

1 UNITED STATES PATENT AND TRADEMARK OFFICE
2 BEFORE THE PATENT TRIAL AND APPEAL BOARD

3 CRUSOE ENERGY SYSTEMS, LLC

4 Petitioner

5 V.

6 UPSTREAM DATA INC.

7 Patent Owner

8
9 Case PGR2023-00039

10 Patent No. 11,574,372
11
12
13
14

15 REMOTE VIDEOTAPED DEPOSITION OF

16 VERNON KASDORF

17 VOLUME 2

18 Friday, September 6, 2024
19
20
21

22 Stenographically Reported by:
23 JUSTYNE N. JOHNSON
RPR, CSR. No. 14301

24 Job No. 550363

25 Pages 95 - 132

Videotaped Deposition of
Vernon Kasdorf, Volume 2, held remotely:

Pursuant to Notice, before Justyne Johnson,
Registered Professional Reporter, Certified Shorthand
Reporter No. 14301 in and for the State of California.

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I N D E X

September 6, 2024

WITNESS:

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VERNON KASDORF, SWORN

CROSS EXAMINATION BY MR. ZOLOTOREV..... 101

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E X H I B I T S

EXHIBIT	DESCRIPTION	MARKED FOR I.D.
1036	Second declaration of Vernon Kasdorf (24 pages)	102
2010	Second declaration of Dr. Fengqi You (143 pages)	112
2016	Article titled "These 23-year-old Texans made \$4 million last year mining Bitcoin off flare gas from oil drilling" (15 pages)	122

1 September 6, 2024 | 10:10 a.m.

2

3

4 THE STENOGRAPHER: Good morning. We are going on the
5 record at 10:10 a.m. on Friday, September 6, 2024, in the
6 matter of Crusoe Energy Systems, LLC, v. Upstream Data,
7 Inc., Case Number PGR2023-00039. Today's deposition is
8 taking place remotely via Zoom videoconference.

9 My name is Justyne Johnson. I am a California
10 certified shorthand reporter representing the firm Planet
11 Depos, and my certification number is 14301. The deponent
12 is Vernon Kasdorf.

13 Counsel, can you please introduce yourselves.

14 MR. ZOLOTOREV: Yes. Jake Zolotorev of the law firm
15 DLA Piper, representing the patent owner.

16 MR. ZHU: And it's Jay Zhu, law firm Fish &
17 Richardson, representing the petitioner.

18 THE STENOGRAPHER: Mr. Kasdorf, can you raise your
19 right hand, please?

20

21 VERNON KASDORF,
22 having first been sworn by the Certified Shorthand
23 Reporter, was examined and testified as follows:

24 THE WITNESS: I do.

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EXAMINATION

BY MR. ZOLOTOREV:

Q Good morning, Mr. Kasdorf.

A Good morning.

Q As in your first deposition, just for the record, if you can state your full name and address.

A Vernon Arthur Kasdorf, 2870 Thorncliffe Drive, North Vancouver V7R2S8.

Q Since your first deposition in this matter, have you by any chance had your deposition taken prior to today or otherwise testified in any judicial proceeding?

A I haven't.

Q Okay. You understand that you are testifying under oath today; right?

A Correct.

Q Okay. And is there any reason today why you can't give your complete and truthful testimony?

A No.

Q All right. And you understand from having experienced this process before that from time to time your counsel may object, but you are to answer the question unless there's a direction not to answer on the ground of privilege?

A Yes.

Q Okay. And just to help the process along, to

1 help our court reporter, it's important that you and I
2 don't speak over each other. You understand that?

3 A Yes.

4 Q And it's also important that you provide verbal
5 answers that can be taken down by the court reporter as
6 opposed to, for example, nodding your head or -- or
7 otherwise providing nonverbal answers.

8 Do you understand that?

9 A I do.

10 Q Thank you.

11 Mr. Kasdorf, in front you there should be
12 Exhibit 1036. Can you let me know if you recognize that
13 as a declaration that you submitted in connection with the
14 reply in PGR2023-0039?

15 (Exhibit 1036 was marked for identification by
16 the Certified Shorthand Reporter and is attached
17 hereto.)

18 THE WITNESS: I do.

19 BY MR. ZOLOTOREV:

20 Q And this is a document that you prepared;
21 correct?

22 A Correct.

23 Q And this document states your opinions that
24 you've submitted in support of Petitioner's reply;
25 correct?

1 A Correct.

2 Q And the document states all of your opinions;
3 correct?

4 A Yes.

5 Q If I could direct your attention to page 9 of
6 Exhibit 1036, there is a section, Section B there, title
7 of "Commercial Success." This section contains your
8 opinions concerning the commercial success factor of the
9 second reconsiderations of validity analysis; correct?

10 A Yes.

11 Q And did you -- when evaluating -- in evaluating
12 the second reconsiderations of validity, did you apply a
13 legal standard?

14 A Well, I'm not a lawyer. So I don't think I can
15 be asked to -- to do that.

16 Q Okay. So how did you know how to measure
17 commercial success if you did not apply any kind of a
18 legal understanding?

19 A Well, I don't think I measured commercial success
20 here. Commercial success is beyond what I can measure. I
21 didn't get any information from Upstream as to whether
22 they were commercially successful. There's one aspect
23 that they said how many units they sold. And those units
24 were -- you know, were they profitable? Did they make
25 money? There's a lot of different aspects to commercial

1 success. So I'm not really in a position to say whether
2 they were commercially successful.

3 Q Okay. And you're also not in a position to say
4 they were not commercially successful; correct?

5 A I don't have the information to make that
6 judgment.

7 Q Okay. And you were not provided with any kind of
8 set of legal principles to follow in your -- forming your
9 opinions regarding secondary considerations; correct?

10 MR. ZHU: Objection. Calls for privileged
11 information.

12 THE WITNESS: Can you repeat the question?

13 MR. ZOLOTOREV: Yeah.

14 BY MR. ZOLOTOREV:

15 Q In forming your opinions with regard to secondary
16 considerations of validity including commercial success,
17 you did not follow any set of legal principles or legal
18 guidance for how to measure these factors; correct?

19 MR. ZHU: (Indiscernible.)

20 THE WITNESS: Well, I'm not a lawyer, so I would be
21 unfamiliar with it.

22 THE STENOGRAPHER: I didn't -- what was the objection?

23 MR. ZHU: Same objection. Calls for privileged
24 information.

25 ///

1 BY MR. ZOLOTOREV:

2 Q In paragraph 24 on page 9, you state, in the
3 first sentence, "Contrary to what Upstream alleges,
4 Upstream's products do not embody claims 1 and 24 for
5 various reasons." Do you see that?

6 A Yes.

7 Q And then the first reason you bring up is,
8 "First, a significant amount of Upstream's product [sic]
9 are single-device deployments (i.e., a system containing
10 only a single Hash Generator or Hash Hut) that do not meet
11 claim 1 according to Upstream."

12 Do you see that?

13 A Yes.

14 Q With regard to the single-device deployments that
15 you mention here, you are relying on deposition testimony
16 by Upstream witnesses; correct?

17 A Correct.

18 Q Aside from the deposition testimony you recite,
19 you do not provide any other opinions or analysis as to
20 whether single-device deployments do or do not meet
21 claim 1; correct?

22 A There's -- a Hash Generator is, by default, a
23 single-device deployment. There's only one generator, one
24 Hash Hut combined. But there is no other evidence other
25 than the data that I was given, the commercial sheets that

1 I read, Upstream's own marketing material.

2 Q Aside from the citation to Upstream deposition
3 testimony that you provide in paragraph 24, you did not
4 form an independent opinion as to whether a Hash Hut or a
5 Hash Generator does or does not meet claim 1; correct?

6 A Please repeat the question.

7 Q Yes. Aside from your citation to deposition
8 testimony in paragraph 24, you do not provide any other
9 evidence in paragraph 24 as to whether the Hash Generator
10 or Hash Hut does or does not meet claim 1; correct?

11 A That would be a legal opinion. And I'm not a
12 lawyer.

13 Q Okay. So is the answer to my question that you
14 did not provide any opinions as to whether a Hash
15 Generator or Hash Hut does or does not meet claim 1, aside
16 from your reliance on deposition testimony?

17 A Sorry. You'll have to repeat it one more time.

18 Q Yes. So it's correct to say that aside from your
19 reliance on certain testimony that you cite in
20 paragraph 24, you do not provide any other opinion as to
21 whether a Hash Generator or Hash Hut does or does not meet
22 claim 1; correct?

23 A Well, further down in that paragraph, I say,
24 "Second, an unknown amount of Upstream's products are
25 deployed to utilize power from either the electric grid or

1 commercial sales lines and do not meet claim 1 according
2 to Upstream."

3 Q So setting aside Upstream's products that are
4 deployed to utilize power from either the electrical grid
5 or commercial sales gas lines, you do not have your own
6 opinion as to whether a Hash Generator or Hash Hut
7 connected to flare gas and powered by flare gas does or
8 does not meet claim 1; correct?

9 A Well, they don't only connect to flare gas. They
10 connect to commercial sales lines as well. That's also
11 from testimony -- Upstream testimony. So I did form my
12 opinions.

13 Q Okay. And I'm asking you specifically to focus
14 on hash huts and hash generators connected to flare gas
15 and powered by flared gas. Okay?

16 A Okay.

17 Q Okay. So focusing on those systems. Aside from
18 your citation to certain deposition testimony, you do not
19 provide any other opinion as to whether a Hash Generator
20 or Hash Hut sole connect does or does not meet claim 1;
21 correct?

22 A My opinion is that it does not meet claim 1.

23 Q Okay. And what is the evidence that you provide
24 to support that opinion?

25 A The evidence is the -- is in 24.

1 Q Okay. And that evidence is certain deposition
2 testimony; correct?

3 A Primarily from deposition testimony.

4 Q Is there anything that's -- aside from deposition
5 testimony, you do not provide any evidence regarding
6 whether or not a Hash Generator or Hash Hut does or does
7 not meet claim 1; correct?

8 A I relied on the testimony of the Upstream
9 experts.

10 Q Okay. And so aside from your reliance on the
11 testimony from Upstream's expert specifically cited in
12 paragraph 24, you do not have an opinion as to whether a
13 Hash Generator or Hash Hut does or does not meet claim 1;
14 correct?

15 MR. ZHU: Objection. Asked and answered.

16 THE WITNESS: I already said that I have an opinion
17 that it does in the meet the claims.

18 BY MR. ZOLOTOREV:

19 Q Okay. And the only source for that opinion is
20 the testimony of Upstream's expert that you specifically
21 cite in paragraph 24; correct?

22 A Well, I'm an expert in the Bitcoin mining area.
23 So I use my own expertise and the -- and the testimony
24 from the Upstream experts.

25 Q Okay. And aside from the testimony that you

1 specifically cited, you do not provide any other evidence
2 in paragraph 24 as to whether a Hash Generator or a Hash
3 Hut connected to a source of flare gas does or does not
4 meet claim 1; correct?

5 MR. ZHU: Objection. Vague.

6 THE WITNESS: So, specifically, I provided information
7 in 24. There's nothing else in 24 besides what I've said.
8 I -- I -- if I understand what you're saying.

9 BY MR. ZOLOTOREV:

10 Q And you do not provide an opinion that multi-unit
11 installations with multiple Hash Hut or Hash Generator
12 units connected to a source of flare gas do not practice
13 claims 1 and 24; correct?

14 A I didn't provide that opinion.

15 Q So you do not dispute in your declaration at
16 least multi-unit systems with Hash Hut or Hash Generator
17 units connected to a source of flare gas practice 372
18 patent claims; correct?

19 A Well, there's multiple units connected to
20 commercial sales lines and electric grid. So you're
21 getting very specific with a small subset of their sales
22 numbers.

23 Q Okay. And, sir, I want you to focus specifically
24 on what I asked. I asked you to confirm that you do not
25 dispute that multi-unit systems with multiple Hash Hut or

1 Hash Generator systems connected to a source of flare gas
2 practice 372 patent claims; true?

3 MR. ZHU: Objection. Vague.

4 THE WITNESS: So claim 1 doesn't specifically require
5 flare gas.

6 BY MR. ZOLOTOREV:

7 Q Is that your answer?

8 A Yes.

9 Q Okay. And so I'll pose my question again. In
10 your declaration, you do not dispute that multi-unit
11 systems comprising multiple Hash Hut or Hash Generator
12 products connected to a source of flare gas practice 372
13 patent claims; right?

14 A Those --

15 MR. ZHU: Objection. Vague.

16 THE WITNESS: The claims are broad. They're --
17 they're -- they're -- they cover -- they cover a number of
18 different installations, a number of different
19 configurations. So those claims are very broad. So I
20 don't know that I can answer that question.

21 BY MR. ZOLOTOREV:

22 Q Okay. You cannot point me to any place in your
23 declaration where you dispute that multi-unit systems
24 comprising multiple Hash Hut or hash generators connected
25 to a source of flare gas practice 372 patent claims;

1 correct?

2 A I didn't say they did, and I didn't say they
3 didn't.

4 Q You don't have an opinion, one way or the other;
5 true?

6 A My opinion's already been stated that I don't
7 believe they meet the -- the claims.

8 Q Okay. And those opinions were with regard to --
9 as you state in paragraph 24 -- single-device deployments;
10 correct?

11 A That's the first part of paragraph 24. "Second
12 unknown amount of products were [sic] deployed to utilize
13 power from either electric grid or sales gas lines do not
14 meet claim 1." I didn't say whether those were single or
15 not.

16 Q So in your opinion, claim 1 does not cover
17 products deployed to utilize power from either the
18 electric grid or commercial sales gas lines; correct?

19 A Claim 1 is very broad. So it could cover.

20 Q Okay. So at the top of page 10, you state --
21 still in paragraph 24 -- "Second, an unknown amount of
22 Upstream's products are deployed to utilize power from
23 either the electric grid or commercial sales gas lines and
24 do not meet claim 1 according to Upstream"; right?

25 A Right.

1 Q And so if -- they do not meet claim 1 because
2 they utilize power from either the electric grid or
3 commercial sales gas lines; correct?

4 A That do not meet the claim.

5 Q As you state in the sentence, "They do not meet
6 claim 1" -- Upstream's products because they "are deployed
7 to utilize power from either the electric grid or
8 commercial sales gas lines"; correct?

9 A Correct.

10 Q Now, if we can take a look at Exhibit 2010,
11 Dr. You's declaration.

12 (Exhibit 2010 was marked for identification by
13 the Certified Shorthand Reporter and is attached
14 hereto.)

15 BY MR. ZOLOTOROV:

16 Q Let me know when you get there.

17 A Yeah. I got that.

18 Q Okay. I can direct your attention to
19 paragraph 76. Do you see that?

20 A I'm just trying to find it.

21 Q It's at the -- it's at page 39.

22 Let me know when you get there?

23 A Yeah. I'm -- I'm at 76.

24 Q Okay. In your declaration, you do not dispute
25 what's stated in paragraph 76; correct?

1 A Let me read it.

2 Okay. I've read it.

3 Q Okay. You, in your declaration, do not reference
4 paragraph 76; correct?

5 A I don't reference his -- paragraph 76.

6 Q And in your declaration, you do not dispute what
7 he states -- what Dr. You states in paragraph 76; correct?

8 A Let me check my declaration.

9 Q I'm specifically referencing the commercial
10 success section in the declaration.

11 A Still don't reference 76. But contrary to what
12 Upstream alleges, Upstream's products do not embody
13 claims 1 and 24 for various reasons, and I provided those
14 reasons.

15 Q Okay. And other than the reasons that you
16 provided in paragraph 24, you don't have any other
17 reasons; correct?

18 A In my declaration?

19 Q Yes.

20 A I'm just checking.

21 So you're asking me if I've argued more than once
22 against the claim -- claim 1? That's what you're asking
23 me.

24 Q Well, no. I'm asking you to confirm for me,
25 other than the reasons you state in paragraph 24, you do

1 not provide any other reasons for why Upstream's products
2 do not embody claims 1 and 24; correct?

3 A As I'm sitting here, I don't -- I don't see any.
4 I don't recall any.

5 Q I can direct your attention back to Exhibit 2010.
6 Paragraph 83 at page 43 of Exhibit 2010.

7 A Number 83?

8 Q Yes. Paragraph 83, page 43. Let me know when
9 you get there.

10 A I'm there.

11 Q In your declaration, you do not address Dr. You's
12 opinion that if an ASIC chip meets the claim limitation in
13 1c_iii, then "each S9 or similar miner is the claimed
14 'blockchain mining device' and each ASIC integrated
15 circuit is a mining processor"; correct?

16 A Repeat the question one more time.

17 Q Yes. In your declaration, you do not address
18 Dr. You's opinion that if an ASIC chip discloses
19 element 1c-iii, then "each S9 or similar miner is the
20 claimed 'blockchain mining device' and each ASIC
21 integrated circuit is a 'mining processor'"; correct?

22 A I have to go back to my...

23 So at 62 -- if you want to look at my
24 declaration -- Dr. You actually says that "claim 1 does
25 not require any 'special-purpose mining processors.' As

1 Dr. You admitted, a CPU in a generic personal computer
2 could satisfy claim 1."

3 That's from You's deposition 181.

4 Q Okay. And what relevance, if any, does this have
5 to whether or not your declaration specifically addresses
6 Dr. You's opinions in paragraph 83 of his declaration?

7 A I think it's very relevant. He's saying it's the
8 ASIC chip is the mining processor. And he's also saying
9 that any CPU could be -- a personal computer could satisfy
10 claim 1.

11 Q Okay. So you would agree, then, with his opinion
12 in paragraph 83 that an ASIC -- that if an ASIC chip is
13 the mining processor, then an S9 or a similar miner is the
14 claim blockchain mining device; correct?

15 A Say that again in that same -- same way.

16 Q Yes. You would agree, then, with Dr. You's
17 opinion that if an ASIC chip is the claimed mining
18 processor, then an S9 or a similar miner is the claimed
19 blockchain mining device; correct?

20 MR. ZHU: Objection. Mischaracterization.

21 THE WITNESS: So you're clarifying that if the ASIC
22 chip was the mining processor, then the S9 or the similar
23 miner would be the blockchain mining device. That's what
24 you're saying?

25 ///

1 BY MR. ZOLOTOREV:

2 Q Yes. I'm asking you whether you, as an expert,
3 agree that if an ASIC chip is held to be a claimed mining
4 processor, then you would agree that an S9 or similar
5 miner would be the claimed blockchain mining device?

6 A I would agree if the ASIC chip was the mining
7 processor. If the CPU was the mining processor, then a
8 personal computer would be the blockchain mining device.

9 Q Sir, I'm not asking you about personal computers.
10 Do you see any reference to personal computers in
11 paragraph 83, sir?

12 A Not in paragraph 38. But further in his
13 declaration.

14 Q Okay. I'm asking you specifically about
15 paragraph 83 now. Do you understand that?

16 A Yes.

17 Q Specifically with regard to paragraph 83, you
18 would agree that if the ASIC chip is held to be the mining
19 processor, then an S9 or similar miner would be the
20 claimed blockchain mining device; correct?

21 A If it's narrowed down that, I would agree.

22 Dr. You doesn't narrow it down to that in his
23 overall declaration.

24 Q If we can go to paragraph 77 in Exhibit 2010.
25 That's at page 40. Let me know when you're looking at

1 paragraph 77 on...

2 A Yep.

3 Q The first sentence states, "Petitioner has
4 identified a single CryptoKube or Polivka system with
5 multiple ASIC mining servers as satisfying the 'blockchain
6 mining devices each having a mining processor'
7 limitation."

8 Do you see that?

9 A Yep.

10 Q That's a correct characterization; right?

11 A Yes.

12 Q And then the next sentence states, "Under this
13 view an installation with a single Upstream data system
14 with plural mining servers likewise meets the limitation."

15 Do you see that?

16 A That's his opinion.

17 Q Okay. And according --

18 A That's --

19 THE STENOGRAPHER: That's what?

20 THE WITNESS: That's -- that's Dr. You's opinion.

21 BY MR. ZOLOTOREV:

22 Q Okay. And in your declaration, you do not
23 dispute this opinion; true?

24 A I didn't dispute number 77 in my declaration.

25 Q Okay. I'm going to go back your declaration.

1 Take you to a different paragraph.

2 Do you see -- well, I'm sorry. I should have
3 given you a paragraph number. If you can please go to
4 paragraph 26 of your declaration.

5 A Yeah.

6 Q Do you see the very last citation of the last
7 sentence of paragraph 26? There's a parenthetical that
8 says "cite Bitcoin price chart."

9 Do you see that?

10 A I see that.

11 Q What is that meant to be?

12 A I believe we didn't put the price chart in.
13 Price chart's not in my declaration.

14 Q Okay. And other than this price chart that's not
15 in your declaration, do you have an independent
16 understanding as to whether or not there was, in fact, a
17 Bitcoin price surge in 2021?

18 A I know the price has gone dramatically higher
19 over that time. I don't know specifically when in 2021.
20 I'd have to reference the price chart.

21 Q Okay. And do you know, independently of the
22 price chart that's not in your declaration, whether that
23 price surge was, in fact, in 2021 or perhaps in 2022
24 or even later?

25 A I'm going to have to look at a price chart. I'm

1 not going to answer that question without looking at the
2 information.

3 Q Okay. So you do not have an independent
4 understanding of whether there was was, in fact, a Bitcoin
5 price surge in 2021; correct?

6 A What I said was I'm not going to answer the
7 question without looking at the price chart.

8 Q And so without looking at the price chart, you
9 cannot tell me as to whether or not there, in fact, was a
10 Bitcoin price surge in 2021; correct?

11 A I can't tell you what the price surge was without
12 look at the chart.

13 Q Okay. And did counsel provide you with this
14 Bitcoin price chart?

15 MR. ZHU: Objection. Calling for privileged
16 information.

17 THE WITNESS: That price chart's public information.
18 BY MR. ZOLOTOREV:

19 Q Did you consider this price chart when you were
20 drafting paragraph 26?

21 A I would have considered the price. Yes. I --
22 that was in February. I don't remember when the price
23 surge was.

24 Q You were saying you drafted paragraph 26 in
25 February of 2024?

1 A It was February 7th -- oh, no. August. Sorry.
2 No. No. I was looking at the issue date. Sorry.
3 I don't recall which date is the date that it was
4 created.
5 Q What is the "it"?
6 A Sorry?
7 Q What is the "it" that you are referring to?
8 A The date of my declaration.
9 Q The price chart --
10 A Oh, July 20, 2023. So that was more than a year
11 ago.
12 Q Okay. Your testimony is you prepared your
13 declaration, that's Exhibit 1036, over a year ago;
14 correct?
15 A That's the date on it. Correct.
16 Q The price chart that you say you considered, did
17 you find it or did somebody find it for you?
18 MR. ZHU: Objection. Calling for privileged
19 information.
20 THE STENOGRAPHER: I'm sorry. I think you cut out at
21 the very end of your question, sir. Can you state that
22 again?
23 MR. ZOLOTOREV: Was that the objection or the
24 question?
25 THE STENOGRAPHER: The question.

1 BY MR. ZOLOTOREV:

2 Q The -- here's the question again. The price
3 chart that you say you considered in drafting
4 paragraph 26, did you find it or did somebody provide it
5 to you?

6 A The price chart's public information. And it is
7 my area of expertise, so I would have found it.

8 Q Sir, I'm not asking you about would or could or
9 should. My question is very simple. The price chart that
10 you considered in preparing paragraph 26, did you, in
11 fact, find it or was it provided to you?

12 MR. ZHU: Same objection. Calling for privileged
13 information.

14 THE WITNESS: I would have found it.

15 BY MR. ZOLOTOREV:

16 Q When you found it, did you undertake any effort
17 to make sure that the price chart you found was accurate?

18 MR. ZHU: Objection. Vague.

19 THE WITNESS: Explain -- explain that.

20 BY MR. ZOLOTOREV:

21 Q Well, for example, when you found this price
22 chart, did you compare it with other publicly available
23 information to make sure that the data in that price chart
24 was accurate?

25 A I would not have taken two different price charts

1 from two different sources and compared them. No.

2 THE WITNESS: It's -- we're an hour in. Is it
3 possible to take a break?

4 MR. ZOLOTOREV: Of course. Yes. We can take ten
5 minutes or whatever you need.

6 THE WITNESS: Okay.

7 THE STENOGRAPHER: Off --

8 MR. ZOLOTOREV: Ten minutes.

9 THE WITNESS: Ten minutes is great.

10 THE STENOGRAPHER: Off the record at 10:59 a.m.

11 (Off the record.)

12 THE STENOGRAPHER: Back on the record at 11:12 a.m.

13 BY MR. ZOLOTOREV:

14 Q Mr. Kasdorf, during the break, did you have any
15 communications with Counsel for Petitioner?

16 A I did not.

17 Q If I can direct your attention to Exhibit 2016.

18 (Exhibit 2016 was marked for identification by
19 the Certified Shorthand Reporter and is attached
20 hereto.)

21 BY MR. ZOLOTOREV:

22 Q Let me know when you have it open in front of
23 you.

24 A I got it.

25 Q And you understand that Exhibit 2016 was cited by

1 Dr. You in his declaration; correct?

2 A Yes.

3 Q And you considered Exhibit 2016; correct?

4 A Yes.

5 Q In your declaration, Exhibit 1036, you do not
6 address Exhibit 2016; correct?

7 A Correct.

8 Q If I can have you go to the second page of
9 Exhibit 2016. The last paragraph on that page that starts
10 with "for years." Let me know when you get there.

11 A Yep.

12 Q Okay. The first sentence of that paragraph
13 states, "For years, oil and gas companies have struggled
14 with the problem of what to do when they accidentally hit
15 a natural gas formation while drilling for oil."

16 Do you see that?

17 A I see that.

18 Q Do you disagree with that statement?

19 A I don't know if I agree with that statement.

20 Only gas companies have come up with things to do with
21 that natural gas. In fact, we cited -- we cited MAGS,
22 Belody, Dickerson all using natural gas from -- as
23 accessed from drilling oil. Those are all prior to 372.

24 Q Okay. So you disagree with the statement that
25 "For years, oil and gas companies have struggled with the

1 problem of what to do when they accidentally hit a natural
2 gas formation while drilling for oil"; correct?

3 A I -- I think I do disagree with that. Because
4 they -- they either use it or they flare it. They have
5 to -- they have to do something with it.

6 Q Okay. And then --

7 A I'm not an oil and gas expert. That's my
8 layman's opinion.

9 Q So then the next sentence states, "Whereas oil
10 can easily be trucked out to a remote destination, gas
11 delivery requires a pipeline." Do you disagree with that
12 statement?

13 A Again, not an oil and gas expert. But as a
14 layperson, if you want to deliver gas somewhere, you
15 either put it on a truck or you put it on a pipeline.

16 Q Okay.

17 A Or a train.

18 Q And then the next sentence states, "If a drilling
19 site is right next door to a pipeline, they chuck the gas
20 in and take whatever cash the buyer on the other end is
21 willing to pay that day."

22 Do you see that?

23 A I see that.

24 Q Do you disagree with that statement?

25 A I'm not familiar with whether they pay on the day

1 or not. If they're near a pipeline, I can see the
2 motivation to put their excess gas into a pipeline and
3 sell it.

4 Q Okay. And the next sentence states, "But if it's
5 20 miles from a pipeline, drillers often burn it off or
6 flare it."

7 Do you see that?

8 A I see that.

9 Q Do you --

10 MR. ZHU: Objection.

11 BY MR. ZOLOTOREV:

12 Q -- disagree with the statement?

13 THE STENOGRAPHER: I'm sorry. What was the objection?

14 MR. ZHU: Objection. Scope.

15 MR. ZOLOTOREV: And what was the question?

16 BY MR. ZOLOTOREV:

17 Q The question was: "But if it's 20 miles from a
18 pipeline, drillers often burn it off or flare it." Do you
19 see that statement?

20 A I see that statement.

21 Q Do you disagree with the statement?

22 A I can't say I know what the mileage away from a
23 pipeline would make -- make it effective or not. But --
24 so I -- I don't know if I can agree with it. I don't know
25 if 20 miles is the right number or 10 miles is the right

1 number or 50 miles is the right number.

2 There's -- for my layperson's opinion -- again,
3 not an oil and gas expert -- there's going to be a
4 distance away from the pipeline that makes economic sense.
5 And I don't know what that distance is.

6 Q Okay. So you do agree, though, that at some
7 distance from a pipeline, drillers often burn the gas off
8 or flare it; correct?

9 A That's my understanding.

10 Q Okay. And the next sentence states "that is why
11 you will typically see flames rising from oil fields."

12 Do you see that?

13 A Yeah.

14 Q And do you disagree with that statement?

15 A I don't disagree.

16 MR. ZHU: Objection. Scope.

17 BY MR. ZOLOTOREV:

18 Q Okay. So you don't disagree that in the oil and
19 gas industry, there's a problem with gas flaring; correct?

20 MR. ZHU: Objection. Scope.

21 THE WITNESS: Define the pro -- define the problem.

22 BY MR. ZOLOTOREV:

23 Q The problem is defined in the first sentence.

24 You -- you don't disagree that "for years," quote, "oil
25 and gas companies have struggled with the problem of what

1 to do when they accidentally hit a natural gas formation
2 while drilling for oil"; right?

3 MR. ZHU: Objection. Mischaracterization.

4 THE WITNESS: I disagreed with that statement. On a
5 layperson's perspective, they seem to have found a
6 solution. They flare it, which is in the last
7 statement -- last sentence, or they use it to power their
8 oil and gas operation using a generator, like MAGS,
9 Belody, Dickerson.

10 BY MR. ZOLOTOREV:

11 Q So this -- this statement that "for years, oil
12 and gas companies have struggled with the problem on what
13 to do when they accidentally hit a natural gas formation
14 while drilling for oil" is, from your perspective,
15 incorrect; right?

16 A From a -- my layperson's perspective -- I'm not
17 an oil and gas expert. But I have in prep -- preparing
18 for this, I've found a number of different responses to
19 accidentally hitting a natural gas formation for drilling
20 for oil -- while drilling for oil. That's why I'm saying
21 define "problem." What is the problem? Because they
22 have -- they have to do something with it, and they are
23 doing something with it.

24 Q And so moving on to the next page, page 3, the
25 first full paragraph say -- states, "Giga places a

1 shipping container full of thousands of Bitcoin miners on
2 an oil well then diverts the natural gas into generators
3 which convert the gas into electricity that is then used
4 to power the miners. The process reduces CO2 equivalent
5 emissions by about 63 percent compared to continued
6 flaring."

7 Do you see that?

8 A I do see that.

9 Q And that's according to research from
10 Denver-based Crusoe Energy Systems; correct?

11 A That's what it says.

12 Q And so you would agree that mining Bitcoin with
13 energy provided from flare and gas reduces CO2 equivalent
14 emissions by about 63 percent compared to continued
15 flaring; right?

16 MR. ZHU: Objection. Scope.

17 THE WITNESS: I haven't looked at the research.
18 Assuming the research is correct, the cite -- citing
19 63 percent is correct, then I would assume that it would
20 reduce approximately 63 percent.

21 BY MR. ZOLOTOREV:

22 Q And then in the next paragraph, there's a
23 statement from Mr. Whitehead -- that's at least one of the
24 people being interviewed -- that "It is a new way to not
25 only lower emissions but to monetize gas"; right?

1 A I see that statement.

2 Q Okay. And you would agree that this is a
3 description of using flared gas to power Bitcoin mining;
4 correct?

5 MR. ZHU: Objection. Scope.

6 THE WITNESS: Please repeat.

7 BY MR. ZOLOTOREV:

8 Q Yes. You would agree that the statement "It is a
9 new way to not only lower emissions but monetize gas" is a
10 description of using flared gas to power Bitcoin miners;
11 correct?

12 A It's multiple questions. It's not a new way to
13 lower emissions. Because the emissions -- the emissions
14 are lowered because they're burning it in a generator.
15 There was generators being used to power Bitcoin mining.
16 So that's not a -- I mean, sorry. Generators used to
17 power oil and gas operations and data centers in the case
18 of Belody. So it's not new. I disagree that it's a new
19 way.

20 Q You disagree with the statement that -- you
21 disagree with the statement in Exhibit 2016 that "powering
22 Bitcoin miners with flared gas is a new way to not only
23 lower emissions but to monetize gas"; correct?

24 MR. ZHU: Objection. Scope.

25 THE WITNESS: So what I'm saying, in my opinion, is

1 it's not a new way to lower emissions because lots of
2 people have been using generators. Using Bitcoin miners
3 to monetize gas. I don't believe that was new either.
4 There was -- there was lots of companies -- a number of
5 companies that talked to me about doing that very thing
6 prior to 2017 as early as 2014.

7 Belody had a data center attached to flare gas.
8 While I didn't have any evidence that they used Bitcoin
9 miners in their -- it's a data center. Anyone could have
10 put Bitcoin miners into that data center. So I don't
11 believe it's a new way.

12 These data centers existed prior to 2017 attached
13 to familiar gas.

14 MR. ZOLOTOREV: Okay. Mr. Kasdorf, at this point, I
15 have no further questions for you. I will pass the
16 witness and reserve time for recross.

17 MR. ZHU: There's no redirect.

18 MR. ZOLOTOREV: Okay. Then I think we can conclude.

19 THE STENOGRAPHER: I have a note saying that there was
20 a same-day rough and expedite request.

21 MR. ZOLOTOREV: Yes. That's us.

22 THE STENOGRAPHER: When would you -- would you -- do
23 you want the rough by the end of today or -- since it's
24 Friday, do you want it Monday? The rough?

25 MR. ZOLOTOREV: Monday would be fine. The bigger

1 question is when can you get the final to us?

2 THE STENOGRAPHER: I can probably get it to you Monday
3 also.

4 MR. ZOLOTOREV: So I'd rather, frankly, get the final
5 if you can get it to us, like, maybe Tuesday or whatever,
6 and have you work on that rather than try to, you know,
7 just bust out a rough.

8 THE STENOGRAPHER: Okay. I mean, it's super short, so
9 I can definitely edit it and have it to you by Monday as a
10 final. That's not a problem.

11 MR. ZOLOTOREV: Okay. That's fine then. Okay.
12 That -- that's best.

13 THE STENOGRAPHER: So no rough, just the expedite to
14 Monday.

15 BY MR. ZOLOTOREV: Just expedite the final. Yes.

16 THE STENOGRAPHER: Okay. Off the record at -- oh
17 wait. Mr. Zhu, are you ordering a copy?

18 MR. ZHU: Yeah. Can I get a copy too?

19 THE STENOGRAPHER: All right. Off the record at
20 11:27 a.m.

21 (Time noted 11:27 a.m.)

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