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

Washington, Diel 2001)		
FORM 6-K		
REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934 For the month of October 2024		
Commission File Number: 001-40370		
BITFARMS LTD. (Translation of registrant's name into English)		
110 Yonge Street, Suite 1601, Toronto, Ontario, Canada M5C 1T4 (Address of principal executive offices)		
Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F. Form 20-F □ Form 40-F ⊠		

DOCUMENTS INCLUDED AS PART OF THIS FORM 6-K

On October 1, 2024, the Registrant filed with the Canadian Securities Regulatory Authorities on the System for Electronic Data Analysis and Retrieval + (SEDAR +) a material change report that includes a copy of a press release, a copy of which is attached hereto as Exhibit 99.1, which is incorporated by reference into the Registration Statements of Bitfarms Ltd. on Form F-10 (File No. 333-272989), Form S-8 (File No. 333-278868) and Form F-4 (File No. 333-282657).

See the Exhibits listed below.

Exhibits

Exhibit No. Description

99.1 Material Change Report dated October 1, 2024

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SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BITFARMS LTD.

By: /s/ Ben Gagnon

Name: Ben Gagnon
Title: Chief Executive Officer

Date: October 16, 2024

FORM 51-102F3 MATERIAL CHANGE REPORT

Item 1 Name and Address of Company

Bitfarms Ltd. ("Bitfarms" or the "Company") 110 Yonge Street, Suite 1601 Toronto, Ontario M5C 1T4

Item 2 Date of Material Change

October 1, 2024

Item 3 News Release

The press release attached as Schedule "A" was released on October 1, 2024 by a newswire company in Canada.

Item 4 Summary of Material Change

The material change is described in the press release attached as Schedule "A".

Item 5 Full Description of Material Change

The material change is described in the press release attached as Schedule "A".

Item 6 Reliance of subsection 7.1(2) of National Instrument 51-102

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Executive Officer

Ben Gagnon Chief Executive Officer Bitfarms Ltd. Bgagnon@bitfarms.com

Item 9 Date of Report

October 1, 2024.

Schedule "A"



Bitfarms Provides September 2024 Production and Operations Update

- Earned 217 BTC in September 2024 & Increased HODL to 1,147 BTC -
- Reached End-of-Year Efficiency Target of 21 w/TH Ahead of Schedule -
 - Signed Hosting Agreement with Stronghold Digital Mining -
- Announced Settlement Agreement with Riot Platforms & Rescheduled Special Meeting of Bitfarms Shareholders to November 20, 2024 -

This news release constitutes a "designated news release" for the purposes of the Company's prospectus supplement dated March 8, 2024, to its short form base shelf prospectus dated November 10, 2023.

Toronto, Ontario and Brossard, Québec (October 1, 2024) - Bitfarms Ltd. (NASDAQ/TSX: BITF), a global leader in vertically integrated Bitcoin data center operations, is pleased to announce its latest monthly production report. All financial references are in U.S. dollars.

Ben Gagnon, Chief Executive Officer of Bitfarms, stated, "We are pleased to have reached our end-of-year efficiency goal of 21 w/TH three months ahead of schedule, allowing us to expect an increase in gross data center profitability with current mining economics. We drove a 16% increase in energy efficiency in September by swapping out thousands of miners and implementing energy efficiency measures across our facilities."

On September 13, 2024, Bitfarms announced a hosting agreement with Stronghold Digital Mining, Inc. that will accelerate the deployment of 10,000 Bitmain T21 miners, originally scheduled for Yguazu, Paraguay. These miners will bring an immediate anticipated increase of ~2.2 EH/s to Bitfarms' operational capacity when deployed to Stronghold's Panther Creek site, which is expected to be energized in the coming weeks.

Additionally, on September 23, 2024, Bitfarms entered into a settlement agreement with Riot Platforms Inc. in advance of the Special Meeting of Bitfarms Shareholders (the "Special Meeting"). The Special Meeting, which was originally scheduled to be held on November 6, 2024, has been rescheduled to November 20, 2024.

Gagnon concluded, "We remain on track to achieve 21 EH/s in the coming months and to double our operating capacity in 2025 with nearly 50% proforma power capacity based in the U.S. We are pleased to have reached an agreement with Riot which allows us to focus our full attention on executing our growth strategy and creating value for shareholders."

Mining Review

Bitcoin difficulty increased 1.2% in the month. As a result, September mining operations generated 217 BTC compared to 233 BTC in August.

Key Performance Indicators	September 2024	August 2024	September 2023
Total BTC earned	217	233	411
Month End Operating EH/s	11.3	11.3	6.1
BTC/Avg. EH/s	21	22	70
Average Operating EH/s	10.3	10.4	5.8
Operating Capacity (MW)	310	310	233
Hydropower (MW)	256	256	183
Watts/Terahash Efficiency (w/TH)	21	25	36
BTC Sold	173	147	362

September 2024 Select Operating Highlights

- 11.3 EH/s operational at September 30, 2024, up 85% Y/Y.
- 10.3 EH/s average operational, up 78% Y/Y and down 1% M/M.
- 21.1 BTC/average EH/s, down 6% from the previous month due to the increase in average network difficulty.
- 217 BTC earned, 7% lower M/M and 47% lower Y/Y.
- 7.2 BTC earned daily on average, equal to ~\$461,000 per day based on a BTC price of \$64,000 at September 30, 2024.

Bitfarms' BTC Monthly Production

Month	BTC Earned 2024	BTC Earned 2023
January	357	486
February	300	387
March	286	424
April	269	379
May	156	459
June	189	385
July	253	378
August	233	383
September	217	411
YTD Totals	2,260	3,692

September 2024 Financial Update

- Sold 173 of the 217 BTC earned as part of the Company's regular treasury management practice for total proceeds of \$10.5 million.
- Total liquidity of \$146 million, including \$73 million in cash at September 30, 2024.
- Added 44 BTC, bringing Treasury to 1,147 BTC, up from 1,103 BTC last month and representing \$73.4 million based on a BTC price of \$64,000 at September 30, 2024.
- Synthetic HODLTM of 602 long-dated BTC call options at September 30, 2024.
- The employment dispute with the former CEO has been settled.

Upcoming Conferences and Events

- October 21-22: AIM Summit (Dubai)
- November 13-14: Cantor Crypto, Digital Assets & AI Infrastructure Conference (Miami)
- November 20: Special Meeting of Bitfarms Shareholders
- December 12: Northland Growth Conference (Virtual)
- January 14 & 15, 2025: Needham Growth Conference (NYC)

About Bitfarms Ltd.

Founded in 2017, Bitfarms is a global vertically integrated Bitcoin mining data center company that contributes its computational power to one or more mining pools from which it receives payment in Bitcoin. Bitfarms develops, owns, and operates vertically integrated mining facilities with in-house management and company-owned electrical engineering, installation service, and multiple onsite technical repair centers. The Company's proprietary data analytics system delivers best-in-class operational performance and uptime.

Bitfarms currently has 12 operating Bitcoin data centers and two under development situated in four countries: Canada, the United States, Paraguay, and Argentina. Powered predominantly by environmentally friendly hydro-electric and long-term power contracts, Bitfarms is committed to using sustainable and often underutilized energy infrastructure.

To learn more about Bitfarms' events, developments, and online communities:

www.bitfarms.com

https://www.facebook.com/bitfarms/ https://twitter.com/Bitfarms_io https://www.instagram.com/bitfarms/ https://www.linkedin.com/company/bitfarms/

Glossary of Terms

- Y/Y or M/M = year over year or month over month
- BTC or BTC/day = Bitcoin or Bitcoin per day
- EH or EH/s = Exahash or exahash per second
- MW or MWh = Megawatts or megawatt hour
- w/TH = Watts/Terahash efficiency (includes cost of powering supplementary equipment)
- Synthetic $HODL^{TM}$ = the use of instruments that create BTC equivalent exposure

Cautionary Statement

Trading in the securities of the Company should be considered highly speculative. No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained herein. Neither the Toronto Stock Exchange, Nasdaq, or any other securities exchange or regulatory authority accepts responsibility for the adequacy or accuracy of this release.

Forward-Looking Statements

This news release contains certain "forward-looking information" and "forward-looking statements" (collectively, "forward-looking information") that are based on expectations, estimates and projections as at the date of this news release and are covered by safe harbors under Canadian and United States securities laws. The statements and information in this release regarding projected growth, target hashrate, opportunities relating to the Company's geographical diversification and expansion, upgrading and deployment of miners as well as the timing therefor, closing of the Stronghold acquisition on a timely basis and on the terms as announced, the ability to integrate and successfully operate the Sharon mega-site with access to up to 120 MW, entering into a definitive lease agreement and receive regulatory approvals in respect of the letter of intent for a lease to an additional 10 MW site in Sharon, the benefits of the Stronghold acquisition and the other Sharon lease transactions (collectively, the "Sharon Acquisitions"), the ability to gain access to additional electrical power and grow the hashrate of the Stronghold business and the other Sharon Acquisitions, performance of the plants and equipment upgrades and the impact on operating capacity including the target hashrate and multi-year expansion capacity, the opportunities to leverage Bitfarms' proven expertise to successfully enhance energy efficiency and hashrate, the benefits of the growth strategy including to merge HPC / AI with Bitcoin mining operations, and other statements regarding future plans and objectives of each of Bitfarms, Stronghold and the combined company, improved financial performance and balance sheet liquidity, hashrate growth in general, energy efficiency and cost savings in general, and other growth opportunities and prospects, and other statements regarding future growth, plans and objectives of the Company are forward-looking information.

Any statements that involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "budget", "scheduled", "forecasts", "estimates", "prospects", "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could", "would", "might" or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward-looking information. This forward-looking information is based on assumptions and estimates of management of each of Bitfarms and Stronghold at the time they were made, and involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance, or achievements of each of Bitfarms and Stronghold to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, risks relating to: receipt of the approval of the shareholders of Stronghold and the Toronto Stock Exchange for the Stronghold acquisition as well as other applicable regulatory approvals; that the Stronghold acquisition may not close within the timeframe anticipated or at all or may not close on the terms and conditions currently anticipated by the parties for a number of reasons including, without limitation, as a result of a failure to satisfy the conditions to closing of the Transaction; the letter of intent on the 10 MW is subject to entering into a definitive lease agreement and TSX approval, none of which is assured; the power purchase agreements and economics thereof may not be as advantageous as expected; the inability of Bitfarms to operate the plants as anticipated following consummation of the Sharon Acquisitions; the construction and operation of new facilities may not occur as currently planned, or at all; expansion of existing facilities may not materialize as currently anticipated, or at all; new miners may not perform up to expectations; revenue may not increase as currently anticipated, or at all; the ongoing ability to successfully mine digital currency is not assured; failure of the equipment upgrades to be installed and operated as planned; the availability of additional power may not occur as currently planned, or at all; expansion may not materialize as currently anticipated, or at all; the power purchase agreements and economics thereof may not be as advantageous as expected; potential environmental cost and regulatory penalties due to the operation of the Stronghold plants which entail environmental risk and certain additional risk factors particular to the business of Stronghold including, land reclamation requirements may be burdensome and expensive, changes in tax credits related to coal refuse power generation could have a material adverse effect on the business, financial condition, results of operations and future development efforts, competition in power markets may have a material adverse effect on the results of operations, cash flows and the market value of the assets, the business is subject to substantial energy regulation and may be adversely affected by legislative or regulatory changes, as well as liability under, or any future inability to comply with, existing or future energy regulations or requirements, the operations are subject to a number of risks arising out of the threat of climate change, and environmental laws, energy transitions policies and initiatives and regulations relating to emissions and coal residue management, which could result in increased operating and capital costs and reduce the extent of business activities, operation of power generation facilities involves significant risks and hazards customary to the power industry that could have a material adverse effect on our revenues and results of operations, and there may not have adequate insurance to cover these risks and hazards, employees, contractors, customers and the general public may be exposed to a risk of injury due to the nature of the operations, limited experience with carbon capture programs and initiatives and dependence on third-parties, including consultants, contractors and suppliers to develop and advance carbon capture programs and initiatives, and failure to properly manage these relationships, or the failure of these consultants, contractors and suppliers to perform as expected, could have a material adverse effect on the business, prospects or operations; the digital currency market; the ability to successfully mine digital currency; revenue may not increase as currently anticipated, or at all; it may not be possible to profitably liquidate the current digital currency inventory, or at all; a decline in digital currency prices may have a significant negative impact on operations; an increase in network difficulty may have a significant negative impact on operations; the volatility of digital currency prices; the anticipated growth and sustainability of hydroelectricity for the purposes of cryptocurrency mining in the applicable jurisdictions; the inability to maintain reliable and economical sources of power to operate cryptocurrency mining assets; the risks of an increase in electricity costs, cost of natural gas, changes in currency exchange rates, energy curtailment or regulatory changes in the energy regimes in the jurisdictions in which Bitfarms and Stronghold operate and the potential adverse impact on profitability; future capital needs and the ability to complete current and future financings, including each of Bitfarms', Stronghold's or the combined company's ability to utilize an at-the-market offering program (each, an "ATM Program") and the prices at which securities may be sold in each such ATM Program, as well as capital market conditions in general; share dilution resulting from an ATM Program and from other equity issuances; volatile securities markets impacting security pricing unrelated to operating performance; the risk that a material weakness in internal control over financial reporting could result in a misstatement of financial position that may lead to a material misstatement of the annual or interim consolidated financial statements if not prevented or detected on a timely basis; historical prices of digital currencies and the ability to mine digital currencies that will be consistent with historical prices; and the adoption or expansion of any regulation or law that will prevent any of Bitfarms, Stronghold or the combined company from operating its business, or make it more costly to do so. For further information concerning these and other risks and uncertainties, refer to Bitfarms' filings on www.sedarplus.ca (which are also available on the website of the U.S. Securities and Exchange Commission (the "SEC") at www.sec.gov), including the MD&A for the year-ended December 31, 2023, filed on March 7, 2024 and the MD&A for the three and six months ended June 30, 2024 filed on August 8, 2024 and Stronghold's filings on www.sec.gov, including the Annual Report on Form 10-K for the fiscal year ended 2023, filed on March 8, 2024, the Quarterly Report on Form 10-O for the fiscal quarter ended March 31, 2024, filed on May 8, 2024, the Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2024, filed on August 14, 2024, and subsequent reports on Forms 10-Q and 8-K. Although each of Bitfarms and Stronghold has attempted to identify important factors that could cause actual results to differ materially from those expressed in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended, including factors that are currently unknown to or deemed immaterial by Bitfarms or Stronghold, as applicable. There can be no assurance that such statements will prove to be accurate as actual results, and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on any forward-looking information. Neither Bitfarms nor Stronghold undertakes any obligation to revise or update any forward-looking information other than as required by law.

Additional Information about the Merger and Where to Find It

This communication relates to a proposed merger between Stronghold and Bitfarms. In connection with the proposed merger, Bitfarms intends to file with the SEC a registration statement on Form F-4, which will include a proxy statement of Stronghold that also constitutes a prospectus of Bitfarms. After the registration statement is declared effective, Stronghold will mail the proxy statement/prospectus to its shareholders. This communication is not a substitute for the registration statement, the proxy statement/prospectus or any other relevant documents Bitfarms and Stronghold has filed or will file with the SEC. Investors are urged to read the proxy statement/prospectus (including all amendments and supplements thereto) and other relevant documents filed with the SEC carefully and in their entirety if and when they become available because they will contain important information about the proposed merger and related matters.

Investors may obtain free copies of the registration statement, the proxy statement/prospectus and other relevant documents filed by Bitfarms and Stronghold with the SEC, when they become available, through the website maintained by the SEC at www sec.gov. Copies of the documents may also be obtained for free from Bitfarms by contacting Bitfarms' Investor Relations Department at investors@bitfarms.com and from Stronghold by contacting Stronghold's Investor Relations Department at SDIG@gateway-grp.com.

No Offer or Solicitation

This communication is not intended to and does not constitute an offer to sell or the solicitation of an offer to buy, sell or solicit any securities or any proxy, vote or approval, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offer of securities shall be deemed to be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended.

Participants in Solicitation Relating to the Merger

Bitfarms, Stronghold, their respective directors and certain of their respective executive officers may be deemed to be participants in the solicitation of proxies from Stronghold's shareholders in respect of the proposed merger. Information regarding Bitfarms' directors and executive officers can be found in Bitfarms' annual information form for the year ended December 31, 2023, filed on March 7, 2024, as well as its other filings with the SEC. Information regarding Stronghold's directors and executive officers can be found in Stronghold's proxy statement for its 2024 annual meeting of stockholders, filed with the SEC on April 29, 2024, and supplemented on June 7, 2024, and in its Form 10-K for the year ended December 31, 2023, filed with the SEC on March 8, 2024. This communication may be deemed to be solicitation material in respect of the proposed merger. Additional information regarding the interests of such potential participants, including their respective interests by security holdings or otherwise, will be set forth in the proxy statement/prospectus and other relevant documents filed with the SEC in connection with the proposed merger if and when they become available. These documents are available free of charge on the SEC's website and from Bitfarms and Stronghold using the sources indicated above.

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