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

Form S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CIPHER MINING INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

84-1614529
(I.R.S. Employer Identification Number)

1 Vanderbilt Avenue, Floor 54, Suite C
New York, New York 10017
Tel.: (332) 262-2300

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

William Iwaschuk
Chief Legal Officer
Cipher Mining Inc.
1 Vanderbilt Avenue, Floor 54, Suite C
New York, New York 10017
United States of America
Tel.: (332) 262-2300

(Address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

J. David Stewart, Esq.
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London EC2M 3XF
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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective on filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for comply with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This registration statement contains:

- a base prospectus which covers (i) the offering, issuance and sale by us of up to \$500,000,000 in the aggregate of the securities identified below from time to time in one or more offerings; (ii) the offering and sale from time to time by the selling securityholders identified below of up to 23,265,565 shares of our common stock and the offer and sale from time to time by the selling securityholders of up to 85,500 of our warrants; (iii) the offering and sale of (A) up to 8,499,978 shares of common stock that are issuable by us upon the exercise of 8,499,978 public warrants that were previously registered and (B) up to 114,000 shares of common stock that are issuable by us upon the exercise of 114,000 private placement warrants; and
- a sales agreement prospectus covering the offering, issuance and sale by us of up to a maximum aggregate offering price of \$250,000,000 of our common stock that may be issued and sold under an At The Market Offering Agreement we have entered into with H.C. Wainwright & Co., LLC as sales agent.

The base prospectus immediately follows this explanatory note. The specific terms of the securities offered pursuant to the base prospectus are specified in the sales agreement prospectus immediately following the base prospectus. The \$250,000,000 of common stock that may be offered, issued and sold under the sales agreement prospectus supplement is included in the \$250,000,000 of securities that may be offered, issued and sold by us under the base prospectus. Upon termination of the At The Market Offering Agreement with H.C. Wainwright & Co., LLC, any portion of the \$250,000,000 included in the sales agreement prospectus supplement that is not sold pursuant to the At The Market Offering Agreement will be available for sale in other offerings pursuant to the base prospectus and a corresponding prospectus supplement, and if no shares are sold under the sales agreement, the full \$500,000,000 of securities may be sold in other offerings pursuant to the base prospectus and a corresponding prospectus supplement.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated September 21, 2022.

PROSPECTUS



Cipher Mining Inc.

\$500,000,000

**Common Stock
Preferred Stock
Warrants
Units**

23,265,565 Shares of Common Stock Offered by Selling Securityholders

8,613,978 Shares of Common Stock Underlying Warrants

85,500 Warrants to Purchase Shares of Common Stock

We may offer and sell up to \$500,000,000 in the aggregate of the securities identified above from time to time in one or more offerings and on terms that we will determine at the time of the offering. This prospectus also relates to: (i) the offer and sale from time to time by the selling securityholders named in this prospectus (the "Selling Securityholders") of up to 23,265,565 shares of our common stock, par value \$0.001 per share ("common stock"), (ii) the offer and sale from time to time by the Selling Securityholders of up to 85,500 of our warrants originally purchased in a private placement by certain of the Selling Securityholders; and (iii) the offer and sale of (A) up to 8,499,978 shares of common stock that are issuable by us upon the exercise of 8,499,978 public warrants that were previously registered and (B) up to 114,000 shares of common stock that are issuable by us upon the exercise of 114,000 private placement warrants. This prospectus provides you with a general description of the securities.

Each time we or any of the Selling Securityholders offer and sell securities, we or such Selling Securityholders will provide a supplement to this prospectus, the extent necessary, that contains specific information about the offering and, if applicable, the Selling Securityholders, as well as the amounts, prices and terms of the securities. The supplement may also add, update or change information contained in this prospectus with respect to that offering. You should carefully read this prospectus and the applicable prospectus supplement before you invest in any of our securities.

We may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, dealers and agents, or directly to purchasers, or through a combination of these methods. In addition, the Selling Securityholders may offer and sell or securities from time to time, together or separately. If any underwriters, dealers or agents are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the sections of this prospectus entitled "*About this Prospectus*" and "*Plan of Distribution*" for more information. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

Our common stock and public warrants are listed on The Nasdaq Global Select Market ("Nasdaq") under the symbols "CIFR" and "CIFRW," respectively. On September 20, 2022, the last reported sales price of our common stock was \$1.47 per share and the last reported sales price of our public warrants was \$0.20 per warrant.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE "[RISK FACTORS](#)" ON PAGE 7 OF THIS PROSPECTUS AND ANY SIMILAR SECTION CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR SECURITIES.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2022.

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ABOUT THIS PROSPECTUS

This prospectus is part of a “shelf” registration statement that we filed with the U.S. Securities and Exchange Commission (the “Commission” or “SEC”). By using a shelf registration statement, we may sell securities from time to time and in one or more offerings up to \$500,000,000 and the Selling Securityholders may, from time to time, sell the securities described in this prospectus in one or more offerings as described in this prospectus. To the extent necessary, each time that we or the Selling Securityholders offer and sell securities, we or the Selling Securityholders may provide a prospectus supplement to this prospectus that contains specific information about the securities being offered and sold and the specific terms of that offering. To the extent permitted by law, we may also authorize one or more free writing prospectuses that may contain material information relating to these offerings. Such prospectus supplement or free writing prospectus may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement or free writing prospectus, you should rely on the prospectus supplement or free writing prospectus, as applicable. Before purchasing any securities, you should carefully read both this prospectus and the applicable prospectus supplement (and any applicable free writing prospectuses), together with the additional information described under the heading “*Where You Can Find More Information; Incorporation by Reference.*”

Neither we nor the Selling Securityholders have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. Neither we nor the Selling Securityholders take any responsibility for, nor provide any assurance as to the reliability of, any other information that others may give you. Neither we nor the Selling Securityholders will make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the applicable prospectus supplement to this prospectus is accurate only as of the date on its respective cover, that the information appearing in any applicable free writing prospectus is accurate only as of the date of that free writing prospectus, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus incorporates by reference, and any prospectus supplement or free writing prospectus may contain and incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, neither we nor the Selling Securityholders guarantee the accuracy or completeness of this information and neither we nor the Selling Securityholders have independently verified this information. In addition, the market and industry data and forecasts that may be included or incorporated by reference in this prospectus, any prospectus supplement or any applicable free writing prospectus may involve estimates, assumptions and other risks and uncertainties and are subject to change based on various factors, including those discussed under the heading “*Risk Factors*” contained in this prospectus, any applicable prospectus supplement and any applicable free writing prospectus, and under similar headings in other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance on this information.

On August 27, 2021 (the “Closing Date”), we consummated the business combination pursuant to the Agreement and Plan of Merger, dated March 4, 2021 (the “Merger Agreement”), by and among Good Works Acquisition Corp. (“GWAC” and, upon consummation of the Business Combination described below, “Cipher”), Currency Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of GWAC (“Merger Sub”), and Cipher Mining Technologies Inc., a Delaware corporation (“Cipher Mining Technologies”). Pursuant to the Merger Agreement, Merger Sub merged with and into Cipher Mining Technologies, the separate corporate existence of Merger Sub ceasing and Cipher Mining Technologies being the surviving corporation and a wholly owned subsidiary of Cipher (the “Merger” and, together with the other transactions contemplated by the Merger Agreement, the “Business Combination”). On the Closing Date, and in connection with the closing of the Transactions (the “Closing”), we changed our name to Cipher Mining Inc.

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As used in this prospectus, unless otherwise indicated or the context otherwise requires, the terms “we,” “our,” “us,” “registrant,” the “Company,” and “Cipher” mean Cipher Mining Inc. and its subsidiaries, which was a special purpose acquisition company called “Good Works Acquisition Corp.” prior to the closing of the Business Combination. When we refer to “you,” we mean the potential holders of the applicable series of securities.

WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION BY REFERENCE

Available Information

We file reports, proxy statements and other information with the SEC. The SEC maintains a web site that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is <http://www.sec.gov>.

We also maintain a website at <https://investors.ciphermining.com>, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on, or accessible through, our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

This prospectus and any prospectus supplement are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Forms of the documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement or documents incorporated by reference in the registration statement. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement through the SEC's website, as provided above.

Incorporation by Reference

The SEC's rules allow us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in this prospectus or a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or a subsequently filed document incorporated by reference modifies or replaces that statement.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC, other than any portions of the respective filing that were furnished, pursuant to Item 2.02 or Item 7.01 of Current Reports on Form 8-K (including exhibits related thereto) or other applicable SEC rules, rather than filed:

- Our Annual Report on [Form 10-K](#) for the year ended December 31, 2021, filed with the SEC on March 4, 2022.
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2022 and June 30, 2022, filed with the SEC on [May 10, 2022](#) and [August 9, 2022](#), respectively.
- Our Current Reports on Form 8-K filed with the SEC on [January 4, 2022](#), [April 14, 2022](#), [May 10, 2022](#), and [September 1, 2022](#) and [September 15, 2022](#).
- The description of our common stock contained in our registration statement on [Form 8-A](#) filed with the SEC on October 15, 2020 and any amendment or report filed with the SEC for the purpose of updating the description, including Exhibit 4.5 to our Annual Report on Form 10-K for the year ended December 31, 2021.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, which we refer to as the "Exchange Act" in this prospectus, prior to the termination of this offering, including all such documents we may file with the SEC after the date of the

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initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

You may request a free copy of any of the documents incorporated by reference in this prospectus by writing or telephoning us at the following address:

CIPHER MINING INC.
1 VANDERBILT AVENUE, FLOOR 54, SUITE C
NEW YORK, NEW YORK 10017
(332) 262-2300

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus or any accompanying prospectus supplement.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Exchange Act. The forward-looking statements are contained principally in our Annual Reports on Form 10-K and in our quarterly reports on Form 10-Q and in any prospectus supplement related hereto in greater detail under the sections titled “*Risk Factors*,” “*Management’s Discussion and Analysis of Financial Condition and Results of Operations*,” and “*Business*,” but are also contained elsewhere in this prospectus and the documents incorporated by reference herein. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “targets,” “projects,” “contemplates,” “believes,” “estimates,” “forecasts,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions. Forward-looking statements contained in this prospectus include, but are not limited to statements regarding:

- our planned buildout of cryptocurrency mining sites;
- our ability to raise financing in the future;
- our future results of operations and financial position, industry and business trends, equity compensation, business strategy, plans, market growth and our objectives for future operations;
- our commercial partnerships and supply agreements;
- the ability to maintain the listing of our common stock and warrants on Nasdaq, and the potential liquidity and trading of such securities;
- our success in retaining or recruiting, or changes required in, our officers, key employees or directors;
- the effects of competition and regulation on our business;
- the effects of price fluctuations in the wholesale and retail power markets;
- the effects of global economic, business or political conditions, such as the global coronavirus (“COVID-19”) pandemic and the disruption caused by various countermeasures to reduce its spread; and
- the value and volatility of Bitcoin and other cryptocurrencies.

The forward-looking statements contained in this prospectus are based on our current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described under the heading “*Risk Factors*.” Should one or more of these risks or uncertainties materialize, or should any of the assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

THE COMPANY

We are an emerging technology company that operates in the Bitcoin mining ecosystem in the United States. Specifically, we plan to develop and grow a cryptocurrency mining business, specializing in Bitcoin. Our key mission is to become a leading Bitcoin mining company in the United States.

On August 27, 2021, we consummated the Business Combination with GWAC. As a stand-alone, U.S.-based cryptocurrency mining business, specializing in Bitcoin, we have begun our buildout of cryptocurrency mining sites in the United States. We began deployment of capacity in the first quarter of 2022, with mining operations beginning at the Alborz facility, located in Texas, in February 2022.

In connection with our planned buildout, we entered into a number of power agreements and joint venture agreements, all of which, together, are expected to cover at least four sites where we expect to begin our buildout. Pursuant to these agreements, we expect to have access, for at least five years, to an average cost of electricity of approximately 2.7 c/kWh. We expect that this will help competitively position us to achieve our goal of becoming a leading Bitcoin mining operator in the United States.

We filed our certificate of incorporation with the Secretary of State of Delaware on June 24, 2020 as Good Works Acquisition Corp. On August 27, 2021, we closed the Business Combination with Cipher Mining Technologies, as a result of which Cipher Mining Technologies became a wholly owned subsidiary of ours, and we changed our name to “Cipher Mining Inc.”

Our principal executive offices are located at 1 Vanderbilt Avenue, Floor 54, Suite C, New York, New York and our telephone number is (332) 262-2300. Our website address is <https://www.ciphermining.com/>. We do not incorporate the information on, or accessible through, our website into this prospectus, and you should not consider any information on, or accessible through, our website as part of this prospectus.

RISK FACTORS

Investment in any securities offered pursuant to this prospectus and the applicable prospectus supplement involves risks. You should carefully consider the risk factors incorporated by reference to our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, and all other information contained or incorporated by reference into this prospectus, as updated by our subsequent filings under the Exchange Act, and the risk factors and other information contained in the applicable prospectus supplement and any applicable free writing prospectus before acquiring any of such securities. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of the securities as set forth in the applicable prospectus supplement.

All of the shares of common stock and warrants offered by the Selling Securityholders will be sold by them for their respective accounts. We will not receive any of the proceeds from these sales.

The Selling Securityholders will pay any underwriting fees, discounts, selling commissions, stock transfer taxes and certain legal expenses incurred by such Selling Securityholders in disposing of their shares of common stock and warrants, and we will bear all other costs, fees and expenses incurred in effecting the registration of such securities covered by this prospectus, including, without limitation, all registration and filing fees, Nasdaq listing fees and fees and expenses of our counsel and our independent registered public accountants.

We will receive the proceeds from the exercise of the warrants for cash, but not from the sale of the shares of common stock issuable upon such exercise. Unless otherwise disclosed in a prospectus supplement, we intend to use any net proceeds from the exercise of warrants for cash for investment in growth and general corporate and working capital purposes.

DESCRIPTION OF CAPITAL STOCK

The following summary of the material terms of our capital stock is not intended to be a complete and is qualified by reference to the amended and restated certificate of incorporation (for purposes of this section, the "Certificate of Incorporation") and the amended and restated bylaws (for purposes of this section, the "Bylaws" and together with the Certificate of Incorporation, the "Governing Documents") which are exhibits to the registration statement of which this prospectus is a part. We urge to you read each of the Certificate of Incorporation and the Bylaws described herein in their entirety for a complete description of the rights and preferences of our securities.

Authorized Capitalization

General

We are authorized to issue 510,000,000 shares of capital stock, consisting of (i) 500,000,000 shares of common stock, par value \$0.001 per share and (ii) 10,000,000 shares of undesignated preferred stock, par value \$0.001 per share. As of the date of this prospectus, there are 247,518,966 shares of our common stock outstanding and no shares of preferred stock outstanding.

Voting rights

Each outstanding share of our common stock shall entitle the holder thereof to one vote on each matter properly submitted to our shareholders of for their vote. Except as otherwise required by law, holders of our common stock will not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of our preferred stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation.

Dividend rights

Subject to preferences that may apply to any shares of our preferred stock outstanding at the time, the holders of our common stock are entitled to receive dividends out of funds legally available if our board of directors (the "Board"), in its discretion, determines to issue dividends and then only at the times and in the amounts that the Board may determine.

Rights upon liquidation

Upon our liquidation, dissolution, or winding-up, the assets legally available for distribution to our shareholders would be distributable ratably among the holders of our common stock outstanding at that time, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights of and the payment of liquidation preferences, if any, on any outstanding shares of our preferred stock.

Other rights

No holder of shares of our common stock will be entitled to preemptive or subscription rights contained in the Certificate of Incorporation or in the Bylaws. There are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of holders of our common stock will be subject to those of the holders of any shares of our preferred stock that we may issue in the future.

Preferred Stock

Our preferred stock may be issued from time to time in one or more series. The Board is expressly authorized, subject to any limitations prescribed by the laws of the State of Delaware, to provide, out of unissued shares of

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our preferred stock that have not been designated as to series, with respect to each series, to establish the number of shares to be included in each such series, to fix the designation, powers (including voting powers), preferences and relative, participating, optional or other special rights, if any, of each such series and any qualifications, limitations or restrictions thereof, and, subject to the rights of such series, to thereafter increase (but not above the total number of authorized shares of our preferred stock) or decrease (but not below the number of shares of such series then outstanding) the number of shares of any such series. The issuance of our preferred stock could have the effect of decreasing the trading price of our common stock, restricting dividends on our capital stock, diluting the voting power of our common stock, impairing the liquidation rights of our capital stock, or delaying or preventing a change in control of us.

Election of Directors and Vacancies

Subject to the rights of any series of our preferred stock then outstanding to elect additional directors under specified circumstances, the directors on the Board consist of seven (7) directors, and be divided, with respect to the time for which they severally hold office, into three classes designated as Class I, Class II and Class III, respectively. The initial term of office of the Class I directors expires at the first annual meeting of shareholders following the consummation of the Business Combination, the initial term of office of the Class II directors shall expire at the second annual meeting of shareholders following the initial classification of the Board and the initial term of office of the Class III directors shall expire at our third annual meeting of shareholders following the initial classification of the Board. At each annual meeting of shareholders following the initial classification of the Board, directors elected to succeed those directors of the class whose terms then expire shall be elected for a term of office expiring at the third succeeding annual meeting of our shareholders after their election.

Under the Bylaws, except as may be required in the Certificate of Incorporation, directors shall be elected by a plurality of the votes cast by the holders of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors.

Each of our directors shall hold office until the annual meeting at which such director's term expires and until such director's successor is elected and qualified or until such director's earlier death, resignation, or removal. Subject to the rights of holders of any series of our preferred stock to elect directors, directors may be removed only as provided by the Certificate of Incorporation and applicable law. All vacancies occurring in the Board and any newly created directorships resulting from any increase in the authorized number of directors shall be filled in the manner set forth below.

Subject to the rights of any series of our preferred stock then outstanding, any vacancy occurring in the Board for any cause, and any newly created directorship resulting from any increase in the authorized number of directors, shall be filled only by the affirmative vote of a majority of the directors then in office, even if less than a quorum, or by a sole remaining director, and shall not be filled by the shareholders.

Any director elected in accordance with the preceding sentence shall hold office for a term expiring at the annual meeting of shareholders at which the term of office for the class in which the vacancy was created or occurred or, in the case of newly created directorships, the class to which the director has been assigned expires and until such director's successor shall have been duly elected and qualified, or until such director's earlier death, resignation, or removal.

If and for so long as the holders of any series of our preferred stock have the special right to elect additional directors, the then otherwise total authorized number of our directors shall automatically be increased by such specified number of directors, and the holders of such Preferred Stock will be entitled to elect the additional directors so provided for or fixed pursuant to the terms of the series of the preferred stock. Each such additional director shall serve until such director's successor shall have been duly elected and qualified, or until such director's right to hold such office terminates pursuant to said provisions, whichever occurs earlier, subject to his or her earlier death, resignation, or removal.

Quorum

Except as otherwise provided by applicable law, the Certificate of Incorporation or the Bylaws, at each meeting of stockholders the holders of a majority of the voting power of the shares of stock issued and outstanding and entitled to vote at the meeting, present in person or represented by proxy, shall constitute a quorum for the transaction of business. If a quorum shall fail to attend any meeting, the chairperson of the meeting or, if directed to be voted on by the chairperson of the meeting, the holders of a majority of the voting power of the shares entitled to vote who are present in person or represented by proxy at the meeting may adjourn the meeting. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, then a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. At the adjourned meeting, we may transact any business that might have been transacted at the original meeting. If a quorum is present at the original meeting, it shall also be deemed present at the adjourned meeting.

Anti-takeover Effects of the Governing Documents

The Governing Documents contain provisions that may delay, defer or discourage another party from acquiring control of the Company. We expect that these provisions, which are summarized below, will discourage coercive takeover practices or inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of the Company to first negotiate with the Board, which we believe may result in an improvement of the terms of any such acquisition in favor of our stockholders. However, they also give the board of directors the power to discourage acquisitions that some stockholders may favor.

Classified Board of Directors

As indicated above, the Certificate of Incorporation provides that the Board will be divided into three classes of directors, with each class of directors being elected by our stockholders every three years. The classification of directors will have the effect of making it more difficult for stockholders to change the composition of the Board.

Authorized but Unissued Capital Stock

Delaware law does not require stockholder approval for any issuance of authorized shares. However, the listing requirements of Nasdaq, which would apply so long as our common stock (or warrants) remains listed on Nasdaq, require stockholder approval of certain issuances equal to or exceeding 20% of the then outstanding voting power or then outstanding number of shares of our common stock. Additional shares that may be issued in the future may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions.

One of the effects of the existence of unissued and unreserved common stock may be to enable the Board to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of the Company by means of a merger, tender offer, proxy contest or otherwise and thereby protect the continuity of management and possibly deprive stockholders of opportunities to sell their shares of our common stock at prices higher than prevailing market prices.

Special Meeting, Action by Written Consent and Advance Notice Requirements for Stockholder Proposals

Unless otherwise required by law, and subject to the rights, if any, of the holders of any series of our preferred stock, Special Meetings of the stockholders, for any purpose or purposes, may be called only by (i) a majority of the Board, (ii) the chairperson of the board of directors, (iii) the chief executive officer or (iv) the President, and our stockholders may not take action by written consent in lieu of a meeting. Notice of all meetings of stockholders shall be given in writing stating the date, time and place, if any, of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and

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vote at such meeting and the record date for determining the stockholders entitled to vote at the meeting if such date is different from the record date for determining stockholders entitled to notice of the meeting. Such notice shall also set forth the purpose or purposes for which the meeting is called.

Unless otherwise required by applicable law or the Certificate of Incorporation, notice of any meeting of stockholders shall be given not less than ten (10), nor more than sixty (60), days before the date of the meeting to each stockholder of record entitled to vote at such meeting as of the record date for determining stockholders entitled to notice. The Bylaws also provide that any action required or permitted to be taken at any meeting of the Board, or of any committee thereof, may be taken without a meeting if all members of the Board or such committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board or committee, as applicable. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

The Bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at an annual meeting of stockholders. The Bylaws also specify certain requirements regarding the form and content of a stockholder's notice, including disclosure of the proposing stockholders' agreements, arrangements and understandings made in connection with such a proposal or nomination. These provisions may preclude stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders. We expect that these provisions might also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of the Company. These provisions could have the effect of delaying until the next stockholder meeting any stockholder actions, even if they are favored by the holders of a majority of our outstanding voting securities.

Amendment to Certificate of Incorporation and Bylaws

We may amend or repeal any provision contained in the Certificate of Incorporation in the manner prescribed by the laws of the State of Delaware, and all rights conferred upon stockholders are granted subject to this reservation. Notwithstanding any provision of the Certificate of Incorporation or any provision of law that might otherwise permit a lesser vote or no vote, subject to the rights of any outstanding series of our preferred stock, but in addition to any vote of the holders of any class or series of our stock required by law or by the Certificate of Incorporation, the affirmative vote of the holders of at least two-thirds of the voting power of all of the then-outstanding shares of our capital stock entitled to vote generally in the election of directors, voting together as a single class, will be required to amend or repeal certain provisions of the Certificate of Incorporation.

The Board shall have the power to adopt, amend or repeal the Bylaws. Any adoption, amendment or repeal of the Bylaws by the Board shall require the approval of a majority of the Board. The stockholders shall also have power to adopt, amend or repeal the Proposed Bylaws. Notwithstanding any other provision of the Certificate of Incorporation or any provision of law that might otherwise permit a lesser or no vote, but in addition to any vote of the holders of any class or series of our stock required by applicable law or by the Certificate of Incorporation, the affirmative vote of the holders of at least two-thirds of the voting power of all of the then-outstanding shares of our capital stock entitled to vote generally in the election of directors, voting together as a single class, shall be required for the stockholders to adopt, amend or repeal any provision of the Bylaws.

Delaware Anti-Takeover Statute

Section 203 of the Delaware General Corporation Law ("DGCL") provides that if a person acquires 15% or more of the voting stock of a Delaware corporation, such person becomes an "interested stockholder" and may not engage in certain "business combinations" with the corporation for a period of three years from the time such person acquired 15% or more of the corporation's voting stock, unless:

1. the board of directors approves the acquisition of stock or the merger transaction before the time that the person becomes an interested stockholder;

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2. the interested stockholder owns at least 85% of the outstanding voting stock of the corporation at the time the merger transaction commences (excluding voting stock owned by directors who are also officers and certain employee stock plans); or
3. the merger transaction is approved by the board of directors and at a meeting of stockholders, not by written consent, by the affirmative vote of 2/3 of the outstanding voting stock which is not owned by the interested stockholder.

A Delaware corporation may elect in its certificate of incorporation or bylaws not to be governed by this particular Delaware law. Under the Certificate of Incorporation, we do not opt out of Section 203 of the DGCL and therefore is subject to Section 203.

Limitations on Liability and Indemnification of Officers and Directors

Section 145 of the DGCL, authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers under certain circumstances and subject to certain limitations. The terms of Section 145 of the DGCL are sufficiently broad to permit indemnification under certain circumstances for liabilities, including reimbursement of expenses incurred, arising under the Securities Act. As permitted by the DGCL, the Certificate of Incorporation contains provisions that eliminate the personal liability of directors for monetary damages for any breach of fiduciary duties as a director, except liability for the following (i) any breach of a director's duty of loyalty to the Company or its stockholders; (ii) acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; (iii) under Section 174 of the DGCL (regarding unlawful dividends and stock purchases); or (iv) any transaction from which the director derived an improper personal benefit. As permitted by the DGCL, the Bylaws provide that: (i) we are required to indemnify its directors and executive officers to the fullest extent permitted by the DGCL, subject to very limited exceptions; (ii) we may indemnify its other employees and agents as set forth in the DGCL; (iii) we are required to advance expenses, as incurred, to its directors and executive officers in connection with a legal proceeding to the fullest extent permitted by the DGCL, subject to very limited exceptions; and (iv) the rights conferred in the Bylaws are not exclusive.

We have entered into indemnification agreements with each director and executive officer to provide these individuals additional contractual assurances regarding the scope of the indemnification set forth in the Certificate of Incorporation and Bylaws and to provide additional procedural protections. There is no pending litigation or proceeding involving a director or executive officer for which indemnification is sought. The indemnification provisions in the Certificate of Incorporation, Bylaws, and the indemnification agreements entered into or to be entered into between us and each of our directors and executive officers may be sufficiently broad to permit indemnification of our directors and executive officers for liabilities arising under the Securities Act. We currently carry liability insurance for our directors and officers.

Exclusive Jurisdiction of Certain Actions

The Certificate of Incorporation requires, to the fullest extent permitted by law, unless we consent in writing to the selection of an alternative forum, that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for: (i) any derivative action or proceeding brought on behalf of us; (ii) any action asserting a claim of breach of a fiduciary duty owed by any current or former director, officer, stockholder, employee or agent to us or our stockholders; (iii) any action asserting a claim against us arising pursuant to any provision of the DGCL, the Governing Documents or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; (iv) any action to interpret, apply, enforce or determine the validity of the Governing Documents; or (v) any action governed by the internal affairs doctrine.

In addition, the Bylaws require that, unless we consent in writing to the selection of an alternative forum, the federal district courts of United States shall be the sole and exclusive forum for resolving any action asserting a claim arising under the Securities Act.

DESCRIPTION OF EXISTING WARRANTS

The following summary of the material terms of our existing warrants is not intended to be a complete and is qualified by reference to the Governing Documents and the Warrant-related documents described herein which are exhibits to the registration statement of which this prospectus is a part. We urge you to read each of the Governing Documents and the Warrant-related documents described herein in their entirety for a complete description of the rights and preferences of our securities.

Public Warrants

Public warrants refer to our warrants that were offered and sold in GWAC's initial public offering pursuant to a registration statement and entitle the registered holder to purchase one share of common stock at a price of \$11.50 per share, subject to adjustment as discussed below, at any time commencing on October 19, 2021, provided in each case that we have an effective registration statement under the Securities Act covering our common stock issuable upon exercise of the public warrants and a current prospectus relating to them is available (or we permit holders to exercise their warrants on a cashless basis under the circumstances specified in the Warrant Agreement) and such shares are registered, qualified or exempt from registration under the securities, or blue sky, laws of the state of residence of the holder. Pursuant to the Warrant Agreement, a warrant holder may exercise its warrants only for a whole number of shares of common stock. This means only a whole warrant may be exercised at a given time by a warrant holder. The public warrants will expire on August 27, 2026, at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

Redemption of Warrants for Cash

Once the warrants become exercisable, we may redeem the outstanding warrants (except as described herein with respect to the private placement warrants):

- in whole and not in part;
- at a price of \$0.01 per Warrant;
- upon a minimum of 30 days' prior written notice of redemption to each warrant holder; and
- if, and only if, the closing price of our common stock equals or exceeds \$18.00 per share (as adjusted for share splits, share capitalizations, reorganizations, recapitalizations and the like) for any 20 trading days within a 30-trading day period ending three trading days before we send the notice of redemption to the warrant holders.

We will not redeem the warrants as described above unless a registration statement under the Securities Act covering the issuance of our common stock issuable upon exercise of the warrants is then effective and a current prospectus relating to our common stock is available throughout the 30-day redemption period. If and when the warrants become redeemable by us, we may exercise our redemption right even if we are unable to register or qualify the underlying securities for sale under all applicable state securities laws.

We have established the last of the redemption criteria discussed above to prevent a redemption call unless there is at the time of the call a significant premium to the warrant exercise price. If the foregoing conditions are satisfied and we issue a notice of redemption of the warrants, each warrant holder will be entitled to exercise his, her or its warrant prior to the scheduled redemption date. However, the price of the shares of our common stock may fall below the \$18.00 redemption trigger price (as adjusted for share splits, share capitalizations, reorganizations, recapitalizations and the like) as well as the \$11.50 (for whole shares) warrant exercise price after the redemption notice is issued.

Redemption Procedures and Cashless Exercise:

If we call the warrants for redemption as described above, our management will have the option to require any holder that wishes to exercise his, her or its warrant to do so on a "cashless basis." In determining whether to

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require all holders to exercise their warrants on a “cashless basis,” our management will consider, among other factors, our cash position, the number of warrants that are outstanding and the dilutive effect on our stockholders of issuing the maximum number of shares of common stock issuable upon the exercise of the warrants. If our management takes advantage of this option, all holders of warrants would pay the exercise price by surrendering their warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the exercise price of the warrants and the “fair market value” (defined below) by (y) the fair market value. The “fair market value” shall mean the average reported last sale price of the common stock for the 10 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of warrants. If our management takes advantage of this option, the notice of redemption will contain the information necessary to calculate the number of shares of common stock to be received upon exercise of the warrants, including the “fair market value” in such case. Requiring a cashless exercise in this manner will reduce the number of shares to be issued and thereby lessen the dilutive effect of a warrant redemption. We believe this feature is an attractive option to us if we do not need the cash from the exercise of the warrants. If we call the warrants for redemption and our management does not take advantage of this option, the holders of the private placement warrants and their permitted transferees would still be entitled to exercise their private placement warrants for cash or on a cashless basis using the same formula described above that other warrant holders would have been required to use had all warrant holders been required to exercise their warrants on a cashless basis, as described in more detail below.

A holder of a warrant may notify us in writing in the event it elects to be subject to a requirement that such holder will not have the right to exercise such warrant, to the extent that after giving effect to such exercise, such person and any of its affiliates or any other person subject to aggregation with such person for purposes of the “beneficial ownership” test under Section 13 of the Exchange Act, or any “group” (within the meaning of Section 13 of the Exchange Act) of which such person is or may be deemed to be a part, would beneficially own (within the meaning of Section 13 of the Exchange Act) (or to the extent that for any reason the equivalent calculation under Section 16 of the Exchange Act and the rules and regulations thereunder would result in a higher ownership percentage, such higher percentage would be) in excess of 9.8% (or such other amount as a holder may specify) of the shares of common stock outstanding immediately after giving effect to such exercise.

Anti-dilution Adjustments

If the number of outstanding shares of common stock is increased by a capitalization or share dividend payable in shares of common stock, or by a split-up of common stock or other similar event, then, on the effective date of such capitalization or share dividend, split-up or similar event, the number of shares of common stock issuable on exercise of each warrant will be increased in proportion to such increase in the outstanding shares of common stock. A rights offering made to all or substantially all holders of common stock entitling holders to purchase shares of common stock at a price less than the “historical fair market value” (as defined below) will be deemed a share dividend of a number of shares of common stock equal to the product of (i) the number of shares of common stock actually sold in such rights offering (or issuable under any other equity securities sold in such rights offering that are convertible into or exercisable for shares of common stock) and (ii) one minus the quotient of (x) the price per share of common stock paid in such rights offering and (y) the historical fair market value.

In addition, if we, at any time while the warrants are outstanding and unexpired, pay a dividend or make a distribution in cash, securities or other assets to all or substantially all the holders of shares of common stock on account of such shares (or other securities into which the warrants are convertible), other than (a) as described above, and (b) any cash dividends or cash distributions which, when combined on a per share basis with all other cash dividends and cash distributions paid on the shares of common stock during the 365-day period ending on the date of declaration of such dividend or distribution does not exceed \$0.50 (as adjusted to appropriately reflect any other adjustments and excluding cash dividends or cash distributions that resulted in an adjustment to the exercise price or to the number of shares of common stock issuable on exercise of each warrant) but only with

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respect to the amount of the aggregate cash dividends or cash distributions equal to or less than \$0.50 per share, then the warrant exercise price will be decreased, effective immediately after the effective date of such event, by the amount of cash and/or the fair market value of any securities or other assets paid on each share of our common stock in respect of such event.

If the number of outstanding shares of our common stock is decreased by a consolidation, combination, reverse share split or reclassification of share of our common stock or other similar event, then, on the effective date of such consolidation, combination, reverse share split, reclassification or similar event, the number of shares of common stock issuable on exercise of each warrant will be decreased in proportion to such decrease in outstanding shares of common stock.

Whenever the number of shares of common stock purchasable upon the exercise of the warrants is adjusted, as described above, the warrant exercise price will be adjusted by multiplying the warrant exercise price immediately prior to such adjustment by a fraction (x) the numerator of which will be the number of shares of common stock purchasable upon the exercise of the warrants immediately prior to such adjustment and (y) the denominator of which will be the number of shares of common stock so purchasable immediately thereafter.

In case of any reclassification or reorganization of the outstanding shares of common stock (other than those described above or that solely affects the par value of such shares of common stock), or in the case of any merger or consolidation of us with or into another corporation (other than a consolidation or merger in which we are the continuing corporation and that does not result in any reclassification or reorganization of our outstanding shares of common stock), or in the case of any sale or conveyance to another corporation or entity of the assets or other property of us as an entirety or substantially as an entirety in connection with which we are dissolved, the holders of the warrants will thereafter have the right to purchase and receive, upon the basis and upon the terms and conditions specified in the warrants and in lieu of the shares of common stock immediately theretofore purchasable and receivable upon the exercise of the rights represented thereby, the kind and amount of shares of common stock or other securities or property (including cash) receivable upon such reclassification, reorganization, merger or consolidation, or upon a dissolution following any such sale or transfer, that the holder of the warrants would have received if such holder had exercised their warrants immediately prior to such event. If less than 70% of the consideration receivable by the holders of shares of common stock in such a transaction is payable in the form of shares in the successor entity that are not listed for trading on a national securities exchange or are not quoted in an established over-the-counter market, or will not be so listed for trading or quoted immediately following such event, and if the registered holder of the warrant properly exercises the warrant within thirty days following public disclosure of such transaction, the warrant exercise price will be reduced as specified in the Warrant Agreement based on the Black-Scholes value (as defined in the Warrant Agreement) of the warrant. The purpose of such exercise price reduction is to provide additional value to holders of the warrants when an extraordinary transaction occurs during the exercise period of the warrants pursuant to which the holders of the warrants otherwise do not receive the full potential value of the warrants.

Our warrants have been issued in registered form under the Warrant Agreement. The Warrant Agreement provides that the terms of the warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision, but requires the approval by the holders of at least 65% of the then outstanding public warrants to make any change that adversely affects the interests of the registered holders of public warrants. You should review a copy of the Warrant Agreement, which is filed as an exhibit to the registration statement of which this prospectus is a part, for a complete description of the terms and conditions applicable to the warrants.

The warrants may be exercised upon surrender of the warrant certificate on or prior to the expiration date at the offices of the warrant agent, with the exercise form on the reverse side of the warrant certificate completed and executed as indicated, accompanied by full payment of the exercise price (or on a cashless basis, if applicable), by certified or official bank check payable to us, for the number of warrants being exercised. The warrant holders do not have the rights or privileges of holders of shares of common stock and any voting rights until they

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exercise their warrants and receive shares of common stock. After the issuance of common stock upon exercise of the warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by shareholders.

No fractional shares of common stock will be issued upon exercise. If, upon exercise, a holder would be entitled to receive a fractional interest in a share, we will round down to the nearest whole number of the number of shares of common stock to be issued to the holder.

We have agreed that, subject to applicable law, any action, proceeding or claim against us arising out of or relating in any way to the Warrant Agreement will be brought and enforced in the courts of the State of New York or the United States District Court for the Southern District of New York, and we irrevocably submit to such jurisdiction, which jurisdiction will be the exclusive forum for any such action, proceeding or claim. This provision applies to claims under the Securities Act but does not apply to claims under the Exchange Act or any claim for which the federal district courts of the United States of America are the sole and exclusive forum.

Private Placement Warrants

Private placement warrants refer to the warrants to purchase our ordinary shares that were issued as part of GWAC's initial public offering. As of June 30, 2022, there were 114,000 private placement warrants outstanding.

Except as described below, the private placement warrants have terms and provisions that are identical to those of the public warrants. The private placement warrants (including the shares of common stock issuable upon exercise of the private placement warrants) will not be redeemable by us, so long as they are held by their initial holders or their permitted transferees. The initial holders of the private placement warrants, or their permitted transferees, have the option to exercise the private placement warrants on a cashless basis. If the private placement warrants are held by holders other than the initial holders or their permitted transferees, the private placement warrants will be redeemable by us in all redemption scenarios and exercisable by the holders on the same basis as the public warrants.

Except as described above regarding redemption procedures and cashless exercise in respect of the public warrants, if holders of the private placement warrants elect to exercise them on a cashless basis, they would pay the exercise price by surrendering his, her or its warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the excess of the "historical fair market value" (defined below) over the exercise price of the warrants by (y) the historical fair market value. The "historical fair market value" will mean the average reported closing price of the shares of common stock for the 10 trading days ending on the third trading day prior to the date on which the notice of warrant exercise is sent to the warrant agent.

Transfer Agent and Warrant Agent

The transfer agent for our common stock and warrant agent for the public warrants and private placement warrants is Continental Stock Transfer & Trust Company. We may designate a new or additional transfer agent for such shares and warrants, and we will provide you with notice of such action and of any change in the office through which any such agent will act.

DESCRIPTION OF NEW WARRANTS

We may issue warrants for the purchase of shares of our common stock or preferred stock. We may issue warrants independently or together with other securities, and the warrants may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and the investors or a warrant agent. The following summary of material provisions of the warrants and warrant agreements is subject to, and qualified in its entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to a particular series of warrants. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. We urge you to read the applicable prospectus supplement and any related free writing prospectus, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants.

The particular terms of any issue of warrants will be described in the prospectus supplement relating to the issue. Those terms may include:

- the number of shares of common stock or preferred stock purchasable upon the exercise of warrants to purchase such shares and the price at which such number of shares may be purchased upon such exercise;
- the designation, stated value and terms (including, without limitation, liquidation, dividend, conversion and voting rights) of the series of preferred stock purchasable upon exercise of warrants to purchase preferred stock;
- the date, if any, on and after which the warrants and the related preferred stock or common stock will be separately transferable;
- the terms of any rights to redeem or call the warrants;
- the date on which the right to exercise the warrants will commence and the date on which the right will expire;
- United States federal income tax consequences applicable to the warrants; and
- any additional terms of the warrants, including terms, procedures, and limitations relating to the exchange, exercise and settlement of the warrants.

Holders of warrants will not be entitled to:

- vote, consent or receive dividends;
- receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter; or
- exercise any rights as our stockholder.

Each warrant will entitle its holder to purchase the number of shares of preferred stock or common stock at the exercise price set forth in, or calculable as set forth in, the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

A holder of warrant certificates may exchange them for new warrant certificates of different denominations, present them for registration of transfer and exercise them at the applicable office of the warrant agent or any other office indicated in the applicable prospectus supplement. Until any warrants to purchase common stock or preferred stock are exercised, the holders of the warrants will not have any rights of holders of the underlying common stock or preferred stock, including any rights to receive dividends or payments upon any liquidation, dissolution or winding up on the common stock or preferred stock, if any.

DESCRIPTION OF UNITS

We may issue units consisting of any combination of the other types of securities offered under this prospectus in one or more series. We may evidence each series of units by unit certificates that we will issue under a separate agreement. We may enter into unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

The following description, together with the additional information included in any applicable prospectus supplement, summarizes the general features of the units that we may offer under this prospectus. You should read any prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the series of units being offered, as well as the complete unit agreements that contain the terms of the units. Specific unit agreements will contain additional important terms and provisions and we will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of each unit agreement relating to units offered under this prospectus.

If we offer any units, certain terms of that series of units will be described in the applicable prospectus supplement, including, without limitation, the following, as applicable:

- the title of the series of units;
- identification and description of the separate constituent securities comprising the units;
- the price or prices at which the units will be issued;
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable;
- a discussion of certain United States federal income tax considerations applicable to the units; and
- any other terms of the units and their constituent securities.

GLOBAL SECURITIES

Book-Entry, Delivery and Form

Unless we indicate differently in any applicable prospectus supplement or free writing prospectus, the securities initially will be issued in book-entry form and represented by one or more global notes or global securities, or, collectively, global securities. The global securities will be deposited with, or on behalf of, The Depository Trust Company, New York, New York, as depository, or DTC, and registered in the name of Cede & Co., the nominee of DTC. Unless and until it is exchanged for individual certificates evidencing securities under the limited circumstances described below, a global security may not be transferred except as a whole by the depository to its nominee or by the nominee to the depository, or by the depository or its nominee to a successor depository or to a nominee of the successor depository.

DTC has advised us that it is:

- a limited-purpose trust company organized under the New York Banking Law;
- a “banking organization” within the meaning of the New York Banking Law;
- a member of the Federal Reserve System;
- a “clearing corporation” within the meaning of the New York Uniform Commercial Code; and
- a “clearing agency” registered pursuant to the provisions of Section 17A of the Exchange Act.

DTC holds securities that its participants deposit with DTC. DTC also facilitates the settlement among its participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in participants’ accounts, thereby eliminating the need for physical movement of securities certificates. “Direct participants” in DTC include securities brokers and dealers, including underwriters, banks, trust companies, clearing corporations and other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation, or DTCC. DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others, which we sometimes refer to as indirect participants, that clear through or maintain a custodial relationship with a direct participant, either directly or indirectly. The rules applicable to DTC and its participants are on file with the SEC.

Purchases of securities under the DTC system must be made by or through direct participants, which will receive a credit for the securities on DTC’s records. The ownership interest of the actual purchaser of a security, which we sometimes refer to as a beneficial owner, is in turn recorded on the direct and indirect participants’ records. Beneficial owners of securities will not receive written confirmation from DTC of their purchases. However, beneficial owners are expected to receive written confirmations providing details of their transactions, as well as periodic statements of their holdings, from the direct or indirect participants through which they purchased securities. Transfers of ownership interests in global securities are to be accomplished by entries made on the books of participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates representing their ownership interests in the global securities, except under the limited circumstances described below.

To facilitate subsequent transfers, all global securities deposited by direct participants with DTC will be registered in the name of DTC’s partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of securities with DTC and their registration in the name of Cede & Co. or such other nominee will not change the beneficial ownership of the securities. DTC has no knowledge of the actual beneficial owners of the securities. DTC’s records reflect only the identity of the direct participants to whose accounts the securities are credited, which may or may not be the beneficial owners. The participants are responsible for keeping account of their holdings on behalf of their customers.

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So long as the securities are in book-entry form, you will receive payments and may transfer securities only through the facilities of the depository and its direct and indirect participants. We will maintain an office or agency in the location specified in the prospectus supplement for the applicable securities, where notices and demands in respect of the securities and the indenture may be delivered to us and where certificated securities may be surrendered for payment, registration of transfer or exchange.

Conveyance of notices and other communications by DTC to direct participants, by direct participants to indirect participants and by direct participants and indirect participants to beneficial owners will be governed by arrangements among them, subject to any legal requirements in effect from time to time.

Redemption notices will be sent to DTC. If less than all of the securities of a particular series are being redeemed, DTC's practice is to determine by lot the amount of the interest of each direct participant in the securities of such series to be redeemed.

Neither DTC nor Cede & Co. (or such other DTC nominee) will consent or vote with respect to the securities. Under its usual procedures, DTC will mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns the consenting or voting rights of Cede & Co. to those direct participants to whose accounts the securities of such series are credited on the record date, identified in a listing attached to the omnibus proxy.

So long as securities are in book-entry form, we will make payments on those securities to the depository or its nominee, as the registered owner of such securities, by wire transfer of immediately available funds. If securities are issued in definitive certificated form under the limited circumstances described below and unless if otherwise provided in the description of the applicable securities herein or in the applicable prospectus supplement, we will have the option of making payments by check mailed to the addresses of the persons entitled to payment or by wire transfer to bank accounts in the United States designated in writing to the applicable trustee or other designated party at least 15 days before the applicable payment date by the persons entitled to payment, unless a shorter period is satisfactory to the applicable trustee or other designated party.

Redemption proceeds, distributions and dividend payments on the securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit direct participants' accounts upon DTC's receipt of funds and corresponding detail information from us on the payment date in accordance with their respective holdings shown on DTC records. Payments by participants to beneficial owners will be governed by standing instructions and customary practices, as is the case with securities held for the account of customers in bearer form or registered in "street name." Those payments will be the responsibility of participants and not of DTC or us, subject to any statutory or regulatory requirements in effect from time to time. Payment of redemption proceeds, distributions and dividend payments to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC, is our responsibility, disbursement of payments to direct participants is the responsibility of DTC, and disbursement of payments to the beneficial owners is the responsibility of direct and indirect participants.

Except under the limited circumstances described below, purchasers of securities will not be entitled to have securities registered in their names and will not receive physical delivery of securities. Accordingly, each beneficial owner must rely on the procedures of DTC and its participants to exercise any rights under the securities and the indenture.

The laws of some jurisdictions may require that some purchasers of securities take physical delivery of securities in definitive form. Those laws may impair the ability to transfer or pledge beneficial interests in securities.

DTC may discontinue providing its services as securities depository with respect to the securities at any time by giving reasonable notice to us. Under such circumstances, in the event that a successor depository is not obtained, securities certificates are required to be printed and delivered.

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As noted above, beneficial owners of a particular series of securities generally will not receive certificates representing their ownership interests in those securities. However, if:

- DTC notifies us that it is unwilling or unable to continue as a depository for the global security or securities representing such series of securities or if DTC ceases to be a clearing agency registered under the Exchange Act at a time when it is required to be registered and a successor depository is not appointed within 90 days of the notification to us or of our becoming aware of DTC's ceasing to be so registered, as the case may be;
- we determine, in our sole discretion, not to have such securities represented by one or more global securities; or
- an Event of Default has occurred and is continuing with respect to such series of securities,

we will prepare and deliver certificates for such securities in exchange for beneficial interests in the global securities. Any beneficial interest in a global security that is exchangeable under the circumstances described in the preceding sentence will be exchangeable for securities in definitive certificated form registered in the names that the depository directs. It is expected that these directions will be based upon directions received by the depository from its participants with respect to ownership of beneficial interests in the global securities.

Euroclear and Clearstream

If so provided in the applicable prospectus supplement, you may hold interests in a global security through Clearstream Banking S.A., which we refer to as "Clearstream," or Euroclear Bank S.A./N.V., as operator of the Euroclear System, which we refer to as "Euroclear," either directly if you are a participant in Clearstream or Euroclear or indirectly through organizations which are participants in Clearstream or Euroclear. Clearstream and Euroclear will hold interests on behalf of their respective participants through customers' securities accounts in the names of Clearstream and Euroclear, respectively, on the books of their respective U.S. depositories, which in turn will hold such interests in customers' securities accounts in such depositories' names on DTC's books.

Clearstream and Euroclear are securities clearance systems in Europe. Clearstream and Euroclear hold securities for their respective participating organizations and facilitate the clearance and settlement of securities transactions between those participants through electronic book-entry changes in their accounts, thereby eliminating the need for physical movement of certificates.

Payments, deliveries, transfers, exchanges, notices and other matters relating to beneficial interests in global securities owned through Euroclear or Clearstream must comply with the rules and procedures of those systems. Transactions between participants in Euroclear or Clearstream, on one hand, and other participants in DTC, on the other hand, are also subject to DTC's rules and procedures.

Investors will be able to make and receive through Euroclear and Clearstream payments, deliveries, transfers and other transactions involving any beneficial interests in global securities held through those systems only on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers and other institutions are open for business in the United States.

Cross-market transfers between participants in DTC, on the one hand, and participants in Euroclear or Clearstream, on the other hand, will be effected through DTC in accordance with the DTC's rules on behalf of Euroclear or Clearstream, as the case may be, by their respective U.S. depositories; however, such cross-market transactions will require delivery of instructions to Euroclear or Clearstream, as the case may be, by the counterparty in such system in accordance with the rules and procedures and within the established deadlines (European time) of such system. Euroclear or Clearstream, as the case may be, will, if the transaction meets its settlement requirements, deliver instructions to its U.S. depository to take action to effect final settlement on its behalf by delivering or receiving interests in the global securities through DTC, and making or receiving payment in accordance with normal procedures for same-day fund settlement. Participants in Euroclear or Clearstream may not deliver instructions directly to their respective U.S. depositories.

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Due to time zone differences, the securities accounts of a participant in Euroclear or Clearstream purchasing an interest in a global security from a direct participant in DTC will be credited, and any such crediting will be reported to the relevant participant in Euroclear or Clearstream, during the securities settlement processing day (which must be a business day for Euroclear or Clearstream) immediately following the settlement date of DTC. Cash received in Euroclear or Clearstream as a result of sales of interests in a global security by or through a participant in Euroclear or Clearstream to a direct participant in DTC will be received with value on the settlement date of DTC but will be available in the relevant Euroclear or Clearstream cash account only as of the business day for Euroclear or Clearstream following DTC's settlement date.

Other

The information in this section of this prospectus concerning DTC, Clearstream, Euroclear and their respective book-entry systems has been obtained from sources that we believe to be reliable, but we do not take responsibility for this information. This information has been provided solely as a matter of convenience. The rules and procedures of DTC, Clearstream and Euroclear are solely within the control of those organizations and could change at any time. Neither we nor the trustee nor any agent of ours or of the trustee has any control over those entities and none of us takes any responsibility for their activities. You are urged to contact DTC, Clearstream and Euroclear or their respective participants directly to discuss those matters. In addition, although we expect that DTC, Clearstream and Euroclear will perform the foregoing procedures, none of them is under any obligation to perform or continue to perform such procedures and such procedures may be discontinued at any time. Neither we nor any agent of ours will have any responsibility for the performance or nonperformance by DTC, Clearstream and Euroclear or their respective participants of these or any other rules or procedures governing their respective operations.

SELLING SECURITYHOLDERS

This prospectus also relates to: (i) the offer and sale from time to time by the Selling Securityholders of up to 23,265,565 shares of our common stock, par value \$0.001 per share (“common stock”), consisting of (A) up to 3,750,500 shares of our common stock issued in private placements in connection with the initial public offering of GWAC; (B) up to 16,000,000 shares of our common stock issued to Bitfury Holding B.V. and Bitfury Top HoldCo B.V. in connection with the consummation of the Business Combination and (C) up to 3,515,065 shares of our common stock issued in a private placement in connection with the consummation of the Business Combination; (ii) the offer and sale from time to time by the Selling Securityholders of up to 85,500 of our warrants originally purchased in a private placement by certain of the Selling Securityholders; and (iii) the offer and sale of (A) up to 8,499,978 shares of common stock that are issuable by us upon the exercise of 8,499,978 public warrants that were previously registered and (B) up to 114,000 shares of common stock that are issuable by us upon the exercise of 114,000 private placement warrants. This prospectus provides you with a general description of the securities.

The Selling Securityholders may from time to time offer and sell any or all of the shares of common stock and warrants set forth below pursuant to this prospectus and any accompanying prospectus supplement. Unless stated otherwise, when we refer to the “Selling Securityholders” in this prospectus, we mean the persons listed in the table below and the pledgees, donees, transferees, assignees, successors, designees and others who later come to hold any of the Selling Securityholders’ interest in the common stock or warrants after the date of this prospectus..

The following table is prepared based on information provided to us by the Selling Securityholders and sets forth, the names of the Selling Securityholders, and the aggregate number of shares of common stock and warrants that the Selling Securityholders may offer pursuant to this prospectus. The table does not include the issuance by us of up to 8,528,478 shares of common stock upon the exercise of outstanding warrants, which is covered by this prospectus, but reflects up to 85,500 shares of common stock issuable upon the exercise of private placement warrants.

Because the Selling Securityholders are not obligated to sell their securities, we cannot state with certainty the amount of our securities that the Selling Securityholders will hold upon consummation of any such sales. In addition, since the date on which the Selling Securityholders provided this information to us, the Selling Securityholders may have sold, transferred or otherwise disposed of all or a portion of their securities. Any changed or new information given to us by the Selling Securityholders, including regarding the identity of, and the securities held by, each Selling Securityholder, will be set forth in a prospectus supplement or amendments to the registration statement of which this prospectus is a part, if and when necessary. A Selling Securityholder may sell all, some or none of such securities in this offering. See “*Plan of Distribution.*”

Percentage of beneficial ownership is based on 247,489,582 shares of our common stock outstanding as of June 30, 2022. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options, warrants or other rights held by such person that are currently exercisable or that will become exercisable or will otherwise vest within 60 days of

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June 30, 2022 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person.

Name of Selling Stockholder	Shares of Common Stock				
	Number Beneficially Owned Prior to the Offering	% ^(*)	Number Being Registered Hereby ^(**)	Number Beneficially Owned After the Offering	% ^(*)
Alexander Morcos	287,484	***	287,484	—	—
American Committee for Shaare Zedek Hospital in Jerusalem, Inc.	2,500	***	2,500	—	—
Ballet Theatre Foundation, Inc.	250,000	***	250,000	—	—
Bitfury Holding B.V. ⁽¹⁾	6,000,000	2.4%	6,000,000	—	—
Bitfury Top HoldCo B.V. ⁽²⁾	10,000,000	4.0%	10,000,000	—	—
Boothbay Absolute Return Strategies, LP ⁽³⁾	42,500	***	42,500	—	—
Cary Grossman	198,750	***	198,750	—	—
David Pauker	47,500	***	47,500	—	—
Douglas Wurth	195,000	***	195,000	—	—
Fred S. Zeidman	195,000	***	195,000	—	—
Gray's Creek Capital Partners Fund I, LP ⁽⁴⁾	200,000	***	200,000	—	—
Harris County Hospital District Foundation	2,500	***	2,500	—	—
I-B Good Works, LLC ⁽⁵⁾	757,500	***	757,500	—	—
IBS Holding Corp. ⁽⁶⁾	47,500	***	47,500	—	—
Iridian Raven Fund, LP ⁽⁷⁾	74,274	***	74,274	—	—
James M McCrory	180,101	***	180,101	—	—
John J. Lendrum III	47,500	***	47,500	—	—
KC Cipher SPV, LLC ⁽⁸⁾	333,500	***	333,500	—	—
Kepos Alpha Master Fund, L.P. ⁽⁹⁾	64,687	***	64,687	—	—
Kepos Special Opportunities Master Fund, L.P. ⁽¹⁰⁾	21,563	***	21,563	—	—
MAP 214 Segregated Portfolio, a segregated portfolio of LMA SPC ⁽¹¹⁾	48,181	***	48,181	—	—
Magnetar Financial LLC ⁽¹²⁾	254,875	***	254,875	—	—
Memorial Hermann Foundation	47,500	***	47,500	—	—
Meteora Special Opportunity Fund i, LP ⁽¹³⁾	86,250	***	86,250	—	—
Mission Gate Inc. ⁽¹⁴⁾	1,482,048	***	1,482,048	—	—
Morgan Stanley Investment Management Inc. ⁽¹⁵⁾	4,606	***	4,606	—	—
Owl Creek Credit Opportunities Master Fund, L.P. ⁽¹⁶⁾	37,500	***	37,500	—	—
Paolo E. Floriani	35,000	***	35,000	—	—
Paul Fratamico	47,500	***	47,500	—	—
Peridian Fund, L.P. ⁽¹⁷⁾	169,375	***	169,375	—	—
Polar Multi-Strategy Master Fund ⁽¹⁸⁾	197,875	***	197,875	—	—
Sea Otter Securities Group, L.L.C. ⁽¹⁹⁾	86,250	***	86,250	—	—
Shaolin Capital Partners Master Fund, Ltd. ⁽²⁰⁾	23,595	***	23,595	—	—
Shaolin Capital Partners SP, a segregated portfolio of PC MAP SPC ⁽²¹⁾	14,474	***	14,474	—	—
Shelley Leonard	160,000	***	160,000	—	—
Social Accountability International, Inc.	125,000	***	125,000	—	—
Stichting Juridisch Eigendom Mint Tower Arbitrage Fund ⁽²²⁾	523,475	***	523,475	—	—
Suhas and Felicitie Daftuar	500,000	***	500,000	—	—
Tahira Rehmatullah	47,500	***	47,500	—	—
The Children's Aid Society	125,000	***	125,000	—	—

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Name of Selling Stockholder	Shares of Common Stock				
	Number Beneficially Owned Prior to the Offering	% ^(*)	Number Being Registered Hereby ^(**)	Number Beneficially Owned After the Offering	% ^(*)
The National World War II Museum, Inc.	2,500	***	2,500	—	—
The University of Texas Foundation, Inc.	175,000	***	175,000	—	—
The Washington University	10,000	***	10,000	—	—
Ulter GW LLC ⁽²³⁾	17,952	***	17,952	—	—
University of St. Thomas	10,000	***	10,000	—	—
Walleye Opportunities Master Fund Ltd ⁽²⁴⁾	51,750	***	51,750	—	—
Walleye Trading LLC ⁽²⁵⁾	34,500	***	34,500	—	—
TOTAL	23,265,565	9.4%	23,265,565		

Name of Selling Stockholder	Private Placement Warrants to Purchase Common Stock			
	Number Beneficially Owned Prior to the Offering	Number Being Registered Hereby	Number Beneficially Owned After this Offering	Percentage Owned After Offering
Magnetar Financial LLC ⁽¹²⁾	28,500	28,500	—	—
Polar Multi-Strategy Master Fund ⁽¹⁸⁾	28,500	28,500	—	—
Stichting Juridisch Eigendom Mint Tower Arbitrage Fund ⁽²²⁾	28,500	28,500	—	—
TOTAL	85,500	85,500	—	—

(*) The amounts set forth in this column are the number of shares of common stock that may be offered by such Selling Securityholder using this prospectus. These amounts do not represent any other shares of our common stock that the Selling Securityholder may own beneficially or otherwise.

(**) The percentage of shares to be beneficially owned after completion of the offering is calculated on the basis of 247,489,582 shares of common stock outstanding as of June 30, 2022.

(***) Represents less than 1%.

- Bitfury Top HoldCo B.V. (“Bitfury Top HoldCo”) is the sole owner of Bitfury Holding B.V. (“Bitfury Holding”). As a result, Bitfury Top HoldCo may be deemed to share beneficial ownership the shares of common stock held by Bitfury Holding. Valerijs Vavilovs is the sole owner of V3 Holding Limited (“V3”), which is the majority owner of Bitfury Group Limited (“BGL”). BGL is the sole owner of Bitfury Top HoldCo. As a result of the foregoing relationships, each of Mr. Vavilovs, V3 and BGL may be deemed to share beneficial ownership of the common stock beneficially owned by Bitfury Top HoldCo. The business address of Bitfury Top HoldCo, Bitfury Holding and Mr. Vavilovs is Strawinskyalaan 3051, 1077ZX Amsterdam, the Netherlands, the business address of V3 is 4th Floor Harbour Place, 103 South Church Street, PO Box 10240, George Town, Grand Cayman KY1-1002, Cayman Islands, BS1 6EG, the business address of BGL is 6th Floor One London Wall, London, United Kingdom EC2Y 5EB.
- Bitfury Group Limited (“BGL”) is the sole owner of Bitfury Top HoldCo. The majority owner of BGL is V3 Holding Limited (“V3”), whose sole owner is Valerijs Vavilovs. As a result of the foregoing relationships, each of Mr. Vavilovs, V3 and BGL may be deemed to share beneficial ownership of the common stock beneficially owned by Bitfury Top HoldCo. The business address of Bitfury Top HoldCo, Bitfury Holding and Mr. Vavilovs is Strawinskyalaan 3051, 1077ZX Amsterdam, the Netherlands, the business address of V3 is 4th Floor Harbour Place, 103 South Church Street, PO Box 10240, George Town, Grand Cayman KY1-1002, Cayman Islands, BS1 6EG, the business address of BGL is 6th Floor One London Wall, London, United Kingdom EC2Y 5EB.
- Boothbay Fund Management, LLC is the investment manager of Boothbay Absolute Return Strategies, LP (the “Fund”), and has appointed ATW SPAC Management LLC (“ATW”) as a subadvisor with limited authority to trade on behalf of the Fund. Antonio Ruiz-Gimenez is the managing member of ATW and in

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that capacity has discretionary authority to direct decisions regarding voting and disposition of the shares held by Boothbay Absolute Return Strategies, LP in the account subject to the discretionary authority of ATW and may be deemed to be the beneficial owner of these shares. The business address of Boothbay Fund Management, LLC and Boothbay Absolute Return Strategies, LP is 140 E 45th Street, 14th Floor, New York, NY 10017. The business address for ATW SPAC Management LLC is 17 State Street, 2100, New York, NY 10004.

- (4) Gray's Creek Capital Partners Fund I, LP is managed by Gray's Creek Capital Advisors, LLC and Gray's Creek Capital Partners, GP. Jason R. Little and Gerrit B. Parker are the natural persons who have voting or investment control over the shares held by Gray's Creek Capital Advisors, LLC and Gray's Creek Capital Partners, GP, and thus have voting or investment control over the securities being offered. The business address of the foregoing individuals and entities is 500 Post Road East, Suite 233 Westport, CT 06880.
- (5) Shelley Leonard is a managing member of I-B Good Works, LLC and may be deemed to be the beneficial owner of the common stock held by I-B Good Works, LLC. Shelley Leonard disclaims beneficial ownership of such securities except to the extent of any pecuniary interests therein. The business address of Shelley Leonard is 2500 N Military Trail, Suite 160-A, Boca Raton, FL 33431.
- (6) Shelley Leonard is a president of IBS Holding Corp. and may be deemed to have a discretionary voting and investment authority with respect to the common stock held by IBS Holding Corp. The business address of Shelley Leonard is 2500 N Military Trail, Suite 160-A, Boca Raton, FL 33431.
- (7) Iridian Asset Management LLC ("Iridian Asset Management") is the investment manager of Iridian Raven Fund, LP and has voting and investment power over the securities being registered for resale. Todd D. Raker exercises control over Iridian Asset Management LLC and voting investment power over the shares, and disclaim beneficial ownership of such shares. The business address of the foregoing entities and individual is 276 Post Road West, Westport, CT 06880.
- (8) Brian Rathjen is a managing member of KC Cipher SPV, LLC and may be deemed to be the beneficial owner of the common stock held by KC Cipher SPV, LLC. Brian Rathjen disclaims beneficial ownership of such securities except to the extent of any pecuniary interests therein. The business address of the foregoing individual and entity is 39 Broadway, Suite 1640, New York, NY 10005.
- (9) Kepos Capital LP is the investment manager of Kepos Alpha Master Fund L.P. and Kepos Partners LLC is the General Partner of Kepos Alpha Master Fund L.P. and each may be deemed to have voting and dispositive power with respect to the common shares. The general partner of Kepos Capital LP is Kepos Capital GP LLC and the Managing Member of Kepos Partners LLC is Kepos Partners MM LLC. Mark Carhart controls Kepos Capital GP LLC and Kepos Partners MM LLC and, accordingly, may be deemed to have voting and dispositive power with respect to the common shares held by Kepos Alpha Master Fund L.P. Mr. Carhart disclaims beneficial ownership of the common shares held by Kepos Alpha Master Fund L.P. The business address of Kepos Alpha Master Fund L.P. is 11 Times Square, 35th Floor, New York, New York 10036.
- (10) Kepos Capital LP is the investment manager of Kepos Special Opportunities Master Fund L.P. and Kepos Partners LLC is the General Partner of Kepos Special Opportunities Master Fund L.P. and each may be deemed to have voting and dispositive power with respect to the common shares. The general partner of Kepos Capital LP is Kepos Capital GP LLC and the Managing Member of Kepos Partners LLC is Kepos Partners MM LLC. Mark Carhart controls Kepos Capital GP LLC and Kepos Partners MM LLC and, accordingly, may be deemed to have voting and dispositive power with respect to the common shares held by Kepos Special Opportunities Master Fund L.P. Mr. Carhart disclaims beneficial ownership of the common shares held by Kepos Special Opportunities Master Fund L.P. The business address of Kepos Special Opportunities Master Fund L.P. is 11 Times Square, 35th Floor, New York, New York 10036.
- (11) Shaolin Capital Management LLC ("Shaolin") serves as the investment advisor to MAP 214 Segregated Portfolio, a segregated portfolio of LMA SPC. David Puritz is the managing member of Shaolin and in that capacity has discretionary authority to vote and dispose of the shares held by MAP 214 Segregated Portfolio, a segregated portfolio of LMA SPC and may be deemed to be the beneficial owner of these shares. The business address of Shaolin is 7620 NE 4th Court, Miami FL 33138.

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- (12) Includes 28,500 shares of common stock issuable upon the exercise of Private Placement Warrants. The registered holders of the referenced securities to be registered are the following funds and accounts that are managed by Magnetar Financial LLC (“MFL”), which serves as investment manager of each Purpose Alternative Credit Fund—F LLC, Purpose Alternative Credit Fund—T LLC, Magnetar Constellation Master Fund, Ltd., Magnetar Constellation Fund II, Ltd., Magnetar SC Fund Ltd., and Magnetar Xing He Master Fund Ltd. MFL is the manager of Magnetar Lake Credit Fund LLC. MFL is the general partner of Magnetar Structured Credit Fund, LP (together with all of the foregoing funds, the “Magnetar Funds”). In such capacities, MFL exercises voting and investment power over the securities listed above held for the accounts of the Magnetar Funds. MFL is a registered investment adviser under Section 203 of the Investment Advisers Act of 1940, as amended. Magnetar Capital Partners LP (“MCP”) is the sole member and parent holding company of MFL. Supernova Management LLC (“Supernova”) is the sole general partner of MCP. The manager of Supernova is Alec N. Litowitz, a citizen of the United States of America. Each of the Magnetar Funds, MFL, MCP, Supernova and Alec N. Litowitz disclaim beneficial ownership of these securities except to the extent of their pecuniary interest in the securities. Shares and warrants shown include only the securities being registered for resale and may not incorporate all interests deemed to be beneficially held by the registered holders described above or by other investment funds managed or advised by MFL.
- (13) Meteora Capital, LLC (“Meteora Capital”) serves as investment manager to Meteora Special Opportunity Fund i, LP, and voting and investment power over the shares held by Meteora Special Opportunity Fund i, LP resides with Meteora Capital. Mr. Vik Mittal serves as the managing member of Meteora Capital and may be deemed to be the beneficial owner of the shares of common stock held by such entities. Mr. Mittal disclaims any beneficial ownership of the shares held by such entities. The business address of Meteora Special Opportunity Fund i, LP, Meteora Capital and Mr. Mittal is 840 Park Drive East, Boca Raton, Florida 33444.
- (14) Mission Gate Inc. is a venture capital firm, managing the private wealth of George Bachiashvili, its sole shareholder and director, exclusively. Business address of the entity is Hunkins Waterfront Plaza, Suite 556, Main Street, Charlestown, Nevis.
- (15) Morgan Stanley Investment Management Inc. is the investment adviser of Bell Atlantic Master Trust and holds voting and dispositive power with respect to shares of record held by Bell Atlantic Master Trust. The address of Bell Atlantic Master Trust is 522 Fifth Avenue, New York, NY 10036.
- (16) Owl Creek GP, LLC is the general partner of Owl Creek Asset Management, L.P, the investment manager to Owl Creek Credit Opportunities Master Fund, L.P. Jeffrey Altman is the managing member of Owl Creek GP, LLC and in that capacity has discretionary authority to vote and dispose of the shares held by Owl Creek Credit Opportunities Master Fund, L.P. and may be deemed to be the beneficial owner of these shares. The business address of Owl Creek GP, LLC is 640 Fifth Ave, Floor 20, New York, New York 10019.
- (17) Voting and investment power over the interests held by Peridian Fund, L.P. (“Peridian”) resides with its investment manager, Periscope Capital Inc. Jamie Wise is the Chief Executive Officer of Periscope Capital Inc. and may be deemed to be the beneficial owner of the interests held by Peridian. Jamie Wise and Periscope Capital Inc., however, disclaim any beneficial ownership of the interests held by Peridian. The address of the foregoing individual and entities is c/o 333 Bay Street, Suite 1240, Toronto, ON, M5H 2R2.
- (18) Includes 28,500 shares of common stock issuable upon the exercise of GWAC Private Placement Warrants. Polar Multi-Strategy Master Fund (“Polar Fund”) is under management by Polar Asset Management Partners Inc. (“PAMPI”). PAMPI serves as investment advisor of the Polar Fund and has control and discretion over the shares held by the Polar Fund. As such, PAMPI may be deemed the beneficial owner of the shares held by the Polar Fund. PAMPI disclaims any beneficial ownership of the reported shares other than to the extent of any pecuniary interest therein. The business address of the Polar Fund is c/o Polar Asset Management Partners Inc., 16 York Street, Suite 2900, Toronto, ON M5J 0E6.
- (19) Sea Otter Securities Group is a registered broker-dealer and FINRA member. Peter Smith, Peter Wisniewski and Nick Fahey may be deemed to have voting and investment power over the shares held by Sea Otter Securities Group. The business address of such holder is 107 Grand Street, 7th Floor, New York, New York 10013.

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- (20) Shaolin Capital Management LLC (“Shaolin”) serves as the investment advisor to Shaolin Capital Partners Master Fund, Ltd., a Cayman Islands exempted company. David Puritz is the managing member of Shaolin and in that capacity has discretionary authority to vote and dispose of the shares held by Shaolin Capital Partners Master Fund, Ltd. and may be deemed to be the beneficial owner of these shares. The business address of Shaolin is 7620 NE 4th Court, Miami FL 33138.
- (21) Shaolin Capital Management LLC (“Shaolin”) serves as the investment advisor to Shaolin Capital Partners SP, a segregated portfolio of PC MAP SPC. David Puritz is the managing member of Shaolin and in that capacity has discretionary authority to vote and dispose of the shares held by Shaolin Capital Partners SP, a segregated portfolio of PC MAP SPC and may be deemed to be the beneficial owner of these shares. The business address of Shaolin is 7620 NE 4th Court, Miami FL 33138.
- (22) Includes 28,500 shares of common stock issuable upon the exercise of Private Placement Warrants. Voting and investment power over the assets held by Stichting Juridisch Eigendom Mint Tower Arbitrage Fund (“MTAF”) resides with its investment manager, Mint Tower Capital Management B.V.. Ramon Heusen, Joris Paulus Hoedemaekers, Marcel Voogel and Wilrik Fokko Sinia are the directors of Mint Tower Capital Management B.V. and may be deemed to be the beneficial owner of the interests held by MTAF. Ramon Heusen, Joris Paulus Hoedemaekers, Marcel Voogel, Wilrik Fokko Sinia and Mint Tower Capital Management B.V., however, disclaim any beneficial ownership of the assets held by MTAF. The business address of the foregoing entities is Beursplein 5, 1012 JW Amsterdam, The Netherlands.
- (23) EVC Fintech Management LLC is the investment manager acting with sole discretionary authority for the Selling Securityholder. Roman Sobachevskiy has sole voting and investment discretion of EVC Fintech Management LLC. EVC Fintech Management LLC and Roman Sobachevskiy both disclaim beneficial ownership of the securities owned by the Selling Securityholder. The business address of the foregoing individual and entities is 16192 Coastal Highway, Lewes, DE 19958.
- (24) Walleye Opportunities Master Fund Ltd is a private investment fund managed by Walleye Capital LLC. William England serves as the Chief Investment Officer of Walleye Capital LLC. As a result, Walleye Capital LLC and Mr. England may be deemed to have shared voting and dispositive power with respect to the shares held by Walleye Opportunities Master Fund Ltd. Walleye Capital LLC and Mr. England disclaim beneficial ownership of such shares except to the extent of each of their pecuniary interest therein.
- (25) Walleye Trading LLC is a broker/dealer managed by Walleye Capital LLC. Andrew Carney serves as the CEO of Walleye Trading LLC. As a result, Walleye Capital LLC and Mr. Carney may be deemed to have shared voting and dispositive power with respect to the shares held by Walleye Trading LLC. Walleye Capital LLC and Mr. Carney disclaim beneficial ownership of such shares except to the extent of each of their pecuniary interest therein.

PLAN OF DISTRIBUTION

We or the Selling Securityholders may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods or through underwriters or dealers, through agents and/or directly to one or more purchasers. The securities may be distributed from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices;
- at negotiated prices;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers; or
- any other method permitted pursuant to applicable law.

When we or any of the Selling Securityholders sell securities covered by this prospectus, we or the Selling Securityholders will provide a prospectus supplement or supplements that will describe the method of distribution and set forth the terms and conditions of the offering of such securities, including the offering price of the securities and the proceeds to the Selling Securityholders, if applicable.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement.

If any Selling Securityholder notifies us that a material arrangement has been entered into with a broker-dealer for the sale of securities through a block trade, special offering or secondary distribution or a purchase by a broker or dealer, we may be required to file a prospectus supplement pursuant to the applicable rules promulgated under the Securities Act.

A Selling Securityholder that is an entity may elect to make an in-kind distribution of the securities covered by this prospectus to its members, partners or shareholders pursuant to the registration statement of which this prospectus forms a part by delivering a prospectus. To the extent that such members, partners, stockholders or other equityholders are not affiliates of ours, such members, partners, stockholders or other equityholders would thereby receive freely tradable securities pursuant to a distribution pursuant to the registration statement of which this prospectus forms a part. To the extent a distributee is an affiliate of ours (or to the extent otherwise required by law), we may file a prospectus supplement in order to permit the distributees to use the prospectus to resell the securities acquired in the distribution.

The Selling Securityholder may, from time to time, pledge or grant a security interest in some or all of the securities owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the securities, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of Selling Securityholders to include the pledgee, transferee or other successor-in-interest as Selling Securityholders under this prospectus. The Selling Securityholders also may transfer the securities in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus after they have provided to us certain documentation.

The aggregate proceeds to the Selling Securityholders from the sale of the securities offered by them will be the purchase price of the securities less discounts or commissions, if any. Each of the Selling Securityholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of securities to be made directly or through agents.

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If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of the securities being offered by this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, the Selling Securityholders, or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for which they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

The Selling Securityholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers will be provided in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions.

In connection with the sale of our securities, unless otherwise restricted by a contractual agreement or, in the case of a Selling Securityholder who is an employee, our insider trading policy, the Selling Securityholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Securityholders may also sell our securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Securityholders may also enter into option, forward or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities registered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

There can be no assurance that any Selling Securityholder will sell any or all of the securities registered pursuant to the shelf registration statement of which this prospectus forms a part. In addition, the Selling Securityholder may also sell securities under Rule 144 under the Securities Act, if available, or in other transactions exempt from registration, rather than under this prospectus. The Selling Stockholder has the sole and absolute discretion not to accept any purchase offer or make any sale of securities if they deem the purchase price to be unsatisfactory at any particular time.

In order to comply with the securities laws of some states, if applicable, securities may be sold in these jurisdictions only through registered or licensed brokers or dealers.

The Selling Securityholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares of securities against certain liabilities, including liabilities arising under the Securities Act.

Once sold under the registration statement of which this prospectus forms a part, the securities will be freely tradeable in the hands of persons other than our affiliates.

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Other than our common stock and our outstanding public warrants to purchase common stock, each of which is listed on Nasdaq, any other securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

LEGAL MATTERS

Latham & Watkins LLP will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby on behalf of Cipher Mining Inc. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements for Cipher Mining Inc. as of December 31, 2021, and January 31, 2021, and for the eleven months ended December 31, 2021 and the period from January 7, 2021 (inception) to January 31, 2021 have been audited by Marcum LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The information in this prospectus supplement is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus supplement is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated September 21, 2022.

PROSPECTUS SUPPLEMENT



Up to \$250,000,000

Common Stock

We have entered into an at the market offering agreement, or the Sales Agreement, with H.C. Wainwright & Co., LLC, or “Wainwright,” dated September 21, 2022, relating to the sale of our common stock offered by this prospectus supplement. In accordance with the terms of the Sales Agreement, under this prospectus supplement we may offer and sell shares of our common stock, \$0.001 par value per share, having an aggregate offering price of up to \$250,000,000 from time to time through Wainwright, acting as sales agent or principal. Until such time as the total number of our authorized shares are increased or our total number of shares outstanding decrease, we will not issue and sell more than aggregate of 212,913,876 shares.

Our common stock and public warrants are listed on The Nasdaq Global Select Market (“Nasdaq”) under the symbols “CIFR” and “CIFRW,” respectively. On September 20, 2022, the last reported sales price of our common stock was \$1.47 per share and the last reported sales price of our public warrants was \$0.20 per warrant.

Sales of our common stock, if any, under this prospectus supplement will be made by any method permitted that is deemed an “at the market offering” as defined in Rule 415(a)(4) under the Securities Act of 1933, as amended, or the Securities Act. If we and Wainwright agree on any method of distribution other than sales of shares of our common stock on or through the Nasdaq Global Select Market or another existing trading market in the United States at market prices, we will file a further prospectus supplement providing all information about such offering as required by Rule 424(b) under the Securities Act. Wainwright is not required to sell any specific amount, but will act as our sales agent using commercially reasonable efforts consistent with their normal trading and sales practices on mutually agreed terms between Wainwright and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Wainwright will be entitled to compensation at a commission rate equal to up to 3.0% of the gross sales price of the shares of our common stock sold through it pursuant to the Sales Agreement. See “Plan of Distribution” beginning on page S-15 for additional information regarding the compensation to be paid to Wainwright. In connection with the sale of the common stock on our behalf, Wainwright may be deemed to be an “underwriter” within the meaning of the Securities Act and the compensation of Wainwright may be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Wainwright with respect to certain liabilities, including liabilities under the Securities Act.

We are an “emerging growth company” as that term is used in the Jumpstart Our Business Startups Act of 2012 and a smaller reporting company as defined under Rule 405 of the Securities Act. As such, we have elected to rely on certain reduced disclosure requirements. See “*Prospectus Supplement Summary—Implications of Being an Emerging Growth Company and a Smaller Reporting Company*” on page S-5 of this prospectus supplement.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE “[RISK FACTORS](#)” ON PAGE S-8 OF THIS PROSPECTUS SUPPLEMENT AND IN THE DOCUMENTS INCORPORATED BY REFERENCE IN THIS PROSPECTUS SUPPLEMENT CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR COMMON STOCK.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

H.C. Wainwright & Co.

The date of this prospectus supplement is _____, 2022.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is part of a registration statement that we have filed with the U.S. Securities and Exchange Commission, or the SEC, utilizing a “shelf” registration process. By using a shelf registration statement, we may offer shares of our common stock having an aggregate offering price of up to \$250,000,000 from time to time under this prospectus supplement at prices and on terms to be determined by market conditions at the time of offering.

We provide information to you about this offering of our common stock in two separate documents that are bound together: (1) this prospectus supplement, which describes the specific details regarding this offering; and (2) the accompanying base prospectus, which provides general information, some of which may not apply to this offering. Generally, when we refer to this “prospectus supplement,” we are referring to both documents combined. If information in this prospectus supplement is inconsistent with the accompanying base prospectus, you should rely on this prospectus supplement. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in any document incorporated by reference in this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement.

We have not, and Wainwright has not, authorized anyone to provide you with information other than that contained in this prospectus supplement, the accompanying base prospectus and any free writing prospectus. We are not, and Wainwright is not, making an offer to sell or soliciting any offer to buy these securities in any jurisdiction where the offer or sale is not permitted or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information appearing in this prospectus supplement, the accompanying base prospectus, the documents incorporated by reference herein and therein and any free writing prospectus that we have authorized for use in connection with this offering is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying base prospectus, the documents incorporated by reference herein and therein and any free writing prospectus that we have authorized for use in connection with this offering in their entirety before making an investment decision.

Before buying any of the common stock that we are offering, we urge you to carefully read this prospectus supplement, the accompanying base prospectus and all of the information incorporated by reference herein and therein, as well as the additional information described under the heading “Where You Can Find More Information; Incorporation by Reference.” These documents contain important information that you should consider when making your investment decision.

We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

On August 27, 2021 (the “Closing Date”), we consummated the business combination pursuant to the Agreement and Plan of Merger, dated March 4, 2021 (the “Merger Agreement”), by and among Good Works Acquisition Corp. (“GWAC” and, upon consummation of the Business Combination described below, “Cipher”), Currency Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of GWAC (“Merger Sub”),

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and Cipher Mining Technologies Inc., a Delaware corporation (“Cipher Mining Technologies”). Pursuant to the Merger Agreement, Merger Sub merged with and into Cipher Mining Technologies, the separate corporate existence of Merger Sub ceasing and Cipher Mining Technologies being the surviving corporation and a wholly owned subsidiary of Cipher (the “Merger” and, together with the other transactions contemplated by the Merger Agreement, the “Business Combination”). On the Closing Date, and in connection with the closing of the Transactions (the “Closing”), we changed our name to Cipher Mining Inc.

When we refer to “Cipher,” “we,” “our,” “us” and the “Company” in this prospectus, we mean Cipher Mining Inc. and its consolidated subsidiaries, which was a special purpose acquisition company called “Good Works Acquisition Corp.” prior to the closing of the Business Combination. When we refer to “you,” we mean the potential holders of the applicable series of securities.

We have proprietary rights to trademarks, trade names and service marks appearing in this prospectus that are important to our business. This prospectus supplement also includes trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, trademarks and tradenames referred to in this prospectus supplement appear without the ® and TM symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or that the applicable owner will not assert its rights, to these trademarks and tradenames.

WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION BY REFERENCE

Available Information

We file reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is www.sec.gov.

Our website address is <https://investors.ciphermining.com>. The information on our website, however, is not, and should not be deemed to be, a part of this prospectus supplement.

This prospectus supplement and the accompanying base prospectus are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement. Statements in this prospectus supplement or the accompanying base prospectus about these documents are summaries, and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement through the SEC's website, as provided above.

CERTAIN INFORMATION INCORPORATED BY REFERENCE

The SEC's rules allow us to "incorporate by reference" information in this prospectus supplement, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus supplement, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or a subsequently filed document incorporated by reference modifies or replaces that statement.

This prospectus supplement incorporates by reference the documents set forth below that have previously been filed with the SEC (other than those documents or the portions of those documents not deemed to be filed):

- Our Annual Report on [Form 10-K](#) for the year ended December 31, 2021, filed with the SEC on March 4, 2022.
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2022 and June 30, 2022, filed with the SEC on [May 10, 2022](#) and [August 9, 2022](#), respectively.
- Our Current Reports on Form 8-K filed with the SEC on [January 4, 2022](#), [April 14, 2022](#), [May 10, 2022](#), [September 1, 2022](#) and [September 15, 2022](#).
- The description of our common stock contained in our registration statement on [Form 8-A](#) filed with the SEC on October 15, 2020 and any amendment or report filed with the SEC for the purpose of updating the description, including Exhibit 4.5 to our Annual Report on Form 10-K for the year ended December 31, 2021.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, which we refer to as the "Exchange Act" in this prospectus supplement, prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement of which this prospectus supplement is a part and prior to the effectiveness of the registration statement, will also be incorporated by reference in this prospectus supplement and deemed to be part of this prospectus supplement from the date of the filing of such reports and documents. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed

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above or filed in the future, that are not deemed “filed” with the SEC, including our stock performance graph or any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

You may request a free copy of any of the documents incorporated by reference in this prospectus supplement by writing or telephoning us at the following address:

CIPHER MINING INC.
1 VANDERBILT AVENUE, FLOOR 54, SUITE C
NEW YORK, NEW YORK 10017
(332) 262-2300

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus supplement.

PROSPECTUS SUPPLEMENT SUMMARY

This summary provides a general overview of selected information and does not contain all of the information you should consider before buying our common stock. Therefore, you should read this entire prospectus supplement, the accompanying base prospectus and any free writing prospectus that we have authorized for use in connection with this offering carefully, including the information incorporated by reference, before deciding to invest in our common stock. Investors should carefully consider the information set forth under “Risk Factors” beginning on page S-8 of this prospectus supplement and incorporated by reference to our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q.

Cipher Mining Inc.

We are an emerging technology company that operates in the Bitcoin mining ecosystem in the United States. Specifically, we plan to develop and grow a cryptocurrency mining business, specializing in Bitcoin. Our key mission is to become a leading Bitcoin mining company in the United States.

On August 27, 2021, we consummated the Business Combination with GWAC. As a stand-alone, U.S.-based cryptocurrency mining business, specializing in Bitcoin, we have begun our buildout of cryptocurrency mining sites in the United States. We began deployment of capacity in the first quarter of 2022, with mining operations beginning at the Alborz facility, located in Texas, in February 2022.

In connection with our planned buildout, we entered into a number of power agreements and joint venture agreements, all of which, together, are expected to cover at least four sites where we expect to begin our buildout. Pursuant to these agreements, we expect to have access, for at least five years, to an average cost of electricity of approximately 2.7 c/kWh. We expect that this will help competitively position us to achieve our goal of becoming a leading Bitcoin mining operator in the United States.

Corporate Information

We were incorporated on June 24, 2020 as a special purpose acquisition company and a Delaware corporation under the name Good Works Acquisition Corp. On October 22, 2020, GWAC completed its initial public offering. On August 27, 2021, GWAC consummated the Business Combination with Cipher pursuant to the Merger Agreement. In connection with the Business Combination, GWAC changed its name to Cipher Mining Inc. Our address is 1 Vanderbilt Avenue, Floor 54, Suite C, New York, New York 10017. Our telephone number is (332) 262-2300. Our website address is <https://investors.ciphermining.com>. Information contained on our website or connected thereto does not constitute part of, and is not incorporated by reference into, this prospectus or the registration statement of which it forms a part.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We are an “emerging growth company,” as defined in Section 2(a) of the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). As such, we are eligible to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”), reduced disclosure obligations regarding executive compensation in their periodic reports and proxy statements, and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. If some investors find our securities less attractive as a result, there may be a less active trading market for our securities and the prices of our securities may be more volatile.

Further, section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. We have elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of our financial statements with certain other public companies difficult or impossible because of the potential differences in accounting standards used.

We will remain an emerging growth company until the earlier of: (1) the last day of the fiscal year (a) December 31, 2025, the last day of the fiscal year following the fifth anniversary of the date of the first sale of the initial public offering by GWAC, which closed on October 19, 2020, (b) in which we have total annual gross revenue of at least \$1.07 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common equity that is held by non-affiliates exceeds \$700 million as of the end of the prior fiscal year's second fiscal quarter; and (2) the date on which we have issued more than \$1.00 billion in non-convertible debt during the prior three-year period. References herein to "emerging growth company" shall have the meaning associated with it in the JOBS Act.

We are also a "smaller reporting company," meaning that the market value of our stock held by non-affiliates is less than \$700 million and our annual revenue was less than \$100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our stock held by non-affiliates is less than \$250 million or (ii) our annual revenue was less than \$100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates was less than \$700 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. For so long as we remain a smaller reporting company, we are permitted and intend to rely on exemptions from certain disclosure and other requirements that are applicable to other public companies that are not applicable to a smaller reporting company.

THE OFFERING

Common stock offered by us	Shares of our common stock having an aggregate offering price of up to \$250,000,000.
Common stock outstanding prior to this offering	247,518,966; until such time as the total number of our authorized shares are increased or our shares outstanding are decreased, we will not issue and sell more than aggregate of 212,913,876 shares.
Plan of Distribution	“At the market offering” as defined in Rule 415(a)(4) under the Securities Act, that may be made from time to time on the Nasdaq Global Select Market or other existing trading market for our common stock through Wainwright, as agent or principal. See the section entitled “Plan of Distribution” on page S-15 of this prospectus supplement.
Use of Proceeds	We intend to use the net proceeds of this offering for investment in growth and general corporate and working capital purposes. See the section entitled “ <i>Use of Proceeds</i> ” on page S-11 of this prospectus supplement.
Risk Factors	See “ <i>Risk Factors</i> ” beginning on page S-8 of this prospectus supplement and the other information included in, or incorporated by reference into, this prospectus supplement for a discussion of certain factors you should carefully consider before deciding to invest in shares of our common stock.
Nasdaq Global Select Market symbol	“CIFR”

The number of shares of our common stock to be outstanding prior to this offering as shown above is based on 247,489,582 shares of our common stock issued and outstanding as of June 30, 2022, and excludes:

- 8,613,978 shares of our common stock issuable upon the exercise of public warrants and private placement warrants outstanding, having an exercise price of \$11.50 per share;
- 8,717,904 shares of common stock subject to nonvested restricted stock units; and
- 22,235,276 shares of common stock reserved for future issuance under the Cipher Mining Inc. 2021 Incentive Award Plan, or the Incentive Award Plan, as of June 30, 2022, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under our 2021 Plan.

RISK FACTORS

Investment in any securities offered pursuant to this prospectus supplement and the accompanying base prospectus involves risks. You should carefully consider the risk factors described below and in our Annual Report on Form 10-K for the year ended December 31, 2021 incorporated by reference in this prospectus supplement, any amendment or update thereto reflected in subsequent filings with the SEC, including in our Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, and all other information contained or incorporated by reference in this prospectus supplement, as updated by our subsequent filings under the Exchange Act. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

Risks Relating to this Offering

Purchasers of common stock in this offering will experience immediate and substantial dilution in the book value of their investment. You may experience further dilution upon exercise of options and warrants.

The price per share of our common stock being offered may be higher than the net tangible book value per share of our outstanding common stock prior to this offering. Assuming that an aggregate of 170,068,027 shares of our common stock are sold at a price of \$1.47 per share, the last reported sale price of our common stock on the Nasdaq Global Select Market on September 20, 2022, for aggregate gross proceeds of approximately \$250.0 million, and after deducting commissions and estimated offering expenses payable by us, new investors in this offering will incur immediate dilution of \$0.14 per share. For a more detailed discussion of the foregoing see the section entitled “Dilution” below. To the extent outstanding stock options or warrants are exercised, there will be further dilution to new investors. In addition, to the extent we need to raise additional capital in the future and we issue additional shares of common stock or securities convertible or exchangeable for our common stock, our then existing stockholders may experience dilution and the new securities may have rights senior to those of our common stock offered in this offering.

We have broad discretion to determine how to use the funds raised in this offering, and may use them in ways that may not enhance our operating results or the price of our common stock.

Our management will have broad discretion over the use of proceeds from this offering, and we could spend the proceeds from this offering in ways our stockholders may not agree with or that do not yield a favorable return, if at all. Because of the number and variability of factors that will determine our use of the proceeds from this offering, their ultimate use may vary substantially from their currently intended use. We expect to use the proceeds from this offering for general corporate and working capital purposes, which may include funding commercialization efforts and research and development activities. If we do not invest or apply the proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

The trading price of our common stock has been volatile and may be volatile in the future.

The trading price of our common stock could fluctuate significantly, as it has in the past, and you may not be able to resell your shares at or above the purchase price. We cannot assure you that the trading price of our common stock will not fluctuate or decline significantly in the future. The trading price for our common stock may be affected by a number of factors, including:

- changes in financial estimates by us or by any securities analysts who might cover our stock;
- proposed changes to laws in the U.S. or foreign jurisdictions relating to our business, or speculation regarding such changes;
- delays, disruptions or other failures in the supply of cryptocurrency hardware, including chips;

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- conditions or trends in the digital assets industries and, specifically cryptoasset mining space;
- stock market price and volume fluctuations of comparable companies;
- fluctuations in prices of Bitcoin and other cryptocurrencies;
- announcements by us or our competitors of significant acquisitions, strategic partnerships or divestitures;
- significant lawsuits or announcements of investigations or regulatory scrutiny of its operations or lawsuits filed against us;
- recruitment or departure of key personnel;
- investors' general perception of our business or management; and
- other risk factors described elsewhere in our public filings.

In addition, the stock markets in general, and the markets for cryptoasset mining stocks in particular, have experienced extreme volatility that may have been unrelated to the operating performance of the issuer. These broad market fluctuations may adversely affect the trading price or liquidity of our common stock. In the past, when the trading price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the issuer. If any of our stockholders were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit and the attention of our management would be diverted from the operation of our business.

Future sales or issuances of our common stock in the public markets, or the perception of such sales, could depress the trading price of our common stock.

The sale of a substantial number of shares of our common stock or other equity-related securities in the public markets, or the perception that such sales could occur, could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We may sell large quantities of our common stock at any time pursuant to this prospectus supplement or in one or more separate offerings. We cannot predict the effect that future sales of common stock or other equity-related securities would have on the market price of our common stock.

The actual number of shares we will issue under the Sales Agreement, at any one time or in total, is uncertain.

Subject to certain limitations in the Sales Agreement and compliance with applicable law, we have the discretion to deliver a sales notice to Wainwright at any time throughout the term of the Sales Agreement. The number of shares that are sold by Wainwright after delivering a sales notice will fluctuate based on the market price of our common stock during the sales period and limits we set with Wainwright. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares that will be ultimately issued.

The common stock offered hereby will be sold in "at the market offerings," and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The information in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein and any free writing prospectus that we have authorized for use in connection with this offering contain forward-looking statements and information within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, which are subject to the “safe harbor” created by those sections. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “targets,” “projects,” “contemplates,” “believes,” “estimates,” “forecasts,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions. Forward-looking statements contained in this prospectus include, but are not limited to statements regarding:

- our planned buildout of cryptocurrency mining sites;
- our ability to raise financing in the future;
- our future results of operations and financial position, industry and business trends, equity compensation, business strategy, plans, market growth and our objectives for future operations;
- our commercial partnerships and supply agreements;
- the ability to maintain the listing of our common stock and warrants on Nasdaq, and the potential liquidity and trading of such securities;
- our success in retaining or recruiting, or changes required in, our officers, key employees or directors;
- the effects of competition and regulation on our business;
- the effects of price fluctuations in the wholesale and retail power markets;
- the effects of global economic, business or political conditions, such as the global coronavirus (“COVID-19”) pandemic and the disruption caused by various countermeasures to reduce its spread; and
- the value and volatility of Bitcoin and other cryptocurrencies.

The forward-looking statements contained in this prospectus supplement are based on our current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described under the heading “*Risk Factors*” and elsewhere in this prospectus supplement and under “*Risk Factors*” in our Annual Report on Form 10-K for the year ended December 31, 2021. Should one or more of these risks or uncertainties materialize, or should any of the assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

You should read this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein and any free writing prospectuses that we have authorized for use in this offering with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$250,000,000 from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. There can be no assurance that we will be able to sell any shares under or fully utilize the Sales Agreement with Wainwright.

We intend to use the net proceeds, if any, from this offering for investment in growth and general corporate and working capital purposes.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock, and we do not currently intend to pay any cash dividends for the foreseeable future. We expect to retain future earnings, if any, to fund the development and growth of our business. Any future determination to pay dividends on our common stock will be at the discretion of the board of directors and will depend upon, among other factors, our financial condition, operating results, current and anticipated cash needs, plans for expansion and other factors that the board of directors may deem relevant.

DILUTION

If you invest in this offering, your ownership interest will be diluted to the extent of the difference between the price per share you pay in this offering and the as adjusted net tangible book value per share of our common stock after this offering.

As of June 30, 2022, we had a net tangible book value of approximately \$313,339,684, or approximately \$1.27 per share of common stock based upon 247,489,582 shares outstanding. Our net tangible book value per share represents total assets less total liabilities, divided by the number of shares of common stock outstanding at June 30, 2022.

After giving effect to the sale of our common stock in the aggregate amount of \$250.0 million at an assumed offering price of \$1.47 per share, the last reported sale price of our common stock on the Nasdaq Global Select Market on September 20, 2022, and after deducting commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2022 would have been \$555,839,684, or \$1.33 per share of common stock. This represents an immediate increase in net tangible book value of \$0.07 per share to our existing stockholders and an immediate dilution in net tangible book value of \$0.14 per share to new investors in this offering.

The following table illustrates this calculation on a per share basis. The as adjusted information is illustrative only and will adjust based on the actual price to the public, the actual number of shares sold and other terms of the offering determined at the time shares of our common stock are sold pursuant to this prospectus supplement. The as adjusted information assumes that all of our common stock in the aggregate amount of \$250.0 million is sold at the assumed offering price of \$1.47 per share, the last reported sale price of our common stock on the Nasdaq Global Select Market on September 20, 2022.

Assumed public offering price per share	\$1.47
Net tangible book value per share as of June 30, 2022	\$1.27
Increase in net tangible book value per share attributable to the offering	<u>0.07</u>
As adjusted net tangible book value per share after giving effect to the offering	<u>1.33</u>
Dilution per share to new investors participating in the offering	<u>\$0.14</u>

The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from an assumed offering price of \$1.47 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$250,000,000 is sold at that price, would cause our as adjusted net tangible book value per share after the offering to be \$1.61 per share and would increase the dilution in net tangible book value per share to new investors to \$0.34 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from an assumed offering price of \$1.47 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$250,000,000 is sold at that price, would cause our as adjusted net tangible book value per share after the offering to be \$0.73 per share and would decrease the dilution in net tangible book value per share to new investors to \$0.54 per share, after deducting commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only.

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The above discussion and table are based on 247,489,582 shares of our common stock issued and outstanding as of June 30, 2022, and excludes:

- 8,613,978 shares of our common stock issuable upon the exercise of Public Warrants and Private Placement Warrants outstanding, having an exercise price of \$11.50 per share;
- 8,717,904 shares of common stock subject to nonvested restricted stock units; and
- 22,235,276 shares of common stock reserved for future issuance under the Cipher Mining Inc. 2021 Incentive Award Plan, or the Incentive Award Plan, as of June 30, 2022, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under our 2021 Plan.

PLAN OF DISTRIBUTION

We have entered into the Sales Agreement with Wainwright under which we may issue and sell shares of our common stock having an aggregate gross sales price of up to \$250.0 million from time to time through Wainwright acting as agent. The Sales Agreement has been filed as an exhibit to the registration statement of which this prospectus supplement and accompanying prospectus form a part.

Upon delivery of a placement notice and subject to the terms and conditions of the Sales Agreement, Wainwright may sell our common stock by any method permitted by law deemed to be an “at the market offering” as defined in Rule 415(a)(4) promulgated under the Securities Act, including sales made directly on The Nasdaq Global Select Market or any other existing trading market of our common stock. We may instruct Wainwright not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or Wainwright may suspend the offering of common stock upon notice and subject to other conditions.

We will pay Wainwright commissions, in cash, for its services in acting as agent in the sale of our common stock. Wainwright will be entitled to compensation at a fixed commission rate equal to up to 3.0% of the gross sales price per share sold pursuant to the Sales Agreement. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We have also agreed to reimburse Wainwright for certain specified expenses, including the fees and disbursements of its legal counsel in an amount up to \$50,000, in addition to up to \$2,500 per due diligence update session for Wainwright’s counsel’s fees and any incidental expenses to be reimbursed by us. We will report at least quarterly the number of shares of common stock sold through Wainwright under the Sales Agreement, the net proceeds to us and the compensation paid by us to Wainwright in connection with the sales of common stock.

Settlement for sales of common stock will generally occur on the second business day following the date on which any sales are made, or on some other date that is agreed upon by us and Wainwright in connection with a particular transaction, in return for payment of the net proceeds to us. Sales of our common stock as contemplated in this prospectus supplement will be settled through the facilities of The Depository Trust Company or by such other means as we and Wainwright may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

Wainwright will use its commercially reasonable efforts, consistent with its sales and trading practices, to sell shares of our common stock under the terms and subject to the conditions set forth in the Sales Agreement. In connection with the sale of the common stock on our behalf, Wainwright will be deemed to be an “underwriter” within the meaning of the Securities Act and the compensation of Wainwright will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to Wainwright against certain civil liabilities, including liabilities under the Securities Act.

The offering of our common stock pursuant to the Sales Agreement will terminate upon the termination of the Sales Agreement or as otherwise permitted therein. We or Wainwright may suspend the offering of the common stock being made through Wainwright under the Sales Agreement upon proper notice to the other party.

Our common stock is listed on The Nasdaq Global Select Market and trades under the symbol “CIFR.” The transfer agent of our common stock is Continental Stock Transfer & Trust Company.

Wainwright and its affiliates have provided, and may in the future provide, various investment banking, commercial banking and other financial services for us and our affiliates, for which services they have received, or may in the future receive, customary fees. To the extent required by Regulation M promulgated under the Exchange Act, Wainwright will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus supplement.

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This prospectus supplement and the accompanying base prospectus in electronic format may be made available on a website maintained by Wainwright and Wainwright may distribute this prospectus supplement and the accompanying base prospectus electronically.

LEGAL MATTERS

Latham & Watkins LLP will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby on behalf of Cipher Mining Inc. H.C. Wainwright & Co., LLC is being represented in connection with this offering by Ellenoff Grossman & Schole LLP.

EXPERTS

The consolidated financial statements for Cipher Mining Inc. as of December 31, 2021, and January 31, 2021, and for the eleven months ended December 31, 2021 and the period from January 7, 2021 (inception) to January 31, 2021 have been audited by Marcum LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.



Up to \$250,000,000

Common Stock

PROSPECTUS SUPPLEMENT

H.C. Wainwright & Co.

, 2022

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following is an estimate of the expenses (all of which are to be paid by the registrant) that we may incur in connection with the securities being registered hereby.

SEC registration fee	\$47,805.39 ⁽¹⁾
FINRA filing fee	\$ (2)
Legal fees and expenses	\$ (2)
Accounting fees and expenses	\$ (2)
Financial printing and miscellaneous expenses	\$ (2)
Miscellaneous	\$ (2)
Total	\$ (2)

- (1) Certain of the securities being registered hereunder were previously registered under the registrant's Registration Statement on Form S-1 (File No. 333-262283), initially filed with the Securities and Exchange Commission on January 21, 2022 and initially declared effective on January 28, 2022 (as amended, the "Prior Registration Statement"), which securities remain unsold as of the date of this registration statement. Pursuant to Rule 415(a)(6), the registration fees relating to such securities under the Prior Registration Statements will continue to be applied to such securities hereunder.
- (2) These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers

Subsection (a) of Section 145 of the General Corporation Law of the State of Delaware, or the DGCL, empowers a corporation to indemnify any person who was or is a party or who is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

Subsection (b) of Section 145 empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145 further provides that to the extent a director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) of

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Section 145, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and the indemnification provided for by Section 145 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of such person's heirs, executors and administrators. Section 145 also empowers the corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Section 102(b)(7) of the DGCL provides that a corporation's certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

Any underwriting agreement or distribution agreement that the registrant enters into with any underwriters or agents involved in the offering or sale of any securities registered hereby may require such underwriters or dealers to indemnify the registrant, some or all of its directors and officers and its controlling persons, if any, for specified liabilities, which may include liabilities under the Securities Act of 1933, as amended.

As permitted by the DGCL, the Certificate of Incorporation contains provisions that eliminate the personal liability of directors for monetary damages for any breach of fiduciary duties as a director, except liability for the following (i) any breach of a director's duty of loyalty to Cipher or its stockholders; (ii) acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; (iii) under Section 174 of the DGCL (regarding unlawful dividends and stock purchases); or (iv) any transaction from which the director derived an improper personal benefit. As permitted by the DGCL, the Bylaws provide that: (i) Cipher is required to indemnify its directors and executive officers to the fullest extent permitted by the DGCL, subject to very limited exceptions; (ii) Cipher may indemnify its other employees and agents as set forth in the DGCL; (iii) Cipher is required to advance expenses, as incurred, to its directors and executive officers in connection with a legal proceeding to the fullest extent permitted by the DGCL, subject to very limited exceptions; and (iv) the rights conferred in the Bylaws are not exclusive.

We entered into indemnification agreements with each director and executive officer to provide these individuals additional contractual assurances regarding the scope of the indemnification set forth in the Certificate of Incorporation and Bylaws and to provide additional procedural protections. There is no pending litigation or proceeding involving a director or executive officer of Cipher for which indemnification is sought. The indemnification provisions in the Certificate of Incorporation, Bylaws, and the indemnification agreements entered into or to be entered into between us and each of our directors and executive officers may be sufficiently broad to permit indemnification of our directors and executive officers for liabilities arising under the Securities Act. We currently carry liability insurance for our directors and officers.

We also have directors' and officers' liability insurance for securities matters.

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Item 16. Exhibits

Exhibit Number	Description
1.1*	Form of Underwriting Agreement.
1.2	At The Market Offering Agreement, dated September 21, 2022, between the Company and H.C. Wainwright & Co., LLC.
3.1	Second Amended and Restated Certificate of Incorporation of Cipher Mining Inc. (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K as filed with the SEC on August 31, 2021, and incorporated herein by this reference.)
3.2	Amended and Restated Bylaws of Cipher Mining Inc. (filed as Exhibit 3.2 to the Company's Current Report on Form 8-K as filed with the SEC on August 31, 2021, and incorporated herein by this reference.)
4.1	Specimen stock certificate evidencing the shares of common stock of Cipher Mining Inc. (filed as Exhibit 4.5 to the Company's Registration Statement on Form S-4/A as filed with the SEC on June 15, 2021).
4.2	Specimen Warrant Certificate of Good Works Acquisition Corp. (filed as Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 28, 2020, and incorporated herein by this reference.)
4.3	Warrant Agreement, dated as of October 19, 2020, by and between Continental Stock Transfer & Trust Company and Good Works Acquisition Corp. (filed as Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 28, 2020, and incorporated herein by this reference.)
4.4*	Form of Preferred Stock Certificate.
4.5*	Form of Warrant Agreement.
4.6*	Form of Warrant Certificate.
4.7*	Form of Unit Agreement.
5.1	Opinion of Latham & Watkins LLP.
5.2	Opinion of Latham & Watkins LLP.
23.1	Consent of Latham & Watkins LLP (included in Exhibits 5.1 and 5.2).
23.2	Consent of Marcum LLP, independent registered public accounting firm.
24.1	Powers of Attorney (incorporated by reference to the signature page hereto).
107	Filing Fee Table.

* To be filed by amendment or incorporated by reference in connection with the offering of the securities.

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

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(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii), and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the

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following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communications that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on the 21st day of September, 2022.

CIPHER MINING INC.

By: /s/ Tyler Page

Name: Tyler Page

Title: Chief Executive Officer

POWER OF ATTORNEY

Each of the undersigned officers and directors of the registrant hereby severally constitutes and appoints Tyler Page and Edward Farrell, and each of them singly (with full power to each of them to act alone), as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them, for him or her and in his or her name, place and stead, and in any and all capacities, to file and sign any and all amendments, including post-effective amendments, to this registration statement and any other registration statement for the same offering that is to be effective under Rule 462(b) of the Securities Act of 1933, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof. This power of attorney shall be governed by and construed with the laws of the State of Delaware and applicable federal securities laws.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons on behalf of the registrant in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Tyler Page</u> Tyler Page	<i>Director, Chief Executive Officer (Principal Executive Officer)</i>	September 21, 2022
<u>/s/ Edward Farrell</u> Edward Farrell	<i>Chief Financial Officer</i> <i>(Principal Accounting and Financial Officer)</i>	September 21, 2022
<u>/s/ Caitlin Long</u> Caitlin Long	Director	September 21, 2022
<u>/s/ Holly Morrow Evans</u> Holly Morrow Evans	Director	September 21, 2022
<u>/s/ Robert Dykes</u> Robert Dykes	Director	September 21, 2022
<u>/s/ James Newsome</u> James Newsome	Director	September 21, 2022
<u>/s/ Cary Grossman</u> Cary Grossman	Director	September 21, 2022
<u>/s/ Wesley Williams</u> Wesley Williams	Director	September 21, 2022

AT THE MARKET OFFERING AGREEMENT

September 21, 2022

H.C. Wainwright & Co., LLC
430 Park Avenue
New York, New York 10022

Ladies and Gentlemen:

Cipher Mining Inc., a corporation organized under the laws of Delaware (the "Company"), confirms its agreement (this "Agreement") with H.C. Wainwright & Co., LLC (the "Manager") as follows:

1. Definitions. The terms that follow, when used in this Agreement and any Terms Agreement, shall have the meanings indicated.

"Accountants" shall have the meaning ascribed to such term in Section 4(m).

"Act" shall mean the Securities Act of 1933, as amended, and the rules and regulations of the Commission promulgated thereunder.

"Action" shall have the meaning ascribed to such term in Section 3(p).

"Affiliate" shall have the meaning ascribed to such term in Section 3(o).

"Applicable Time" shall mean, with respect to any Shares, the time of sale of such Shares pursuant to this Agreement or any relevant Terms Agreement.

"Base Prospectus" shall mean the base prospectus contained in the Registration Statement at the Effective Time.

"Board" shall have the meaning ascribed to such term in Section 2(b)(iii).

"Broker Fee" shall have the meaning ascribed to such term in Section 2(b)(v).

"Business Day" shall mean any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, that, for purposes of clarity, commercial banks shall not be deemed to be authorized or required by law to remain closed due to "stay at home", "shelter-in-place", "non-essential employee" or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

“Commission” shall mean the United States Securities and Exchange Commission.

“Common Stock” shall have the meaning ascribed to such term in Section 2.

“Common Stock Equivalents” shall have the meaning ascribed to such term in Section 3(g).

“Company Counsel” shall have the meaning ascribed to such term in Section 4(l).

“DTC” shall have the meaning ascribed to such term in Section 2(b)(vii).

“Effective Date” shall mean each date and time that the Registration Statement and any post-effective amendment or amendments thereto became or becomes effective.

“Effective Time” shall mean the first date and time that the Registration Statement becomes effective.

“Exchange Act” shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder.

“Execution Time” shall mean the date and time that this Agreement is executed and delivered by the parties hereto.

“Free Writing Prospectus” shall mean a free writing prospectus, as defined in Rule 405.

“GAAP” shall have the meaning ascribed to such term in Section 3(m).

“Incorporated Documents” shall mean the documents or portions thereof filed with the Commission on or prior to the Effective Date that are incorporated by reference in the Registration Statement or the Prospectus and any documents or portions thereof filed with the Commission after the Effective Date that are deemed to be incorporated by reference in the Registration Statement or the Prospectus.

“Intellectual Property Rights” shall have the meaning ascribed to such term in Section 3(v).

“Issuer Free Writing Prospectus” shall mean an issuer free writing prospectus, as defined in Rule 433.

“Losses” shall have the meaning ascribed to such term in Section 7(d).

“Material Adverse Effect” shall have the meaning ascribed to such term in Section 3(b).

“Material Permits” shall have the meaning ascribed to such term in Section 3(t).

“Net Proceeds” shall have the meaning ascribed to such term in Section 2(b)(v).

“Permitted Free Writing Prospectus” shall have the meaning ascribed to such term in Section 4(g).

“Placement” shall have the meaning ascribed to such term in Section 2(c).

“Proceeding” shall have the meaning ascribed to such term in Section 3(b).

“Prospectus” shall mean the Base Prospectus, as supplemented by the Prospectus Supplement in the Registration Statement at the Effective Time and any subsequently filed Prospectus Supplement.

“Prospectus Supplement” shall mean the prospectus supplement relating to the Shares contained in the Registration Statement at the Effective Time and any other prospectus supplement relating to the Shares prepared and filed pursuant to Rule 424(b) from time to time.

“Registration Statement” shall mean the shelf registration statement on Form S-3 registering \$250,000,000 of securities of the Company to be filed on or immediately following the Execution Date, including exhibits and financial statements and any prospectus supplement relating to the Shares that is filed with the Commission pursuant to Rule 424(b) and deemed part of such registration statement pursuant to Rule 430B, as amended on each Effective Date and, in the event any post-effective amendment thereto becomes effective, shall also mean such registration statement as so amended.

“Representation Date” shall have the meaning ascribed to such term in Section 4(k).

“Required Approvals” shall have the meaning ascribed to such term in Section 3(e).

“Rule 158”, “Rule 164”, “Rule 172”, “Rule 173”, “Rule 405”, “Rule 415”, “Rule 424”, “Rule 430B” and “Rule 433” refer to such rules under the Act.

“Sales Notice” shall have the meaning ascribed to such term in Section 2(b)(i).

“SEC Reports” shall have the meaning ascribed to such term in Section 3(m).

“Settlement Date” shall have the meaning ascribed to such term in Section 2(b)(vii).

“Subsidiary” shall have the meaning ascribed to such term in Section 3(a).

“Terms Agreement” shall have the meaning ascribed to such term in Section 2(a).

“Time of Delivery” shall have the meaning ascribed to such term in Section 2(c).

“Trading Day” means a day on which the Trading Market is open for trading.

“Trading Market” means the Nasdaq Global Select Market.

2. Sale and Delivery of Shares. The Company proposes to issue and sell through or to the Manager, as sales agent and/or principal, from time to time during the term of this Agreement and on the terms set forth herein, up to the lesser of such number of shares (the “Shares”) of the Company’s common stock, \$0.001 par value per share (“Common Stock”), that does not exceed (a) the number or dollar amount of shares of Common Stock registered on the Registration Statement, pursuant to which the offering is being made, (b) the number of authorized but unissued shares of Common Stock (less the number of shares of Common Stock issuable upon exercise, conversion or exchange of any outstanding securities of the Company or otherwise reserved from the Company’s authorized capital stock), or (c) the number or dollar amount of shares of Common Stock that would cause the Company or the offering of the Shares to not satisfy the eligibility and transaction requirements for use of Form S-3, including, if applicable, General Instruction I.B.6 of Registration Statement on Form S-3 (the lesser of (a), (b) and (c), the “Maximum Amount”). Notwithstanding anything to the contrary contained herein, the parties hereto agree that compliance with the limitations set forth in this Section 2 on the number and aggregate sales price of Shares issued and sold under this Agreement shall be the sole responsibility of the Company and that the Manager shall have no obligation in connection with such compliance.

(a) Appointment of Manager as Selling Agent; Terms Agreement. For purposes of selling the Shares through the Manager, the Company hereby appoints the Manager as agent of the Company for the purpose of selling the Shares of the Company pursuant to this Agreement and the Manager agrees to use its commercially reasonable efforts to sell the Shares on the terms and subject to the conditions stated herein. In using commercially reasonable efforts to sell Shares, as sale agent for the Company, the Manager will undertake such sales in a manner that is consistent with its normal trading and sales practices and applicable state, provincial and federal laws, rules and regulations and the rules of the Trading Market. The Company agrees that, whenever it determines to sell the Shares directly to the Manager as principal, it will enter into a separate agreement (each, a “Terms Agreement”) in substantially the form of Annex I hereto, relating to such sale in accordance with Section 2 of this Agreement.

(b) Agent Sales. Subject to the terms and conditions and in reliance upon the representations and warranties set forth herein, following the effectiveness of the Registration Statement, the Company will issue and agrees to sell Shares from time to time through the Manager, acting as sales agent, and the Manager agrees to use its commercially reasonable efforts to sell, as sales agent for the Company, on the following terms:

(i) The Shares are to be sold on a daily basis or otherwise as shall be agreed to by the Company and the Manager on any day that (A) is a Trading Day, (B) the Company has instructed the Manager by telephone (confirmed promptly by electronic mail, which confirmation will be promptly acknowledged by the Manager) to make such sales (“Sales Notice”) and (C) the Company has satisfied its obligations under Section 6 of this Agreement. The Company will designate the maximum amount of the Shares to be sold by the Manager daily (subject to the limitations set forth in Section 2(d)) and the minimum price per Share at which such Shares may be sold. Subject to the terms and conditions hereof, the Manager shall use its commercially reasonable efforts to sell on a particular day all of the Shares designated for the sale by the Company on such day. The gross sales price of the Shares sold under this Section 2(b) shall be the prevailing market price for the shares of Common Stock sold by the Manager under this Section 2(b) on the Trading Market at the time of sale of such Shares.

(ii) The Company acknowledges and agrees that (A) there can be no assurance that the Manager will be successful in selling the Shares, (B) the Manager will incur no liability or obligation to the Company or any other person or entity if it does not sell the Shares for any reason other than a failure by the Manager to use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable law and regulations to sell such Shares as required under this Agreement, and (C) the Manager shall be under no obligation to purchase Shares on a principal basis pursuant to this Agreement, except as otherwise specifically agreed by the Manager and the Company pursuant to a Terms Agreement.

(iii) The Company shall not authorize the issuance and sale of, and the Manager shall not be obligated to use its commercially reasonable efforts to sell, any Share at a price lower than the minimum price therefor designated from time to time by the Company's Board of Directors (the "Board"), or a duly authorized committee thereof, or such duly authorized officers of the Company, and notified to the Manager in writing. The Company or the Manager may, upon notice to the other party hereto by telephone (confirmed promptly by electronic mail), suspend the offering of the Shares for any reason and at any time; provided, however, that such suspension or termination shall not affect or impair the parties' respective obligations with respect to the Shares sold hereunder prior to the giving of such notice.

(iv) The Manager may sell Shares by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415 under the Act, including without limitation sales made directly on the Trading Market, on any other existing trading market for the Common Stock or to or through a market maker. The Manager may also sell Shares in privately negotiated transactions, provided that the Manager receives the Company's prior written approval for any sales in privately negotiated transactions and if so provided in the "Plan of Distribution" section of the Prospectus Supplement or a supplement to the Prospectus Supplement or a new Prospectus Supplement disclosing the terms of such privately negotiated transaction.

(v) The compensation to the Manager for sales of the Shares under this Section 2(b) shall be a placement fee of up to 3.0% of the gross sales price of the Shares sold pursuant to this Section 2(b) ("Broker Fee"). The foregoing rate of compensation shall not apply when the Manager acts as principal, in which case the Company may sell Shares to the Manager as principal at a price agreed upon at the relevant Applicable Time pursuant to a Terms Agreement. The remaining proceeds, after deduction of the Broker Fee (if applicable) and deduction of any transaction fees imposed by any clearing firm, execution broker, or governmental or self-regulatory organization in respect of such sales, shall constitute the net proceeds to the Company for such Shares (the "Net Proceeds"). The Manager shall notify the Company as promptly as practicable if any deduction referenced in the preceding sentence will be made.

(vi) The Manager shall provide written confirmation (which may be by facsimile or electronic mail) to the Company following the close of trading on the Trading Market each day in which the Shares are sold under this Section 2(b) setting forth the number of the Shares sold on such day, the aggregate gross sales proceeds and the Net Proceeds to the Company, and the compensation payable by the Company to the Manager with respect to such sales.

(vii) Unless otherwise agreed between the Company and the Manager, settlement for sales of the Shares will occur at 10:00 a.m. (New York City time) on the second (2nd) Trading Day (or such earlier day as is industry practice for regular-way trading) following the date on which such sales are made (each, a “Settlement Date”). On or before the Trading Day prior to each Settlement Date, the Company will, or will cause its transfer agent to, electronically transfer the Shares being sold by crediting the Manager’s or its designee’s account (provided that the Manager shall have given the Company written notice of such designee at least one Trading Day prior to the Settlement Date) at The Depository Trust Company (“DTC”) through its Deposit and Withdrawal at Custodian System or by such other means of delivery as may be mutually agreed upon by the parties hereto which Shares in all cases shall be freely tradable, transferable, registered shares in good deliverable form. On each Settlement Date, the Manager will deliver the related Net Proceeds in same day funds to an account designated by the Company.

(viii) At each Applicable Time, Settlement Date and Representation Date, the Company shall be deemed to have affirmed each representation and warranty contained in this Agreement as if such representation and warranty were made as of such date, modified as necessary to relate to the Registration Statement and the Prospectus as amended as of such date. Any obligation of the Manager to use its commercially reasonable efforts to sell the Shares on behalf of the Company shall be subject to the continuing accuracy of the representations and warranties of the Company herein, to the performance by the Company of its obligations hereunder and to the continuing satisfaction of the additional conditions specified in Section 6 of this Agreement.

(ix) Adjustments for Share Splits. The parties acknowledge and agree that all share related numbers contained in this Agreement shall be adjusted to take into account any share split, share dividend or similar event effected with respect to the Common Stock.

(c) Term Sales. If the Company wishes to sell the Shares pursuant to this Agreement but other than as set forth in Section 2(b) of this Agreement (each, a “Placement”), the Company will notify the Manager of the proposed terms of such Placement. If the Manager, acting as principal, wishes to accept such proposed terms (which it may decline to do for any reason in its sole discretion) or, following discussions with the Company, the Manager wishes to accept amended terms, the Manager and the Company will enter into a Terms Agreement setting forth the terms of such Placement. The terms set forth in a Terms

Agreement will not be binding on the Company or the Manager unless and until the Company and the Manager have each executed such Terms Agreement accepting all of the terms of such Terms Agreement. In the event of a conflict between the terms of this Agreement and the terms of a Terms Agreement, the terms of such Terms Agreement will control. A Terms Agreement may also specify certain provisions relating to the reoffering of such Shares by the Manager. The commitment of the Manager to purchase the Shares pursuant to any Terms Agreement shall be deemed to have been made on the basis of the representations and warranties of the Company herein contained and shall be subject to the terms and conditions set forth herein. Each Terms Agreement shall specify the number of the Shares to be purchased by the Manager pursuant thereto, the price to be paid to the Company for such Shares, any provisions relating to rights of, and default by, underwriters acting together with the Manager in the reoffering of the Shares, and the time and date (each such time and date being referred to herein as a "Time of Delivery") and place of delivery of and payment for such Shares. Such Terms Agreement shall also specify any requirements for opinions of counsel, accountants' letters and officers' certificates pursuant to Section 6 of this Agreement and any other information or documents required by the Manager.

(d) Maximum Number of Shares. Under no circumstances shall the Company cause or request the offer or sale of any Shares if, after giving effect to the sale of such Shares, the aggregate gross sales proceeds of Shares sold pursuant to this Agreement would exceed the lesser of (A) together with all sales of Shares under this Agreement, the Maximum Amount, (B) the amount available for offer and sale under the currently effective Registration Statement and (C) the amount authorized from time to time to be issued and sold under this Agreement by the Board, a duly authorized committee thereof or a duly authorized executive committee, and notified to the Manager in writing. Under no circumstances shall the Company cause or request the offer or sale of any Shares pursuant to this Agreement at a price lower than the minimum price authorized from time to time by the Board, a duly authorized committee thereof or a duly authorized executive officer, and notified to the Manager in writing. Further, under no circumstances shall the Company cause or permit the aggregate offering amount of Shares sold pursuant to this Agreement to exceed the Maximum Amount.

(e) Regulation M Notice. Unless the exceptive provisions set forth in Rule 101(c)(1) of Regulation M under the Exchange Act are satisfied with respect to the Shares, the Company shall give the Manager at least one Business Day's prior notice of its intent to sell any Shares in order to allow the Manager time to comply with Regulation M.

3. **Representations and Warranties.** The Company represents and warrants to, and agrees with, the Manager at the Execution Time and on each such time the following representations and warranties are repeated or deemed to be made pursuant to this Agreement, as set forth below or in the Registration Statement, the Prospectus or the Incorporated Documents.

(a) **Subsidiaries.** All of the direct and indirect subsidiaries (individually, a “Subsidiary”) of the Company are set forth on Exhibit 21.1 to the Company’s most recent Annual Report on Form 10-K filed with the Commission. The Company owns, directly or indirectly, all of the capital stock or other equity interests of each Subsidiary free and clear of any “Liens” (which for purposes of this Agreement shall mean a lien, charge, security interest, encumbrance, right of first refusal, preemptive right or other restriction), and all of the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities.

(b) **Organization and Qualification.** The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any Subsidiary is in violation or default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of this Agreement, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, as set forth in the Registration Statement, the Base Prospectus, any Prospectus Supplement, the Prospectus or the Incorporated Documents, or (iii) a material adverse effect on the Company’s ability to perform in any material respect on a timely basis its obligations under this Agreement (any of (i), (ii) or (iii), a “Material Adverse Effect”) and no “Proceeding” (which for purposes of this Agreement shall mean any action, claim, suit, investigation or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or threatened) has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(c) **Authorization and Enforcement.** The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and otherwise to carry out its obligations hereunder. The execution and delivery of this Agreement by the Company and the consummation by it of the transactions contemplated hereby have been duly

authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board or the Company's stockholders in connection herewith other than in connection with the Required Approvals. This Agreement has been duly executed and delivered by the Company and, when delivered in accordance with the terms hereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(d) No Conflicts. The execution, delivery and performance by the Company of this Agreement, the issuance and sale of the Shares and the consummation by it of the transactions contemplated hereby do not and will not (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, anti-dilution or similar adjustments, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other "Person" (defined as an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind, including the Trading Market) in connection with the execution, delivery and performance by the Company of this Agreement, other than (i) the filings required by this Agreement, (ii) the filing with the Commission of the Prospectus Supplement, (iii) the filing of application(s) to and approval by the Trading Market for the listing of the Shares for trading thereon in the time and manner required thereby, and (iv) such filings as are required to be made under applicable state securities laws and the rules and regulations of the Financial Industry Regulatory Authority, Inc. ("FINRA") (collectively, the "Required Approvals").

(f) Issuance of Shares. The Shares to be issued and sold by the Company hereunder are duly authorized and, when issued and paid for in accordance with this Agreement, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Company has an authorized capitalization as set forth in the Prospectus Supplement and all of the issued shares of capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable and conform to the description of the Common Stock or the preferred stock of the Company, as applicable, contained in the Prospectus. The issuance and sale by the Company of the Shares to or through the Manager will be effected pursuant to the Registration Statement filed by the Company, although nothing in this Agreement shall be construed as requiring the Company to use the Registration Statement (as defined below) to issue the Common Stock. The "Plan of Distribution" section within the Registration Statement permits the issuance and sale of the Shares as contemplated by this Agreement. Upon receipt of the Shares, the purchasers of such Shares will have good and marketable title to such Shares and the Shares will be freely tradable on the Trading Market.

(g) Capitalization. The capitalization of the Company is as set forth in the SEC Reports. Except for any Shares issued pursuant to this Agreement, the Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee stock options under the Company's stock option plans, the issuance of shares of Common Stock to employees pursuant to the Company's employee stock purchase plan and pursuant to the conversion and/or exercise of securities exercisable, exchangeable or convertible into Common Stock ("Common Stock Equivalents") outstanding as of the date of the most recently filed periodic report under the Exchange Act. Except as set forth in the SEC Reports, no Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by this Agreement. Except as set forth in the SEC Reports, there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any shares of Common Stock or the capital stock of any Subsidiary, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents or capital stock of any Subsidiary. Except as set forth in the SEC Reports, the issuance and sale of the Shares will not obligate the Company or any Subsidiary to issue shares of Common Stock or other securities to any Person. Except as set forth in the SEC Reports, there are no outstanding

securities or instruments of the Company or any Subsidiary with any provision that adjusts the exercise, conversion, exchange or reset price of such security or instrument upon an issuance of securities by the Company or any Subsidiary. Except as set forth in the SEC Reports, there are no outstanding securities or instruments of the Company or any Subsidiary that contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to redeem a security of the Company or such Subsidiary. The Company does not have any stock appreciation rights or “phantom stock” plans or agreements or any similar plan or agreement. All of the outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. Other than the Required Approvals, no further approval or authorization of any stockholder, the Board or others is required for the issuance and sale of the Shares. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company’s capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company’s stockholders.

(h) Registration Statement. The Company meets the requirements for use of Form S-3 under the Act and has prepared and filed with the Commission the Registration Statement, including a related Base Prospectus, for registration under the Act of the offering and sale of the Shares. After the Effective Time, such Registration Statement is effective and available for the offer and sale of the Shares as of the date hereof. As filed, the Base Prospectus contains all information required by the Act and the rules thereunder, and, except to the extent the Manager shall agree in writing to a modification, shall be in all substantive respects in the form furnished to the Manager prior to the Execution Time or prior to any such time this representation is repeated or deemed to be made. The Registration Statement, at the Execution Time, each such time this representation is repeated or deemed to be made, and at all times during which a prospectus is required by the Act to be delivered (whether physically or through compliance with Rule 172, 173 or any similar rule) in connection with any offer or sale of the Shares, meets the requirements set forth in Rule 415(a)(1)(x). The Company meets the transaction requirements as set forth in General Instruction I.B.1 of Form S-3 or, if applicable, as set forth in General Instruction I.B.6 of Form S-3 with respect to the aggregate market value of securities being sold pursuant to this offering and during the twelve (12) months prior to this offering.

(i) Accuracy of Incorporated Documents. The Incorporated Documents, when they were filed with the Commission, conformed in all material respects to the requirements of the Exchange Act and the rules thereunder, and none of the Incorporated Documents, when they were filed with the Commission, contained any untrue statement of a material fact or omitted to state a material fact

necessary to make the statements therein, in light of the circumstances under which they were made not misleading; and any further documents so filed and incorporated by reference in the Registration Statement, the Base Prospectus, the Prospectus Supplement or the Prospectus, when such documents are filed with the Commission, will conform in all material respects to the requirements of the Exchange Act and the rules thereunder, as applicable, and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(j) Ineligible Issuer. (i) At the earliest time after the filing of the Registration Statement that the Company or another offering participant made a bona fide offer (within the meaning of Rule 164(h)(2)) of the Shares and (ii) as of the Execution Time and on each such time this representation is repeated or deemed to be made (with such date being used as the determination date for purposes of this clause (ii)), the Company was not and is not an Ineligible Issuer (as defined in Rule 405), without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an Ineligible Issuer.

(k) Free Writing Prospectus. The Company is eligible to use Issuer Free Writing Prospectuses. Each Issuer Free Writing Prospectus does not include any information the substance of which conflicts with the information contained in the Registration Statement, including any Incorporated Documents and any prospectus supplement deemed to be a part thereof that has not been superseded or modified; and each Issuer Free Writing Prospectus does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The foregoing sentence does not apply to statements in or omissions from any Issuer Free Writing Prospectus based upon and in conformity with written information furnished to the Company by the Manager specifically for use therein. Any Issuer Free Writing Prospectus that the Company is required to file pursuant to Rule 433(d) has been, or will be, filed with the Commission in accordance with the requirements of the Act and the rules thereunder. Each Issuer Free Writing Prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) or that was prepared by or behalf of or used by the Company complies or will comply in all material respects with the requirements of the Act and the rules thereunder. The Company will not, without the prior consent of the Manager, prepare, use or refer to, any Issuer Free Writing Prospectuses.

(l) Proceedings Related to Registration Statement. The Registration Statement is not the subject of a pending proceeding or examination under Section 8(d) or 8(e) of the Act, and the Company is not the subject of a pending proceeding under Section 8A of the Act in connection with the offering of the Shares. The Company has not received any notice that the Commission has issued or intends to issue a stop-order with respect to the Registration Statement or that the Commission otherwise has suspended or withdrawn the effectiveness of the Registration Statement, either temporarily or permanently, or intends or has threatened in writing to do so.

(m) SEC Reports. The Company has complied in all material respects with requirements to file all reports, schedules, forms, statements and other documents required to be filed by the Company under the Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, together with the Prospectus and the Prospectus Supplement, being collectively referred to herein as the “SEC Reports”) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The financial statements of the Company included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing or as amended or corrected in a subsequent filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“GAAP”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(n) [RESERVED]

(o) Material Changes; Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the SEC Reports, except as specifically disclosed in a specific subsequent SEC Report filed prior to the date this representation is being made, (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company’s financial

statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or "Affiliate" (defined as any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 144 under the Act), except pursuant to existing Company stock option plans. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Shares contemplated by this Agreement or as set forth in the SEC Reports, no event, liability, fact, circumstance, occurrence or development has occurred or exists or is reasonably expected to occur or exist with respect to the Company or its Subsidiaries or their respective businesses, prospects, properties, operations, assets or financial condition that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed at least 1 Trading Day prior to the date that this representation is made.

(p) Litigation. Except as set forth in the SEC Reports, there is no action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an "Action"), which (i) adversely affects or challenges the legality, validity or enforceability of this Agreement or the Shares or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary, nor, to the knowledge of the Company, any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Act.

(q) Labor Relations. No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. To the knowledge of the Company, none of the Company's or its Subsidiaries' employees is a member of a union that relates to such employee's relationship with the Company or such Subsidiary, and neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and

its Subsidiaries believe that their relationships with their employees are good. To the knowledge of the Company, no executive officer of the Company or any Subsidiary, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(r) Compliance. Neither the Company nor any Subsidiary: (i) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company or any Subsidiary under), nor has the Company or any Subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any judgment, decree or order of any court, arbitrator or other governmental authority or (iii) is or has been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, environmental protection, occupational health and safety, product quality and safety and employment and labor matters, except in each case of clauses (i), (ii) and (iii) as could not have or reasonably be expected to result in a Material Adverse Effect.

(s) Environmental Laws. The Company and its Subsidiaries (i) are in compliance with all applicable federal, state, local and foreign laws relating to pollution or protection of human health or the environment (including ambient air, surface water, groundwater, land surface or subsurface strata), including laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "Hazardous Materials") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands, or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations, issued, entered, promulgated or approved thereunder ("Environmental Laws"); (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (iii) are in compliance with all terms and conditions of any such permit, license or approval, where in each clause (i), (ii) and (iii), the failure to so comply could be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect.

(t) Regulatory Permits. The Company and the Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct their respective businesses as described in the SEC Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect (“Material Permits”), and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any Material Permit.

(u) Title to Assets. The Company and the Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made therefor in accordance with GAAP and, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and the Subsidiaries are in compliance, except where such non-compliance would not have or reasonably be expected to have a Material Adverse Effect.

(v) Intellectual Property. The Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights necessary or required for use in connection with their respective businesses as described in the SEC Reports and which the failure to so have could have a Material Adverse Effect (collectively, the “Intellectual Property Rights”). Neither the Company nor any Subsidiary has received a notice (written or otherwise) that any of, the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two (2) years from the date of this Agreement, except where such expiration, termination or abandonment could not have or reasonably be expected to not have a Material Adverse Effect. Neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Intellectual Property Rights violate or infringe upon the rights of any Person, except as could not have or reasonably be expected to not have a Material Adverse Effect. To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(w) Insurance. The Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary for companies of similar size as the Company in the businesses in which the Company and the Subsidiaries are engaged, including, but not limited to, directors and officers insurance coverage. Neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

(x) Affiliate Transactions. Except as set forth in the SEC Reports, none of the officers or directors of the Company or any Subsidiary and, to the knowledge of the Company, none of the employees of the Company or any Subsidiary is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000 other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(y) Sarbanes-Oxley Compliance. Except as disclosed in the SEC Reports, the Company and the Subsidiaries are in material compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof.

(z) Certain Fees. Other than payments to be made to the Manager, no brokerage or finder's fees or commissions are or will be payable by the Company or any Subsidiary to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by this Agreement. The Manager shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by this Agreement.

(aa) No Other Sales Agency Agreement. The Company has not entered into any other sales agency agreements or other similar arrangements with any agent or any other representative in respect of at the market offerings of the Shares.

(bb) [RESERVED]

(cc) Listing and Maintenance Requirements. The Common Stock is listed on the Trading Market and the issuance of the Shares as contemplated by this Agreement does not contravene the rules and regulations of the Trading Market. The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. Except as disclosed in the SEC Reports, the Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. The Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements. The Common Stock is currently eligible for electronic transfer through the Depository Trust Company or another established clearing corporation and the Company is current in payment of the fees to the Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer.

(dd) Application of Takeover Protections. Except as set forth in the Registration Statement, the Base Prospectus, any Prospectus Supplement or the Prospectus, the Company and the Board have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company's certificate of incorporation (or similar charter documents) or the laws of its state of incorporation that is or could become applicable to the Shares.

(ee) Solvency. Based on the consolidated financial condition of the Company as of the Effective Date, (i) the fair saleable value of the Company's assets exceeds the amount that will be required to be paid on or in respect of the Company's existing debts and other liabilities (including known contingent liabilities) as they mature, (ii) the Company's assets do not constitute unreasonably small capital to carry on its business as now conducted and as proposed to be conducted including its capital needs taking into account the particular capital requirements of the business conducted by the Company, consolidated and projected capital requirements and capital availability thereof,

and (iii) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its liabilities when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). The Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction within one year from the date hereof. The SEC Reports set forth as of the dates thereof all outstanding secured and unsecured Indebtedness of the Company or any Subsidiary, or for which the Company or any Subsidiary has commitments. For the purposes of this Agreement, "Indebtedness" means (x) any liabilities for borrowed money or amounts owed in excess of \$50,000 (other than trade accounts payable incurred in the ordinary course of business), (y) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Company's consolidated balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (z) the present value of any lease payments in excess of \$50,000 due under leases required to be capitalized in accordance with GAAP. Neither the Company nor any Subsidiary is in default with respect to any Indebtedness.

(ff) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company and its Subsidiaries each (i) has made or filed all material United States federal, state and local income and foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company or of any Subsidiary know of no basis for any such claim, except those which do not individually or in the aggregate, have a Material Adverse Effect.

(gg) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law, or (iv) violated in any material respect any provision of the Foreign Corrupt Practices Act of 1977, as amended.

(hh) Accountants. The Company's accounting firm is set forth in the SEC Reports. To the knowledge and belief of the Company, such accounting firm is a registered public accounting firm as required by the Exchange Act.

(ii) Regulation M Compliance. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Shares, (ii) sold, bid for, purchased, or, paid any compensation for soliciting purchases of, any of the Shares, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company, other than, in the case of clauses (ii) and (iii), compensation paid to the Manager in connection with the Shares.

(jj) [RESERVED]

(kk) Stock Option Plans. Except as set forth in the SEC Reports, each stock option granted by the Company under the Company's stock option plan was granted (i) in accordance with the terms of the Company's stock option plan and (ii) with an exercise price at least equal to the fair market value of the Common Stock on the date such stock option would be considered granted under GAAP and applicable law. No stock option granted under the Company's stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no Company policy or practice to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its Subsidiaries or their financial results or prospects.

(ll) Cybersecurity. (i)(x) There has been no security breach or other compromise of or relating to any of the Company's or any Subsidiary's information technology and computer systems, networks, hardware, software, data (including the data of its respective customers, employees, suppliers, vendors and any third party data maintained by or on behalf of it), equipment or technology (collectively, "IT Systems and Data") and (y) the Company and the Subsidiaries have not been notified of, and has no knowledge of any event or condition that would reasonably be expected to result in, any security breach or other compromise to its IT Systems and Data, except as in both (x) and (y) would not, individually or in the aggregate, have a Material Adverse Effect; (ii) the Company and the Subsidiaries are presently in compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and

contractual obligations relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification, except as would not, individually or in the aggregate, have a Material Adverse Effect; (iii) the Company and the Subsidiaries have implemented and maintained commercially reasonable safeguards to maintain and protect its material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and Data; and (iv) the Company and the Subsidiaries have implemented backup and disaster recovery technology consistent with industry standards and practices.

(mm) Office of Foreign Assets Control. Neither the Company nor any Subsidiary nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC").

(nn) U.S. Real Property Holding Corporation. The Company is not and has never been a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company shall so certify upon the Manager's request.

(oo) [RESERVED]

(pp) Anti-Money Laundering. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable anti-money laundering statutes and applicable rules and regulations thereunder (collectively, the "Anti-Money Laundering Laws"), and no Action or Proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any Subsidiary with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company or any Subsidiary, threatened.

(qq) FINRA Member Shareholders. There are no affiliations with any FINRA member firm among the Company's officers, directors or, to the knowledge of the Company, any five percent (5%) or greater stockholder of the Company, except as set forth in the Registration Statement, the Base Prospectus, any Prospectus Supplement or the Prospectus.

4. Agreements. The Company agrees with the Manager that:

(a) Right to Review Amendments and Supplements to Registration Statement and Prospectus. During any period when the delivery of a prospectus relating to the Shares is required (including in circumstances where such requirement may be satisfied pursuant to Rule 172, 173 or any similar rule) to be delivered under the Act in connection with the offering or the sale of Shares, the

Company will not file any amendment to the Registration Statement or supplement (including any Prospectus Supplement) to the Base Prospectus unless the Company has furnished to the Manager a copy for its review prior to filing and will not file any such proposed amendment or supplement to which the Manager reasonably objects. The Company will cause any supplement to the Prospectus filed after the Effective Time to be properly completed, and will file such supplement with the Commission pursuant to the applicable paragraph of Rule 424(b) within the time period prescribed thereby and will provide evidence reasonably satisfactory to the Manager of such timely filing. The Company will promptly advise the Manager (i) when the Prospectus, and any supplement thereto, shall have been filed (if required) with the Commission pursuant to Rule 424(b), (ii) when, during any period when the delivery of a prospectus (whether physically or through compliance with Rule 172, 173 or any similar rule) is required under the Act in connection with the offering or sale of the Shares, any amendment to the Registration Statement shall have been filed or become effective (other than any annual report of the Company filed pursuant to Section 13(a) or 15(d) of the Exchange Act), (iii) of any request by the Commission or its staff for any amendment of the Registration Statement, or for any supplement to the Prospectus or for any additional information, (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of any notice objecting to its use or the institution or threatening of any proceeding for that purpose and (v) of the receipt by the Company of any notification with respect to the suspension of the qualification of the Shares for sale in any jurisdiction or the institution or threatening of any proceeding for such purpose. The Company will use its best efforts to prevent the issuance of any such stop order or the occurrence of any such suspension or objection to the use of the Registration Statement and, upon such issuance, occurrence or notice of objection, to obtain as soon as possible the withdrawal of such stop order or relief from such occurrence or objection, including, if necessary, by filing an amendment to the Registration Statement or a new registration statement and using its best efforts to have such amendment or new registration statement declared effective as soon as practicable.

(b) Subsequent Events. If, at any time on or after an Applicable Time but prior to the related Settlement Date, any event occurs as a result of which the Registration Statement or Prospectus would include any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein in the light of the circumstances under which they were made or the circumstances then prevailing not misleading, the Company will (i) notify promptly the Manager so that any use of the Registration Statement or Prospectus may cease until such are amended or supplemented; (ii) amend or supplement the Registration Statement or Prospectus to correct such statement or omission; and (iii) supply any amendment or supplemented Prospectus to the Manager in such quantities as the Manager may reasonably request.

(c) Notification of Subsequent Filings. During any period when the delivery of a prospectus relating to the Shares is required (including in circumstances where such requirement may be satisfied pursuant to Rule 172, 173 or any similar rule) to be delivered under the Act, any event occurs as a result of which the Prospectus as then supplemented would include any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein in the light of the circumstances under which they were made not misleading, or if it shall be necessary to amend the Registration Statement, file a new registration statement or supplement the Prospectus to comply with the Act or the Exchange Act or the respective rules thereunder, including in connection with use or delivery of the Prospectus, the Company promptly will (i) notify the Manager of any such event, (ii) subject to Section 4(a), prepare and file with the Commission an amendment or supplement or new registration statement which will correct such statement or omission or effect such compliance, (iii) use its best efforts to have any amendment to the Registration Statement or new registration statement declared effective as soon as practicable in order to avoid any disruption in use of the Prospectus and (iv) supply any supplemented Prospectus to the Manager in such quantities as the Manager may reasonably request.

(d) Earnings Statements. As soon as practicable, the Company will make generally available to its security holders and to the Manager an earnings statement or statements of the Company and its Subsidiaries which will satisfy the provisions of Section 11(a) of the Act and Rule 158. For the avoidance of doubt, the Company's compliance with the reporting requirements of the Exchange Act shall be deemed to satisfy the requirements of this Section 4(d).

(e) Delivery of Registration Statement. Upon the request of the Manager, the Company will furnish to the Manager and counsel for the Manager, as soon as reasonably practicable, without charge, signed copies of the Registration Statement (including exhibits thereto) and, so long as delivery of a prospectus by the Manager or dealer may be required by the Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172, 173 or any similar rule), as many copies of the Prospectus and each Issuer Free Writing Prospectus and any supplement thereto as the Manager may reasonably request. The Company will pay the expenses of printing or other production of all documents relating to the offering.

(f) Qualification of Shares. The Company will arrange, if necessary, for the qualification of the Shares for sale under the laws of such jurisdictions as the Manager may designate and will maintain such qualifications in effect so long as required for the distribution of the Shares; provided that in no event shall the Company be obligated to qualify to do business in any jurisdiction where it is not now so qualified or to take any action that would subject it to service of process in suits, other than those arising out of the offering or sale of the Shares, in any jurisdiction where it is not now so subject.

(g) Free Writing Prospectus. The Company agrees that, unless it has or shall have obtained the prior written consent of the Manager, and the Manager agrees with the Company that, unless it has or shall have obtained, as the case may be, the prior written consent of the Company, it has not made and will not make any offer relating to the Shares that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a “free writing prospectus” (as defined in Rule 405) required to be filed by the Company with the Commission or retained by the Company under Rule 433. Any such free writing prospectus consented to by the Manager or the Company is hereinafter referred to as a “Permitted Free Writing Prospectus.” The Company agrees that (i) it has treated and will treat, as the case may be, each Permitted Free Writing Prospectus as an Issuer Free Writing Prospectus and (ii) it has complied and will comply, as the case may be, with the requirements of Rules 164 and 433 applicable to any Permitted Free Writing Prospectus, including in respect of timely filing with the Commission, legending and record keeping.

(h) Subsequent Equity Issuances. The Company shall not deliver any Sales Notice hereunder (and any Sales Notice previously delivered shall not apply during such three Business Days) for at least three (3) Business Days prior to any date on which the Company or any Subsidiary offers, sells, issues, contracts to sell, contracts to issue or otherwise disposes of, directly or indirectly, any other shares of Common Stock or any Common Stock Equivalents (other than the Shares), subject to Manager’s right to waive this obligation, provided that, without compliance with the foregoing obligation, the Company may issue and sell Common Stock pursuant to any employee equity plan, stock ownership plan or dividend reinvestment plan of the Company in effect at the Execution Time and the Company may issue Common Stock issuable upon the conversion or exercise of Common Stock Equivalents outstanding at the Execution Time.

(i) Market Manipulation. Until the termination of this Agreement, the Company will not take, directly or indirectly, any action designed to or that would constitute or that might reasonably be expected to cause or result in, under the Exchange Act or otherwise, stabilization or manipulation in violation of the Act, Exchange Act or the rules and regulations thereunder of the price of any security of the Company to facilitate the sale or resale of the Shares or otherwise violate any provision of Regulation M under the Exchange Act.

(j) Notification of Incorrect Certificate. The Company will, at any time during the term of this Agreement, as supplemented from time to time, advise the Manager immediately after it shall have received notice or obtained knowledge thereof, of any information or fact that would alter or affect any opinion, certificate, letter and other document provided to the Manager pursuant to Section 6 herein.

(k) Certification of Accuracy of Disclosure. During the term of this Agreement, on or prior to the date of the first Sales Notice given hereunder, upon commencement of the offering of the Shares under this Agreement (and upon the recommencement of the offering of the Shares under this Agreement following the termination of a suspension of sales hereunder lasting more than 30 Trading Days), each time that (i) the Registration Statement or Prospectus shall be amended or supplemented, other than by means of Incorporated Documents, (ii) the Company files its Annual Report on Form 10-K under the Exchange Act, (iii) the Company files its quarterly reports on Form 10-Q under the Exchange Act, or (iv) the Company files a Current Report on Form 8-K containing amended financial information (other than an earnings release, to “furnish” information pursuant to Items 2.02 or 7.01 of Form 8-K or to provide disclosure pursuant to Item 8.01 of Form 8-K relating to the reclassifications of certain properties as discontinued operations in accordance with Statement of Financial Accounting Standards No. 144), if the Manager reasonably determines that the information in such Form 8-K is material, or (v) the Shares are delivered to the Manager as principal at the Time of Delivery pursuant to a Terms Agreement (such commencement or recommencement date and each such date referred to in (i), (ii), (iii), (iv) and (v) above, a “Representation Date”), unless waived by the Manager, the Company shall furnish or cause to be furnished to the Manager forthwith a certificate within five (5) Trading Days after each Representation Date, in form attached hereto as Exhibit A. The requirement to provide a certificate under this Section 4(k) shall be waived for any Representation Date occurring at a time at which no Sales Notice is pending, which waiver shall continue until the earlier to occur of the date the Company delivers a Sales Notice hereunder (which for such calendar quarter shall be considered a Representation Date) and the next occurring Representation Date following the delivery of such Sales Notice; provided, however, that such waiver shall not apply for any Representation Date on which the Company files its annual report on Form 10-K. Notwithstanding the foregoing, if the Company subsequently decides to sell Shares following a Representation Date when the Company relied on such waiver and did not provide the Manager with a certificate under this Section 7(o), then before the Company delivers the Placement Notice or the Manager sells any Shares, the Company shall provide the Manager with a certificate, in the form attached hereto as Exhibit A, dated the date of the Placement Notice.

(l) Bring Down Opinions; Negative Assurance. During the term of this Agreement, on or prior to the date of the first Sales Notice given hereunder, unless waived by the Manager, the Company shall furnish or cause to be furnished forthwith to the Manager a written opinion of counsel to the Company (“Company Counsel”) addressed to the Manager in form and substance reasonably satisfactory to the Manager, including a negative assurance representation. Thereafter, within five (5) Trading Days after each Representation Date with respect to which the Company is obligated to deliver a certificate pursuant to Section 4(k) for which no waiver is applicable pursuant to Section 4(k), and not more than once per calendar quarter, the Company shall cause to be furnished to the Manager the written opinion and negative assurance of Company Counsel substantially in the form previously agreed between the Company and

the Manager, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented; provided, however, that if Company Counsel has previously furnished to the Manager such written opinion and negative assurance substantially in the form previously agreed between the Company and the Manager, such counsel may, in respect of any future Representation Date, furnish the Manager with a letter (a "Reliance Letter") in lieu of such opinions and negative assurance to the effect that the Manager may rely on the prior opinions and negative assurance of such counsel delivered pursuant to this Section 4(L) to the same extent as if it were dated the date of such Reliance Letter (except that statements in such prior opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended or supplemented to the date of such Reliance Letter).

(m) Auditor Bring Down "Comfort" Letter. During the term of this Agreement, on or prior to the date of the first Sales Notice given hereunder and within five (5) Trading Days of each Representation Date, unless waived by the Manager, the Company shall cause (1) the Company's auditors (the "Accountants"), or other independent accountants satisfactory to the Manager forthwith to furnish the Manager a letter, and (2) the Chief Financial Officer of the Company forthwith to furnish the Manager a certificate, in each case dated within five (5) Trading Days of such Representation Date, in form satisfactory to the Manager, of the same tenor as the letters and certificate referred to in Section 6 of this Agreement but modified to relate to the Registration Statement and the Prospectus, as amended and supplemented to the date of such letters and certificate. The requirement to furnish or cause to be furnished a "comfort" letter under this Section 4(m) shall be waived for any Representation Date other than a Representation Date on which a material amendment to the Registration Statement or Prospectus is made or the Company files its Annual Report on Form 10-K or a material amendment thereto under the Exchange Act, unless the Manager reasonably requests the deliverables required by this Section 4(m) in connection with a Representation Date, upon which request such deliverable shall be deliverable hereunder.

(n) Due Diligence Session. Upon commencement of the offering of the Shares under this Agreement (and upon the recommencement of the offering of the Shares under this Agreement following the termination of a suspension of sales hereunder lasting more than 30 Trading Days), and at each Representation Date, the Company will conduct a due diligence session, in form and substance, reasonably satisfactory to the Manager, which shall include representatives of management and Accountants. The Company shall cooperate timely with any reasonable due diligence request from or review conducted by the Manager or its agents from time to time in connection with the transactions contemplated by this Agreement, including, without limitation, providing information and available documents and access to appropriate corporate officers and the Company's agents during regular business hours, and timely furnishing or causing to be furnished such certificates, letters and opinions from the Company, its officers and its agents, as the Manager may reasonably request. The Company shall reimburse the Manager for Manager's counsel's fees in each such due diligence update session, up to a maximum of \$2,500 per update, plus any incidental expense incurred by the Manager in connection therewith.

(o) Acknowledgment of Trading. The Company consents to the Manager trading in the Common Stock for the Manager's own account and for the account of its clients at the same time as sales of the Shares occur pursuant to this Agreement or pursuant to a Terms Agreement.

(p) Disclosure of Shares Sold. The Company will disclose in its Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, as applicable, the number of Shares sold through the Manager under this Agreement, the Net Proceeds to the Company and the compensation paid by the Company with respect to sales of Shares pursuant to this Agreement during the relevant quarter; and, if required by any subsequent change in Commission policy or request, more frequently by means of a Current Report on Form 8-K or a further Prospectus Supplement.

(q) Rescission Right. If to the knowledge of the Company, the conditions set forth in Section 6 shall not have been satisfied as of the applicable Settlement Date, the Company will offer to any person who has agreed to purchase Shares from the Company as the result of an offer to purchase solicited by the Manager the right to refuse to purchase and pay for such Shares.

(r) Bring Down of Representations and Warranties. Each acceptance by the Company of an offer to purchase the Shares hereunder, and each execution and delivery by the Company of a Terms Agreement, shall be deemed to be an affirmation to the Manager that the representations and warranties of the Company contained in or made pursuant to this Agreement are true and correct as of the date of such acceptance or of such Terms Agreement as though made at and as of such date, and an undertaking that such representations and warranties will be true and correct as of the Settlement Date for the Shares relating to such acceptance or as of the Time of Delivery relating to such sale, as the case may be, as though made at and as of such date (except that such representations and warranties shall be deemed to relate to the Registration Statement and the Prospectus as amended and supplemented relating to such Shares).

(s) Reservation of Shares. The Company shall ensure that there are at all times sufficient shares of Common Stock to provide for the issuance, free of any preemptive rights, out of its authorized but unissued shares of Common Stock or shares of Common Stock held in treasury, of the maximum aggregate number of Shares authorized for issuance by the Board pursuant to the terms of this Agreement. The Company will use its commercially reasonable efforts to cause the Shares to be listed for trading on the Trading Market and to maintain such listing.

(t) Obligation Under Exchange Act. During any period when the delivery of a prospectus relating to the Shares is required (including in circumstances where such requirement may be satisfied pursuant to Rule 172, 173 or any similar rule) to be delivered under the Act, the Company will file all documents required to be filed with the Commission pursuant to the Exchange Act within the time periods required by the Exchange Act and the regulations thereunder.

(u) DTC Facility. The Company shall cooperate with the Manager and use its reasonable efforts to permit the Shares to be eligible for clearance and settlement through the facilities of DTC.

(v) Use of Proceeds. The Company will apply the Net Proceeds from the sale of the Shares in the manner set forth in the Prospectus.

(w) Filing of Prospectus Supplement. If any sales are made pursuant to this Agreement which are not made in “at the market” offerings as defined in Rule 415, including, without limitation, any Placement pursuant to a Terms Agreement, the Company shall file a Prospectus Supplement describing the terms of such transaction, the amount of Shares sold, the price thereof, the Manager’s compensation, and such other information as may be required pursuant to Rule 424 and Rule 430B, as applicable, within the time required by Rule 424.

(x) Additional Registration Statement. To the extent that the Registration Statement is not available for the sales of the Shares as contemplated by this Agreement, the Company shall file a new registration statement with respect to any additional shares of Common Stock necessary to complete such sales of the Shares and shall cause such registration statement to become effective as promptly as practicable. After the effectiveness of any such registration statement, all references to “Registration Statement” included in this Agreement shall be deemed to include such new registration statement, including all documents incorporated by reference therein pursuant to Item 12 of Form S-3, and all references to “Base Prospectus” included in this Agreement shall be deemed to include the final form of prospectus, including all documents incorporated therein by reference, included in any such registration statement at the time such registration statement became effective.

5. Payment of Expenses. The Company agrees to pay the costs and expenses incident to the performance of its obligations under this Agreement, whether or not the transactions contemplated hereby are consummated, including without limitation: (i) the preparation, printing or reproduction and filing with the Commission of the Registration Statement (including financial statements and exhibits thereto), the Prospectus and each Issuer Free Writing Prospectus, and each amendment or supplement to any of them; (ii) the printing (or reproduction) and delivery (including postage, air freight charges and charges for counting and packaging) of such copies of the Registration Statement, the

Prospectus, and each Issuer Free Writing Prospectus, and all amendments or supplements to any of them, as may, in each case, be reasonably requested for use in connection with the offering and sale of the Shares; (iii) the preparation, printing, authentication, issuance and delivery of certificates for the Shares, including any stamp or transfer taxes in connection with the original issuance and sale of the Shares; (iv) the printing (or reproduction) and delivery of this Agreement, any blue sky memorandum and all other agreements or documents printed (or reproduced) and delivered in connection with the offering of the Shares; (v) the registration of the Shares under the Exchange Act, if applicable, and the listing of the Shares on the Trading Market; (vi) any registration or qualification of the Shares for offer and sale under the securities or blue sky laws of the several states (including filing fees and the reasonable fees and expenses of counsel for the Manager relating to such registration and qualification); (vii) the transportation and other expenses incurred by or on behalf of Company representatives in connection with presentations to prospective purchasers of the Shares; (viii) the fees and expenses of the Company's accountants and the fees and expenses of counsel (including local and special counsel) for the Company; (ix) the filing fee under FINRA Rule 5110; (x) the reasonable fees and expenses of the Manager's counsel, not to exceed \$50,000 (excluding any periodic due diligence fees provided for under Section 4(n)), which shall be paid upon the Effective Time; and (xi) all other costs and expenses incident to the performance by the Company of its obligations hereunder.

6. Conditions to the Obligations of the Manager. The obligations of the Manager under this Agreement and any Terms Agreement shall be subject to (i) the accuracy of the representations and warranties on the part of the Company contained herein as of the Execution Time, each Representation Date, and as of each Applicable Time, Settlement Date and Time of Delivery, (ii) the performance by the Company of its obligations hereunder and (iii) the following additional conditions:

(a) Effectiveness of the Registration Statement; Filing of Prospectus Supplement. The Registration Statement shall have been declared effective by the Commission and the Prospectus, and any supplement thereto, required by Rule 424 to be filed with the Commission have been filed in the manner and within the time period required by Rule 424(b) with respect to any sale of Shares; each Prospectus Supplement filed after the Effective Time shall have been filed in the manner required by Rule 424(b) within the time period required hereunder and under the Act; any other material required to be filed by the Company pursuant to Rule 433(d) under the Act, shall have been filed with the Commission within the applicable time periods prescribed for such filings by Rule 433; and no stop order suspending the effectiveness of the Registration Statement or any notice objecting to its use shall have been issued and no proceedings for that purpose shall have been instituted or threatened.

(b) Delivery of Opinion. The Company shall have caused the Company Counsel to furnish to the Manager its opinion and negative assurance statement, dated as of such date and addressed to the Manager in form and substance acceptable to the Manager.

(c) Delivery of Officer's Certificate. The Company shall have furnished or caused to be furnished to the Manager a certificate of the Company signed by the Chief Executive Officer or the President or the principal financial or accounting officer of the Company, dated as of such date, to the effect that the signer of such certificate have carefully examined the Registration Statement, the Prospectus, any Prospectus Supplement and any documents incorporated by reference therein and any supplements or amendments thereto and this Agreement and that:

(i) the representations and warranties of the Company in this Agreement are true and correct on and as of such date with the same effect as if made on such date and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to such date;

(ii) no stop order suspending the effectiveness of the Registration Statement or any notice objecting to its use has been issued and no proceedings for that purpose have been instituted or, to the Company's knowledge, threatened; and

(iii) since the date of the most recent financial statements included in the Registration Statement, the Prospectus and the Incorporated Documents, there has been no Material Adverse Effect on the condition (financial or otherwise), earnings, business or properties of the Company and its subsidiaries, taken as a whole, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Registration Statement and the Prospectus.

(d) Delivery of Accountants' "Comfort" Letter. Prior to the sale of the Shares, the Company shall have requested and caused the Accountants to have furnished to the Manager letters (which may refer to letters previously delivered to the Manager), dated as of such date, in form and substance satisfactory to the Manager, confirming that they are independent accountants within the meaning of the Act and the Exchange Act and the respective applicable rules and regulations adopted by the Commission thereunder and that they have performed a review of any unaudited interim financial information of the Company included or incorporated by reference in the Registration Statement and the Prospectus and provide customary "comfort" as to such review in form and substance satisfactory to the Manager.

(e) Payment of All Fees. The Company shall have paid the required Commission filing fees relating to the Shares within the time period required by Rule 456(b)(1)(i) of the Act without regard to the proviso therein and otherwise in accordance with Rules 456(b) and 457(r) of the Act and, if applicable, shall have updated the "Calculation of Registration Fee" table in accordance with Rule 456(b)(1)(ii) either in a post-effective amendment to the Registration Statement or on the cover page of a prospectus filed pursuant to Rule 424(b).

(f) No FINRA Objections. FINRA shall not have raised any objection with respect to the fairness and reasonableness of the terms and arrangements under this Agreement.

(g) Shares Listed on Trading Market. The Shares shall have been listed and admitted and authorized for trading on the Trading Market, and satisfactory evidence of such actions shall have been provided to the Manager.

(h) Other Assurances. Prior to each Settlement Date and Time of Delivery, as applicable, the Company shall have furnished to the Manager such further information, certificates and documents as the Manager may reasonably request.

If any of the conditions specified in this Section 6 shall not have been fulfilled when and as provided in this Agreement, or if any of the opinions and certificates mentioned above or elsewhere in this Agreement shall not be reasonably satisfactory in form and substance to the Manager and counsel for the Manager, this Agreement and all obligations of the Manager hereunder may be canceled at, or at any time prior to, any Settlement Date or Time of Delivery, as applicable, by the Manager. Notice of such cancellation shall be given to the Company in writing or by telephone and confirmed in writing by email.

The documents required to be delivered by this Section 6 shall be delivered to the office of Ellenoff Grossman & Schole LLP, counsel for the Manager, at 1345 Avenue of the Americas, New York, New York 10105, email: xxxxx@xxxxx.com, on each such date as provided in this Agreement.

7. Indemnification and Contribution.

(a) Indemnification by Company. The Company agrees to indemnify and hold harmless the Manager, the directors, officers, employees and agents of the Manager and each person who controls the Manager within the meaning of either the Act or the Exchange Act against any and all losses, claims, damages or liabilities, joint or several, to which they or any of them may become subject under the Act, the Exchange Act or other Federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement for the registration of the Shares as originally filed or in any amendment thereof, or in the Base Prospectus, any Prospectus Supplement, the Prospectus, any Issuer Free Writing Prospectus, or in any amendment thereof or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary

to make the statements therein not misleading or result from or relate to any breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement, and agrees to reimburse each such indemnified party for any legal or other expenses reasonably incurred and documented by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon any such untrue statement or alleged untrue statement or omission or alleged omission made therein in reliance upon and in conformity with written information furnished to the Company by the Manager specifically for inclusion therein. This indemnity agreement will be in addition to any liability that the Company may otherwise have.

(b) Indemnification by Manager. The Manager agrees to indemnify and hold harmless the Company, each of its directors, each of its officers who signs the Registration Statement, and each person who (i) controls the Company within the meaning of either the Act or the Exchange Act or (ii) is controlled by or is under common control with the Company (each, a “Company Affiliate”), to the same extent as the foregoing indemnity from the Company to the Manager, but only with reference to written information relating to the Manager furnished to the Company by the Manager specifically for inclusion in the documents referred to in the foregoing indemnity. This indemnity agreement will be in addition to any liability which the Manager may otherwise have.

(c) Indemnification Procedures. Promptly after receipt by an indemnified party under this Section 7 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 7, notify the indemnifying party in writing of the commencement thereof; but the failure so to notify the indemnifying party (i) will not relieve it from liability under paragraph (a) or (b) above unless and to the extent it did not otherwise learn of such action and such failure results in the forfeiture by the indemnifying party of substantial rights and defenses and (ii) will not, in any event, relieve the indemnifying party from any obligations to any indemnified party other than the indemnification obligation provided in paragraph (a) or (b) above. The indemnifying party shall be entitled to appoint counsel of the indemnifying party’s choice at the indemnifying party’s expense to represent the indemnified party in any action for which indemnification is sought (in which case the indemnifying party shall not thereafter be responsible for the fees and expenses of any separate counsel retained by the indemnified party or parties except as set forth below); provided, however, that such counsel shall be reasonably satisfactory to the indemnified party. Notwithstanding the indemnifying party’s election to appoint counsel to represent the indemnified party in an action, the indemnified party shall have the right to employ separate counsel (including local counsel), and the indemnifying party shall bear the reasonable fees, costs and expenses of such separate counsel if (i) the use of counsel chosen by the indemnifying party to represent the

indemnified party would present such counsel with a conflict of interest, (ii) the actual or potential defendants in, or targets of, any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, (iii) the indemnifying party shall not have employed counsel reasonably satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of the institution of such action or (iv) the indemnifying party shall authorize the indemnified party to employ separate counsel at the expense of the indemnifying party. An indemnifying party will not, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any pending or threatened claim, action, suit or proceeding in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified parties are actual or potential parties to such claim or action) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action, suit or proceeding.

(d) Contribution. In the event that the indemnity provided in paragraph (a), (b) or (c) of this Section 7 is unavailable to or insufficient to hold harmless an indemnified party for any reason, the Company and the Manager agree to contribute to the aggregate losses, claims, damages and liabilities (including legal or other expenses reasonably incurred in connection with investigating or defending the same) (collectively "Losses") to which the Company and the Manager may be subject in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and by the Manager on the other from the offering of the Shares; provided, however, that in no case shall the Manager be responsible for any amount in excess of the Broker Fee applicable to the Shares and paid hereunder. If the allocation provided by the immediately preceding sentence is unavailable for any reason, the Company and the Manager severally shall contribute in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and of the Manager on the other in connection with the statements or omissions which resulted in such Losses as well as any other relevant equitable considerations. Benefits received by the Company shall be deemed to be equal to the total net proceeds from the offering (before deducting expenses) received by it, and benefits received by the Manager shall be deemed to be equal to the Broker Fee applicable to the Shares and paid hereunder as determined by this Agreement. Relative fault shall be determined by reference to, among other things, whether any untrue or any alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information provided by the Company on the one hand or the Manager on the other, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Manager agree that it would not be just and equitable if contribution were determined by pro rata

allocation or any other method of allocation which does not take account of the equitable considerations referred to above. Notwithstanding the provisions of this paragraph (d), no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 7, each person who controls the Manager within the meaning of either the Act or the Exchange Act and each director, officer, employee and agent of the Manager shall have the same rights to contribution as the Manager, and each person who controls the Company within the meaning of either the Act or the Exchange Act, each officer of the Company who shall have signed the Registration Statement and each director of the Company shall have the same rights to contribution as the Company, subject in each case to the applicable terms and conditions of this paragraph (d).

8. Termination.

(a) The Company shall have the right, by giving ten (10) Business Days' prior written notice, to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that (i) with respect to any pending sale, through the Manager for the Company, the obligations of the Company, including in respect of compensation of the Manager, shall remain in full force and effect notwithstanding the termination and (ii) the provisions of Sections 5, 6, 7, 8, 9, 10, 12, 14 and 15 of this Agreement shall remain in full force and effect notwithstanding such termination.

(b) The Manager shall have the right, by giving ten (10) Business Days' prior written notice, to terminate the provisions of this Agreement relating to the solicitation of offers to purchase the Shares in its sole discretion at any time. Any such termination shall be without liability of any party to any other party except that the provisions of Sections 5, 6, 7, 8, 9, 10, 12, 14 and 15 of this Agreement shall remain in full force and effect notwithstanding such termination.

(c) This Agreement shall automatically terminate upon the issuance and sale of all of the Shares to or through the Manager on the terms and subject to the conditions set forth herein, unless terminated earlier pursuant to Sections 8(a) or (b) above or otherwise terminated by mutual agreement of the parties, provided that any such termination by mutual agreement shall in all cases be deemed to provide that Sections 5, 6, 7, 8, 9, 10, 12, 14 and 15 shall remain in full force and effect.

(d) Any termination of this Agreement shall be effective on the date specified in such notice of termination, provided that such termination shall not be effective until the close of business on the date of receipt of such notice by the Manager or the Company, as the case may be. If such termination shall occur prior to the Settlement Date or Time of Delivery for any sale of the Shares, such sale of the Shares shall settle in accordance with the provisions of Section 2(b) of this Agreement.

(e) In the case of any purchase of Shares by the Manager pursuant to a Terms Agreement, the obligations of the Manager pursuant to such Terms Agreement shall be subject to termination, in the absolute discretion of the Manager, by prompt oral notice given to the Company prior to the Time of Delivery relating to such Shares, if any, and confirmed promptly by electronic mail, if since the time of execution of the Terms Agreement and prior to such delivery and payment, (i) trading in the Common Stock shall have been suspended by the Commission or the Trading Market or trading in securities generally on the Trading Market shall have been suspended or limited or minimum prices shall have been established on such exchange, (ii) a banking moratorium shall have been declared either by Federal or New York State authorities or (iii) there shall have occurred any outbreak or escalation of hostilities, declaration by the United States of a national emergency or war, or other calamity or crisis the effect of which on financial markets is such as to make it, in the sole judgment of the Manager, impractical or inadvisable to proceed with the offering or delivery of the Shares as contemplated by the Prospectus (exclusive of any amendment or supplement thereto).

9. Representations and Indemnities to Survive. The respective agreements, representations, warranties, indemnities and other statements of the Company or its officers and of the Manager set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by the Manager or the Company or any of the officers, directors, employees, agents or controlling persons referred to in Section 7, and will survive delivery of and payment for the Shares.

10. Notices. All communications hereunder will be in writing and effective only on receipt, and will be mailed, delivered, or e-mailed to the addresses of the Company and the Manager, respectively, set forth on the signature page hereto.

11. Successors. This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers, directors, employees, agents and controlling persons referred to in Section 7, and no other person will have any right or obligation hereunder.

12. No Fiduciary Duty. The Company hereby acknowledges that (a) the purchase and sale of the Shares pursuant to this Agreement is an arm's-length commercial transaction between the Company, on the one hand, and the Manager and any affiliate through which it may be acting, on the other, (b) the Manager is acting solely as sales agent and/or principal in connection with the purchase and sale of the Company's securities and not as a fiduciary of the Company and (c) the Company's engagement of the Manager in connection with the offering and the process leading up to the offering is as independent contractors and not in any other capacity. Furthermore, the Company agrees that it is solely responsible for making its own judgments in connection with the

offering (irrespective of whether the Manager has advised or is currently advising the Company on related or other matters). The Company agrees that it will not claim that the Manager has rendered advisory services of any nature or respect, or owe an agency, fiduciary or similar duty to the Company, in connection with such transaction or the process leading thereto.

13. Integration. This Agreement and any Terms Agreement supersede all prior agreements and understandings (whether written or oral) between the Company and the Manager with respect to the subject matter hereof.

14. Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company and the Manager. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right.

15. Applicable Law. This Agreement and any Terms Agreement will be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed within the State of New York. Each of the Company and the Manager: (i) agrees that any legal suit, action or proceeding arising out of or relating to this Agreement shall be instituted exclusively in New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York, (ii) waives any objection which it may have or hereafter to the venue of any such suit, action or proceeding, and (iii) irrevocably consents to the jurisdiction of the New York Supreme Court, County of New York, and the United States District Court for the Southern District of New York in any such suit, action or proceeding. Each of the Company and the Manager further agrees to accept and acknowledge service of any and all process which may be served in any such suit, action or proceeding in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York and agrees that service of process upon the Company mailed by certified mail to the Company's address shall be deemed in every respect effective service of process upon the Company, in any such suit, action or proceeding, and service of process upon the Manager mailed by certified mail to the Manager's address shall be deemed in every respect effective service process upon the Manager, in any such suit, action or proceeding. If either party shall commence an action or proceeding to enforce any provision of this Agreement, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its reasonable attorney's fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

16. WAIVER OF JURY TRIAL. THE COMPANY HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, ANY TERMS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY.

17. Counterparts. This Agreement and any Terms Agreement may be signed in one or more counterparts, each of which shall constitute an original and all of which together shall constitute one and the same agreement, which may be delivered in .pdf file via e-mail.

18. Headings. The section headings used in this Agreement and any Terms Agreement are for convenience only and shall not affect the construction hereof.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to us the enclosed duplicate hereof, whereupon this letter and your acceptance shall represent a binding agreement among the Company and the Manager.

Very truly yours,

CIPHER MINING INC.

By: /s/ Edward Farrell

Name: Edward Farrell

Title: Chief Financial Officer

Address for Notice:

1 Vanderbilt Avenue, Floor 54, Suite C

New York, New York 10017

Attention: Chief Legal Officer

E-mail: xxxxx@xxxxxxx.com

The foregoing Agreement is hereby confirmed and accepted as of the date first written above.

H.C. WAINWRIGHT & CO., LLC

By: /s/ Edward D. Silvera

Name: Edward D. Silvera

Title: Chief Operating Officer

Address for Notice:

430 Park Avenue

New York, New York 10022

Attention: Chief Executive Officer

E-mail: xxxxx@xxxx.com

Form of Terms Agreement
ANNEX I
CIPHER MINING INC.
TERMS AGREEMENT

Dear Sirs:

Cipher Mining Inc. (the "Company") proposes, subject to the terms and conditions stated herein and in the At The Market Offering Agreement, dated September 21, 2022 (the "At The Market Offering Agreement"), between the Company and H.C. Wainwright & Co., LLC ("Manager"), to issue and sell to Manager the securities specified in the Schedule I hereto (the "Purchased Shares").

Each of the provisions of the At The Market Offering Agreement not specifically related to the solicitation by the Manager, as agent of the Company, of offers to purchase securities is incorporated herein by reference in its entirety, and shall be deemed to be part of this Terms Agreement to the same extent as if such provisions had been set forth in full herein. Each of the representations and warranties set forth therein shall be deemed to have been made at and as of the date of this Terms Agreement and the Time of Delivery, except that each representation and warranty in Section 3 of the At The Market Offering Agreement which makes reference to the Prospectus (as therein defined) shall be deemed to be a representation and warranty as of the date of the At The Market Offering Agreement in relation to the Prospectus, and also a representation and warranty as of the date of this Terms Agreement and the Time of Delivery in relation to the Prospectus as amended and supplemented to relate to the Purchased Shares.

An amendment to the Registration Statement (as defined in the At The Market Offering Agreement), or a supplement to the Prospectus, as the case may be, relating to the Purchased Shares, in the form heretofore delivered to the Manager is now proposed to be filed with the Securities and Exchange Commission.

Subject to the terms and conditions set forth herein and in the At The Market Offering Agreement which are incorporated herein by reference, the Company agrees to issue and sell to the Manager and the latter agrees to purchase from the Company the number of shares of the Purchased Shares at the time and place and at the purchase price set forth in the Schedule I hereto.

If the foregoing is in accordance with your understanding, please sign and return to us a counterpart hereof, whereupon this Terms Agreement, including those provisions of the At The Market Offering Agreement incorporated herein by reference, shall constitute a binding agreement between the Manager and the Company.

CIPHER MINING INC.

By: _____
Name:
Title:

ACCEPTED as of the date first written above.

H.C. WAINWRIGHT & CO., LLC

By: _____
Name:
Title:

EXHIBIT A

CIPHER MINING INC.

OFFICERS' CERTIFICATE

At The Market Offering of
\$250,000,000 of Common Stock

_____, 2022

The undersigned, the duly qualified and appointed _____ of Cipher Mining Inc., a company organized under the laws of Delaware (the "Company"), does hereby certify in such capacity, and not in its individual capacity, as follows, as of the date hereof:

1. The representations and warranties of the Company in Section 3 of the Sales Agreement (as defined below) (A) to the extent such representations and warranties are subject to qualifications and exceptions contained therein relating to materiality or Material Adverse Effect, are true and correct on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof, except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date, and (B) to the extent such representations and warranties are not subject to any qualifications or exceptions, are true and correct in all material respects as of the date hereof as if made on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date.

2. The Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied pursuant to the Sales Agreement at or prior to the date hereof.

3. No stop order suspending the effectiveness of the Registration Statement or any notice objecting to its use has been issued and no proceedings for that purpose have been instituted or, to the Company's knowledge, threatened.

4. Since the date of the most recent financial statements included in the Registration Statement, the Prospectus and the Incorporated Documents, there has been no Material Adverse Effect on the condition (financial or otherwise), earnings, business or properties of the Company and its subsidiaries, taken as a whole, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Registration Statement and the Prospectus.

This certificate is being delivered pursuant to Section 7(c) of the At The Market Offering Agreement (the "Sales Agreement") dated September 21, 2022, between the Company and H.C. Wainwright & Co., LLC, as sales agent and/or principal. Terms defined in the Sales Agreement and not otherwise defined herein are used herein as therein defined.

[Remainder of Page Intentionally Blank]

IN WITNESS WHEREOF, we have signed this certificate as of the date first set forth above.

CIPHER MINING INC.

By: _____
Name:
Title:

[Signature Page to CIPR Officers' Certificate]

99 Bishopsgate
 London EC2M 3XF
 United Kingdom
 Tel: +44(0)20.7710.1000 Fax: +44(0)20.7374.4460
 www.lw.com

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London	Tel Aviv
Los Angeles	Tokyo
Madrid	Washington, D.C.

September 21, 2022

Cipher Mining Inc.
 1 Vanderbilt Avenue, Floor 54, Suite C
 New York, New York 10017

Re: Registration Statement on Form S-3

To the addressee set forth above:

We have acted as special counsel to Cipher Mining Inc., a Delaware corporation (the “*Company*”), in connection with its filing on the date hereof with the Securities and Exchange Commission (the “*Commission*”) of a registration statement on Form S-3 (the “*Registration Statement*”), including a base prospectus (the “*Base Prospectus*”), which provides that it will be supplemented by one or more prospectus supplements (each such prospectus supplement, together with the Base Prospectus, a “*Prospectus*”), under the Securities Act of 1933, as amended (the “*Act*”), relating to the registration for issue and sale by the Company of up to \$500,000,000 in aggregate offering amount of (i) shares of the Company’s common stock, \$0.001 par value per share (“*Common Stock*”), (ii) shares of one or more series of the Company’s preferred stock, par value \$0.001 per share (the “*Preferred Stock*”), (iii) warrants to purchase Common Stock or Preferred Stock (“*Warrants*”), and (iv) units consisting of two or more of the Securities (as defined below) (“*Units*”). The Registration Statement also relates to the offer and sale from time to time by the selling securityholders named in the Registration Statement (the “*Selling Securityholders*”) of (i) up to 23,265,565 shares of Common Stock that were previously registered to be resold from time to time by certain securityholders of the Company (“*Resale Shares*”), (ii) up to 8,613,978 shares of Common Stock (“*Warrant Shares*”) that were previously registered and are issuable by the Company upon the exercise of (x) up to 8,499,978 public warrants of the Company (“*Public Warrants*”), each exercisable for one share of Common Stock at a price of \$11.50 per share, and (y) up to 114,000 private placement warrants (together with the Public Warrants, the “*Outstanding Warrants*”), each exercisable for one share of Common Stock at a price of \$11.50 and (iii) up to 85,500 warrants to purchase Common Stock (“*Private Placement Warrants*”) that were previously registered. The Common Stock, Preferred Stock, Warrants, Units, Resale Shares, Warrant Shares and Private Placement Warrants, plus any additional Common Stock, Preferred Stock, Warrants and Units that may be registered pursuant to any subsequent registration statement that the Company may hereafter file with the Commission pursuant to Rule 462(b) under the Act in connection with the offering by the Company contemplated by the Registration Statement, are referred to herein collectively as the “*Securities*.”

Latham & Watkins is the business name of Latham & Watkins (London) LLP, a registered limited liability partnership organised under the laws of New York and authorised and regulated by the Solicitors Regulation Authority (SRA No. 203820). A list of the names of the partners of Latham & Watkins (London) LLP is open to inspection at its principal place of business, 99 Bishopsgate, London EC2M 3XF, and such persons are either solicitors, registered foreign lawyers, or managers authorised by the SRA. We are affiliated with the firm Latham & Watkins LLP, a limited liability partnership organised under the laws of Delaware.

*In cooperation with the Law Firm of Salman M. Al-Sudairi LLC

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This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related applicable Prospectus, other than as expressly stated herein with respect to the issue of the Securities.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware, and with respect to the opinions set forth in paragraphs 3, 4 and 6 below, the internal laws of the State of New York, and we express no opinion with respect to the applicability thereto, or the effect thereon, of the laws of any other jurisdiction or, in the case of Delaware, any other laws, or as to any matters of municipal law or the laws of any local agencies within any state.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof:

1. When an issuance of Common Stock has been duly authorized by all necessary corporate action of the Company, upon issuance, delivery and payment therefor in an amount not less than the par value thereof in the manner contemplated by the applicable Prospectus and by such corporate action, and in total amounts and numbers of shares that do not exceed the respective total amounts and numbers of shares (a) available under the certificate of incorporation, and (b) authorized by the board of directors in connection with the offering contemplated by the applicable Prospectus, such shares of Common Stock will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the General Corporation Law of the State of Delaware.

2. When a series of Preferred Stock has been duly established in accordance with the terms of the Company's Second Amended and Restated Certificate of Incorporation and authorized by all necessary corporate action of the Company, upon issuance, delivery and payment therefor in an amount not less than the par value thereof in the manner contemplated by the applicable Prospectus and by such corporate action, and in total amounts and numbers of shares that do not exceed the respective total amounts and numbers of shares (a) available under the certificate of incorporation, and (b) authorized by the board of directors in connection with the offering contemplated by the applicable Prospectus, such shares of such series of Preferred Stock will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the General Corporation Law of the State of Delaware.

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3. When the applicable warrant agreement has been duly authorized, executed and delivered by all necessary corporate action of the Company, and when the specific terms of a particular issuance of Warrants have been duly established in accordance with the terms of the applicable warrant agreement and authorized by all necessary corporate action of the Company, and such Warrants have been duly executed, authenticated, issued and delivered against payment therefor in accordance with the terms of the applicable warrant agreement and in the manner contemplated by the applicable Prospectus and by such corporate action (assuming the securities issuable upon exercise of such Warrants have been duly authorized and reserved for issuance by all necessary corporate action), such Warrants will be the legally valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

4. When the applicable unit agreement has been duly authorized, executed and delivered by all necessary corporate action of the Company, and when the specific terms of a particular issuance of Units have been duly authorized in accordance with the terms of the applicable unit agreement and authorized by all necessary corporate action of the Company, and such Units have been duly executed, authenticated, issued and delivered against payment therefor in accordance with the terms of the applicable unit agreement and in the manner contemplated by the applicable Prospectus and by such corporate action (assuming the securities issuable upon exercise of such Units have been duly authorized and reserved for issuance by all necessary corporate action), such Units will be the legally valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

5. The Resale Shares have been duly authorized by all necessary corporate action of the Company and are validly issued, fully paid and nonassessable.

6. The Private Placement Warrants are the legally valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

7. When the Warrant Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name of or on behalf of the Outstanding Warrant holders and have been issued by the Company against payment therefor (not less than par value) in the circumstances contemplated by the Outstanding Warrants, the Warrant Shares will have been duly authorized by all necessary corporate action of the Company and will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the General Corporation Law of the State of Delaware.

Our opinions are subject to: (i) the effect of bankruptcy, insolvency, reorganization, preference, fraudulent transfer, moratorium or other similar laws relating to or affecting the rights and remedies of creditors; (ii) (a) the effect of general principles of equity, whether considered in a proceeding in equity or at law (including the possible unavailability of specific performance or injunctive relief), (b) concepts of materiality, reasonableness, good faith and fair dealing, and (c) the discretion of the court before which a proceeding is brought; and (iii) the invalidity under certain circumstances under law or court decisions of provisions providing for the indemnification of or contribution to a party with respect to a liability where such indemnification or contribution is contrary to public policy. We express no opinion as to (a) any provision for liquidated damages, default interest, late charges, monetary penalties, make-whole premiums or other economic remedies to the extent such provisions are deemed to constitute a

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penalty, (b) consents to, or restrictions upon, governing law, jurisdiction, venue, arbitration, remedies, or judicial relief, (c) waivers of rights or defenses, (d) any provision requiring the payment of attorneys' fees, where such payment is contrary to law or public policy, (e) the creation, validity, attachment, perfection, or priority of any lien or security interest, (f) advance waivers of claims, defenses, rights granted by law, or notice, opportunity for hearing, evidentiary requirements, statutes of limitation, trial by jury or at law, or other procedural rights, (g) waivers of broadly or vaguely stated rights, (h) provisions for exclusivity, election or cumulation of rights or remedies, (i) provisions authorizing or validating conclusive or discretionary determinations, (j) proxies, powers and trusts, (k) provisions prohibiting, restricting, or requiring consent to assignment or transfer of any right or property, (l) any provision to the extent it requires that a claim with respect to a security denominated in other than U.S. dollars (or a judgment in respect of such a claim) be converted into U.S. dollars at a rate of exchange at a particular date, to the extent applicable law otherwise provides, and (m) the severability, if invalid, of provisions to the foregoing effect.

With your consent, we have assumed (a) that each of the Warrants and Units and the warrant agreements and unit agreements governing such Securities (collectively, the "**Documents**") will be governed by the internal laws of the State of New York, (b) that each of the Documents has been or will be duly authorized, executed and delivered by the parties thereto, (c) that each of the Documents constitutes or will constitute legally valid and binding obligations of the parties thereto other than the Company, enforceable against each of them in accordance with their respective terms, and (d) that the status of each of the Documents as legally valid and binding obligations of the parties will not be affected by any (i) breaches of, or defaults under, agreements or instruments, (ii) violations of statutes, rules, regulations or court or governmental orders, or (iii) failures to obtain required consents, approvals or authorizations from, or to make required registrations, declarations or filings with, governmental authorities.

With your consent, we have also assumed (a) that the Outstanding Warrants and the warrant agreement, dated October 19, 2020, between the Company and Continental Stock Transfer & Trust Company, as warrant agent, relating to the Outstanding Warrants, have been duly authorized, executed and delivered by the parties thereto other than the Company, (b) that such securities constitute or will constitute legally valid and binding obligations of the parties thereto other than the Company, enforceable against each of them in accordance with their respective terms and (c) that the status of the Outstanding Warrants as legally valid and binding obligations of the parties will not be affected by any (i) breaches of, or defaults under, agreements or instruments, (ii) violations of statutes, rules, regulations or court or governmental orders, or (iii) failures to obtain required consents, approvals or authorizations from, or to make required registrations, declarations or filings with, governmental authorities.

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This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement and to the reference to our firm contained in the Prospectus under the heading "Legal Matters." We further consent to the incorporation by reference of this letter and consent into any registration statement or post-effective amendment to the Registration Statement filed pursuant to Rule 462(b) under the Act with respect to the Securities. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Sincerely,

/s/ Latham & Watkins LLP

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 London EC2M 3XF
 United Kingdom
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September 21, 2022

Cipher Mining Inc.
 1 Vanderbilt Avenue, Floor 54, Suite C
 New York, New York 10017

Re: Registration Statement on Form S-3; Shares of Common Stock, par value \$0.001 per share, having an aggregate offering price of up to \$250,000,000

To the addressee set forth above:

We have acted as special counsel to Cipher Mining Inc., a Delaware corporation (the “**Company**”), in connection with the sale through H.C. Wainwright & Co., LLC (“**Wainwright**”) as the sales agent from time to time by the Company of shares (the “**Shares**”) of common stock of the Company, par value \$0.001 per share (the “**Common Stock**”), having an aggregate offering price of up to \$250,000,000, to be issued pursuant to (i) a registration statement on Form S-3 filed by the Company with the Securities and Exchange Commission (the “**Commission**”) on September 21, 2022 (the “**Registration Statement**”), (ii) the base prospectus included in the Registration Statement (the “**Base Prospectus**”), (iii) the prospectus supplement included in the Registration Statement (together with the Base Prospectus, the “**Prospectus**”), and (iv) that certain At The Market Offering Agreement, dated as of September 21, 2022, by and between the Company and Wainwright (the “**Sales Agreement**”).

The term “**Shares**” shall include any additional shares of common stock registered by the Company pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the “**Act**”), in connection with the offering contemplated by the Registration Statement. This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or the Prospectus, other than as expressly stated herein with respect to the issue of the Shares.

Latham & Watkins is the business name of Latham & Watkins (London) LLP, a registered limited liability partnership organised under the laws of New York and authorised and regulated by the Solicitors Regulation Authority (SRA No. 203820). A list of the names of the partners of Latham & Watkins (London) LLP is open to inspection at its principal place of business, 99 Bishopsgate, London EC2M 3XF, and such persons are either solicitors, registered foreign lawyers, or managers authorised by the SRA. We are affiliated with the firm Latham & Watkins LLP, a limited liability partnership organised under the laws of Delaware.

* In cooperation with the Law Firm of Salman M. Al-Sudairi LLC

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As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware (the “*DGCL*”), and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers, and have been issued by the Company against payment therefor (not less than par value) in the circumstances contemplated by the Sales Agreement, the issue and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that (i) the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the DGCL and (ii) upon the issue of any of the Shares, the total number of shares of Common Stock issued and outstanding will not exceed the total number of shares of Common Stock that the Company is then authorized to issue under its Second Amended and Restated Certificate of Incorporation.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement and to the reference to our firm in the Prospectus under the heading “Legal Matters.” In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Sincerely,

/s/ Latham & Watkins LLP

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Cipher Mining, Inc. on Form S-3 of our report dated March 4, 2022 with respect to our audits of the consolidated financial statements of Cipher Mining, Inc. as of December 31, 2021 and January 31, 2021, and for the eleven months ended December 31, 2021 and for the period from January 7, 2021 (inception) to January 31, 2021, appearing in the Annual Report on Form 10-K of Cipher Mining, Inc. for the year ended December 31, 2021. We also consent to the reference to our firm under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Marcum LLP

Marcum LLP
San Francisco, CA
September 21, 2022

CALCULATION OF FILING FEE TABLE

Form S-3
(Form Type)

Cipher Mining Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Unit(1)	Maximum Aggregate Offering Price(1)(3)	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Equity	Common stock, \$0.001 par value per share	—	—	—	—	—	—				
	Equity	Preferred Stock	—	—	—	—	—	—				
	Other	Warrants	—	—	—	—	—	—				
	Other	Units	—	—	—	—	—	—				
	Unallocated (Universal) Shelf	Unallocated (Universal) Shelf	457(o)	\$500,000,000 ⁽¹⁾	— ⁽²⁾	\$500,000,000	0.0000927	\$46,350.00				
	Equity	Common stock, \$0.001 par value per share	457(c)	10,000,000 ⁽³⁾	\$1.57 ⁽⁴⁾	\$15,700,000	0.0000927	\$1,455.39				
Fees Previously Paid												
Carry Forward Securities												
Carry Forward Securities	Equity	Common stock, \$0.001 par value per share ⁽⁵⁾	415(a)(6)	13,180,065 ⁽⁶⁾	\$3.24	\$42,703,410.60 ⁽⁷⁾			S-1	333-262283	January 28, 2022	\$3,958.60
	Equity	Common stock, \$0.001 par value per share ⁽⁵⁾	415(a)(6)	8,613,978 ⁽⁶⁾	\$11.50	\$99,060,747.00 ⁽⁷⁾			S-1	333-262283	January 28, 2022	\$9,182.90
	Equity	Common stock, \$0.001 par value per share ⁽⁵⁾	415(a)(6)	85,500 ⁽⁶⁾	\$3.24	\$277,020.00 ⁽⁷⁾			S-1	333-262283	January 28, 2022	\$25.68
	Other	Warrants ⁽⁵⁾	415(a)(6)	85,500 ⁽⁶⁾	\$0.76	\$64,980.00 ⁽⁷⁾			S-1	333-262283	January 28, 2022	\$6.02
		Total Offering Amounts				\$515,700,000	0.0000927	\$47,805.39				
		Total Fees Previously Paid						—				
		Total Fee Offsets						—				
		Net Fee Due						\$47,805.39				

- (1) The amount to be registered consists of up to \$500,000,000 aggregate offering price of an indeterminate amount of ordinary stock, preferred stock, warrants and/or units of the registrant. There is also being registered hereunder such currently indeterminate number of ordinary stock and preferred stock as may be issued upon conversion, exchange or exercise, as applicable, of any preferred shares or warrants or settlement of any units, including such shares of ordinary shares or preferred shares as may be issued pursuant to anti-dilution adjustments determined at the time of offering. Any securities registered hereunder may be sold separately or together with other securities registered hereunder. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend or pursuant to anti-dilution provisions of any of the securities. Separate consideration may or may not be received for securities that are issuable upon conversion, exercise or exchange of other securities.
- (2) The proposed maximum offering price per security will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered hereunder and is not specified as to each class of security pursuant to General Instruction II.D. of Form S-3 under the Securities Act.
- (3) Consists of 10,000,000 shares of common stock of the registrant to be offered and sold by a selling securityholder. Pursuant to Rule 416 under the Securities Act, the registrant is also registering an indeterminate number of additional securities that may be offered or issued in connection with any stock split, stock dividend or pursuant to anti-dilution provisions of any of the securities.
- (4) Estimated solely for the purpose of determining the registration fee in accordance with Rule 457(c) under the Securities Act, as amended, based on the average of the high and the low prices as reported on the Nasdaq Global Select Market on September 19, 2022.
- (5) Consists of 13,265,565 shares of common stock and 85,500 warrants to be offered and sold by the selling securityholders and 8,613,978 shares underlying warrants (together, the "Carry-Forward Securities") previously registered under the registrant's Registration Statement on Form S-1 (File Nos. 333-262283), initially filed with the Securities and Exchange Commission on January 21, 2022, and initially declared effective on January 28, 2022 (as amended, the "Prior S-1 Registration Statement"), which remain unsold as of the date of this registration statement. Pursuant to Rule 415(a)(6), the registration fees relating to the Carry-Forward Securities under the Prior S-1 Registration Statement will continue to be applied to such securities hereunder. If securities previously registered under the Prior S-1 Registration Statement are offered and sold before the effective date of this registration statement, the amount of previously registered securities so sold will not be included in the prospectus hereunder. Pursuant to Rule 415(a)(6), the offering of the Carry-Forward Securities under the Prior S-1 Registration Statement will be deemed terminated as of the effective date of this registration statement.
- (6) Pursuant to Rule 416 under the Securities Act, the registrant is also registering an indeterminate number of additional securities that may be offered or issued in connection with any stock split, stock dividend or pursuant to anti-dilution provisions of any of the securities.
- (7) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act. The Proposed Maximum Offering Price Per Unit for the Carry-Forward Securities related to the Prior S-1 Registration Statement is based on the average of the high and low prices reported for the registrant's common stock and warrants, respectively, on January 19, 2022, as specified in the fee table of the Prior S-1 Registration Statement.