CLIFFS NATURAL RESOURCES INC.
Form 424B5
February 09, 2017

The information in this preliminary prospectus supplement and the accompanying prospectus is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities or a solicitation of an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-215980
SUBJECT TO COMPLETION
Preliminary Prospectus Supplement, Dated February 9, 2017
(To Prospectus dated February 9, 2017)
P R O S P E C T U S
50,000,000 Common Shares
Cliffs Natural Resources Inc.

We are selling 50,000,000 of our common shares, par value $0.125 per share.
Our common shares trade on the New York Stock Exchange under the symbol “CLF.” On February 8, 2017, the last sale price of the common shares as reported on the New York Stock Exchange was $9.52 per share.
Investing in the common shares involves risks that are described in the “Risk Factors” section beginning on page S-11 of this prospectus supplement.

	Per Share	Total
Public offering price	$	$
Underwriting discount[(1)]	$	$
Proceeds, before expenses, to us	$	$

(1) See "Underwriting" for a description of the compensation payable to the underwriter.
The underwriter may also exercise its option to purchase up to an additional 7,500,000 common shares from us, at the public offering price, less the underwriting discount, for 30 days after the date of this prospectus supplement.
Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.
The shares will be ready for delivery on or about February , 2017.

Goldman,
Sachs &
Co.

February , 2017

Table of Contents

Table of Contents

Prospectus Supplement

Prospectus

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

We provide information to you about this offering in two separate documents. The accompanying prospectus provides general information about us and the common shares we may offer from time to time, some of which may not apply to this offering. This prospectus supplement describes the specific details regarding this offering. Additional information is incorporated by reference into this prospectus supplement. If information in this prospectus supplement is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement. You should read both this prospectus supplement and the accompanying prospectus together with additional information under the heading "Where You Can Find More Information" and "Information We Incorporate By Reference."

We have not, and the underwriter has not, authorized anyone to provide you with any information other than that contained or incorporated by reference into this prospectus supplement, the accompanying prospectus or in any free writing prospectus that we may provide to you. We and the underwriter take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. You should not assume that the information contained in this prospectus supplement, the accompanying prospectus or any document incorporated by reference is accurate as of any date other than the date mentioned on the cover page of these documents. We are not, and the underwriter is not, making offers to sell the common shares in any jurisdiction in which an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation.

References in this prospectus supplement to the terms "we," "us," "our," or "Cliffs" or other similar terms mean Cliffs Natural Resources Inc. and its consolidated subsidiaries, unless we state otherwise or the context indicates otherwise. As used in this prospectus supplement, the term "ton" means a long ton (equal to 2,240 pounds) when referring to our U.S. Iron Ore business segment and the term "metric ton" means a metric ton (equal to 1,000 kilograms or 2,205 pounds) when referring to our Asia Pacific Iron Ore business segment.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational reporting requirements of the Securities Exchange Act of 1934, or Exchange Act. We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission, or SEC. Our SEC filings are available over the Internet at the SEC's website at www.sec.gov. You may read and copy any reports, statements and other information filed by us at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call 1-800-SEC-0330 for further information on the Public Reference Room.

We make available, free of charge, on our website at www.cliffsnaturalresources.com, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports and statements as soon as reasonably practicable after they are filed with the SEC. The information contained on or accessible through our website is not part of this prospectus supplement or the accompanying prospectus, other than the documents that we file with the SEC that are incorporated by reference into this prospectus supplement or the accompanying prospectus.

Table of Contents

INFORMATION WE INCORPORATE BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus supplement the information in documents we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement, and information that we file later with the SEC will automatically update and supersede this information. Any statement contained in any document incorporated or deemed to be incorporated by reference into this prospectus supplement or in the accompanying prospectus shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in or omitted from this prospectus supplement or the accompanying prospectus, or in any other subsequently filed document that also is or is deemed to be incorporated by reference into this prospectus supplement or in the accompanying prospectus, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement or the accompanying prospectus.

We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until the completion of this offering:

- our Annual Report on Form 10-K for the year ended December 31, 2016;
- our Definitive Proxy Statement on Schedule 14A for the year ended December 31, 2015, filed on March 11, 2016, but only to the extent incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2015; and
- the description of our common shares contained in the Current Report on Form 8-K/A filed on May 21, 2008, including any subsequently filed amendments and reports updating such description.

We do not and will not, however, incorporate by reference into this prospectus supplement or in the accompanying prospectus any documents or portions thereof that are not deemed “filed” with the SEC, including any information furnished pursuant to Item 2.02 or Item 7.01 of our current reports on Form 8-K unless, and except to the extent, specified in such current reports. You may obtain copies of these filings without charge by accessing the investor relations section of www.cliffsnaturalresources.com or by requesting the filings in writing or by telephone at the following address and telephone number.

Cliffs Natural Resources Inc.
Investor Relations
200 Public Square
Suite 3300
Cleveland, Ohio 44114
Telephone Number: (216) 694-5700

NON-GAAP FINANCIAL MEASURES

We include in or incorporate by reference into this prospectus supplement certain non-GAAP financial measures, including earnings before interest, taxes, depreciation and amortization, or EBITDA, Adjusted EBITDA and cash cost of goods sold and operating expense rate per long/metric ton. EBITDA, Adjusted EBITDA and cash cost of goods sold and operating expense rate per long/metric ton are not measurements of financial performance or condition under generally accepted accounting principles in the United States, or GAAP, and should not be considered as alternatives to net income, operating income, or any other financial performance measure derived in accordance with GAAP. Additionally, EBITDA and Adjusted EBITDA are not intended to be measures of free cash flow available for management’s discretionary use, as they do not consider certain cash requirements such as interest payments, tax payments and debt service requirements. These non-GAAP financial measures are not calculated in the same manner by all companies and, accordingly, are not necessarily comparable to similarly titled measures of other companies and may not be appropriate measures for comparing performance relative to other companies. While we believe that the presentation of the non-GAAP financial measures will enhance an investor’s understanding of our operating performance, performance compared to other producers and a more accurate view of the cash outflows related to the sale of iron ore, the use of the non-GAAP financial measures as analytical tools has limitations and you should not consider it in isolation, or as a substitute for an analysis of our results of operations as reported in accordance with GAAP.

For additional information about EBITDA, Adjusted EBITDA and cash cost of goods sold and operating expense rate per long/metric ton, including a description of how EBITDA, Adjusted EBITDA and cash cost of goods sold and

Table of Contents

operating expense rate per long/metric ton, are calculated and reconciliations to the most directly comparable GAAP financial measures, see the section titled “Summary—Summary Consolidated Financial Data” of this prospectus supplement.

Table of Contents

PROSPECTIVE FINANCIAL INFORMATION

The prospective financial information included in or incorporated by reference into this prospectus supplement regarding our future performance represents our management's estimates as of the date of this prospectus supplement only. This information, which consists entirely of forward-looking statements, has been prepared by our management and is qualified by, and subject to, the assumptions, risks and uncertainties discussed or incorporated by reference into this prospectus supplement that may cause actual results to differ materially. Prospective financial information is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the information described above will not materialize or will vary significantly from actual results. For further discussion of some of the factors that may cause actual results to vary materially from the information included or incorporated by reference herein, see "Disclosure Regarding Forward-Looking Statements" and "Risk Factors." Accordingly, the prospective financial information included in or incorporated by reference into this prospectus supplement is only an estimate of what management believes is realizable as of the date of this prospectus supplement. Investors should also recognize that the reliability of any forecasted financial data diminishes the farther in the future that the data is forecast. In light of the foregoing, investors are urged to put the information in context and not to place undue reliance on it. See "Risk Factors—Our actual operating results may differ significantly from our guidance." The prospective financial information included in this prospectus supplement has been prepared by, and is the responsibility of our management. Deloitte & Touche LLP has neither examined, compiled nor performed any procedures with respect to the accompanying prospective financial information and, accordingly, Deloitte & Touche LLP does not express an opinion or any other form of assurance with respect thereto. The Deloitte & Touche LLP report incorporated by reference into this prospectus supplement relates to our historical financial information. It does not extend to the prospective financial information and should not be read to do so.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, including the documents incorporated by reference, contains, statements that constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements may be identified by the use of predictive, future-tense or forward-looking terminology, such as "believes," "anticipates," "expects," "estimates," "intends," "may," "will" or similar terms. These statements speak onl the date of this prospectus supplement or the date of the document incorporated by reference, as applicable, and we undertake no ongoing obligation, other than that imposed by law, to update these statements. These statements appear in a number of places in this prospectus supplement, including the documents incorporated by reference, and relate to, among other things, our intent, belief or current expectations of our directors or our officers with respect to: our future financial condition; results of operations or prospects; estimates of our economic iron ore reserves; our business and growth strategies; and our financing plans and forecasts. You are cautioned that any such forward-looking statements are not guarantees of future performance and involve significant risks and uncertainties, and that actual results may differ materially from those contained in or implied by the forward-looking statements as a result of various factors, some of which are unknown, including, without limitation:

- uncertainty and weaknesses in global economic conditions, including downward pressure on prices caused by oversupply or imported products, the impact of any reduced barriers to trade, the outcomes of recently filed and forthcoming trade cases, reduced market demand and any change to the economic growth rate in China;
- continued volatility of iron ore and steel prices and other trends, including the supply approach of the major iron ore producers, affecting our financial condition, results of operations or future prospects, specifically the impact of price-adjustment factors on our sales contracts;
- our level of indebtedness could limit cash flow available to fund working capital, capital expenditures, acquisitions and other general corporate purposes or ongoing needs of our business;
- availability of capital and our ability to maintain adequate liquidity;
- our ability to successfully conclude the Companies' Creditors Arrangement Act (Canada), or CCAA, process in a manner that minimizes cash outflows and associated liabilities;
- the impact of our customers reducing their steel production due to increased market share of steel produced using other methods or lighter-weight steel alternatives;
- uncertainty relating to restructurings in the steel industry and/or affecting the steel industry;

S-v

Table of Contents

- the outcome of any contractual disputes with our customers, joint venture partners or significant energy, material or service providers or any other litigation or arbitration;
- the ability of our customers and joint venture partners to meet their obligations to us on a timely basis or at all;
- problems or uncertainties with productivity, tons mined, transportation, mine-closure obligations, environmental liabilities, employee-benefit costs and other risks of the mining industry;
- our ability to reach agreement with our customers regarding any modifications to sales contract provisions, renewals or new arrangements;
- our actual levels of capital spending;
- our ability to successfully diversify our product mix and add new customers beyond our traditional blast furnace clientele;
- our actual economic iron ore reserves or reductions in current mineral estimates, including whether any mineralized material qualifies as a reserve;
- our ability to cost-effectively achieve planned production rates or levels;
- our ability to successfully identify and consummate any strategic investments or development projects;
- changes in sales volume or mix;
- events or circumstances that could impair or adversely impact the viability of a mine and the carrying value of associated assets, as well as any resulting impairment charges;
- our ability to maintain appropriate relations with unions and employees;
- impacts of existing and increasing governmental regulation and related costs and liabilities, including failure to receive or maintain required operating and environmental permits, approvals, modifications or other authorization of, or from, any governmental or regulatory entity and costs related to implementing improvements to ensure compliance with regulatory changes;
- uncertainties associated with natural disasters, weather conditions, unanticipated geological conditions, supply or price of energy, equipment failures and other unexpected events;
- adverse changes in currency values, currency exchange rates, interest rates and tax laws;
- risks related to international operations;
- the potential existence of significant deficiencies or material weakness in our internal control over financial reporting;
- our ability to complete the Refinancing Transactions (as described under "Summary—Recent Developments") on terms that are commercially attractive to us or at all; and
- other risks described in our reports filed with the SEC.

These factors and the other risk factors described in this prospectus supplement, including the documents incorporated by reference, are not necessarily all of the important factors that could cause actual results to differ materially from those expressed in any of our forward-looking statements. Other unknown or unpredictable factors also could harm our results. Consequently, there can be no assurance that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to or effects on us. Given these uncertainties, prospective investors are cautioned not to place undue reliance on such forward-looking statements.

Table of Contents

SUMMARY

This summary highlights information about us and our common shares being offered by this prospectus supplement. This summary is not complete and may not contain all of the information that you should consider prior to investing in our common shares. For a more complete understanding of us, we encourage you to read this prospectus supplement, including the information incorporated by reference into this prospectus supplement, and the other documents to which we have expressly referred you. In particular, we encourage you to read the historical financial statements, and the related notes, incorporated by reference into this prospectus supplement. Investing in our common shares involves significant risks, as described in the "Risk Factors" section in this prospectus supplement and our Annual Report on Form 10-K for the year ended December 31, 2016.

Our Company

Cliffs Natural Resources Inc. is a leading mining and natural resources company. Founded in 1847, we are recognized as the largest and oldest independent iron ore mining company in the United States. We are a major supplier of iron ore pellets to the North American steel industry from our mines and pellet plants located in Michigan and Minnesota. Additionally, we operate an iron ore mining complex in Western Australia. Driven by the core values of safety, social, environmental and capital stewardship, our employees endeavor to provide all stakeholders with operating and financial transparency.

We are organized through a global commercial group responsible for sales and delivery of our products and operations groups responsible for the production of the iron ore that we market. Our continuing operations are organized according to geographic location: U.S. Iron Ore and Asia Pacific Iron Ore.

In the U.S., we currently own or co-own four operational iron ore mines plus one indefinitely idled mine. We are currently operating one iron ore mine in Michigan and three iron ore mines in Minnesota. All four mines are currently operating at or near full capacity. The Empire mine located in Michigan was indefinitely idled beginning on August 3, 2016. We plan to continue shipping Empire's remaining inventory of pellets into 2017. Our Asia Pacific operations consist solely of our Koolyanobbing iron ore mining complex in Western Australia, which is currently operating at or near full capacity.

U.S. Iron Ore

We are a major producer of iron ore pellets, primarily selling production from U.S. Iron Ore to integrated steel companies in the U.S., Canada and Mexico. We operate four iron ore mines located in Michigan and Minnesota. In Michigan, we are operating the Tilden mine. In Minnesota, we are operating the Northshore, United Taconite and Hibbing mines. The Empire mine located in Michigan, which historically had annual rated capacity of 5.5 million long tons, was indefinitely idled beginning on August 3, 2016. The U.S.-based mines currently have an annual rated capacity of 27.4 million long tons of iron ore pellet production, representing 55% of total U.S. pellet production capacity. Based on our equity ownership in these mines, our share of the annual rated production capacity is currently 20.0 million long tons, representing 40% of total U.S. annual pellet capacity.

We produce various grades of iron ore pellets, including standard, fluxed and direct reduction grade, or DR-grade,for use in our customers' operations as part of the steelmaking process. The variation in grades of iron ore pellets results from the specific chemical and metallurgical properties of the ores at each mine, the end user's steelmaking process and whether or not fluxstone is added in the process. Although the grade or grades of pellets currently delivered to each customer are based on that customer's preferences, which depend in part on the characteristics of the customer's steelmaking operation, in many cases our iron ore pellets can be used interchangeably. Standard pellets require less processing, are generally the least costly pellets to produce and are called "standard" because no ground fluxstone, such as limestone or dolomite, is added to the iron ore concentrate before turning the concentrate into pellets. In the case of fluxed pellets, fluxstone is added to the concentrate, which produces pellets that can perform at higher productivity levels in the customer's specific blast furnace and will minimize the amount of fluxstone the customer may be required to add to the blast furnace. DR-grade pellets require processing to make an iron unit that contains higher iron and lower silica content than a standard pellet. Unlike standard or fluxed pellets, DR-grade pellets are fed into a direct reduced iron facility, which then are converted as the raw material for an electric arc furnace, or EAF, producer.

Each of our U.S. Iron Ore mines is located near the Great Lakes. The majority of our iron ore pellets are transported via railroads to loading ports for shipment via vessel to steelmakers in North America.

Table of Contents

Our U.S. Iron Ore revenues primarily are derived from sales of iron ore pellets to the North American integrated steel industry, consisting primarily of three major customers. Generally, we have multi-year supply agreements with our customers. Sales volume under these agreements largely is dependent on customer requirements, and in certain cases, we are the sole supplier of iron ore to the customer. Historically, each agreement has contained a base price that is adjusted annually using one or more adjustment factors. Factors that could result in a price adjustment include spot iron ore pricing, measures of general industrial inflation and steel prices. In May 2016, we agreed to a new contract with ArcelorMittal USA LLC (as the parent company of Ispat Inland Inc., ArcelorMittal Cleveland Inc. and ArcelorMittal Indiana Harbor LLC, as well as many other subsidiaries), which we collectively refer to as ArcelorMittal, through 2026. This extended our average remaining duration of our U.S. Iron Ore contracts from three years to approximately seven years.

For the years ended December 31, 2016, 2015 and 2014, we sold 18.2 million, 17.3 million and 21.8 million long tons of iron ore pellets, respectively, from our share of the production from our U.S. Iron Ore mines. U.S. Iron Ore's three largest customers accounted for approximately 87%, 93% and 86% of the segment's sales for the years ended December 31, 2016, 2015 and 2014, respectively.

At the end of 2016, our U.S. Iron Ore mines had proven and probable mineral reserves totaling 2,251.6 million long tons, which equates to approximately 728.4 million saleable long tons. For the year ended December 31, 2016, our U.S. Iron Ore segment had revenues of approximately $1,554.5 million and Adjusted EBITDA of approximately $359.6 million.

Asia Pacific Iron Ore

Our Asia Pacific Iron Ore operations are located in Western Australia and consist solely of our wholly owned Koolyanobbing operation. Koolyanobbing is a collective term for the ore deposits at Koolyanobbing, Mount Jackson and Windarling. There are approximately 70 miles separating the three mining areas. Banded iron formations host the mineralization, which is predominately hematite and goethite. Each deposit is characterized with different chemical and physical attributes and, in order to achieve customer product quality, ore in varying quantities from each deposit must be blended together.

Crushing and blending are undertaken at Koolyanobbing, where the crushing and screening plant is located. Once the blended ore has been crushed and screened into a direct lump and fines shipping product, it is transported by rail approximately 360 miles south to the Port of Esperance, via Kalgoorlie, for shipment to our customers in Asia.

Asia Pacific Iron Ore's production is under contract with steel companies primarily in China, Japan and South Korea. In March 2015, we extended the majority of our supply agreements with steel producers in China for two years. These contracts will currently expire in March 2017, but we anticipate that the majority of these contracts will be renewed for an additional 12 months. Our supply agreement with our client in South Korea was recently extended and will expire in December 2017. Our supply agreements with our customers in Japan currently expire in March 2017, but we anticipate these contracts also will be renewed for an additional 12 months. Pricing for our Asia Pacific Iron Ore Chinese customers consists of shorter-term pricing mechanisms of various durations up to three months based on the average of daily spot prices that are generally associated with the time of unloading of each shipment. Pricing with our Japanese and South Korean customers is generally consistent with the inputs used with our Chinese customers, but the pricing inputs are fixed before shipment.

For years ended December 31, 2016, 2015 and 2014, we sold 11.6 million, 11.6 million and 11.5 million metric tons of iron ore, respectively, from our Western Australia mines. Asia Pacific Iron Ore's five largest customers accounted for approximately 56%, 47% and 38% of the segment's sales in the years ended December 31, 2016, 2015 and 2014, respectively. For the year ended December 31, 2016, our Asia Pacific Iron Ore segment had revenues of approximately $554.5 million and Adjusted EBITDA of approximately $132.9 million.

At the end of 2016, we had approximately 42.7 million metric tons of proven and probable reserves in our Asia Pacific Iron Ore business.

Table of Contents

Our Strategy

Our key strategic initiatives include:

We are Focused on our Core U.S. Iron Ore Business

In 2014, we established a strategy centering the Company around our U.S. Iron Ore business. We are the market-leading iron ore producer in the U.S., supplying differentiated iron ore pellets under long-term contracts to the largest North American steel producers. We have the unique advantage of being a low cost producer of iron ore pellets in the U.S. market with significant transportation and logistics advantages to serve the U.S. steel market effectively. Pricing structures contained in and the long-term supply provided by our existing contracts, along with our low-cost operating profile, positions U.S. Iron Ore as a strong cash flow generator in most commodity pricing environments. Since instituting our core strategy of focusing on this business, we have achieved significant accomplishments including providing volume certainty by signing a new ten-year supply agreement with our largest customer; substantially reducing operating costs by making various operational improvements; and developing alternate iron unit strategies to provide opportunities to enter into the EAF end market.

Optimized, Divested or Shutdown All Non-Core Business Segments

Given the current and projected constructive iron ore pricing market, we are focused on optimizing the remaining ore reserve base of our Asia Pacific Iron Ore business. Asia Pacific Iron Ore is a well-recognized and reliable supplier to steelmakers in Asia. We will continue to operate Asia Pacific Iron Ore with very low total capital expenditures for the remaining life of the mine.

We commenced restructuring proceedings for our Eastern Canadian Iron Ore businesses under the CCAA in the first quarter of 2015. During the second quarter of 2015, the CCAA protection granted to the Bloom Lake Group was extended to include the Wabush Group to facilitate the reorganization of each of their businesses and operations. As of December 31, 2016, CCAA proceedings are still ongoing and the Monitor is evaluating all claims into the estate. Currently, there is uncertainty as to the amount of the distribution that will be made to the creditors of the estate, including, if any to Cliffs, and whether Cliffs could be held liable for claims that may be asserted by or on behalf of the Bloom Lake Group or the Wabush Group or by their respective representatives against non-debtor affiliates of the Bloom Lake Group and the Wabush Group.

On December 22, 2015, we closed the sale of our remaining North American Coal business, which included the Pinnacle mine in West Virginia and the Oak Grove mine in Alabama, to Seneca Coal Resources, LLC, which we refer to as Seneca. The sale marked our exit from the coal business and represents another very important step in the implementation of our U.S. Iron Ore pellet-centric strategy. Prior to this sale, it was determined by management as of March 31, 2015 that our North American Coal operating segment met the criteria to be classified as held for sale under ASC 205, Presentation of Financial Statements.

Maintaining Discipline on Costs and Capital Spending and Improving our Financial Flexibility

We believe our ability to execute our strategy is dependent on our improving financial position, balance sheet strength and financial flexibility, which will enable us to manage through the inherent cyclical demand for our products and volatility in commodity prices. We have developed a highly disciplined financial and capital expenditure plan with a focus on improving our cost profile and increasing long-term profitability. Our streamlined organization and support functions are well aligned to best serve our strategic direction. Our capital allocation plan is focused on strengthening our core U.S. Iron Ore operations to promote greater free cash flow generation.

As the implementation of our strategy has strengthened the business, we have put additional emphasis on the continued improvement of our balance sheet via continued reduction of long-term debt. Since the 2014 initiation of our transition strategy, we have reduced the principal of our long-term debt by 21% using various liability management strategies. Given the cyclical nature of our business, we feel that further reduction of our long-term debt will put us in an optimal position to manage through any commodity environment, and we continue to seek the best opportunities to accomplish this.

Table of Contents

Competitive Strengths

Resilient U.S. Iron Ore Operations

Our U.S. Iron Ore segment is the core focus of our business strategy. The U.S. Iron Ore segment is the primary contributor to our consolidated results, generating 74% of consolidated revenue and $359.6 million of consolidated Adjusted EBITDA for the year ended December 31, 2016. U.S. Iron Ore produces differentiated iron ore pellets that are customized for use in customers' blast furnaces as part of the steelmaking process. The grades of pellets currently delivered to each customer are based on that customer's preferences, which depend in part on the characteristics of the customer's blast furnace operation. We believe our long history of supplying customized pellets to the U.S. steel producers has resulted in a co-dependent relationship between us and our customers. This technical and operational co-dependency has enabled us to claim a substantial portion of the total U.S. iron ore market. Based on Cliffs' equity ownership in its U.S. mines, Cliffs' share of the annual rated production capacity is 20.0 million long tons, representing 40% of total U.S. annual pellet capacity. Long-lived assets with an average mine life of approximately 30 years provide the opportunity to maintain our significant market position well into the future.

We believe U.S. Iron Ore is uniquely positioned in the global iron ore market due to its reduced exposure to seaborne iron ore pricing. More than half of U.S. Iron Ore production is sold through long-term contracts that are structured with various formula-based pricing mechanisms that reference seaborne pricing, inflation factors and steel prices and mitigate the impact of any one factor's price volatility on our business.

In addition, we maintain lower costs compared to our competition as a result of our proximity to U.S. steelmaking operations. Our costs are lower as a result of inherent transportation advantages associated with our mine locations near the Great Lakes which allows for transportation via railroads and loading ports. U.S. Iron Ore mines also benefit from on-site pellet production and ore production facilities located a short distance from the mines.

Competitive Asia Pacific Iron Ore Operations

Although our annual production tonnage is substantially less than our competitors in the seaborne market, the Asia Pacific Iron Ore business maintains a competitive position with the major Australian iron ore producers. We produce a product mix of approximately 50% lump ore and 50% fines, which is a significantly higher lump mix than the major producers in Australia. This lump ore typically commands a premium in the seaborne market over iron ore fines. Further, our Asia Pacific Iron Ore segment is a cost competitive producer and requires minimal ongoing sustaining capital expenditures to continue our operations. Going forward, we will continue to operate Asia Pacific Iron Ore with a clear bias toward cash optimization.

Experienced Management Team

We have a seasoned and experienced management team with extensive mining sector knowledge and the functional disciplines required to manage and grow our business. In August 2014, the Board of Directors appointed Lourenco Goncalves as Chairman, President and Chief Executive Officer of the Company. Mr. Goncalves joined Cliffs with over 30 years of experience in the metals and mining industries. Effective as of January 1, 2017, P. Kelly Tompkins now serves as Executive Vice President & Chief Operating Officer of the Company. Mr. Tompkins, previously served as the Executive Vice President and Chief Financial Officer of the Company and has over 30 years of executive management experience including financial, legal, commercial and business development experience. Effective as of January 1, 2017, Timothy K. Flanagan now serves as Executive Vice President, Chief Financial Officer & Treasurer of the Company. Mr. Flanagan has held several positions with the Company since April 2008, and previously served as Vice President, Corporate Controller & Chief Accounting Officer of the Company. Other experienced members of executive leadership include Terry Fedor, Executive Vice President - U.S. Iron Ore, James Graham, Executive Vice President - Chief Legal Officer and Secretary, Maurice Harapiak, Executive Vice President - Human Resources, Terrence Mee, Executive Vice President - Global Commercial, and Clifford Smith, Executive Vice President - Business Development.

Recent Developments

Concurrent Tender Offers

Concurrently with this offering, we are conducting tender offers, which we refer to as the tender offers, for up to a total aggregate purchase price of $250.0 million of the following series of our senior notes: 5.900% senior notes

S-4

Table of Contents

due March 2020, which we refer to as our 5.900% 2020 Notes; 4.80% senior notes due October 2020, which we refer to as our 4.80% 2020 Notes; and 4.875% senior notes due 2021, which we refer to as our 2021 Notes. We refer to the 5.900% 2020 Notes, the 4.80% 2020 Notes and the 2021 Notes, collectively, as our “tender notes.” The tender offers will expire at midnight, New York City time, at the end of March 9, 2017, or such later date and time to which we extend the tender offers, unless earlier terminated. We intend to use a portion of the net proceeds from this offering to repurchase any tender notes validly tendered, not validly withdrawn and accepted for purchase in the tender offers. This offering is not conditioned upon the successful consummation of any or all of the tender offers. The tender offers are conditioned upon the issuance and sale of the common shares offered hereby.

The tender offers are conditioned upon a number of customary conditions. We are permitted, among other things, to amend or terminate any or all of the tender offers in accordance with the terms of the Offer to Purchase dated February 9, 2017 and applicable law, including increasing the total aggregate purchase price, and there is no assurance that the tender offers will be consummated in accordance with their terms, or at all. This prospectus supplement is not an offer to purchase or a solicitation of an offer to sell the tender notes. The tender offers are being made only by and pursuant to, and on the terms and subject to the conditions set forth in, the Offer to Purchase dated February 9, 2017 and the related letter of transmittal.

Proposed Debt Refinancing

We currently have outstanding $540.0 million aggregate principal amount of 8.25% senior secured notes due 2020, which we refer to as our First Lien Notes, $218.5 million aggregate principal amount of 8.00% 1.5 lien senior secured notes due 2020, which we refer to as our 1.5 Lien Notes, and $430.1 million aggregate principal amount of 7.75% second lien senior secured notes due 2020, which we refer to as our Second Lien Notes. We refer to our First Lien Notes, our 1.5 Lien Notes and our Second Lien Notes, collectively, as our Secured Notes.

Consistent with our strategy to strengthen our balance sheet and debt profile by, among other things, extending outstanding debt maturities, in the near term, we intend to issue approximately $600.0 million aggregate principal amount of senior unsecured long-term debt with an expected tenure of approximately eight years, the net proceeds of which would be used, along with a portion of the net proceeds from this offering, to redeem all of our outstanding 1.5 Lien Notes and Second Lien Notes. We refer to the proposed senior unsecured long-term debt issuance as the "Proposed Debt Refinancing." We refer to this offering and the Proposed Debt Refinancing and the use of the net proceeds therefrom, including the repurchase of the tender notes in the tender offers and the redemption of our Secured Notes, collectively, as the "Refinancing Transactions." The timing, amount and other terms of the Proposed Debt Refinancing are subject to market and other conditions. There can be no assurance that we will be able to consummate the Proposed Debt Refinancing on commercially reasonable terms or at all. This offering is not conditioned on the Proposed Debt Refinancing or the consummation of the tender offers.

The securities that may be issued pursuant to the Proposed Debt Refinancing have not been and will not be registered under the Securities Act of 1933, as amended, or Securities Act, and may not be offered or sold in the United States absent registration or an applicable exemption from the registration requirements under the Securities Act.

Corporate Information

Our principal executive offices are located at 200 Public Square, Suite 3300, Cleveland, Ohio 44114-2315. Our main telephone number is (216) 694-5700, and our website address is www.cliffsnaturalresources.com. The information contained on or accessible through our website is not part of this prospectus supplement, other than the documents that we file with the SEC that are incorporated by reference into this prospectus supplement.

Table of Contents

The Offering

Issuer	Cliffs Natural Resources Inc.
Common shares offered by us	50,000,000 common shares (or 57,500,000 common shares if the underwriter exercises its option to purchase additional shares in full).
Common shares outstanding immediately after this offering	283,074,091 common shares (or 290,574,091 common shares if the underwriter exercises its option to purchase additional shares in full).
Use of proceeds	We estimate that the net proceeds to us from this offering, after deducting estimated underwriting discounts and estimated offering expenses that we must pay, will be approximately $ million. If the underwriter exercises its option to purchase additional shares in full, we estimate that our net proceeds will be approximately $ million.
	We intend to use a portion of the net proceeds of this offering to fund the purchase of the tender notes in the tender offers as described under “Recent Developments—Concurrent Tender Offers,” including fees and expenses related to the tender offers. We intend to use the remaining net proceeds for general corporate purposes, including the redemption of a portion of our Secured Notes. See “Capitalization.”
Risk factors	Investing in our common shares involves substantial risk. For a discussion of risks relating to us, our business and an investment in our common shares, see the section titled “Risk Factors” on page S-11 of this prospectus supplement and in our Annual Report on Form 10-K and all other information set forth in and incorporated by reference into this prospectus supplement before investing in our common shares.
Exchange listing	Our common shares are traded on the New York Stock Exchange, or NYSE, under the symbol “CLF.”

Table of Contents

Summary Historical Consolidated Financial Data

The table below sets forth our summary historical consolidated financial and other statistical data for the periods presented. We derived the summary historical consolidated financial data as of and for the years ended December 31, 2016, 2015 and 2014 from our audited consolidated financial statements. Summary historical consolidated financial and other statistical data should be read in conjunction with our consolidated financial statements, the related notes and other financial information incorporated by reference into this prospectus supplement. During the first quarter of 2015, we began reporting our former Eastern Canadian Iron Ore and North American Coal businesses as discontinued operations, as reflected in our Annual Report on Form 10-K for the year ended December 31, 2016, which is incorporated by reference into this prospectus supplement. The summary historical consolidated financial data below reflects Eastern Canadian Iron Ore and North American Coal as discontinued operations.

The information presented below should be read together with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and accompanying notes included in the reports incorporated by reference into this prospectus supplement.

	Year Ended December 31,		
	2016[2]	2015[3]	2014[4]
Financial data (in millions, except per share and per ton amounts)[1]			
Revenue from product sales and services	$2,109.0	$2,013.3	$3,373.2
Cost of goods sold and operating expenses	(1,719.7)	(1,776.8)	(2,487.5)
Other operating expense	(148.5)	(85.2)	(755.6)
Operating income	240.8	151.3	130.1
Income from continuing operations	219.2	143.7	56.4
Loss from discontinued operations, net of tax	(19.9)	(892.1)	(8,368.0)
Net income (loss)	199.3	(748.4)	(8,311.6)
Loss (income) attributable to noncontrolling interest	(25.2)	(0.9)	1,087.4
Net income (loss) attributable to Cliffs shareholders	174.1	(749.3)	(7,224.2)
Preferred stock dividends	—	(38.4)	(51.2)
Income (loss) attributable to Cliffs common shareholders	$174.1	$(787.7)	$(7,275.4)
Earnings (loss) per common share attributable to Cliffs common shareholders - basic			
Continuing operations	$0.98	$0.63	$(0.14)
Discontinued operations	(0.10)	(5.77)	(47.38)
Earnings (loss) per common share attributable to Cliffs common shareholders - basic	$0.88	$(5.14)	$(47.52)
Earnings (loss) per common share attributable to Cliffs common shareholders - diluted			
Continuing operations	$0.97	$0.63	$(0.14)
Discontinued operations	(0.10)	(5.76)	(47.38)
Earnings (loss) per common share attributable to Cliffs common shareholders - diluted	$0.87	$(5.13)	$(47.52)
Total assets	$1,923.9	$2,135.5	$3,147.2
Long-term debt obligations (including capital leases)	$2,213.5	$2,755.6	$2,911.5
Net cash provided by operating activities	$303.0	$37.9	$358.9
Net cash used in investing activities	$(57.9)	$(103.2)	$(103.6)
Net cash provided by (used in) financing activities	$(206.4)	$61.0	$(288.3)
Distributions to preferred shareholders cash dividends[5]			
- Per depositary share	$—	$1.32	$1.76
- Total	$—	$38.40	$51.20
Distributions to common shareholders cash dividends[6]			

- Per share	$—	$—	$0.60
- Total	$—	$—	$92.50

Table of Contents

	Year Ended December 31, 2016[2]	2015[3]	2014[4]
Financial data (in millions, except per share and per ton amounts)[1]			
Repurchases of common shares	$—	$—	$—
Common shares outstanding - basic (millions)			
- Average for year	197.7	153.2	153.1
- At year-end	233.1	153.6	153.2
Iron ore and coal production and sales statistics			
(long tons - U.S. Iron Ore; metric tons - Asia Pacific Iron Ore)			
Production tonnage			
- U.S. Iron Ore	23.4	26.1	29.7
- Asia Pacific Iron Ore	11.8	11.7	11.4
Production tonnage - (Cliffs' share)			
- U.S. Iron Ore	16.0	19.3	22.4
Sales tonnage			
- U.S. Iron Ore	18.2	17.3	21.8
- Asia Pacific Iron Ore	11.6	11.6	11.5
Reconciliation of Net Income to EBITDA to Total Adjusted EBITDA			
Net Income (Loss)	$199.3	$(748.4)	$(8,311.6)
Less:			
Interest expense, net	(200.5)	(231.4)	(185.2)
Income tax benefit (expense)	12.2	(163.3)	1,302.0
Depreciation, depletion and amortization	(115.4)	(134.0)	(504.0)
Total EBITDA	$503.0	$(219.7)	$(8,924.4)
Less:			
Impairment of goodwill and other long-lived assets	$—	$(3.3)	$(635.5)
Impact of discontinued operations	(19.9)	(892.0)	(9,332.5)
Gain on extinguishment/restructuring of debt	166.3	329.9	16.2
Severance and contractor termination costs	(0.1)	(10.2)	(23.3)
Foreign exchange remeasurement	(16.8)	16.3	29.0
Proxy contest and change in control in SG&A	—	—	(26.6)
Supplies inventory write-off	—	(16.3)	—
Total Adjusted EBITDA	$373.5	$292.9	$1,048.3
EBITDA:			
U.S. Iron Ore	$342.4	$317.6	$805.6
Asia Pacific Iron Ore	128.3	35.3	(352.9)
Other[7]	32.3	(572.6)	(9,377.1)
Total EBITDA	$503.0	$(219.7)	$(8,924.4)
Adjusted EBITDA:			
U.S. Iron Ore	$359.6	$352.1	$833.5
Asia Pacific Iron Ore	132.9	(32.7)	252.9
Other	(119.0)	(91.9)	(38.1)
Total Adjusted EBITDA	$373.5	$292.9	$1,048.3

Table of Contents

Business Segment per Ton Information			
U.S. Iron Ore (Per long ton)			
Realized product revenue rate(8)	$75.71	$79.12	$102.36
Cash cost of goods sold and operating expense rate(9)	55.97	60.27	64.91
Depreciation, depletion and amortization	4.61	5.72	4.92
Total cost of goods sold and operating expense rate(8)	60.58	65.99	69.83
Sales margin	$15.13	$13.13	$32.53
Asia Pacific Iron Ore (Per metric ton)			
Realized product revenue rate(8)	$45.85	$39.93	$74.56
Cash cost of goods sold and operating expense rate(9)	33.94	36.95	51.36
Depreciation, depletion and amortization	2.16	2.18	12.65
Total cost of goods sold and operating expense rate(8)	36.10	39.13	64.01
Sales margin	$9.75	$0.80	$10.55

(1) Management determined as of March 31, 2015, that our North American Coal operating segment met the criteria to be classified as held for sale under ASC 205, Presentation of Financial Statements. The North American Coal segment continued to meet the criteria throughout 2015 until we sold our North American Coal operations during the fourth quarter of 2015. As such, all current and historical North American Coal operating segment results are included in our financial statements and classified within discontinued operations. On January 27, 2015, we announced that the Bloom Lake Group commenced restructuring proceedings, which we refer to as the Bloom Filing, under the CCAA with the Québec Superior Court (Commercial Division) in Montreal, which we refer to as the Court. At that time, the Bloom Lake Group was no longer generating revenues and was not able to meet its obligations as they came due. The Bloom Filing addressed the Bloom Lake Group's immediate liquidity issues and permits the Bloom Lake Group to preserve and protect its assets for the benefit of all stakeholders while restructuring and sale options are explored. As part of the CCAA process, the Court approved the appointment of a monitor and certain other financial advisors. Additionally, on May 20, 2015, we announced that the Wabush Group commenced restructuring proceedings, which we refer to as the Wabush Filing, with the Court under the CCAA. As a result of this action, the CCAA protections granted to the Bloom Lake Group were extended to include the Wabush Group to facilitate the reorganization of each of their businesses and operations. The Wabush Group was no longer generating revenues and was not able to meet its obligations as they came due. The inclusion of the Wabush Group in the existing Bloom Filing facilitated a more comprehensive restructuring and sale process of both the Bloom Lake Group and the Wabush Group which collectively included mine, port and rail assets. As part of the Wabush Filing, the Court approved the appointment of a monitor and certain other financial advisors. The monitor of the Wabush Group is also the monitor of the Bloom Lake Group. Financial results prior to the respective deconsolidations of the Bloom Lake and Wabush Groups and subsequent expenses directly associated with the Canadian Entities are included in our financial statements and classified within discontinued operations.
(2) During 2016, we recorded a net gain of $166.3 million related to debt restructuring activities that occurred throughout the year including the issuance

of $218.5 million aggregate principal of 1.5 Lien Senior Notes due 2020 in exchange for $512.2 of our existing senior notes, the issuance of an aggregate of 8.2 million shares in exchange for $56.9 million aggregate principal of our existing senior notes and a loss on the full redemption of our $283.6 million outstanding 2018 senior notes at a total redemption price of $301.0 million. We also issued 44.4 million common shares in an underwritten public offering. We received net proceeds of approximately $287.6 million at a public offering price of $6.75 per common share.

(3) On January 27, 2015, we announced that the Bloom Filing under the CCAA with the Court. Additionally, on May 20, 2015, we announced the Wabush Filing with the Court under the CCAA. As a result of this action, the CCAA protections granted to the Bloom Lake Group were extended to include the Wabush Group to facilitate the reorganization of each of their businesses and operations. Consistent with our strategy to extract maximum value from our current assets, on December 22, 2015, we sold our equity interests in all the remaining North American Coal operations to Seneca. The sale included the Pinnacle mine in West Virginia and the Oak Grove mine in Alabama. Additionally, Seneca may pay Cliffs an earn-out of up to $50 million contingent upon the terms of a revenue sharing agreement which extends through the year 2020. As noted above, all current and historical North American Coal operating segment results are included in our financial statement and classified within discontinued operations.

(4) During 2014, we recorded an impairment of goodwill and other long-lived assets of $73.5 million. The goodwill impairment charge of $73.5 million related to our Asia Pacific Iron Ore reporting unit. There were also other long-lived asset impairment charges of $562.0 million related to our continuing operations including the Asia Pacific Iron Ore operating segment and our Other reportable segments. The other long-lived asset impairment charges which related to our discontinued operations were $8,394.4 million related to our Wabush operation and Bloom Lake operation within our Eastern Canadian Iron Ore operating segment, and our Cliffs Logan County Coal LLC thermal operation, Oak Grove operation and Pinnacle operation within our North American Coal operating segment, along with impairments charged to reporting units within our Other reportable segments. The impairment charges were primarily a result of changes in life-of-mine cash flows due to declining pricing for both global iron ore and low-volatile metallurgical coal, which impacts our estimate of long-term pricing, along with changes in strategic focus including exploratory phases of possible divestiture of the operations as the new Chief Operating Decision Maker views Eastern Canadian Iron Ore, Asia Pacific Iron Ore, North American Coal and Ferroalloys as non-core assets. The Cliffs Logan County Coal LLC assets were sold in the fourth quarter of 2014 on December 31, 2014, resulting in a loss on sale of $419.6 million. As noted above, all current and historical North American Coal operating segment results are included in our financial statement and classified within discontinued operations.

Table of Contents

(5) On February 11, 2014, May 13, 2014, September 8, 2014, and November 19, 2014, our Board of Directors declared a quarterly cash dividend of $17.50 per preferred share, which is equivalent to approximately $0.44 per depositary share. The cash dividends were paid on May 1, 2014, August 1, 2014, November 3, 2014, and February 2, 2015, to our preferred shareholders of record as of the close of business on April 15, 2014, July 15, 2014, October 15, 2014, and January 15, 2015, respectively. On March 27, 2015, July 1, 2015, and September 10, 2015, our Board of Directors declared the quarterly cash dividend of $17.50 per preferred share, which is equivalent to

approximately $0.44 per depositary share. The cash dividend was paid on May 1, 2015, August 3, 2015, and November 2, 2015 to our shareholders of record as of the close of business on April 15, 2015, July 15, 2015, and October 15, 2015, respectively. On January 4, 2016, we announced that our Board of Directors determined the final quarterly dividend of our preferred shares would not be paid in cash, but instead, pursuant to the terms of the preferred shares, the conversion rate was increased such that holders of the preferred shares received additional common shares in lieu of the accrued dividend at the time of the mandatory conversion of the preferred shares on February 1, 2016. The number of our common shares in the aggregate issued in lieu of the dividend was 1.3 million. This resulted in an effective conversion rate of 0.9052 common shares, rather than 0.8621 common shares, per depositary share, each representing 1/40th of a preferred share. Upon conversion on February 1, 2016, an aggregate of 26.5 million common shares were issued, representing 25.2 million common shares issuable upon conversion and 1.3 million that were issued in lieu of a final cash dividend.

(6) In 2014, the dividend of $0.15 per share was paid on March 3, 2014, June 3, 2014, September 2, 2014 and December 1, 2014 to our common shareholders of record as of the close of business on February 21, 2014, May 23, 2014, August 15, 2014, and November 15, 2014,

respectively. On January 26, 2015, we announced that our Board of Directors had decided to eliminate the quarterly dividend of $0.15 per share on our common shares. The decision was applicable to the first quarter of 2015 and all subsequent quarters.

(7) Including discontinued operations for each of the years ended December 31, 2016, 2015 and 2014.

(8) Excludes revenues and expenses related to domestic freight for the U.S. Iron Ore operations and freight associated with CFR based shipments for the Asia Pacific Iron Ore operations, which are offsetting and have no impact on sales margin. Revenues and expenses also exclude venture partner cost reimbursements for the U.S. Iron Ore business segment.

(9) We present cash cost of goods sold and operating expense rate per long/metric ton, which is a non-GAAP financial measure that management uses in evaluating operating performance. We believe our presentation of non-GAAP cash cost of goods sold and operating expenses is useful to investors because it excludes depreciation, depletion and amortization, which are non-cash, and freight and joint venture partners' cost reimbursements, which have no impact on sales margin, thus providing a more accurate view of the cash outflows related to the sale of iron ore. The presentation of this measure is not intended to be considered in isolation from, as a substitute for, or as superior to,

the financial information prepared and presented in accordance with U.S. GAAP. The presentation of this measure may be different from non-GAAP financial measures used by other companies. Below is a reconciliation in dollars of this non-GAAP financial measure to the most directly comparable GAAP financial measure in our consolidated financial statements for the years ended December 31, 2016, 2015 and 2014.

	(In Millions)									
	Year Ended December 31, 2016			Year Ended December 31, 2015			Year Ended December 31, 2014			
	U.S. Iron Ore	Asia Pacific Iron Ore	Total	U.S. Iron Ore	Asia Pacific Iron Ore	Total	U.S. Iron Ore	Asia Pacific Iron Ore	Other	Total
Cost of goods sold and operating expenses	$(1,278.8)	$(440.9)	$(1,719.7)	$(1,298.3)	$(478.5)	$(1,776.8)	$(1,796.1)	$(745.0)	$53.6	$(2,487.5)
Less:										
Freight and reimbursements	(174.8)	(20.7)	(195.5)	(157.3)	(23.6)	(180.9)	(271.0)	(6.9)	—	(277.9)
Depreciation, depletion & amortization	(84.0)	(25.1)	(109.1)	(98.9)	(25.3)	(124.2)	(107.4)	(145.9)	—	(253.3)
Elimination with discontinued operations	—	—	—	—	—	—	—	—	(53.6)	53.6

Cash cost of goods sold and operating expenses	$(1,020.0)	$(395.1)	$(1,415.1)	$(1,042.1)	$(429.6)	$(1,471.7)	$(1,417.7)	$(592.2)	$—	$(2,009.9)

Table of Contents

RISK FACTORS

An investment in our common shares involves risk. Prior to making a decision about investing in our common shares, you should carefully consider the following risk factors, as well as the risk factors discussed in our Annual Report on Form 10-K for the year ended December 31, 2016, which is incorporated by reference, all of which could affect our business, financial condition and results of operations. You should carefully consider each of the following risks and all of the other information contained or incorporated by reference into this prospectus supplement. Additional risks and uncertainties that are not yet identified may also materially harm our business, financial condition and results of operations.

Risks Related to this Offering and Ownership of Our Common Shares

We may not complete the Proposed Debt Refinancing on the contemplated terms or at all.

As described in this prospectus supplement under the heading “Summary—Recent Developments—Proposed Debt Refinancing,” we intend to, in the near term, subject to market and other conditions, issue approximately $600.0 million aggregate principal amount of senior unsecured long-term debt with an expected tenure of approximately eight years, the net proceeds of which would be used, along with a portion of the net proceeds from this offering, to redeem all of our outstanding 1.5 Lien Notes and Second Lien Notes. The timing, amount and other terms of the new senior unsecured debt issuance are subject to market and other conditions. There can be no assurance that we will be able to consummate the Proposed Debt Refinancing on commercially reasonable terms or at all. This offering is not conditioned on the Proposed Debt Refinancing or the consummation of the tender offers.

The price of our common shares may be volatile and you could lose all or part of your investment.

We have experienced volatility in the market price of our common shares. Volatility in the market price of our common shares may prevent you from being able to sell your shares at or above the price you paid for your shares. The market price of our common shares could fluctuate significantly for various reasons, which include:

- our quarterly or annual earnings or those of other companies in our industry;
- changes in laws or regulations, or new interpretations or applications of laws and regulations, that are applicable to our business;
- the public’s reaction to our press releases, our other public announcements and our filings with the SEC;
- changes in accounting standards, policies, guidance, interpretations or principles;
- additions or departures of our senior management personnel;
- sales of our common shares by our directors and executive officers;
- adverse market reaction to any indebtedness we may incur or securities we may issue in the future;
- actions by shareholders;
- the level and quality of research analyst coverage for our common shares, changes in financial estimates or investment recommendations by securities analysts following our business or failure to meet such estimates;
- the financial disclosure we may provide to the public, any changes in such disclosure or our failure to meet such disclosure;
- various market factors or perceived market factors, including rumors, whether or not correct, involving us or our competitors;
- acquisitions or strategic alliances by us or our competitors;
- short sales, hedging and other derivative transactions in our common shares;
- the operating and stock price performance of other companies that investors may deem comparable to us; and

- other events or factors, including changes in general conditions in the United States and global economies or financial markets (including those resulting from acts of God, war, incidents of terrorism or responses to such events).

In addition, in recent years, the stock market has experienced extreme price and volume fluctuations. This volatility has had a significant impact on the market price of securities issued by many companies, including companies in our industry. The price of our common shares could fluctuate based upon factors that have little or nothing to do with us, and these fluctuations could materially reduce our share price.

In the past, following periods of market volatility in the price of a company’s securities, security holders have often instituted class action litigation. If the market value of our common shares experiences adverse fluctuations and we become involved in this type of litigation, regardless of the outcome, we could incur substantial legal costs and our management’s attention could be diverted from the operation of our business, causing our business to suffer.

Future sales of our common shares in the public market could lower our share price, and the exercise of stock options and any additional capital raised by us through the sale of our common shares may dilute your ownership in us.

Sales of substantial amounts of our common shares in the public market by our existing shareholders in this offering, upon the exercise of outstanding stock options or stock options granted in the future or by persons who acquire shares in this offering may adversely affect the market price of our common shares. Such sales could also create public perception of difficulties or problems with our business. These sales might also make it more difficult for us to sell securities in the future at a time and price that we deem appropriate.

With limited exceptions as described under the caption “Underwriting,” the lock-up agreements with the underwriter of this offering will prohibit certain shareholders from selling, contracting to sell or otherwise disposing of any of our common shares or securities that are convertible or exchangeable for our common shares or entering into any arrangement that transfers the economic consequences of ownership of our common shares for at least 90 days from the date of this prospectus supplement, although the underwriter may, in its sole discretion and at any time without notice, release all or any portion of the securities subject to these lock-up agreements. The underwriter has advised us that it has no present intent or arrangement to release any shares subject to a lock-up and will consider the release of any lock-up on a case-by-case basis. Upon a request to release any shares subject to a lock-up, the underwriter would consider the particular circumstances surrounding the request including, but not limited to, the length of time before the lock-up expires, the number of shares requested to be released, reasons for the request, the possible impact on the market for our common shares and whether the holder of our shares requesting the release is an officer, director or other affiliate of ours. As a result of these lock-up agreements, notwithstanding earlier eligibility for sale under the provisions of Rule 144, none of these shares may be sold until at least 90 days after the date of this prospectus supplement.

As restrictions on resale expire or as shares are registered, our share price could drop significantly if the holders of these restricted or newly registered shares sell them or are perceived by the market as intending to sell them. These sales might also make it more difficult for us to sell securities in the future at a time and at a price that we deem appropriate.

U.S. federal income tax may be imposed on any gain recognized by a non-U.S. holder on a sale, exchange or other taxable disposition of our common shares if we are a “United States real property holding corporation.”

We believe we currently are likely a “United States real property holding corporation,” or USRPHC, for U.S. federal income tax purposes. Assuming we are a USRPHC, non-U.S. holders (as defined in “Material U.S. Federal Income Tax Consequences to Non-U.S. Holders” in this prospectus supplement) generally will be taxed on gain recognized on the sale, exchange or other taxable disposition of our common shares and/or a 15% withholding tax will apply to the gross proceeds from the sale, exchange or other taxable disposition of our common shares if, absent an applicable income tax treaty exemption, (i) our common shares cease to be regularly traded on an established securities market, or (ii) such non-U.S. holder held more than 5% of our common shares at any time during the relevant period (as described in “Material U.S. Federal Income Tax Consequences to Non-U.S. Holders Gain on Sale, Exchange or Other Taxable Disposition of Common Shares” in this prospectus supplement).

Table of Contents

If securities analysts or industry analysts downgrade our shares, publish negative research or reports, or do not publish reports about our business, our share price and trading volume could decline.

The trading market for our common shares is influenced by the research and reports that industry or securities analysts publish about us, our business and our industry. If one or more analysts adversely change their recommendation regarding our shares or our competitors' stock, our share price would likely decline. If one or more analysts cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our share price or trading volume to decline.

Provisions in our corporate documents and Ohio law could have the effect of delaying, deferring or preventing a change in control of us, even if that change may be considered beneficial by some of our shareholders.

The existence of some provisions of our articles of incorporation and regulations and Ohio law could have the effect of delaying, deferring or preventing a change in control of us that a shareholder may consider favorable. These provisions include:

- providing that our board of directors fixes the number of members of the board; and
- authorizing the issuance of additional preferred shares, which could be issued by our board of directors to increase the number of outstanding securities of ours with voting rights and thwart a takeover attempt.

We believe these provisions protect our shareholders from coercive or otherwise unfair takeover tactics by requiring potential acquirors to negotiate with our board of directors and by providing our board of directors with more time to assess any acquisition proposal, and are not intended to make our company immune from takeovers. However, these provisions apply even if the offer may be considered beneficial by some shareholders and could delay, defer or prevent an acquisition that our board of directors determines is not in the best interests of our company and our shareholders.

Rights of our future preferred shareholders may dilute the voting power or reduce the value of our common shares.

Our articles of incorporation authorize us to issue, without the approval of our shareholders, one or more classes or series of preferred shares having such designation, powers, preferences and relative, participating, optional and other special rights, including preferences over our common shares respecting dividends and voting rights, as our board of directors generally may determine. The terms of one or more classes or series of preferred shares could dilute the voting power or reduce the value of our common shares. For example, we could grant holders of preferred shares the right to veto specified transactions on the happening of specified events. Similarly, the repurchase or redemption rights or liquidation preferences we could assign to holders of preferred shares could affect the residual value of the common shares.

Our ability to raise capital in the future may be limited.

Our ability to raise capital in the future may be limited. Our business and operations may consume resources faster than we anticipate. In the future, we may need to raise additional funds through the issuance of new equity securities, debt or a combination of both. Additional financing may not be available on favorable terms, or at all. If adequate funds are not available on acceptable terms, we may be unable to fund our capital requirements. If we issue new debt securities, the debt holders would have rights senior to common shareholders to make claims on our assets, and the terms of any debt could restrict our operations, including our ability to pay dividends on our common shares. If we issue additional equity securities, existing shareholders will experience dilution, and the new equity securities could have rights senior to those of our common shares. Because our decision to issue securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings. Thus, our shareholders bear the risk of our future securities offerings, diluting their interest and reducing the market price of our common shares.

Our board of directors and management have broad discretion over the use of our cash reserves and might not apply this cash in ways that increase the value of your investment.

We had $323.4 million of cash and cash equivalents as of December 31, 2016. We presently intend to use a portion of the net proceeds from this offering to fund the purchase of the tender notes in the tender offers as described under "Summary—Recent Developments—Concurrent Tender Offers," including fees and expenses related to the tender offers. We intend to use the remaining net proceeds of this offering for general corporate purposes, including

S-13

the redemption of a portion of our Secured Notes. Our board of directors and management have broad discretion to use our cash reserves, and you will be relying on their judgment regarding the application of this cash. Our board of directors and management might not apply the cash in ways that increase the value of your investment. Until we use the cash, we plan to invest it, and these investments may not yield a favorable rate of return. If we do not invest or apply the cash in ways that enhance shareholder value, we may fail to achieve expected financial results, which could cause our common share price to decline.

Our ability to use our net operating loss and credit carryforwards to offset future taxable income may be subject to certain limitations.

As of December 31, 2016, we had gross domestic (including state) and foreign net operating loss carryforwards, inclusive of discontinued operations, of $3.7 billion and $6.9 billion, respectively. The U.S. federal net operating losses will begin to expire in 2035, and the state net operating losses will begin to expire in 2019. The foreign net operating losses can be carried forward indefinitely. Additionally, there is a net operating loss carryforward, inclusive of discontinued operations, of $1.4 billion for alternative minimum tax. As of December 31, 2016, we had $251.2 million of gross deferred tax assets related to U.S. alternative minimum tax credits that can be carried forward indefinitely. As of December 31, 2016, we had foreign tax credit carryforwards of $5.8 million. The foreign tax credit carryforwards will begin to expire in 2020. Our ability to utilize our net operating loss and credit carryforwards is dependent upon our ability to generate taxable income in future periods.

Our ability to utilize U.S. net operating loss and credit carryforwards may be limited if we experience an "ownership change" under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, which generally occurs if one or more shareholders or groups of shareholders who own at least 5% of our shares increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling period that begins on the later of three years prior to the testing date and the date of the last ownership change. Similar rules may apply under state tax laws. Although not free from doubt, this offering is not expected to, but future issuances or sales of our common shares (including certain transactions involving our common shares that are outside of our control) could, cause an "ownership change." If an "ownership change" were to occur, Section 382 of the Code would impose an annual limit on the amount of pre-ownership change net operating loss carryforwards and other tax attributes we could use to reduce our taxable income, potentially increasing and accelerating our liability for income taxes, and also potentially causing tax attributes to expire unused. It is possible that such an ownership change could materially reduce our ability to use our net operating loss carryforwards or other tax attributes to offset taxable income, which could impact our profitability.

Our actual operating results may differ significantly from our guidance.

From time to time, we release guidance, including that set forth under "Management's Discussion and Analysis of Financial Condition and Results of Operations—Outlook" in our Annual Report on Form 10-K for the year ended December 31, 2016, regarding our future performance. This guidance, which consists of forward-looking statements, is prepared by our management and is qualified by, and subject to, the assumptions and the other information included in or incorporated by reference into this prospectus supplement and included in our Annual Report on Form 10-K for the year ended December 31, 2016, as well as the factors described under "Disclosure Regarding Forward-Looking Statements" in this prospectus supplement. Our guidance is not prepared with a view toward compliance with published guidelines of the American Institute of Certified Public Accountants, and neither our independent registered public accounting firm nor any other independent or outside party compiles or examines the guidance and, accordingly, no such person expresses any opinion or any other form of assurance with respect thereto.

Guidance is based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. The principal reason that we release this data is to provide a basis for our management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such persons.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Actual results will vary from the guidance. Investors should also recognize that the reliability of any forecasted financial data diminishes the farther

Table of Contents

in the future that the data is forecast. In light of the foregoing, investors are urged to put the guidance in context and not to place undue reliance on it.

Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in, or incorporated by reference into, this prospectus supplement could result in actual operating results being different than the guidance, and such differences may be adverse and material.

Table of Contents

USE OF PROCEEDS

We estimate that the net proceeds to us from this offering, after deducting estimated underwriting discounts and estimated offering expenses that we must pay, will be approximately $ million. If the underwriter exercises its option to purchase additional shares in full, we estimate that our net proceeds will be approximately $ million.

We intend to use a portion of the net proceeds of this offering to fund the purchase of the tender notes in the tender offers as described under "Recent Developments—Concurrent Tender Offers," including fees and expenses related to the tender offers. We intend to use the remaining net proceeds for general corporate purposes, including the redemption of a portion of our Secured Notes. See "Capitalization."

Our 5.900% 2020 Notes bear interest at a rate of 5.900% per year and mature on March 15, 2020. Our 4.80% 2020 Notes bear interest at a rate of 4.80% per year and mature on October 1, 2020. Our 2021 Notes bear interest at a rate of 4.875% per year and mature on April 1, 2021. As of December 31, 2016, $225.6 million, $236.8 million and $309.4 million aggregate principal amount of our 5.900% 2020 Notes, 4.80% 2020 Notes and 2021 Notes, respectively, remained outstanding.

Our First Lien Notes bear interest at a rate of 8.25% per year and mature on March 31, 2020. Our 1.5 Lien Notes bear interest at a rate of 7.75% per year and mature on September 30, 2020. Our Second Lien Notes bear interest at a rate of 8.00% per year and mature on March 31, 2020. As of December 31, 2016, $540.0 million, $218.5 million and $430.1 million aggregate principal amount of our First Lien Notes, 1.5 Lien Notes and Second Lien Notes, respectively, remained outstanding.

Table of Contents

PRICE RANGE OF COMMON STOCK

Our common shares are listed on the NYSE under the ticker symbol "CLF." The following table sets forth, for the periods indicated, the high and low sales prices per common share as reported on the NYSE:

2016		2015	2014
High	Low	High	