as of December 31, 2017.

Name	Option Awards Number of Securities		Option Exercise Price (\$)	Option Expiration Date
	Underlying Unexercised Options #	Underlying Unexercised Options # Unexercisable Exercisable		
Matthew Beale				
11/5/2015 ⁽¹⁾	100,000	—	8.95	11/5/2025
12/16/2016 ⁽²⁾	240,000	240,000	2.25	12/16/2026
Total	340,000	240,000		
Stephen J. Golden, Ph.D.				
3/17/2011 ⁽³⁾	3,200	—	28.40	3/17/2021
2/22/2012 ⁽⁴⁾	11,764	—	15.30	2/22/2022
5/20/2015 ⁽⁵⁾	14,245	7,123	9.80	5/20/2025
12/16/2016 ⁽²⁾	60,000	60,000	2.25	12/16/2026
Total	89,209	67,123		
Peter Chase				
2/24/2017 ⁽⁶⁾	—	100,000	2.60	2/24/2027
Total	—	100,000		

(1) Options granted on November 5, 2015 vest 50% on March 31, 2016 and 50% on December 31, 2016. The expiration date indicated is the tenth anniversary of the date of grant and options are for a ten year term.

(2) Options granted on December 16, 2016 vest 33.33% on the date of grant and 16.66% on each of December 16, 2017, 2018, 2019 and 2020. The expiration date indicated is the tenth anniversary of the date of grant and options are for a ten year term.

(3) Options granted on March 17, 2011 vested 50% on grant date and 50% on March 17, 2012. The expiration date indicated is the the tenth anniversary of the date of grant and options are for a ten-year term.

(4) Options granted on February 22, 2012 vested 33.3% on each of February 22, 2013, 2014 and 2015. The expiration date indicated is the tenth anniversary of the date of grant and options are for a ten year term.

(5) Options granted on May 20, 2015 vest 33.3% on each of May 20, 2016, 2017 and 2018. The expiration date indicated is the tenth anniversary of the date of grant and options are for a ten year term.

(6) Options granted on February 24, 2017 vest 25% on each January 30, 2018, 2019, 2020 and 2021. The expiration date indicated is the tenth anniversary of the date of grant and options are for a ten year term.

Non-Employee Director Compensation

Director Compensation Table

The following table details the total compensation earned by our non-employee directors in fiscal year 2017:

Name	Fees Earned or Paid in Cash
Lon E. Bell, Ph.D. ⁽¹⁾	\$94,000
Dr. Till Becker ⁽²⁾	\$44,000
Mungo Park ⁽³⁾	\$49,000

(1) During 2017, Dr. Bell served on the Audit Committee and the Compensation and Nominating Committee and as Chairman of the Technology Committee. Dr. Bell also served as Chairman of the Board.

(2) During 2017, Dr. Becker served on the Technology Committee, the Audit Committee and the Compensation and Nominating Committee.

(3) During 2017, Mr. Park served on the Technology Committee and as Chairman of the Audit Committee.

As of December 31, 2017, none of our non-employee directors held options or stock awards for shares of our common stock except for Mr. Park, who held options to purchase an aggregate of 3,000 shares of our common stock.

Narrative to Director Compensation Table

During 2017, CDTi's Non-Executive Directors were compensated based on the following fee schedule:

Description	Compensation
Board Member -- Retainers:	
Chairman (in addition to Member Retainer)	\$35,000 per year
Board Member Includes four in-person meetings Includes four telephonic meetings	\$25,000 per year, plus an annual award of restricted stock units valued at \$30,000, with timing and vesting to be at the discretion of the Board on the recommendation of the Compensation and Nominating Committee
Board Member - Additional Compensation:	
Additional in-person meetings	\$1,500 each meeting
Additional telephonic meetings	\$500 each meeting
Audit Committee -- Retainers:	
Chairman (in addition to Member Retainer)	\$10,000 per year
Committee Member Includes four in-person meetings Includes four telephonic meetings	\$5,000 per year
Audit Committee -- Additional Compensation:	
Additional in-person meetings	\$1,500 each meeting
Additional telephonic meetings	\$500 each meeting
Comp. and Nom. Committee -- Retainers:	
Chairman (in addition to Member Retainer)	\$7,500 per year
Committee Member Includes four in-person meetings Includes four telephonic meetings	\$5,000 per year
Comp. and Nom. Committee -- Additional	

Compensation:

Additional in-person meetings	\$1,500 each meeting
Telephonic meetings	\$500 each meeting

Technology Committee

-- Retainers:

Chairman (in addition to Member Retainer)	\$7,500 per year
Committee Member	\$5,000 per year

Includes four in-person meetings
Includes four telephonic meetings

Technology Committee

-- Additional

Compensation:

Additional in-person meetings	\$1,500 each meeting
Additional telephonic meetings	\$500 each meeting

Fees earned by the Non-Executive Directors are generally paid in cash quarterly during the period earned. Restricted stock unit awards to Non-Executive Directors will be, under the current policy of the Board, granted pursuant to our stock incentive plan and vest over time.

During 2017, no awards of restricted stock units were made to our current Non-Executive Directors.

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

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information known to us regarding the beneficial ownership of common stock as of March 30, 2018 by: 1) each person known to CDTi to beneficially own more than five percent of its outstanding shares of common stock; 2) each of the Directors (including all nominees for Director); 3) CDTi's "Named Executive Officers" as set forth in the

Summary Compensation Table included under “Executive Compensation”; and 4) all current Directors and executive officers as a group at such date.

Unless otherwise noted below, the address of each beneficial owner listed in the table is in care of CDTi, 1700 Fiske Place, Oxnard, California, 93033.

Number of
Shares
Beneficially
Owned ⁽¹⁾ Percentage of Shares Outstanding ⁽²⁾

Directors,
Named
Executive
Officers
and
all
Directors
and
Executive
Officers
as
a
Group:

Lon
E.
Bell,
Ph.D.,
598,494 3.8%

Chairman
of
the
Board
⁽³⁾

Dr.
Till
3,849 *

Becker,
Director
Mungo
2,544 *

Director⁽⁴⁾
Matthew
Beale,
President,
Chief
367,437 2.3%

Executive
Officer
and
Director⁽⁵⁾

Stephen
105,082 *
J.
Golden,
Ph.D.,

Chief
Technology
Officer
and
Vice
President⁽⁶⁾

Peter
J.

Chase
25,000 *

Chief
Operating
Officer⁽⁷⁾

Directors
and
executive
officers

at 1,166,906 7.4%

a
group
(7
persons)⁽⁸⁾

Greater
than
5%

Stockholders:

Kanis
5,012,708 31.7%
S.A.⁽⁹⁾

*Less than 1%

To our knowledge, unless otherwise indicated in the footnotes to this table, we believe that each of the persons named in the table has sole voting and investment power with respect to all shares shown as beneficially owned by (1) them, subject to community property laws where applicable (or other beneficial ownership shared with a spouse) and the information contained in this table and these notes.

Beneficial ownership has been determined in accordance with Securities and Exchange Commission ("SEC") rules, which generally attribute beneficial ownership of securities to each person who possesses, either solely or shared with others, the power to vote or dispose of those securities. These rules also treat as beneficially owned all shares that a person would receive upon 1) exercise of stock options or warrants held by that person that are immediately exercisable or exercisable within 60 days of the determination date; and 2) vesting of restricted stock units held by that person that vest within 60 days of the determination date, which is March 29, 2018 for this purpose. Such shares are deemed to be outstanding for the purpose of computing the number of shares beneficially owned and the percentage ownership of the person holding such options, warrants or restricted stock units, but these shares are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

The percent of CDTi beneficially owned is based on 15,803,736 shares of Common Stock issued and outstanding (2) on March 29, 2018, together with the applicable stock options, restricted stock units and warrants for that stockholder or group of stockholders calculated in accordance with SEC rules.

(3) For Dr. Bell, includes a warrant to acquire 8,000 shares. 16,000 shares and the warrant are held in the Bell Family Trust for which Dr. Bell serves as Trustee and has sole voting and investment control over such securities.

(4) For Mr. Park, includes 3,000 shares subject to options currently exercisable.

(5) For Mr. Beale, includes 340,000 shares subject to options exercisable within 60 days.

For Dr. Golden, includes 96,332 shares subject to options exercisable within 60 days. 1,711 shares are held in the (6) Golden Family Trust for which Dr. Golden serves as Trustee and has sole voting and investment control over such securities.

(7) For Mr. Chase, includes 25,000 shares subject to options exercisable within 60 days.

(8) Includes warrants to acquire 8,000 shares, and 511,832 shares subject to options currently exercisable.

Kanis S.A.'s mailing address is c/o 235 Old Marylebone Road, London NW1 5QT, England. Includes warrants to purchase 49,800 shares that currently are exercisable. Derek Gray, Chief Financial Officer of Kanis S.A. exercises (9) voting and investment power over the shares held by Kanis S.A. but disclaims beneficial ownership of such shares except to the extent of pecuniary interest therein.

Equity Compensation Plan Information

The following table summarizes certain information about our equity compensation plans as of December 31, 2017.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)(1)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)(2)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders (3)	1,939,436	\$ 4.28	1,351,667
Equity compensation plans not approved by security holders	—	—	—
Total	1,939,436	\$ 4.28	1,351,667

(1) Includes restricted stock units for 1,600 shares of common stock.

(2) The weighted average exercise price is calculated based solely on outstanding stock options. It does not take into account restricted stock units, which have no exercise price.

(3) Consists of the (i) Stock Incentive Plan (formerly known as the 1994 Incentive Plan), as amended, and (ii) the 2016 Omnibus Incentive Plan. No additional awards will be made under the Stock Incentive Plan.

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

Transactions with Related Parties

Since January 1, 2016, aside from those transactions listed below and compensation and other arrangements described elsewhere in this Annual Report, there has not been nor is there currently proposed any transaction or series of similar transactions to which the Company was or is to be a party in which the amount involved exceeds \$120,000 or one percent of the Company's average total assets at year end for the last two completed fiscal years and in which any of the Company's Directors, executive officer, persons who we know hold more than five percent of our common stock, or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest.

Kanis S.A.

We have entered into certain transactions involving the issuance of indebtedness by us to Kanis S.A., which has been from time to time and currently is the holder of more than five percent of our outstanding shares of common stock. For more information, see Note 11 to the Company's consolidated financial statements included in this Annual Report. In connection with our loan transactions with Kanis S.A., we have issued equity securities to Kanis S.A. in consideration of the agreement to loan funds to us or to amend related debt instruments and/or agreements, including the issuance on: (i) December 30, 2010 of warrants to acquire up to 5,000 shares of common stock at \$52.00 per share (the "December Warrants") in connection with the entry into a loan commitment letter on such date providing for a loan by Kanis S.A. to us of \$1.5 million; (ii) July 3, 2013 of 37,600 shares of common stock and warrants to acquire up to 18,800 shares of common stock at \$6.25 per share in satisfaction of a \$100,000 payment premium due June 30, 2013 and \$135,000 of accrued interest as of June 30, 2013 relating to an 8% promissory note due 2016 in the aggregate principal amount of \$1.5 million; (iii) on February 16, 2012 of warrants to acquire up to 1,000 shares of common stock at \$19.00 per share (the "February Warrants") in connection with an amendment to our 8% subordinated convertible note due 2016 issued pursuant to a subordinated notes commitment letter dated April 11, 2011; (iv) on July 27, 2012 of warrants to acquire up to 9,000 shares of common stock at \$10.45 per share (the "July Warrants") in connection with a 8% promissory note in the principal amount of in the initial aggregate principal amount of \$3.0 million; and (v) on November 11, 2014 of warrants to acquire up to 16,000 shares of common stock at \$8.75 per share in connection with the entry into a letter agreement amending the terms of various loans made by Kanis S.A. to us.

On October 7, 2015, we entered into a letter agreement with Kanis S.A., whereby Kanis S.A. agreed to amend the terms of the outstanding loans made to CDTi, such that (i) the maturity date and payment premium on the outstanding 8% shareholder note due on October 1, 2016 in the aggregate principal amount of \$1,500,000 was extended to October 1, 2018; (ii) the maturity date on the outstanding 8% subordinated convertible note due on October 1, 2016 in the aggregate principal amount of \$3,000,000 was extended to October 1, 2018; and (iii) the maturity date on the outstanding 8% shareholder note due on October 1, 2016 in the aggregate principal amount of \$3,000,000 was extended to October 1, 2018. Pursuant to the terms of the agreement, we agreed to amend the terms of certain outstanding warrants issued to Kanis S.A. in order to (i) extend the expiration date until November 11, 2019 and (ii) with respect to the December Warrants, February Warrants and July Warrants, representing the right to purchase up to 15,000 shares of our common stock, reduce the exercise price to \$8.75 per share.

On April 1, 2016, we borrowed \$2.0 million from Kanis S.A. pursuant to an 8% promissory note due September 30, 2017 (the "April 2016 Note") and, in connection therewith, entered into an amendment to loan agreement (the "April 2016 Agreement") with Kanis S.A. Pursuant to the April 2016 Agreement, CDTi and Kanis S.A. agreed to amend certain an aggregate of \$7,500,000 in principal amount of promissory notes and other indebtedness (collectively, the "Kanis Notes"), such that (i) Kanis S.A. had the right to convert the principal balance of the Kanis Notes and any accrued interest thereon into our common stock at a conversion price equal to the lower of the closing price of CDTi on the date before the date of the April 2016 Agreement or as of the date when Kanis S.A. exercised its conversion right; and (ii) we had the right to mandatorily convert the principal balance of the Kanis Notes and any accrued interest thereon into our common stock on the earlier of the maturity date thereof or upon the occurrence of a "Liquidity Event" at a conversion price equal to the lower of the closing price of our common stock as of the date immediately before the date of the April 2016 Agreement or at a 25% discount to the Liquidity Event price. A

Liquidity Event was defined as a strategic investment in CDTI or a public stock offering by CDTI.

On June 30, 2016, we entered into a letter agreement (the “Kanis Exchange Agreement”) with Kanis S.A. pursuant to which we agreed to an exchange with Kanis S.A. of the Kanis Notes for a number of shares of our common stock equal to (a) the principal amount of the Kanis Notes plus the accrued but unpaid interest thereon through and including the date of the settlement of the exchange contemplated by the Kanis Exchange Agreement, divided by (b) \$1.6215. The transactions contemplated by the Kanis Exchange Agreement were subject to the approval of our stockholders. At a special meeting of stockholders held on August 25, 2016, our stockholders approved the transactions contemplated by the Kanis Exchange Agreement, which approval was a condition precedent to the issuance of our common stock in exchange for the Kanis Notes.

On August 30, 2016, we consummated the Kanis Exchange Agreement transactions, pursuant to which we issued to Kanis S.A. an aggregate of 4,872,032 shares of common stock in exchange for the delivery to us of the Kanis Notes and the extinguishment of \$7,900,000 of indebtedness.

On January 10, 2017, we repaid in full to Kanis S.A. the principal balance of the April 2016 Note and all accrued interest thereon.

Lon E. Bell, Ph.D.

On April 11, 2016, we borrowed \$500,000 from Lon E. Bell, Ph.D., a director of CDTi, pursuant to an 8% convertible promissory note (the “Bell Note”). The Bell Note was convertible into our common stock at a conversion price equal to the lower of the closing price of our common stock on the date before the date of the Note or as of the date when Dr. Bell exercised his conversion right. The Company shall have the right to mandatorily convert the principal balance of the Note and any accrued interest into the common stock of Company upon the Maturity Date at a conversion price equal to the lower of the closing price of CDTI on the date before the date of the Note or the Maturity Date. We had the right to mandatorily convert the Bell Note concurrently with the closing of a Liquidity Event at a conversion price equal to the lower of the closing price of our common stock as of the date immediately before the date of the Bell Note or at a 25% discount to the Liquidity Event price. A Liquidity Event was defined as a strategic investment in CDTI or a public stock offering by CDTI.

On May 18, 2016, CDTi and Dr. Bell amended and restated the Bell Note to amend the conversion features contained therein. Following the amendment, Dr. Bell had the right to convert the Bell Note into our common stock at a fixed conversion price of \$3.55 per share, and we had the right to mandatorily convert the Bell Note into our common stock at a fixed conversion price of \$3.55 per share upon the earlier of the maturity date of the Bell Note and the closing of a Liquidity Event if, and only if, the \$3.55 conversion price was less than the average closing price of our common stock for the five consecutive trading days ending on the trading day immediately preceding the date we exercise our conversion rights.

On June 30, 2016, we entered into a letter agreement (the “Bell Exchange Agreement”) with Dr. Bell pursuant to which we agreed to an exchange with Dr. Bell of the Bell Note for a number of shares of our common stock equal to (a) the principal amount of the Bell Note plus the accrued but unpaid interest thereon through and including the date of the settlement of the exchange contemplated by the Bell Exchange Agreement, divided by (b) \$1.6215. The transactions contemplated by the Bell Exchange Agreement were subject to the approval of our stockholders. At a special meeting of stockholders held on August 25, 2016, our stockholders approved the transactions contemplated by the Bell Exchange Agreement, which approval was a condition precedent to the issuance of our common stock in exchange for the Bell Note. On August 30, 2016, we consummated the Bell Exchange Agreement transactions, pursuant to which we issued to Dr. Bell an aggregate of 317,950 shares of common stock in exchange for the delivery to us of the Bell Note and the extinguishment of \$515,556 of indebtedness.

On December 16, 2016, we sold 250,000 shares of our common stock to Dr. Bell at a purchase price of \$2.00 per share. The sale of shares to Dr. Bell was made pursuant to a securities purchase agreement (the “Purchase Agreement”) that we entered into on November 3, 2016 with Dr. Bell and 95 other investors, pursuant to which we sold an aggregate of 5,172,250 shares of our common stock for gross proceeds of \$10,344,500. The sale of these securities was approved on October 24, 2016 by Kanis S.A., the holder of a majority of our outstanding shares of common stock as of such date. Dr. Bell purchased shares in the offering on the same terms as all other investors. At the initial closing of the offering, we entered into a registration rights agreement, dated November 4, 2016, with the investors, including Dr. Bell, pursuant to which we agreed to register for resale by the investors the shares of common stock purchased pursuant to the Purchase Agreement. We completed the registration of these shares in January 2017.

Policies and Procedures for Related Party Transactions

Our audit committee has the primary responsibility for reviewing and approving or disapproving “related party transactions,” which are transactions between us and related persons in which the aggregate amount involved exceeds or may be expected to exceed \$120,000 and in which a related person has or will have a direct or indirect material interest. Our policy regarding transactions between us and related persons provides that a related person is defined as a director, executive officer, nominee for director or greater than 5% beneficial owner of our common stock, in each case since the beginning of the most recently completed year, and any of their immediate family members. Our audit committee charter provides that our audit committee shall review and approve or disapprove any related party

transactions.

Director Independence

Our common stock is listed on the NASDAQ Capital Market. Under the rules of NASDAQ, independent directors must comprise a majority of a listed company's board of directors. In addition, the rules of NASDAQ require that, subject to

41

specified exceptions, each member of a listed company's audit, compensation and nominating and governance committees be independent. Under the rules of NASDAQ, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Our board of directors has undertaken a review of the independence of each director and considered whether each director has a material relationship with us that could compromise such director's ability to exercise independent judgment in carrying out his or her responsibilities. As a result of this review, our board of directors has determined that Dr. Till Becker, Lon E. Bell, Ph.D., and Mungo Park are "independent directors" as defined under the applicable rules and regulations of the SEC and the listing requirements and rules of NASDAQ. In addition, the Board of Directors has determined that each of Dr. Becker, Dr. Bell and Mr. Park are "independent" under the heightened independence standards applicable to members CDTi's Audit Committee and Compensation and Nominating Committee under applicable NASDAQ listing standards and SEC rules.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Fees Paid to Independent Registered Public Meeting Firms

The following table presents fees for professional audit services and other services rendered to us by our independent registered public accounting firms during the fiscal years ended December 31, 2017 and 2016:

BDO USA, LLP	2016	2017
Audit Fees	\$494,962	\$63,596
Audit-Related Fees	—	—
Tax Fees	16,806	6,285
All Other Fees	—	—
Total	\$511,768	\$69,881

Rose, Snyder & Jacobs, LLP	2016	2017
Audit Fees	*	\$82,000
Audit-Related Fees	—	—
Tax Fees	—	—
All Other Fees	—	—
Total	*	\$82,000

In the above table, in accordance with the SEC's definitions and rules, "Audit Fees" are fees for professional services for the audit of a company's financial statements included in the annual report on Form 10-K, for the review of a company's interim financial statements included in the quarterly reports on Form 10-Q, and for services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements, "Audit-Related Fees" are fees for assurance and related services by the accountant that are reasonably related to the performance of the audit or review of the financial statements and are not reported as "Audit Fees," and "Tax Fees" are fees for tax compliance, tax advice and tax planning.

Auditor Independence

In 2017, there were no other professional services provided by Rose, Snyder & Jacobs, LLP or BDO USA, LLP that would have required the audit committee to consider their compatibility with maintaining the independence of such firm.

Pre-Approval Policies and Procedures

Consistent with SEC rules regarding auditor independence, the Audit Committee has responsibility for appointing, as well as setting the compensation and overseeing the work of, the independent registered public accounting firm. In recognition of this responsibility, the Audit Committee's policy is to approve in advance an engagement of our independent registered public accounting firm for any audit or non-audit service. All services provided by BDO USA, LLP and Rose, Snyder & Jacobs, LLP

to CDTi during fiscal 2017, as described above, were approved by the Audit Committee in advance of such firm providing such services.

Changes in Independent Registered Public Accounting Firm

On September 18, 2017, we dismissed BDO USA LLP as our independent registered public accounting firm. The decision to dismiss BDO USA, LLP was approved by the Audit Committee.

The audit reports of BDO USA, LLP on our consolidated financial statements as of and for the fiscal years ended December 31, 2016 and 2015 did not contain an adverse opinion or disclaimer of opinion, and were not modified as to uncertainty, audit scope, or accounting principles, except that each of the audit reports on our consolidated financial statements as of and for the fiscal years ended December 31, 2016 and 2015 did contain an explanatory paragraph related to our ability to continue as a going concern.

In connection with the audit of our consolidated financial statements for the fiscal years ended December 31, 2016 and 2015, and for the subsequent period through the date of dismissal, there were: (i) no disagreements between us and BDO USA, LLP on any matters of accounting principles or practices, financial statement disclosure, or auditing scope or procedures, which disagreements, if not resolved to the satisfaction of BDO USA, LLP, would have caused BDO to make reference to the subject matter of the disagreements in its report on our consolidated financial statements for such fiscal years; and (ii) no “reportable events” within the meaning set forth in Item 304(a)(1)(v) of Regulation S-K. At the time of its dismissal, we provided BDO USA, LLP with a copy of the disclosures reproduced in this Annual Report and requested that BDO USA, LLP furnish us with a letter addressed to the Securities and Exchange Commission stating whether or not BDO USA, LLP agrees with our statements. A copy of the letter dated September 18, 2017, furnished by BDO USA, LLP in response to that request is filed as Exhibit 16.1 to our Current Report on Form 8-K filed with the Securities and Exchange Commission on September 20, 2017.

The audit committee of our board of directors approved the appointment of Rose, Snyder & Jacobs, LLP as our new independent registered public accounting firm, and we formally engaged Rose, Snyder & Jacobs, LLP as our independent registered public accounting firm on September 18, 2017.

During our two most recent fiscal years ended December 31, 2016 and 2015 and through September 18, 2017, neither we nor anyone on our behalf consulted with Rose, Snyder & Jacobs, LLP with respect to (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that may be rendered on our financial statements, and Rose, Snyder & Jacobs, LLP did not provide either a written report or oral advice to us that Rose, Snyder & Jacobs, LLP concluded was an important factor considered by us in reaching a decision as to any accounting, auditing, or financial reporting issue; or (ii) any matter that was the subject of any disagreement, as defined in Item 304 (a)(1)(iv) of Regulation S-K and the related instructions, or a “reportable event” within the meaning set forth in Item 304(a)(1)(v) of Regulation S-K.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

We have filed the following documents as part of this Annual Report on Form 10-K:

1. Consolidated Financial Statements

Our consolidated financial statements are listed in the “Index to Consolidated Financial Statements” under Part II, Item 8 of this Annual Report on Form 10-K.

2. Financial Statement Schedules

All schedules have been omitted because they are not required, not applicable, not present in amounts sufficient to require submission of the schedule, or the required information is otherwise included in our consolidated financial statements and related notes.

3. Exhibits

The following exhibits are filed as part of this Annual Report on Form 10-K.

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Exhibit	Filing Date	Filed Herewith
<u>2.1</u>	Asset Purchase Agreement, dated September 8, 2017, by and between the Registrant, Catalytic Solutions, Inc., Engine Control Systems Limited, and AP Emissions Technologies, LLC.	8-K	001-33710	2.1	9/12/2017	
<u>3.1.1</u>	Composite Certificate of Incorporation of the Registrant.	10-K	001-33710	3.1	3/30/2016	
<u>3.1.2</u>	Certificate of Amendment to the Restated Certificate of Incorporation of the Registrant.	8-K	001-33710	3.1	7/26/2016	
<u>3.1.3</u>	Certificate of Amendment to the Restated Certificate of Incorporation of the Registrant.	8-K	001-33710	3.1	12/16/2016	
<u>3.1.4</u>	Certificate of Amendment to the Restated Certificate of Incorporation of the Registrant.	8-K	001-33710	3.1	3/9/2018	
<u>3.2</u>	By-Laws of the Registrant as amended through November 6, 2008.	10-Q	001-33710	3.1	11/10/2008	
<u>4.1</u>	Specimen of Certificate for the Registrant's Common Stock.	S-3	333-166865	4.1	11/10/2010	
<u>4.2</u>	Form of Investor Warrant issued on July 3, 2013.	8-K	001-33710	4.1	7/3/2013	
<u>4.3</u>	Form of Investor Warrant issued on April 4, 2014.	8-K	001-33710	4.1	4/1/2014	
<u>4.4</u>	Form of Investor Series A Warrant issued on November 7, 2014.	8-K	001-33710	4.1	11/4/2014	

<u>4.5</u>	Form of Investor Series B Warrant issued on November 7, 2014.	8-K	001-33710	4.2	11/4/2014
<u>4.6</u>	Form of Series A Warrant.	8-K	001-33710	4.1	11/23/2015
<u>4.7</u>	Form of Series B Pre-Funded Warrant.	8-K	001-33710	4.2	11/23/2015
<u>4.8</u>	Form of Series C-1 Warrant.	8-K	001-33710	4.3(a)	11/23/2015
<u>4.9</u>	Form of Series C-2 Warrant.	8-K	001-33710	4.3(b)	11/23/2015
<u>4.10</u>	Form of Series C-3 Warrant.	8-K	001-33710	4.3(c)	11/23/2015
<u>4.11</u>	Form of Warrant issued to Kanis S.A., dated February 16, 2012.	8-K	001-33710	10.2	2/17/2012
<u>4.12</u>	Warrant issued to Kanis S.A., dated July 3, 2013.	8-K	001-33710	99.2	7/3/2013
<u>4.13</u>	Form of Warrant, dated November 11, 2014, issued to Kanis S.A.	10-K	001-33710	10.18	3/18/2015
<u>4.14</u>	Form of Warrant issued on July 5, 2011 to the underwriters named in the Underwriting Agreement, dated June 28, 2011, by and among Clean Diesel Technologies, Inc., the selling stockholders named therein, and Roth Capital Partners, LLC, as the representative of the underwriters.	8-K	001-33710	10.1	7/1/2011
<u>4.15</u>	Form of Underwriter Warrant.	8-K	001-33710	99.1	7/3/2013
<u>4.16</u>	Warrant, dated November 4, 2016, between the Registrant and MDB Capital Group LLC.	8-K	001-33710	10.3	11/8/2016
<u>4.17</u>	Warrant, dated December 16, 2016, between the Registrant and MDB Capital Group LLC.	8-K	001-33710	10.2	12/16/2016
<u>10.1</u>	Joint Research Agreement on Zero Precious Group Metal Catalyst, dated June 8, 2010, between Honda R&D Co., Ltd. and Catalytic Solutions, Inc. and extended by the Memorandum of Joint Research Agreement on Zero Precious Group Metal Catalyst, dated April 1, 2012, between Honda R&D Co., Ltd. and Catalytic Solutions, Inc.	10-K	001-33710	10.1	3/31/2014
<u>10.2*</u>	Joint Venture Agreement, dated February 19, 2013, between Pirelli & C. Ambiente SpA and the Registrant.	8-K/A	001-33710	10.1	5/6/2013

Edgar Filing: CDTI ADVANCED MATERIALS, INC. - Form 10-K

<u>10.3</u>	Eco Emission Enterprise srl Liquidation letter, dated November 21, 2013, between Pirelli & C. Ambiente SpA and the Registrant.	10-K	001-33710	10.16	3/31/2014
<u>10.4</u> †	Employment Agreement, dated December 14, 2016, between Stephen J. Golden, Ph.D., and the Registrant.	10-K	001-33710	10.6	4/7/2017
<u>10.5</u> †	Stock Incentive Plan as amended through May 20, 2015.	DEF 14A	001-33710	Appx. A	4/2/2015
<u>10.6</u> †	Form of U.S. Participant Notice of Grant of Stock Option and Agreement.	10-Q	001-33710	10.3	8/9/2012
<u>10.7</u> †	Form of Non-U.S. Participant Notice of Grant of Stock Option and Agreement.	10-Q	001-33710	10.4	8/9/2012
<u>10.8</u> †	Form of Non-Employee Director Notice of Grant of Stock Option and Agreement.	10-Q	001-33710	10.5	8/9/2012
<u>10.9</u> †	Form of U.S. Participant Notice of Grant of Restricted Share Units and Agreement.	10-Q	001-33710	10.6	8/9/2012
<u>10.10</u> †	Form of Non-U.S. Participant Notice of Grant of Restricted Share Units and Agreement.	10-Q	001-33710	10.7	8/9/2012
<u>10.11</u> †	Management Short Term Incentive Plan.	8-K	001-33710	10.3	6/13/2011
<u>10.12</u> †	Executive Long Term Incentive Plan.	8-K	001-33710	10.1	12/18/2012
<u>10.13</u>	Second Purchase and Sale Agreement, dated December 18, 2009, between Tanaka Kikinzoku Kogyo K.K. and Catalytic Solutions, Inc.	10-K	011-33710	10.37	3/31/2014
<u>10.14</u>	Purchase and Sale Agreement and the Amendment to Purchase and Sale Agreement, each dated December 22, 2008, between Tanaka Kikinzoku Kogyo K.K. and Catalytic Solutions, Inc.	10-K	011-33710	10.38	3/31/2014
<u>10.15</u>	New Shareholders Agreement, dated December 18, 2009, between Tanaka Holdings Co., Ltd., Tanaka Kikinzoku Kogyo K.K., Catalytic Solutions, Inc. and TC Catalyst, Inc.	10-K	011-33710	10.39	3/31/2014
<u>10.16</u>	TKK-CDTi Addendum Agreement, dated March 13, 2015, between Tanaka Holdings Co., Ltd., Tanaka Kikinzoku Kogyo K.K., TC Catalyst, Inc. and Catalytic Solutions, Inc.	10-K	011-33710	10.44	3/18/2015

<u>10.17</u>	North American Purchase and Sale Agreement, dated June 5, 2015, between Honda North America and each of the other Honda Companies named in the Agreement and the Registrant.	10-Q	001-33710	10.2	8/6/2015
<u>10.18.1</u> [†]	Employment Agreement, dated October 22, 2015, between Matthew Beale and the Registrant.	10-Q	001-33710	10.3	11/13/2015
<u>10.18.2</u> [†]	Addendum to Employment Agreement, dated March 29, 2016, between the Registrant and Matthew Beale.	10-K	001-33710	10.62	3/30/2016
<u>10.18.3</u> [†]	Addendum to Employment Agreement, dated June 1, 2016, between the Registrant and Matthew Beale.	8-K	001-33710	10.3	6/1/2016
<u>10.19</u>	Letter Agreement dated October 7, 2015 between the Registrant and Kanis S.A.	8-K	001-33710	10.1	10/13/2015
<u>10.20</u> [†]	Employment Agreement, dated as of January 11, 2017, between the Registrant and Peter J. Chase.	8-K	001-33710	10.1	1/31/2017
<u>10.21</u>	Promissory Note, dated April 1, 2016, issued by the Registrant.	8-K	001-33710	10.1	4/7/2016
<u>10.22</u>	Amendment to Loan Agreement, dated April 1, 2016, by and between the Registrant and Kanis S.A.	8-K	001-33710	10.2	4/7/2016
<u>10.23.1</u>	Convertible Promissory Note, dated April 11, 2016, issued by the Registrant in favor of Lon E. Bell, Ph.D.	8-K	001-33710	10.1	4/15/2016
<u>10.23.2</u>	Convertible Promissory Note of the Registrant, in the principal amount of \$500,000, originally dated April 11, 2016 and amended and restated effective May 12, 2016.	8-K	001-33710	10.1	5/20/2016
<u>10.24</u> [†]	Separation Agreement and Release, dated as of May 31, 2016, between the Registrant and David Shea.	8-K	001-33710	10.1	6/1/2016
<u>10.25</u> [†]	Employment Agreement, dated as of May 25, 2016, between the Registrant and Tracy Kern.	8-K	001-33710	10.2	6/1/2016
<u>10.26</u>	Letter Agreement, dated June 30, 2016, between the Registrant. and Kanis S.A.	8-K	001-33710	10.1	7/1/2016
<u>10.27</u>	Letter Agreement, dated June 30, 2016, between the Registrant and Lon E. Bell, Ph.D.	8-K	001-33710	10.2	7/1/2016
<u>10.28</u>	Debt Subordination Agreement, dated June 30, 2016, among the Registrant, Kanis S.A. and Haldor Topsøe A/S.	8-K	001-33710	10.3	7/1/2016

Edgar Filing: CDTI ADVANCED MATERIALS, INC. - Form 10-K

<u>10.29</u>	Note Purchase Agreement, dated June 30, 2016, between the Registrant and Haldor Topsøe A/S.	8-K	001-33710	10.4	7/1/2016	
<u>10.30</u>	Senior Convertible Promissory Note of the Registrant, in the principal amount of \$750,000, dated June 30, 2016.	8-K	001-33710	10.5	7/1/2016	
<u>10.31</u>	Convertible Promissory Note of the Registrant, in the principal amount of \$500,000, dated June 30, 2016.	8-K	001-33710	10.6	7/1/2016	
<u>10.32</u>	Securities Purchase Agreement, dated November 3, 2016, between the Registrant and the Investors listed on the schedule of buyers attached thereto.	8-K	001-33710	10.1	11/8/2016	
<u>10.33</u>	Registration Rights Agreement, dated November 4, 2016, between the Registrant and the Investors party thereto.	8-K	001-33710	10.2	11/8/2016	
<u>10.34</u>	Securities Purchase Agreement, dated December 16, 2016, between the Registrant and MDB Capital Group LLC.	8-K	001-33710	10.3	12/16/2016	
<u>10.35</u> †	Clean Diesel Technologies, Inc. 2016 Omnibus Incentive Plan.	8-K	001-33710	10.1	12/16/2016	
<u>10.36</u> †	Form of Restricted Stock Unit Agreement (Employee; 2016 Plan).	10-K	001-33710	10.43	4/7/2017	
<u>10.37</u> †	Form of Non-Qualified Stock Option Agreement (Employee; 2016 Plan).	10-K	001-33710	10.44	4/7/2017	
<u>10.38</u> †	Form of Incentive Stock Option Agreement (2016 Plan).	10-K	001-33710	10.45	4/7/2017	
<u>10.39</u> †	Form of Restricted Stock Unit Agreement (Non-Employee Director; 2016 Plan).	10-K	001-33710	10.46	4/7/2017	
<u>10.40</u> †	Form of Non-Qualified Stock Option Agreement (Non-Employee Director; 2016 Plan).	10-K	001-33710	10.47	4/7/2017	
<u>21.1</u>	List of Subsidiaries					X
<u>23.1</u>	Consent of Rose, Snyder & Jacobs, LLP					X
<u>23.2</u>	Consent of BDO USA, LLP					X
<u>24.1</u>	Power of Attorney (included on signature page)					X
<u>31.1</u>	Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X

<u>31.2</u>	Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X
<u>32.1#</u>	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X
101.INS	XBRL Instance Document	X
101.SCH	XBRL Taxonomy Extension Schema Document	X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	X

† Each a management contract or compensatory plan or arrangement required to be filed as an exhibit to this annual report on Form 10-K.

* Confidential treatment has been granted for certain portions omitted from this exhibit pursuant to an order granted by the Commission under Rule 24b-2 of the Securities Exchange Act of 1934, as amended. Confidential portions of this exhibit have been separately filed with the Securities and Exchange Commission.

The information in this exhibit is furnished and deemed not filed with the Securities and Exchange Commission for purposes of section 18 of the Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of Clean Diesel Technologies, Inc. under the Securities Act of 1933, as amended, or the Exchange Act of 1934, as amended, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

ITEM 16. FORM 10-K SUMMARY

None

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.

CDTi ADVANCED

MATERIALS, INC.

April 2, 2018 By: /s/ Matthew Beale

Matthew Beale

Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Matthew Beale and Tracy Kern, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution for him, and in his name in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, and any of them or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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.

/s/ Matthew Beale Chief Executive Officer and Director (Principal Executive Officer) Date: April 2, 2018
Matthew Beale

/s/ Tracy Kern Chief Financial Officer (Principal Financial and Accounting Officer) Date: April 2, 2018
Tracy Kern

/s/ Lon E. Bell Chairman of the Board Date: April 2, 2018
Lon E. Bell, Ph.D.

/s/ Till Becker Director Date: April 2, 2018
Till Becker, Ph.D.

/s/ Mungo Park Director Date: April 2, 2018
Mungo Park

CDTi ADVANCED MATERIALS, INC.
Index to Financial Statements
Audited Consolidated Financial Statements

<u>Reports of Independent Registered Public Accounting Firm</u>	<u>F-2</u>
<u>Consolidated Balance Sheets as of December 31, 2017 and 2016</u>	<u>F-4</u>
<u>Consolidated Statements of Comprehensive Loss for the years ended December 31, 2017 and 2016</u>	<u>F-5</u>
<u>Consolidated Statements of Stockholders' Equity for the years ended December 31, 2017 and 2016</u>	<u>F-6</u>
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2017 and 2016</u>	<u>F-7</u>
<u>Notes to Consolidated Financial Statements</u>	<u>F-8</u>

F-1

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
CDTi Advanced Materials, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of CDTi Advanced Materials, Inc. (the Company) as of December 31, 2017, and the related consolidated statements of comprehensive loss, stockholders' equity, and cash flows for the year ended December 31, 2017, and the related notes (collectively referred to as the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2017, and the results of its operations and its cash flows for the year ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Explanatory Paragraph – Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has incurred recurring losses from operations and negative cash flows from operations, resulting in an accumulated deficit of \$(228.3) million as of December 31, 2017. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans with regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

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

Our audit 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 audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ Rose, Snyder & Jacobs LLP

We have served as the Company's auditor since 2017

Rose, Snyder & Jacobs LLP

Encino, CA

April 2, 2018

F-2

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders

CDTi Advanced Materials, Inc. (formerly Clean Diesel Technologies, Inc.)

Oxnard, California

We have audited the accompanying consolidated balance sheets of CDTi Advanced Materials, Inc. (the "Company") as of December 31, 2016 and the related consolidated statements of comprehensive loss, stockholders' equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of CDTi Advanced Materials, Inc. at December 31, 2016, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As described in Note 2 to the consolidated financial statements, the Company has suffered recurring losses from operations and negative cash flows from operations since inception, resulting in an accumulated deficit of \$(223.1) million as of December 31, 2016, that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

As discussed in Note 3 to the consolidated financial statements, the Company changed its method of presentation of debt issuance costs in 2016 due to the adoption of Financial Accounting Standards Board Accounting Standards Update ("ASU") 2015-03, Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs. This change was applied retrospectively to all periods presented.

/s/ BDO USA, LLP

BDO USA, LLP

Los Angeles, California

April 7, 2017

F-3

CDTi ADVANCED MATERIALS, INC.

Consolidated Balance Sheets

(in thousands, except share and per share amounts)

	December 31,	
	2017	2016
ASSETS		
Current assets:		
Cash	\$2,807	\$7,839
Accounts receivable, net	2,097	5,398
Inventories	2,647	7,125
Prepaid expenses and other current assets	667	968
Total current assets	8,218	21,330
Property and equipment, net	714	1,158
Intangible assets, net	1,051	1,483
Deferred tax asset	644	554
Other assets	187	305
Total assets	\$10,814	\$24,830
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Line of credit	\$—	\$1,458
Shareholder notes payable	—	1,803
Accounts payable	2,059	5,979
Accrued expenses and other current liabilities	3,585	6,345
Income taxes payable	789	642
Total current liabilities	6,433	16,227
Commitments and contingencies (Note 18)		
Stockholders' equity:		
Preferred stock, par value \$0.01 per share: authorized 100,000; no shares issued and outstanding	—	—
Common stock, par value \$0.01 per share: authorized 50,000,000 at December 31, 2017 and 2016, respectively; issued and outstanding 15,803,736 and 15,703,301 shares at December 31, 2017 and 2016, respectively	158	157
Additional paid-in capital	238,455	237,838
Accumulated other comprehensive loss	(5,886)	(6,329)
Accumulated deficit	(228,346)	(223,063)
Total stockholders' equity	4,381	8,603
Total liabilities and stockholders' equity	\$10,814	\$24,830
See accompanying notes to the consolidated financial statements.		

CDTi ADVANCED MATERIALS, INC.

Consolidated Statements of Comprehensive Loss

(in thousands, except per share amounts)

	Years Ended	
	December 31,	
	2017	2016
Revenues	\$28,353	\$36,839
Cost of revenues	22,455	28,773
Gross profit	5,898	8,066
Operating expenses:		
Research and development	3,970	4,657
Selling, general and administrative	8,292	11,837
Goodwill impairment	—	4,675
Severance and other charges	(480)	) 2,555
Total operating expenses	11,782	23,724
Loss from continuing operations	(5,884)	) (15,658)
Other (expense) income:		
Interest expense, net	(260)	) (1,535)
Gain on change in fair value of bifurcated derivative liability	—	2,754
Loss on extinguishment of debt	(194)	) (12,410)
Gain on change in fair value of liability - classified warrants	523	1,554
Gain on sale of DuraFit business	805	—
Other (expense) income, net	(188)	) 863
Total other income (expense)	686	(8,774)
Loss from operations before income taxes	(5,198)	) (24,432)
Income tax expense (benefit) from operations	85	(958)
Net loss	(5,283)	) (23,474)
Foreign currency translation adjustments	443	(942)
Comprehensive loss	\$(4,840)	) \$(24,416)
Basic and diluted net loss per share:		
Net loss	\$(0.34)	) \$(3.84)
Weighted-average number of common shares outstanding—basic and diluted	15,744	6,107

See accompanying notes to the consolidated financial statements.

CDTi ADVANCED MATERIALS, INC.

Consolidated Statements of Stockholders' Equity

(in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity	
	Shares	Amount					
Balance at December 31, 2015	3,560	\$ 36	\$ 205,377	\$ (5,387	) \$(199,589	) \$ 437	
Net loss	—	—	—	—	(23,474	) (23,474)
Foreign currency translation adjustment	—	—	—	(942	) —	(942)
Issuance of stock for settlement of accounts payable	81	1	183	—	—	184	
Proceeds from equity offerings, net of costs	5,662	56	9,287	—	—	9,343	
Issuance of common stock on conversion of debt	5,961	60	19,978	—	—	20,038	
Exercise of warrants	411	4	1,382	—	—	1,386	
Restricted stock unit vesting	28	—	—	—	—	—	
Stock-based compensation	—	—	1,631	—	—	1,631	
Balance at December 31, 2016	15,703	157	237,838	(6,329	) (223,063	) 8,603	
Net loss	—	—	—	—	(5,283	) (5,283)
Foreign currency translation adjustment	—	—	—	443	—	443	
Exercise of stock options	18	—	42	—	—	42	
Exercise of warrants	76	1	154	—	—	155	
Restricted stock unit vesting	6	—	—	—	—	—	
Stock-based compensation	—	—	421	—	—	421	
Balance at December 31, 2017	15,803	\$ 158	\$ 238,455	\$ (5,886	) \$(228,346	) \$ 4,381	
See accompanying notes to the consolidated financial statements.							

See accompanying notes to the consolidated financial statements.

CDTi ADVANCED MATERIALS, INC.
Consolidated Statements of Cash Flows
(in thousands)

	Years Ended December 31,	
	2017	2016
Cash flows from operating activities:		
Net loss	\$(5,283)	\$(23,474)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	680	780
Stock-based compensation expense	421	1,631
Gain on sale of DuraFit business	(805)	—
Gain on change in fair value of liability-classified warrants	(523)	(1,554)
Gain on change in fair value of bifurcated derivative liability	—	(2,754)
Loss on extinguishment of debt	194	12,410
(Gain) Loss on foreign currency transactions	92	(965)
Amortization of debt discount	—	460
Impairment of goodwill	—	4,675
Other	187	150
Changes in operating assets and liabilities:		
Accounts receivable	3,368	(1,124)
Inventories	2,056	965
Prepaid expenses and other assets	454	571
Accounts payable, accrued expenses and other current liabilities	(6,226)	1,894
Income taxes	52	(669)
Net cash used in operating activities	(5,333)	(7,004)
Cash flows from investing activities:		
Purchases of property and equipment	(24)	(146)
Proceeds from sale of DuraFit business	3,337	—
Proceeds from sale of property, equipment and other assets	—	79
Net cash provided by (used in) investing activities	3,313	(67)
Cash flows from financing activities:		
Net payments under demand line of credit	(1,458)	(2,055)
Payments of shareholder notes payable	(2,000)	—
Proceeds from issuance of common stock and warrants, net of offering costs	—	10,200
Proceeds from exercise of stock options	42	—
Proceeds from exercise of warrants	122	240
Proceeds from debt offerings	—	3,750
Net cash (used in) provided by financing activities	(3,294)	12,135
Effect of exchange rates on cash	282	(183)
Net change in cash	(5,032)	4,881
Cash at beginning of year	7,839	2,958
Cash at end of year	\$2,807	\$7,839
See accompanying notes to the consolidated financial statements.		

CDTi ADVANCED MATERIALS, INC.

Notes to Consolidated Financial Statements

1. Description of Business

CDTi Advanced Materials, Inc. ("CDTi" or the "Company") is a leading provider of technology and solutions to the automotive emissions control markets. The Company possesses market leading expertise in emissions catalyst design and engineering for automotive and off-road applications

The Company has a proven ability to develop proprietary materials incorporating various base metals that replace costly platinum group metals ("PGMs") in coatings on vehicle catalytic converters. Recently, the Company has expanded its materials platform to include new synergized-PGM diesel oxidation catalysts (SPGM™ DOC), Base-Metal Activated Rhodium Support (BMARS™), and Spinel™ technologies, and it is in the process of introducing these new catalyst technologies to OEMs and other vehicle catalyst manufacturers in a proprietary powder form. The Company believes that this powder-to-coat business model will allow it to achieve greater scale and higher return on its technology investment than in the past.

The Company's business is driven by increasingly stringent global emission standards for internal combustion engines, which are major sources of a variety of harmful pollutants. It has operations in the United States ("U.S."), the United Kingdom, and Sweden as well as an Asian investment.

2. Liquidity and Going Concern

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern. Therefore, the consolidated financial statements contemplate the realization of assets and liquidation of liabilities in the ordinary course of business. The Company has suffered recurring losses and negative cash flows from operations since inception, resulting in an accumulated deficit of \$228.3 million at December 31, 2017. The Company has funded its operations through asset sales, credit facilities and other borrowings and equity sales. At December 31, 2017, the Company had \$2.8 million in cash.

The Company's continuation as a going concern is dependent upon its ability to obtain adequate financing, which the Company has successfully secured since inception, including financing from equity sales and asset divestitures. However, there is no assurance that the Company will be able to achieve projected levels of revenue and maintain access to sufficient working capital, and accordingly, there is substantial doubt as to whether the Company's existing cash resources and working capital are sufficient to enable it to continue its operations within one year from the financial statement issuance date. The Company is currently working towards obtaining a new credit facility that would provide the Company the flexibility it needs as it implements its new business strategy. If the Company is unable to obtain the necessary capital, it will be forced to license or liquidate its assets, significantly curtail or cease its operations and/or seek reorganization under the U.S. Bankruptcy Code.

On May 19, 2015, the Company filed a shelf registration statement on Form S-3 with the SEC, which was declared effective on November 17, 2015. The Form S-3 permits the Company to sell in one or more registered transactions up to an aggregate of \$50.0 million of various securities not to exceed one-third of the Company's public float in any 12-month period. As of December 31, 2017, the Company had sold an aggregate of \$3.1 million using the Form S-3.

3. Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the financial statements of the Company and its wholly owned subsidiaries. All intercompany transactions, including intercompany profits and losses and intercompany balances, have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S requires management of the Company to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. These estimates and assumptions are based on management's best estimates and judgment. On an ongoing basis, the Company evaluates its estimates and assumptions, including those related to impairment of goodwill and long-lived assets, stock-based compensation, the fair value of financial instruments including warrants, allowance for doubtful accounts, inventory valuation, taxes and

contingent and accrued liabilities. The Company bases its estimates on historical experience and various other factors, including the current economic environment, which it

F-8

believes to be reasonable under the circumstances. Estimates and assumptions are adjusted when facts and circumstances dictate. Actual results may differ from these estimates under different assumptions and conditions. Management believes that the estimates are reasonable.

Cash

Cash consists of cash balances on hand and on deposit at banks. Cash on deposit at banks at times may exceed the Federal Deposit Insurance Corporation (FDIC) limits. The Company believes no significant concentration of credit risk exists with respect to these cash balances.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount and do not bear interest. Accounts receivable are presented net of a reserve for doubtful accounts of \$0.5 million and \$0.4 million at December 31, 2017 and 2016, respectively. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing accounts receivable. The Company determines the allowance based on historical write-off experience and past due balances over 90 days that are reviewed individually for collectability. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. The Company does not have any off balance sheet credit exposure related to its customers.

Inventories

Inventories are stated at the lower of cost (FIFO method) or market (net realizable value). Finished goods inventory includes materials, labor and manufacturing overhead. The Company establishes provisions for inventory that is obsolete or when quantities on hand are in excess of estimated forecasted demand. The creation of such provisions results in a write-down of inventory to net realizable value and a charge to cost of sales.

The Company's inventory includes precious metals (platinum, palladium and rhodium) for use in the manufacturing of catalysts. The precious metals are valued at the lower of cost or net realizable value, consistent with the Company's other inventory.

Property and Equipment

Property and equipment is capitalized at cost and is stated at cost less accumulated depreciation and amortization. Depreciation and amortization is determined using the straight line method over the estimated useful lives of the various asset classes. Machinery and equipment are depreciated over 2 to 10 years; furniture and fixtures, computer hardware and software and vehicles are depreciated over 2 to 5 years. Property and equipment held under capital leases and leasehold improvements are amortized over the shorter of estimated useful lives or the lease term. Repairs and maintenance are charged to expense as incurred and major replacements or betterments are capitalized.

Intangible Assets

The Company's intangible assets consist of trade names, acquired patents and technology, and customer relationships and have finite lives. Intangible assets are carried at cost, less accumulated amortization. Amortization is computed on a straight-line or accelerated basis over the estimated useful lives of the respective assets, ranging from 4 to 20 years.

Long Lived Assets

Assets such as property and equipment and amortizable intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss is recognized when the sum of the expected undiscounted future net cash flows of an asset or asset group is less than its carrying amount and is measured as the amount by which the carrying amount of the asset or asset group exceeds its fair value.

Warrants and Derivative Liabilities

The Company accounts for the issuance of Company derivative equity instruments in accordance with Accounting Standards Codification ("ASC") 815-40 "Derivative and Hedging". The Company reviews common stock purchase warrants at each balance sheet date based upon the characteristics and provision of each particular instrument and classifies them on the balance

sheet as equity or a liability. Below are some of the factors the Company considers with the corresponding balance sheet classification:

Equity if the awards (i) require physical settlement or net-share settlement, or (ii) give the Company a choice of net-cash settlement or settlement in the Company's own shares (physical settlement or net-share settlement), or as Liabilities if the awards (i) require net-cash settlement (including a requirement to net-cash settle the contract if an event occurs and if that event is outside the Company's control), or (ii) give the counterparty a choice of net-cash settlement or settlement in shares (physical settlement or net-share settlement).

The Company assesses classification of common stock purchase warrants and other freestanding derivatives at each reporting date to determine whether a change in classification between assets and liabilities and equity is required.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance against deferred tax assets is required if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. The valuation allowance should be sufficient to reduce the deferred tax assets to the amount that is more likely than not to be realized.

The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Changes in recognition or measurement are reflected in the period in which the change occurs. The Company records interest and penalties related to unrecognized tax benefit in income tax expense.

Revenue Recognition

Revenues are derived primarily from the sale of products. The Company generally recognizes revenue when products are shipped and the customer takes ownership and assumes risk of loss, collection of the relevant receivable is reasonably assured, persuasive evidence of an arrangement exists and the sales price is fixed or determinable. There are certain customers where risk of loss transfers at destination point and revenue is recognized when product is delivered to the destination. For these customers, revenue is recognized upon receipt at the customer's warehouse. When terms of sale include subjective customer acceptance criteria, the Company defers revenue until the acceptance criteria are met. The determination of whether or not the customer acceptance terms are perfunctory or inconsequential impacts the amount and timing of the revenue recognized.

Research and Development

Research and development costs are generally expensed as incurred. These expenses include compensation expense for employees and contractors engaged in research, design and development activities, as well costs paid to outside parties for testing, validation and certification of our products. Also included is any depreciation related to assets utilized in the development of new products.

Stock-Based Compensation

Equity awards consist of stock options and restricted stock units ("RSUs"). The Company measures the compensation cost for all stock-based awards at fair value on the date of grant and recognizes it on a straight-line basis over the service period for awards expected to vest, which is generally three years.

The Company measures the fair value of stock options using the Black-Scholes option-pricing model and certain assumptions, including the expected life of the stock options, an expected forfeiture rate and the expected volatility of its common stock. The fair value of RSUs is based on the closing price of the Company's common stock on the grant date.

Product Warranty

The Company provides for the estimated cost of product warranties in cost of sales, at the time product revenue is recognized. Warranty costs are estimated primarily using historical warranty information in conjunction with current engineering assessments applied to the Company's expected repair or replacement costs.

Foreign Currency

The functional currency of our subsidiary Engine Control Systems Europe AB in Sweden is the Swedish krona and the Clean Diesel Technologies Limited U.K. subsidiary, is the British pound sterling. Accordingly, the assets and liabilities of the foreign locations are translated into U.S. dollars at period-end exchange rates. Revenue and expense accounts are translated at the average exchange rates for the period. The resulting foreign currency exchange adjustments are charged or credited directly to other comprehensive income or loss as a separate component of stockholders' equity. Unrealized foreign currency exchange gains and losses on certain intercompany transactions that are of a long-term investment nature (i.e. settlement is not planned or anticipated in the foreseeable future) are also recorded in other comprehensive income or loss in stockholders' equity. Accumulated other comprehensive loss contained only foreign currency translation adjustments as of December 31, 2017 and 2016.

The Company has exposure to multiple currencies. The primary exposure is between the U.S. dollar, the Canadian dollar, the Euro, British pound sterling and Swedish krona. Gains and losses arising from transactions denominated in currencies other than the functional currency of the entity are included in other income (expense) in the consolidated statements of comprehensive loss. Gains and losses arising from transactions denominated in foreign currencies are primarily related to inter-company loans that have been determined to be temporary in nature, cash, accounts receivable and accounts payable denominated in non-functional currencies.

Net Loss per Share

Basic net loss per share is computed using the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed using the weighted average number of common shares and dilutive potential common shares. Dilutive potential common shares include employee stock options, RSUs, warrants and debt that are convertible into the Company's common stock.

Diluted net loss per share excludes certain dilutive potential common shares outstanding as their effect is anti-dilutive. Because the Company incurred net losses in the years ended December 31, 2017 and 2016, the effect of potentially dilutive securities has been excluded in the computation of net loss per share as their impact would be anti-dilutive. Potentially dilutive common stock equivalents excluded were 1.9 million and 2.1 million shares during the years ended December 31, 2017 and 2016, respectively.

Fair Value Measurements

Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset and liability. As a basis for considering such assumptions, a fair value hierarchy has been established that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurement) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2: Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable including quoted prices for similar instruments in active markets and quoted prices for identical or similar instruments in markets that are not active; and

- Level 3: Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

Fair Value of Financial Instruments

ASC Topic 825, "Financial Instruments", requires disclosure of the fair value of financial instruments for which the determination of fair value is practicable. The fair values of the Company's cash, trade accounts receivable, prepaid expenses and other current assets, accounts payable and accrued expenses and other current liabilities approximate carrying values due to the short maturity of these instruments. The fair value of borrowings under the line of credit approximates their carrying value due to the variable interest rates. The fair value of shareholder notes payable, calculated using level 3 inputs, and a net present value model, was \$1.8 million at December 31, 2016. The fair value for the warrants classified as liability and the bifurcated derivative liabilities were calculated using level 3 inputs, including Black-Scholes option-pricing model as well as Monte Carlo Simulation model. These inputs are disclosed in Note 14 "Fair Value Measurements"

Recently Issued Accounting Guidance

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-9, "Revenue from Contracts with Customers (Topic 606)". ASU No. 2014-9 supersedes the revenue recognition requirements in "Revenue Recognition (Topic 605)". ASU No. 2014-9 requires entities to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. In July 2015, the FASB finalized the delay of the effective date by one year, making the new standard effective for interim periods and annual periods beginning after December 15, 2017. Early adoption is permitted, but it is not permitted earlier than the original effective date. ASU No. 2014-9 provides for either full retrospective adoption or a modified retrospective adoption by which it is applied only to the most current period presented. While the Company has not finalized the impact of the adoption of ASU No. 2014-9 on its consolidated financial statements, the Company does not expect the adoption to have a material impact.

In January 2016, FASB issued ASU No. 2016-1, "Recognition and Measurement of Financial Assets and Financial Liabilities". ASU No. 2016-1 requires equity investments to be measured at fair value with changes in fair value recognized in net income; simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment; eliminates the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet; requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments; requires separate presentation of financial assets and financial liabilities by measurement category and form of financial assets on the balance sheet or the accompanying notes to the financial statements and clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity's other deferred tax assets. ASU No. 2016-1 is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. While the Company has not finalized the impact of the adoption of ASU No. 2016-1 on its consolidated financial statements, the Company does not expect the adoption to have a material impact.

In February 2016, the FASB issued ASU No. 2016-2, "Leases (Topic 842)." ASU No. 2016-2 requires the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous U.S. generally accepted accounting principles. It is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. Entities are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. While the Company has not finalized the impact of adoption of ASU No. 2016-2 on its consolidated financial statements, the Company does not expect the adoption to have a material impact.

In August 2016, the FASB issued ASU No. 2016-15, "Classification of Certain Cash Receipts and Cash Payments: a consensus of the Emerging Task Force." ASU No. 2016-15 provides guidance on how certain cash receipts and payments are presented and classified in the statement of cash flows, including debt prepayment or debt extinguishment costs, contingent consideration payments made after a business combination, and separately identifiable cash flows and application of the predominance principle. The standard is intended to reduce current diversity in practice. The standard will be effective for annual reporting periods beginning after December 15, 2017,

including interim periods within those reporting periods. Early adoption is permitted. While the Company has not finalized the impact of adoption of ASU No. 2016-15 on its consolidated financial statements, the Company does not expect the adoption to have a material impact.

In October 2016, the FASB issued ASU No. 2016-16, "Intra-Entity Transfers of Assets of Other Than Inventory." Current GAAP prohibits the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been

F-12

sold to an outside party. ASU No. 2016-16 updates the current guidance by requiring that entities recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The amendments in this ASU do not change GAAP for the pre-tax effects of an intra-entity asset transfer under Topic 810, Consolidation, or for the income tax effects of an intra-entity transfer of inventory. The standard will be effective for annual reporting periods beginning after December 15, 2017, including interim periods within those reporting periods. Early adoption is permitted. While the Company has not finalized the impact of adoption of ASU No. 2016-16 on its consolidated financial statements, the Company does not expect the adoption to have a material impact.

4. Sale of DuraFit business

On September 8, 2017, the Company entered into an Asset Purchase Agreement with AP Emissions Technologies, LLC ("AP") wherein the Company sold substantially all of the assets of its DuraFit and private label OEM replacement diesel particulate filter ("DPF") and diesel oxidation catalysts ("DOC") business for approximately \$3.3 million in cash. The assets sold included all tangible and intangible assets of that business, including brands, intellectual property, equipment, customer agreements, private label programs and inventory. As a result of the transaction, for the year ended December 31, 2017, the Company recorded a gain on sale of DuraFit of approximately \$0.8 million. The Company will continue to serve this market through coating arrangements and its powder-to-coat technology. As the DuraFit assets sold were not a component of CDTi prior to the sale and the sale of DuraFit did not meet the criteria of a strategic shift in CDTi's business, the transaction was not treated as discontinued operations in the Company's financial statements.

Concurrently with the sale of the DuraFit business, the Company repaid in full all indebtedness owed to FGI Worldwide LLC, successor to Faunus Group International, Inc. ("FGI"), and terminated the Company's loan agreements with FGI and all commitments thereunder. In connection with termination of the loan agreements, FGI terminated and released all of its security interests in and liens on all of the assets of the Company and its subsidiaries. Of the proceeds received by the Company from the sale of the DuraFit business, the Company applied approximately \$315,000 in repayment of the outstanding indebtedness to FGI. The Company did not incur any prepayment or early termination penalties in connection with termination of the FGI loan agreements.

5. Inventories

Inventories consist of the following (in thousands):

	December 31,	
	2017	2016
Raw materials	\$1,101	\$3,291
Work in process	383	790
Finished goods	1,163	3,044
	\$2,647	\$7,125

6. Property and Equipment

Property and equipment consists of the following (in thousands):

	December 31,	
	2017	2016
Furniture and fixtures	\$1,735	\$2,124
Computer hardware and software	1,213	1,228
Machinery and equipment	4,274	11,078
Vehicles	—	31
	7,222	14,461
Less accumulated depreciation	(6,508)	(13,303)
	\$714	\$1,158

Depreciation expense was \$0.2 million and \$0.3 million for the years ended December 31, 2017 and 2016, respectively.

7. Goodwill and Intangible Assets

Goodwill

The balance of goodwill as of December 31, 2017 and 2016 was \$0.0 million. In connection with the annual impairment analysis performed during the fourth quarter of 2016, the Company recognized an impairment charge of \$4.7 million (see Note 16 for further details).

Intangible Assets

Intangible assets consist of the following (in thousands):

	Useful Life in Years	December 31,	
		2017	2016
Trade name	15 - 20	\$1,208	\$1,204
Patents and know-how	5 - 12	4,113	4,090
Customer relationships	4 - 8	750	721
		6,071	6,015
Less accumulated amortization		(5,020)	(4,532)
		\$1,051	\$1,483

The Company recorded amortization expense related to amortizable intangible assets of \$0.4 million and \$0.5 million for the years ended December 31, 2017 and 2016, respectively.

Estimated amortization expense for existing intangible assets for each of the next five years is as follows (in thousands):

Years ending December 31:

2018	\$162
2019	\$162
2020	\$162
2021	\$162
2022	\$143
Thereafter	\$260
	\$1,051

8. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following (in thousands):

	December 31,	
	2017	2016
Accrued salaries and benefits	\$560	\$759
Accrued severance and other charges(1)	28	1,738
Accrued warranty(2)	125	338
Warrant liability(3)	669	1,226
Liability for consigned precious metals	1,902	1,282
Other	301	1,002
	\$3,585	\$6,345

(1)For additional information, refer to Note 9, "Severance and Other Charges".

(2)For additional information, refer to Note 10, "Accrued Warranty".

(3)For additional information, refer to Note 14, "Fair Value Measurements".

9. Severance and Other Charges

Severance, exit and other charges consist of the following (in thousands):

	Years Ended	
	December 31,	
	2017	2016
Employee severance expense	\$139	\$1,227
Lease exit costs	(619)	1,328
Total severance and other charges	\$(480)	\$2,555

During 2016, the Company accrued approximately \$1.3 million of lease exit costs associated with its manufacturing facility in Canada. In addition, the Company incurred additional severance costs of approximately \$1.2 million associated with its Canadian manufacturing facility as well as other North American locations.

In the third quarter of 2017, the Company incurred severance charges related to the sale of its Durafit business as well as the contraction in its operations team in response to the permanent decrease in sales to Honda. In the second quarter of 2017, the Company reached an agreement with the property owner of its former Canadian facility to exit the lease prior to its December 2018 termination. Severance and other charges reflect the reduction of the liability for the remaining estimated costs relative to the closed facility.

The following summarizes the activity in the Company's accrual for severance and other exit costs (in thousands):

	Severance	Lease Exit Costs	Total
December 31, 2015	\$ 1,092	\$—	\$ 1,092
Provision	1,227	1,328	2,555
Payments	(1,601)	(308)	(1,909)
December 31, 2016	\$ 718	\$ 1,020	\$ 1,738
Provision	139	(619)	(480)
Payments	(829)	(401)	(1,230)
December 31, 2017(1)	\$ 28	\$—	\$ 28

(1)The Company paid this in January 2018.

10. Accrued Warranty

The Company establishes reserves for future product warranty costs that are expected to be incurred pursuant to specific warranty provisions with its customers. The Company generally warrants its products against defects between one and five years from date of shipment, depending on the product. The warranty reserves are established at the time of sale and updated throughout the warranty period based upon numerous factors including historical warranty return rates and expenses over various warranty periods. Historically, warranty returns have not been material.

The following summarizes the activity in the Company's accrual for product warranty (in thousands):

	Years Ended December 31,	
	2017	2016
Balance at beginning of period	\$338	\$228
Accrued warranty expense	54	431
Warranty claims paid	(163)	(324)
Transferred in sale of DuraFit	(110)	—
Translation adjustment	6	3
Balance at end of period	\$ 125	\$ 338

11. Debt

Debt consists of the following (in thousands):

	December 31, 2017	December 31, 2016
Line of credit with FGI	\$ —	—\$ 1,458
\$2.0 million, 8% shareholder note due 2017 (1)	—	1,803
Total debt	—	3,261
Less current portion	—	(3,261)
Long-term portion	\$ —	—\$ —

Debt discount related to extinguishment and amendment of previous outstanding debt. The aggregate amount of (1)unamortized debt discount was \$0.2 million at December 31, 2016. For additional information, refer to the respective discussions below.

Line of Credit with FGI

The Company maintained a \$7.5 million secured demand facility with FGI backed by the Company's receivables and inventory. The Company also granted FGI a first lien collateral interest in substantially all of the Company's assets. On September 8, 2017, concurrent with the sale of the DuraFit business (see Note 4), the Company repaid all outstanding balances under this demand facility and terminated the loan agreements and all commitments thereunder. In connection with termination of the loan agreements, FGI terminated and released all of its security interests in and liens on all of the assets of the Company and its subsidiaries.

The interest rate on advances or borrowings under the FGI facility was the greater of (i) 6.50% per annum and (ii) 2.50% per annum above the prime rate, as defined in the FGI facility and was 6.50% at December 31, 2016.

Kanis S. A. Indebtedness

On April 1, 2016, the Company executed a Promissory Note (the "Kanis Note") and entered into an amendment of existing loan agreements (the "Kanis Agreement") with Kanis S.A. Pursuant to the terms of the Kanis Note, Kanis S.A. agreed to lend the Company \$2.0 million at 8% per annum with a maturity date of September 30, 2017. Pursuant to the terms of the Kanis Agreement, the Company and Kanis S.A. agreed to amend prior loans with an aggregate outstanding principal balance of \$7.5 million (collectively, the "Loan Agreements"), such that: (i) Kanis S.A. had the right to convert the principal balance of the Loan Agreements and any accrued interest thereon into common stock of the Company at any time prior to maturity at a conversion price equal to the lower of the closing price of CDTi's common stock on the date before the date of the Kanis Agreement or as of the date when Kanis S.A. exercises its conversion right; and (ii) the Company had the right to mandatorily convert the \$7.5 million principal balance and any accrued interest thereon into its common stock upon maturity of the Loan Agreements or earlier upon the occurrence of a Liquidity Event at a conversion price equal to the lower of the closing price of CDTi as of the date immediately before the date of the Kanis Agreement or at a 25% discount to the Liquidity Event price. A Liquidity Event is defined as a strategic investment in CDTi or a public stock offering by CDTi. The Company could prepay the principal and any interest due on the Loan Agreements at any time before their maturity date without penalty.

Certain features of the Kanis Note resulting from the Kanis Agreement required bifurcation and were determined to be an embedded derivative comprised of a conversion feature and a call option. The embedded derivative was separated from the Kanis Note and carried as a derivative liability on the balance sheet at fair value, with changes in fair value reported through earnings. The conversion feature could have been exercised at either \$3.60, which is the closing stock price the day prior to the original agreement or at the market price when the conversion was exercised. The call option could have been executed by the Company in the event the Company completes a Liquidity Event. The call option would be settled at a 25% discount to the Liquidity Event pricing. In addition, the Kanis Agreement was considered to trigger an extinguishment of the debt. As a result the Company recorded a loss of approximately \$1.6 million for the three and six months ended June 30, 2016 in connection with the Kanis agreement. For additional information on the bifurcated derivative liability, please see Note 14, "Fair Value Measurements".

On June 30, 2016, the Company entered into a Letter Agreement (the "Kanis Exchange Agreement") with Kanis S.A. The Company agreed to an exchange with Kanis of an aggregate of \$7.5 million in principal amount of promissory notes and other indebtedness (collectively, the "Kanis Notes") held by Kanis, plus accrued interest, for a number of shares of the Company's common stock equal to (a) the principal amount of the Kanis Notes plus the accrued interest thereon through and including the date of the settlement of the exchange contemplated by the Kanis Exchange Agreement, divided by (b) \$1.6215.

At a special meeting of stockholders held on August 25, 2016, the Company's stockholders approved the transactions contemplated by the Kanis Exchange Agreement. On August 30, 2016, the Company consummated the Kanis Exchange Agreement, pursuant to which an aggregate of 4,872,032 shares of common stock was issued to Kanis in exchange for the delivery to the Company of the Kanis Notes and the extinguishment of \$7.9 million of indebtedness, including \$0.4 million of accrued interest and the bifurcated derivative liability. The exchange resulted in a loss on extinguishment of \$10.2 million. Subsequent to the August 30, 2016 conversion, the Company's sole remaining debt with Kanis S.A. was the loan agreement for \$2.0 million, at 8% interest per annum with a maturity date of

September 30, 2017, entered into on April 1, 2016.

In January 2017, the Company repaid the entire \$2.0 million balance.

Director note

F-17

On April 11, 2016, the Company executed a Convertible Promissory Note (the “Director Note”) with Lon E. Bell, Ph.D., one of the Company’s Directors. Pursuant to the terms of the Director Note, Dr. Bell agreed to lend the Company \$0.5 million at 8% per annum and a maturity date of September 30, 2017. Dr. Bell had the right to convert the principal balance of the Director Note and any accrued interest thereon into common stock of the Company at any time prior to maturity at a conversion price equal to the lower of the closing price of CDTi on the date before the date of the Director Note or as of the date when Dr. Bell exercises his conversion right. The Company had the right to mandatorily convert the principal balance of the Director Note and any accrued interest thereon into its common stock upon maturity at a conversion price equal to the lower of the closing price of CDTi on the date before the date of the Director Note or on the maturity date. The Company also had the right to mandatorily convert the principal amount of the Director Note plus accrued interest thereon into its common stock concurrently with the closing of a Liquidity Event, as defined, at a conversion price equal to the lower of the closing price of CDTi as of the date immediately before the date of this Director Note or at a 25% discount to the Liquidity Event price. A Liquidity Event is defined as a strategic investment in CDTi or a public stock offering by CDTi.

Effective May 12, 2016, the Director Note was amended and restated to amend the conversion features contained therein. The Director Note, which originally had a floating conversion price, allowed Dr. Bell to convert the principal balance of the note and any accrued interest thereon at any time before payment into shares of the Company’s common stock at a fixed conversion price of \$3.55 per share (subject to adjustment for stock splits, reverse stock splits, and similar events) (the “Conversion Price”), which was the closing consolidated bid price of the Company’s common stock on the trading day immediately prior to the date of issuance. In addition, the Company had the right to mandatorily convert the principal balance of the Director Note plus any accrued interest into shares of the Company’s common stock at the Conversion Price upon the earlier of the Maturity Date and the closing of a Liquidity Event if, and only if, the Conversion Price was less than the average closing price of the Company’s common stock for the five consecutive trading days ending on the trading day immediately preceding the date the Company exercises its conversion rights.

On June 30, 2016, the Company entered into a Letter Agreement (the “Bell Exchange Agreement”) with Dr. Bell. The Company agreed to an exchange with Dr. Bell of the Director Note for a number of shares of the Company’s common stock equal to (a) the principal amount of the Bell Note plus the accrued interest thereon through and including the date of the settlement of the exchange contemplated by the Bell Exchange Agreement, divided by (b) \$1.6215.

At a special meeting of stockholders held on August 25, 2016, the stockholders approved the transactions contemplated by the Bell Exchange Agreement. On August 30, 2016, the Company consummated the Bell Exchange Agreement transaction, pursuant to which an aggregate of 317,950 shares of common stock was issued to Dr. Bell in exchange for the delivery to the Company of the Bell Note and the extinguishment of \$0.5 million of indebtedness, including accrued interest. The exchange resulted in a loss on extinguishment of \$0.6 million.

Note Purchase Agreement and Convertible Notes

On June 30, 2016, the Company also entered into a Note Purchase Agreement (the “Note Purchase Agreement”) with Haldor Topsøe A/S, a company organized under the laws of Denmark (“Haldor Topsøe”). The Company agreed to sell and issue (i) a Senior Convertible Promissory Note (the “Senior Note”) in the principal amount of \$0.75 million and (ii) a Convertible Promissory Note (the “Note”, and with the Senior Note, the “Convertible Notes”) in the principal amount of \$0.5 million, each of which is convertible into the Company’s equity securities.

The Convertible Notes provided for interest at a rate of 8% per annum, were to mature on December 31, 2017 and bore no prepayment penalty. The Convertible Notes provided that they shall at no time be convertible into more than 779,350 shares (subject to adjustment for stock splits, reverse stock splits, and similar events) of the Company’s common stock and/or other securities convertible or exercisable for such number of shares of the Company’s common stock.

The Convertible Notes permitted Haldor Topsøe to convert the principal balance of the Convertible Notes into shares of the Company's common stock at a fixed conversion price of \$1.6215 per share at any time. In addition, the Senior Note permitted Haldor Topsøe to convert the principal balance of the Senior Note into equity securities that the Company may issue in a future financing including any instruments or securities exchangeable for or convertible into equity securities, at the same price and on the same terms at which the Company sells equity securities in such future financing. The Company had the right to

F-18

mandatorily convert the Convertible Notes. As long as the Company's common stock continued to be listed on The NASDAQ Stock Market, LLC ("NASDAQ") and the Company was not in default under the Note, the Company had the right to mandatorily convert the principal balance of the Note into shares of its common stock at the conversion price of \$1.6215 per share at any time before payment and following the date of conversion of the Kanis Notes into the Company's common stock. The Company has the right to mandatorily convert the Senior Note, subject to satisfaction of the same conditions to conversion of the Note, upon consummation of a Qualified Financing into the equity securities the Company issues in the Qualified Financing at the same price and on the same terms at which it sells such equity securities in the Qualified Financing. A "Qualified Financing" is defined as an equity or equity-linked financing in which the Company received aggregate gross proceeds of at least \$5.0 million (including the principal amount of the Senior Note converted in such financing).

Accrued interest under the Convertible Notes is not convertible into the Company's equity securities and any interest that has accrued on principal amount converted into equity securities will be paid in cash at the time of such conversion.

Pursuant to the Note Purchase Agreement, the Company agreed, if requested by Haldor Topsøe, to expand the size of its board of directors by one member and appoint one person designated by Haldor Topsøe. Thereafter, until the later of (i) the date that the Convertible Notes have been paid in full or (ii) if 100% of the principal amount of the Convertible Notes have been converted into the Company's common stock and/or other equity securities, the date Haldor Topsøe no longer owns at least eighty percent (80%) of such securities, the Company's board shall include one person designated by Haldor Topsøe in the board's slate of nominees to be submitted to stockholders at each meeting of stockholders of the Company where directors are to be elected.

On August 30, 2016, Haldor Topsøe elected to convert the Note for which the Company issued to Haldor Topsøe an aggregate of 308,357 shares of common stock in conversion of \$0.5 million in principal amount of indebtedness. On December 16, 2016, Haldor Topsøe elected to convert the Senior Note, and issued to Haldor Topsøe an aggregate of 462,535 shares of common stock in conversion of \$0.75 million in principal amount of indebtedness.

For additional information on the warrants discussed within this Note, refer to Note 12, "Stockholders' Equity" and Note 13 "Warrants", respectively.

12. Stockholders' Equity

On February 12, 2016, at a special meeting of the Company's stockholders, the Company's stockholders voted to approve an amendment to the Restated Certificate of Incorporation to increase the number of authorized shares from 24.0 million shares to 100.0 million shares. Further, on February 12, 2016, the Company filed with the Secretary of State of Delaware a Certificate of Amendment to the Restated Certificate of Incorporation (the "Amendment") which increased the number of authorized shares from 24.0 million shares to 100.0 million shares, ninety-nine million nine hundred thousand (99.9 million) of which were designated as common stock and one hundred thousand (0.1 million) of which were designated as preferred stock. On May 25, 2016 at the Company's Annual Meeting of Stockholders, the stockholders also voted to approve the amendment of the Restated Certificate of Incorporation to effect a reverse stock split of the Company's common stock which to reduce the total number of shares authorized under the Restated Certificate of Incorporation from 100.0 million to 20.0 million. On July 21, 2016, the Company filed a Certificate of Amendment to its Restated Certificate of Incorporation, as amended, with the Secretary of State of Delaware to effect a one-for-five reverse stock split of the Company's common stock, (the "Reverse Stock Split"). The amendment became effective on July 22, 2016. As a result of the Reverse Stock Split, every five (5) shares of the Company's issued and outstanding common stock were combined and reclassified into one (1) share of the Company's common stock. The Reverse Stock Split did not change the par value of the Company's common stock. All share and per share information disclosed in this report, including the conversion features of all warrants (shares and exercise prices) reflect the Reverse Stock Split.

On December 16, 2016, the Company filed with the Secretary of State of Delaware a Certificate of Amendment to the Company's Restated Certificate of Incorporation (the "Amendment") which increased the number of authorized shares

from 20,000,000 shares to 50,100,000 shares, of which 50,000,000 are designated as common stock and 100,000 are designated as preferred stock.

November 2016 Offering

F-19

On November 3, 2016, the Company entered into a securities purchase agreement with certain investors (the "Purchasers") providing for the issuance and sale of 5,172,250 shares of the Company's common stock at a price of \$2.00 per share (the "November 2016 Offering"). On November 4, 2016, and December 16, 2016 the Company sold 949,960 and 4,222,290 shares of Common Stock, respectively, under the November 2016 Offering. The Company also issued to the placement agent, in consideration for its services as placement agent for the November 2016 Offering, a total of 489,475 shares of Common Stock and a five-year warrant to purchase up to 489,475 shares of Common Stock at an exercise price of \$2.20 per share

On October 24, 2016, the Company received a written consent from Kanis S.A., the holder of a majority of the Company's outstanding shares of common stock as of such date, approving the offer and sale of securities by the Company in a private placement transaction, or series of related private placement transactions, on terms similar to the terms of the November 2016 Offering.

The Company received net proceeds of \$10.2 million after deducting placement agent fees and other offering expenses. The November 2016 Offering warrants are within the scope of ASC 815-40 and are required to be recorded as liabilities. Accordingly, of the \$10.2 million in net proceeds, \$9.3 million was allocated to the common stock and included in equity and \$0.9 million was allocated to the warrant liability based on the fair value of the warrants on the issuance date. The Company intends to use the net proceeds for general corporate purposes, which may include working capital, general and administrative expenses, capital expenditures and implementation of its strategic priorities.

Exchange Transactions

As discussed in Note 11, on August 30, 2016, the Company consummated the Kanis Exchange Agreement and Bell Exchange Agreement transactions, pursuant to which the Company (i) issued to Kanis an aggregate of 4,872,032 shares of common stock in exchange for the delivery to the Company of the Kanis Notes and the extinguishment of \$7.9 million of indebtedness, and (ii) issued to Dr. Bell an aggregate of 317,950 shares of common stock in exchange for the delivery to the Company of the Director Note and the extinguishment of \$0.5 million of indebtedness

Note Conversion

As discussed in Note 11, on August 31, 2016, the Company elected to convert \$0.5 million in principal amount of the Haldor Notes and issued Haldor Topsøe 308,357 shares of the Company's common stock. On December 16, 2016, Haldor Topsøe elected to convert \$0.75 million in principal amount of the Haldor Notes and issued Haldor Topsøe 462,535 shares of the Company's common stock.

Other Sales and Issuances of Common Stock and Warrants

On December 16, 2016, the Company entered into a securities purchase agreement with MDB Capital Group, LLC ("MDB"), providing for the sale of 81,550 shares of the Company's common stock at a price of \$2.00 per share for an aggregate purchase price of \$0.2 million. The purchase price was paid by the cancellation of trade payables of the Company to MDB in the amount of the purchase price.

13. Warrants

From time to time, the Company issues warrants to purchase its common stock. Warrants have been issued for consulting services, in connection with the Company's issuance of debt and sales of its common stock. For additional information regarding the warrants discussed in this Note, refer to Note 11, "Debt" and Note 12 "Stockholders' Equity", respectively.

Warrants activity is summarized as follows:

	Shares(1)	Weighted Average Exercise Price	Range of Exercise Prices
Outstanding at December 31, 2015	913,434	\$ 3.54	\$6.25 - \$52.00
Issued	489,475	\$ 2.20	\$2.20
Exercised	(410,824)	\$ 1.73	\$0.05 - \$3.00
Expired	(12,216)	\$ 22.50	\$22.50
Outstanding at December 31, 2016	979,869	\$ 6.36	\$2.20 - \$21.00
Issued	—	\$ —	\$-
Exercised	(75,399)	\$ 19.46	\$13.25-\$21.00
Expired	—	\$ —	\$-
Outstanding at December 31, 2017	904,470	\$ 5.27	\$2.20 - \$21.00
Exercisable at December 31, 2017	904,470	\$ 5.27	\$2.20 - \$21.00

(1) Outstanding and exercisable information includes 21,920 equity-classified warrants as of December 31, 2017.
Warrant Liability

The Company's warrant liability is carried at fair value and is classified as Level 3 in the fair value hierarchy because the warrants are valued based on unobservable inputs.

The Company determines the fair value of its warrant liability using the Black-Scholes option-pricing model unless the awards are subject to market conditions, in which case it uses a Monte Carlo simulation model, which utilizes multiple input variables to estimate the probability that market conditions will be achieved. These models are dependent on several variables such as the instrument's expected term, expected strike price, expected risk-free interest rate over the expected term of the instrument, expected dividend yield rate over the expected term and the expected volatility. The expected strike price for warrants with full-ratchet down-round price protection is based on a weighted average probability analysis of the strike price changes expected during the term as a result of the full-ratchet down-round price protection.

The assumptions used in the Black-Scholes option-pricing model to estimate the fair value of the warrant liability were as follows:

	December 31,	
	2017	2016
Expected volatility	91.0 - 104.5	97.7% - 106.4%
Risk-free interest rate	1.86% - 2.09%	1.40% - 1.92%
Dividend yield	—	—
Expected life in years	1.8 - 4.0	2.8 - 5.0

The assumptions used in the Monte Carlo simulation model to estimate the fair value of the warrant liability were as follows:

	December 31,	
	2017	2016
Expected volatility	91.3 - 95.7	97.7%-106.4%
Risk-free interest rate	1.53% - 1.87%	1.03%-1.43%
Dividend yield	—	—
Expected life in years	0.5- 1.9	1.5-2.9

The warrant liability, included in accrued expenses and other current liabilities in the accompanying consolidated balance sheets, is re-measured at the end of each reporting period with changes in fair value recognized in other income (expense), net in the consolidated statements of comprehensive loss. Upon the exercise of a warrant that is classified as a liability, the fair value of the warrant exercised is re-measured on the exercise date and reclassified from warrant liability to additional paid-in capital.

14. Fair Value Measurements

The Company measures certain financial assets and liabilities at fair value in accordance with a hierarchy which requires an entity to maximize the use of observable inputs which reflect market data obtained from independent sources and minimize the use of unobservable inputs. There are three levels of inputs that may be used to measure fair value:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2: Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable including quoted prices for similar instruments in active markets and quoted prices for identical or similar instruments in markets that are not active; and

Level 3: Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

Assets and liabilities measured at fair value on the Company's balance sheet on a recurring basis include the following at December 31, 2017 and December 31, 2016 (in thousands):

Warrant Liability	Level 1	Level 2	Level 3
December 31, 2017	—	—	\$ 669
December 31, 2016	—	—	\$ 1,226

There were no transfers in and out of Level 1 and Level 2 fair value measurements during the year ended December 31, 2017.

The following is a reconciliation of the warrant liability, included in accrued expenses and other current liabilities in the accompanying consolidated balance sheets, measured at fair value using Level 3 inputs (in thousands):

	Years Ended	
	December 31,	
	2017	2016
Balance at beginning of period	\$ 1,226	\$ 3,072
Issuance of common stock warrants	—	858
Exercise of common stock warrants	(34)	(1,150)
Remeasurement of common stock warrants	(523)	(1,554)
Balance at end of period	\$ 669	\$ 1,226

The following is a reconciliation of the embedded bifurcated derivative liability measured at fair value using significant unobservable inputs, Level 3 (in thousands):

	Years Ended December 31, 2017	2016
Balance at beginning of period	\$ —	\$ —
Transfers in and/or out of Level 3	—	—
Initial valuation of bifurcated derivative liability	—	3,936
Extinguishment of bifurcated derivative liability	—	(3,936)
Balance at end of period	\$ —	\$ —

Upon amendment of the Kanis debt on April 1, 2016, the convertible debt required bifurcation and accounting at fair value. The resulting embedded derivative was composed of a conversion option, the exercise of which would require shareholder approval, as well as a call option the Company could exercise in the event of a Liquidity Event. The call option would be at a 25% discount to the Liquidity Event price. The company used a Monte Carlo simulation model to estimate the fair value of the embedded derivative portion of the Kanis debt. The assumptions used in the Monte Carlo simulation model to estimate the fair value of the derivative liability included volatility of 109%, a risk free rate of 0.8% and an expected term of 2.5 years. On August 30, 2016, the Kanis debt was extinguished eliminating the embedded derivative.

The fair values of the Company's cash, accounts receivable, prepaid expenses and other current assets, accounts payable and accrued expenses and other current liabilities approximate carrying values due to the short maturity of these instruments. The fair value of the line of credit approximates its carrying value due to the variable interest rates. Using a net present value model, the fair value of the Company's current notes payable was \$1.8 million at December 31, 2016.

The Company's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of assets and liabilities and their placement within the fair value hierarchy.

15. Stock-Based Compensation

The Clean Diesel Technologies, Inc. Stock Incentive Plan (formerly known as the Clean Diesel Technologies, Inc. 1994 Incentive Plan), as amended (the "Plan"), provides for the awarding of incentive stock options, non-qualified stock options, stock appreciation rights, restricted shares, performance awards, bonuses or other forms of share-based awards, or combinations of these to the Company's directors, officers, employees, consultants and advisors (except consultants or advisors in capital-raising transactions) as determined by the board of directors. At the Company's Annual Meeting of Shareholders held on May 23, 2012, the Company's shareholders approved certain amendments to the Plan, the most significant of which changed the Plan name, removed the evergreen provision and established a maximum number of 1.4 million shares to be reserved for issuance under the Plan, disallowed the repricing of outstanding stock options without shareholder approval, removed the ability to issue cash bonus awards under the Plan and modified the change in control provisions within the Plan. As of December 31, 2017, there were 81,766 shares available for future grants under the Plan.

Effective December 16, 2016, the Company adopted the Clean Diesel Technologies, Inc. 2016 Omnibus Incentive Plan (the "Omnibus Plan"), pursuant to the approval of the Omnibus plan by the Company's stockholders by written consent dated October 24, 2016. The Omnibus plan was adopted by the Company's Board of Directors (the "Board") on October 11, 2016. Under the Omnibus Plan, the Company is authorized to grant equity-based awards in the form of stock options, restricted common stock, restricted stock units, stock appreciation rights, and other stock based awards to employees (including executive officers), directors and consultants of the Company and its subsidiaries. The Omnibus Plan authorized the issuance of 2,250,000 shares of the Company's common stock.

Total stock-based compensation expense was \$0.4 million and \$1.6 million for the years ended December 31, 2017 and 2016, respectively.

Stock Options

Stock option activity is summarized as follows:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (thousands)
Outstanding at December 31, 2016	1,073,288	\$ 5.26	9.4	6
Granted	100,000	\$ 2.60	—	—
Exercised	(18,333)	\$ 2.25	—	17
Canceled	(56,335)	\$ 2.45	—	—
Vested shares expired	(65,254)	\$ 33.68	—	\$ —
Outstanding at December 31, 2017	1,033,366	\$ 3.41	8.8	\$ —
Vested and expected to vest at December 31, 2017	1,033,366	\$ 3.41	8.8	
Exercisable at December 31, 2017	532,407	\$ 4.33	8.5	\$ —

The aggregate intrinsic value represents the difference between the exercise price and the Company's closing stock price on the last trading day of the year.

Stock options granted under the Plan typically expire ten years from the date of grant and are issued at a price equal to the fair market value of the underlying stock on the date of grant. The Company's board of directors may establish such vesting and other conditions with respect to options as it deems appropriate.

The Company estimates the fair value of stock options using a Black-Scholes option-pricing model. The weighted-average assumptions and grant date fair value for the options granted during year ended December 31, 2017 were as follows:

	Years Ended December 31,	
	2017	2016
Expected volatility	121.1 %	153.7% - 168.5%
Risk-free interest rate	1.9 %	1.19% - 2.18%
Dividend yield	—	—
Expected life in years	6.0	6.0
Weighted average grant date fair value	\$2.25	\$ 2.12

The expected term of the options has historically been based upon the historical term until exercise or expiration of all granted options. Due to the significant change in the Company following the Merger and significant change in the terms of the options granted, CDTI's pre-Merger historical exercise data was not considered to provide a reasonable basis for estimating the expected term for current option grants. As such, the expected term of stock options granted in 2015 and later was determined using the "simplified method" as allowed under ASC 718-10-S99, "Compensation—Stock Compensation: Overall: SEC Materials." The "simplified method" calculates the expected term as the average of the vesting term and original contractual term of the options. The expected volatility is based on the volatility of the Company over the corresponding expected term of the option. The risk-free interest rate is the constant maturity rate published by the U.S. Federal Reserve Board that corresponds to the expected term of the option. The dividend yield is assumed as 0% because the Company has not paid dividends and does not expect to pay dividends in the future.

Compensation costs for stock options that vest over time are recognized over the vesting period on a straight-line basis. As of December 31, 2017, the Company had \$1.3 million of unrecognized compensation cost related to stock option grants that remained to be recognized over vesting periods. These costs are expected to be recognized over a weighted average period of 3.7 years.

Restricted Stock Units

RSU activity is as follows:

	Shares	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2016	12,389	\$ 10.50
Granted	—	\$ —
Vested	(6,704)	\$ 11.77
Forfeited	(4,085)	\$ 11.80
Nonvested units at December 31, 2017	1,600	\$ 1.85

As of December 31, 2017, the Company had approximately \$2.2 thousand of unrecognized compensation expense related to RSUs, which will be recognized over a weighted average estimated remaining life of 1.5 years.

16. Impairment

The Company performs its annual impairment test during the fourth quarter, after the annual budgeting process is completed as well as whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Each interim period, management assesses whether or not an indicator of impairment is present that would necessitate that impairment analysis be performed in an interim period other than during the fourth quarter. During the Company's annual impairment analysis during the fourth quarter of 2016, management used a discount rate of 15% and a terminal growth rate of 3%. The discount rate used in the discount cash flow method was based on a weighted-average cost of capital determined from relevant market comparisons, adjusted for specific reporting unit

risks (i.e. primarily the

F-25

uncertainty of achieving projected operating cash flows). The terminal value growth rate was applied to the final year of the projected period and reflected the Company's estimate of stable, perpetual growth. The inputs utilized in the analyses are classified as Level 3 inputs within the fair value hierarchy as defined in ASC Topic 820 "Fair Value Measurements and Disclosures" ("ASC 820").

Due to the complexity and the effort required to estimate the fair value of the reporting units in the step one of the impairment test and to estimate the fair values of all assets and liabilities of the reporting units in the second step of the test, the fair value estimates were derived based on assumptions and analyses that are subject to change. Such assumptions include but are not limited to the following: changes in its cost of capital, growth of the reporting unit's revenue, cost structure of the reporting unit, successful completion of research and development and customer acceptance of new products, expected changes in emissions regulations and approval of the reporting unit's product by regulatory agencies. Based on the Company's analyses, the implied fair value of goodwill was substantially lower than the carrying value of goodwill for its reporting unit.

As a result during the fourth quarter of 2016, the Company recognized, an impairment charge of \$4.7 million. This impairment charge was included as a separate component of operating expenses for the year ended December 31, 2016. As a result, as of December 31, 2016, the Company had no goodwill on its consolidated balance sheet.

17. Income Taxes

On December 22, 2017 the U.S. government enacted comprehensive tax reform commonly referred to as the Tax Cuts and Jobs Act ("TCJA"). Under FASB Accounting Standards Codification ("ASC 740"), the effects of changes in tax rates and laws are recognized in the period which the new legislation is enacted. The TCJA makes broad and complex changes to the U.S. tax code, including, but not limited to: (1) reducing the U.S. federal corporate tax rate from 35% to 21%; (2) changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017; (3) bonus depreciation that will allow for full expensing of qualified property; (4) creating a new limitation on deductible interest expense; (5) eliminating the corporate alternative minimum tax ("AMT"); (6) limitation on the deductibility of executive compensation under Internal Revenue Code §162(m); and (7) new tax rules related to foreign operations.

On December 22, the SEC staff issued Staff Accounting Bulletin ("SAB") No. 118, which provides guidance on accounting for the tax effects of TCJA. The purpose of SAB No. 118 was to address any uncertainty or diversity of view in applying ASC Topic 740, Income Taxes in the reporting period in which the TCJA was enacted. SAB No. 118 addresses situations where the accounting is incomplete for certain income tax effects of the TJCA upon issuance of a company's financial statements for the reporting period that includes the enactment date. SAB No. 118 allows for a provisional amount to be recorded if it is a reasonable estimate of the impact of the TCJA. Additionally, SAB No. 118 allows for a measurement period to finalize the impacts of the TCJA, not to extend beyond one year from the date of enactment.

In connection with the initial analysis of the impact of the TCJA, the Company has recorded a provisional decrease in our deferred tax assets and liabilities with a corresponding adjustment to its valuation allowance. While the Company is able to make a reasonable estimate of the impact of the reduction in the corporate rate, it is subject to further analysis, interpretation and clarification of the TCJA, which could result in changes to this estimate during 2018. Income (loss) from continuing operations before income taxes include the following components (in thousands):

	Years Ended	
	December 31,	
	2017	2016
U.S.-based operations	\$(5,715)	\$(17,344)
Non U.S.-based operations	517	(7,088)
	\$(5,198)	\$(24,432)

Income tax expense (benefit) attributable to loss from continuing operations is summarized as follows (in thousands):

	Current	Deferred	Total
Year ended December 31, 2017:			
State and local	\$ 53	\$ —	\$ 53
Foreign	128	(96)	32
Total	\$ 181	\$ (96)	\$ 85
Year ended December 31, 2016:			
U.S. Federal	\$ —	\$ —	\$ —
State and local	22	—	22
Foreign	(210)	(770)	(980)
Total	\$ (188)	\$ (770)	\$ (958)

Income taxes attributable to loss from continuing operations differ from the amounts computed by applying the U.S. federal statutory rate of 34% to loss from continuing operations before income taxes as shown below (in thousands):

	Years Ended	
	December 31,	
	2017	2016
Expected tax benefit	\$(1,766)	\$(8,307)
Net tax effects of:		
Foreign tax rate differential	(77)	1,331
State taxes, net of federal benefit	(362)	219
Return to provision adjustment	(48)	13,386
Research and other credits	2,719	443
Permanent difference on convertible notes and warrants	(169)	2,923
Goodwill impairment	—	533
Other	86	61
Change in deferred tax asset valuation allowance	(298)	(11,547)
	\$ 85	\$(958)

Deferred tax assets and liabilities consist of the following (in thousands):

	December 31,	
	2017	2016
Deferred tax assets:		
Research and development credits	\$2,486	\$2,063
Operating loss carry forwards	7,085	7,320
Interest	315	460
Inventories	240	289
Allowance for doubtful accounts	88	129
Depreciation	316	353
Non-cash compensation	739	946
Other	533	929
Total gross deferred tax assets	11,802	12,489
Valuation allowance	(10,874)	(11,441)
Net deferred tax assets	\$928	\$1,048
Deferred tax liabilities:		
Other identifiable intangible assets	\$(284)	\$(494)
Total gross deferred tax liabilities	(284)	(494)
Net deferred tax assets	\$644	\$554

The Company had approximately \$19.8 million and \$17.6 million of federal and state income tax net operating loss carryforwards at December 31, 2017, respectively. The foreign net operating losses can be carried forward indefinitely. Future utilization of the federal and state net operating losses and credit carryforwards is subject to a substantial annual limitation due to ownership change limitations as required by Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Code"), as well as similar state limitations.

In connection with the settlement of the Kanis S.A. debt exchange (see Note 11), a change in control of the Company occurred with Kanis S.A. becoming the largest owner of the Company's common stock in an amount greater than 50% of the issued and outstanding shares of common stock. As a result, the Company performed a study to evaluate the status of net operating loss carryforwards as a result of the ownership change during the year. The results of the study provided that there was indeed an "ownership change" as of August 30, 2016 as defined for U.S. federal income tax purposes. The "ownership change" will significantly limit the use of the Company's net operating losses and credits in future tax years.

Of the \$19.8 million federal loss carryforwards approximately \$4.9 million of the loss will be subject to an annual limitation of \$0.4 million within the next 5 years and \$0.2 million for the next 15 years. The federal net operating loss carryforwards will expire in fiscal year 2037. As a result of the "ownership change" the federal research and development credits have been limited and based on the limitation the Company does not anticipate being able to use any of these credits that existed as of the date of the Merger in future tax years. Of the \$17.6 million of state net operating loss carryforwards approximately \$1.4 million of the loss will be subject to an annual limitation of \$0.1 million for the next 20 years. The state net operating loss carryforwards will expire in fiscal year 2037. The Company has state research and development credits of \$3.9 million however they have placed a 20% reserve on the credit since a thorough R&D study was not performed. Since the state credits have an indefinite life, the Company did not write them off even though it is also limited under Section 383. The Company has a full valuation allowance against the related deferred tax assets for its U.S. and U.K. entities as it is more likely than not that they will not be realized by the Company.

In assessing the potential realization of deferred tax assets, consideration is given to whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the Company attaining future taxable income during the periods in which those temporary differences become deductible. In addition, the utilization of net operating loss carryforwards may be limited due to restrictions imposed under applicable federal

and state tax laws due to a change in ownership. Based upon the level of historical operating losses and future projections, management believes it is more likely than not that the Company will not realize the deferred tax assets. The Company has not recognized a deferred tax liability on undistributed earnings of its foreign subsidiaries, because these earnings are intended to be permanently reinvested. The amount of the unrecognized deferred tax liability depends on judgment required to analyze the withholding tax due, the applicable tax law and factual circumstances in effect at the time of any such distributions. Therefore, the Company believes it is not practicable at this time to reliably determine the amount of unrecognized deferred tax liability related to its undistributed earnings; however, these undistributed earnings are immaterial. If circumstances change and it becomes apparent that some or all of the undistributed earnings of a subsidiary will be remitted and income taxes have not been recognized by the parent entity, the parent entity shall accrue as an expense of the current period income taxes attributable to that remittance. The following changes occurred in the amount of unrecognized tax benefits including related interest and penalties, included in the income taxes payable on the consolidated balance sheet (in thousands):

	Years Ended December 31,	
	2017	2016
Balance at beginning of year	\$1,469	\$634
Additions for current year tax provisions	51	49
Additions/Reduction for tax positions of prior years	—	786
Reduction for prior year tax provisions	—	—
Balance at end of year	\$1,520	\$1,469

If recognized, the entire amount of the unrecognized tax benefits would affect the effective tax rate. As of December 31, 2017 and 2016, the Company had \$0.2 million and \$0.2 million, respectively, accrued for payment of interest and penalties related to unrecognized tax benefits.

The Company operates in multiple tax jurisdictions, both within and outside of the United States. Although the timing of the resolution and/or closure of audits is not certain, the Company does not believe it is reasonably possible that its unrecognized tax benefits would materially change in the next twelve months. The following tax years remain open to examination by the major domestic taxing jurisdictions to which it is subject:

	Open Tax Years
United States—Federal	2014 - 2017
United States—State	2013 - 2017
Canada	2012 - 2017
Sweden	2015 - 2017
United Kingdom	2013 - 2017

18. Commitments and Contingencies

Lease Commitments

The Company leases its facilities under operating leases that expire through 2019. The Company recognizes its minimum lease payments, including escalation clauses, on a straight-line basis over the minimum lease term of the lease. Rent expense was \$0.5 million and \$0.6 million during the years ended December 31, 2017 and 2016, respectively.

Future minimum lease payments under non-cancelable operating leases (with initial or remaining lease terms in excess of one year) as of December 31, 2017 are (in thousands):

Years ending December 31:

2018	\$ 146
2019	25
2020	—
2021	—
2022 and thereafter	—

Total minimum lease payments \$ 171

California Air Resources Board ("CARB")

By email dated June 26, 2015, CARB asserted the Company had deficiencies in compliance with the Verification Procedure, Aftermarket Parts Regulations and the Vehicle Code. The initial penalty calculated by CARB for these alleged violations was \$1.8 million, with the largest component relating to the use of empty center bodies to allow trucks to be placed back in service while warranty claims are being evaluated. This process is now explicitly permitted by regulation, but was not permitted at the time of the alleged violation. Although the Company disagreed with CARB's findings, the Company cooperated with CARB's investigation and discussed with CARB whether and to what extent the payment of monetary penalties would be appropriate. During the first quarter of 2017, the Company and CARB reached a settlement in which the Company paid approximately \$0.1 million in 2017.

In addition to the foregoing, the Company is involved in legal proceedings from time to time in the ordinary course of its business. Management does not believe that any of these claims and proceedings against it is likely to have, individually or in the aggregate, a material adverse effect on the Company's consolidated financial condition, results of operations or cash flows. Accordingly, the Company cannot determine the final amount, if any, of its liability beyond the amount accrued in the consolidated financial statements as of December 31, 2017, nor is it possible to estimate what litigation-related costs will be in the future.

Applied Utility Systems, Inc.

The Company is undergoing a sales and use tax audit by the State of California (the "State") on AUS for the period of 2007 through 2009. The audit has identified a project performed by the Company during that time period for which sales tax was not collected and remitted and for which the State asserts that proper documentation of resale may not have been obtained and that the Company owes sales tax of \$1.5 million, inclusive of interest. The Company contends and believes that it received sufficient and proper documentation from its customer to support not collecting and remitting sales tax from that customer and is actively disputing the audit report with the State. On August 12, 2013, the Company appeared at an appeals conference with the State Board of Equalization ("BOE"). On July 21, 2014, the Company received a Decision and Recommendation ("D&R") from the BOE. The D&R's conclusion was that the basis for the calculation of the aforementioned \$1.5 million tax due should be reduced from \$12.2 million to \$9.0 million with a commensurate reduction in the tax owed to the State. Regardless of this finding, the Company continues to believe that it will prevail in this matter, as it believes that the State did not adequately address the legal arguments related to the Company's acceptance of the valid resale certificate from its customer. The Company has not agreed to these findings, and therefore, it will be appealing at a higher level at the BOE. Based on a re-audit, the BOE lowered the tax due to \$0.9 million, inclusive of interest. The Company continues to disagree with these findings based on the aforementioned reasons. However, in October 2015, the Company offered to settle this case for \$0.1 million, which is based on the expected cost of continuing to contest this audit. Accordingly, an accrual was charged to discontinued operations during the year ended December 31, 2015 to reflect the offer to settle this case. Should the Company not prevail with the offer to settle this case, it plans to continue with the appeals process. Further, should the Company not prevail in this case, it will pursue reimbursement from the customer for all assessments from the State.

19. Geographic Information

Net sales by geographic region based on location of sales organization is as follows (in thousands):

	Years Ended	
	December 31,	
	2017	2016
United States	\$17,238	\$23,870
Canada	7,477	9,583
Europe	3,638	3,386
Total international	11,115	12,969
Total revenues	\$28,353	\$36,839

Property and equipment, net and total assets by geographic region as of December 31, 2017 and 2016 is as follows (in thousands):

	Property and Equipment, net		Total Assets	
	2017	2016	2017	2016
United States	\$710	\$1,082	\$9,099	\$15,126
Canada	—	71	—	8,352
Europe	4	5	1,715	1,352
Total international	4	76	1,715	9,704
Total	\$714	\$1,158	\$10,814	\$24,830

20. Concentrations

For the years ended December 31, 2017 and 2016, Honda accounted for 52% and 59%, respectively, of the Company's revenues. This customer accounted for 1% and 35% of the Company's accounts receivable at December 31, 2017 and 2016, respectively. The Company does not anticipate material sales to this customer in 2018.

For the year ended December 31, 2017, the Company had three suppliers that accounted for approximately 17%, 11% and 11% of the Company's material purchases. For the year ended December 31, 2016, the Company had one supplier that accounted for approximately 30% of the Company's material purchases.

21. Supplementary Cash Flow Information

Supplementary cash flow information for 2017, and 2016 is as follows (in thousands):

	Years Ended	
	December 31,	
	2017	2016
Cash paid for interest	256	694
Cash paid for income taxes	56	43
Non-cash operating and financing activities		
Kanis S.A. notes payable plus accrued interest settled with common stock (Note 11)	—	7,900
Haldor Topsøe note payable settled with common stock (Note 11)	—	1,250
Director Note payable plus accrued interest settled with common stock (Note 11)	—	515
Issuance of common stock to placement agent in connection with equity offering (Note 12)	—	5
Issuance of warrants to placement agent in connection with equity offering (Note 12)	—	857
Accounts Payable settled with common stock	—	184