

CARBO CERAMICS INC  
Form 10-K  
February 24, 2014  
[Table of Contents](#)

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**Form 10-K**

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2013

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. 001-15903

**CARBO Ceramics Inc.**

(Exact name of registrant as specified in its charter)

**DELAWARE**  
(State or other jurisdiction of

incorporation or organization)

**72-1100013**  
(I.R.S. Employer

Identification Number)

575 North Dairy Ashford

Suite 300

Houston, Texas 77079

(Address of principal executive offices)

(281) 921-6400

(Registrant's telephone number)

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

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Title of each class	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	New York Stock Exchange
Securities registered pursuant to Section 12(g) of the Act: None	

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit 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 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 or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act:

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

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

The aggregate market value of the Common Stock held by non-affiliates of the Registrant, based upon the closing sale price of the Common Stock on June 30, 2013, as reported on the New York Stock Exchange, was approximately \$1,331,909,120. Shares of Common Stock held by each director and executive officer and each person who owns 10% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 18, 2014, the Registrant had 23,102,471 shares of Common Stock outstanding.

## DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for Registrant's Annual Meeting of Stockholders to be held May 20, 2014, are incorporated by reference in Part III.

**Table of Contents**

**TABLE OF CONTENTS**

**PART I**

Item 1.	<u>Business</u>	1
Item 1A.	<u>Risk Factors</u>	10
Item 1B.	<u>Unresolved Staff Comments</u>	16
Item 2.	<u>Properties</u>	16
Item 3.	<u>Legal Proceedings</u>	17
Item 4.	<u>Mine Safety Disclosures</u>	17

**PART II**

Item 5.	<u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	18
Item 6.	<u>Selected Financial Data</u>	20
Item 7.	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	21
Item 7A.	<u>Quantitative and Qualitative Disclosures about Market Risk</u>	29
Item 8.	<u>Financial Statements and Supplementary Data</u>	29
Item 9.	<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	29
Item 9A.	<u>Controls and Procedures</u>	29
Item 9B.	<u>Other Information</u>	30

**PART III**

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

**PART IV**

Item 15.	<u>Exhibits and Financial Statement Schedules</u>	32
	<u>Signatures</u>	33
	<u>Management's Report on Internal Control Over Financial Reporting</u>	F-1
	<u>Reports of Independent Registered Public Accounting Firm</u>	F-2
	<u>Consolidated Financial Statements</u>	F-4

## Table of Contents

### PART I

#### Item 1. *Business* General

CARBO Ceramics Inc. (the "Company" or "CARBO") is an oilfield services technology company that generates revenue primarily through the sale of products and services to the oil and gas industry for production enhancement and environmental services.

Our production enhancement businesses promote increased Exploration and Production ("E&P") Operators' production and Estimated Ultimate Recovery ("EUR") by providing industry leading technology to *Design, Build, and Optimize the Fracture*. Our environmental services business is intended to protect E&P Operators' assets, minimize environmental risk, and lowers operating costs (LOE).

CARBO is the world's largest supplier of ceramic proppant and, during 2010, commenced the sale of resin-coated sand in order to broaden its proppant suite of products. The Company is the provider of the industry's most popular fracture simulation software, and a provider of fracture design and consulting services, and a broad range of technologies for spill prevention, containment and countermeasures. The Company sells the majority of its products and services to operators of oil and natural gas wells and to oilfield service companies to help increase the production rates and the amount of oil and natural gas ultimately recoverable from these wells. The Company's products and services are primarily used in the hydraulic fracturing of natural gas and oil wells. The Company was incorporated in 1987 in Delaware. As used herein, "Company", "CARBO", "we", "our" and "us" may refer to the Company and/or its consolidated subsidiaries.

Hydraulic fracturing is the most widely used method of increasing production from oil and natural gas wells. The hydraulic fracturing process consists of pumping fluids down a natural gas or oil well at pressures sufficient to create fractures in the hydrocarbon-bearing rock formation. A granular material, called proppant, is suspended and transported in the fluid and fills the fracture, propping it open once high-pressure pumping stops. The proppant-filled fracture creates a conductive channel through which the hydrocarbons can flow more freely from the formation to the well and then to the surface.

There are three primary types of proppant that can be utilized in the hydraulic fracturing process: sand, resin-coated sand and ceramic. Sand is the least expensive proppant, resin-coated sand is more expensive and ceramic proppant is typically the most expensive. The higher initial cost of ceramic proppant is justified by the fact that the use of these proppants in certain well conditions results in an increase in the production rate of oil and natural gas, an increase in the total oil or natural gas that can be recovered from the well and, consequently, an increase in cash flow for the operators of the well. The increased production rates are primarily attributable to the higher strength and more uniform size and shape of ceramic proppant versus alternative materials.

The Company primarily manufactures six distinct ceramic proppants. Our newest proppant, KRYPTOSPHERE-H, is a high-performance ceramic proppant engineered to deliver increased conductivity and durability in the highest closure stress wells. Even in challenging, high-cost environments such as deep water wells, KRYPTOSPHERE-H retains its integrity and enables greater ultimate recovery from the reservoir. Commercialization of KRYPTOSPHERE-H is progressing, and the Company continues to complete the formal qualification milestones with its clients and anticipates initial sales could occur during the third quarter of 2014.

CARBOHSP® and CARBOPROP® are high strength proppants designed primarily for use in deep oil and gas wells.

CARBOLITE®, CARBOECONOPROP® and CARBOHYDROPROP® are lightweight ceramic proppants. CARBOLITE® is used in medium depth oil and gas wells, where higher production rates can be achieved due to the product's uniform size and spherical shape. CARBOECONOPROP® was introduced to compete directly with sand-based proppant, and CARBOHYDROPROP® was introduced in late 2007 to improve performance in slickwater fracture treatments.

## **Table of Contents**

During 2010, the Company began production of resin-coated ceramic (CARBOBOND® LITE®) and resin-coated sand (CARBOBOND® RCS) proppants. CARBOBOND® LITE® addresses a niche market in which oil and natural gas wells are subject to the risk of proppant flow-back. In the case of CARBOBOND® RCS, the Company made the strategic decision to offer a lower-cost, lower-conductivity alternative proppant in addition to its ceramic proppant products, thereby broadening its proppant suite of products.

In addition, the Company manufactures CARBONRT®, a detectable proppant that utilizes a non-radioactive tracer material to assist operators in determining the locations of fractures in a natural gas or oil well. This tracer is incorporated into proppant granules during the manufacturing process, and can be added to any of the types of ceramic proppant that the Company makes.

The Company, through its wholly-owned subsidiary StrataGen, Inc., also sells fracture simulation software under the brand FracPro® and provides fracture design and consulting services to oil and natural gas companies under the brand StrataGen.

FracPro® provides a suite of stimulation software solutions to the industry that have marked capabilities for on-site real-time analysis. This has enabled recognition and remediation of potential stimulation problems. This stimulation software is tightly integrated with reservoir simulators, thus allowing for stimulation treatment and production optimization.

StrataGen, the specialized consulting team, consults and works with operators around the world to help optimize well placement, fracture treatment design and production stimulation. The broad range of expertise of the StrataGen consultants includes: fracture treatment design; completion support; on-site treatment supervision, quality control; post-treatment evaluation and optimization; reservoir and fracture studies; rock mechanics and software application and training.

Demand for most of the Company's products and services depends primarily upon the demand for natural gas and oil and on the number of natural gas and oil wells drilled, completed or re-completed worldwide. More specifically, the demand for the Company's products and services is dependent on the number of oil and natural gas wells that are hydraulically fractured to stimulate production.

Falcon Technologies and Services, Inc. (Falcon Technologies), a wholly-owned subsidiary of the Company, provides spill prevention, containment and countermeasure systems for the oil and gas industry. Falcon Technologies uses proprietary technology to provide products that are designed to enable its clients to extend the life of their storage assets, reduce the potential for hydrocarbon spills and provide containment of stored materials.

During the year ended December 31, 2013, the Company generated approximately 79% of its revenues in the United States and 21% in international markets.

## **Competition**

As the demand for resin-coated and ceramic proppant continues to be amplified by the large resource plays, the Company expects more entrants into the market for its products. One of the Company's worldwide proppant competitors is Saint-Gobain Proppants (Saint-Gobain). Saint-Gobain is a division of Compagnie de Saint-Gobain, a large French glass and materials company. Saint-Gobain manufactures a variety of ceramic proppants that it markets in competition with each of the Company's products. Saint-Gobain's primary manufacturing facility is located in Fort Smith, Arkansas. Saint-Gobain also manufactures ceramic proppant in China. Mineracao Curimbaba (Curimbaba), based in Brazil, is also a competitor and manufactures ceramic proppants that it markets in competition with some of the Company's products. Imerys, S.A., a competitor based in France (Imerys), has begun to manufacture ceramic proppant in Andersonville, Georgia, and during 2013 acquired Wrens, Georgia-based ceramic proppant manufacturer Pyramax, LLC.

## **Table of Contents**

There are two major manufacturers of ceramic proppant in Russia. Borovichi Refractory Plant ( Borovichi ) located in Borovichi, Russia, and FORES Refractory Plant ( FORES ) located in Ekaterinburg, Russia. Although the Company has limited information about Borovichi and FORES, the Company believes that Borovichi primarily manufactures intermediate strength ceramic proppants and markets its products principally within Russia, and that FORES manufactures intermediate strength and lightweight ceramic proppant lines and markets its products both inside and outside of Russia. The Company further believes that these companies have added manufacturing capacity in recent years and now provide a majority of the ceramic proppant used in Russia. The Company is also aware of an increasing number of manufacturers in China. Most of these companies produce intermediate strength ceramic proppants that are marketed both inside and outside of China. Chinese proppant imports into the United States increased beginning in 2010 and 2011, which contributed to an over-supply of ceramic proppant in 2012 and 2013.

Competition for CARBOHSP® and CARBOPROP® principally includes ceramic proppant manufactured by Saint-Gobain, Curimbaba and various producers located in China. The Company's CARBOLITE®, CARBOECONOPROP® and CARBOHYDROPROP® products compete primarily with ceramic proppant produced by Saint-Gobain, Curimbaba and Imerys and with sand-based proppant for use in the hydraulic fracturing of medium depth natural gas and oil wells. The leading suppliers of mined sand are Unimin Corp., U.S. Silica Company, Fairmount Minerals Limited, Inc., and Badger Mining Corp. The leading suppliers of resin-coated sand are Momentive Specialty Chemicals (formerly known as Hexion) and Santrol, a subsidiary of Fairmount Minerals.

The Company believes that the most significant factors that influence a customer's decision to purchase the Company's ceramic proppant are (i) price/performance ratio, (ii) on-time delivery performance, (iii) technical support and (iv) proppant availability. The Company believes that its products are competitively priced and that its delivery performance is good. The Company also believes that its superior technical support has enabled it to persuade customers to use ceramic proppant in an increasingly broad range of applications and thus increased the overall market for the Company's products. Over the past five years, the Company has increased its manufacturing and resin-coating capacity by 67% and plans to continue its strategy of adding capacity, as needed, to meet anticipated future increases in sales demand.

## **Product Development**

The Company continually conducts testing and development activities with respect to alternative raw materials to be used in the Company's existing and alternative production methods. During 2013, the Company introduced a new ceramic proppant, KRYPTOSPHERE-H, with increased strength and conductivity when compared to its traditional products. This new product is intended for use in ultra-high stress wells. The next phase for KRYPTOSPHERE will be to apply this technology to the Company's existing manufacturing footprint. Currently, the Company is engaging in an engineering study to determine the capital cost of retrofitting an existing plant with KRYPTOSPHERE technology. For information regarding the Company's research and development expenditures, see Note 1 to the Notes to Consolidated Financial Statements.

The Company is actively involved in the development of alternative products for use as proppant in the hydraulic fracturing process and is aware of others engaged in similar development activities. The Company believes that while there are potential specialty applications for these products, they will not significantly impact the use of ceramic proppants. The Company believes that the know-how and trade secrets necessary to efficiently manufacture a product of consistently high quality are difficult barriers to entry to overcome.

## **Customers and Marketing**

The Company's largest customers are participants in the petroleum pressure pumping industry. Specifically, Halliburton Energy Services, Inc. and Schlumberger Limited each accounted for more than 10% of the Company's 2013 and 2012 revenues. However, the end users of the Company's products are the operators of

**Table of Contents**

natural gas and oil wells that hire the pressure pumping service companies to hydraulically fracture wells. The Company works both with the pressure pumping service companies and with the operators of natural gas and oil wells to present the technical and economic advantages of using ceramic proppant. The Company generally supplies its customers with products on a just-in-time basis, as specified in individual purchase orders. Continuing sales of product depend on the Company's direct customers and the well operators being satisfied with product quality, availability and delivery performance. The Company provides its software simulation products and consulting services directly to owners and/or operators of oil and gas wells and service companies.

The Company recognizes the importance of a technical marketing program in demonstrating long-term economic advantages when selling products and services that offer financial benefits over time. The Company has a broad technical sales force to advise end users on the benefits of using ceramic proppant, resin-coated sand and performing fracture simulation and consultation services.

Although the Company's initial products were originally intended for use in deep, high stress wells that require high-strength proppant, the Company believes that there is economic benefit to well operators of using ceramic proppant in shallower, lower stress wells. The Company believes that its new product introductions and education-based technical marketing efforts have allowed it to expand sales in recent years and will continue to do so in the future.

The Company provides a variety of technical support services and has developed computer software that models the return on investment achievable by using the Company's ceramic proppant versus alternatives in the hydraulic fracturing of a natural gas or oil well. In addition to the technical marketing effort, the Company from time to time engages in field trials to demonstrate the economic benefits of its products and validate the findings of its computer simulations. Periodically, the Company provides proppant to production companies for field trials, on a discounted basis, in exchange for a production company's agreement to provide production data for direct comparison of the results of fracturing with ceramic proppant as compared to alternative proppants.

The Company's international marketing efforts are conducted primarily through its sales offices in Dubai, United Arab Emirates; Aberdeen, Scotland; Beijing, China; and Moscow, Russia, and through commissioned sales agents located in South America. The Company's products and services are used worldwide by U.S. customers operating domestically and abroad, and by foreign customers. Sales outside the United States accounted for 21%, 23% and 21% of the Company's sales for 2013, 2012 and 2011, respectively. The distribution of the Company's international and domestic revenues is shown below, based upon the region in which the customer used the products and services:

	For the years ended December 31,		
	2013	2012	2011
	(\$ in millions)		
<b>Location</b>			
United States	\$ 529.6	\$ 500.1	\$ 495.8
International	137.8	145.4	129.9
 Total	 \$ 667.4	 \$ 645.5	 \$ 625.7

**Production Capacity**

The Company believes that constructing adequate capacity ahead of demand while incorporating new technology to reduce manufacturing costs are important competitive strategies to increase its overall share of the market for proppant.

Between 2006 and 2011, the Company, in successive phases, completed construction of four ceramic proppant production lines at its manufacturing facility in Toombsboro, Georgia. The stated annual production capacity at this facility is 1.0 billion pounds per year.

## Table of Contents

During 2010, the Company began production from a resin-coating plant that was built within the existing manufacturing infrastructure of its New Iberia, Louisiana facility. The resin-coating plant is utilized to coat both ceramic proppant manufactured at other Company locations and raw frac sand. A second resin-coating production line at the facility was completed in 2012. The facility also functions as a distribution center. During 2012, the Company began to utilize its own CARBO Northern White sand in its sand processing facility in Marshfield, Wisconsin. This facility supplies sand to the resin-coating facility in New Iberia.

The following table sets forth the current stated capacity of each of the Company's existing manufacturing and resin-coating facilities:

Location	Annual Capacity (millions of pounds)
Eufaula, Alabama	275
McIntyre, Georgia	275
Toombsboro, Georgia	1,000
Luoyang, China	100
Kopeysk, Russia	100
Total manufacturing capacity	1,750
New Iberia, Louisiana resin-coating	400*
Total current capacity	2,150

\* Processing activities at the New Iberia facility involve resin-coating of previously manufactured ceramic proppant substrate and raw frac sand. During 2013, the Company began manufacturing KRYPTOSPHERE™-H at its New Iberia facility.

The Company is moving forward with construction of the first 250 million pound ceramic proppant production line in Millen, Georgia and anticipates the plant could commence operation by the end of the second quarter of 2014. In addition, construction on a second 250 million pound production line in Millen will commence in the first half of 2014. Construction of the second line is anticipated to be completed by the end of the second quarter of 2015. Once both lines are complete, the Company's ceramic manufacturing capacity will total 2.25 billion pounds, resulting in a 29% increase in ceramic production capacity over the next 18 months. Additionally, the Company is currently completing product testing and qualifications of KRYPTOSPHERE-H, which is produced at a small production line at the Company's New Iberia, Louisiana facility. The construction of additional manufacturing capacity beyond these new facilities will be dependent on the expected future demand for the Company's products and the ability to obtain necessary environmental permits.

The Company generally supplies its domestic pumping service customers with products on a just-in-time basis and operates without any material backlog.

## Long-Lived Assets By Geographic Area

Long-lived assets, consisting of net property, plant and equipment, goodwill, intangibles, and other long-term assets as of December 31 in the United States and other countries are as follows:

	2013	2012	2011
	(\$ in millions)		
Long-lived assets:			
United States	\$ 472.1	\$ 422.3	\$ 397.5
International (primarily China and Russia)	35.5	36.7	40.8
Total	\$ 507.6	\$ 459.0	\$ 438.3





## **Table of Contents**

### **Distribution**

The Company maintains finished goods inventories at each of its manufacturing facilities and at remote stocking facilities. The North American remote stocking facilities consist of bulk storage silos with truck trailer loading facilities, as well as rail yards for direct transloading from rail car to tank trucks. International remote stocking sites are duty-free warehouses operated by independent owners. North American sites are typically supplied by rail, and international sites are typically supplied by container ship. In total, the Company leases approximately 1,650 rail cars for use in the distribution of its products and expects to add approximately 500 more railcars by the end of 2014. The price of the Company's products sold for delivery in the lower 48 United States and Canada typically includes just-in-time delivery of proppant to the operator's well site, which eliminates the need for customers to maintain an inventory of ceramic proppant. The Company expands its distribution network as needed, including rail car additions as well as increasing finished goods storage capacity at stocking locations. During the fourth quarter of 2012, the Company completed an expansion of its distribution facility in South Texas and, at present, is continuing to add storage capacity at new and existing stocking facilities in the areas of highest activity, including the Permian and Bakken regions. Additionally, the Company is rationalizing its rail fleet to reduce reliance on the fleet as a form of storage.

### **Raw Materials**

Ceramic proppant is made from alumina-bearing ores (commonly referred to as clay, bauxite, bauxitic clay or kaolin, depending on the alumina content) that are readily available on the world market. Bauxite is largely used in the production of aluminum metal, refractory material and abrasives. The main known deposits of alumina-bearing ores in the United States are in Arkansas, Alabama and Georgia; other economically mineable known deposits are located in Australia, Brazil, China, Gabon, Guyana, India, Jamaica, Russia and Surinam.

For the production of *CARBOHSP*® and *CARBOPROP*® in the United States the Company uses bauxite, and has historically purchased its annual requirements at the seller's current prices. The Company believes that its ability to purchase bauxite on the open market and current bauxite inventories will sufficiently provide for its bauxite needs in the United States during 2014.

The Company's Eufaula, McIntyre and Toombsboro facilities primarily use locally mined kaolin for the production of *CARBOLITE*®, *CARBOECONOPROP*® and *CARBOHYDROPROP*®. The Millen facility, currently under construction, will also use locally mined kaolin in its production processes. The Company has entered into bi-lateral contracts that require a supplier to sell to the Company, and the Company to purchase from the supplier, at least fifty percent of the Eufaula facility's and Millen facility's annual kaolin requirements. The Eufaula contract runs through 2017, with options to extend this agreement for additional three year terms. The Millen contract will begin upon the date in which the plant commences operations and extend for an initial period of five years, with options to extend the agreement for an additional five years. The Company has obtained ownership rights in acreage in Wilkinson County, Georgia, which contains in excess of an eleven year supply of kaolin for its Georgia facilities at current production rates. The Company has entered into a long-term agreement with a third party to mine and transport this material at a fixed price subject to annual adjustment. The agreement requires the Company to utilize the third party to mine and transport a majority of the McIntyre facility's annual kaolin requirement. Overall, the Company estimates that its fee simple and leasehold mineral rights in the states of Alabama and Georgia contain approximately 15.1 million tons of kaolin suitable for use in production of the Company's kaolin-based proppants.

The Company's production facility in Luoyang, China, uses both kaolin and bauxite for the production of *CARBOPROP*® and *CARBOLITE*®. Certain of these materials are purchased under a long-term contract that stipulates fixed prices subject to periodic adjustment and provides for minimum purchase requirements.

The Company's production facility in Kopeysk, Russia currently uses bauxite for the production of *CARBOPROP*®. Bauxite is purchased under annual agreements that stipulate fixed prices for up to a specified quantity of material.

## **Table of Contents**

The Company continues to explore options for the purchase of high quality raw materials for its resin-coated sand business. In 2011, the Company secured a five-year contract with a supplier and consummated the purchase of two parcels of property containing sand reserves. During 2012, the Company began to utilize its own CARBO Northern White sand in its sand processing facility in Marshfield, Wisconsin, which supplies the Company's resin-coating facility in New Iberia, Louisiana.

### **Ceramic Production Process**

Ceramic proppants are made by grinding or dispersing ore to a fine powder, combining the powder into small pellets and firing the pellets in a rotary kiln. The Company uses two different methods to produce ceramic proppant. The Company's plants in McIntyre, Georgia; Kopeysk, Russia and Luoyang, China use a dry process, which utilizes clay, bauxite, bauxitic clay or kaolin. The raw material is ground, pelletized and screened. The manufacturing process is completed by firing the product in a rotary kiln.

The Company's plants in Eufaula, Alabama and Toombsboro, Georgia, use a wet process, which starts with kaolin that is formed into slurry. The slurry is then pelletized in a dryer and the pellets are then fired in a rotary kiln.

The Company's rotary kilns are primarily heated by the use of natural gas.

### **Patent Protection and Intellectual Property**

The Company makes ceramic proppant and ceramic media used in foundry and scouring processes (the latter two items comprising a minimal volume of overall sales) by processes and techniques that involve a high degree of proprietary technology, some of which is protected by patents.

The Company owns multiple patents in the United States and various foreign countries that relate to different types of ceramic proppant and production methods used for ceramic proppant and media; however, production of products pursuant to these patents does not currently constitute a material portion of the Company's output. The Company also owns multiple U.S. and foreign patents that relate to methods for the detection of subterranean fractures.

The Company owns multiple U.S. patent applications (together with a number of counterpart applications pending in foreign jurisdictions). Each of the U.S. patent applications cover ceramic proppant, processes for making ceramic proppant, and detection of subterranean fractures. The applications are in various stages of the patent prosecution process, and patents may not issue on such applications in any jurisdiction for some time, if they issue at all.

The Company believes that its patents have historically been important in enabling the Company to compete in the market to supply proppant to the natural gas and oil industry. The Company intends to enforce, and has in the past vigorously enforced, its patents. The Company may from time to time in the future be involved in litigation to determine the enforceability, scope and validity of its patent rights. In addition to patent rights, and perhaps more notably, the Company uses a significant amount of trade secrets, or know-how, and other proprietary information and technology in the conduct of its business. None of this know-how and technology is licensed from third parties.

Falcon Technologies owns two U.S. patents, which expire in 2026 and 2027 and relate to construction of secondary containment areas, and multiple U.S. patent applications (together with a number of counterpart applications pending in foreign jurisdictions), each of which relates to tank bases, anchoring systems, or methods of constructing secondary containment areas.

## **Table of Contents**

### **Seasonality**

Historically, the Company's business has not been subject to regular material seasonality fluctuations. However, with the activity increase in resource plays in the northern and eastern United States, the Company has recently experienced higher levels of proppant sales activities during warmer weather periods and less during colder weather months. In addition, sales activities can be decreased by the spring snow and ice break-up in Canada, North Dakota, Montana, and the Northeast U.S., as well as the winter holidays in December and January.

### **Environmental and Other Governmental Regulations**

The Company believes that its operations are in substantial compliance with applicable domestic and foreign federal, state and local environmental and safety laws and regulations.

Existing federal Environmental requirements such as the Clean Air Act and the Clean Water Act, as amended, impose certain restrictions on air and water pollutants from the Company's operations via permits and regulations. Those pollutants include volatile organic compounds, nitrogen oxides, sulfur dioxide, particulate matter, storm water and wastewater discharges and other by-products. In addition to meeting environmental requirements for existing operations, the Company must also demonstrate compliance with environmental regulations in order to obtain permits prior to any future expansion. The United States Environmental Protection Agency (EPA) and state programs require covered facilities to obtain individual permits or have coverage under an EPA general permit issued to groups of facilities. A number of federal and state agencies, including but not limited to, the EPA, the Texas Commission of Environmental Quality, the Louisiana Department of Environmental Quality, the Alabama Department of Environmental Management, the Wisconsin Department of Natural Resources, and the Georgia Environmental Protection Division, in states in which we do business, have environmental regulations applicable to our operations. Historically we have been able to obtain permits, where necessary, to build new facilities and modify existing facilities that allow us to continue compliant operations and obtaining these permits in a timely manner will continue to be an important factor in the Company's ability to do so in the future.

### **Employees**

As of December 31, 2013, the Company had 1,025 employees worldwide. In addition to the services of its employees, the Company employs the services of consultants as required. The Company's employees are not represented by labor unions. There have been no work stoppages or strikes during the last three years that have resulted in the loss of production or production delays. The Company believes its relations with its employees are satisfactory.

### **Executive Officers of the Registrant**

Gary A. Kolstad (age 55) was elected in June 2006, by the Company's Board of Directors to serve as President and Chief Executive Officer and a Director of the Company. Mr. Kolstad previously served in a variety of positions over 21 years with Schlumberger. Mr. Kolstad became a Vice President of Schlumberger in 2001, where he last held the positions of Vice President, Oilfield Services - U.S. Onshore and Vice President, Global Accounts.

Ernesto Bautista III (age 42) joined the Company as a Vice President and Chief Financial Officer in January 2009. From July 2006 until joining the Company, Mr. Bautista served as Vice President and Chief Financial Officer of W-H Energy Services, Inc., a Houston, Texas based diversified oilfield services company (W-H Energy). From July 2000 to July 2006, he served as Vice President and Corporate Controller of W-H Energy. From September 1994 to May 2000, Mr. Bautista served in various positions at Arthur Andersen LLP, most recently as a manager in the assurance practice, specializing in emerging, high growth companies. Mr. Bautista is a certified public accountant in the State of Texas.

## **Table of Contents**

Don P. Conkle (age 49) was appointed Vice President, Marketing and Sales in October 2012. Mr. Conkle previously held a variety of domestic and international managerial positions in engineering, marketing and sales, and technology development over a 26 year period with Schlumberger. He served in the positions of Vice President of Stimulation Services from 2007 until 2009, as GeoMarket Manager (Qatar & Yemen) from 2009 until 2011 and as Production Group Marketing and Technology Director from 2011 until he joined the Company.

Roger Riffey (age 55) joined the Company in July 2006 as Director of Logistics and Customer Service. He was appointed Plant Manager of the Toombsboro, Georgia, facility in July 2010, and was named Vice President, Manufacturing in May 2013. Previously, Mr. Riffey held positions with Rio Tinto Energy in Special Projects, U.S. Borax as Global Logistics Manager and Kerr-McGee Coal Corporation as Manager of Marketing.

R. Sean Elliott (age 39) joined the Company in November 2007 as General Counsel, and was appointed as Corporate Secretary and Chief Compliance Officer in January 2008 and as a Vice President of the Company in May 2011. Previously, Mr. Elliott served as legal counsel to Aviall, Inc. (an international aviation company) from 2004 to 2007, where he last held the positions of Assistant General Counsel and Assistant Secretary. From 1999 until 2004, Mr. Elliott practiced law with Haynes and Boone, LLP, a Dallas, Texas-based law firm.

All officers are elected for one-year terms or until their successors are duly elected. There are no arrangements between any officer and any other person pursuant to which he was selected as an officer. There is no family relationship between any of the named executive officers or between any of them and the Company's directors.

## **Forward-Looking Information**

The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward-looking statements. This Form 10-K, the Company's Annual Report to Shareholders, any Form 10-Q or any Form 8-K of the Company or any other written or oral statements made by or on behalf of the Company may include forward-looking statements which reflect the Company's current views with respect to future events and financial performance. The words "believe", "expect", "anticipate", "project", "estimate", "forecast", "plan" or "intend" and similar expressions identify forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, each of which speaks only as of the date the statement was made. The Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. The Company's forward-looking statements are based on assumptions that we believe to be reasonable but that may not prove to be accurate. All of the Company's forward-looking information is subject to risks and uncertainties that could cause actual results to differ materially from the results expected. Although it is not possible to identify all factors, these risks and uncertainties include the risk factors discussed below.

The Company's results of operations could be adversely affected if its business assumptions do not prove to be accurate or if adverse changes occur in the Company's business environment, including but not limited to:

a potential decline in the demand for oil and natural gas;

potential declines or increased volatility in oil and natural gas prices that would adversely affect our customers, the energy industry or our production costs;

potential reductions in spending on exploration and development drilling in the oil and natural gas industry that would reduce demand for our products and services;

seasonal sales fluctuations;

an increase in competition in the proppant market, including imports from foreign countries;

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logistical and distribution challenges relating to certain resource plays that do not have the type of infrastructure systems that are needed to efficiently support oilfield services activities;

## **Table of Contents**

the development of alternative stimulation techniques, such as extraction of oil or gas without fracturing;

increased governmental regulation of hydraulic fracturing;

increased regulation of emissions from our manufacturing facilities;

the development of alternative proppants for use in hydraulic fracturing;

general global economic and business conditions;

an increase in raw materials costs;

fluctuations in foreign currency exchange rates; and

the potential expropriation of assets by foreign governments.

The Company's results of operations could also be adversely affected as a result of worldwide economic, political and military events, including, but not limited to, war, terrorist activity or initiatives by the Organization of the Petroleum Exporting Countries ( OPEC ). For further information, see Item 1A. Risk Factors.

## **Available Information**

The Company's annual reports on Form 10-K, proxy statements, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 ( Exchange Act ) are made available free of charge on the Company's internet website at <http://www.carboceramics.com> as soon as reasonably practicable after such material is filed with, or furnished to, the Securities and Exchange Commission ( SEC ).

The public may read and copy any materials that the Company files with the SEC at the SEC's Public Reference Room at 100 F Street, Room 1580, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, at <http://www.sec.gov>.

## **Item 1A. Risk Factors**

You should consider carefully the trends, risks and uncertainties described below and other information in this Form 10-K and subsequent reports filed with the SEC before making any investment decision with respect to our securities. If any of the following trends, risks or uncertainties actually occurs or continues, our business, financial condition or operating results could be materially adversely affected, the trading prices of our securities could decline, and you could lose all or part of your investment.

### ***Our business and financial performance depend on the level of activity in the natural gas and oil industries.***

Our operations are materially dependent upon the levels of activity in natural gas and oil exploration, development and production. More specifically, the demand for our products is closely related to the number of natural gas and oil wells completed in geologic formations where ceramic or resin-coated sand proppants are used in fracture treatments. These activity levels are affected by both short-term and long-term trends in natural gas and oil prices. In recent years, natural gas and oil prices and, therefore, the level of exploration, development and production activity, have experienced significant fluctuations. Worldwide economic, political and military events, including war, terrorist activity, events in the Middle East and initiatives by OPEC, have contributed, and are likely to continue to contribute, to price volatility. Additionally, warmer than

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normal winters in North America and other weather patterns may adversely impact the short-term demand for natural gas and, therefore, demand for our products and services. Natural gas prices experienced a significant decline during the second half of 2011 and 2012 and remained low throughout 2013, which resulted in a decline in the United States drilling rig count. A prolonged reduction in natural gas and oil prices would generally depress the level of natural gas and oil



## **Table of Contents**

exploration, development, production and well completions activity and result in a corresponding decline in the demand for our products. Such a decline could have a material adverse effect on our results of operations and financial condition.

***Our business and financial performance could suffer if the levels of hydraulic fracturing decrease or cease as a result of the development of new processes, increased regulation or a decrease in horizontal drilling activity.***

Substantially all of our products are proppants used in the completion and re-completion of natural gas and oil wells through the process of hydraulic fracturing. In addition, demand for our proppants is substantially higher in the case of horizontally drilled wells, which allow for multiple hydraulic fractures within the same well bore but are more expensive to develop than vertically drilled wells. A reduction in horizontal drilling or the development of new processes for the completion of natural gas and oil wells leading to a reduction in, or discontinuation of the use of, hydraulic fracturing could cause a decline in demand for our products. Additionally, increased regulation or environmental restrictions on hydraulic fracturing or the materials used in this process could negatively affect our business by increasing the costs of compliance or resulting in operational delays, which could cause operators to abandon the process due to commercial impracticability. Moreover, it is possible that future federal, state or foreign laws or regulations could otherwise limit or ban hydraulic fracturing. Several states in which our customers operate have adopted, or are considering adopting, regulations that have imposed, or could impose, more stringent permitting, transparency, disposal and well construction requirements on hydraulic fracturing operations. For example, groups within Colorado are seeking to amend the State's constitution to allow municipalities the right to restrict or ban hydraulic fracturing altogether. Similar efforts are being proposed in other States. Any of these events could have a material adverse effect on our results of operations and financial condition.

***We face distribution and logistical challenges in our business***

As oil and natural gas prices fluctuate, our customers may shift their focus back and forth between different resource plays, some of which can be located in geographic areas that do not have well-developed transportation and distribution infrastructure systems. Transportation and logistical operating expenses continue to comprise a significant portion of our total delivered cost of sales. Therefore, serving our clients in these less-developed areas presents distribution and other operational challenges that affect our sales and negatively impact our operating costs. Disruptions in transportation services, including shortages of rail cars or a lack of rail transportation services or developed infrastructure, could affect our ability to timely and cost effectively deliver to our customers and could provide a competitive advantage to competitors located in closer proximity to customers. Additionally, increases in the price of diesel fuel could negatively impact operating costs if we are unable to pass those increased costs along to our customers. Failure to find long-term solutions to these logistical challenges could adversely affect our ability to respond quickly to the needs of our customers or result in additional increased costs, and thus could negatively impact our results of operations and financial condition.

***We operate in an increasingly competitive market.***

The proppant market is highly competitive and no one supplier is dominant. We compete with other domestic and international suppliers of ceramic proppant, as well as with suppliers of sand and resin-coated sand for use as proppant, in the hydraulic fracturing of natural gas and oil wells. The expiration of key patents owned by the Company has resulted in additional competition in the market for ceramic proppant. Specifically, Chinese manufacturers now import ceramic proppant of varying quality into North America, which has led to an oversupply of product in the marketplace. While we believe our ceramic proppant can be differentiated from low quality imports, the oversupply in the marketplace had resulted in pricing and margin pressures. In 2013, ceramic proppant imports from China decreased somewhat when compared to 2011 and early 2012, but these imports were still present in the market. The entry of additional competitors into the market to supply ceramic proppant or a surge in the level of ceramic proppant imports into North America could have a material adverse effect on our results of operations and financial condition.

## **Table of Contents**

***We may be adversely affected by decreased demand for our proppant or the development by our competitors of effective alternative proppants.***

Ceramic proppant is a premium product capable of withstanding higher pressure and providing more highly conductive fractures than mined sand, which is the most commonly used proppant type. Although we believe that the use of ceramic proppant or resin-coated sand generates higher production rates and more favorable production economics than mined sand, a significant shift in demand from ceramic proppant or resin-coated sand to mined sand could have a material adverse effect on our results of operations and financial condition. The development and use of effective alternative proppant could also cause a decline in demand for our products, and could have a material adverse effect on our results of operations and financial condition.

***We rely upon, and receive a significant percentage of our revenues from, a limited number of key customers.***

During 2013, our key customers included several of the largest participants in the worldwide petroleum pressure pumping industry. Although the end users of our products are numerous operators of natural gas and oil wells that hire pressure pumping service companies to hydraulically fracture wells, two customers accounted collectively for approximately 48% of our 2013 revenues. We generally supply our domestic pumping service customers with products on a just-in-time basis, with transactions governed by individual purchase orders. Continuing sales of product depend on our direct customers and the end user well operators being satisfied with product quality, availability and delivery performance. Although we believe our relations with our customers and the major well operators are satisfactory, a material decline in the level of sales to any one of our major customers due to unsatisfactory product performance, delivery delays or any other reason could have a material adverse effect on our results of operations and financial condition.

***The operations of our customers, and thus the results of our operations, are subject to a number of operational risks, interruptions and seasonal trends.***

As hydraulic fracturing jobs have increased in size and intensity, common issues such as weather, equipment delays or changes in the location and types of oil and natural gas plays can result in increased variability in proppant sales volumes. Our business operations and those of our customers involve a high degree of operational risk. Natural disasters, adverse weather conditions, collisions and operator error could cause personal injury or loss of life, severe damage to and destruction of property, equipment and the environment, and suspension of operations. Our customers perform work that is subject to unexpected or arbitrary interruption or termination. The occurrence of any of these events could result in work stoppage, loss of revenue, casualty loss, increased costs and significant liability to third parties. We have not historically considered seasonality to be a significant risk, but with the increase in resource plays in the northern and eastern United States as well as our operations in Marshfield, Wisconsin, our results of operations are exposed to seasonal variations and inclement weather. Operations in certain regions involve more seasonal risk in the winter months, and work is hindered during other inclement weather events. This variability makes it difficult to predict sales and can result in fluctuations to our quarterly financial results. These quarterly fluctuations could result in operating results that are below the expectations of public market analysts and investors, and therefore may adversely affect the market price for our common stock.

The ability of our customers to complete work, as well as our ability to mine sand from cold climate areas, could be affected during the winter months. Our revenue and profitability could decrease during these periods and in other severe weather conditions because work is either prevented or more costly to complete. If a substantial amount of production is interrupted, our cash flow and, in turn, our results of operations could be materially and adversely affected.

## **Table of Contents**

***A significant portion of our ceramic proppant is manufactured at one of our plants. Any adverse developments at that plant could have a material adverse effect on our financial condition and results of operations.***

Our Toombsboro, Georgia plant currently represents approximately 47% of our total annual capacity at our existing manufacturing facilities. Any adverse developments at this plant, including a material disruption in production, an inability to supply the plant with raw materials at a competitive cost, or adverse developments due to catastrophic events, could have a material adverse effect on our financial condition and results of operations.

***We provide environmental warranties on certain of our containment and spill prevention products.***

Falcon Technologies' tank liners, secondary containments and related products and services are designed to contain or avoid spills of hydrocarbons and other materials. If a release of these materials occurs, it could be harmful to the environment. Although we attempt to negotiate appropriate limitations of liability in the applicable terms of sale, some customers have required expanded warranties, indemnifications or other terms that could hold Falcon Technologies responsible in the event of a spill or release under particular circumstances. If Falcon Technologies is held responsible for a spill or release of materials from one of its customers' facilities, it could have a material adverse effect on our results of operations and financial condition.

***We rely upon intellectual property to protect our proprietary rights. Failure to protect our intellectual property rights may affect our competitive position, and protecting our rights or defending against third-party allegations of infringement may be costly.***

The Company uses a significant amount of trade secrets, or know-how, and other proprietary information and technology in the conduct of its business. In some cases, we rely on trade secrets, trademarks or contractual restrictions to protect intellectual property rights that are not patented. The steps we take to protect the non-patented intellectual property may not be sufficient to protect it and any loss or diminishment of such intellectual property rights could negatively impact our competitive advantage. Additionally, it is possible our competitors could independently develop the same or similar technologies that are only protected by trade secret and thus do not prevent third parties from competing with us. Furthermore, even protected intellectual property rights can be infringed upon by third parties. Monitoring unauthorized use of Company intellectual property can be difficult and expensive, and adequate remedies may not be available.

Although the Company does not believe that it is infringing upon the intellectual property rights of others by using such proprietary information and technology, it is possible that such a claim will be asserted against the Company in the future. In the event any third party makes a claim against us for infringement of patents or other intellectual property rights of a third party, such claims, with or without merit, could be time-consuming and result in costly litigation. In addition, the Company could experience loss or cancellation of customer orders, experience product shipment delays, or be subject to significant liabilities to third parties. If our products or services were found to infringe on a third party's proprietary rights, the Company could be required to enter into royalty or licensing agreements to continue selling its products or services. Royalty or licensing agreements, if required, may not be available on acceptable terms, if at all, which could seriously harm our business. Involvement in any patent dispute or other intellectual property dispute or action to protect trade secrets and expertise could have a material adverse effect on the Company's business.

***Significant increases in fuel prices for any extended periods of time will increase our operating expenses.***

The price and supply of natural gas are unpredictable, and can fluctuate significantly based on international, political and economic circumstances, as well as other events outside of our control, such as changes in supply and demand due to weather conditions, actions by OPEC and other oil and gas producers, regional production patterns and environmental concerns. Natural gas is a significant component of our direct manufacturing costs and price escalations will likely increase our operating expenses and can have a negative impact on income from

## **Table of Contents**

operations and cash flows. We operate in a competitive marketplace and may not be able to pass through all of the increased costs that could result from an increase in the cost of natural gas.

### ***Environmental compliance costs and liabilities could reduce our earnings and cash available for operations.***

We are subject to increasingly stringent laws and regulations relating to environmental protection, including laws and regulations governing air emissions, water discharges and waste management. The technical requirements of complying with these environmental laws and regulations are becoming increasingly expensive and complex, and may affect the Company's ability to expand its operations. Our ability to continue the expansion of our manufacturing capacity to meet market demand is contingent upon obtaining required environmental permits and compliance with their terms, which continue to be more restrictive and require longer lead times to obtain in anticipation of any efforts to expand and increase capacity. We incur, and expect to continue to incur, capital and operating costs to comply with environmental laws and regulations.

In addition, we use some hazardous substances and generate certain industrial wastes in our operations. Many of our current and former properties are or have been used for industrial purposes. Accordingly, we could become subject to potentially material liabilities relating to the investigation and cleanup of contaminated properties, and to claims alleging personal injury or property damage as the result of exposures to, or releases of, hazardous substances. These laws also may provide for strict liability for damages to natural resources or threats to public health and safety. Strict liability can render a party liable for environmental damage without regard to negligence or fault on the part of the party. Some environmental laws provide for joint and several strict liability for remediation of spills and releases of hazardous substances.

Stricter enforcement of existing laws and regulations, new laws and regulations, the discovery of previously unknown contamination or the imposition of new or increased requirements could restrict our expansion efforts, require us to incur costs, or become the basis of new or increased liabilities. Any of these events could reduce our earnings and our cash available for operations.

### ***Our international operations subject us to risks inherent in doing business on an international level that could adversely impact our results of operations.***

International revenues accounted for approximately 21%, 23% and 21% of our total revenues in 2013, 2012 and 2011, respectively. We may not succeed in overcoming the risks that relate to or arise from operating in international markets. Risks inherent in doing business on an international level include, among others, the following:

economic and political instability (including as a result of the threat or occurrence of armed international conflict or terrorist attacks);

changes in regulatory requirements, tariffs, customs, duties and other trade barriers;

transportation delays and costs;

power supply shortages and shutdowns;

difficulties in staffing and managing foreign operations and other labor problems;

currency rate fluctuations, convertibility and repatriation;

taxation of our earnings and the earnings of our personnel;

potential expropriation of assets by foreign governments; and

other risks relating to the administration of or changes in, or new interpretations of, the laws, regulations and policies of the jurisdictions in which we conduct our business.

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## **Table of Contents**

In particular, we are subject to risks associated with our production facilities in Luoyang, China, and Kopeysk, Russia. The legal systems in both China and Russia are still developing and are subject to change. Accordingly, our operations and orders for products in both countries could be adversely impacted by changes to or interpretation of each country's law. Further, if manufacturing in either region is disrupted, our overall capacity could be significantly reduced and sales and/or profitability could be negatively impacted.

### ***The manufacture of resin-coated sand is a relatively new process for us.***

We first sold resin-coated sand in 2010. Resin-coated sand is an alternative to the Company's traditional ceramic proppant and involves a different manufacturing process that utilizes a different raw material. The expansion of our resin-coated sand operations is driven by market demand and involves capital expenditures and new operational requirements. If we are unable to secure adequate, cost effective supply commitments for the raw materials associated with resin-coated sand or if we are unable to timely and cost effectively construct additional manufacturing capacity and infrastructure to produce resin-coated sand, our ability to sell this product to the marketplace at profitable margins may be adversely impacted. A lack of sales of resin-coated sand or the inability to control the costs associated with manufacturing and distribution of this product could have a material adverse effect on our results from operations and financial condition.

### ***Undetected defects in our fracture simulation software could adversely affect our business.***

Despite extensive testing, our software could contain defects, bugs or performance problems. If any of these problems are not detected, the Company could be required to incur extensive development costs or costs related to product recalls or replacements. The existence of any defects, errors or failures in our software products may subject us to liability for damages, delay the development or release of new products and adversely affect market acceptance or perception of our software products or related services, any one of which could materially and adversely affect the Company's business, results of operations and financial condition.

### ***The market price of our common stock will fluctuate, and could fluctuate significantly.***

The market price of the Company's common stock will fluctuate, and could fluctuate significantly, in response to various factors and events, including the following:

the liquidity of the market for our common stock;

seasonal or quarterly sales fluctuations;

differences between our actual financial or operating results and those expected by investors and analysts;

changes in analysts' recommendations or projections;

new statutes or regulations or changes in interpretations of existing statutes and regulations affecting our business;

changes in general economic or market conditions; and

broad market fluctuations.

### ***Our actual results could differ materially from results anticipated in forward-looking statements we make.***

Some of the statements included or incorporated by reference in this Form 10-K are forward-looking statements. These forward-looking statements include statements relating to trends in the natural gas and oil industries, the demand for ceramic proppant and our performance in the Management's Discussion and Analysis of Financial Condition and Results of Operations and Business sections of this Form 10-K. In addition,

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we have made and may continue to make forward-looking statements in other filings with the SEC, and in written material, press releases and oral statements issued by us or on our behalf. Forward-looking statements include

## **Table of Contents**

statements regarding the intent, belief or current expectations of the Company or its officers. Our actual results could differ materially from those anticipated in these forward-looking statements. (See Business Forward-Looking Information. )

### **Item 1B. *Unresolved Staff Comments***

Not applicable.

### **Item 2. *Properties***

The Company maintains its corporate headquarters in leased office space in Houston, Texas and also leases space for its technology center in Houston. The Company owns its manufacturing facilities, land and substantially all of the related production equipment in New Iberia, Louisiana, Eufaula, Alabama, and Kopeysk, Russia and leases its McIntyre and Toombsboro, Georgia, facilities. The Company owns the buildings and production equipment at its facility in Luoyang, China, and has been granted use of the land on which the facility is located through 2051 under the terms of a land use agreement with the People's Republic of China.

The facilities in McIntyre and Toombsboro, Georgia, include real property, plant and equipment that are leased by the Company from the Development Authority of Wilkinson County. The original lease was executed in 1997 and was last amended in 2008. The term of the current lease, which covers both locations, terminates on November 1, 2017, subject to the Company's ability to renew the lease through November 2022. Under the terms of the lease, the Company is responsible for all costs incurred in connection with the premises, including costs of construction of the plant and equipment. At the termination of the lease, title to all of the real property, plant and equipment is to be conveyed to the Company in exchange for nominal consideration. The Company has the right to purchase the property, plant and equipment at any time during the term of the lease for a nominal price.

In November 2012, the Company entered into a lease for the land and improvements associated with the construction of a plant in Millen, Georgia. The lease term continues until the tenth anniversary of the completion of the last phase of the facility. Similar to lease terms of the two other Georgia facilities, the Millen lease requires the Company to be responsible for all costs (including construction costs) incurred in connection with the premises. Moreover, title to the real property, plant and equipment of the facility is to be conveyed to the Company at the end of the lease term for nominal consideration, and may be purchased by the Company at any time for a nominal price. The Company is moving forward with the construction of the first 250 million pound ceramic production line in Millen and anticipates the Millen plant could commence operation by the end of the second quarter of 2014. In addition, construction on a second 250 million pound production line in Millen will commence soon and is expected to be completed by the end of the second quarter of 2015.

The Marshfield, Wisconsin sand processing plant, which became operational during 2012, and the resin-coating facility for which construction has been currently deferred are located on land owned by the Company.

The Company owns or otherwise utilizes distribution facilities in multiple locations around the world. See Item 1. Business Distribution.

The Company owns approximately 4,220 acres of land and leasehold interests near its plants in Georgia and Alabama. The land contains raw material for use in the production of the Company's lightweight ceramic proppants. The Company also holds approximately 490 acres of land and leasehold interests in Wisconsin near its resin-coating facility under construction in Marshfield, Wisconsin.

Falcon Technologies owns its service facility located in Decatur, Texas, and leases other regional service facilities within the United States.



## **Table of Contents**

### **Item 3.      *Legal Proceedings***

On February 9, 2012, the Company and two of its officers, Gary A. Kolstad and Ernesto Bautista III, were named as defendants in a purported class-action lawsuit filed in the United States District Court for the Southern District of New York (the "February SDNY Lawsuit"), brought on behalf of shareholders who purchased the Company's Common Stock between October 27, 2011 and January 26, 2012 (the "Relevant Time Period"). On April 10, 2012, a second purported class-action lawsuit was filed against the same defendants in the United States District Court for the Southern District of New York, brought on behalf of shareholders who purchased or sold CARBO Ceramics Inc. option contracts during the Relevant Time Period (the "April SDNY Lawsuit", and collectively with the February SDNY Lawsuit, the "Federal Securities Lawsuit"). In June 2012, the February SDNY Lawsuit and the April SDNY Lawsuit were consolidated, and will proceed as one lawsuit. The Federal Securities Lawsuit alleges violations of the federal securities laws arising from statements concerning the Company's business operations and business prospects that were made during the Relevant Time Period and requests unspecified damages and costs. In September 2012, the Company and Messrs. Kolstad and Bautista filed a motion to dismiss this lawsuit. The motion to dismiss was granted, and the Federal Securities Lawsuit was dismissed without prejudice in June 2013. In September 2013, the plaintiffs filed a motion requesting leave to file a second amended complaint and sustain the lawsuit. In January 2014, the Court denied plaintiffs' motion, and entered a judgment in favor of the Company and Messrs. Kolstad and Bautista. The plaintiffs have the right to appeal this judgment for a period of 30 days from entry.

On June 13, 2012, the Directors of the Company and Mr. Bautista were named as defendants in a purported derivative action lawsuit brought on behalf of the Company by a stockholder in District Court in Harris County, Texas (the "Harris County Lawsuit"). This lawsuit alleges various breaches of fiduciary duty and other duties by the defendants that generally are related to the Federal Securities Lawsuit, as well as a breach of duty by certain defendants in connection with stock sales. The lawsuit requests unspecified damages and costs, and has been further stayed, pending final resolution of the Federal Securities Lawsuit.

In October 2013, the Company made a voluntary disclosure to the State of Georgia Environmental Protection Department ("EPD") concerning the air emissions of its Toomsboro, Georgia manufacturing facility. Specifically, the disclosure concerns the emission of a specific substance that exceeds permitted levels under applicable regulations. In November 2013, the Company entered into a consent decree to resolve this matter with the EPD. Pursuant to the consent decree, the Company paid EPD \$300,000, and has agreed to install additional emissions control equipment by May 2014.

Additionally, from time to time, the Company is the subject of legal proceedings arising in the ordinary course of business. The Company does not believe that any of these proceedings will have a material effect on its business or its results of operations.

The Company cannot predict the ultimate outcome or duration of any lawsuit described in this report.

### **Item 4.      *Mine Safety Disclosures***

Several of our U.S. manufacturing facilities process mined minerals, and therefore are viewed as mine operations subject to regulation by the federal Mine Safety and Health Administration under the Federal Mine Safety and Health Act of 1977. Information concerning mine safety violations or other regulatory matters required by section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the recently proposed Item 106 of Regulation S-K (17 CFR 229.106) is included in Exhibit 95 to this annual report.

**Table of Contents****PART II****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**  
**Common Stock Market Prices, Dividends and Stock Repurchases**

The Company's common stock is traded on the New York Stock Exchange (ticker symbol CRR). The number of record and beneficial holders of the Company's common stock as of February 1, 2014 was approximately 25,800.

The following table sets forth the high and low sales prices of the Company's common stock on the New York Stock Exchange and dividends for the last two fiscal years:

Quarter Ended	2013			2012		
	Sales Price		Cash	Sales Price		Cash
			Dividends			Dividends
	High	Low	Declared (1)	High	Low	Declared (2)
March 31	\$ 97.53	\$ 75.03	\$ 0.54	\$ 133.99	\$ 85.94	\$ 0.48
June 30	92.74	65.64		105.45	72.33	
September 30	104.95	65.63	0.60	86.26	62.92	0.54
December 31	126.00	97.68		81.67	61.00	

(1) Represents quarters during which dividends were declared. The payment months for cash dividends were February 2013 (\$0.27), May 2013 (\$0.27), August 2013 (\$0.30) and November 2013 (\$0.30).

(2) Represents quarters during which dividends were declared. The payment months for cash dividends were February 2012 (\$0.24), May 2012 (\$0.24), August 2012 (\$0.27) and November 2012 (\$0.27).

The Company currently expects to continue its policy of paying quarterly cash dividends, although there can be no assurance as to future dividends because they depend on future earnings, capital requirements and financial condition.

On August 28, 2008, the Company's Board of Directors authorized the repurchase of up to two million shares of the Company's common stock. Shares are effectively retired at the time of purchase. The Company did not repurchase any shares under this repurchase plan during the fourth quarter of 2013. As of December 31, 2013, the Company has repurchased and retired 1,952,576 shares at an aggregate price of \$84.1 million.

The following table provides information about the Company's repurchases of common stock during the quarter ended December 31, 2013, all of which represent shares surrendered to the Company for tax withholding obligations upon the vesting of restricted stock:

**ISSUER PURCHASES OF EQUITY SECURITIES**

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan (1)	Maximum Number of Shares that May Yet be Purchased Under the Plan (2)
10/01/13 to 10/31/13	1,371(3)	\$ 99.35		47,424
11/01/13 to 11/30/13		\$		47,424
12/01/13 to 12/31/13		\$		47,424
Total	1,371(3)			

- (1) On August 28, 2008, the Company announced the authorization by its Board of Directors for the repurchase of up to two million shares of its Common Stock.

**Table of Contents**

- (2) Represents the maximum number of shares that may be repurchased under the previously announced authorization as of period end. As of February 21, 2014, a maximum of 10,455 shares may be repurchased under the previously announced authorization.
- (3) Represents shares of stock withheld for the payment of withholding taxes upon the vesting of restricted stock.

**Stock Performance Graph**

The graph below compares the cumulative shareholder return on the Company's common stock with the cumulative returns of the S&P 500 index, the S&P MidCap 400 Oil & Gas Equipment & Services Index and the S&P SmallCap 600 Oil & Gas Equipment & Services Index. The Company has moved from being listed on the S&P SmallCap 600 Oil & Gas Equipment & Services Index to the S&P MidCap 400 Oil & Gas Equipment & Services Index. The graph tracks the performance of a \$100 investment in the Company's common stock and in each of the indexes (with the reinvestment of all dividends) from December 31, 2008 to December 31, 2013.

**COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\***

Among CARBO Ceramics Inc., the S&P 500 Index, S&P MidCap 400 Oil & Gas  
Equipment & Services Index, and S&P SmallCap 600 Oil & Gas Equipment & Services Index

\* \$100 invested on 12/31/08 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.  
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## Table of Contents

### Item 6. Selected Financial Data

The following selected financial data are derived from the audited consolidated financial statements of the Company. The data should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and notes thereto included elsewhere in this Form 10-K. The Company has determined that its outstanding non-vested restricted stock awards are participating securities. Accordingly, effective January 1, 2009, earnings per common share are computed using the two-class method prescribed by ASC Topic 260 *Earnings Per Share*. All previously reported earnings per common share data were retrospectively adjusted to conform to the new computation method.

	2013	Years ended December 31,			2009
		2012	2011	2010	
		(\$ in thousands, except per share data)			
Statement of Income Data:					
Revenues	\$ 667,398	\$ 645,536	\$ 625,705	\$ 473,082	\$ 341,872
Cost of sales	474,403	422,031	363,990	298,411	221,369
Gross profit	192,995	223,505	261,715	174,671	120,503
Selling, general, & administrative and other operating expenses (1)	68,404	64,619	64,113	55,061	41,053
Operating profit	124,591	158,886	197,602	119,610	79,450
Other income (expense), net	610	(296)	(152)	(261)	344
Income before income taxes	125,201	158,590	197,450	119,349	79,794
Income taxes	40,315	52,657	67,314	40,633	26,984
Net income	\$ 84,886	\$ 105,933	\$ 130,136	\$ 78,716	\$ 52,810
Earnings per share:					
Basic	\$ 3.67	\$ 4.59	\$ 5.62	\$ 3.41	\$ 2.27
Diluted	\$ 3.67	\$ 4.59	\$ 5.62	\$ 3.40	\$ 2.27

	2013	2012	December 31,		
			2011	2010	2009
	(\$ in thousands, except per share data)				
Balance Sheet Data:					
Current assets	\$ 371,382	\$ 349,917	\$ 302,565	\$ 237,655	\$ 218,870
Current liabilities	56,688	50,830	79,066	51,247	32,458
Property, plant and equipment, net	478,535	426,232	392,659	338,483	270,722
Total assets	878,951	808,878	740,865	599,571	513,412
Total shareholders' equity	768,587	713,078	630,158	521,979	457,316
Cash dividends per share	\$ 1.14	\$ 1.02	\$ 0.88	\$ 0.76	\$ 0.70

- (1) Selling, general, & administrative (SG&A) and other operating expenses include costs of start-up activities and gains/losses on disposal or impairment of assets.

## **Table of Contents**

### **Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*** **Executive Level Overview**

CARBO Ceramics Inc. is an oilfield service technology company that generates revenue primarily through the sale of products and services to the oil and gas industry for production enhancement and environmental services.

Our production enhancement businesses promote increased E&P Operators' production and EUR by providing industry leading technology to *Design, Build, and Optimize the Frac™*. Our environmental services business is intended to protect E&P Operators' assets, minimizes environmental risk, and lowers operating costs (LOE).

The Company's principal business consists of manufacturing and selling ceramic proppant and resin-coated sand for use primarily in the hydraulic fracturing of oil and natural gas wells. Falcon Technologies, a wholly-owned subsidiary of the Company, uses proprietary technology to provide products that are designed to enable its clients to extend the life of their storage assets, reduce the potential for hydrocarbon spills and provide containment of stored materials. The Company, through its wholly-owned subsidiary StrataGen, Inc., also provides the industry's most widely used hydraulic fracture simulation software under the brand FracPro®, as well as hydraulic fracture design and consulting services under the brand StrataGen.

During 2010, the Company began production of resin-coated ceramic (CARBOBOND® LITE®) and resin-coated sand (CARBOBOND® RCS) proppants. The introduction of CARBOBOND® LITE® addresses a market in which oil and natural gas wells are subject to a high risk of proppant flow-back. The adhesive property of the resin allows the ceramic proppant pack to adhere in place and therefore reduce the risk of proppant flow-back. In the case of CARBOBOND® RCS, the Company made the strategic decision to offer a lower cost, lower conductivity alternative to its ceramic proppants thereby broadening its proppant suite of products. Management of the Company believes that this is a natural extension of its core business and enhances the Company's highly conductive proppant offering.

During the second half of 2013, the Company introduced KRYPTOSPHERE™-H, a new ultra-high conductivity, ultra-high strength proppant. Product testing and qualifications with the Company's clients is ongoing, and it is anticipated that initial sales could begin as early as the third quarter of 2014. The next phase of KRYPTOSPHERE™ product development will be to apply this technology to the Company's existing manufacturing footprint.

The Company's products and services help oil and gas producers increase production and recovery rates from their wells, thereby lowering overall finding and development (F&D) costs. As a result, the Company's business is dependent to a large extent on the level of drilling and hydraulic fracturing activity in the oil and gas industry worldwide. Although the Company's ceramic proppants are more expensive than alternative non-ceramic proppants, the Company has been able to demonstrate the cost-effectiveness of its products to numerous operators of oil and gas wells through increased technical marketing activity. The Company believes its future prospects benefit from both an increase in drilling and hydraulic fracturing activity worldwide and the desire of industry participants to improve production results and lower their overall development costs.

The Company believes international sales will continue to represent an important role in its business. International revenues represented 21%, 23% and 21% of total revenues in 2013, 2012 and 2011, respectively.

Management believes the addition of new manufacturing capacity is critical to the Company's ability to continue its long-term growth in sales volume and revenue for ceramic proppant, resin-coated ceramic proppant and resin-coated sand. The Company is currently constructing the first 250 million pound line in Millen, Georgia and anticipates the Millen plant could commence operations by the end of the second quarter of 2014. The Company will begin construction on a second 250 million pound line in Millen in the first half of 2014 and it

## **Table of Contents**

could start up before the end of the second quarter of 2015. Upon the completion of both lines, the Company's total ceramic proppant stated capacity is expected to be 2.25 billion pounds per year. Although the Company has operated near or at full capacity at times during the previous ten years, the addition of significant new capacity, as well as the addition of resin-coating capacity, could adversely impact operating profit margins if the timing of this new capacity does not match increases in demand for the Company's products. In addition, the ability to construct new capacity will be contingent upon the receipt of all needed environmental emission permits. See Item 1 Business and Item 1A Risk Factors.

Operating profit margin for the Company's ceramic proppant business is principally impacted by manufacturing and distribution costs, sales price and the Company's production levels as a percentage of its capacity. During mid-2012, the Company experienced lower pricing for its proppant products due to market conditions resulting from a decline in activity in the oil and gas industry caused by a drop in natural gas prices and an over-supply of ceramic proppant. Conditions driving these pricing pressures continued through 2013. Although most direct production expenses have been relatively stable or predictable over time, the Company has experienced volatility in the cost of natural gas, which is used in production by the Company's domestic manufacturing facilities, and bauxite, which is the primary raw material for production of the Company's high and intermediate density ceramic proppant. The cost of natural gas has been a significant component of total monthly domestic direct production expense. In an effort to mitigate volatility in the cost of natural gas purchases and reduce exposure to short term spikes in the price of this commodity, the Company contracts in advance for portions of its future natural gas requirements. Despite the efforts to reduce exposure to changes in natural gas prices, it is possible that, given the significant portion of manufacturing costs represented by this item, gross margins as a percentage of sales may decline and changes in net income may not directly correlate to changes in revenue. Investments continue to be made to enhance the Company's distribution capabilities. Having completed an expansion of its distribution center in South Texas, the Company is continuing to add storage capacity at new and existing stocking facilities in the areas of highest activity, including the Permian and Bakken regions.

With regard to resin-coating and sand operations, during 2012 the Company completed a second resin-coating line at its New Iberia, Louisiana facility and began to utilize its Northern White sand in its sand processing facility in Marshfield, Wisconsin. The production of resin-coated sand is a different process than the manufacture of ceramic proppant, and profit margins associated with resin-coated sand are not as high as those historically received for the Company's manufactured ceramic proppant.

As the Company has expanded its operations in both domestic and international markets, there has been an increase in activities and expenses related to marketing, research and development, and finance and administration. As a result, selling, general and administrative expenses have increased in recent years. In the future, the Company expects to continue to actively pursue new business opportunities by:

increasing marketing activities associated with our production and enhancement technology; and

focusing on new product development.

The Company expects that these activities will generate increased revenue. Selling, general and administrative expenses may, however, increase in 2014 from 2013 levels for these or other reasons as the Company pursues these opportunities and continues to expand its operations.

## **General Business Conditions**

The Company's proppant business is impacted by the number of natural gas and oil wells drilled in North America, and the need to hydraulically fracture these wells. In markets outside North America, sales of the Company's products are also influenced by the overall level of drilling and hydraulic fracturing activity. Furthermore, because the decision to use ceramic proppant is based on comparing the higher initial costs to the future value derived from increased production and recovery rates, the Company's business is influenced by the current and expected prices of natural gas and oil.

## **Table of Contents**

Late in 2011, a severe decline in natural gas prices led certain customers to reduce drilling activities and capital spending in natural gas basins and increase these items in liquids-rich basins. Low natural gas prices continued throughout 2012 and operations were impacted by the shift in drilling activity away from natural gas basins. The impact resulting from this shift included higher distribution costs due to the logistical challenges in these infrastructure limited regions and competitive pricing pressures resulting from an over-supply of Chinese ceramic proppant. While natural gas fundamentals remain weak, the continued strength in oilfield activity through 2013 by the Company's new and existing clients in oily, liquids-rich plays remains positive.

### **Critical Accounting Policies**

The Consolidated Financial Statements are prepared in accordance with accounting principles generally accepted in the U.S., which require the Company to make estimates and assumptions (see Note 1 to the Consolidated Financial Statements). The Company believes that, of its significant accounting policies, the following may involve a higher degree of judgment and complexity.

Revenue is recognized when title passes to the customer (generally upon delivery of products) or at the time services are performed. The Company generates a significant portion of its revenues and corresponding accounts receivable from sales to the petroleum pressure pumping industry. In addition, the Company generates a significant portion of its revenues and corresponding accounts receivable from sales to two major customers, both of which are in the petroleum pressure pumping industry. As of December 31, 2013, approximately 37% of the balance in trade accounts receivable was attributable to those two customers. The Company records an allowance for doubtful accounts based on its assessment of collectability risk and periodically evaluates the allowance based on a review of trade accounts receivable. Trade accounts receivable are periodically reviewed for collectability based on customers' past credit history and current financial condition, and the allowance is adjusted, if necessary. If a prolonged economic downturn in the petroleum pressure pumping industry were to occur or, for some other reason, any of the Company's primary customers were to experience significant adverse conditions, the Company's estimates of the recoverability of accounts receivable could be reduced by a material amount and the allowance for doubtful accounts could be increased by a material amount. At December 31, 2013, the allowance for doubtful accounts totaled \$2.1 million.

The Company values inventory using the weighted average cost method. Assessing the ultimate realization of inventories requires judgments about future demand and market conditions. The Company regularly reviews inventories to determine if the carrying value of the inventory exceeds market value and the Company records an adjustment to reduce the carrying value to market value, as necessary. Future changes in demand and market conditions could cause the Company to be exposed to additional obsolescence or slow moving inventory. If actual market conditions are less favorable than those projected by management, lower of cost or market adjustments may be required.

Income taxes are provided for in accordance with ASC Topic 740, *Income Taxes*. This standard takes into account the differences between financial statement treatment and tax treatment of certain transactions. 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 bases. 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 of a change in tax rates is recognized as income or expense in the period that includes the enactment date. This calculation requires the Company to make certain estimates about its future operations. Changes in state, federal and foreign tax laws, as well as changes in the Company's financial condition, could affect these estimates.

Long-lived assets, which include net property, plant and equipment, goodwill, intangibles and other long-term assets, comprise a significant amount of the Company's total assets. The Company makes judgments and estimates in conjunction with the carrying values of these assets, including amounts to be capitalized, depreciation and amortization methods and useful lives. Additionally, the carrying values of these assets are



## Table of Contents

periodically reviewed for impairment or whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable. An impairment loss is recorded in the period in which it is determined that the carrying amount is not recoverable. This requires the Company to make long-term forecasts of its future revenues and costs related to the assets subject to review. These forecasts require assumptions about demand for the Company's products and services, future market conditions and technological developments. Significant and unanticipated changes to these assumptions could require a provision for impairment in a future period.

## Results of Operations

### Net Income

(\$ in thousands)	2013	Percent Change	2012	Percent Change	2011
Net Income	\$ 84,886	(20)%	\$ 105,933	(19)%	\$ 130,136

For the year ended December 31, 2013, the Company reported net income of \$84.9 million, a decrease of 20% compared to the \$105.9 million reported in the previous year. Operations in 2013 continued to be impacted by the shift in drilling activity away from natural gas basins due to the severe decline in natural gas prices in late 2011. While the Company achieved record sales volume of nearly 2.1 billion pounds, net income in 2013 decreased primarily as a result of a decrease in the average proppant selling price, spending to bring the Company's new KRYPTOSPHERE™ proppant technology to a commercial state and higher selling, general and administrative costs. Income tax expense in 2013 decreased primarily due to lower pretax income.

For the year ended December 31, 2012, the Company reported net income of \$105.9 million, a decrease of 19% compared to the \$130.1 million reported in the previous year. Operations in 2012 were impacted by the shift in drilling activity away from natural gas basins due to the severe decline in natural gas prices in late 2011. The impact resulting from this shift included higher distribution costs due to the logistical challenges in infrastructure limited regions and competitive pricing pressures resulting from an over-supply of Chinese ceramic proppant. Net income in 2012 decreased primarily as a result of a 5% decrease in the average proppant selling price and a decrease in the proppant gross profit margin as a percentage of sales, partially offset by a 7% increase in proppant sales volume and a greater contribution from the Company's other business units. Income tax expense in 2012 decreased primarily due to lower pretax income.

Individual components of financial results are discussed below.

### Revenues

(\$ in thousands)	2013	Percent Change	2012	Percent Change	2011
Consolidated revenues	\$ 667,398	3%	\$ 645,536	3%	\$ 625,705

Revenues of \$667.4 million for the year ended December 31, 2013 increased 3% compared to \$645.5 million in 2012. Revenues increased primarily due to a 20% increase in proppant sales volume, partially offset by a 13% decrease in the average proppant selling price in response to market conditions during mid-2012 and higher volumes of sand-based products, which have a lower average selling price than ceramic proppants. Worldwide proppant sales volume totaled 2.060 billion pounds during 2013 compared to 1.712 billion pounds in 2012. North American (defined as Canada and the U.S.) sales volume increased 29% due to continued success of the Company's products in oily, liquids-rich basins and despite a decrease in the North America rig count. International (excluding Canada) sales volume decreased 17% primarily due to decreases in China, Mexico, and Africa, partially offset by an increase in Europe. Ceramic proppant sales volumes increased to 1.718 billion pounds in 2013 from 1.649 billion pounds in 2012. Resin-coated sand sales volumes increased to 241 million pounds in 2013, as compared to 57 million pounds in 2012. Other Proppants (defined as raw sand sold in the

## Table of Contents

course of producing substrate for the resin-coated sand business) represented 101 million pounds of the Company's worldwide sales volume in 2013, as compared to 6 million pounds in 2012. The average selling price per pound of all proppant was \$0.297 per pound in 2013 compared to \$0.343 per pound in 2012.

Revenues of \$645.5 million for the year ended December 31, 2012 increased 3% compared to \$625.7 million in 2011. Revenues increased primarily due to a 7% increase in proppant sales volume and an increase in the revenues of some of the Company's other business units, partially offset by a 5% decrease in the average proppant selling price resulting from competitive pricing pressures. Worldwide proppant sales volume totaled 1.712 billion pounds during 2012 compared to 1.605 billion pounds in 2011. North American (defined as Canada and the U.S.) sales volume increased 3% primarily attributed to an increase in the oil rig count in the U.S. as well as acceptance of the Company's products in oily, liquids-rich basins. International (excluding Canada) sales volume increased 25% primarily due to increases in China, Russia and Mexico, partially offset by a decrease in Europe. Resin-coated sand sales volumes increased to 57 million pounds in 2012, as compared to 27 million pounds in 2011. Other Proppants represented 6 million pounds of the Company's worldwide sales volume in 2012, as compared to 3 million pounds in 2011. The average selling price per pound of all proppant was \$0.343 per pound in 2012 compared to \$0.360 per pound in 2011.

## Gross Profit

(\$ in thousands)	2013	Percent Change	2012	Percent Change	2011
Consolidated gross profit	\$ 192,995	(14)%	\$ 223,505	(15)%	\$ 261,715
As a % of revenues	29%		35%		42%

The Company's cost of sales related to proppant manufacturing consists of manufacturing costs, packaging and transportation expenses associated with the delivery of the Company's products to its customers and handling costs related to maintaining finished goods inventory and operating the Company's remote stocking facilities. Variable manufacturing costs include raw materials, labor, utilities and repair and maintenance supplies. Fixed manufacturing costs include depreciation, property taxes on production facilities, insurance and factory overhead.

Gross profit for the year ended December 31, 2013 was \$193.0 million, or 29% of revenues, compared to \$223.5 million, or 35% of revenues, for 2012. The decrease in gross profit was primarily the result of a decrease in average selling price and spending to bring the Company's new proppant technology to a commercial state, partially offset by higher proppant sales volumes. The gross profit margin as a percentage of revenues also declined due to the change in the product sales mix resulting from volume gains of the Company's lower-priced and lower-margin sand-based products.

Gross profit for the year ended December 31, 2012 was \$223.5 million, or 35% of revenues, compared to \$261.7 million, or 42% of revenues, for 2011. Operations in 2012 were impacted by the shift in drilling activity away from natural gas basins due to the severe decline in natural gas prices in late 2011 and the resulting logistical challenges and costs and the competitive pricing pressures created by this shift. Despite a 7% increase in proppant sales volume, gross profit and gross profit as a percentage of revenues decreased primarily as a result of a decrease in the average proppant selling price, an increase in freight and logistics costs, higher fixed cost absorption, and a shift in sales mix towards lower-margin heavyweight and sand-based products. Greater contribution from the Company's other business units partially offset the decrease in gross profit from proppant sales.

## Selling, General & Administrative (SG&A) and Other Operating Expenses

(\$ in thousands)	2013	Percent Change	2012	Percent Change	2011
Consolidated SG&A and other	\$ 68,404	6%	\$ 64,619	1%	\$ 64,113
As a % of revenues	10%		10%		10%

**Table of Contents**

Operating expenses consisted of \$68.4 million of SG&A expenses and \$43.0 thousand of other operating income for the year ended December 31, 2013 compared to \$64.0 million of SG&A expenses and \$0.6 million of other operating expenses for 2012. The increase in SG&A expenses primarily resulted from higher marketing and research and development spending. Other operating expenses in 2013 decreased \$0.5 million compared to 2012 due primarily to a loss on disposal of assets in 2012 related to the wind down of the geotechnical monitoring business. As a percentage of revenues, SG&A and other operating expenses for 2013 remained consistent to 2012.

Operating expenses consisted of \$64.0 million of SG&A expenses and \$0.6 million of other operating expenses for the year ended December 31, 2012 compared to \$62.4 million and \$1.7 million, respectively, for 2011. The increase in SG&A expenses primarily resulted from higher administrative spending. Other operating expenses in 2012 consisted primarily of a \$0.5 million loss on disposal of assets related to the wind down of the geotechnical monitoring business. Other operating expenses in 2011 consisted primarily of an impairment of goodwill of \$0.9 million related to the Company's geotechnical monitoring business and a write-down of \$0.8 million related to a 6% interest in an investment accounted for under the cost method as a result of the sale of the business by majority shareholders. As a percentage of revenues, SG&A and other operating expenses for 2012 remained consistent to 2011.

**Income Tax Expense**

(\$ in thousands)	2013	Percent Change	2012	Percent Change	2011
Income Tax Expense	\$ 40,315	(23)%	\$ 52,657	(22)%	\$ 67,314
Effective Income Tax Rate	32.2%		33.2%		34.1%

Consolidated income tax expense was \$40.3 million, or 32.2% of pretax income, for the year ended December 31, 2013 compared to \$52.7 million, or 33.2% of pretax income for 2012. The \$12.3 million decrease is due to lower pre-tax income and a lower effective tax rate primarily associated with additional R&D tax credits and the final preparation and filing of the Company's prior year income tax returns.

Consolidated income tax expense was \$52.7 million, or 33.2% of pretax income, for the year ended December 31, 2012 compared to \$67.3 million, or 34.1% of pretax income for 2011. The \$14.7 million decrease is due to lower pre-tax income and a lower effective tax rate primarily associated with the final preparation and filing of the Company's prior year income tax returns and additional tax benefits relating to mining depletion deductions.

**Outlook**

Given the cyclical nature of the industry, the Company believes that market conditions will continue to fluctuate, driven by several factors, including oil and natural gas commodity prices and quarterly seasonality trends. The Company expects activity over the short term will be variable and driven by a focus on reduction of well costs and a continued over-supply in the proppant market. However, the Company believes an increase in capital spending on the part of exploration and production companies in 2014 should result in solid industry activity. Consequently, the Company anticipates demand for its production enhancement products and services to remain intact. Specifically, regarding ceramic proppant sales, the Company believes 2014 will be another good year for volumes, aided by the Company's technical marketing campaign that continues to highlight the superior conductivity of its ceramic proppant compared to low-quality Chinese ceramic proppant. In the near term, the Company expects ceramic proppant volumes for the first quarter of 2014 to increase when compared with the fourth quarter of 2013. Current market conditions remain competitive, which leads the Company to believe that pricing may remain at current levels.

Based on the demand the Company witnessed in the second half of 2013, ceramic proppant capacity expansion remains central to the Company's growth. Construction on the first line in Millen, Georgia remains on schedule with completion expected by the end of the second quarter of 2014. In addition, construction will

## **Table of Contents**

commence on the second line in Millen in the first half of 2014 and the Company anticipates startup could occur before the end of the second quarter of 2015. Once both lines are completed, the Company's ceramic proppant manufacturing capacity will increase by 500 million pounds to a total of 2.25 billion pounds per year.

With respect to the Company's resin-coated sand product line, further market expansion was experienced during 2013. The Company anticipates continued demand for its high quality, high conductivity resin-coated sand during 2014. Resin-coated sand products are unlikely to realize large, near-term price increases, given the current low natural gas activity and industry oversupply. While the Company continues to focus on improving margins from these products, they are expected to remain challenging until the oversupply situation improves.

The amount of activity in infrastructure-limited, liquids-rich basins introduced supply chain challenges to the industry and resulted in higher distribution costs during 2012 and the first part of 2013. The Company has continued addressing distribution costs with a number of initiatives. One initiative is rationalizing the Company's rail fleet to reduce reliance on the fleet as a form of storage. Other initiatives include increasing storage capacity at new and existing stocking locations and reducing transportation costs. The Company anticipates completing the majority of these initiatives during the first half of 2014, with the resulting benefits seen in the second half of 2014.

Commercialization of KRYPTOSPHERE™-H, the Company's new ultra-high conductivity, ultra-high strength proppant technology, is progressing well. Product testing and qualification milestones with clients continue with all results to date being positive. While many deep well completions in the Gulf of Mexico have been delayed in 2014, the Company anticipates initial sales of KRYPTOSPHERE™-H could begin as early as the third quarter of 2014. The next phase in the Company's KRYPTOSPHERE™ product development will be to apply this technology to the Company's existing manufacturing footprint. Engineering of a retrofit of an existing plant is underway. Once the retrofit is complete, applying KRYPTOSPHERE™ technology to the Company's production platform will expand its technology position in the industry and further assist in increasing the production and EUR of its clients' oil and natural gas wells.

During 2013, new product development continued across the Company's proppant-delivered technology platforms. During 2014, the Company expects to use field trials to test new products across these proppant-delivered technology platforms.

Falcon Technologies' growth during 2013 was negatively impacted by lower demand for tank lining services. As a result, near-term growth lagged internal projections. However, long-term growth projections remain intact with a renewed focus on new and existing product lines aimed at protecting the environment and its clients' assets and reputations.

## **Liquidity and Capital Resources**

At December 31, 2013, the Company had cash and cash equivalents of \$94.3 million compared to cash and cash equivalents of \$90.6 million at December 31, 2012. During 2013, the Company generated \$137.6 million of cash from operating activities and retained \$0.1 million from excess tax benefits relating to stock based compensation. Uses of cash included \$99.9 million for capital expenditures, \$26.4 million for the payment of cash dividends, \$7.0 million for repurchases of the Company's common stock, and \$0.8 million for the effect of exchange rate changes on cash. Major capital spending in 2013 included engineering, procurement and construction activities related to the new manufacturing facility in Millen, Georgia, expansion of the Company's distribution infrastructure, as well as upgrades and improvements at existing manufacturing facilities.

Subject to its financial condition, the amount of funds generated from operations and the level of capital expenditures, the Company's current intention is to continue to pay quarterly dividends to holders of its common stock. On January 21, 2014, the Company's Board of Directors approved the payment of a quarterly cash dividend of \$0.30 per share to shareholders of the Company's common stock on February 3, 2014. The dividend

**Table of Contents**

was paid on February 18, 2014. The Company estimates its total capital expenditures in 2014 will be between \$185.0 million and \$205.0 million, which include costs associated with the construction of the new manufacturing facility in the Millen, Georgia area, retrofitting an existing plant with the new proppant technology, expansion of the Company's distribution infrastructure, as well as various other projects and additions.

The Company has historically maintained an unsecured line of credit with a bank. In July 2013, the Company entered into a second amendment to this credit agreement to (i) extend its maturity date from July 29, 2013 to July 25, 2018, (ii) increase the size from \$25.0 million to \$50.0 million, and (iii) make other administrative changes to certain covenants and provisions. As of December 31, 2013, there was no outstanding debt under the new credit agreement. The Company anticipates that cash on hand, cash provided by operating activities and funds provided by its line of credit will be sufficient to meet planned operating expenses, tax obligations, capital expenditures and other cash needs for the next 12 months. The Company also believes that it could acquire additional debt financing, if needed. Based on these assumptions, the Company believes that its fixed costs could be met even with a moderate decrease in demand for the Company's products.

**Off-Balance Sheet Arrangements**

The Company had no off-balance sheet arrangements as of December 31, 2013.

**Contractual Obligations**

The following table summarizes the Company's contractual obligations as of December 31, 2013:

(\$ in thousands)	Total	Payments due in period			
		Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Long-term debt obligations	\$	\$	\$	\$	\$
Capital lease obligations					
Operating lease obligations:					
Primarily railroad equipment					
(net of subleases)	108,840	14,655	31,600	24,389	38,196
Purchase obligations:					
Natural gas contracts	59,519	21,010	34,958	3,551	
Raw materials contracts	3,269	3,269			
Other long-term obligations					
<b>Total contractual obligations</b>	<b>\$ 171,628</b>	<b>\$ 38,934</b>	<b>\$ 66,558</b>	<b>\$ 27,940</b>	<b>\$ 38,196</b>

See Note 4 and Note 13 to the Notes to the Consolidated Financial Statements.

Operating lease obligations relate primarily to railroad equipment leases and include leases of other property, plant and equipment.

The Company uses natural gas to power its domestic manufacturing plants. From time to time, the Company enters into contracts to purchase a portion of the anticipated natural gas requirements at specified prices. As of December 31, 2013, the last such contract was due to expire in December 2017.

The Company has entered into contracts to supply raw materials, primarily kaolin, bauxite and hydro sized sand, to each of its manufacturing plants. Each of the contracts is described in Note 13 to the Notes to the Consolidated Financial Statements. Two outstanding contracts do not require the Company to purchase minimum annual quantities, but do require the purchase of minimum annual percentages, ranging from 50% to 80% of the respective plants' requirements for the specified raw materials. One outstanding contract requires the Company

## **Table of Contents**

to purchase a minimum annual quantity of material. The Company also has entered into a supply agreement for its Millen plant that will become effective upon the commencement of operations at the plant and requires the purchase of a minimum annual percentage of 50% of the Millen plant's requirements of kaolin.

### **Item 7A. *Quantitative and Qualitative Disclosures about Market Risk***

The Company's major market risk exposure is to foreign currency fluctuations that could impact its investments in China and Russia. As of December 31, 2013, the Company's net investment that is subject to foreign currency fluctuations totaled \$89.6 million, and the Company has recorded a cumulative foreign currency translation loss of \$3.3 million, net of deferred income tax benefit. This cumulative translation loss is included in Accumulated Other Comprehensive Loss. From time to time, the Company may enter into forward foreign exchange contracts to hedge the impact of foreign currency fluctuations. There were no such foreign exchange contracts outstanding at December 31, 2013.

The Company has a \$50.0 million revolving credit agreement with a bank. Under the terms of the agreement, the Company has the option of choosing either the bank's fluctuating Base Rate or LIBOR Fixed Rate, plus an Applicable Margin, all as defined in the credit agreement. There were no borrowings outstanding under the agreement at December 31, 2013. The Company does not believe that it has any material exposure to market risk associated with interest rates.

The Company is subject to the risk of market price fluctuations of certain commodities, such as natural gas, and utilizes forward purchase contracts to manage or reduce market risks relating to these costs. The Company does not enter into these transactions for speculative or trading purposes. The Company expects to take delivery of the underlying natural gas and, as such, does not currently believe the market risk exposure on these instruments to be material. As of December 31, 2013, \$59.5 million of natural gas forward contracts were outstanding for delivery of gas through 2017.

### **Item 8. *Financial Statements and Supplementary Data***

The information required by this Item is contained in pages F-3 through F-21 of this Report.

### **Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

Not applicable.

### **Item 9A. *Controls and Procedures***

#### **(a) Evaluation of Disclosure Controls and Procedures**

Disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports filed or submitted under the Securities Exchange Act of 1934 (the "Exchange Act") is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports filed under the Exchange Act is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

As of December 31, 2013, management carried out an evaluation, under the supervision and with the participation of the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurances of achieving their control objectives. Based upon

## **Table of Contents**

and as of the date of that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures were effective to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

### **(b) Management's Report on Internal Control Over Financial Reporting**

For Management's Report on Internal Control Over Financial Reporting, see page F-1 of this Report.

### **(c) Report of Independent Registered Public Accounting Firm**

For the Report of Independent Registered Public Accounting Firm on the Company's internal control over financial reporting, see page F-2 of this Report.

### **(d) Changes in Internal Control over Financial Reporting**

There were no changes in the Company's internal control over financial reporting during the quarter ended December 31, 2013, that materially affected, or are reasonably likely to materially affect, those controls.

## **Item 9B. Other Information**

Not applicable.

**Table of Contents**

**PART III**

Certain information required by Part III is omitted from this Report. The Company will file a definitive proxy statement pursuant to Regulation 14A (the Proxy Statement) not later than 120 days after the end of the fiscal year covered by this Report and certain information included therein is incorporated herein by reference. Only those sections of the Proxy Statement that specifically address the items set forth herein are incorporated by reference. Such incorporation does not include the Compensation Committee Report included in the Proxy Statement.

**Item 10. Directors, Executive Officers and Corporate Governance**

Information concerning executive officers under Item 401 of Regulation S-K is set forth in Part I of this Form 10-K. The other information required by this Item is incorporated by reference to the portions of the Company's Proxy Statement entitled Security Ownership of Certain Beneficial Owners and Management, Election of Directors, Board of Directors, Committees of the Board of Directors and Meeting Attendance, Code of Business Conduct and Ethics, Section 16(a) Beneficial Ownership Reporting Compliance and Report of the Audit Committee.

**Item 11. Executive Compensation**

The information required by this Item is incorporated by reference to the portions of the Company's Proxy Statement entitled Compensation of Executive Officers, Director Compensation and Potential Termination and Change in Control Payments.

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

The information required by this Item is incorporated by reference from the Company's Proxy Statement under the captions Securities Ownership of Certain Beneficial Owners and Management and Equity Compensation Plan Information.

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

The information required by this Item is incorporated by reference to the portion of the Company's Proxy Statement entitled Election of Directors.

**Item 14. Principal Accounting Fees and Services**

The information required by this Item is incorporated by reference to the portion of the Company's Proxy Statement entitled Ratification of Appointment of the Company's Independent Registered Public Accounting Firm.



**Table of Contents**

**PART IV**

**Item 15.      *Exhibits, Financial Statement Schedules***

(a) Exhibits, Financial Statements and Financial Statement Schedules:

1.      Consolidated Financial Statements

The Consolidated Financial Statements of CARBO Ceramics Inc. listed below are contained in pages F-3 through F-21 of this Report:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets at December 31, 2013 and 2012

Consolidated Statements of Income for each of the three years ended December 31, 2013, 2012 and 2011

Consolidated Statements of Comprehensive Income for each of the three years ended December 31, 2013, 2012 and 2011

Consolidated Statements of Shareholders' Equity for each of the three years ended December 31, 2013, 2012 and 2011

Consolidated Statements of Cash Flows for each of the three years ended December 31, 2013, 2012 and 2011

2.      Consolidated Financial Statement Schedules

All schedules have been omitted since they are either not required or not applicable.

3.      Exhibits

The exhibits listed on the accompanying Exhibit Index are filed as part of, or incorporated by reference into, this Report.

**Table of Contents**

**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.

**CARBO Ceramics Inc.**

By: */s/ Gary A Kolstad*  
Gary A. Kolstad  
*President and Chief Executive Officer*

By: */s/ Ernesto Bautista III*  
Ernesto Bautista III  
*Vice President and*  
*Chief Financial Officer*

Dated: February 24, 2014

**Table of Contents****POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Gary A. Kolstad and Ernesto Bautista III, jointly and severally, his attorneys-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendments to this 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, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may 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.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ William C. Morris	Chairman of the Board	February 24, 2014
William C. Morris		
/s/ Gary A. Kolstad	President, Chief Executive Officer and Director (Principal Executive Officer)	February 24, 2014
Gary A. Kolstad		
/s/ Ernesto Bautista III	Vice President and	February 24, 2014
Ernesto Bautista III	Chief Financial Officer  (Principal Financial and  Accounting Officer)	
/s/ Sigmund L. Cornelius	Director	February 24, 2014
Sigmund L. Cornelius		
/s/ Chad C. Deaton	Director	February 24, 2014
Chad C. Deaton		
/s/ James B. Jennings	Director	February 24, 2014
James B. Jennings		
/s/ H.E. Lentz, Jr.	Director	February 24, 2014
H.E. Lentz, Jr.		
/s/ Randy L. Limbacher	Director	February 24, 2014
Randy L. Limbacher		
/s/ Robert S. Rubin	Director	February 24, 2014
Robert S. Rubin		



**Table of Contents**

**MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

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 Securities Exchange Act of 1934. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally accepted accounting principles.

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

Management, including our Chief Executive Officer and our Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2013. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control - Integrated Framework (1992). Based on its assessment and those criteria, management has concluded that the Company maintained effective internal control over financial reporting as of December 31, 2013.

The Company's independent registered public accounting firm, Ernst & Young LLP, has issued an attestation report on the Company's internal control over financial reporting. That report is included herein.

F-1

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**Table of Contents**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Shareholders

CARBO Ceramics Inc.

We have audited CARBO Ceramics Inc.'s internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) (the COSO criteria). CARBO Ceramics Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit 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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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

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

In our opinion, CARBO Ceramics Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of CARBO Ceramics Inc. as of December 31, 2013, and 2012, and the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2013 and our report dated February 24, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

New Orleans, Louisiana

February 24, 2014

**Table of Contents**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Shareholders

CARBO Ceramics Inc.

We have audited the accompanying consolidated balance sheets of CARBO Ceramics Inc. as of December 31, 2013 and 2012, and the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2013. 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes 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 financial statements referred to above present fairly, in all material respects, the consolidated financial position of CARBO Ceramics Inc. at December 31, 2013 and 2012, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2013, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), CARBO Ceramics Inc.'s internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) and our report dated February 24, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

New Orleans, Louisiana

February 24, 2014

**Table of Contents****CARBO CERAMICS INC.****CONSOLIDATED BALANCE SHEETS**

(\$ in thousands, except per share data)

	December 31,	
	2013	2012
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 94,250	\$ 90,635
Trade accounts and other receivables, net	125,179	103,258
Inventories:		
Finished goods	87,218	102,625
Raw materials and supplies	47,042	38,061
Total inventories	134,260	140,686
Prepaid expenses and other current assets	5,442	4,293
Prepaid income taxes	1,888	
Deferred income taxes	10,363	11,045
Total current assets	371,382	349,917
Property, plant and equipment:		
Land and land improvements	31,163	19,700
Land-use and mineral rights	12,751	9,559
Buildings	72,702	67,866
Machinery and equipment	535,529	530,129
Construction in progress	109,735	39,564
Total	761,880	666,818
Less accumulated depreciation and amortization	283,345	240,586
Net property, plant and equipment	478,535	426,232
Goodwill	12,164	12,164
Intangible and other assets, net	16,870	20,565
Total assets	\$ 878,951	\$ 808,878
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 24,570	\$ 20,078
Accrued payroll and benefits	13,650	13,986
Accrued freight	6,873	4,925
Accrued utilities	3,577	3,707
Accrued income taxes		727
Other accrued expenses	8,018	7,407
Total current liabilities	56,688	50,830
Deferred income taxes	53,676	44,970
Shareholders' equity:		
Preferred stock, par value \$0.01 per share, 5,000 shares authorized, none outstanding		
Common stock, par value \$0.01 per share, 80,000,000 shares authorized; 23,080,632 and 23,092,906 shares issued and outstanding at December 31, 2013 and 2012, respectively	231	231
Additional paid-in capital	56,782	57,364



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Retained earnings	714,835	657,423
Accumulated other comprehensive loss	(3,261)	(1,940)
Total shareholders' equity	768,587	713,078
Total liabilities and shareholders' equity	\$ 878,951	\$ 808,878

See accompanying notes to consolidated financial statements.

F-4

**Table of Contents****CARBO CERAMICS INC.****CONSOLIDATED STATEMENTS OF INCOME**

(\$ in thousands, except per share data)

	Years ended December 31,		
	2013	2012	2011
Revenues	\$ 667,398	\$ 645,536	\$ 625,705
Cost of sales	474,403	422,031	363,990
Gross profit	192,995	223,505	261,715
Selling, general and administrative expenses	68,447	64,033	62,381
Start-up costs		68	184
(Gain) loss on disposal or impairment of assets	(43)	518	1,548
Operating profit	124,591	158,886	197,602
Other income (expense):			
Interest income, net	777	64	197
Foreign currency exchange loss, net	(17)	(76)	(135)
Other, net	(150)	(284)	(214)
	610	(296)	(152)
Income before income taxes	125,201	158,590	197,450
Income taxes	40,315	52,657	67,314
Net income	\$ 84,886	\$ 105,933	\$ 130,136
Earnings per share:			
Basic	\$ 3.67	\$ 4.59	\$ 5.62
Diluted	\$ 3.67	\$ 4.59	\$ 5.62

See accompanying notes to consolidated financial statements.

**Table of Contents**

**CARBO CERAMICS INC.**

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

**(\$ in thousands)**

	<b>Years ended December 31,</b>		
	<b>2013</b>	<b>2012</b>	<b>2011</b>
Net income	\$ 84,886	\$ 105,933	\$ 130,136
Other comprehensive (loss) income:			
Foreign currency translation adjustment	(2,031)	2,960	(1,198)
Deferred income tax benefit (expense)	710	(1,035)	1,447
Other comprehensive (loss) income, net of tax	(1,321)	1,925	249
Comprehensive income	\$ 83,565	\$ 107,858	\$ 130,385

See accompanying notes to consolidated financial statements.

**Table of Contents****CARBO CERAMICS INC.****CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**

(\$ in thousands, except per share data)

	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total
Balances at January 1, 2011	\$ 231	\$ 57,475	\$ 468,387	\$ (4,114)	\$ 521,979
Net income			130,136		130,136
Foreign currency translation adjustment, net of tax benefit of (\$1,447)				249	249
Comprehensive income					130,385
Exercise of stock options		76			76
Tax benefit from stock based compensation		1,412			1,412
Stock granted under restricted stock plan, net		223			223
Stock based compensation		4,002			4,002
Shares repurchased and retired		(6,649)			(6,649)
Shares surrendered by employees to pay taxes			(901)		(901)
Cash dividends (\$0.88 per share)			(20,369)		(20,369)
Balances at December 31, 2011	231	56,539	577,253	(3,865)	630,158
Net income			105,933		105,933
Foreign currency translation adjustment, net of tax expense of \$1,035				1,925	1,925
Comprehensive income					107,858
Exercise of stock options		54			54
Tax benefit from stock based compensation		1,388			1,388
Stock granted under restricted stock plan, net	1	206			207
Stock based compensation		4,903			4,903
Shares repurchased and retired	(1)	(5,726)			(5,727)
Shares surrendered by employees to pay taxes			(2,200)		(2,200)
Cash dividends (\$1.02 per share)			(23,563)		(23,563)
Balances at December 31, 2012	231	57,364	657,423	(1,940)	713,078
Net income			84,886		84,886
Foreign currency translation adjustment, net of tax benefit of (\$710)				(1,321)	(1,321)
Comprehensive income					83,565
Tax expense from stock based compensation		(205)			(205)
Stock granted under restricted stock plan, net	1	209			210
Stock based compensation		5,247			5,247
Shares repurchased and retired	(1)	(5,833)			(5,834)
Shares surrendered by employees to pay taxes			(1,124)		(1,124)
Cash dividends (\$1.14 per share)			(26,350)		(26,350)
Balances at December 31, 2013	\$ 231	\$ 56,782	\$ 714,835	\$ (3,261)	\$ 768,587

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See accompanying notes to consolidated financial statements.

F-7

**Table of Contents****CARBO CERAMICS INC.****CONSOLIDATED STATEMENTS OF CASH FLOWS**

(\$ in thousands)

	Years ended December 31,		
	2013	2012	2011
<b>Operating activities</b>			
Net income	\$ 84,886	\$ 105,933	\$ 130,136
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	47,472	44,893	36,015
Provision for doubtful accounts	354	19	229
Deferred income taxes	10,121	11,212	4,223
Excess tax benefits from stock based compensation	(134)	(1,384)	(1,399)
(Gain) loss on disposal or impairment of assets	(43)	518	1,548
Foreign currency transaction loss, net	17	76	135
Stock compensation expense	5,837	5,335	4,719
Changes in operating assets and liabilities:			
Trade accounts and other receivables	(22,024)	8,945	(23,101)
Inventories	6,068	(7,589)	(41,704)
Prepaid expenses and other current assets	(1,136)	(150)	(1,142)
Long-term prepaid expenses	2,969	12,005	(24,083)
Accounts payable	4,330	(18,201)	15,971
Accrued expenses	1,677	(10,628)	11,846
Accrued income taxes, net	(2,823)	5,397	(1,980)
Net cash provided by operating activities	137,571	156,381	111,413
<b>Investing activities</b>			
Capital expenditures	(99,936)	(77,189)	(90,395)
Net cash used in investing activities	(99,936)	(77,189)	(90,395)
<b>Financing activities</b>			
Proceeds from bank borrowings		10,000	
Repayments on bank borrowings		(10,000)	
Net proceeds from stock based compensation		54	76
Dividends paid	(26,350)	(23,563)	(20,369)
Purchase of common stock	(6,958)	(7,927)	(7,550)
Excess tax benefits from stock based compensation	134	1,384	1,399
Net cash used in financing activities	(33,174)	(30,052)	(26,444)
Effect of exchange rate changes on cash	(846)	225	40
Net increase (decrease) in cash and cash equivalents	3,615	49,365	(5,386)
Cash and cash equivalents at beginning of year	90,635	41,270	46,656
Cash and cash equivalents at end of year	\$ 94,250	\$ 90,635	\$ 41,270
<b>Supplemental cash flow information</b>			
Interest paid	\$ 10	\$ 78	\$ 1
Income taxes paid	\$ 33,015	\$ 36,036	\$ 65,071

See accompanying notes to consolidated financial statements.

F-8

## **Table of Contents**

### **CARBO CERAMICS INC.**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(\$ in thousands, except per share data)**

#### **1. Significant Accounting Policies**

##### ***Description of Business***

CARBO Ceramics Inc. (the "Company") was formed in 1987 and is a manufacturer of ceramic proppants and also produces resin-coated ceramic and resin-coated sand proppants. The Company has six production plants in: New Iberia, Louisiana; Eufaula, Alabama; McIntyre, Georgia; Toombsboro, Georgia; Luoyang, China; and Kopeysk, Russia; and a sand processing facility in Marshfield, Wisconsin. The Company predominantly markets its proppant products through pumping service companies that perform hydraulic fracturing for oil and gas companies. Finished goods inventories are stored at the plant sites and various domestic and international remote distribution facilities. The Company also provides the industry's most widely used hydraulic fracture simulation software FracPro®, as well as hydraulic fracture design and consulting services. In addition, the Company provides a broad range of technologies for spill prevention, containment and countermeasures. The Company wound-down its geotechnical monitoring business in late 2012.

##### ***Principles of Consolidation***

The consolidated financial statements include the accounts of CARBO Ceramics Inc. and its operating subsidiaries. All significant intercompany transactions have been eliminated.

##### ***Concentration of Credit Risk, Accounts Receivable and Other Receivables***

The Company performs periodic credit evaluations of its customers' financial condition and generally does not require collateral. Receivables are generally due within 30 days. The majority of the Company's receivables are from customers in the petroleum pressure pumping industry. The Company establishes an allowance for doubtful accounts based on its assessment of collectability risk and periodically evaluates the balance in the allowance based on a review of trade accounts receivable. Trade accounts receivable are periodically reviewed for collectability based on customers' past credit history and current financial condition, and the allowance is adjusted if necessary. Credit losses historically have been insignificant. The allowance for doubtful accounts at December 31, 2013 and 2012 was \$2,083 and \$1,844, respectively. Other receivables were \$2,781 and \$1,732 as of December 31, 2013 and 2012, respectively, of which related mainly to miscellaneous receivables in the United States and China.

##### ***Cash Equivalents***

The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. The carrying amounts reported in the balance sheet for cash equivalents approximate fair value.

##### ***Inventories***

Inventories are stated at the lower of cost (weighted average) or market. Finished goods inventories include costs of materials, plant labor and overhead incurred in the production of the Company's products and costs to transfer finished goods to distribution centers.

##### ***Property, Plant and Equipment***

Property, plant and equipment are stated at cost. Repair and maintenance costs are expensed as incurred. Depreciation is computed on the straight-line method for financial reporting purposes using the following estimated useful lives:

Buildings and improvements	15 to 30 years
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Machinery and equipment	3 to 30 years
Land-use rights	30 years

F-9

**Table of Contents**

**CARBO CERAMICS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(\$ in thousands, except per share data)**

The Company holds approximately 4,220 acres of land and leasehold interests containing kaolin reserves near its plants in Georgia and Alabama. The Company also holds approximately 490 acres of land and leasehold interests near its resin-coating facility currently under construction in Marshfield, Wisconsin containing sand reserves for use as raw material in the production of its resin-coated sand products. The capitalized costs of land and mineral rights as well as costs incurred to develop such property are amortized using the units-of-production method based on estimated total tons of these reserves.

***Impairment of Long-Lived Assets and Intangible Assets***

Long-lived assets to be held and used and intangible assets that are subject to amortization are reviewed for impairment whenever events or circumstances indicate their carrying amounts might not be recoverable. Recoverability is assessed by comparing the undiscounted expected future cash flows from the assets with their carrying amount. If the carrying amount exceeds the sum of the undiscounted future cash flows an impairment loss is recorded. The impairment loss is measured by comparing the fair value of the assets with their carrying amounts. Intangible assets that are not subject to amortization are tested for impairment at least annually by comparing their fair value with the carrying amount and recording an impairment loss for any excess of carrying amount over fair value. Fair values are generally determined based on discounted expected future cash flows or appraised values, as appropriate. During 2013, the Company recognized a gain of \$43, and in 2012 and 2011, the Company recognized losses of \$518 and \$1,548, respectively, on disposal or impairment of various assets. The gain in 2013 consisted primarily of equipment disposals. The loss in 2012 consisted primarily of the wind down of the geotechnical monitoring business. The loss in 2011 consisted of an impairment of goodwill related to the Company's geotechnical monitoring business, a write-down of a 6% interest in an investment accounted for under the cost method as a result of the sale of the business by majority shareholders and certain equipment disposals.

***Capitalized Software***

The Company capitalizes certain software costs, after technological feasibility has been established, which are amortized utilizing the straight-line method over the economic lives of the related products, generally not to exceed five years.

***Goodwill***

Goodwill represents the excess of the cost of companies acquired over the fair value of their net assets at the date of acquisition. Goodwill relating to each of the Company's reporting units is tested for impairment annually as well as when an event, or change in circumstances, indicates an impairment is more likely than not to have occurred. As a result of changes in business conditions in the geotechnical monitoring business during 2011, the Company recorded an impairment charge of \$889 on goodwill associated with that reporting unit. The latest impairment review indicated goodwill related to other reporting units was not impaired.

***Revenue Recognition***

Revenue from proppant sales is recognized when title passes to the customer, generally upon delivery. Revenue from consulting and geotechnical services is recognized at the time service is performed. Revenue from the sale of fracture simulation software is recognized when title passes to the customer at time of shipment. Revenue from the sale of spill prevention services is recognized at the time service is performed. Revenue from the sale of containment goods is recognized at the time goods are delivered.

**Table of Contents**

**CARBO CERAMICS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(\$ in thousands, except per share data)**

***Shipping and Handling Costs***

Shipping and handling costs are classified as cost of sales. Shipping costs consist of transportation costs to deliver products to customers. Handling costs include labor and overhead to maintain finished goods inventory and operate distribution facilities.

***Cost of Start-Up Activities***

Start-up activities, including organization costs, are expensed as incurred. There were no start-up costs during 2013. Start-up costs for 2012 primarily related to the start-up of the second resin-coating line at the Company's New Iberia, Louisiana facility. Start-up costs for 2011 primarily related to the start-up of the fourth production line at the Company's Toombsboro, Georgia facility.

***Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

***Research and Development Costs***

Research and development costs are charged to operations when incurred and are included in Selling, General and Administrative expenses. The amounts incurred in 2013, 2012 and 2011 were \$8,416, \$6,916 and \$7,335, respectively.

***Foreign Subsidiaries***

Financial statements of the Company's foreign subsidiaries are translated using current exchange rates for assets and liabilities; average exchange rates for the period for revenues, expenses, gains and losses; and historical exchange rates for equity accounts. Resulting translation adjustments are included in, and the only component of, Accumulated Other Comprehensive Loss as a separate component of shareholders' equity.

***New Accounting Pronouncements***

In February 2013, the Financial Accounting Standards Board (FASB) issued authoritative guidance on reporting of amounts reclassified from accumulated other comprehensive income. The new guidance requires a company to present significant amounts reclassified from each component of other comprehensive income and the income statement line items affected by the reclassification. The Company adopted this guidance as of January 1, 2013. The adoption did not have a material impact on the Company's financial position, results of operations or cash flows.

On September 13, 2013, the U.S. Treasury and IRS issued final Tangible Property Regulations (TPR) under IRC Section 162 and IRC Section 263(a). The regulations are not effective until tax years beginning on or after January 1, 2014; however, certain portions may require an accounting method change on a retroactive basis, thus requiring a IRC Section 481(a) adjustment related to fixed and real asset deferred taxes. The accounting rules under ASC 740 treat the release of the regulations as a change in tax law as of the date of issuance and require the Company to determine whether there will be an impact on its financial statements for the year ended December 31, 2013. Any such impact of the final tangible property regulations would affect temporary deferred taxes only and result in a balance sheet reclassification between current and deferred taxes. The Company has analyzed the expected impact of the TPR on the Company and concluded that the expected impact is immaterial. The Company will continue to monitor the impact of any future changes to the TPR on the Company prospectively.



**Table of Contents****CARBO CERAMICS INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

(\$ in thousands, except per share data)

**2. Intangible and Other Assets**

Following is a summary of intangible assets as of December 31:

	Weighted Average Life	Gross Amount	2013 Accumulated Amortization	Gross Amount	2012 Accumulated Amortization
Intangibles:					
Patents and licenses, software and hardware designs	6 years	\$ 3,620	\$ 1,461	\$ 3,955	\$ 1,684
Developed technology	10 years	2,782	1,182	2,782	904
Customer relationships and non-compete	9 years	2,838	1,428	2,838	1,092
Trademark	Indefinite	833		833	
		\$ 10,073	\$ 4,071	\$ 10,408	\$ 3,680

Amortization expense for 2013, 2012 and 2011 was \$1,173, \$1,224 and \$1,131, respectively. Estimated amortization expense for each of the ensuing years through December 31, 2018 is \$1,162, \$1,086, \$734, \$638 and \$565, respectively.

Following is a summary of other assets as of December 31:

	2013	2012
Other assets:		
Bauxite raw materials:		
Inventories	\$ 9,949	\$ 13,143
Prepayments	474	474
Other assets	445	220
	\$ 10,868	\$ 13,837

Bauxite raw materials are used in the production of heavyweight ceramic products. As of December 31, 2013 and 2012, the Company has classified as long-term assets those bauxite raw materials inventories that are not expected to be consumed in production during the upcoming twelve month period.

**3. Bank Borrowings**

The Company has an unsecured revolving credit agreement with a bank. On March 5, 2012, the Company entered into a first amendment to this credit agreement to (i) extend its maturity date from January 29, 2013 to July 29, 2013, (ii) increase the size from \$10,000 to \$25,000, and (iii) make other administrative changes to certain covenants and provisions. On July 25, 2013, the Company entered into a second amendment to this credit agreement to (i) extend its maturity date to July 25, 2018, (ii) increase the size of the revolving credit facility to \$50,000, and (iii) make other administrative changes to certain covenants and provisions.

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The Company has the option of choosing either the bank's fluctuating Base Rate or LIBOR Fixed Rate, plus an Applicable Margin, all as defined in the credit agreement. The terms of the credit agreement provide for certain affirmative and negative covenants and require the Company to maintain certain financial ratios. Commitment fees are payable quarterly at an annual rate between 0.375% and 0.50% of the unused line of credit. Commitment fees for 2013, 2012 and 2011 were \$154, \$107 and \$51, respectively.

F-12

**Table of Contents****CARBO CERAMICS INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

(\$ in thousands, except per share data)

**4. Leases**

The Company leases certain property, plant and equipment under operating leases, primarily consisting of railroad equipment leases. Net minimum future rental payments due under non-cancelable operating leases with remaining terms in excess of one year as of December 31, 2013 are as follows:

2014	\$ 14,655
2015	15,450
2016	16,150
2017	13,142
2018	11,247
Thereafter	38,196
<b>Total</b>	<b>\$ 108,840</b>

Leases of railroad equipment generally provide for renewal options at their fair rental value at the time of renewal. In the normal course of business, operating leases for railroad equipment are generally renewed or replaced by other leases. For the years ended December 31, 2014 and 2015, minimum future rental payments in the table above are presented net of sublease income related to subleases of railroad equipment of \$1,985 and \$1,619, respectively. Rent expense for all operating leases was \$22,542 in 2013, \$21,452 in 2012 and \$11,590 in 2011. For the year ended December 31, 2013, rent expense is stated net of sublease income of \$208.

**5. Income Taxes**

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities as of December 31 are as follows:

	<b>2013</b>	<b>2012</b>
<b>Deferred tax assets:</b>		
Employee benefits	\$ 1,757	\$ 1,032
Inventories	5,923	7,161
Goodwill	1,358	1,842
Other	4,438	3,761
 Total deferred tax assets	 13,476	 13,796
<b>Deferred tax liabilities:</b>		
Depreciation	54,973	45,056
Foreign earnings	1,816	2,665
 Total deferred tax liabilities	 56,789	 47,721

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Net deferred tax liabilities	\$ 43,313	\$ 33,925
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Foreign earnings in the table above are presented net of foreign tax credits of \$5,019 and \$4,432 as of December 31, 2013 and 2012, respectively, which are expected to be utilized upon repatriation of the foreign earnings.

F-13



**Table of Contents****CARBO CERAMICS INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

(\$ in thousands, except per share data)

Significant components of the provision for income taxes for the years ended December 31 are as follows:

	2013	2012	2011
<b>Current:</b>			
Federal	\$ 27,188	\$ 37,596	\$ 57,429
State	2,164	2,268	4,288
Foreign	842	1,581	1,374
<b>Total current</b>	<b>30,194</b>	<b>41,445</b>	<b>63,091</b>
<b>Deferred</b>	<b>10,121</b>	<b>11,212</b>	<b>4,223</b>
	<b>\$ 40,315</b>	<b>\$ 52,657</b>	<b>\$ 67,314</b>

Provision has been made for deferred U.S. income taxes on all foreign earnings based on the Company's intent to repatriate foreign earnings. The reconciliation of income taxes computed at the U.S. statutory tax rate to the Company's income tax expense for the years ended December 31 is as follows:

	2013		2012		2011	
	Amount	Percent	Amount	Percent	Amount	Percent
U.S. statutory rate	\$ 43,820	35.0%	\$ 55,507	35.0%	\$ 69,107	35.0%
State income taxes, net of federal tax benefit	2,097	1.7	2,199	1.4	3,103	1.6
Mining depletion	(2,751)	(2.2)	(2,606)	(1.6)	(1,162)	(0.6)
Section 199 Manufacturing Benefit and other	(2,851)	(2.3)	(2,443)	(1.6)	(3,734)	(1.9)
	<b>\$ 40,315</b>	<b>32.2%</b>	<b>\$ 52,657</b>	<b>33.2%</b>	<b>\$ 67,314</b>	<b>34.1%</b>

The Company had a recorded reserve of \$153 associated with uncertain tax positions as of December 31, 2013 and there were no significant changes to the recorded reserve during 2013. If these uncertain tax positions are recognized, substantially all of this amount would impact the effective tax rate. Related accrued interest and penalties are recorded in income tax expense and are not material.

The Company files its tax returns as prescribed by the tax laws of the jurisdictions in which it operates, the most significant of which are U.S. federal and certain state jurisdictions. The 2010 and subsequent tax years are still subject to examination. Various U.S. state jurisdiction tax years remain open to examination as well though the Company believes assessments, if any, would be immaterial to its consolidated financial statements.

## 6. Shareholders' Equity

### Common Stock

Holders of Common Stock are entitled to one vote per share on all matters to be voted on by shareholders and do not have cumulative voting rights. Subject to preferences of any Preferred Stock, the holders of Common Stock are entitled to receive ratably such dividends, if any, as may

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be declared from time to time by the Board of Directors out of funds legally available for that purpose. In the event of liquidation, dissolution or winding up of the Company, holders of Common Stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of any Preferred Stock then outstanding. The Common Stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the Common Stock. All outstanding shares of Common Stock are fully paid and non-assessable.

F-14

**Table of Contents**

**CARBO CERAMICS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(\$ in thousands, except per share data)**

On January 21, 2014, the Board of Directors declared a cash dividend of \$0.30 per share. The dividend was paid on February 18, 2014 to shareholders of record on February 3, 2014.

**Preferred Stock**

The Company's charter authorizes 5,000 shares of Preferred Stock. The Board of Directors has the authority to issue Preferred Stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or the designation of such series, without further vote or action by the Company's shareholders. In connection with adoption of a shareholder rights plan on February 13, 2002, the Company created the Series A Preferred Stock and authorized 2,000 shares of the Series A Preferred Stock. This shareholder rights plan expired in February 2012.

**Common Stock Repurchase Program**

On August 28, 2008, the Company's Board of Directors authorized the repurchase of up to two million shares of the Company's Common Stock. Shares are effectively retired at the time of purchase. During the years ended December 31, 2013, 2012 and 2011, the Company repurchased and retired 75,000, 60,000 and 55,000 shares respectively, at an aggregate price of \$5,833, \$5,727 and \$6,649, respectively. As of December 31, 2013, the Company has repurchased and retired 1,952,576 shares at an aggregate price of \$84,134.

**7. Stock Based Compensation**

The CARBO Ceramics Inc. Omnibus Incentive Plan (the Omnibus Incentive Plan) provides for granting of cash-based awards, stock options (both non-qualified and incentive) and other equity-based awards (including stock appreciation rights, phantom stock, restricted stock, restricted stock units, performance shares, deferred share units or share-denominated performance units) to employees and non-employee directors. The amount paid under the Omnibus Incentive Plan to any single participant in any calendar year with respect to any cash-based award shall not exceed \$2,000. Awards may be granted with respect to a number of shares of the Company's Common Stock that in the aggregate does not exceed 750,000 shares prior to the fifth anniversary of its effective date, plus (i) the number of shares that are forfeited, cancelled or returned, and (ii) the number of shares that are withheld from the participants to satisfy an option exercise price or minimum statutory tax withholding obligations. No more than 50,000 shares may be granted to any single participant in any calendar year. Equity-based awards may be subject to performance-based and/or service-based conditions. With respect to stock options and stock appreciation rights granted, the exercise price shall not be less than the market value of the underlying Common Stock on the date of grant. The maximum term of an option is ten years. Restricted stock awards granted generally vest (i.e., transfer and forfeiture restrictions on these shares are lifted) in equal annual installments over a three-year period, but subject to certain limitations, awards may specify other vesting periods. As of December 31, 2013, 496,455 shares were available for issuance under the Omnibus Incentive Plan.

As of December 31, 2012, all compensation cost related to stock options granted under the expired stock option plan has been recognized. During 2012, a total of 2,425 options, with a weighted-average exercise price of \$22.35 per share, were exercised. There were no options outstanding at December 31, 2012 and thereafter. The total intrinsic value of options exercised during the years ended December 31, 2013, 2012 and 2011 was none, \$118, and \$346, respectively.

**Table of Contents****CARBO CERAMICS INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

(\$ in thousands, except per share data)

A summary of restricted stock activity and related information for the year ended December 31, 2013 is presented below:

	Shares	Weighted-Average Grant-Date Fair Value
Nonvested at January 1, 2013	115,722	\$ 99.50
Granted	90,243	\$ 82.18
Vested	(52,621)	\$ 94.92
Forfeited	(17,149)	\$ 93.91
Nonvested at December 31, 2013	136,195	\$ 90.50

As of December 31, 2013, there was \$6,467 of total unrecognized compensation cost, net of estimated forfeitures, related to restricted shares granted under the Omnibus Incentive Plan. That cost is expected to be recognized over a weighted-average period of 1.8 years. The weighted-average grant date fair value of restricted stock granted during the years ended December 31, 2013, 2012 and 2011 was \$82.18, \$105.22 and \$104.07, respectively. The total fair value of shares vested during the years ended December 31, 2013, 2012 and 2011 was \$4,995, \$4,696 and \$2,712, respectively.

The Company has made phantom stock awards to key international employees pursuant to the Omnibus Incentive Plan. The units subject to an award vest and cease to be forfeitable in equal annual installments over a three-year period. Participants awarded units of phantom shares are entitled to a lump sum cash payment equal to the fair market value of a share of Common Stock on the vesting date. In no event will Common Stock of the Company be issued with regard to outstanding phantom shares. As of December 31, 2013, there were 14,590 units of phantom shares granted under the plan, of which 6,156 have vested and 1,304 have been forfeited, with a total value of \$831, a portion of which is accrued as a liability within Accrued Payroll and Benefits.

**8. Earnings Per Share**

ASC Topic 260, *Earnings Per Share*, provides that unvested share-based payment awards that contain non-forfeitable rights to dividends or dividend equivalents (whether paid or unpaid) are participating securities and shall be included in the computation of earnings per share pursuant to the two-class method. The Company's outstanding non-vested restricted stock awards are participating securities. Accordingly, earnings per common share are computed using the two-class method.

**Table of Contents****CARBO CERAMICS INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

(\$ in thousands, except per share data)

The following table sets forth the computation of basic and diluted earnings per share under the two-class method:

	2013	2012	2011
Numerator for basic and diluted earnings per share:			
Net income	\$ 84,886	\$ 105,933	\$ 130,136
Effect of reallocating undistributed earnings of participating securities	(530)	(553)	(749)
Net income available under the two-class method	\$ 84,356	\$ 105,380	\$ 129,387
Denominator:			
Denominator for basic earnings per share weighted-average shares	22,957,013	22,968,696	23,011,087
Effect of dilutive securities:			
Employee stock options (See Note 7)		625	1,332
Deferred stock awards (See Note 7)			
Dilutive potential common shares		625	1,332
Denominator for diluted earnings per share adjusted weighted-average shares	22,957,013	22,969,321	23,012,419
Basic earnings per share	\$ 3.67	\$ 4.59	\$ 5.62
Diluted earnings per share	\$ 3.67	\$ 4.59	\$ 5.62

**9. Quarterly Operating Results (Unaudited)**

Quarterly results for the years ended December 31, 2013 and 2012 were as follows:

	March 31	Three Months Ended		December 31
		June 30	September 30	
<b>2013</b>				
Revenues	\$ 147,657	\$ 153,744	\$ 201,477	\$ 164,520
Gross profit	42,384	39,333	62,759	48,519
Net income	17,577	16,307	30,148	20,854
Earnings per share:				
Basic	\$ 0.76	\$ 0.71	\$ 1.31	\$ 0.90
Diluted	\$ 0.76	\$ 0.71	\$ 1.31	\$ 0.90
<b>2012</b>				
Revenues	\$ 163,166	\$ 177,614	\$ 151,134	\$ 153,622
Gross profit	63,464	64,253	50,150	45,638
Net income	30,291	31,917	23,898	19,827
Earnings per share:				

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Basic	\$	1.31	\$	1.38	\$	1.04	\$	0.86
Diluted	\$	1.31	\$	1.38	\$	1.04	\$	0.86

Quarterly data may not sum to full year data reported in the Consolidated Financial Statements due to rounding.

F-17

**Table of Contents****CARBO CERAMICS INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

(\$ in thousands, except per share data)

**10. Sales to Customers**

The following schedule presents customers from whom the Company derived 10% or more of total revenues for the years ended December 31:

	<b>Major Customers</b>	
	<b>A</b>	<b>B</b>
2013	13.1%	34.7%
2012	13.7%	35.2%
2011	15.0%	33.3%

**11. Geographic Information**

Long-lived assets, consisting of net property, plant and equipment and other long-term assets, as of December 31 in the United States and other countries are as follows:

	<b>2013</b>	<b>2012</b>	<b>2011</b>
Long-lived assets:			
United States	\$ 454,031	\$ 403,534	\$ 377,667
International (primarily China and Russia)	35,372	36,535	40,835
Total	\$ 489,403	\$ 440,069	\$ 418,502

Revenues outside the United States accounted for 21%, 23% and 21% of the Company's revenues for 2013, 2012 and 2011, respectively. Revenues for the years ended December 31 in the United States, Canada and other countries are as follows:

	<b>2013</b>	<b>2012</b>	<b>2011</b>
Revenues:			
United States	\$ 529,603	\$ 500,106	\$ 495,777
Canada	43,329	30,929	34,001
Other international	94,466	114,501	95,927
Total	\$ 667,398	\$ 645,536	\$ 625,705

**12. Benefit Plans**

The Company has defined contribution savings and profit sharing plans pursuant to Section 401(k) of the Internal Revenue Code. Benefit costs recognized as expense under these plans consisted of the following for the years ended December 31:

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	2013	2012	2011
Contributions:			
Profit sharing	\$ 2,126	\$ 2,132	\$ 2,690
Savings	1,609	1,241	1,081
	\$ 3,735	\$ 3,373	\$ 3,771

All contributions to the plans are 100% participant directed. Participants are allowed to invest up to 20% of contributions in the Company's Common Stock.

F-18



**Table of Contents**

**CARBO CERAMICS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(\$ in thousands, except per share data)**

**13. Commitments**

In January 2011, the Company entered into an agreement with one of the Company's existing suppliers to purchase from the supplier at least 70 percent of the annual kaolin requirements for the Eufaula plant at specified contract prices. The term of the agreement was three years, with options to extend for an additional six years. In May 2012, the agreement was amended to require the Company to purchase from the supplier at least 50 percent of the annual kaolin requirements for the Eufaula, Alabama plant at specified contract prices for the remainder of 2012 and the ensuing five calendar years. The agreement has options to extend the term for an additional three years. For the years ended December 31, 2013, 2012 and 2011, the Company purchased from the supplier \$3,788, 3,012 and \$3,205, respectively, of kaolin under the agreement.

In January 2003, the Company entered into a mining agreement with a contractor to provide kaolin for the Company's McIntyre plant at specified contract prices, from lands owned or leased by either the Company or the contractor. The term of the agreement, which commenced on January 1, 2003, and remains in effect until such time as all Company-owned minerals have been depleted, requires the Company to accept delivery from the contractor of at least 80 percent of the McIntyre plant's annual kaolin requirements. For the years ended December 31, 2013, 2012 and 2011, the Company purchased \$1,381, \$2,491 and \$2,900, respectively, of kaolin under the agreement.

In October 2008, the Company entered into a ten-year agreement, with options to extend for an additional ten years, to purchase a minimum of 40,000 tons of uncalcined bauxite each year during the first three years of the agreement. Thereafter, the minimum required purchase increased to 70,000 tons annually. The bauxite is purchased at specified contract prices. After meeting annual minimum requirements for the first three years, the agreement was terminated in 2012 with no further required minimum purchases. For the year ended December 31, 2011, the Company purchased \$1,400 of bauxite under the agreement.

In 2002, the Company entered into a ten-year agreement with a supplier to purchase hard clay for its China plant at a specified contract price. The ten-year agreement, which expired in 2011, required the Company to accept delivery from the supplier for at least 80 percent of the plant's annual requirements. For the year ended December 31, 2011, the Company purchased \$2,918 of material under this agreement.

In July 2011, the Company entered into a new agreement with a supplier to provide hydro sized sand for the Company's Marshfield, Wisconsin plant at a specified contract price. The term of the agreement was five years commencing on July 30, 2011 and required the Company to purchase a minimum of 40,000 tons and 100,000 tons of hydro sized sand during 2011 and 2012, respectively. Effective January 30, 2012, the agreement was amended and requires the Company to purchase a minimum of 150,000 tons of hydro sized sand annually during 2012 and 2013 and a minimum of 350,000 tons of hydro sized sand in 2014, all at a stated contract price. For the years ended December 31, 2013, 2012 and 2011, the Company purchased \$3,546, 2,538 and \$462, respectively, of sand under this agreement.

In May 2012, the Company entered into a new supply agreement to provide kaolin and bauxite to a manufacturing plant in Millen, Georgia, once operations commence. Construction of the facility is expected to be completed in early 2014. The agreement requires the Company to purchase at least 50 percent of the plant's annual requirements of such products, and has an initial term of five years with options to extend for an additional five years.

The Company has entered into a lease agreement dated November 1, 2008 with the Development Authority of Wilkinson County (the "Wilkinson County Development Authority") and a lease agreement dated November 1, 2012 with the Development Authority of Jenkins County (the "Jenkins County Development Authority") and together with the Wilkinson County Development Authority, the "Development Authorities") each in the State of

**Table of Contents**

**CARBO CERAMICS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(\$ in thousands, except per share data)**

Georgia. Pursuant to the 2008 agreement, the Wilkinson County Development Authority holds the title to the real and personal property of the Company's McIntyre and Toombsboro manufacturing facilities and leases the facilities to the Company for an annual rental fee of \$50 per year through the year 2022. Pursuant to the 2012 agreement, the Jenkins County Development Authority holds title to the real estate and personal property of the Company's Millen, Georgia manufacturing facility, which is currently under construction, and leases the facility to the Company until the tenth anniversary of completion of the final phase of the facility. At any time prior to the scheduled termination of either lease, the Company has the option to terminate the lease and purchase the property for a nominal fee plus the payment of any rent payable through the balance of the lease term. Furthermore, the Company has security interests in the titles held by the Development Authorities. The Company has also entered into a Memorandum of Understanding (the "MOU") with the Development Authorities and other local agencies, under which the Company receives tax incentives in exchange for its commitment to invest in the county and increase employment. The MOU with the Jenkins County Development Authority also requires the Company to pay an administrative payment of \$50 per year during the term of the Millen lease. The Company is required to achieve certain employment levels in order to retain its tax incentives. In the event the Company does not meet the agreed-upon employment targets or the MOU is otherwise terminated, the Company would be subjected to additional property taxes annually. The properties subject to these lease agreements are included in Property, Plant and Equipment (net book value of \$292,190 at December 31, 2013) in the accompanying consolidated financial statements.

The Company uses natural gas to power its domestic manufacturing plants. From time to time the Company enters into contracts to purchase a portion of the anticipated natural gas requirements at specified prices. As of December 31, 2013, the Company had natural gas contracts totaling \$21,010, \$21,009, \$13,949 and \$3,551 for years ended 2014, 2015, 2016 and 2017, respectively.

**14. Employment Agreements**

The Company has an employment agreement through December 31, 2014 with its President and Chief Executive Officer. The agreement provides for an annual base salary and incentive bonus. If the President and Chief Executive Officer is terminated early without cause, the Company will be obligated to pay two years base salary and a prorated incentive bonus. Under the agreement, the timing of the payment of severance obligations to the President in the event of the termination of his employment under certain circumstances has been conformed so that a portion of such obligations will be payable in a lump sum, with the remainder of the obligations to be paid over an 18 month period. The agreement also contains a two-year non-competition covenant that would become effective upon termination for any reason. The employment agreement extends automatically for successive one-year periods without prior written notice.

**15. Foreign Currencies**

As of December 31, 2013, the Company's net investment that is subject to foreign currency fluctuations totaled \$89,580, and the Company has recorded a cumulative foreign currency translation loss of \$3,261, net of deferred income tax benefit. This cumulative translation loss is included in and is the only component of Accumulated Other Comprehensive Loss. There were no amounts reclassified to net income during the year ended December 31, 2013.

**16. Legal Proceedings and Regulatory Matters**

The Company is subject to legal proceedings, claims and litigation arising in the ordinary course of business. While the outcome of these matters is currently not determinable, management does not expect that the ultimate costs to resolve these matters will have a material adverse effect on the Company's consolidated financial position, results of operations, or cash flows.



**Table of Contents**

**CARBO CERAMICS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(\$ in thousands, except per share data)**

On February 9, 2012, the Company and two of its officers, Gary A. Kolstad and Ernesto Bautista III, were named as defendants in a purported class-action lawsuit filed in the United States District Court for the Southern District of New York (the February SDNY Lawsuit), brought on behalf of shareholders who purchased the Company's Common Stock between October 27, 2011 and January 26, 2012 (the Relevant Time Period). On April 10, 2012, a second purported class-action lawsuit was filed against the same defendants in the United States District Court for the Southern District of New York, brought on behalf of shareholders who purchased or sold CARBO Ceramics Inc. option contracts during the Relevant Time Period (the April SDNY Lawsuit), and collectively with the February SDNY Lawsuit, the Federal Securities Lawsuit. In June 2012, the February SDNY Lawsuit and the April SDNY Lawsuit were consolidated, and will proceed as one lawsuit. The Federal Securities Lawsuit alleges violations of the federal securities laws arising from statements concerning the Company's business operations and business prospects that were made during the Relevant Time Period and requests unspecified damages and costs. In September 2012, the Company and Messrs. Kolstad and Bautista filed a motion to dismiss this lawsuit. The motion to dismiss was granted, and the Federal Securities Lawsuit was dismissed without prejudice in June 2013. In September 2013, the plaintiffs filed a motion requesting leave to file a second amended complaint and sustain the lawsuit. In January 2014, the Court denied plaintiffs' motion, and entered a judgment in favor of the Company and Messrs. Kolstad and Bautista. The plaintiffs have the right to appeal this judgment for a period of 30 days from entry.

On June 13, 2012, the Directors of the Company and Mr. Bautista were named as defendants in a purported derivative action lawsuit brought on behalf of the Company by a stockholder in District Court in Harris County, Texas (the Harris County Lawsuit). This lawsuit alleges various breaches of fiduciary duty and other duties by the defendants that generally are related to the Federal Securities Lawsuit, as well as a breach of duty by certain defendants in connection with stock sales. The lawsuit requests unspecified damages and costs, and has been further stayed, pending final resolution of the Federal Securities Lawsuit.

In October 2013, the Company made a voluntary disclosure to the State of Georgia Environmental Protection Department (EPD) concerning the air emissions of its Toombsboro, Georgia manufacturing facility. Specifically, the disclosure concerns the emission of a specific substance that exceeds permitted levels under applicable regulations. In November 2013, the Company entered into a consent decree to resolve this matter with EPD. Pursuant to the consent decree, the Company paid the EPD \$300, and has agreed to install additional emissions control equipment by May 2014.

The Company cannot predict the ultimate outcome or duration of any lawsuit described in this report.

**17. Subsequent Events**

In January 2014, the Company awarded 73,785 shares of restricted stock to certain employees. The fair value of the stock award on the date of grant totaled \$8,278, which will be recognized as expense, net of estimated forfeitures, on a straight-line basis over the three-year vesting period.

In January 2014, the Company awarded 3,590 units of phantom shares to certain key international employees. The fair value of the stock award on the date of grant totaled \$403.

In February 2014, the Company repurchased and retired 36,969 common shares at an aggregate price of \$4,062 under the common stock repurchase program.

## **Table of Contents**

### **Exhibit Index**

3.1	Restated Certificate of Incorporation of CARBO Ceramics Inc. (incorporated by reference to Exhibit 3.1 of the Registrant's Form 10-Q filed for the period ending June 30, 2012)
3.2	Second Amended and Restated By-Laws of CARBO Ceramics Inc. (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K Current Report filed March 20, 2009)
4.1	Form of Common Stock Certificate of CARBO Ceramics Inc. (incorporated by reference to Exhibit 4.1 of the Registrant's Form S-1 Registration Statement No. 333-1884 filed July 19, 1996)
4.2	Certificate of Designations of Series A Preferred Stock (incorporated by reference to Exhibit 2 of the Registrant's Form 8-A12B Registration Statement No. 001-15903 filed February 25, 2002)
10.1	Mining Agreement dated as of January 1, 2003 between CARBO Ceramics Inc. and Arcilla Mining & Land Co. (incorporated by reference to Exhibit 10.8 of the Registrant's Form 10-K Annual Report for the year ended December 31, 2002)
10.2	Addendum to Mining Agreement dated as of November 10, 2009 between CARBO Ceramics Inc. and Arcilla Mining & Land Co. (incorporated by reference to Exhibit 10.3 of the Registrant's Form 10-K Annual Report for the year ended December 31, 2010)
*10.3	Second Amended and Restated Employment Agreement dated effective as of January 1, 2012, by and between CARBO Ceramics Inc. and Gary A. Kolstad (incorporated by reference to Exhibit 10.8 of the Registrant's Form 10-K filed for the period ending December 31, 2011)
10.4	Proppant Supply Agreement dated as of August 28, 2008 between CARBO Ceramics Inc. and Halliburton Energy Services, Inc. (incorporated by reference to Exhibit 10.3 of the Registrant's Form 10-Q Quarterly Report for the quarter ended September 30, 2008)
10.5	Amendment No. 1 to Proppant Supply Agreement dated as of February 28, 2011 between CARBO Ceramics Inc. and Halliburton Energy Services, Inc. (incorporated by reference to Exhibit 10.1 of the Registrant's Form 10-Q Quarterly Report for the quarter ended March 31, 2011)
10.6	Side Letter to Proppant Supply Agreement dated as of August 26, 2011 between CARBO Ceramics Inc. and Halliburton Energy Services, Inc. (incorporated by reference to Exhibit 10.1 of the Registrant's Form 10-Q Quarterly Report for the quarter ended September 30, 2011)
10.7	Lease Agreement dated as of November 1, 2008 between the Development Authority of Wilkinson County and CARBO Ceramics Inc. (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K Current Report filed December 30, 2008)
10.8	Option Agreement dated as of November 1, 2008 between the Development Authority of Wilkinson County and CARBO Ceramics Inc. (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K Current Report filed December 30, 2008)
10.9	Lease Agreement dated as of November 1, 2012 between the Development Authority of Jenkins County and CARBO Ceramics Inc. (incorporated by reference to Exhibit 10.9 of the Registrant's Form 10-K Annual Report for the year ended December 31, 2012)
*10.10	CARBO Ceramics Inc. Omnibus Incentive Plan (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K Current Report filed May 21, 2009)
*10.11	Form of Officer Restricted Stock Award Agreement for Omnibus Incentive Plan (incorporated by reference to Exhibit 10.20 of the Registrant's Form 10-K Annual Report for the year ended December 31, 2010)
*10.12	Form of Amended and Restated Officer Restricted Stock Award Agreement for Omnibus Incentive Plan
*10.13	Form of Non-Employee Director Restricted Stock Award Agreement for Omnibus Incentive Plan (incorporated by reference to Exhibit 10.21 of the Registrant's Form 10-K Annual Report for the year ended December 31, 2010)

## **Table of Contents**

*10.14	Form of Amended and Restated Non-Employee Director Restricted Stock Award Agreement for Omnibus Incentive Plan
*10.15	Form of Performance-Based Cash Award Agreement for Omnibus Incentive Plan (incorporated by reference to Exhibit 10.4 of the Registrant's Form 8-K Current Report filed May 21, 2009)
*10.16	Description of Annual Non-Employee Director Stock Grants (incorporated by reference to Exhibit 10.1 of the Registrant's Form 10-Q Quarterly Report for the quarter ended June 30, 2010)
*10.17	Description of Modification to Annual Non-Employee Director Stock Grants (incorporated by reference to Exhibit 10.2 of the Registrant's Form 10-Q Quarterly Report for the quarter ended March 31, 2011)
*10.18	Description of Modification to the Annual Non-Employee Director Stock Grants (incorporated by reference to Exhibit 10.2 of the Registrant's Form 10-Q Quarterly Report for the quarter ended March 31, 2012).
10.19	Description of Modification to Annual Non-Employee Director Stock Grants (incorporated by reference to Exhibit 10.1 of the Registrant's Form 10-Q Quarterly Report for the quarter ended March 31, 2013).
*10.20	CARBO Ceramics Inc. Omnibus Incentive Plan Annual Incentive Arrangement (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K Current Report filed January 21, 2010)
10.21	Office Lease dated as of January 20, 2009 between I-10 EC Corridor #2 Limited Partnership and CARBO Ceramics Inc. (incorporated by reference to Exhibit 10.27 of the Registrant's Form 10-K Annual Report for the year ended December 31, 2009)
10.22	First Amendment to Lease dated as of January 15, 2010 between I-10 EC Corridor #2 Limited Partnership and CARBO Ceramics Inc. (incorporated by reference to Exhibit 10.28 of the Registrant's Form 10-K Annual Report for the year ended December 31, 2009)
10.23	Credit Agreement, dated as of January 29, 2010, among CARBO Ceramics Inc., as borrower, Wells Fargo Bank, National Association, as administrative agent, issuing lender and swing line lender, and the lenders named therein (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K Current Report filed February 4, 2010).
10.24	Amendment No. 1, dated as of March 5, 2012, among CARBO Ceramics Inc., as borrower, Wells Fargo Bank, National Association, as administrative agent, issuing lender and swing line lender, and the lenders named therein. (incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K Current Report filed March 6, 2012).
10.25	Amendment No. 2 to Credit Agreement, dated as of July 25, 2013, among CARBO Ceramics Inc., as borrower, Wells Fargo Bank, National Association, as administrative agent, issuing lender and swing line lender, and the lenders named therein (incorporated by reference to Exhibit 10.1 of the Registrant's Form 10-Q Quarterly Report for the quarter ended June 30, 2013).
*10.26	Form of Change in Control Severance Agreement (incorporated by reference to Exhibit 10.1 of the Registrant's Form 10-Q Quarterly Report for the quarter ended March 31, 2012).
10.27	Separation Agreement, made as of August 9, 2012, by and between David G. Gallagher and CARBO Ceramics Inc. (incorporated by reference to Exhibit 10.1 of the Registrant's Form 10-Q Quarterly Report for the quarter ended September 30, 2012).
*10.28	Summary of initial compensation terms for Don P. Conkle (incorporated by reference to Exhibit 10.2 of the Registrant's Form 10-Q Quarterly Report for the quarter ended September 30, 2012).
21	Subsidiaries
23	Consent of Independent Registered Public Accounting Firm
31.1	Rule 13a-14(a)/15d-14(a) Certification by Gary A. Kolstad

**Table of Contents**

31.2	Rule 13a-14(a)/15d-14(a) Certification by Ernesto Bautista III
32	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
95	Mine Safety Disclosures
101	The following financial information from the Company's Annual Report on Form 10-K for the year ended December 31, 2013, formatted in XBRL: (i) Consolidated Balance Sheets; (ii) Consolidated Statements of Income; (iii) Consolidated Statements of Shareholders' Equity; (iv) Consolidated Statements of Cash Flows; and (v) Notes to the Consolidated Financial Statements.

\* Management contract or compensatory plan or arrangement filed as an exhibit pursuant to Item 15(b) of the requirements for an Annual Report on Form 10-K.