We conclude that:

- MARA may have taken at least $250 million out of the company via overstated purchases of miners. We draw that conclusion based on interviews with mining companies in China.

- About 65% of the mining fleet MARA has ordered and made payments on, nearly 132,000 machines, are not in use. The most recent order was 11 months ago.

- Silvergate Bank, historically MARA’s biggest source of liquidity, just announced that it can’t file its 2022 financials on time and may not be able to continue as a going concern. Shares fell about 45% on the news. That was just two days after MARA announced it could not publish its 2022 10K as scheduled “due to certain accounting errors.” Yet the “restatement issues” MARA cited were not among those we discuss in this report. Surely the SEC will sit up and take notice.

- MARA’s crypto-mining business did not make money even when Bitcoin was averaging around $47,500. When bitcoin prices rise, investors should make money, but potential gains have consistently been lost in stock compensation. In 2021, stock-based compensation was $161 mln – more than net revenue – even as MARA lost $13 mln pre-tax. And in 2021, MARA had just 10 employees.

- MARA has made a series of highly questionable payments, awarding shares to a company that appears not to exist, paying $35.5 mln to a related party company without disclosing that company’s business, making huge deposits with service providers for unclear reasons, and much more.
Mining is the last frontier of crypto fraud. We’ve had major frauds committed by the exchanges, the crypto banks, liquidity pools, and more. There was the mining fraud Ebang (EBON) that Hindenburg exposed, and now we have a company with all of 25 people that claims to have bought 240,000 miners but somehow has deployed less than one-third of them.

**Reported purchases of mining rigs**

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of Rigs</th>
<th>Calculated price per rig</th>
<th>5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2018</td>
<td>1,300</td>
<td>$2,000</td>
<td></td>
</tr>
<tr>
<td>February 2018</td>
<td>1,400</td>
<td>$4,142</td>
<td></td>
</tr>
<tr>
<td>August 2019</td>
<td>6,000</td>
<td>$681</td>
<td></td>
</tr>
<tr>
<td>May 2020</td>
<td>660</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 2020</td>
<td>500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 2020</td>
<td>700 MicroBT</td>
<td>$1,857</td>
<td></td>
</tr>
<tr>
<td>Q4 2020</td>
<td>90,000</td>
<td>$2,368</td>
<td></td>
</tr>
<tr>
<td>August 2021</td>
<td>30,000</td>
<td>$4,023</td>
<td></td>
</tr>
<tr>
<td>December 2021</td>
<td>78,000</td>
<td>$11,269</td>
<td></td>
</tr>
<tr>
<td>Total purchased to Q4 2021</td>
<td>208,560</td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2022</td>
<td>30,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stated average price per miner as of 2021 10K</td>
<td>$6,054</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total purchased to Q3 2022</td>
<td>238,560</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total potential disposals</td>
<td>44,104</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Active” February 2023</td>
<td>71,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*In January, the company reported “overclocking” to increase machine utilization.

Source: Company reports, J Capital See Appendix for source links.
This report is divided into four parts:

1. **Missing PPE:** There’s a gap of over 130,000 machines between the number of rigs MARA claims to have bought and sold and the number it has installed. And MARA claims to have paid a price well above cost estimates for the machines from vendors we interviewed in China. Based on our interviews, we estimate overpayments of at least $250 mln.

2. **Questionable assets:** Excessive write-downs, pre-payments, and dubious investments on MARA’s books could be designed to offset the overstated values and machines they may not have. MARA was subpoenaed by the SEC over its relationship with a hosting services company to which it made payments. Pre-payments on the books for machines that are undelivered at least nine months later are over $200 mln dollars.

3. **Company background:** MARA tried out minerals exploration, real estate, and patent management before landing on BTC mining. The company was incubated by a group of financiers who have been accused by the SEC of “pump-and-dump” stock promotion.¹ MARA can’t seem to hang onto a CFO and has run through six Tier 3 auditors in a decade.

4. **The raw deal for investors:** Sophisticated investors believe that MARA is a junk-stock company. Short interest in MARA is extremely high, and the debt – held by savvy investors – trades at a 77% discount. Massive share compensation and dilution indicate that shareholders are extremely unlikely to make money from this stock.

### 1. Missing PPE

Crypto-mining relies on servers that crunch ever-more complex equations to extract digital currency. MARA claims to have gained an edge in this energy-intensive business by deploying more powerful miners with a higher hash rate, thus increasing the likelihood it will earn bitcoin.

Interviews indicate that MARA is paying top dollar for machines that haven’t been delivered, and then even writing some down. The main thing that MARA appears to be mining is investor credulity.

MARA buys nearly all its machines from Bitmain, a Beijing-based company. In total, MARA has reported acquiring about 241,080 machines and selling or

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¹ [https://www.sec.gov/litigation/litreleases/2020/lr24765.htm](https://www.sec.gov/litigation/litreleases/2020/lr24765.htm)
disposing 44,104. There was a large sale of equipment to a mining center called DCRBN, and to give MARA the benefit of the doubt, we assume that was a sale of 14,404 mining rigs.

**Total purchases since 2018**

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Number of machines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitmain</td>
<td>237,860</td>
</tr>
<tr>
<td>MicroBT</td>
<td>700</td>
</tr>
<tr>
<td>GPU servers*</td>
<td>2,520</td>
</tr>
<tr>
<td><strong>Total machines</strong></td>
<td><strong>241,080</strong></td>
</tr>
</tbody>
</table>

* Calculated number. See Appendix for detailed announcements and links.

**Source:** Company disclosures

**Total reported disposals**

<table>
<thead>
<tr>
<th>Date</th>
<th>Site</th>
<th>Number of rigs</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2-Q3 2022</td>
<td>Sale to DCRBN</td>
<td>14,404</td>
<td>Note: The company has never reported how many rigs it sold to DCRBN or, indeed, if they sold mining rigs at all. To give them the benefit of the doubt, we simply divide the gross proceeds - $87.2 mln - by the average cost of a machine that MARA reported in 2021, $6,054. DCRBN transactions are described in the company 10Q issued August 9, 2022: <a href="https://ir.marathondh.com/sec-filings/all-sec-filings?form_type=10-Q&amp;year=2022#document-25305-0001493152-22-021799-2">https://ir.marathondh.com/sec-filings/all-sec-filings?form_type=10-Q&amp;year=2022#document-25305-0001493152-22-021799-2</a></td>
</tr>
</tbody>
</table>

**Total number of mining machines potentially disposed of** 44,104

**Total machines that should be owned by February 2023** 196,976

**Source:** Company disclosures, J Capital

As of February 2, 2023, MARA reported that 71,000 miners were operating. Based on orders, some 65% of the proposed fleet is not yet operating. Two years ago, in March 2021, the company said “Marathon expects all 105,120 of its miners to be deployed by the first quarter of 2022, at which point, the Company will be directing 10.37 EH/s
to the mining pool." Somehow, the company never mentioned that it would miss this target.

Lest someone think the magnitude of this difference is just too great and there must be some mistake, MARA itself keeps telling investors about all the machines. In the 2021 10K, MARA reported that 199,000 miners should be “installed and energized” by early 2023.

**Bitmain Miners Shipped**

Company disclosures about miners purchased and deployed are erratic but also either wildly optimistic or else simply exaggerated.

**March 2021: The company will have 103,120 miners installed in Q1 2022**

**Fourth Quarter 2020 and Recent Highlights**

- Purchased 90,000 of the industry’s most efficient Bitcoin miners during the fourth quarter, increasing the Company’s mining fleet to approximately 103,120 miners capable of producing 10.37 EH/s (exahash per second) by the first quarter of 2022

8K March 16, 2021

**But in June 2022, the company had 36,830 “active” miners**

Prior to the storm, the 30,000 miners Marathon had deployed in Montana represented over 75% of the Company’s active fleet. With these miners offline, Marathon’s bitcoin production is expected to be significantly reduced until repairs to the power generating facility in Montana can be completed or MARA press release June 28, 2022
In January 2023, there were 69,000 miners.

Currently, the company has approximately 69,000 active miners, capable of producing approximately 7 exahashes per second, according to its update.

MARA statement January 7, 2023

Currently, three months remain before the “middle of the fiscal year 2023,” by which time MARA says it expects to triple its active mining capacity.

Based on current construction and installation schedules provided to the Company by its hosting providers, Marathon currently expects to have enough miners installed to generate 23.3 EH/s in the middle of fiscal year 2023.

PR August 8, 2022

Pre-payments
The lack of installations hasn’t stopped MARA from forking over money.

MARA’s balance sheet pre-payments for equipment are absolutely massive. It had a whopping advance payment of $687.8 million on its balance sheet by end September 2022 to “vendors” for the receipt of more machines, $482 mln of which was paid in the first nine months of 2022, according to its cash flow statement.

Pre-payments
The lack of installations hasn’t stopped MARA from forking over money.

MARA’s balance sheet pre-payments for equipment are absolutely massive. It had a whopping advance payment of $687.8 million on its balance sheet by end September 2022 to “vendors” for the receipt of more machines, $482 mln of which was paid in the first nine months of 2022, according to its cash flow statement.

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>September 30, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets:</td>
<td>$555,319,430</td>
<td>$260,555,837</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$8,500,000</td>
<td>-</td>
</tr>
<tr>
<td>Restricted cash</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Digital currencies</td>
<td>126,418,096</td>
<td>102,805,060</td>
</tr>
<tr>
<td>Pre-payments and other current assets</td>
<td>20,015,945</td>
<td>8,148,180</td>
</tr>
<tr>
<td>Total current assets</td>
<td>240,107,010</td>
<td>683,321,325</td>
</tr>
<tr>
<td>Other assets:</td>
<td>403,522,538</td>
<td>270,243,704</td>
</tr>
<tr>
<td>Property and equipment (net of accumulated depreciation of $20,899,059 and $21,311,401, respectively)</td>
<td>687,777,200</td>
<td>460,254,628</td>
</tr>
<tr>
<td>Pre-payments and other current assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total assets</td>
<td>$1,475,777,433</td>
<td>$1,444,415,857</td>
</tr>
</tbody>
</table>

Source: MARA 10Q
A similar generous use of shareholders’ funds happened the previous year. At least $205.6 mln of advance payments made by the end of 2021 were for machines that had not been delivered at least nine months later. Some $260.6 mln in pre-payments were reclassified as PPE by end Q3 2022.

Based on disclosures\(^2\), roughly 130,000 rigs should now be on the ocean or in warehouses, but previous MARA statements, plus interviews with Bitmain tell us that Bitmain miners are delivered promptly.

With such a large number of un-utilized machines, was it really necessary to make those extra advance payments?

**Agreeing to overpay?**

Since 2018, MARA has spent around $1.3 billion on miners purchased from Bitmain, according to company disclosures.

But detailed interviews with Chinese manufacturers of bitcoin miners, including former executives of Bitmain, show that these prices are inflated. Lower prices, they said, were charged at the time, while MARA posted higher numbers in their disclosures. Bitmain formers admitted to drawing up inflated contracts for some clients to display to investors. Even adding in high tariffs and shipping fees, we es-

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\(^2\) see Appendix for links
timate that MARA could not have paid more than $955 million for the Bitmain machines. That is around a $250 million discrepancy compared to company reports. Our estimate is based on interviews with two former Bitmain executives and four other Chinese vendors of mining rigs about the cost and terms of sale of machines from 2018 through 2022.

Someone close to the company told us that Bitmain signs two contracts with most big customers, one at a higher amount for show and one with the real purchase values. “The external contract is drawn up according to the customer’s requests,” the insider said. “For example, if a listed company is under financial-report pressure, or if it is a purchase contract for the funder, Bitmain will cooperate with them to quote a high price. But the actual transaction is definitely different.”

Although there can be discounts offered when the price of miners declines, Bitmain and others in the industry told us that Bitmain generally offers discounts in terms of coupons for future purchases. Those discounts were not included in our $955 mln estimate. It seems very likely that the gap between what MARA claimed to have paid and what it really paid was actually much larger than $250 mln.

The most accurate way to look at price for bitcoin miners is in terms of computing power, ie, the likelihood that the machines will obtain bitcoins. The company discloses 7 Exahash of computing power operating in January 2023. With 69,000 miners operating, that means MARA was paying $59,000 per petahash/s (there are 1,000 Phs per exahash). Currently, the rate has dropped below $17,000 per Ph/s, our interviewees say, but even when the market was much higher, this average looks much too high based on the price estimates we received.

We are not the only one to notice this discrepancy. In MARA’s Q2 earnings call, a Jefferies analyst noted MARA appears to be overpaying for its miners. MARA CEO Frederick Thiel did not dispute that MARA had paid too much in the past, saying it did not matter because it would cost less in future to get the miners deployed.

But despite Thiel’s optimism that it would all average out in the end, MARA is carrying over-priced and un-delivered machines on its books, raising its average cost per PH/s.

Even BTIG, a sell-side analyst that put a $50 price target on MARA in early 2022, thinks MARA is overpaying for miners. Noting that in contrast to MARA paying around $11,000 each for rigs purchased in December 2021, BTIG wrote: “It is worth noting that backing into an implied cost of an S19 Pro based on the economics of the S19 XP points to a price of about $8.6k per rig.”
In other words, MARA would be overpaying by 28% for these 78,000 rigs. Apart from one April 2022 order, the last major orders for machines were in December 2020 and December 2021. If MARA’s fully utilized operation is not in place until mid or end 2023, many of these machines will be two years old. With ongoing installation delays as newer models come to market, the book value of these machines may fall while sitting idle.

**Sales and write-downs of miners**
As of end Q3 2022, only $169 mln in equipment was in use, with another $261 mln classified as “construction in progress.” Together with $688 mln of advance payments, un-utilized shareholder capital amounts to some $949 mln. Nearly $1 bln of shareholder capital sitting idly for extended periods plus multiple write-downs and questionable acquisitions is not exactly what an asset-light business model is meant to be about. Based on pre-payments as well as a lack of disclosure about any facility costs, “construction in progress” must consist mostly of purchased machines that are ready to be installed when delivered. We question whether such a large amount of construction in progress really exists thanks to disposals.

After asset sales and write-downs, utilized PPE was $163.9 mln at end December 2021 and only $169.2 mln at end September 2022 on a gross basis, showing no meaningful net increase in utilization despite a massive machine purchase binge in the same period, thanks to disposals and operational disasters.
II. Questionable assets

We've found all sorts of pockets in the financial statements into which MARA has diverted investor cash. Here are a few:

**Summary questionable assets ($mLn)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount ($mLn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SelectGreen Blockchain</td>
<td>$4</td>
</tr>
<tr>
<td>Beowulf/Liefern LLC and Lucky Liefern LLC</td>
<td>$11.2</td>
</tr>
<tr>
<td>Hardin, MT, accelerated costs &amp; depreciation</td>
<td>$54.2</td>
</tr>
<tr>
<td>Compute North write offs to date</td>
<td>$59.0</td>
</tr>
<tr>
<td>Auradine</td>
<td>$35.5</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>$163.9</strong></td>
</tr>
<tr>
<td>Advance Payments in excess of nine months old</td>
<td>$205.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$369.6</strong></td>
</tr>
</tbody>
</table>

*Source: Company disclosures, J Capital*

**SelectGreen Blockchain: $4 million**

In 2019, MARA reported buying 6,000 Antminer machines via an asset purchase agreement with SelectGreen Blockchain Ltd., a British Columbia company. MARA paid 2,335,000 shares in a private placement, valued at a total of about $4 mln. We cannot find any reference to a company called SelectGreen on Google or via historical searches in Canadian corporate databases.

*Source: Canada's Business Registries*
A report released December 19, 2019 and since removed, for unspecified reasons, claimed that SelectGreen did not exist.

Beowulf/Liefern LLC and Lucky Liefern LLC: $11.9 million

In October 2020, MARA formed a joint venture with a company called Beowulf to build a data center in Hardin, Montana along with an providing associated power plant services. MARA issued a private placement of shares to Beowulf worth $11 mln. Just five months after completion, the company announced the facility was to be shut down, following a decision to go “carbon neutral”. The facility was written off.

In November 2021, MARA disclosed a subpoena from the SEC regarding the Hardin, Montana facility. The subpoena had been issued in the third quarter, but MARA had not disclosed this to investors until after that quarter had ended.

Both Liefern and Lucky Liefern are affiliates of Beowulf. MARA issued 6 mln shares, valued then at $11.2m, to them in 2020 “for the operation and servicing of the Hardin, MT facility.” Excluded from our calculations because of inconsistencies in company disclosures, an additional 350,000 shares may have been issued in stages to Beowulf based on reaching facility power targets. In February 2022, MARA issued a prospectus to sell 350,000 shares on behalf of Lucky Liefern LLC, only several weeks before the company announced it would abandon the Hardin facility.
MARA reported issuing shares to operators of the Hardin facility in the 2021 Q3 report. But in the 2022 Q1 call, they were telling investors they had to “transition away” from Hardin.

On October 6, 2020, the Company issued 6,000,000 shares at $1.87 per share pursuant to the Long Term Prepaid Service Contract with Liefern LLC and Lucky Liefern LLC each receiving 3,000,000 shares for the operation and servicing of the Hardin, Montana facility through September 2025.

And so the Hardin facility in April was really limping essentially. It was operating at about 60% of capacity. So hopefully, those issues are kind of behind us, but I don’t think we have — believe they were behind us a number of times in the past, and issues keep cropping up. And uptime is very important to us. So we’re eager to do this transition away from Hardin and into an environment where we can have much higher performance and uptime.
Hardin, MT facility exit: $54.2 mln

For the first three quarters of 2022, hosting and other related costs related to MARA’s exit from the Hardin, MT facility were $18.2 mln. A further $36 mln in accelerated infrastructure depreciation was made to vanish from the balance sheet. Just five months after completion, the company announced the facility was to be shut down.*

ESG ate my homework: Compute North: $59 mln

MARA had an $81 mln in exposure to Compute North, a hosting center entity that declared bankruptcy in September 2022. So far, MARA has written off $59 mln of the liabilities; we expect the balance soon to be written off.

MARA invested $10 mln in convertible notes, $21 mln in promissory notes, and $50 mln in operating deposits, totaling $81 mln, in Compute North. The primary Compute North subsidiaries MARA used for hosting centers were a JV with NextEra and Compute North in King Mountain, McCarney, Texas and a hosting center in Wolf Hollow, Granbury, Texas.

In Q3 2022, MARA wrote off $31 mln in convertible and promissory notes, and $8 mln out of a total $50 mln of deposits to Compute North. As of the most recent announcements, MARA expects only $22 mln out of the remaining $42 mln in deposits to be recoverable. That makes a total of $59 mln so far. Further write-downs can be expected.

According to Compute North bankruptcy filings, MARA’s own corporate structure at the respective Compute North facilities consists of two joint ventures, one of them 82% owned by Marathon and 18% by Compute North and the other 60-40%.
MARA has not reported any write-off of its shares in the joint ventures.

The King Mountain facility, with 64,000 MARA servers, was operated by a new owner but had “maintenance and technical issues” according to MARA PR as of February 2, 2023. Neither King Mountain nor Wolf Hollow was fully operational as of December 2022. MARA has said the Compute North bankruptcy will not affect its operations, but the company entered into a new hosting agreement with Applied Digital last July 2022 nevertheless. Applied Digital is in a very tight financial position, and hosting risks appear high.

The $50 mln operating deposit paid to Compute North is a curious feature – why such a big amount? References in MARA’s 2021 10K describe $14 mln of these deposits as “expedite fees” for construction and supply-chain activities. Another $14.6 mln and $5.9 mln in deposits was given to Compute North by end 2021 as an upfront payment for service fees, an amount curiously similar to the $14 mln expedite fees. These deposits were primarily related to King Mountain and Wolf Hollow hosting facilities. Several months later, the total of $34.5 mln in deposit grew to $50 mln.
Exhibit 10.1

**MASTER AGREEMENT**

This Master Agreement (the “Agreement”), dated [Redacted], 2021, is between Compute North LLC ("Compute North") and Mountain Digital Holdings, Inc. ("Customer"). In consideration of the premises set forth below, the parties agree as follows:

1. Services. Compute North shall provide, and Customer shall pay for, the services, managed and other services (the "Services") for Customer’s equipment (the "Managing Equipment") identified on the order form attached hereto as Exhibit A, as may be updated in writing and duly agreed by Compute North and Compute North from time to time (the “Order Form”). Compute North shall provide the Services consistent with, and as more completely described in, its customer handbook (the "Customer Handbook"), available at [Link] and incorporated herein, as Compute North reasonably may update from time to time.

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**Payment and Billing Terms:**

- **Initial Setup Fee:** Initial Setup Fee, if any, is due upon execution of this Order Form.
- **Monthly Fees:**
  - Last month of Monthly Service and Package Fees are due upon execution of this Order Form (the "Initial Deposit"), as follows:
    - **Initial Deposit** (service fees $201,400 ± 10% of the equipment value x 6 months)
      - Service Fee: $14,407,622.60
      - Package Fee: $73,000.00
      - Total Initial Deposit: $14,480,622.60
  - Second month of Monthly Service and Package Fees are due 60 days before each batch shipment. Equipment installation will not begin until received.

**Hosting Payment Schedule**

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/15/2021</td>
<td>$1,795,144.00</td>
</tr>
<tr>
<td>2/15/2022</td>
<td>$2,743,581.00</td>
</tr>
<tr>
<td>4/15/2022</td>
<td>$2,743,581.36</td>
</tr>
</tbody>
</table>

- The Monthly Service Fee is payable based on the actual hashrate performance of the Equipment per miner type per location as a percentage of the anticipated monthly hashrate per miner type. Customer shall pay a minimum service fee monthly in advance equal to seventy percent (70%) of the Expected Monthly Service Fee (the “Minimum Service Fee”) based on the Anticipated Daily Rate:
  - Hashrate performance adjustment: shall be calculated as follows:
    - Expected Monthly Service Fees x (100% - Actual hashrate performance percentage by model type) = Hashrate Performance Adjustment
  - The Minimum Service Fee is nonrefundable. Any Monthly Service Fee owed in excess of the Minimum Service Fee will be invoiced monthly in arrears.
  - Monthly Service Fees and Monthly Package Fees will be invoiced monthly, beginning on the date of installation and due upon receipt of invoice submitted by Compute North. Late payments will incur interest at the lesser of 1.5% per month (18% annual) or the maximum amount allowed under applicable law.

Source: MARA master agreement with Compute North September 2021
Additional funding from Marathon to Compute North also came from a bridge loan facility for capital expenditure, for up to $67 mln albeit not all of this was drawn. For the amount that was lent, Marathon’s balance sheet clearly distinguishes this as separate loan receivable compared to deposits. Similarly, the binding letter of intent for the Compute North partnership clearly says the loan is exclusive of expedite fees. The expedite fees themselves include both a construction/electrical premium and supply chain payments.
Partial payment for these Compute North deposits and loans was shown in the Q2 2022 filings, before the write-downs that took place during the following third quarter when Compute North filed for bankruptcy.
Now you see it

MARATHON DIGITAL HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED CONDENSED BALANCE SHEETS

June 30, December 31, (unaudited) (unaudited)
2022 2021

ASSETS
Current assets:
Cash and cash equivalents $ 86,493,447 $ 249,522,019
Receivable - 1,201,000
Digital currencies 136,856,199 102,865,080
Digital currencies restricted 55,558,996 -
Digital currencies frozen - 20,432,284
Deposits 40,095,730 34,439,347
Loan receivable 36,000,000 36,000,000
Prepaid expenses and other current assets 27,178,746 8,489,820
Total current assets 602,774,484 610,450,191
Other assets:
Property and equipment (net of accumulated depreciation and impairment charges of $55,309,407 and $21,311,481, respectively) 104,237,384 270,242,794
Assets held for sale 14,778,346 -
Advances to vendor 808,294,367 469,234,623
Investments 16,900,823 3,000,000
Long term prepaids - 13,605,889
Right-of-use assets 1,166,040 -
Intangible assets (net of accumulated amortization of $280,497 at December 31, 2021) 931,726 -
Total other assets 1,147,355,909 760,094,223
TOTAL ASSETS $ 1,909,129,393 $ 1,440,244,412

Now you don't

MARATHON DIGITAL HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS (unaudited)

Three Months Ended September 30, Nine Months Ended September 30,
2022 2021 2022 2021

Total Revenues $ 12,000,432 $ 31,709,485 $ 39,399,986 $ 96,118,135

Costs and expenses:
Cost of revenues - energy, housing and other (13,772,555) (5,022,021) (42,974,265) (11,647,487)
Cost of revenues - depreciation and amortization (26,204,842) (4,541,215) (64,881,323) (8,015,801)
Operating expenses:
General and administrative expenses (12,352,000) (99,235,964) (39,187,906) (159,411,480)
Land reserves (24,066,000) - (24,066,000) -
Impairment of deposits due to vendor bankruptcy filing (5,581,117) - (5,581,117) -
Impairment of digital currencies (5,508,391) (6,341,806) (153,843,952) (18,422,756)
Impairment of patents - - (983,363) -
Realized and unrealized gains (losses) on digital currencies held in fund - 42,066,907 (85,049,269) 59,410,028
Gain on sale of equipment, net of disposals 31,934,307 - 96,118,248 -
(13,508,735) (83,860,953) (228,993,568) (118,874,326)
Operating loss (40,646,631) (22,416,407) (239,824,976) (47,099,229)

Operating loss due to vendor bankruptcy filing (31,012,833) - (31,012,833) -
Other operating income 261,273 524,372 25,004 25,004
Interest expense (7,552,361) (767) (10,314,659) (2,604)
Loss before income taxes $ (81,322,987) $ (22,173,507) $ (269,208,930) $ (47,700,898)
Income tax benefit 5,750,272 2,940 192,712 3,454
Net loss $ (75,572,715) $ (22,170,567) $ (269,016,218) $ (47,508,444)

Source: MARA filings
The expedite fees and loans make a mockery of MARA’s asset-light strategy. Funding for construction of the hosting facilities was supposed to primarily come from Generate Capital, not “asset light” MARA.

With the total amount of deposits reaching $50 mln by the time of Compute North's bankruptcy, we are wondering what the extra amounts were for.

The news flow for the Wolf Hollow facility goes from bad to worse. On February 10, 2022, Ault Alliance, a subsidiary of BitNile, announced it was moving its Bitcoin miners from Wolf Hollow because “the site is no longer economically viable.” The Ault Alliance machines had been recently purchased, and some of the latest, most efficient models include S19 Antminers. MARA, with similar machines, plans to continue using the Wolf Hollow facility.

Auradine Inc.: $35.5 million

In Q2 and Q3 2022, MARA invested $35.5 mln in a private company called Auradine Inc., whose business is not described in MARA’s filings. The Auradine website says the company provides “Web3 infrastructure solutions.” MARA CEO Fred Thiel serves on Auradine’s board, and another Marathon board member is a 10%
shareholder in Auradine, according to MARA’s disclosures.

Said Ouissal, a director of the Company, owns approximately 10% of the issued and outstanding shares of Auradine, and Fred Thiel, the Company’s Chairman and CEO, sits on Auradine’s Board of Directors.

On May 3, 2022, the Company converted $2.0 million from a SAFE investment into preferred stock while purchasing an additional $3.5 million of preferred stock in Auradine, Inc. along with entering into a commitment to acquire $30.0 million of additional shares of preferred stock. This forward contract was accounted for under ASC 321 as an equity security. On September 27, 2022, pursuant to the forward contract, the Company increased its investment in the preferred stock of Auradine, Inc. by $30.0 million, bringing its total carrying amount of investment in Auradine, Inc. preferred stock to $35.5 million with no noted impairments or other adjustments (See Note 11).

**Accelerated depreciation:** $4.1 mln

Out of 30,000 machines at Hardin, MT, 22,000 were sold and 1,800 junked following “accelerated depreciation” of $4.1 mln on machines reportedly no longer in operating condition.

**Debt and Silvergate Capital (SI)***

MARA owes about $50 mln to Silvergate Bank. Faced with recent huge customer withdrawals and the ongoing investigation for potential illegal facilitation of crypto transactions, the bank reports it could go under, and if that happens, MARA will lose an important source of liquidity and may even have its loans called in.

There may be more losses coming down the pike. The company has a 1% convertible debt of $731.3 mln on its balance sheet that investors are trading at a 77% discount. Additionally, MARA burned though $84 mln of cash for the first nine months of 2022 just in its operating cash flow, and could have much more to spend on top of that from investment commitments.

**Abu Dhabi Venture***

MARA has a new channel for disposing of mining rigs it may or may not have. It is making a 20% contribution valued at some $81 mln to a new joint venture in Abu Dhabi, and the contribution may be in cash or “in kind.”

On January 27, 2023, Marathon Digital and FS Innovation (FSI) agreed to form the Abu Dhabi Global Markets company (ADGM) to set up and operate facilities that will mine bitcoin. The initial proposal is for two mining sites with a total of
250 MW capacity. The initial equity ownership in the ADGM entity will be 80% FSI and 20% Marathon Digital. To capitalize the venture, capital contributions are expected to be some $406 mln, and can consist of both cash and in-kind. FSI will have four directors to the board of the ADGM entity, while Marathon Digital will only have one. Digital assets mined by the ADGM Entity will be distributed to MARA and FSI twice a month in proportion to their equity interests.

According to the website Hashrate Index, digital mining machines in the class that MARA agreed to buy in December 2021 and December 2020 had fallen in equivalent price by some 85% and 59% respectively by the end of February 2023. While values specific to MARA Bitcoin mining machines may not exactly match the trends shown in this chart, the overall falling price trend is clear. Any “in kind” contribution of mining machines may reflect prevailing values at the time of transfer to the Abu Dhabi venture and not historic cost, likely leading to a disproportionate transfer of a number of machines compared to expectations and significant asset value write downs.
Our ASIC Price Index reflects the current price per TH of different Bitcoin mining ASICs grouped by three efficiency tiers. The ASIC Price Index is measured in both US dollars (USD) and bitcoin (BTC).

Hashrate Index collects the price, hashrate, and electricity usage for dozens of SHA-256 miners over time. We leverage multiple sources including forums (Bitcoin Talk, Reddit), broker-dealers (websites, telegram channels), manufacturers’ websites, and Luxor’s ASIC Trading Desk.

We calculate the ASIC Price Index by averaging each unit price based on its nominal hashrate output. We group together different ASIC models into different efficiency tiers based on their power efficiency and display each efficiency in terms of $ per TH or BTC per TH. Each Bitcoin mining ASIC listing we use in the index is vetted through a confidence interval using previous index values and our proprietary algorithm.

The three efficiency tiers:

- **Under 38 J/TH (38 J/TH)** includes the latest generation Bitcoin mining ASICs like Bitmain’s Antminer S19, S19j and S19 Pro units and MicroBT’s Whatsminer M30s, M30s+ and M30s++ models, among others.

- **38-to-68 J/TH** includes mid-generation ASICs like Bitmain’s Antminer S17 and T17 series and MicroBT’s Whatsminer M20, M21 and M32 series models, among others.

- Over **68 J/TH** includes old-generation ASICs like Bitmain’s Antminer S9, T9, S11 and T15 series and MicroBT’s Whatsminer M10 series, among others.

“Joules” is interchangeable with “Watts”

Denominating Bitcoin mining ASIC prices in Bitcoin is useful for filtering out noise in price signals. It lets you analyze key trends such as ASIC supply constraints, public market valuation arbitrage, and infrastructure roll outs.

Source: Hashrateindex.com
III. Company background

MARA started life exploring for vanadium and uranium. Then it went into real estate, then patent management. In 2018, MARA acquired crypto miners and in 2021 discarded the rest of the business.

MARA has changed auditors 6x in the last decade. The current auditor is Marcum and the engagement partner Sougata Banerjee. Other clients include SolarMax, whose former CFO brought suit against the company, claiming it engaged in “round trip” financial transactions.

BDO resigned as auditor when the Bit Ventures acquisition was announced. Per the 2017 filing, “the resignation of BDO was not recommended by the Company’s audit committee.”

For the years 2017-2020, the no-name auditor was RBSM, which was fined in 2021 by the PCAOB because

“... the Firm violated PCAOB rules and quality control standards by failing to take sufficient steps from 2015 through 2018 to ensure that its system of quality control provided reasonable assurance that its personnel complied with applicable professional standards and the Firm’s standards of quality, despite auditing and quality control concerns repeatedly brought to the Firm’s attention through several PCAOB inspections.”

Marcum LLP took over for the fiscal year 2021. Marcum has been cited numerous times by the PCAOB for poorly executed audits. In 2020, the firm was fined $250,000 and a disciplinary notice issued saying, among other things:

“Marcum violated PCAOB rules and standards during the Audits when it failed to perform appropriate procedures regarding significant unusual transactions engaged in by the Issuer.”

Marcum has been subject to four PCAOB disciplinary proceedings. But even Marcum expressed doubt about the MARA accounts. It wrote in the 2021 10K:

“Our report on the effectiveness of internal control over financial reporting expressed an adverse opinion because of the existence of a material weakness.”

To remediate internal control weakness, the company reported it had increased the number of full-time staff in key technology and financial reporting roles from three to 10 by end December 2021. But elsewhere in the filings, the company states it had only nine full-time employees for everything at end December 2021.
With so many changes of business focus and of executives, we decided to make it easier for the reader by putting a timeline into charts.
February 2016: Merger agreement canceled

February 2021: Changes name to Marathon Digital Holdings

November 2017: Enters merger agreement with Global Bit Ventures

December 2017: Hindenburg publishes a damning report on MARA

July 2018: Cancels merger agreement, issues 3 million shares to GBV as a break fee

August 2017: Merrick Okamoto becomes chairman

December 2017: Okamoto appointed Interim CEO

October 2018: Okamoto appointed CEO

March 2019, Frost, Honig, Groussman, and others settle SEC case alleging “microcap schemes.”

March 2020: SEC fines Michael Brauser, John O’Rourke, and others involved in MARA in a “classic pump-and-dump scheme”
https://www.sec.gov/litigation/litreleases/2020/lr24765.htm

April 2021: Okamoto becomes executive chairman, Fred Thiel appointed CEO

December 2021: Okamoto signs severance agreement
Executive Timeline

December 13, 2020: Michael Rudolph resigns from all positions with the Company as a board member.

January 19, 2021: David Lieberman, formerly CFO, resigns from all positions.

April 26, 2021: Fred Thiel is appointed CEO to replace Merrick Okamoto, who becomes executive chairman. Okamoto lasts 7 months.

November 2021: Chief Accounting Officer appointed. Old CAO was removed in September.

December 27, 2021: Ashu Swami is appointed CTO. Between 2018 and Mr. Swami’s appointment, it appears the company did not have a CTO. Umesh Jani, who served as CTO 2014-17, and: David Liu, CTO in 2017-18, were “terminated.”

March 2022: Douglas Mellinger is appointed director to fill the vacancy created by Merrick Okamoto’s departure at the end of 2021. Mellinger and his company PRT had been accused in a lawsuit of exaggerating the company’s prospects. The case was “terminated” in 2000.

November 21, 2022: Sim Salzman resigns, and John Lee is appointed Chief Accounting Officer

March 2021: First mention that Simeon Salzman is CFO: Company says in 2020 it “Strengthened management team with the appointments of Simeon Salzman to chief financial officer and Kevin A. DeNuccio to board of directors.”

May 20, 2021: Board member Michael Berg “stepped down to pursue other projects” and Peter Benz transitioned to vice president of corporate development.

December 15, 2021: Merrick Okamoto “retires” as executive chairman, later receives about $31 million “in exchange for” releasing all claims against the company.

March 2022: Hugh Gallagher is appointed Chief Financial Officer, with Sim Salzman being appointed as the Company’s Chief Accounting Officer. Salzman, when a senior associate of Audit Services at the audit firm McGladrey & Pullen LLP, had been named in a lawsuit alleging improper use of trade secrets. The case was dismissed in 2009.

March 31, 2022: Hugh Gallagher is appointed CFO. Sim Salzman becomes Chief Accounting Officer
IV. A raw deal for investors

Investors hope that they can access crypto currency gains by buying MARA shares. MARA executives regularly help themselves to stock-based compensation when bitcoin prices are high.

Share comp accounted for $161 mln in 2021—more than net revenue of $150 mln. Incredibly, as of end December 2021, the company states it had only nine or 10 full time employees (statements are inconsistent). By December 2022, full time employees had grown to just 25. That’s a lot of stock comp per employee.

For the nine months reported in 2022, stock comp was $18.9 mln against revenue of $89.3 mln. That seems more reasonable, except that the company lost a whopping $280 mln pre-tax, including a highly suspicious $90 mln gain on sale of equipment, so the underlying loss was about $370 mln. Why did management deserve any stock comp at all?

What is the point of investing in this company when literally all revenue generated is taken away in stock comp? When the good times roll, any shareholder benefit seems to disappear in stock comp. When there are massive losses, lower stock comp is hardly a comforting boon.

Despite BTC production being 20% less in the first nine months of 2022 compared to the full year 2021, cost of revenue - which excludes various impairments, stock compensation, unrealized losses, and a legal reserve - more than trebled for the nine-month period compared to all of 2021. Even excluding the disastrous $54.2 mln accelerated cost recognition from the Hardin facilities exit, 2022 nine months’ cost of revenue was about $53.7 mln, nearly 60% higher already compared to the full twelve months in 2021. If idle machines, currently parked in “construction in progress” where there is no depreciation, are brought in to service, there may be further accelerated expenses or impairments to their values suffered if future potential cash flows generated are revised down because of lower-than-expected Bitcoin prices and higher operating costs in comparison to original projections.
MARA - The only thing Going to the Moon is Stock Compensation and Cost of Revenue

### 2021 MARA Stock Compensation Vs Expenses and Profitability

- **Revenue**: $150,463,770
- **Cost of revenues**: ($33,696,103)
- **Stock compensation, gross**: ($160,786,028)
- **Other operating (expenses)/benefits**: ($41,069,369)
- **Other Income (Loss)**: $71,933,945
- **Loss before income taxes**: ($19,892,135)

**FY 2021**
- **Bitcoin Average Price**: $47,500
- **Bitcoin Production**: 3,197

Incredibly, stock compensation alone exceeds revenue. When Bitcoin went to the moon, so... Source: Statmuse.com, MARA disclosures

### 9 Months 2022 YTD MARA Stock Compensation Vs Expenses and Profitability

- **Revenue**: $89,329,986
- **Cost of revenues**: ($107,819,580)
- **Stock compensation, gross**: ($202,122,224)
- **Other operating (expenses)/benefits**: $80,695,260
- **Other Income (Loss)**: ($280,220,350)
- **Loss before income taxes**: $107,165,580

**9mths YTD 2022**
- **Bitcoin Average Price**: $31.613
- **Bitcoin Production**: 2,582

Bitcoin produced fell nearly 20% so far YTD, yet basic cost of revenue nearly trebled compared to FY 2021. Excluding the YTD Hardin exit costs of some $54.2m, the 9mth 2022 cost of revenue was still nearly 60% higher compared to all 12mths of 2021.

Who wants to celebrate that stock compensation was "only" 21% of revenue when pre-tax losses were $280m? Source: Statmuse.com, MARA disclosures
In 2020, with just $4.4 mln in revenue, the company handed out $1.2 mln in stock-based compensation. The previous year, stock-based compensation, at $933,682, was 79% of revenue.

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CASH FLOWS FROM OPERATING ACTIVITIES</strong></td>
<td></td>
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<tr>
<td>Net income (loss)</td>
<td>$(36,374,306)</td>
<td>$(10,447,771)</td>
<td>$(3,517,065)</td>
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<td>Adjustments to reconcile net loss to net cash used in operating activities:</td>
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<td>Depreciation</td>
<td>14,831,102</td>
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<td>Amortization of patents and website</td>
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<td>71,176</td>
<td>71,177</td>
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<td>Amortization of leasehold improvements</td>
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<td>Deferred tax liability</td>
<td>23,020,721</td>
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<td>Loss on conversion of debt</td>
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<tr>
<td>Impairment of mining equipment</td>
<td>-</td>
<td>871,302</td>
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<tr>
<td>Impairment of leasehold improvements</td>
<td>-</td>
<td>-</td>
<td>447,776</td>
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<tr>
<td>Realized gain (loss) on sale of digital currencies</td>
<td>$(11,659)</td>
<td>$(15,466)</td>
<td>$(36,092)</td>
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<td>Change in fair value of warrant liability</td>
<td>1,048,286</td>
<td>309,588</td>
<td>(26,234)</td>
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<td>Change in fair value of mining payable</td>
<td>-</td>
<td>66,547</td>
<td>(507,862)</td>
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<tr>
<td>Change in fair value of investment securities</td>
<td>(73,779,545)</td>
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<tr>
<td>Gain on PPP loan forgiveness</td>
<td>(82,500)</td>
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<tr>
<td>Impairment of cryptocurrencies</td>
<td>29,552,991</td>
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<tr>
<td><strong>Stock based compensation</strong></td>
<td>160,786,028</td>
<td>1,178,609</td>
<td>933,682</td>
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</tbody>
</table>

Source: MARA 2021 10K

Dilution has been huge. Since end 2019 up to end Q3 2022, equity has gone from 8.5 mln to 116 mln shares.

Meanwhile, MARA’s convertible debt is trading at 33 cents to the dollar. Clearly, sophisticated investors think this company is a dog.
# Appendix

## History of MARA purchases

<table>
<thead>
<tr>
<th>Date of announcement</th>
<th>Announcement type</th>
<th>Number of machines</th>
<th>Machine type</th>
<th>Vendor</th>
<th>Price per machine</th>
<th>Source</th>
<th>Other</th>
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<tbody>
<tr>
<td>Jan-18</td>
<td>Purchase</td>
<td>1,300</td>
<td>Antminer S9</td>
<td>Bitmain</td>
<td>$2,000</td>
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<tr>
<td>Feb-18</td>
<td>Purchase</td>
<td>1,400</td>
<td>Antminer S9</td>
<td>Bitmain</td>
<td>$4,142</td>
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<td>Feb-18</td>
<td>Installation</td>
<td>1,400</td>
<td>Antminer S10</td>
<td>Bitmain</td>
<td>$8,152</td>
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<td>Apr-21</td>
<td>Capacity</td>
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<td></td>
<td>Bitmain</td>
<td>$4,142</td>
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<tr>
<td>Aug-19</td>
<td>Purchase</td>
<td>6,000</td>
<td>Antminer S9</td>
<td>Bitmain</td>
<td>$681</td>
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<td>May-20</td>
<td>Purchase</td>
<td>660</td>
<td>S19 Pro</td>
<td>Bitmain</td>
<td>$1,000</td>
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<td>Jun-20</td>
<td>Purchase</td>
<td>500</td>
<td>S19 Pro</td>
<td>Bitmain</td>
<td>$1,000</td>
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<td>Jul-20</td>
<td>Purchase</td>
<td>700</td>
<td>M31S+</td>
<td>MicroBT</td>
<td>$1,857</td>
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<td>Oct-2020</td>
<td>Purchase</td>
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<td>S-19 Pro</td>
<td>Bitmain</td>
<td>$2,158</td>
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<td>Dec-2020</td>
<td>Purchase</td>
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<td>S-19 Pro</td>
<td>Bitmain</td>
<td>$2,377</td>
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<td>Dec-2020</td>
<td>Purchase</td>
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<td>S-19 Pro</td>
<td>Bitmain</td>
<td>$2,397</td>
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<td>Mar-21</td>
<td>Shipment</td>
<td>10,300</td>
<td>S-19 Pro</td>
<td>Bitmain</td>
<td>$4,025</td>
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<tr>
<td>Jun-21</td>
<td>Installation</td>
<td>3,967</td>
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<td>Mar-21</td>
<td>On order</td>
<td>103,000</td>
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<td>Bitmain</td>
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<td>Aug-21</td>
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<td>Dec-21</td>
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<td>Bitmain</td>
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<td>Aug-22</td>
<td>Purchase</td>
<td>30,000</td>
<td>S19 XP</td>
<td>Bitmain</td>
<td></td>
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</tr>
</tbody>
</table>

*Source: company 20F*
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