Comstock

Reaching a Turning Point; Upgrading to Outperform

Nov 04, 2025

Nat Resources

LODE

NYSE

Rating

Outperform

Upgraded

Current Price

$2.95

Target Price

$6.75

Market Capitalization

151.23m

Shares Outstanding

51.26m

Float

48.96m

Institutional Holdings

6.67%

12-Month Low/High

$1.67/$10.10

Average 90-Day Volume

1370000

Fiscal Year End

12/31/2025

Revenues ($ MIL)

Period	2023 A	2024 A	2025 E
Q1	0.0308 A	0.4260 A	0.7858 A
Q2	0.0353 A	0.4348 A	0.3395 A
Q3	0.7607 A	0.5564 A	0.0541 A
Q4	0.4476 A	1.5990 A	0.1044 E
	1.2744 A	3.0162 A	$1.2838 E

EPS ($)

Period	2023 A	2024 A	2025 E
Q1	(0.55) A	(0.59) A	(0.37) A
Q2	(0.54) A	(0.60) A	(0.27) A
Q3	1.12 A	(0.80) A	(0.31) E
Q4	0.84 A	(1.22) A	(0.18) E
	0.87 A	(3.21) A	(1.07) E

Raising our rating to Outperform. We are raising our investment rating to Outperform from Market Perform with a price target of $6.75 per share. With the completion of an equity offering in August that raised net proceeds of $31.8 million, Comstock has eliminated its debt obligations and is expected to be able to fund Comstock Metals' first commercial-scale metal recycling facility. We think the company is in a much stronger position to execute its growth plans.

Comstock Metals offers investors a visible growth path. Comstock Metals is anticipated to commission a commercial-scale recycling facility with 100,000 tons per year of capacity during the first quarter of 2026 and begin ramping up operations during the second quarter. In 2026, we expect the facility to process approximately 25,225 tons of solar panels, generating revenues of $12.6 million from tipping fees, $5.0 million from mineral and metal recoveries, and a gross operating profit of $13.9 million. We expect the facility to operate at 100,000 tons per year in 2027.

Unlocking the value of Comstock Mining. We expect Comstock to advance initiatives to unlock value from its mining properties. Comstock intends to commercialize agreements that either monetize or enable resource expansion of the central claims, publish an updated SK-1300 technical report with preliminary economics and sensitivities for Dayton, and complete preliminary mine plans that enable the economic development of the southern claims. While the company could put mines into operation, joint venture, or sell part or all of its properties, the company is now taking the necessary steps to achieve its goals.

Rating is Outperform. We think the company has reached a turning point and is in a much stronger position to execute its growth plans. A path to profitability is in Comstock Metals' line of sight. We view the company's interest in Bioleum Corporation as an option on its future growth and value creation. While the timing of monetizing the company's real estate and water rights in Silver Springs, Nevada, LODE's interest in the Silver Springs Opportunity Fund (SSOF), and other investments is uncertain, the combination represents a portfolio of tangible value that could provide additional upside to our valuation.

Equity Research
Mark Reichman, Managing Director, Equity Research Analyst, Natural Resources
(561) 999-2272, mreichman@noblecapitalmarkets.com, Connect on LinkedIn

Noble Capital Markets, Inc.
Trading: (561) 998-5489 Sales: (561) 998-5491
noblecapitalmarkets.com | Follow Noble on LinkedIn

Refer to the last two pages for Analyst Certification & Disclosures

Reaching a Turning Point; Upgrading to Outperform

We are raising our investment rating to Outperform from Market Perform with a price target of $6.75 per share. With the completion of an equity offering in August that raised net proceeds of $31.8 million, Comstock has eliminated its debt obligations and is expected to be able to fund Comstock Metals' first commercial-scale metal recycling facility. We think the company has reached a turning point and is in a much stronger position to execute its growth plans.

Comstock Inc. innovates and commercializes technologies, systems, and supply chains that enable, support, and sustain clean energy systems by extracting and converting under-utilized natural resources into reusable metals, including aluminum, silver, gold, and other critical minerals, primarily from end-of-life photovoltaics. Comstock Inc. has four key reportable business segments: 1) Comstock Metals, 2) Comstock Mining, 3) Bioleum Corporation, and 4) Strategic Investments. While Bioleum was separated from Comstock Inc. as an independent legal entity in May 2025, its financial results will continue to be consolidated with Comstock's financial reports until it completes a Series A financing. Comstock also maintains strategic investments and a portfolio of properties and water rights in Silver Springs, Nevada.

Comstock's corporate objectives for the remainder of 2025 include: 1) advancing legacy real estate and non-strategic investments for monetization, 2) supporting the next phases of Comstock Metals' growth, and 3) finalizing, communicating, and implementing plans to unlock value from the separation of Bioleum Corporation.

Comstock Metals

Comstock Metals has established a goal of setting global standards for solar panel recycling. Comstock is the first solar panel recycling company in North America to be certified by Sustainable Electronics Recycling International (SERI) to the R2v3/RIOS Responsible Recycling Standard. Comstock Metals has been operating its first commercial demonstration facility for nearly two years, and in November of 2024, submitted permits for the first industry-scale photovoltaic recycling facility. We expect Comstock to receive a written determination from the Bureau of Sustainable Materials Management and an air quality permit from the Bureau of Air Pollution in early January 2026. The industry-scale facility is designed for 100,000 tons of annual capacity, with operations commencing post-commissioning during the second quarter of 2026.

We expect Comstock Metals to commission the 100,000-ton-per-year commercial facility during the first quarter of 2026 and begin ramping up operations during the second quarter. In 2026, we expect the facility to process approximately 25,000 tons of solar panels, generating revenues of $12.5 million from tipping fees, $5.0 million from mineral and metal recoveries, and generating gross profit $13.9 million. We expect the facility to operate at 100,000 tons per year in 2027. Capital expenditures for the first industry-scale facility are expected to be approximately $12.5 million, including expanded storage. As of September 30, 2025, the company paid deposits of $5.1 million for property, plant, and equipment and anticipates a total capital spend of $10.0 million for the industry-scale facility by the end of 2025, with an additional $2 to $3 million expected to be spent in the first quarter of 2026. We expect additional facilities to be deployed in 2028 and 2030, following similar development paths as the first facility. Site selection activities are ongoing for the next two industry-scale facilities and multiple associated storage sites. The company plans to build up to seven industry-scale recycling facilities in the United States.

Comstock Metals' objectives for the remainder of 2025 include: 1) receive final permits for the first industry-scale facility in Silver Springs, Nevada, 2) procure, deploy, and assemble plant and equipment for the first industry-scale facility in Silver Springs, Nevada, 3) secure additional Master Service Agreements (MSA) with national and regional customers, 4) complete site selection for two additional solar panel recycling locations, 5) expand the system globally with international strategic and capital partners, and 6) advance research and development efforts to recover more and higher purity materials from recycled streams for off-take.

Comstock Mining

Comstock Mining LLC is a gold and silver mining company with extensive, contiguous property in the Comstock District in Nevada. The company's near-term goal is to deliver stockholder value by validating qualified resources and reserves (proven and probable) from Dayton and the Lucerne resource areas and grow the commercial development of its operations through extended, long-lived mine plans that are economically feasible. The company has consolidated 12 square miles of properties, including patented mining claims, unpatented mining claims, and surface parcels in northern Nevada covering 6.5 miles of continuous mineralized strike length. Comstock Mining has the single largest known repository of historical and current geological data within the Comstock mineral district, including extensive geophysical surveys, geological mapping, and drilling data, including the Dayton resource. The company holds two estimated mineral resources, with an existing, permitted processing facility, and several exploration projects.

In 2022, Comstock published a third-party S-K 1300 technical report, which estimates that the Dayton Development Area contains measured and indicated mineral resources containing 293,000 ounces of gold and 2,120,000 ounces of silver. The Dayton also contains additional inferred mineral resources containing 90,000 ounces of gold and 480,000 ounces of silver. Properties in the Lucerne Development Area contain additional indicated mineral resources containing 312,000 ounces of gold and 3,760,000 ounces of silver. Lucerne also contains additional inferred mineral resources containing 207,000 ounces of gold and 2,092,000 ounces of silver. Comstock has identified additional prospective exploration targets located throughout the district.

Comstock Mining's objectives for the remainder of 2025 include: 1) commercialize agreements that either monetize or enable resource expansion of the central claims, 2) publish the Dayton Consolidated Project technical work with preliminary economics and sensitivities, and 3) complete the preliminary mine plans that enable the economic development of the southern district claims.

The company's 2025 efforts will apply economic analysis to Comstock's existing gold and silver resources and progress toward preliminary economic feasibility for the southern part of the district and the eventual development of full mine and reclamation plans, along with the development of post-productive land and community development plans.

Bioleum Corporation

In May, Comstock announced the successful separation of its renewable fuels segment, Comstock Fuels, into a new independent entity named Bioleum Corporation. Bioleum is commercializing advanced technologies that convert lignocellulosic biomass into fuel. Comstock holds a $65.0 million investment in Bioleum through a Preferred Series 1 equity position. Comstock received one million shares of Series 1 Convertible Preferred Stock with an original purchase price and liquidation preference of $65 per share, for a total aggregate value of $65.0 million. The preferred stock is convertible into 32.5 million shares of Bioleum's common stock at a conversion rate of $2.00 per share. In the event of liquidation or sale of Bioleum, Series 1 preferred stock entitles Comstock to full payment of its liquidation preference before any proceeds are distributed to other classes of stock.

Following the separation from Comstock in May 2025, Bioleum closed on an initial $20 million Series A preferred equity financing, with additional funding rounds planned. In February 2025, Comstock entered into definitive agreements with subsidiaries of Marathon Petroleum, involving the purchase of $14.0 million in Bioleum equity as part of a Series A financing. The purchase price included $1.0 million in cash and $13.0 million in payment-in-kind assets comprised of equipment, intellectual properties, and other materials located at Marathon's former renewable fuel demonstration facility in Madison, Wisconsin. Bioleum plans to initiate an initial public offering (IPO) at some point in the future. In May 2025, Bioleum issued 2.0 million Series 2 Convertible Preferred shares to 11 foundational Bioleum leaders in exchange for the assignment of additional developed technologies. The Founders group consists of 11 Bioleum founders, all of whom were former employees of the company, and three of whom were former officers of the company.

Investments

Comstock directly owns three types of properties in Silver Springs, Nevada, including 98 acres of industrial land, 160 acres of commercial land, and a portfolio of water rights. While these properties are no longer classified as assets held for sale on the company's balance sheet, management intends to monetize the portfolio as asset values in the area have increased. We think they could eventually be marketed as part of a larger package, including the company's interest in the Silver Springs Opportunity fund.

The Silver Springs Opportunity Fund (SSOF) is a qualified opportunity zone fund that owns 100% of SSE, a qualified opportunity zone business. Mr. Corrado De Gasperis, Comstock's CEO, is an executive of SSOF. SSE and its subsidiaries own or control approximately 2,500 acres of land, a manufacturing facility, senior, junior, and effluent water rights, sewer rights, and also owns and operates the Silver Springs Regional Airport. As of September 30, Comstock owned 11,236,111 shares of SSOF shares, representing a 16.99% ownership interest and an investment of $20,225,000. The company has also advanced SSOF $5.0 million, including $2.5 million on October 1, 2025.

Green Li-ion is a lithium-ion battery recycling technology company producing modular hardware solutions that convert spent batteries into cathode and anode material. A wholly owned subsidiary of Comstock owns 35,662 preferred shares of Green-Li-ion, representing a 13.34% interest in the company. Comstock intends to sell its remaining shares by the end of 2026.

Valuation

Our sum of the parts analysis is summarized below.

Investment ($ in millions)	
Mineral properties and rights	93.8
Comstock Metals	88.0
Bioleum Corporation	65.0
Sierra Springs Opportunity Fund Inc.	30.3
Silver Springs Industrial Properties and Water Rights	30.0
Green Li-ion	18.2
Investment in research and development company	1.1
Investment in Hexas Biomass	1.0
Sub-Total	327.4
Add: Cash*	19.3
Less: Debt	0.0
Total	346.7
Shares Outstanding	51.3
Per Share Value	6.76

*Net of cash held at Bioleum Corporation

Source: Noble Capital Markets Inc.

We have valued Comstock's mining properties based on the mineral resource estimates for Dayton and Lucerne, and an estimated in-situ resource and land value of the properties. We will update our estimate once the company publishes a preliminary economic assessment that will offer a better assessment of the property's value. We think the Lucerne property may be of more immediate interest to third-party mining companies since it is not encumbered with legacy liabilities.

Comstock Metals has been valued using a discounted free cash flow framework based on the deployment of and costs associated with its first commercial-scale recycling facility that will be commissioned during the first quarter of 2026. We expect three commercial facilities with a capacity of 100,000 tons per year to be operating at full capacity in 2031. While the first plant is expected to cost $12.5 million, we expect the second and third plants will cost $15.0 million each. We expect the timing of expenditures for the second and third facilities to follow a similar first facility spending pattern.

We view the company's interest in Bioleum Corporation as an option on its future growth and value creation. In our view, it is still early days, and we would like to see how the story plays out before assigning a value any greater than Comstock's Series 1 equity position. While monetization of the company's real estate and water rights in Silver Springs, Nevada, LODE's interest in the Silver Springs Opportunity Fund (SSOF), and other investments are uncertain, we believe they could have greater value than ascribed based on past comments by management.

Summary of Third Quarter 2025 Financial Results

Comstock reported a third-quarter net loss of $12.9 million or $(0.31) per share compared to a net loss of $15.0 million or $(0.80) per share during the prior year period. Revenue decreased to $54.1 thousand compared to the prior year period due to the termination of the Mackay mining lease in the fourth quarter of 2024, along with lower revenues from Comstock Metals due to lower decommissioning services. The loss from operations narrowed to $10.2 million compared to $13.6 million during the third quarter of 2024. Third quarter 2024 financial results included an $8.7 million impairment of intangible assets.

Revenue decreased due to lower revenues from the company’s mining segment due to the termination of the Mackay mining lease in the fourth quarter of 2024, along with lower revenues from Comstock Metals due to lower decommissioning services.

The cost of goods sold increased $0.3 million due to the commencement and ramp-up of the first commercial metal recycling demonstration facility.

Operating expenses declined to $9.9 million from $14.2 million during the third quarter of 2024. Third quarter 2024 financial results included an $8.7 impairment of intangible assets. Most other expenses increased compared to the prior year period.

Total other expenses increased to $2.7 million compared to $1.4 million during the third quarter of 2024. Key drivers of the increase were changes in the fair value of derivative instruments and loss on extinguishment of debt.

During the third quarter, cash increased by $13.1 million to $31.7 million. Net cash used in operating activities amounted to $8.7 million, net cash used in investing activities amounted to $7.3 million, and net cash provided by financing activities amounted to $29.1 million.

Capital Structure and Liquidity

As of September 30, Comstock Inc. reported cash and cash equivalents in the amount of $31.7 million, of which $12.4 million is at Bioleum Corporation. The company had no debt. We expect that Comstock’s financial statements will continue to reflect the consolidation of Bioleum Corporation until it completes Series A financing. Therefore, we think Bioleum could be deconsolidated with the second quarter 2026 financial statements. As of October 27, the company had 51,264,247 common shares outstanding.

Company Profile Comstock Inc. innovates and commercializes technologies, systems, and supply chains that enable, support, and sustain clean energy systems by efficiently, effectively, and expediently extracting and converting under-utilized natural resources into reusable metals, including aluminum, silver, gold, and other critical minerals, primarily from end-of-life photovoltaics. Comstock Inc. shares trade on the NYSE American under the ticker symbol "LODE."

Fundamental Analysis - 3.0/5.0 Checks

Our fundamental assessment rating, separate from our investment rating and valuation, is based on five attributes. We assign 3.0 checks out of 5.0, which falls within our Average range of 2.5 to 3.0 checks. Our rating reflects the fact that recent corporate development initiatives are centered on building businesses in relatively nascent industries that offer significant growth potential, albeit with higher risk profiles. For further explanation of our fundamental analysis, please refer to the disclosures at the end of this report.

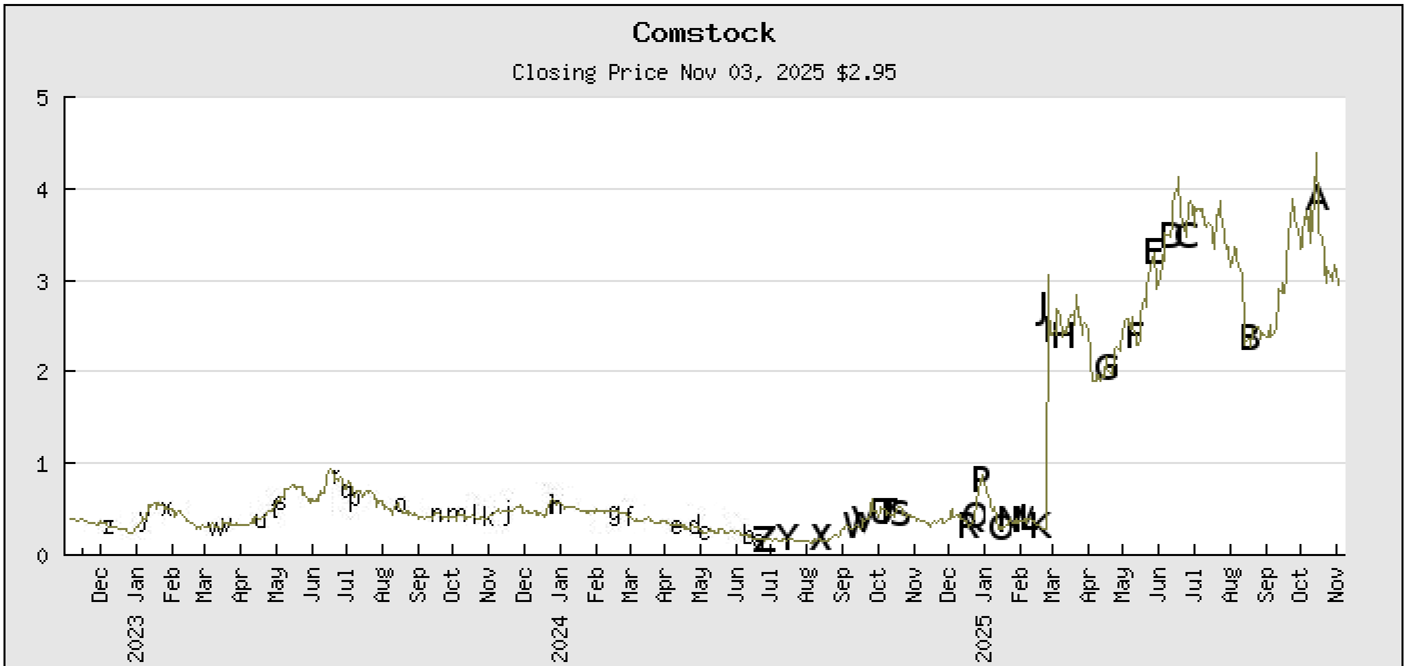
Valuation Summary

We are raising our investment rating to Outperform from Market Perform with a price target of $6.75 per share. With the completion of an equity offering in August that raised net proceeds of $31.8 million, Comstock has eliminated its debt obligations and will be able to fund Comstock Metals’ first commercial-scale metal recycling facility. We think the company has reached a turning point and is in a much stronger position to execute its growth plans. Our value is based on a sum of the parts analysis of the company's investments.

Investment risks include but are not limited to: 1) failure to execute planned asset divestitures on expected terms, 2) failure to develop economic mineral resources, 3) global economic and capital market uncertainties, 4) uncertainties associated with the availability and costs of future financing, 5) changes in capital market and macroeconomic environments, 6) changes in supply and demand fundamentals for minerals, including gold and silver, 7) delays in the development of projects, 8) uncertainties associated with operational execution, 9) changes in regulation or actions taken by various regulatory entities, 10) the potential for operating costs and financing costs to vary from management expectations, 11) unexpected claims or financial obligations associated with environmental and/or reclamation duties, 12) the development of each of the company's business lines may not succeed as planned, and 13) Comstock may or may not close all proposed transactions with potential strategic and financial partner. An investment in Comstock Inc. should be considered highly speculative and could result in high reward or the potential loss of a shareholder's investment.

Comstock Inc.
Fiscal Year End - December
(US$)

Income Statement	FY 2023	FY 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025E	FY 2025E	Q1 2026E	Q2 2026E	Q3 2026E	Q4 2026E	FY 2026E	FY 2027E
Revenue	1,274,449	3,016,163	785,815	339,546	54,079	104,379	1,283,819	107,928	4,777,500	6,440,000	6,440,000	17,657,500	70,000,000
Cost of sales	0	(451,938)	(886,796)	(814,001)	(324,397)	(325,208)	(2,350,402)	0	(1,023,750)	(1,380,000)	(1,380,000)	(3,783,750)	(15,000,000)
Gross profit	1,274,449	2,564,225	(100,981)	(474,455)	(270,318)	(220,829)	(1,066,583)	107,928	3,753,750	5,060,000	5,060,000	13,873,750	55,000,000
Operating Expenses:													
Selling, general, and administrative expenses	(12,588,626)	(12,703,056)	(3,258,465)	(4,635,090)	(6,110,011)	(6,201,661)	(20,205,227)	(6,263,678)	(6,326,315)	(6,389,578)	(6,453,473)	(25,433,044)	(25,687,374)
Research and development	(6,117,305)	(19,098,183)	(3,303,918)	(2,120,645)	(2,229,838)	(2,263,286)	(9,917,687)	(2,285,918)	(2,291,633)	(397,400)	(398,394)	(5,373,345)	(1,597,558)
Depreciation and amortization	(2,477,525)	(2,242,554)	(375,384)	(636,692)	(1,162,246)	(1,165,152)	(3,339,474)	(1,176,803)	(1,223,875)	(1,272,830)	(1,323,743)	(4,997,252)	(5,047,225)
Impairment of intangible assets	0	(8,667,869)	0	0	(9,333)	0	(9,333)	0	0	0	0	0	0
Impairment of properties, plant, and equipment	0	(324,047)	0	0	(433,411)	0	(433,411)	0	0	0	0	0	0
Gain on sale of mineral rights	7,304,570	804,489	0	200,000	0	0	200,000	0	0	0	0	0	0
Total Operating Expenses	(13,878,886)	(42,231,220)	(6,937,767)	(7,192,427)	(9,944,839)	(9,630,098)	(33,705,131)	(9,726,399)	(9,841,823)	(8,059,808)	(8,175,610)	(35,803,641)	(32,332,157)
Income (loss) from operations	(12,604,437)	(39,666,995)	(7,038,748)	(7,666,882)	(10,215,157)	(9,850,927)	(34,771,714)	(9,618,471)	(6,088,073)	(2,999,808)	(3,115,610)	(21,929,891)	22,667,843
Other Income (Expense)													
Gain (loss) on investments	25,034,875	(711,920)	0	0	0	0	0	0	0	0	0	0	0
Interest expense	(1,646,724)	(2,971,351)	(659,144)	(774,062)	(336,076)	0	(1,769,282)	0	0	0	0	0	0
Interest income	251,969	302,091	96,109	154,700	312,862	306,605	870,276	300,473	294,463	288,574	282,802	1,166,312	1,154,649
Change in fair value of derivative instruments	961,085	1,284,614	(1,190,803)	2,868,176	(1,243,382)	0	433,991	0	0	0	0	0	0
Gain (loss) on conversion of debt	129,705	(9,755,686)	(1,196,880)	(2,133,951)	242,664	0	(3,088,167)	0	0	0	0	0	0
Loss on debt extinguishment	0	(817,498)	845,000	0	(2,767,887)	0	(1,922,887)	0	0	0	0	0	0
Impairment of investment, net recovery	0	0	0	0	0	0	0	0	0	0	0	0	0
Change in fair value of SAFE Note	0	0	0	0	900,000	0	900,000	0	0	0	0	0	0
Other income (expense)	(1,600,221)	(1,066,153)	50,535	(274,924)	218,640	219,187	213,438	0	0	0	0	0	0
Total Other Income (Expense), net	23,130,689	(13,735,903)	(2,055,183)	(160,061)	(2,673,179)	525,791	(4,362,632)	300,473	294,463	288,574	282,802	1,166,312	1,154,649
Net income (loss)	10,526,252	(53,402,898)	(9,093,931)	(7,826,943)	(12,888,336)	(9,325,136)	(39,134,346)	(9,317,999)	(5,793,610)	(2,711,234)	(2,832,808)	(20,763,578)	23,822,493
Deferred income tax benefit	0	0	0	0	0	0	0	0	0	0	0	0	0
Net income (loss) attributable to noncontrolling interest	(1,364,431)	(81,444)	0	0	0	0	0	0	0	0	0	0	0
Net income (loss)	9,161,821	(53,321,454)	(9,093,931)	(7,826,943)	(12,888,336)	(9,325,136)	(39,134,346)	(9,317,999)	(5,793,610)	(2,711,234)	(2,832,808)	(20,763,578)	23,822,493
Earnings (loss) per share	0.87	(3.21)	(0.37)	(0.27)	(0.31)	(0.18)	(1.07)	(0.18)	(0.11)	(0.05)	(0.05)	(0.39)	0.44
Weighted average common shares outstanding, diluted	10,516,936	16,613,755	24,266,290	29,326,043	41,662,075	51,264,248	36,717,418	52,545,854	52,677,219	52,808,912	52,943,575	52,745,158	53,800,061



A - 10/16/2025 Market Perform Current $3.89	B - 08/18/2025 Market Perform Current $2.35
C - 06/25/2025 Market Perform Current $3.47	D - 06/10/2025 Market Perform Current $3.47
E - 05/27/2025 Market Perform Current $3.29	F - 05/12/2025 Market Perform Current $2.39
G - 04/17/2025 Market Perform Current $2.04	H - 03/10/2025 Market Perform Current $2.38
I - 03/03/2025 Market Perform Current $2.45	J - 02/26/2025 Market Perform Current $2.70
K - 02/18/2025 Market Perform Current $0.32	L - 02/10/2025 Market Perform Current $0.39
M - 02/03/2025 Market Perform Current $0.38	N - 01/22/2025 Market Perform Current $0.38
O - 01/14/2025 Market Perform Current $0.29	P - 12/31/2024 Market Perform Current $0.80
Q - 12/24/2024 Market Perform Current $0.42	R - 12/18/2024 Market Perform Current $0.30
S - 10/23/2024 Outperform Target $2.50 Current $0.44	T - 10/08/2024 Outperform Target $2.60 Current $0.45
U - 10/03/2024 Outperform Target $2.60 Current $0.46	V - 09/19/2024 Outperform Target $2.60 Current $0.36
W - 09/11/2024 Outperform Target $2.60 Current $0.31	X - 08/12/2024 Outperform Target $2.60 Current $0.17
Y - 07/16/2024 Market Perform Current $0.17	Z - 06/25/2024 Market Perform Current $0.16
a - 06/20/2024 Market Perform Current $0.16	b - 06/11/2024 Market Perform Current $0.21
c - 05/02/2024 Market Perform Current $0.27	d - 04/25/2024 Outperform Target $4.00 Current $0.32
e - 04/08/2024 Outperform Target $4.00 Current $0.34	f - 02/29/2024 Outperform Target $4.00 Current $0.43
g - 02/15/2024 Outperform Target $3.75 Current $0.48	h - 12/29/2023 Outperform Target $3.75 Current $0.55
i - 12/22/2023 Outperform Target $3.75 Current $0.54	j - 11/16/2023 Outperform Target $4.00 Current $0.47
k - 10/31/2023 Outperform Target $4.00 Current $0.42	l - 10/18/2023 Outperform Target $3.75 Current $0.43
m - 10/06/2023 Outperform Target $3.75 Current $0.47	n - 09/15/2023 Outperform Target $3.75 Current $0.46
o - 08/14/2023 Outperform Target $3.75 Current $0.57	p - 07/07/2023 Outperform Target $4.25 Current $0.63
q - 06/29/2023 Outperform Target $4.25 Current $0.71	r - 06/20/2023 Outperform Target $4.25 Current $0.88
s - 05/04/2023 Outperform Target $4.25 Current $0.60	t - 04/28/2023 Outperform Target $4.25 Current $0.51
u - 04/17/2023 Outperform Target $4.25 Current $0.40	v - 03/20/2023 Outperform Target $4.25 Current $0.35
w - 03/10/2023 Outperform Target $4.75 Current $0.30	x - 01/27/2023 Outperform Target $4.75 Current $0.52
y - 01/06/2023 Outperform Target $4.75 Current $0.41	z - 12/06/2022 Outperform Target $4.75 Current $0.32

GENERAL DISCLAIMERS

All statements or opinions contained herein that include the words "we", "us", or "our" are solely the responsibility of Noble Capital Markets, Inc. ("Noble") and do not necessarily reflect statements or opinions expressed by any person or party affiliated with the company mentioned in this report. Any opinions expressed herein are subject to change without notice. All information provided herein is based on public and non-public information believed to be accurate and reliable, but is not necessarily complete and cannot be guaranteed. No judgment is hereby expressed or should be implied as to the suitability of any security described herein for any specific investor or any specific investment portfolio. The decision to undertake any investment regarding the security mentioned herein should be made by each reader of this publication based on its own appraisal of the implications and risks of such decision.

This publication is intended for information purposes only and shall not constitute an offer to buy/sell or the solicitation of an offer to buy/sell any security mentioned in this report, nor shall there be any sale of the security herein in any state or domicile in which said offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or domicile. This publication and all information, comments, statements or opinions contained or expressed herein are applicable only as of the date of this publication and subject to change without prior notice. Past performance is not indicative of future results.

Noble accepts no liability for loss arising from the use of the material in this report, except that this exclusion of liability does not apply to the extent that such liability arises under specific statutes or regulations applicable to Noble. This report is not to be relied upon as a substitute for the exercising of independent judgement. Noble may have published, and may in the future publish, other research reports that are inconsistent with, and reach different conclusions from, the information provided in this report. Noble is under no obligation to bring to the attention of any recipient of this report, any past or future reports. Investors should only consider this report as single factor in making an investment decision.

IMPORTANT DISCLOSURES

This publication is confidential for the information of the addressee only and may not be reproduced in whole or in part, copies circulated, or discussed to another party, without the written consent of Noble Capital Markets, Inc. ("Noble"). Noble seeks to update its research as appropriate, but may be unable to do so based upon various regulatory constraints. Research reports are not published at regular intervals; publication times and dates are based upon the analyst's judgement. Noble professionals including traders, salespeople and investment bankers may provide written or oral market commentary, or discuss trading strategies to Noble clients and the Noble proprietary trading desk that reflect opinions that are contrary to the opinions expressed in this research report.

The majority of companies that Noble follows are emerging growth companies. Securities in these companies involve a higher degree of risk and more volatility than the securities of more established companies. The securities discussed in Noble research reports may not be suitable for some investors and as such, investors must take extra care and make their own determination of the appropriateness of an investment based upon risk tolerance, investment objectives and financial status.

Company Specific Disclosures

The following disclosures relate to relationships between Noble and the company (the "Company") covered by the Noble Research Division and referred to in this research report.

The Company in this report is a participant in the Company Sponsored Research Program ("CSRP"); Noble receives compensation from the Company for such participation. No part of the CSRP compensation was, is, or will be directly or indirectly related to any specific recommendations or views expressed by the analyst in this research report.

The Company has attended Noble investor conference(s) in the last 12 months.

Noble intends to seek compensation for investment banking services and non-investment banking services (securities and non-securities related) within the next 3 months.

Noble is not a market maker in the Company.

FUNDAMENTAL ASSESSMENT

The fundamental assessment rating system is designed to provide insights on the company's fundamentals both on a macro level, which incorporates a company's market opportunity and competitive position, and on a micro/company specific level. The micro/company specific attributes include operating & financial leverage, and corporate governance/management. The number of check marks that a company receives is designed to provide a quick reference and easy determination of the company's fundamentals based upon the following five attributes of the company (weighting reflects the importance of each attribute in the overall scoring of company’s fundamental analysis):

Attribute	Weighting
Corporate Governance/Management	20%
Market Opportunity Analysis	20%
Competitive Position	20%
Operating Leverage	20%
Financial Leverage	20%

For each attribute, the analysts score the company from a low of zero to a high of ten based upon the analysis described below. The final rating and resulting check marks is a result of dividing the overall score (out of 100%) by ten.

Rating	Score	Checks
Superior	9.1 to 10	Five Checks
Superior	8.1 to 9	Four & A Half Checks
Above Average	7.1 to 8	Four Checks
Above Average	6.1 to 7	Three & A Half Checks
Average	5.1 to 6	Three Checks
Average	4 to 5	Two & A Half Checks
Below Average	3 to 3.9	Two Checks
Below Average	2 to 2.9	One & A Half Checks
Low Quality	0 to 1.9	One Check

While these are the attributes currently used for the analyst's fundamental analysis, the attributes and weighting may be reviewed, updated with additional attributes, and/or changed in the future based on discussions with the analysts and recommendations from the Director of Research.

Following is the description of each attribute in the fundamental analysis.

Corporate Governance/Management

We believe that a review of corporate governance and assessment of the senior management are important tools to determine investment merit. Good corporate governance aligns management with the interests of stakeholders. As such, analysts are to rank the company on the basis of good corporate governance principles that may include rules and procedures, board composition and staggered term limits, rights and responsibilities, corporate objectives, monitoring of actions and policies, and accountability. In addition, analysts will assess issues with controlling shareholders and whether decisions have been made in the past that were in the interests of all shareholders. In addition, management will be assessed based on industry experience, expertise, and/or track record.

High ranking example: Board and management that is aligned with the interests of shareholders with incentives based on stock price appreciation and with an experienced management team known for exceptional shareholder returns.

Low ranking example: Concentrated ownership without independent directors that do not necessarily align with all shareholders' interests.

The Market Opportunity Analysis

In this review, the analyst assesses the company's macro environment as a measure of understanding the industry. Factors considered include the size and growth potential of the industry under various economic conditions, the emerging demands in the market, technological benefits/disruptions, competition, geographical opportunities, and customer demands/needs, and an assessment of supply and distribution channels. In addition, the analyst will review legal and regulatory trends, as well as potential shifts in consumer or social behavior and natural environment changes.

High rank example: A company in an industry that is growing revenues well above GDP rates (which are on average 2% plus) and/or may have unmet or under-served needs in a rapidly growing market opportunity.

Low rank example: A mature industry that is in secular decline and likely to grow below GDP rates.

Competitive Position

The evaluation of the company's competitive position is another macro environment attribute designed to measure the relevance, market share, position and value proposition, and sustainable differentiations of the company and its products/services within its industry. Ease of entry into the industry and the ability of other well-funded players to potentially enter the market would be determined. As such, the assessment would consider the company's strengths and advantages of its products/services against weaknesses and limitations. This may include the company's current brand awareness, pricing and cost structure, current market strategies and geographic penetration that may affect demand for its products/services. In addition, the company's competitors would be evaluated.

High rank example: An analyst would consider the company's product to be superior to its competitors and that should allow the company to gain market share.

Low rank example: A company with a "me-too" product that does not have any significant technology advantages in an industry that has low barriers to entry.

Operating Leverage

Simplistically, operating leverage is determined by the operating income relative to changes in revenue. The analyst will calculate the impact on sensitivity on gross margins and variable costs to determine operating leverage. The analyst will take into account the ability of the company to cut fixed and variable costs in a challenged revenue environment and technological changes that may impact operating expenses. In addition, the analyst is to assess corporate strategies that include capital investment, which may be required for sustainable revenue growth, marketing expenses, and the company's ability to attract and retain talent and/or employees. The analyst should focus on the revenue opportunity and determine the price elasticity of demand for the company's products or services. In other words, the analyst is to rank the company based on improved operating margins going forward on an absolute and relative basis.

High rank example: A company that has improving margins for the foreseeable future, with significant price elasticity.

Low rank example: A company that is in a challenged revenue environment with a fixed cost structure and limited ability to cut costs, indicating an outlook for declining margins.

Financial Leverage

A strict definition of financial leverage is total debt divided by total shareholder's equity. Financial leverage analysis is to determine the company's ability to improve shareholder value by means of utilizing its balance sheet to grow organically or to acquire assets. Analysts may look at the company's debt to cash flow leverage ratio, interest coverage ratios, or debt to equity ratios. In addition, the interest rate environment and the outlook for interest rates are a factor in determining the company's ability to manage financial leverage. Finally, the analyst is expected to determine the ability to service the debt given the industry and/or company profile, such as cyclicality, barriers to entry, history of bankruptcy, consistency in revenue and profit growth, or predictability in sales and profits and large cash reserves. The analyst is expected to take into account capital intensity of the company and the anticipated of capital allocation decisions.

High rank example: A company with predictable and growing revenue and cash flow with modest debt levels. This may indicate that the company could improve shareholder value through growth investments, including acquisitions, using debt financing.

Low rank example: A company in a cyclical industry in a late stage economic cycle that has above average debt leverage and is in an industry that has a history of financial challenges, including bankruptcies.

ANALYST CREDENTIALS, PROFESSIONAL DESIGNATIONS, AND EXPERIENCE

Senior Equity Analyst focusing on Basic Materials & Mining. 20 years of experience in equity research. BA in Business Administration from Westminster College. MBA with a Finance concentration from the University of Missouri. MA in International Affairs from Washington University in St. Louis.
Named WSJ 'Best on the Street' Analyst and Forbes/StarMine's "Best Brokerage Analyst."
FINRA licenses 7, 24, 63, 87.

CONTINUING COVERAGE

Unless otherwise noted through the dropping of coverage or change in analyst, the analyst who wrote this research report will provide continuing coverage on this company through the publishing of research available through Noble Capital Market's distribution lists, website, third party distribution partners, and through Noble’s affiliated website, channelchek.com.

WARNING

This report is intended to provide general securities advice, and does not purport to make any recommendation that any securities transaction is appropriate for any recipient particular investment objectives, financial situation or particular needs. Prior to making any investment decision, recipients should assess, or seek advice from their advisors, on whether any relevant part of this report is appropriate to their individual circumstances. If a recipient was referred to by an investment advisor, that advisor may receive a benefit in respect of transactions effected on the recipients behalf, details of which will be available on request in regard to a transaction that involves a personalized securities recommendation. Additional risks associated with the security mentioned in this report that might impede achievement of the target can be found in its initial report issued by . This report may not be reproduced, distributed or published for any purpose unless authorized by .

RESEARCH ANALYST CERTIFICATION

Independence Of View

All views expressed in this report accurately reflect my personal views about the subject securities or issuers.

Receipt of Compensation

No part of my compensation was, is, or will be directly or indirectly related to any specific recommendations or views expressed in the public appearance and/or research report.

Ownership and Material Conflicts of Interest

Neither I nor anybody in my household has a financial interest in the securities of the subject company or any other company mentioned in this report.

NOBLE RATINGS DEFINITIONS	% OF SECURITIES COVERED	% IB CLIENTS
Outperform: potential return is >15% above the current price	85%	15%
Market Perform: potential return is -15% to 15% of the current price	15%	5%
Underperform: potential return is >15% below the current price	0%	0%

NOTE: On August 20, 2018, Noble Capital Markets, Inc. changed the terminology of its ratings (as shown above) from "Buy" to "Outperform", from "Hold" to "Market Perform" and from "Sell" to "Underperform." The percentage relationships, as compared to current price (definitions), have remained the same.

Additional information is available upon request. Any recipient of this report that wishes further information regarding the subject company or the disclosure information mentioned herein, should contact Noble Capital Markets, Inc. by mail or phone.

Noble Capital Markets, Inc.
150 E Palmetto Park Rd, Suite 110
Boca Raton, FL 33432
561-994-1191

Noble Capital Markets, Inc. is a FINRA (Financial Industry Regulatory Authority) registered broker/dealer.
Noble Capital Markets, Inc. is an MSRB (Municipal Securities Rulemaking Board) registered broker/dealer.
Member - SIPC (Securities Investor Protection Corporation)

Report ID: 27828