

Computer Forensics: Blue Coursework

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1

TASK 1: IMAGING EXERCISE

1.1 PART A

The file `ImageFile7.001` will be the subject of the following report as specified in the task document. All the steps shown in this report are to guarantee that veracious and accurate procedures are followed to safeguard the preservation of the evidence and are suitable to be served in court. To establish evidence, stages are documented and explained.

1.1.1 *Correct Image*

As a demonstration that the image file is the correct one, verification has been carried out. The following dialog represents the MD5 Hash that confirms it is an exact copy of the original file.

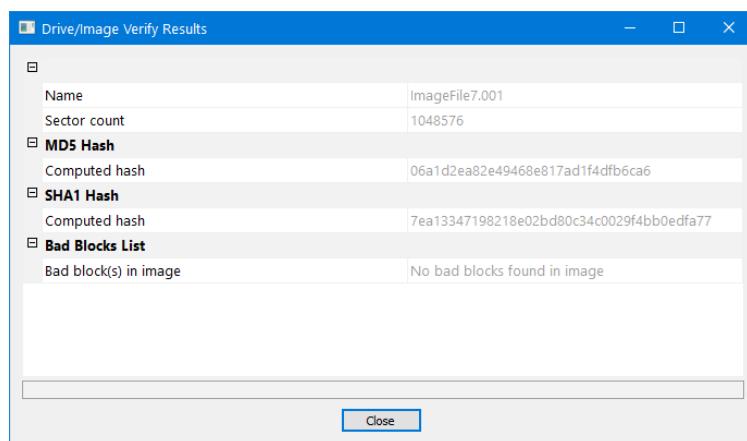


Figure 1.1: Image Hash

1.1.2 *EWF/E01 Image Files*

For this tasks, two different methods and images are being created. To create the images, the dialog to create images has been opened on `FTK Imager`.

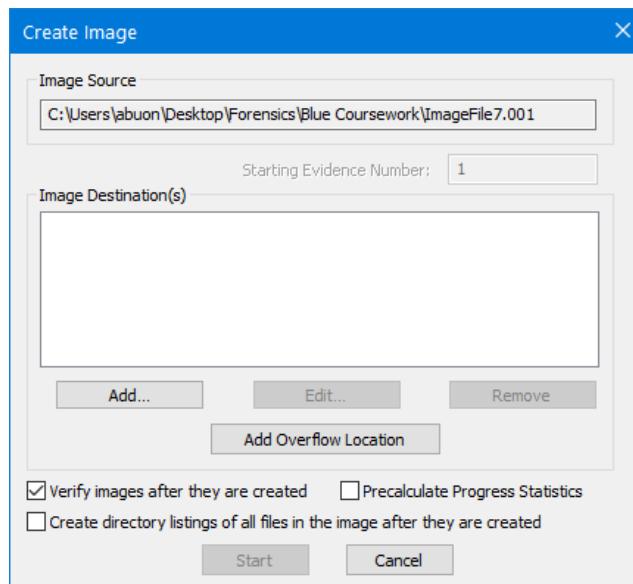


Figure 1.2: Create Images on FTK Imager

Clicking on Add will open another dialog that asks for evidence information.

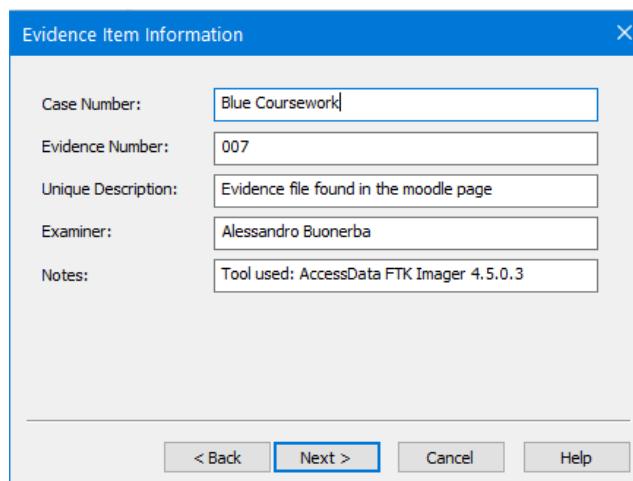


Figure 1.3: Evidence Information

The next step is used to selected the image destination, the filename and various options such as fragmentation and compression.

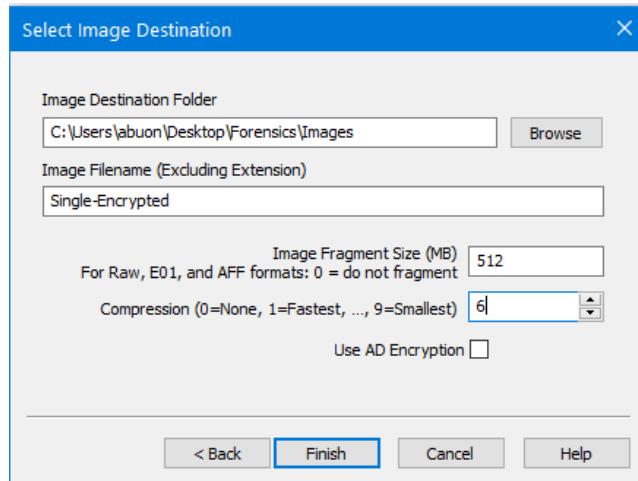


Figure 1.4: Single Encrypted Image

The figure above represents the first requirements that asks to create a single E01 image file with enabled compression that in this case is set on 6, while the figure below represents the splitted version without compression.

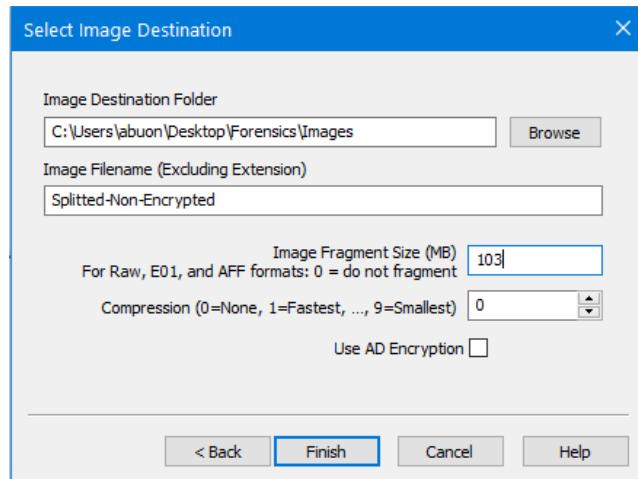


Figure 1.5: Fragmented Image without Compression

Since the image to be split is 512mb and the new E01 must be split in 5 files, the image fragment size has been set dividing the two numbers, resulting in 103mb. After closing the dialog, the previous create image dialog is shown again with the image destinations and configurations that has been set previously for the two tasks.

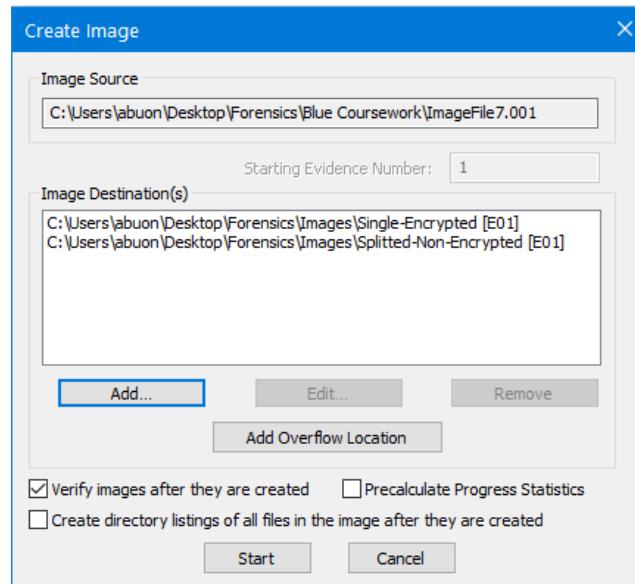


Figure 1.6: Create Image Dialog with Images

Clicking on start will initialise the creation of both and at the end of the process a verify result dialog will pop up with informations on both image output and their hashes.

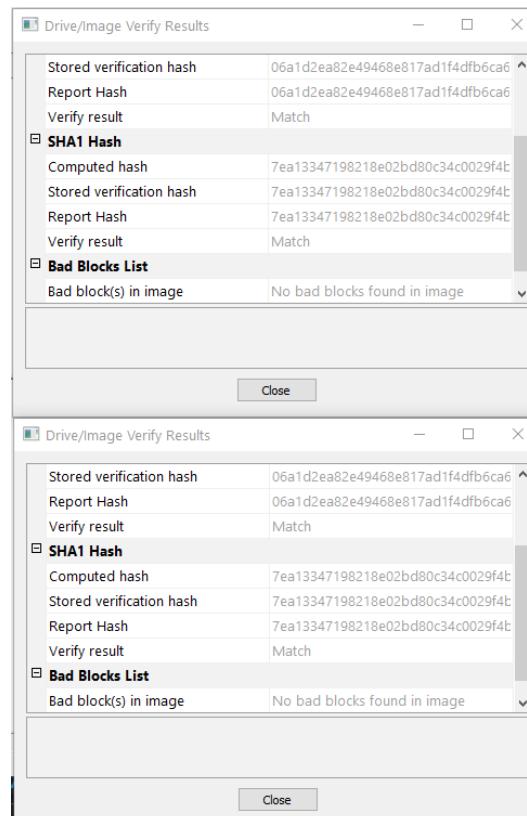


Figure 1.7: Verify Result Dialog

The following image captures the structure of the output files we previously created. It confirms that the splitted files are indeed 5.

Evidence Tree		File List		
		Name	Size	Type
	ImageFile7.001	Single-Encrypted.E01	3,647	Regular File
	Partition 1 [509MB]	Single-Encrypted.E01.txt	2	Regular File
	NothingToSeeHere [NTFS]	Splitted-Non-Encrypted.E01	105,321	Regular File
	[orphan]	Splitted-Non-Encrypted.E01.txt	2	Regular File
	[root]	Splitted-Non-Encrypted.E02	105,321	Regular File
	[unallocated space]	Splitted-Non-Encrypted.E03	105,321	Regular File
	Unpartitioned Space [basic disk]	Splitted-Non-Encrypted.E04	105,321	Regular File
	Images	Splitted-Non-Encrypted.E05	103,208	Regular File
	C:\Users\aboun\Desktop\Forensics\Images			

Figure 1.8: File Structures

1.2 PART B

Previously, FTK Imager has been used to accomplish the tasks, and the previously screenshots to document the hashes of the images created. To perform Dual Tool Verification, Autopsy is also used on this task to double-check the image hashes. The following screenshots confirm that the hashes are the same, meaning that nothing has been tempered.

Figure 1.9: Autopsy Dual Tool Verification

1.3 PART C

The following would be a description suitable for the members of a jury without technical knowledge.

1.3.1 *Write blocker*

A *write blocker* is a small portable device used by investigators to examine USBs or other removable media without tempering the evidences that are being examined, preserving authenticity.

2

TASK 2: SEARCH AND SEIZURE

Below the plan for the search and seizure task, coupled with the pictures and their descriptions.

2.1 PLAN

1. **Safety:** A bedroom is the subject of the examination. It is a double bedroom owned by a single person, meaning that control measures for entering or leaving the room are not followed.
2. **Scene:** The scene setting as previously mentioned is for a double bedroom. It has two desks with desktop computers and general hardwares such as keyboards, mouses and monitors. A TV is also present on the right side of the room. A super-king bed is also found in the middle of the scene.
3. **Assistance:** If large items need to be kept in custody, then assistance would be required in order for the item to be taken in custody. For small devices, even though they can be easily handled, assistance might still be needed to isolation and prevention of any kind of damage.
4. **Interview:** Some questions could be asked to the suspect, such as passwords or additional informations.

2.2 PICTURES OF SCENE

In this section, all pictures related to the investigation are listed and described.

2.2.1 *Full Scene*

The picture below pictures the whole scene that is subject to the investigation.



Figure 2.1: Full scene of the investigation

2.2.2 Left Desk

The picture below shows the left desk of the scene. It has a monitor, speakers, keyboard, mouse, mousepad and an Apple Watch. The Apple Watch has been taken into custody for further investigation. See AB/5 (2.3.5).



Figure 2.2: Left Desk

2.2.3 Right Desk

The picture below shows the right desk of the scene. It has a monitor, speakers, keyboard, mouse, mousepad, microphone, laptop, HDD, soundbar, subwoofer, controller, an amp sound card and a smartphone. The items taken in costudy are the Laptop (2.3.1), HDD (2.3.2) and the smartphone (2.3.3).



Figure 2.3: Right Desk

2.2.4 *Chest of Drawer*

The picture below shows a chest of drawers used as a stand for a TV. On top of it there is also a portable usb that has been taken in custody (AB/4).



Figure 2.4: Chest of Drawer with TV

2.3 PICTURES OF EVIDENCES

In this section, all pictures of the evidences that have been taken in custody.

2.3.1 *Exhibit AB/1 (MacBook Pro)*

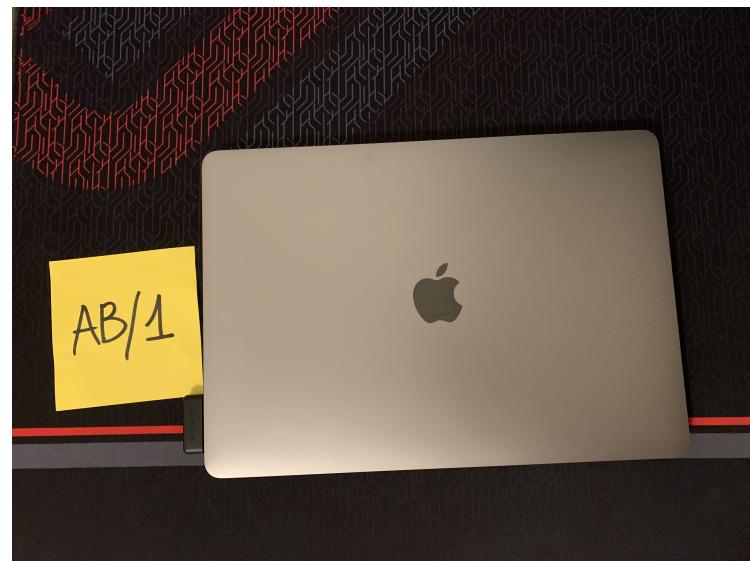


Figure 2.5: Macbook Pro: Front



Figure 2.6: Macbook Pro: Back

2.3.2 Exhibit AB/2 (HDD)

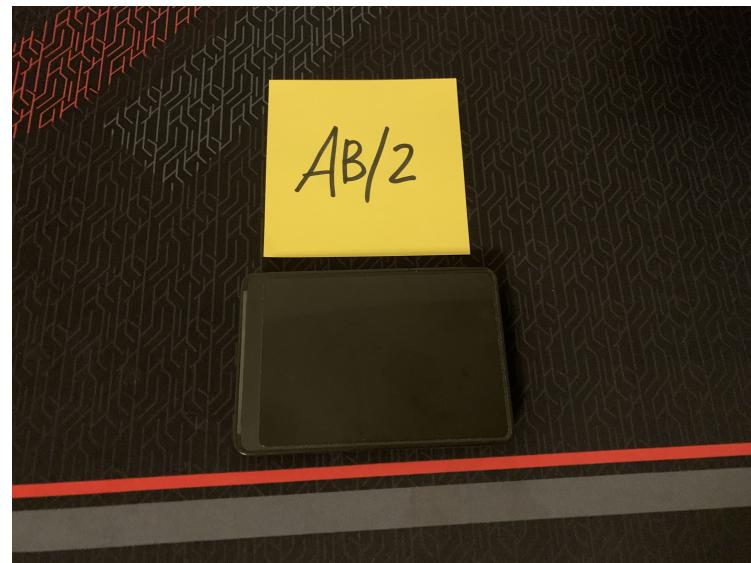


Figure 2.7: HDD: Front



Figure 2.8: HDD: Back

2.3.3 Exhibit AB/3 (Smartphone)

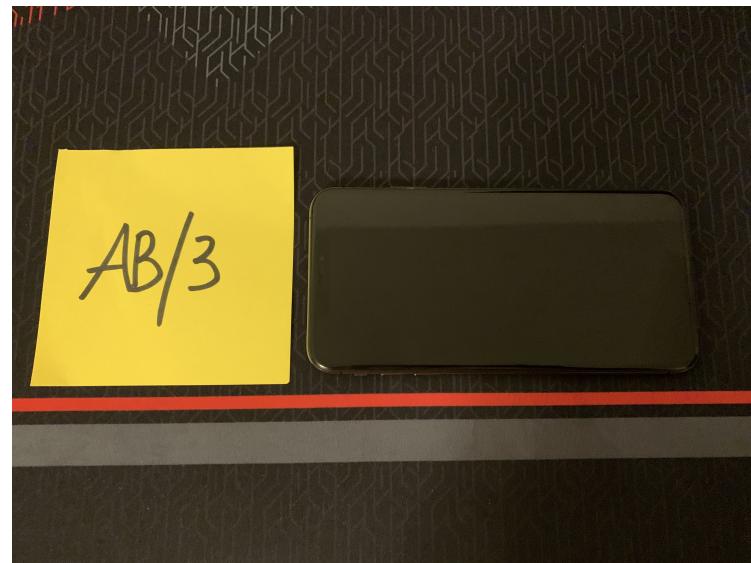


Figure 2.9: Smartphone: Front



Figure 2.10: Smartphone: Back

2.3.4 Exhibit AB/4 (Portable USB)

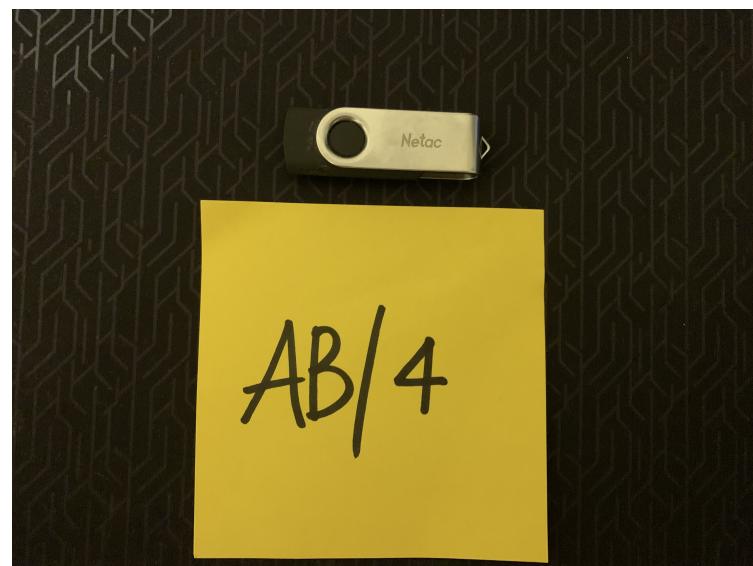


Figure 2.11: Portable USB: Front

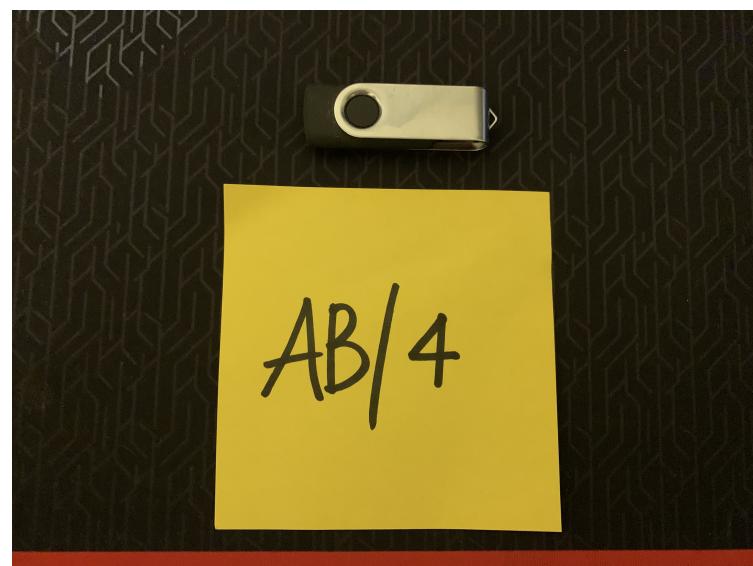


Figure 2.12: Portable USB: Back

2.3.5 Exhibit AB/5 (Apple Watch)



Figure 2.13: Apple Watch: Front



Figure 2.14: Apple Watch: Back

2.4 EXHIBIT RECORDS

2.4.1 AB/1: Laptop

Location: Right Desk

Seized by: Alessandro Buonerba

Time: 29/10/2021 at 16:00

2.4.2 AB/2: HDD

Location: Right Desk

Seized by: Alessandro Buonerba

Time: 29/10/2021 at 16:10

2.4.3 AB/3: Smartphone

Location: Right Desk

Seized by: Alessandro Buonerba

Time: 29/10/2021 at 16:15

2.4.4 AB/4: Portable USB

Location: Chest of drawer

Seized by: Alessandro Buonerba

Time: 29/10/2021 at 16:25

Seal Number : AB

2.4.5 AB/5: Apple Watch

Location: Left Desk

Seized by: Alessandro Buonerba

Time: 29/10/2021 at 16:40

2.5 SEALED EVIDENCES

The evidence that have been sealed is Exhibit AB/4 (2.3.4). They have been stored in a sealed envelope that cannot be tempered without leaving tracks of it. If the seal breaks, there would be noticeable traces of it as shown in figure 2.18.

2.5.1 Sealed Exhibit AB/4 (Portable USB)

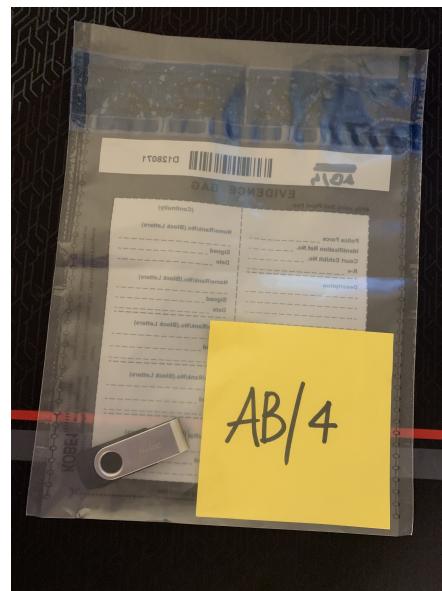


Figure 2.15: Sealed Portable USB: Back



Figure 2.16: Sealed Portable USB: Front

2.5.2 Seal

Below a close-up of the seal is shown.

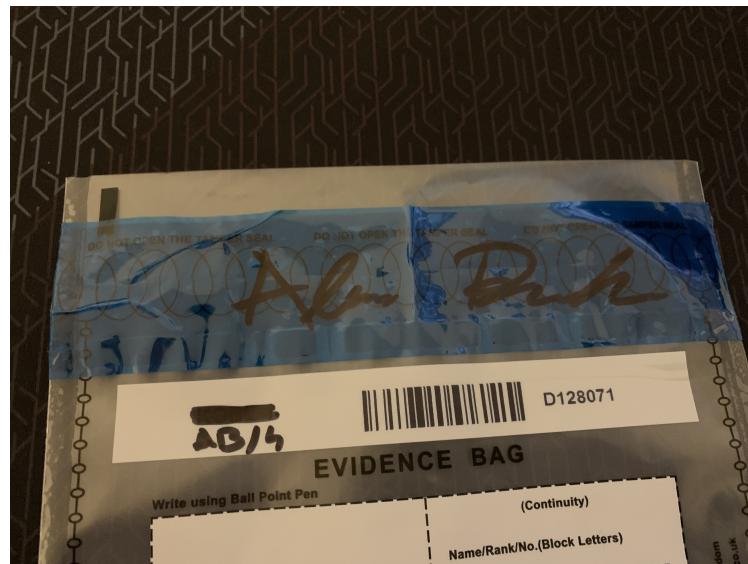


Figure 2.17: Close-up Seal

This is an example of possible tempered evidence.

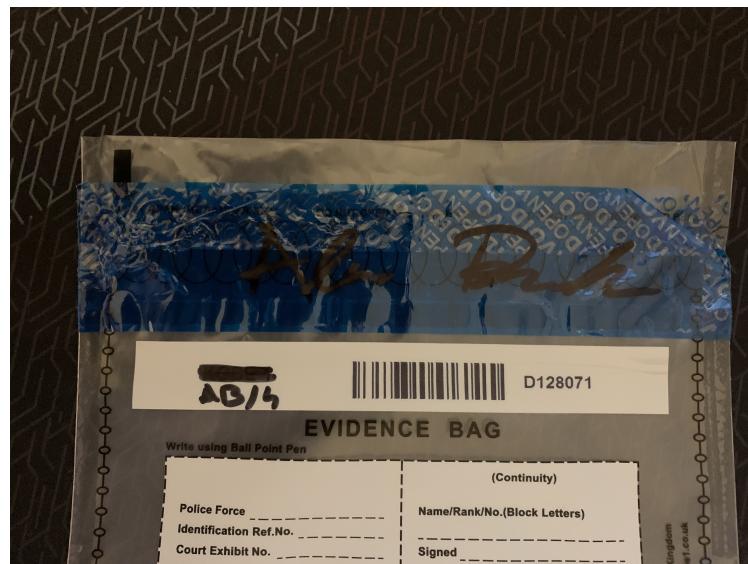


Figure 2.18: Broken Seal

3

TASK 3: WRITTEN EVIDENCE

In this task I will be producing a statement after conducting an individual analysis on a provided image file. The MG11 statement will be the results of such analysis with elaboration on evidences and examinations done.

Scenario Outline

You are the duty Digital Forensics Analyst at the Greenwich Police Hi-Tech Forensics Unit (HTFU). You have received the forensic image file 'Operation Blue 3 - 2021.E01' from the duty Imaging Technician, A. Aaron Adamson, relating to an urgent examination that is required on an exhibit ABL/1.

Circumstances

At approximately 2340hrs on Tuesday the 19th of 2021 DC LITTLE (4012RG) in company with DC LARGE (1006RG) as part of 'Operation Blue 3' stopped a dark coloured Golf GTi on Glaisher street SE8, for suspicion of distribution of drugs, in a 'Deliveroo for Drugs' type of operation. Two males, James PRZYBYLOWICZ (DOB 5/1/2001) and Simon VAN DER VALK (DOB 1/5/2000) were present in the vehicle. VAN DER VALK jumped out of the passenger side of the car, ran to the edge of the river and threw what appeared to be a small rucksack into the Thames before LARGE was able to arrest him. A Duty boat was dispatched from Wapping MPU but was not able to locate the bag. The suspects did not have any mobile phones on their person. A small removable computer drive (exhibit ABL/1) was found in the footwell of the passenger side of the vehicle, along with a lighter and cigarette rolling paper. A Section 18 search of VAN DER VALK's home address has turned up computer paraphernalia and a laptop bag, but no computer has been located. VAN DER VALK states that his computer "broke ages ago" and he got rid of it. PRZYBYLOWICZ has made a no comment interview. VAN DER VALK has stated that he has no knowledge of ABL/1. VAN DER VALK states that he had "A little bit of weed" in his bag, and he threw it in the river because he panicked, stating that he didn't want to be thrown out of university, as he is on a student visa. VAN DER VALK has shown student identification documents showing he studies Business Information Systems at the University of Greenwich.

3.1 EVIDENTIAL EXTRACTION DOCUMENT

3.1.1 Notable Files and Documents

The artefact 1 is related to paragraph 26 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vo1/backups/greSTYLE chat/Logs/JamesP.txt
Type:	File System
MIME Type:	message/rfc822
Size:	1608
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-19 06:15:06 BST
Accessed:	2021-10-19 12:30:29 BST
Created:	2021-10-19 12:30:29 BST
Changed:	2021-10-19 06:15:06 BST
MD5:	de54f808005e2e6a127b104364005604
SHA-256:	0cab201a861e7b4a94b876257406fc64c357bf415fea6845bb344ae94f2f0ee8
Hash Lookup Results:	UNKNOWN
Internal ID:	69

Figure 3.1: Artefact 1: JamesP.txt

3.1.2 Chats and Website

The artefact 2 is related to paragraph 20 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vo1/Work/Notes to self.txt
Type:	File System
MIME Type:	text/plain
Size:	250
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:29:29 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:29:29 BST
MD5:	59dac114d99298401e25b89520ab297a
SHA-256:	31dbb048ea903ee08266e5f919f83a285e9a2e81e44648c56bcafe6e4c2e4fcc
Hash Lookup Results:	UNKNOWN
Internal ID:	560

Figure 3.2: Artefact 2: Notes to self.txt

The artefact 3 is related to paragraph 21 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Uni/Generate password hash_files/saved_resource.html
Type:	File System
MIME Type:	text/html
Size:	213
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:36:24 BST
Accessed:	2021-10-19 12:30:29 BST
Created:	2021-10-19 12:30:29 BST
Changed:	2021-10-02 22:36:24 BST
MD5:	9df983d9cc51a14ac7dabd9d18c275bf
SHA-256:	351f60b534c01e430062aaeceaea5a1dc7b6e873c0b433317cb866b5e191f7c6
Hash Lookup Results:	UNKNOWN
Internal ID:	122

Figure 3.3: Artefact 3: _resource.html

The artefact 4 is related to paragraph 21 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Home sweet home.html
Type:	File System
MIME Type:	text/html
Size:	245516
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:26:11 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:26:11 BST
MD5:	3111004188084f2dbc6c984ad4b83a2
SHA-256:	285716088804f5bdb7abaed655b38debb151dfb83f58feac2e1ecc226bc3714
Hash Lookup Results:	UNKNOWN
Internal ID:	300

Figure 3.4: Artefact 4: Home sweet home.html

The artefact 5 is related to paragraph 21 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/How much do drugs cost_ - DrugWise.html
Type:	File System
MIME Type:	text/html
Size:	71823
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:21:15 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:21:15 BST
MD5:	0f4698c68eff7b417d617ad2c11801d0
SHA-256:	ea6f63ded07b0d07cb579660321821668825b28722a71403a5df471f07a799fd
Hash Lookup Results:	UNKNOWN
Internal ID:	394

Figure 3.5: Artefact 5: DrugWise.html

The artefact 6 is related to paragraph 21 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/How much do drugs cost_ - DrugWise_files/page.html
Type:	File System
MIME Type:	text/html
Size:	98417
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:21:15 BST
Accessed:	2021-10-19 12:30:31 BST
Created:	2021-10-19 12:30:31 BST
Changed:	2021-10-02 22:21:15 BST
MD5:	6184458c85bcd2978bca882d0c9ccda2
SHA-256:	11fb6200d088ff6a2abbb63634cbff130359d9202c01eb1bcad3be589910ecb3
Hash Lookup Results:	UNKNOWN
Internal ID:	402

Figure 3.6: Artefact 6: page.html

The artefact 7 is related to paragraph 11 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/How much do drugs cost_ - DrugWise_files/saved_resource.html
Type:	File System
MIME Type:	text/html
Size:	147994
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:21:15 BST
Accessed:	2021-10-19 12:30:31 BST
Created:	2021-10-19 12:30:31 BST
Changed:	2021-10-02 22:21:15 BST
MD5:	5ec43dec627f418496722553e53933b7
SHA-256:	7a72464643aeaf5d626adf5b141771df651f3c9853e239f3dcde35379d4dbea1
Hash Lookup Results:	UNKNOWN
Internal ID:	518

Figure 3.7: Artefact 7: resource.html

The artefact 8 is related to paragraph 11 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/How much do drugs cost_ - DrugWise_files/widget_iframe.a53eecb4584348a2ad32ec2ae21f6eae.html
Type:	File System
MIME Type:	text/html
Size:	327411
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:21:15 BST
Accessed:	2021-10-19 12:30:31 BST
Created:	2021-10-19 12:30:31 BST
Changed:	2021-10-02 22:21:15 BST
MD5:	709504885778c111557f96aa1fb05171
SHA-256:	3307e01a666db87c40e850d3eb3a6976739edef3948b4e0c50d1a46d3cd6a0d17
Hash Lookup Results:	UNKNOWN
Internal ID:	548

Figure 3.8: Artefact 8: iframe.a53eecb4584348a2ad32ec2ae21f6eae.html

The artefact 9 is related to paragraph 30 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/CV.rtf
Type:	File System
MIME Type:	application/rtf
Size:	1061
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:19:27 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:19:27 BST
MD5:	6ed23908398e64d1c422d0e49f28e370
SHA-256:	5df57fdc16ebcf9ea1fc5182b411509de0d2ee54dffca7c19194e09466386e1b
Hash Lookup Results:	UNKNOWN
Internal ID:	152

Figure 3.9: Artefact 9: CV.rtf

The artefact 10 is related to paragraph 26 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/backups/greSTYLE chat/Logs/Ellie.txt
Type:	File System
MIME Type:	message/rfc822
Size:	2029
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-19 06:12:17 BST
Accessed:	2021-10-19 12:30:29 BST
Created:	2021-10-19 12:30:29 BST
Changed:	2021-10-19 06:12:17 BST
MD5:	0ac0e9114bb533f4d460fc13f4341b53
SHA-256:	5ea75ef734db205696d01c631c98ab05ba49f5c67958865b3765a04791ab7c3b
Hash Lookup Results:	UNKNOWN
Internal ID:	67

Figure 3.10: Artefact 10: Ellie.txt

3.1.3 Drug Material

The artefact 11 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.11: Artefact 11: o.png

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/How much do drugs cost_ - DrugWise_files/12485991_1123295977680555_4107604916347623593_o.png
Type:	File System
MIME Type:	image/png
Size:	106066
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:21:15 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:21:15 BST
MD5:	683814113b604562a6c15cf03d281e09
SHA-256:	b8c51a2ea1a241025fc7f8dc482f82bf56c01c5b2ba6874e8be3fec2b59ed4dc
Hash Lookup Results:	UNKNOWN
Internal ID:	407

Figure 3.12: Artefact 11: Metadata

The artefact 12 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.13: Artefact 12: n(1).png

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/How much do drugs cost_ - DrugWise_files/12553071_1122803657729787_2253999606226163220_n(1).png
Type:	File System
MIME Type:	image/png
Size:	2186
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:21:15 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:21:15 BST
MD5:	80c81e247389012411854ff4e47f3ce8
SHA-256:	dcf9434f909b9329878889a1f98eec759ba4c1e317834cabf11e9799bcc179
Hash Lookup Results:	UNKNOWN
Internal ID:	409

Figure 3.14: Artefact 12: Metadata

The artefact 13 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.15: Artefact 13: amphetamines.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _ DNA Legal_files/amphetamines.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	34070
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	9007c9ccc803b9792d7db8d82bf70923
SHA-256:	6173ec0bda9ef2783f8a4250ece58494e2e6b2a004068dc2e024bdfcf44ea3f5
Hash Lookup Results:	UNKNOWN
Internal ID:	166

Figure 3.16: Artefact 13: Metadata

The artefact 14 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.17: Artefact 14: anabolic-steroids.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/anabolic-steroids.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	53544
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	7f167c3a03ffbe64180ccf4ef806bbd2
SHA-256:	f861826245bc8e8a0dda4ee373eaf5b949478207ac0909f7bcac5ae6cbac57e9
Hash Lookup Results:	UNKNOWN
Internal ID:	168

Figure 3.18: Artefact 14: Metadata

The artefact 15 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.19: Artefact 15: barbiturates.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/barbiturates.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	39172
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	ccf72f74ced74ada7a694d6aef46e504
SHA-256:	ccaf2ed8c889db8cf6a5ed8e5a3fc7ba9dccb8f8b5fa340e2cc0e03bfe33fef
Hash Lookup Results:	UNKNOWN
Internal ID:	172

Figure 3.20: Artefact 15: Metadata

The artefact 16 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.21: Artefact 16: bath-salts.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/bath-salts.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	56536
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	2885c3ea80e341d3b7543fb51c45a28
SHA-256:	07aa3318fbc117b6cc719dc1b3deb2421f040c6c9a32cae08281abcd55e6b6e7
Hash Lookup Results:	UNKNOWN
Internal ID:	174

Figure 3.22: Artefact 16: Metadata

The artefact 17 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.23: Artefact 17: benzos.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/benzos.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	41666
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	a439a0cf5f8f92642877e6cc0c70db13
SHA-256:	e487c58b47cdc47535ad8909440e3518c0c3170c10d03f918fe733d1492c6b2f
Hash Lookup Results:	UNKNOWN
Internal ID:	176

Figure 3.24: Artefact 17: Metadata

The artefact 18 is related to paragraph 23 & 31 of the statement dated 06/11/2021



Figure 3.25: Artefact 18: cannabis.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/cannabis.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	109069
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	ce40971ca351e15754f9a5e84e40d200
SHA-256:	829b566aaff0d406fd251f4bc69832ee812da013d8b22e0d737948d29e2a19f1
Hash Lookup Results:	UNKNOWN
Internal ID:	182

Figure 3.26: Artefact 18: Metadata

The artefact 19 is related to paragraph 23 & 31 of the statement dated 06/11/2021



Figure 3.27: Artefact 19: cocaine-and-crack.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/cocaine-and-crack.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	39075
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	4746f551e6df1136c535b3a25fd5fbde
SHA-256:	41578391827a4e6ff88873278838e7c2b8373489228e58a0b7efc74b0c700d
Hash Lookup Results:	UNKNOWN
Internal ID:	184

Figure 3.28: Artefact 19: Metadata

The artefact 20 is related to paragraph 23 & 31 of the statement dated 06/11/2021



Figure 3.29: Artefact 20: dns-drugs-dnslegal.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _ DNA Legal_files/dna-drugs-dnalegal.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	10585
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	efc9fb0ea26893c2ee72d2ca0f94c6e0
SHA-256:	c565f2785d906c69f8ccfed0733cda50961b68c306e15d28a24ec8065ee74432
Hash Lookup Results:	UNKNOWN
Internal ID:	204

Figure 3.30: Artefact 20: Metadata

The artefact 21 is related to paragraph 23 & 31 of the statement dated 06/11/2021

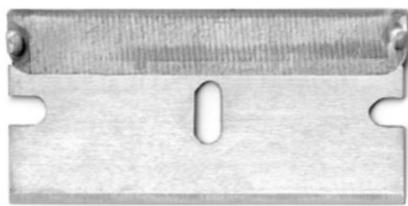


Figure 3.31: Artefact 21: dna-drugs-razor.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _ DNA Legal_files/dna-drugs-razor.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	19329
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	028f55b62c0385d0a3c65d9fb6021e88
SHA-256:	6ad5e9b78f1aa69d469157aa82a8d29191bbfd2f522e3592b2073a36d2c8a3a
Hash Lookup Results:	UNKNOWN
Internal ID:	206

Figure 3.32: Artefact 21: Metadata

The artefact 22 is related to paragraph 23 & 31 of the statement dated 06/11/2021



Figure 3.33: Artefact 22: ecstasy.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/ecstasy.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	72369
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	f39af8219ce590c1eef495c2965a0856
SHA-256:	7f9f4ac633fb1aa40c180797930965c949681e824a8497c7b35fff275f5c499e
Hash Lookup Results:	UNKNOWN
Internal ID:	210

Figure 3.34: Artefact 22: Metadata

The artefact 23 is related to paragraph 23 & 31 of the statement dated 06/11/2021



Figure 3.35: Artefact 23: ketamine.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/ketamine.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	57072
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	fcfa905229ba6535ae3db51e23158417
SHA-256:	4975fe9ecc0235407a077041744cf48a26d884a1c0914bdce7ebd810e48fb123
Hash Lookup Results:	UNKNOWN
Internal ID:	240

Figure 3.36: Artefact 23: Metadata

The artefact 24 is related to paragraph 23 & 31 of the statement dated 06/11/2021



Figure 3.37: Artefact 24: khat.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/khat.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	77546
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	ff3d402bbcf05cfbe2db78f44e124d65
SHA-256:	cda081c5c8b62393fd71b3e89cf9649527970484b1f80bb01185be80082deb4f
Hash Lookup Results:	UNKNOWN
Internal ID:	242

Figure 3.38: Artefact 24: Metadata

The artefact 25 is related to paragraph 23 & 31 of the statement dated 06/11/2021



Figure 3.39: Artefact 25: lsd.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _ DNA Legal_files/lsd.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	34906
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	e52edb5148510b037ed5b0ba53bf71b8
SHA-256:	3845befd482263d4251b75c9d5709cd62f39dbd56c9f1c92b7246c303938ef5c
Hash Lookup Results:	UNKNOWN
Internal ID:	250

Figure 3.40: Artefact 25: Metadata

The artefact 26 is related to paragraph 23 & 31 of the statement dated 06/11/2021



Figure 3.41: Artefact 26: mephedrone.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/mephedrone.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	38172
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	ce72f6bd6c1e926740322ee73d16a9b2
SHA-256:	3acc5e636cca6520178beb511960d8a3790d2d03b3379af2cee32c0cb3c99c2e
Hash Lookup Results:	UNKNOWN
Internal ID:	252

Figure 3.42: Artefact 26: Metadata

The artefact 27 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.43: Artefact 27: methodone.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/methodone.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	45643
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:03 BST
MD5:	cfaba66cc5f4e7bda877e9a871a9cb6b
SHA-256:	d8aa31c4ea9257407c20fb31d6edc0c5da4fc7dd942916a7a8d305fdac1216e2
Hash Lookup Results:	UNKNOWN
Internal ID:	254

Figure 3.44: Artefact 27: Metadata

The artefact 28 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.45: Artefact 28: narcotics.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _DNA Legal_files/narcotics.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	92776
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	cc8cf792a1a7fae5c48dd9e86f3ab02c
SHA-256:	634d389bf3f47a04f5ec4dc21732b40d836b7ae99ef172a99251a89cc774535
Hash Lookup Results:	UNKNOWN
Internal ID:	260

Figure 3.46: Artefact 28: Metadata

The artefact 29 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.47: Artefact 29: opiates-heroin.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vo12/Work/Drugs Menu _DNA Legal_files/opiates-heroin.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	160253
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	7b0193ac76818b4cbdbffcb804ddafab
SHA-256:	d4227d839c9dc1c341b68ceff097a80c7a9eb217b805a76d8dd73f0f4be6d1ce
Hash Lookup Results:	UNKNOWN
Internal ID:	264

Figure 3.48: Artefact 29: Metadata

The artefact 30 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.49: Artefact 30: razor.png

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vo12/Work/Drugs Menu _DNA Legal_files/razor.png
Type:	File System
MIME Type:	image/png
Size:	51565
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	589bc90998af5c2150e3245f09c9e7d0
SHA-256:	c26fd1669b01ad322fb226851dd86309b073737219d40e51fd06727d8b146b5
Hash Lookup Results:	UNKNOWN
Internal ID:	266

Figure 3.50: Artefact 30: Metadata

The artefact 31 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.51: Artefact 31: spice-drug.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Drugs Menu _ DNA Legal_files/spice-drug.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	100156
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:24:03 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:24:04 BST
MD5:	ae2f8c9558aa6deefe9f4af68b65f354
SHA-256:	7f25f5dc076abf741f341fd92243530f9e01b8147fbef25215e3fce861e614
Hash Lookup Results:	UNKNOWN
Internal ID:	273

Figure 3.52: Artefact 31: Metadata

The artefact 32 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.53: Artefact 32: _image(1).php

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/How much do drugs cost_ - DrugWise_files/safe_image(1).php
Type:	File System
MIME Type:	image/jpeg
Size:	17948
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:21:15 BST
Accessed:	2021-10-19 12:30:31 BST
Created:	2021-10-19 12:30:31 BST
Changed:	2021-10-02 22:21:15 BST
MD5:	b5fbe5e553c5f32245187692ed54a74f
SHA-256:	62628b4b7815a10c0bbc58a2842654580e1cd4704e9c1668a49b0276c8d4e870
Hash Lookup Results:	UNKNOWN
Internal ID:	500

Figure 3.54: Artefact 32: Metadata

The artefact 33 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.55: Artefact 33: _image(2).php

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/How much do drugs cost_ - DrugWise_files/safe_image(2).php
Type:	File System
MIME Type:	image/jpeg
Size:	18137
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:21:15 BST
Accessed:	2021-10-19 12:30:31 BST
Created:	2021-10-19 12:30:31 BST
Changed:	2021-10-02 22:21:15 BST
MD5:	fc3e5b6c9e5e542fd5e68a0633b8c324
SHA-256:	b88821a562ae4c11222089b2b9901ecb2e7b635ab7b96e1206ce70a7bb923504
Hash Lookup Results:	UNKNOWN
Internal ID:	502

Figure 3.56: Artefact 33: Metadata

The artefact 34 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.57: Artefact 34: safe-image.php

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/How much do drugs cost_- -DrugWise_files/safe_image.php
Type:	File System
MIME Type:	image/jpeg
Size:	26494
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:21:15 BST
Accessed:	2021-10-19 12:30:31 BST
Created:	2021-10-19 12:30:31 BST
Changed:	2021-10-02 22:21:15 BST
MDS:	371f9e8c9fbfb138ba007a5f2b6c2ca6
SHA-256:	71b7f5030c317a0a93f4f1e4e3f30cc2933f62137247783d8f8f05f8c3ca09e3
Hash Lookup Results:	UNKNOWN
Internal ID:	508

Figure 3.58: Artefact 34: Metadata

The artefact 35 is related to paragraph 23 & 31 of the statement dated 06/11/2021.



Figure 3.59: Artefact 35: Webp.net-resizeimage-85.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Home sweet home_files/Webp.net-resizeimage-85.jpg
Type:	File System
MIME Type:	image/webp
Size:	81936
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-02 22:26:10 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-02 22:26:11 BST
MDS:	8345baa11093e0d3ff419fbfb9f5fda4
SHA-256:	94630f124db31fe3e605eac96f121f9be06c77b2b0d718aa8fb0dd64ef4128e5
Hash Lookup Results:	UNKNOWN
Internal ID:	380

Figure 3.60: Artefact 35: Metadata

3.2 INDECENT AND PORNOGRAPHIC MATERIAL

The artefact 36 is related to paragraph 24 & 32 of the statement dated 06/11/2021.



Figure 3.61: Artefact 36: blondie.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/delete.jpg/hawty kitty/blondie.jpg
Type:	Derived
MIME Type:	image/jpeg
Size:	5429
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-19 00:03:52 BST
Accessed:	0000-00-00 00:00:00
Created:	0000-00-00 00:00:00
Changed:	0000-00-00 00:00:00
MD5:	e1f0ab68247b61dd8995d1d7b823c158
SHA-256:	13387dcbb8213ae5ac0319e25503554cce793b4131ae7813e3bdb3dbb3fcc20
Hash Lookup Results:	UNKNOWN
Internal ID:	565

Figure 3.62: Artefact 36: Metadata

The artefact 37 is related to paragraph 24 & 32 of the statement dated 06/11/2021.



Figure 3.63: Artefact 37: cosplay.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vo12/Work/delete.jpg/nawty kitty/cosplay.jpg
Type:	Derived
MIME Type:	image/jpeg
Size:	57775
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-19 00:04:14 BST
Accessed:	0000-00-00 00:00:00
Created:	0000-00-00 00:00:00
Changed:	0000-00-00 00:00:00
MD5:	05087bcc68efc2e740e6c5ab79d1904e
SHA-256:	78bfcd1c343344bda2ab09fdd5228f9377b6890253e4605215c76b8836b06aea
Hash Lookup Results:	UNKNOWN
Internal ID:	566

Figure 3.64: Artefact 37: Metadata

The artefact 38 is related to paragraph 24 & 32 of the statement dated 06/11/2021.



Figure 3.65: Artefact 38: lil asian.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vo12/Work/delete.jpg/nawty kitty/lil asian.jpg
Type:	Derived
MIME Type:	image/jpeg
Size:	5770
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-19 00:04:34 BST
Accessed:	0000-00-00 00:00:00
Created:	0000-00-00 00:00:00
Changed:	0000-00-00 00:00:00
MD5:	682594530c028395331b71b22a4ee4b5
SHA-256:	349126df119f6b76c1c328f7c402e4f7f6451ff21e530679d109b9ccb61e9c2e
Hash Lookup Results:	UNKNOWN
Internal ID:	567

Figure 3.66: Artefact 38: Metadata

The artefact 39 is related to paragraph 24 & 32 of the statement dated 06/11/2021.



Figure 3.67: Artefact 39: yay retro big hair.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/delete.jpg/nawty kitty/yay retro big hair.jpg
Type:	Derived
MIME Type:	image/jpeg
Size:	213131
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-19 00:05:00 BST
Accessed:	0000-00-00 00:00:00
Created:	0000-00-00 00:00:00
Changed:	0000-00-00 00:00:00
MD5:	611292acd7e41bb8ac710ce5d8333a1
SHA-256:	74a93560474348f5d74ddedecff8f2e859a4418fd4293ba00d322bb87f11b1f
Hash Lookup Results:	UNKNOWN
Internal ID:	568

Figure 3.68: Artefact 39: Metadata

3.3 PORNOGRAPHIC MATERIAL

The artefact 40 is related to paragraph 25 of the statement dated 06/11/2021.



Figure 3.69: Artefact 40: Elizabeth Olson lookalike.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Fun times/Fun times/Elizabeth Olson lookalike.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	73020
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-18 22:08:36 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-19 06:02:34 BST
MD5:	0546bd85a7b76426e3f4ea521986429e
SHA-256:	3100d757935a365dcdb78f0f1814c5ac3c3ca31e5fa37847732a61134a238fc3
Hash Lookup Results:	UNKNOWN
Internal ID:	292

Figure 3.70: Artefact 40: Metadata

The artefact 41 is related to paragraph 25 of the statement dated 06/11/2021.



Figure 3.71: artefact 41: I love the blue.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Fun times/Fun times/I love the blue.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	54776
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-18 22:06:18 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-19 06:02:34 BST
MD5:	b7011c6c23185f93a8b19aee58ffb285
SHA-256:	f87b6474c654af2acc543e576966252d27cd6bf348e638b88a4ce31c5de4851e
Hash Lookup Results:	UNKNOWN
Internal ID:	294

Figure 3.72: Artefact 41: Metadata

The artefact 42 is related to paragraph 25 of the statement dated 06/11/2021.



Figure 3.73: Artefact 42: collar and cuffs dont match.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Fun times/Fun times/collar and cuffs dont match.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	35855
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-18 22:06:38 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-19 06:02:34 BST
MDS:	d76a6d890b02057f8ff658ba29176ebb
SHA-256:	2a505fa78ed89ed69085939438261f4bbe18a3ff27fed65f75c13cad47e4625a
Hash Lookup Results:	UNKNOWN
Internal ID:	290

Figure 3.74: Artefact 42: Metadata

The artefact 43 is related to paragraph 25 of the statement dated 06/11/2021.



Figure 3.75: Artefact 43: like and char.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Fun times/Fun times/like and cher.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	35725
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-18 22:06:02 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-19 06:02:34 BST
MD5:	bc9f7727570cad725194b8b0c25e5371
SHA-256:	ef7b2d93d4578af0dbae72a83fdec369bd10fd7edb28a164c0bdb0ccc7f1951c
Hash Lookup Results:	UNKNOWN
Internal ID:	296

Figure 3.76: Artefact 43: Metadata

The artefact 44 is related to paragraph 25 of the statement dated 06/11/2021.



Figure 3.77: Artefact 44: not a real blonde.jpg

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/Work/Fun times/Fun times/not a real blonde.jpg
Type:	File System
MIME Type:	image/jpeg
Size:	45523
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-18 22:07:30 BST
Accessed:	2021-10-19 12:30:30 BST
Created:	2021-10-19 12:30:30 BST
Changed:	2021-10-19 06:02:34 BST
MD5:	cd6c902abf25cd2e25708d353c5452ad
SHA-256:	1aad48ec54060a2e3351b2b587ddb353d5b3bfe8551a354650ce2ce5311b9355
Hash Lookup Results:	UNKNOWN
Internal ID:	298

Figure 3.78: Artefact 44: Metadata

3.4 REGISTRY FILES

The artefact 45 is related to paragraph 34 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/backups/Registry/SAM
Type:	File System
MIME Type:	application/x.windows-registry
Size:	65536
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-18 19:07:16 BST
Accessed:	2021-10-19 12:30:29 BST
Created:	2021-10-19 12:30:29 BST
Changed:	2021-10-19 06:20:01 BST
MD5:	e40dd6b59d17faf6ac0293b1e782b80d
SHA-256:	2f18500244e5c8f53661c48838c8a701998e72b2f656a84e5f756d875aa8c096
Hash Lookup Results:	UNKNOWN
Internal ID:	76

Figure 3.79: Artefact 45: SAM

The artefact 46 is related to paragraph 34 of the statement dated 06/11/2021.

Metadata	
Name:	/img_Operation Blue 3 - 2021.E01/vol_vol2/backups/Registry/SOFTWARE
Type:	File System
MIME Type:	application/x.windows-registry
Size:	72351744
File Name Allocation:	Allocated
Metadata Allocation:	Allocated
Modified:	2021-10-18 19:10:58 BST
Accessed:	2021-10-19 12:30:29 BST
Created:	2021-10-19 12:30:29 BST
Changed:	2021-10-19 06:20:02 BST
MD5:	fdbab1d47d485ee70ab039a59232a59b
SHA-256:	bacb3a06e9d6275820ce803aa7932a3796404952ae3aa3458ca398155e16b889
Hash Lookup Results:	UNKNOWN
Internal ID:	77

Figure 3.80: Artefact 46: SOFTWARE

3.5 WITNESS STATEMENT

From the next page, the Witness Statement as specified in the task.

WITNESS STATEMENT

CJ Act 1967, s.9; MC Act 1980, ss.5A(3) (a) and 5B; Criminal Procedure Rules 2020, Rule 16.2

URN

Statement of: Alessandro Buonerba BSc(Hons) Computer Science (Cyber Security)

Age if under 18: Over 18 (if over 18 insert 'over 18') Occupation: Digital Forensics Specialist

This statement (consisting of 7 pages each signed by me) is true to the best of my knowledge and belief and I make it knowing that, if it is tendered in evidence, I shall be liable to prosecution if I have wilfully stated in it, anything which I know to be false, or do not believe to be true.

Signature: Alessandro Buonerba Date: 29/10/2021

Tick if witness evidence is visually recorded (supply witness details on rear)

Qualifications and Experience

1. I am employed as a Digital Forensics Specialist at Greenwich Police High Tech Forensics Unit. I have worked in the field of Computer Forensics since 2018. I have Bachelor of Science degree in Computer Science (Cyber Security) from the University of Greenwich. I have undertaken specialist training in Digital Forensics as part of my degree from the University of Greenwich.
2. I have performed various examinations for both law enforcement and commercial organisations. I have previously given evidence in Court as an expert witness in relation to forensic computing cases.

Background

3. This witness statement refers to actions I have undertaken during the examination of a forensic image supplied to me at the Greenwich Police High Tech Forensics Unit in the case referred to as Operation Blue 3.

Continuation of Statement of Alessandro BUONERBA

4. This statement should be read in conjunction with that of my colleague, Mr. A. Aaron Adamson who is the imaging technician in this case.
5. The exhibit to which my examination refers is as follows: A forensic image file called 'Operation Blue 3 - 2021.E01', relating to exhibit ABL/1, a USB drive.
6. Following instructions from the investigating officer I have conducted an examination of the of the image file in order assist the investigation into alleged drugs offences.
7. My examination was conducted using sound forensic methodology, tools and practices. I have followed the 'Good Practice Guide for Digital Evidence' produced by the Association of Chief Police Officers (ACPO).
8. During my examination I recorded my actions and observations in my original notes. These notes provide more detailed technical aspects of the forensic image of the exhibit and the processes and tools that I used. They can be produced if required.

Summary of Findings

9. 1 (one) artefact that present password hiding techniques
10. 2 (two) artefacts present on device that show conversations between two entities
11. 5 (five) artefacts are present that link towards a website
12. 1 (one) artefact of a CV
13. 25 (twenty-five) artefacts related to drugs
14. 4 (four) artefacts of child pornography
15. 5 (five) artefacts of pornography

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Continuation of Statement of Alessandro BUONERBA

Detailed Findings for Exhibit ABL/1

16. The file 'Operation Blue 3 - 2021.E01' is the forensic image of the USB drive of exhibit ABL/1.
For the remainder of the statement, I will refer to my examination as being on exhibit ABL/1.
17. ABL/1 contains the NTFS file system and is 2045MB in size. My examination shows that the last recorded use of the computer was on 18/10/2021 at 18:11:09.
18. The currently installed operating system is Windows 10 Enterprise Evaluation with a recorded installation/update date of 19th of March at 12:59:35. The registered owner is recorded as Piet and there is a single (1) user account present named IEUser which has a password set for it. My examination shows that the last recorded use of the computer was on 18/10/2021 at 18:11:09.

Documents and Notable Files

19. I searched ABL/1 using the Autopsy version 4.19.1.
20. One of the documents found is "Note to self.txt" created on 2021-10-19 12:30:30 BST and located in the "/Work/" folder. This file contains the following sentence: "better yet, make a website where we can just mail this stuff to people without the stupid driving around".
21. 4 (four) more documents are found in the "Work/Home sweet home_files/" folder. The files are named "Home sweet home.html", "How much do drugs cost_ – DrugWise.html" and "How much do drugs cost_ – DrugWise.html", which are artifacts 4, 5 and 6 in the order presented. These files are web pages that are related to inform and sell drugs to the viewer of the page. The meta-data of all the files are also included in the evidential extraction.
22. A CV in a format of a Rich Text File has been found in the Work directory. The CV has some information about "Simon Piet van der Valk" and it emphasise the fact that is still doing University

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Continuation of Statement of Alessandro BUONERBA

and that he has web design skills. The CV seems to be only a draft as it contains unfinished sentences. I have included the notable files on the evidential extraction, AB/1.

Pictures and Video

23. 25 (twenty-five) artefacts (from 11 to 36) related to drugs have been found in the folder “/Work”.
All images listed here depict pictures of drugs which were found on the device.
24. 4 (four) artefacts representing child pornography have also been found in a folder hidden inside another folder named “delete.jpg”. The name of the folder containing the material is “nawty kitty” and has been created on 2021-10-19 at 12:30:30 BST.
25. 5 (five) more images of pornography have been found in the “Work/Fun times/Fun times/” folder where they have been created on 2021-10-19 at 12:30:30 BST. I have included the notable pictures on the evidential extraction, AB/1.

Chat Artefacts

26. 2 (two) documents containing chat messages sent to “JamesP” and “Ellie” have been found. The files are named after the name of the recipient such as “JamesP.txt” and “Ellie.txt” and are located in the “backups/greSTYLE chat/Logs/” folder. The message exchanges made in the JamesP files state that the subject has recently bought a new laptop. Additionally, he addresses himself as the “dutchman” and to Miss Ellie as “Piet” and shows his preoccupation about the cops to JamesP. I have included the notable Internet history on the evidential extraction, AB/1.

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Continuation of Statement of Alessandro BUONERBA**Registry Artifacts**

27. Two (2) Registry Files were found on this device located “/img_Operation Blue 3 - 2021.E01/vol_ vol2/backups/Registry/”. The name of the files is SAM & SOFTWARE. An application called Windows Registry Recovery was used to examine and open these files. The user would need to use specific tools to view the files. Within “SAM” the IEUser is set with the name “Piet” and the last login can be seen as “18/10/2021 18:11:09”. The user was online for 6 hours and then changed the password set at “19/10/2021 02:01:47” Meta-data for the registry files has been added to the evidential extraction.

Conclusions

28. As stated in the section 20, there is a note that shows the intention of the creation of a website to sell unknown items. This combined to the evidence of a Drupal website and related images of the items and drugs sold would be a premeditated intention of marketing the illegal substances over the internet to customers around the world.
29. In the section 21, there were files related to a Drupal website containing all drug pictures that have been disclosed previously. Specifically, there was a webpage explaining the cost of the drugs. This could suggest that the owner of the USB wanted to purchase or sell drugs at internet standard price.
30. In section 22, the CV displays information's of the suspect name, being Simon Pier Van Der Valk, this would suggest that he is the owner of the document. The last sentence is: “Blah blah... there is a reason I don't do real jobs blah”, which could hide a subliminal message.
31. In section 23, It seems as the pictures are used as a thumbnail for a website that is used as a marketplace where users can buy drugs and get it delivered at home. The name of the files is

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Continuation of Statement of Alessandro BUONERBA

also the name of the drugs that are shown in the pictures. Some images have also been given a different extension (Artifact 33/34/35/36, where the extension has been changed to .php) in hope to hide the content.

32. In section 24 and 25, illegal material such as child-pornography has been found in the USB device. This could link to different crimes not related to drugs.
33. The fact that only a laptop bag has been found in the apartment of the suspect is connected to the section 26, where messages to JamesP states that he would bring his new laptop over to work on something. This suggest that the last statement on the status of his computer made on the scene could not be true, as the evidence suggests otherwise.
34. In section 27 the registry files show that a user named "Piet" logged on to a device containing Windows 10. This time shows that it is in the timeframe of when Mr Piet Van Der Valk claims to not of had access to a computer. The name of the user links to the same name of the suspect who is in question. This name also appears again in section 26.
35. Many files have the same date of creation, meaning that they have been transferred from a device to this USB in batch and are not the main source of truth.

Exhibit Production

36. As a result of my analysis I produce the following exhibit:

Exhibit Bag Seal Description of Exhibit

AB/1 Unsealed Evidential Extraction Document

37. I have attached to this statement the evidential extraction, exhibit your AB/1.

Signature: Alessandro Buonerba

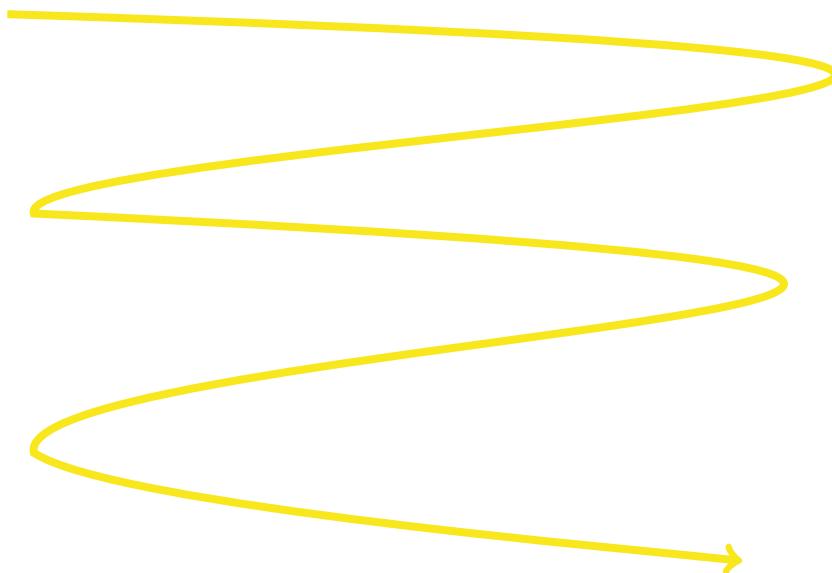
Signature witnessed by: _____ Not Required for Professional Witnesses

Continuation of Statement of Alessandro BUONERBA**Disclosure**

38. I confirm that I have complied with my duties to record, retain and reveal material in accordance with the Criminal Procedure and Investigations Act 1996, as amended.
39. In the event my opinion changes on any material issue, I will inform the investigating officer as soon as reasonably practicable and give reasons.

Duty to the Court

40. I declare that I understand that my duty, including providing written reports and giving evidence, is to assist the court and that this duty overrides any obligation to the party who has engaged me. I can confirm that I believe that I have complied with my duty.
41. I confirm that, to the best of my knowledge and belief, I have acted in accordance with the Code of Conduct published by the Forensic Science Regulator (Issue 4) in all aspects that relate to my personal conduct. Alessandro Buonerba



Signature: Alessandro Buonerba

Signature witnessed by: _____

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