Claim No: IL-2021-000019

IN THE HIGH COURT OF JUSTICE

BUSINESS AND PROPERTY COURTS OF ENGLAND & WALES

INTELLECTUAL PROPERTY LIST (ChD)

BETWEEN:

CRYPTO OPEN PATENT ALLIANCE Claimant

-and-

DR CRAIG STEVEN WRIGHT

Defendant

SIXTH EXPERT REPORT OF MR PATRICK MADDEN



INTRODUCTION AND OVERVIEW OF DOCUMENTS	3
TECHNICAL CONTENT OF CONFLICTING EMAILS	7
Timestamps of image attachments	7
Image attachment	7
Timestamps encoded in the encoding of the attachments	7
Relating timestamps to context	8
Transmission headers	8
Ontier Version	8
18 Feb 2024 Received Version	9
Ramona Version	
Conflict between ESTMPSA Received Timestamps	12
The email to Shoosmiths	13
SUMMARY OF CONCLUSIONS ON EMAILS	13
CONSIDERING POTENTIAL EXPLANATION	15
POTENTIAL FURTHER INFORMATION SOURCES	

INTRODUCTION AND OVERVIEW OF DOCUMENTS

- 1. This is my Sixth Report in these proceedings. I have approached it in the same way as my previous reports and with the same duties in mind.
- 2. After I attended the Court for cross-examination on 26 February 2024, I was present in Court when a series of emails were read to the Court by Dr Wright's legal team. On the afternoon of 26 February 2024, I was provided with a ZIP file as an attachment to an email. I understand that the zip file was provided by Shoosmiths to Bird & Bird, and that the content relates to the exchange of emails that were discussed in Court that afternoon. The Zip file contained three Outlook MSG files, and two PDF documents. There was also one email file attached to one of the Outlook MSG files. I have been instructed to consider the content of the email messages and report on my observations.
- 3. The documents I have been instructed to analyse are as follows. Since there are multiple versions of the same email (which conflict with one another), Bird & Bird has added bundle references and suggested reference names in the table below.

Description	Dated on its face	Bundle	Reference
1. Email from craig@rcjbr.org simon.cohen@ontier.co.uk content: "An old Information defense file about the IP"	with 15:56 on	{X/59/1} Tab 5 of 26 Feb 2024 bundle	"The Ontier Version" (as described by Dr Wright's counsel), received by Ontier on 2 December 2019
2. Email from craig@tuliptrading.net to simon.cohen@ontier.co.uk content "It links data we had in MYOB…"		{X/58/1} Tab 4 of 26 Feb 2024 bundle	"The 18 Feb 2024 Received Version" (Described by Ontier as the version received on their systems on Sunday 18 February 2024.)
3. Email from craig@tuliptrading.net to simon.cohen@ontier.co.uk v content "It links data we have in MYOB…"		{X/56/2}. Second-third page of tab 2 of 26 Feb 2024 bundle	"The Ramona Version" (as described by Dr Wright's counsel), forwarded to Shoosmiths as an attachment to #4 below.
4. Email from Ramona@rcjbr to Shoosmiths with content "Please see communication between Simon Cohen from Ontier in respect of 2019 MYOB login. Ontier had sa that they only received"	12:56	{X/56/1}. First page, tab 2 of 26 Feb 2024 bundle	The Email to Shoosmiths from Ms Watts, which had #3 above (the Ramona Version) as an attachment

- 4. Of those documents, Emails 1, 2, and 3 above (the **Ontier Version**, the **18 Feb 2024 Received Version**, and the **Ramona Version**) all start with the same thread, as follows:
 - a. At the bottom of all three, the thread starts on 2 December 2019 at 12:38, an email is sent from craig@rcjbr.org to Simon Cohen with just the word "Attached" above a signature as follows:

From: craig@rcjbr.org <mailto:craig@rcjbr.org> <craig@rcjbr.org <mailto:craig@rcjbr.org=""> > Sent: 02 December 2019 12:38 To: Simon Cohen Subject: [EXT] Old ID Email</craig@rcjbr.org></mailto:craig@rcjbr.org>		
Attached		
Dr. Craig S Wright MSc LLM Chief Scientist nChain c.wright@nChain.com <mailto:c.wright@nchain.com></mailto:c.wright@nchain.com>		
craig@rcjbr.org <mailto:craig@rcjbr.org></mailto:craig@rcjbr.org>		

b. Then, all three show that shortly afterwards at 1:45PM, Simon Cohen (Simon.Cohen@scaontier.com) replies asking what this relates to:

From: Simon Cohen <Simon.Cohen@scaontier.com>
Sent: Monday, December 2, 2019 1:45 PM
To: craig@rcjbr.org
Subject: RE: [EXT] Old ID Email

Thanks Craig. What does this relate to?
Simon
Simon Cohen
Senior Associate

SCA ONTIER LLP

This e-mail (including any attachments) is intended only for the recipient(s) named above and should not be read, copied or otherwise used by any other person. It may contain confidential or privileged information. If

recipient(s) named above and should not be read, copied or otherwise used by any other person. It may contain confidential or privileged information. If you are not a named recipient, please contact the sender and delete the e-mail from your system. SCA ONTIER LLP is a Limited Liability Partnership registered in England Registered No. OC327289. A list of the members is open to inspection at the registered office. Authorised and Regulated by the Solicitors Regulation Authority 84D6476F8B4BBCDA

c. However, the emails then diverge and show different content in the top (most recent) message shown in each one. In **the Ontier Version**, craig@rcjbr.org replies as follows discussing Information Defense IP:

Re: [EXT] Old ID Email

Craig Wright

To: Simon Cohen (SHARED)
Attachments: ■ image002.png
Sent: 02/12/2019 15:56

An old Information defense file about the IP.

Including Blacknet.

To my lawyer in Au.

I will waive privilege with Michael.

d. In the **18 Feb 2024 Received Version**, the email is sent from craig@tuliptrading.com and the content discusses MYOB:

[EXT] RE: [EXT] Old ID Email

craig@tuliptrading.net

To: Simon Cohen (SHARED)
Attachments: ■ image001.png
Sent: 18/02/2024 11:06

It links data we have in MYOB. When you log in you will understand - it is the WII and TTL accounts from 9/11 AP have already accessed this. Though- I do not like that they need admin - I disagree strongly that admin is ever needed in forensic captures and think this is a problem.

I sent a login to Alix Partners that they have ace[ted, so now I have added

Note - I do not have a direct login, and your user login will be from MYOB live directly - not me.

Regards, Craig

e. The top of the **Ramona Version** is identical to the **18 Feb 2024 Received Version** in its main content:

RE: [EXT] Old ID Email

craig@tuliptrading.net To: 'Simon Cohen' Attachments: ■ image001.png

It links data we have in MYOB. When you log in you will understand - it is the WII and TTL accounts from 9/11 AP have already accessed this. Though-I do not like that they need admin - I disagree strongly that admin is ever needed in forensic captures and think this is a problem.

I sent a login to Alix Partners that they have ace[ted, so now I have added you.

Note - I do not have a direct login, and your user login will be from MYOB live directly - not me.

Regards, Craig

f. The only face-value differences between the **Ramona Version** and the **18 Feb 2024 Received Version** are small differences in how the subject and recipient information is displayed. These are shown below, and appear to relate to how the 18 Feb 2024 Received Version was handled by Ontier's servers at the point of receipt. Specifically, the server appears to have added an "[EXT]" designation in the subject line, and to display the recipient name with an additional tag "(SHARED)":

[EXT] RE: [EXT] Old ID Email craig@tuliptrading.net

To: Simon Cohen (SHARED)

RE: [EXT] Old ID Email

craig@tuliptrading.net To: 'Simon Cohen'

- 5. Neither of these differences is unusual in my experience:
 - i. The designation "[EXT]" is commonly applied to the subject line of external emails when they are received by businesses, as a security measure to indicate that the email comes from an external sender.
 - ii. The designation "(SHARED)" is commonly applied to email mailboxes of ex-staff members where the mailbox is still managed and monitored by remaining team members (After I made this observation, Bird & Bird informed me that Mr Cohen has left Ontier at some point after 2019).
 - iii. These differences are therefore consistent with the 18 Feb 2024 Received Version being received by Ontier.
 - iv. Neither of these differences have affected my analysis.

6. I have been instructed not to analyse the PDF files, which are printouts of two emails from Ontier to Shoosmiths that were also read out in court on 26 February 2024, and I have read them again for context. My analysis of the technical content of the emails has not been affected by this, but the context they provide is that Ontier identifies a conflict between the two records of an email exchange dated 2 December 2019. This conflict can be observed in the technical content.

TECHNICAL CONTENT OF CONFLICTING EMAILS

7. As can be observed above, the face-value content of the Ramona Version and the 18 Feb 2024 Received Version is almost identical, but the technical content of their headers is very different and is in conflict with one another. The Ontier Version, though differing in content, provides a useful comparator for analysis.

Timestamps of image attachments

Image attachment

8. All three of the **Ontier Version**, the **Ramona Version** and the **18 Feb 2024 Received Version** contain the following attached logo image:



Timestamps encoded in the encoding of the attachments

9. In the **Ontier Version**, the logo image is encoded with the following property:

image002.png@01D5A916.9B38C020

10. The **Ramona Version** and the **18 Feb 2024 Received Version**, a similar property is also encoded, shown below next to the **Ontier Version** for comparison:

Image property for	image001.png@01DA6253.B07AB3D0
Ramona Version	
Image property for 18 Feb	image001.png@01DA6253.B07AB3D0
2024 Received Version	

¹ In these files the encoded property is present in the PR_ATTACH_CONTENT_ID_W metadata fields.

Image property for Ontier	image002.png@01D5A916.9B38C020
Version	

- 11. This includes an embedded timestamp relating to the time that the image was attached to the email, which can be seen as the digits following the @ symbol in each of the properties above.
- 12. The decoded timestamps are shown in the following table, in the final column:

Ramona Version	image001.png@01DA6253.B07AB3D0	Sun 18 February 2024 10:17:34.349 UTC
18 Feb 2024 Received Version	image001.png@01DA6253.B07AB3D0	Sun 18 February 2024 10:17:34.349 UTC
Ontier Version	image002.png@01D5A916.9B38C020	Mon 2 December 2019 13:44:23.585 UTC

Relating timestamps to context

- 13. Comparing these to the dates on the face of the emails:
 - a. The timestamps for the **Ramona Version** and the **18 Feb 2024 Received Version** are identical, and both correspond to 18 February 2024 at 10:17, which is not contemporaneous with the December 2019 date on the face of those emails. That is irregular. It is however contemporaneous to the date that the 18 Feb 2024 Received Version was received by Ontier (as described by Ontier).
 - The presence of this timestamp embedded in both the sent item produced on behalf of Dr Wright, and the received item produced by Ontier is consistent with the timestamp being applied during the authorship of the message and retained through transmission.
 - b. The timestamp for the **Ontier Version** is contemporaneous to the date on the face of the email. It is not irregular and is consistent with a normal email editing process.

Transmission headers

14. I next analysed the Transmission headers of the emails themselves.

Ontier Version

15. I found no irregularities within the **Ontier Version**. The structure and content of this email are consistent with it being sent using the Google Gmail webmail interface (via a browser), and the Transmission header for this message includes date and timestamps contemporaneous to its authorship on 2 December 2019 at 15:56.

16. For completeness, the entire header content of this document is set out below, with various timestamps highlighted for ease of reference. All of these timestamps are contemporaneous to the date on the face of the email (and the date of the nChain logo Image property discussed above) and are consistent with normal sending and delivery of an email message.

```
Received: from SCA-EX1LON.SCA.local (2001:8b0:c97:3:999d:6bff:2075:c2bc) by
 SCA-EX1LON.SCA.local (2001:8b0:c97:3:999d:6bff:2075:c2bc) with Microsoft SMTP
 Server (version=TLS1_2, cipher=TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384_P256) id
 15.1.1847.3 via Mailbox Transport; Mon, 2 Dec 2019 15:56:38 +0000
Received: from SCA-EX1LON.SCA.local (2001:8b0:c97:3:999d:6bff:2075:c2bc) by
SCA-EX1LON.SCA.local (2001:8b0:c97:3:999d:6bff:2075:c2bc) with Microsoft SMTP
Server (version=TLS1_2, cipher=TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384_P256) id
15.1.1847.3; Mon, 2 Dec 2019 15:56:38 +0000
Received: from mail.scaontier.com (172.22.0.242) by SCA-EX1LON.SCA.local
 (172.22.0.242) with Microsoft SMTP Server (version=TLS1 2,
cipher=TLS ECDHE RSA WITH AES 256 CBC SHA384 P256) id 1\overline{5}.1.1847.3 via
Frontend Transport; Mon, 2 Dec 2019 15:56:38 +0000
Received: from mail-qt1-f180.google.com ([209.85.160.180])
      by mail.scaontier.com
       over TLS secured channel (TLSv1.3:TLS AES 256 GCM SHA384:256)
      with XWall v3.55e;
      Mon, 2 Dec 2019 15:56:37 -0000
Received: by mail-qt1-f180.google.com with SMTP id n4so195738qte.2
        for <Simon.Cohen@scaontier.com>; Mon, 02 Dec 2019 07:56:37 -0800 (PST)
From: Craig Wright <craig@rcjbr.org>
To: "Simon Cohen (SHARED)" <Simon.Cohen@ontier.co.uk>
Subject: Re: [EXT] Old ID Email
Thread-Topic: [EXT] Old ID Email
Thread-Index: AdWpDQ7yO0v0IjQTQcCFcCOqyFB4+QACYwiQAASbYAA=
Date: Mon, 2 Dec 2019 15:56:18 +0000 Message-ID: <CAN6ho5Khgd5hj8MBgP2CJdzwvWAwf-
jhUUnT4qCaJoKkuhQm Q@mail.qmail.com>
References: <081e01d5a90d$4f9cc200$eed64600$@rcjbr.org>
<fdea6d9001344b908c8e83882fd6abe1@scaontier.com>
In-Reply-To: <fdea6d9001344b908c8e83882fd6abe1@scaontier.com>
X-MS-Exchange-Organization-AuthSource: SCA-EX1LON.SCA.local
X-MS-Has-Attach: yes
X-MS-Exchange-Organization-Network-Message-Id: abe9b3be-6b00-4d82-9289-
08d77740373d
X-MS-TNEF-Correlator:
received-spf: none (domain of craig@rcjbr.org does not designate permitted
sender hosts)
X-Message-Flag: Follow up
MIME-Version: 1.0
Content-Language: en-GB
Content-Type: multipart/mixed;
      boundary=" 004 CAN6ho5Khqd5hj8MBqP2CJdzwvWAwfjhUUnT4qCaJoKkuhQmQmailqm
```

17. I note that the header contains an SPF indication that the sending domain does not designate permitted sender hosts. This is known as a "soft fail" and does not indicate any irregularity, as it can often be caused by incorrectly configured SPF information at the sender's servers.

18. This message contained some conflicting information between the date on the face of the email, and the date it was sent. The entire Transmission header is as follows, with timestamps highlighted:

```
Received: from SCA-EX1LON.SCA.local (172.22.0.242) by SCA-EX1LON.SCA.local
 (172.22.0.242) with Microsoft SMTP Server (version=TLS1 2,
 cipher=TLS ECDHE RSA WITH AES 256 CBC SHA384 P521) id 1\overline{5}.1.2176.14 via
Mailbox Transport; Sun, 18 Feb 2024 11:06:11 +0000
Received: from SCA-EX1LON.SCA.local (172.22.0.242) by SCA-EX1LON.SCA.local
 (172.22.0.242) with Microsoft SMTP Server (version=TLS1 2,
 cipher=TLS ECDHE RSA WITH AES 256 CBC SHA384 P521) id 15.1.2176.14; Sun, 18
Feb 2024 11:06:10 +0000
Received: from eu-smtp-inbound-delivery-1.mimecast.com (195.130.217.221) by
SCA-EX1LON.SCA.local (172.22.0.242) with Microsoft SMTP Server id
15.1.2176.14 via Frontend Transport; Sun, 18 Feb 2024 11:06:10 +0000
Received: from mail-wm1-f42.google.com (mail-wm1-f42.google.com
 [209.85.128.42]) by relay.mimecast.com with ESMTP with STARTTLS
 (version=TLSv1.3, cipher=TLS AES 256 GCM SHA384) id
uk-mtapsc-6-LzZ9BXRIO22yGof5PHCUYA-1; Sun, 18 Feb 2024 11:06:08 +0000
Received: by mail-wm1-f42.google.com with SMTP id 5b1f17b1804b1-
41263e8b7f8so1286605e9.2
        for <Simon.Cohen@scaontier.com>; Sun, 18 Feb 2024 03:06:08 -0800 (PST)
Received: from RCJBR ([31.111.12.61])
        by smtp.gmail.com with ESMTPSA id oll-
20020adfcf0b00000b0033b4dae972asm7132634wrj.37.2024.02.18.03.06.06
        for <Simon.Cohen@scaontier.com>
        (version=TLS1_2 cipher=ECDHE-ECDSA-AES128-GCM-SHA256 bits=128/128);
Sun, 18 Feb 2024 03:06:06 -0800 (PST)
From: "craig@tuliptrading.net" <craig@tuliptrading.net>
To: "Simon Cohen (SHARED)" <Simon.Cohen@ontier.co.uk>
Subject: [EXT] RE: [EXT] Old ID Email
Thread-Topic: [EXT] RE: [EXT] Old ID Email
Thread-Index: AdWpDQ7yO0v0IjQTQcCFcCOqyFB4+QACYwiQAAJYnQA=
Date: Mon, 2 Dec 2019 14:51:34
Message-ID: <6dd901d5a91f$fe267070$fa735150$@tuliptrading.net>
References: <081e01d5a90d$4f9cc200$eed64600$@rcjbr.org>
<fdea6d9001344b908c8e83882fd6abe1@scaontier.com>
In-Reply-To: <fdea6d9001344b908c8e83882fd6abe1@scaontier.com>
X-MS-Exchange-Organization-AuthSource: SCA-EX1LON.SCA.local
X-MS-Has-Attach: yes
X-MS-Exchange-Organization-Network-Message-Id: d067a2ac-cab7-450c-9377-
08dc30719d42
X-MS-Exchange-Organization-SCL: -1
X-MS-TNEF-Correlator:
x-mailer: Microsoft Outlook 16.0
x-mc-unique: LzZ9BXRIO22yGof5PHCUYA-1
MIME-Version: 1.0
Content-Language: en-US
Content-Type: multipart/mixed;
      boundary="_002_6dd9<mark>01d5a91ffe267070</mark>fa735150tuliptradingnet_"
```

- 19. The structure of this message is not consistent with the use of Google Gmail webmail, and MS Outlook version 16 is recorded as the software used to create it.
- 20. I observe that there are two conflicting sets of timestamps:

- a. Up to the point that the email was sent, the timestamps recorded in the header (highlighted green above) date to 2 Dec 2019. These green highlighted timestamps relate to times that were set according to the local clock on the computer used to author the email.
- b. From the point that the email is sent onwards, it records a different set of timestamps:
 - i. The first server hop indicates that the message was received by the server when the clock of the server was set to 18 February 2024 at 03:06:06 -0800 (PST). PST is the time zone used in relation to Google's mail servers, and corresponds to 18 February 2024 at 11:06:06 +0000 (UTC).
 - ii. The next hops show that over the few seconds from 11:06:06 to 11:06:11 the email was transferred through six hops, first to Google's servers, then to a Mimecast server, then to Ontier's servers. These server hop timestamps all date to 18 February 2024 and are consistent with normal sending of a message on 18 February 2024.
 - iii. These timestamps are highlighted yellow (and in one case blue, which I discuss more below).
- 21. The header of the **18 Feb 2024 Received Version** is consistent with an email being composed and sent on 18 Feb 2024, using a computer with the local clock backdated to 2 December 2019.

Ramona Version

- 22. The **Ramona Version** of the email is very similar to the **18 Feb 2024 Received Version** but with important differences.
- 23. The message contains a header that is typical of an email retrieved as a sent item. Thus, this is not a complete account of the transmission of the message, but just the initial sending of the message from the computer used to create it, to Google's Gmail servers. The header is below with timestamps highlighted:

```
Return-Path: <craig@tuliptrading.net>
Received: from RCJBR ([31.111.12.61])
       by smtp.gmail.com with ESMTPSA id oll-
20020adfcf0b000000b0033b4dae972asm7132634wrj.37.2019.12.02.06.49.16
        for <Simon.Cohen@scaontier.com>
From: <craig@tuliptrading.net>
To: 'Simon Cohen' <Simon.Cohen@scaontier.com>
References: <081e01d5a90d$4f9cc200$eed64600$@rcjbr.org>
<fdea6d9001344b908c8e83882fd6abe1@scaontier.com>
In-Reply-To: <fdea6d9001344b908c8e83882fd6abe1@scaontier.com>
Subject: RE: [EXT] Old ID Email
Date: Mon, 2 Dec 2019 14:51:34 +0000
Message-ID: <6dd901d5a91f$fe267070$fa735150$@tuliptrading.net>
X-Mailer: Microsoft Outlook 15.0
Thread-Index: AQBP1BKEEcYN5NtRLB+urbsMoXsyBQJ2/CrxtBFHLxA=
MIME-Version: 1.0
```

```
Content-Type: multipart/related;
boundary="---=_NextPart_000_6DDA_01D5A91F.FE269780"

Content-Language: en-us
```

24. The two encoded timestamps in yellow above indicate a local clock time of the authoring computer of Mon 2 December 2019 14:51:35.031 UTC (with the second timestamp being one thousandth of a second later than the first). These will be set on the local computer according to the clock setting on that computer.

Conflict between ESTMPSA Received Timestamps

- 25. In the **Ramona Version** and the **18 Feb Received Version**, there is a human-readable timestamp highlighted in blue.
- 26. This is contained within the ESTMPSA identifier at the point that the email was received by Google's servers. It would <u>not</u> be set automatically according to the clock setting on the computer, and would typically be set by the server.
- 27. However, comparison between the Ramona Version and the 18 Feb 2024 Received Version shows a conflict between the recorded information, as the timestamps differ:

Ramona Version	by smtp.gmail.com with ESMTPSA id o11-20020adfcf0b000000b0033b4dae972asm7132634wrj.37.2019.12.02.06.49.16
18 Feb 2024 Received Version	by smtp.gmail.com with ESMTPSA id o11-20020adfcf0b000000b0033b4dae972asm7132634wrj.37.2024.02.18.03.06.06

- 28. I consider the **Ramona Version** was not sent on 2 December 2019 and that the timestamp above has been manipulated. This is my opinion for two reasons.
- 29. First, considering the timestamps discussed above in relation to the **18 Feb 2024 Received**Version, those timestamps are consistent across several server hops (Google, Mimecast, and Ontier servers) before the email was received, and these timestamps from different servers corroborate each other and are consistent with actual sending on 18 Feb 2024.
- 30. Second, the structure of the ESTMPSA header is anomalous for 2019. Specifically:
 - a. The manner in which Gmail servers assigned ESTMPSA IDs to messages transmitted has not always been the same.
 - b. Up to February 2022, ESTMPSA IDs assigned by GMail servers were much shorter, at 39 characters in length. I produce below a sample of an actual ESTMPSA id header from 14 February 2022:

- c. Around the end of February 2022 (and before 6 March 2022), GMail's ESTMPSA id changed format, and became 71 or 72 characters in length. Prior to that date, such a long ESTMPSA id would not have been recorded by GMail servers.
- d. The ESTMPSA id in the **Ramona Version** and the **18 Feb 2024 Received Version** are 71 characters in length.
- e. That is anomalous for the date recorded in the **Ramona Version**. It is however consistent with my findings on the **18 Feb 2024 Received Version**.
- f. As well as being aware of this myself (from experience of reviewing many emails sent with GMail), I have also double checked and confirmed it to be the case in the course of preparing my report, both by (i) checking emails within the disclosure dataset generally (sent and received using Google Infrastructure into and from Dr Wright's various email accounts at various times in the past), and (ii) checking emails of my own which were sent or received through Google infrastructure. These are all consistent with the above explanation, that emails sent prior to 2022 all used the shorter-form ESTMPSA ids.
- 31. I therefore consider the timestamps of the **Ramona Version** to have been manipulated.

The email to Shoosmiths

- 32. I am instructed by Bird & Bird that the **Email to Shoosmiths** is not in dispute and I have not conducted an analysis of the Transmission header of this email.
- 33. However, I note that the **email to Shoosmiths** (which attached the **Ramona Version**) is timed to 18 February 2024 at 12:56.
- 34. I observe that this is contemporaneous with the dates of sending of the **18 Feb 2024 Received**Version, which were sent around 1 hour and 48 minutes earlier (at 11.06UTC that day) and contemporaneous with the image property timestamps referred to above (which were around 50 minutes earlier than that).

SUMMARY OF CONCLUSIONS ON EMAILS

- 35. Considering these findings, in my opinion:
 - a. The **Ontier Version** is an authentic email which dates to 2 December 2019, and contains consistent timestamps on its face, on the Transmission header, and encoded in the image attachment properties.

- b. The **18 Feb 2024 Received Version** was authentically sent on 18 February 2024 and received by Ontier on 18 February 2024. However, it was authored with a computer with the local clock backdated to 2 December 2019. The date on the face is not authentic and has been manipulated by backdating the clock; the dates on the servers that transmitted it and encoded in the properties for the image attachment do accurately record that it was created and sent on 18 February 2024.
- c. The **Ramona Version** is not authentic to the purported timestamps. It is a sent item that has been manipulated to change a human-readable timestamp to match the date on its face. Since it is a sent item and does not record any further server hops, there is no transmission information; however the timestamp encoded in the properties for the image attachment indicates that it was created on 18 Feb 2024.
- d. I did not find any information that caused me to doubt the authenticity of the **Email to Shoosmiths** itself, but I did not investigate that email in the same depth as the others based on my instructions and the short time available.
- 36. Considering the various forensic indications, in my view it is possible to reconstruct the following timeline in relation to these emails:

2 December 2019 at 12.38	craig@rcjbr.org sends an email to Simon Cohen at
	Ontier which says "Attached".
2 December 2019 at 13.45	Simon Cohen replies to craig@rcjbr.org asking what the
	email relates to.
2 December 2019 at	craig@rcjbr.org authors and sends a reply to Simon
15:56.18UTC	Cohen that it relates to "an old Information defense file
	about the IP".
2 December 2019 at	20 seconds later, the authentic reply is received by
15:56:38	Ontier: the Ontier Version.
Some point in 2019—2023	Simon Cohen leaves Ontier and his mailbox is changed
	to a Shared mailbox for management by others, and is
	designated "(Shared)".
18 February 2024 at	A new email reply is created, in reply to Mr Cohen's 2
10:17:34.349UTC	December 2019 email.
	The local computer clock is then backdated to 2
	December 2019 and the email is composed, stating that
	"It links data we have in MYOB".

18 February 2024 at	The "It links data we have in MYOB" email is sent to
11.06.06	Simon Cohen at Ontier.
18 February 2024 at	5 seconds later the email is received by Ontier: the 18
11.06.11	Feb 2024 Received Version. This is authentically sent
	and received on 18 Feb 2024, however it bears a
	backdated date on its face as a result of local clock
	manipulation.
18 February 2024	The "It links data we have in MYOB" email is
between 11.06 and 11.39	downloaded as a sent item, and the header is
	manipulated to alter a human-readable timestamp in the
	Transmission header. The manipulated email created is
	the Ramona Version.
18 February 2024 at 11.39	craig@tuliptrading.net sends the Ramona Version as an
	attachment, by email to Ramona@rcjbr.org.
18 February 2024 at 12:56	Ramona@rcjbr.org sends the Email to Shoosmiths,
	with the Ramona Version to Shoosmiths stating
	"Please see communications between Simon Cohen from
	Ontier in respect of 2019 MYOB login".

CONSIDERING POTENTIAL EXPLANATION

- 37. I considered other possibilities that might account for the irregularities in the **Ramona Version**. The only indication that I thought could be possible is if the Ramona Version was authored in December 2019, but inadvertently remained in the outbox of Microsoft Outlook before eventually being transmitted on 18 February 2024. In some cases, this might explain a long delay between the date of authoring an email and the date of receipt. However, I do not consider this possible for the following reasons:
 - a. It would not explain the image property timestamps which are in conflict with the other timestamps in the message.
 - b. The behaviour of MS Outlook in that situation also would not cause for the observed irregularities. Specifically, if this had happened, then the 2 December 2019 timestamps would not be encoded in the header. The encoded date would have been 18 February 2024. As well as being aware of this behaviour from my own experience, I have double checked it in the course of preparing my report and confirmed that if an email is delayed in the outbox of MS Outlook while disconnected from the internet, when it eventually reconnects and is sent the

- timestamp applied was the time of sending, not the earlier time (whether or not the clock is manipulated in the meantime).
- 38. I am therefore confident that this could not explain the observations above.
- 39. Finally, to double check, and demonstrate the irregularities could be caused in the way I have concluded, I also created an email while my computer clock was set back to February 2019 and sent an email using MS Outlook 16 via Gmail. It was received immediately by the recipient address. Just as seen with the **18 Feb 2024 Received Version**, the date on its face was my local computer clock setting of February 2019, and the boundary timestamps did encode the 2019 date, but the first hop to Google and other server hops recorded the actual date of transmission in February 2024. This was entirely consistent with the **18 Feb 2024 Received Version** and confirmed my view that it was created with a backdated computer clock and actually sent on 18 Feb 2024.

POTENTIAL FURTHER INFORMATION SOURCES

- 40. There are various additional sources of information which might provide more detail about these emails:
 - a. I have not had access to the computer equipment used to create and send the Ramona Version, the 18 Feb 2024 Received Version, or the Email to Shoosmiths. This has not prevented me from drawing the conclusions above, but it is likely that access to this computing equipment would allow further evidence of the actions taken.
 - b. Similarly the email mailboxes for "craig@tuliptrading.net" and "craig@rcjbr.org" can be analysed for IMAP timestamps and indicators. Once again, the fact that this has not been done has not prevented me from being able to draw the conclusions set out above.
 - c. Some specific metadata of the **Ramona Version** and other email messages has unfortunately been contaminated by handling on Shoosmiths infrastructure. This metadata relates to MS Outlook specific metadata fields and does not affect my analysis of the email itself, which has focused on the Transmission header itself metadata properties which are not affected in this way. If an image of the computing equipment is taken as discussed above, a forensic capture of these emails would be preserved (if they exist). The effects of handling described above and the lack of access to the forensic capture have not prevented me from drawing my conclusions set out above
 - d. During my analysis I have identified that Ontier have Mimecast infrastructure. Mimecast provides a range of email spam filtering and journalling systems which record additional

information and copies of the message. While I have managed to make sufficient observations to form a firm conclusion regarding the email messages, it is possible that Ontier's Mimecast servers may keep an archive version of the relevant email messages in a form that they appeared before being received by the Ontier infrastructure, possibly allowing a further point of comparison. I point out that if Ontier uses the journaling or message tracking services of Mimecast, and did in December 2019, that these could provide further useful information. Again to be clear, the fact that I have not had access to Ontier's Mimecast servers does not detract from the confidence I have in my conclusions.

41. I would also recommend that the email earlier in the chain on 2 December 2019 at 12:38 (with the simple content "Attached" above a signature) should also be provided for analysis, together with the attachment. I am informed by Bird & Bird that the 2 December 2019 12:38 "Attached" email has been requested and that Shoosmiths have agreed to provide it. However, it has not been provided along with the other emails mentioned above. As with the other further information sources I have identified above, access to this material might have enabled me to provide further context, but lack of access to this material does not detract from the conclusions I have been able to reach.

Declaration

- 1. I understand that my duty is to help the Court to achieve the overriding objective by giving independent assistance by way of objective, unbiased opinion on matters within my expertise, both in preparing reports and giving oral evidence. I understand that this duty overrides any obligation to the party by whom I am engaged or the person who has paid or is liable to pay me. I confirm that I have complied with and will continue to comply with that duty.
- 2. I confirm that I have not entered into any arrangement where the amount or payment of my fees is in any way dependent on the outcome of the case.
- 3. I know of no conflict of interest of any kind, other than any which I have disclosed in my report. I do not consider that any interest affects my suitability as an expert witness on any issues on which I have given evidence.
- 4. I will advise the party by whom I am instructed if, between the date of my report and the trial, there is any change in circumstances which affects this.
- 5. I have shown the sources of all information I have used.
- 6. I have exercised reasonable care and skill in order to be accurate and complete in preparing this report.
- 7. I have endeavoured to include in my report those matters, of which I have knowledge or of which I have been made aware, that might adversely affect the validity of my opinion. I have clearly stated any qualifications to my opinion.
- 8. I have not, without forming an independent view, included or excluded anything which has been suggested to me by others including my instructing lawyers.

- 9. I will notify those instructing me immediately and confirm in writing if for any reason my existing report requires any correction or qualification or my opinion changes.
- 10. I understand that:
 - a. my report will form the evidence to be given under oath or affirmation;
 - b. the court may at any stage direct a discussion to take place between experts and has done in this case;
 - c. the court may direct that, following a discussion between the experts, a statement should be prepared showing those issues which are agreed and those issues which are not agreed;
 - d. I may be required to attend Court to be cross-examined on my report; and
 - e. I am likely to be the subject of public adverse criticism by the judge if the Court concludes that I have not taken reasonable care in trying to meet the standards set out above.
- 11. I have read Part 35 of the Civil Procedure Rules and I have complied with its requirements. I am aware of the requirements of Practice Direction 35 and the Guidance for the Instruction of Experts in Civil Claims 2014.
- 12. I confirm that I have acted in accordance with the Code of Practice for Experts.
- 13. I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

Signed: Patrick Madden Dated: 28 February 2024