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REPORT ON THE PROGRESS OF THE FACT-FINDING MISSION REGARDING THE INCIDENT OF ALLEGED USE OF TOXIC CHEMICALS AS A WEAPON IN DOUMA, SYRIAN ARAB REPUBLIC, ON 7 APRIL 2018

This document contains the findings and conclusions of the Fact-Finding Mission (FFM) into the alleged use of toxic chemicals as a weapon in Douma in the Syrian Arab Republic (SAR) on 7 April 2018. The FFM was conducted in accordance with preambular paragraph 8 and operative paragraphs 5 and 6 of OPCW Executive Council decision EC-M-48/DEC.1, dated 4 February 2015, and other relevant decisions of the Executive Council, as well as the Director General's authority to seek to uphold at all times the object and purpose of the Convention as reinforced by the United Nations Security Council resolutions 2118 (2013) and 2209 (2015), as applicable to this investigation. The mandates for the investigation of the alleged incident make reference to the Note Verbale of the Technical Secretariat, NV/ODG/214589/18, dated 10 April 2018, and Note Verbale No.38 of the Syrian Arab Republic, dated 10 April 2018.

1. SUMMARY

- 1.1 On 10 April 2018, the Technical Secretariat (TS) and the Permanent Representation of the Syrian Arab Republic (SAR) to the OPCW exchanged Notes Verbales with regards to urgently dispatching a Fact-Finding Mission (FFM) team to Damascus to gather facts regarding the incident of alleged use of toxic chemicals, as a weapon, in Douma on 7 April 2018. An advance team was dispatched on 12 April and a follow-on team the next day, with the full complement arriving in Damascus on 15 April. A second team deployed to a neighbouring country on 16 April to conduct further activities in relation to the allegation.
- 1.2 The FFM team could not enter Douma until almost a week after arrival due to the high security risk to the team, which included the presence of unexploded ordnance, explosives and sleeper cells still suspected of being active in Douma. On 18 April, during a reconnaissance visit to two sites of interest, the security detail was confronted by a hostile crowd and came under small arms fire and a hand-grenade explosion. The incident reportedly resulted in two fatalities and one injury.
- 1.3 On 21 April, the FFM team conducted its first visit to one of the alleged sites of interest after security concerns had been addressed and it was deemed safe to enter Douma. The team made four additional deployments to other sites of interest over the following ten days, including two on-site visits to a warehouse and a facility suspected of producing chemical weapons. There were no further security incidents during the on-site visits and the FFM team was at all times isolated from local crowds and media personnel, thereby allowing it to conduct its activities without interference. At one location, the team was unable to gain full access to apartments of interest.
- 1.4 The FFM activities in Douma included on-site visits to collect environmental samples, interviews with alleged witnesses, data collection and chemical detection. In the neighbouring country (Country X), biological and environmental samples were gathered or received by the FFM team and interviews with alleged witnesses or casualties were conducted. All the environmental samples from Douma were collected by the FFM team in the presence of representatives of the SAR, following the Organisation's stringent chain-of-custody procedures.
- 1.5 From an analysis of the information gathered during the on-site visits to the warehouse and facility suspected of producing chemical weapons, there was no indication of either facility being involved in their manufacture. The overwhelming evidence was that the activities at both locations were related to the production of explosives.
- 1.6 Based on the levels of chlorinated organic derivatives, which are not naturally present in the environment, detected in environmental samples gathered at the sites of alleged use of toxic chemicals (Locations 2 and 4), the FFM concludes that the materials from which the samples were taken at both locations had been in contact with one or more substances containing reactive chlorine. Examples of such chemicals include, molecular chlorine, phosgene, cyanogen chloride, hydrochloric acid, hypochlorous acid and sodium hypochlorite. The actual chemical was not identified.
- 1.7 Two industrial gas cylinders with dimensions of approximately 1.4 x 0.4 meters were observed by the FFM team, one at each of the two locations where the alleged

chemical attacks took place. Although the cylinders might have been the sources of the suspected chemical release, there is insufficient evidence to affirm this.

- 1.8 No organophosphorous nerve agents, their degradation products or synthesis impurities were detected either in the twenty environmental samples prioritised for analysis or in plasma samples from alleged casualties.
- 1.9 Apart from the Schedule 3.B.17 chemical triethanolamine and a Schedule 2.B.04 chemical known as “AmgardV19”, the presence of which was satisfactorily explained, no other scheduled chemicals listed in the Annex on Chemicals of the Chemical Weapons Convention, or their degradation products, were detected in the samples analysed so far.
- 1.10 Some of the signs and symptoms described by witnesses and noted in photos and video recordings taken by witnesses, of the alleged victims are not consistent with exposure to chlorine-containing choking or blood agents such as chlorine gas, phosgene or cyanogen chloride. Specifically, the rapid onset of heavy buccal and nasal frothing in many victims, as well as the colour of the secretions, is not indicative of intoxication from such chemicals.
- 1.11 The large number of decedents in the one location (allegedly 40 to 45), most of whom were seen in videos and photos strewn on the floor of the apartments away from open windows, and within a few meters of an escape to un-poisoned or less toxic air, is at odds with intoxication by chlorine-based choking or blood agents, even at high concentrations.
- 1.12 The FFM team is unable to provide satisfactory explanations for the relatively moderate damage to the cylinders allegedly dropped from an unknown height, compared to the destruction caused to the rebar-reinforced concrete roofs. In the case of Location 4, how the cylinder ended up on the bed, given the point at which it allegedly penetrated the room, remains unclear. The team considers that further studies by specialists in metallurgy and structural engineering or mechanics are required to provide an authoritative assessment of the team’s observations.
- 1.13 The inconsistency between the presence of a putative chlorine-containing toxic choking or blood agent on the one hand and the testimonies of alleged witnesses and symptoms observed from video footage and photographs, on the other, cannot be rationalised. The team considered two possible explanations for the incongruity:
 - a. The victims were exposed to another highly toxic chemical agent that gave rise to the symptoms observed and has so far gone undetected.
 - b. The fatalities resulted from a non-chemical-related incident.
- 1.14 The team has insufficient evidence at this time to be able to formulate an authoritative conclusion in either regard. To this end, the investigation remains on-going.

2. BACKGROUND

- 2.1 On 7 April 2018 reports began to circulate in social media and the press of an alleged chemical attack taking place around 16:00 local time on the same day in Douma, a district of eastern Ghouta, Damascus, SAR and another attack the same evening at approximately 19:30. Casualty levels ranging from 40 to 70 deaths, including large numbers of children, and hundreds of chemical related injuries were reported. There were mixed reports of what toxic chemicals had been used, with some citing chlorine and others sarin or mixtures of chlorine and sarin. Images and videos posted online showed casualties in a residential building as well as victims being treated at a hospital, reportedly for chemical exposure. Photos and videos of cylinders purportedly used in the two attacks were also posted online.
- 2.2 Widespread condemnation of the incident ensued, with Armed Opposition Groups (AOGs) laying responsibility for the alleged incident on the SAR forces. The SAR denied the attack and accused the media wing of Jaysh al Islam of fabricating the incident to incriminate the SAR Government Forces.
- 2.3 On 10 April, the Technical Secretariat (TS) sent Note Verbale No. NV/ODG/214589/18 to the SAR, expressing its intention to deploy a team to Damascus. This correspondence coincided with Note Verbale No. 38 from the Permanent Representation of the Syrian Arab Republic to the OPCW, requesting that an FFM be dispatched urgently to visit the town of Douma to verify the information surrounding the alleged use of toxic chemicals on 7 April 2018. On the same day the permanent representative of the Russian Federation submitted a letter to the OPCW in which he welcomed the request from the SAR and pledged to facilitate the FFM.
- 2.4 An advance team was mobilised and dispatched on 12 April 2018 with a follow-on team the next day.

3. AIMS AND SCOPE OF THE FFM

- 3.1 The aim of the FFM, as specified in Mandate FFM/050/18, was to gather facts regarding the incident of alleged use of toxic chemicals, as a weapon, in Douma, in eastern Ghouta, the Syrian Arab Republic, on 7 April 2018, as reported in the media, and to report to the Director-General upon conclusion of the FFM activities. The site for investigation included Damascus and any other relevant sites, subject to consultation with the Government of the SAR and in accordance with paragraphs 12 and 13 of the FFM Terms of Reference. The operational instructions were to:
- Review and analyse all available information pertaining to the reported incident of alleged use of toxic chemicals, as a weapon;
 - Collect testimonies from persons alleged to have been affected by use of toxic chemicals, as a weapon, including those who underwent treatment; eye witnesses of the alleged use of toxic chemicals; medical personnel who had provided treatment to persons who had been treated or came into contact with persons who might have been affected by the alleged use of toxic chemicals;

- Where possible, and deemed necessary, carry out medical examinations, including autopsies, and collect biomedical samples of those alleged to have been affected;
- If possible, visit hospitals and other locations as deemed relevant to the conduct of its investigations;
- Examine, and, if possible, collect copies of, the hospital records including patient registers, treatment records, and any other relevant records as deemed necessary;
- Examine, and, if possible, collect copies of any other documentation and records deemed necessary;
- Take photographs and video recordings and examine, and if possible collect copies of video and telephone records;
- If possible, and deemed necessary, physically examine and collect samples from remnants of munitions, devices, cylinders, containers, etc., alleged to have been used during the incident under investigation;
- If possible, and deemed necessary, collect environmental samples at or from the alleged points of incident and surrounding area;
- Arrange transport for the off-site analysis of the collected samples and
- All activities of the FFM will be undertaken in accordance with the relevant Technical Secretariat procedures relating to the conduct of inspections during contingency operations, as applicable.

3.2 On 20 April, the SAR submitted a Note Verbale to the Technical Secretariat formally requesting the Director-General to instruct the FFM team to carry out a visit, within the framework of its mission to gather facts surrounding the allegation on 7 April 2018, to a warehouse suspected of storing chemicals related to the production of chemical weapons.

3.3 Two further mandates (FFM/049/18 and FFM/051/18) were issued by the Director-General instructing the FFM team to conduct activities in a neighbouring country, referred to as Country X from here out, in relation to the investigation of alleged use of toxic chemicals as a weapon in the SAR on 7 April 2018.

4. PRE-DEPLOYMENT ACTIVITIES AND TIMELINE

4.1 Following reports in the media of the alleged incident on 7 April, the Information Cell of the Technical Secretariat (TS) immediately informed the FFM team and initiated a search of open-source information to assess the credibility of the allegation. The major sources comprised news media, blogs and the websites of various non-governmental organisations (NGOs) (Annex 2). The final assessment by the Information Cell was that the credibility of the allegation was high and based on this information the Director General initiated an on-site investigation.

4.2 An FFM team, comprising nine inspectors and two interpreters, was mobilised on 9 April 2018 and pre-deployment activities commenced immediately. Preparations were made to deploy an advance team of three inspectors and an interpreter on 12 April and a follow-on team the next day. The team was briefed by the Information Cell on all

the relevant information gathered to date. A detailed timeline of the key events of the mission is provided in Annex 3.

5. SECURITY AND ACCESS TO THE SITES OF THE ALLEGED INCIDENTS

- 5.1 Given the recent military activities and the volatile situation in Douma at the time of the FFM deployment, security and safety considerations were of paramount importance. Considerable time and effort were invested in discussions and planning to mitigate the inherent security risks to the FFM team and others deploying into Douma. According to SAR and Russian Military Police (MP) representatives, there were a number of unacceptable risks to the team, including mines and explosives that still needed to be cleared, a risk of explosions, and sleeper cells still suspected of being active in Douma. This assessment was shared by the representative of the United Nations Department of Safety and Security (UNDSS). Moreover, the massive operation to evacuate residents who accepted the offer to leave Douma was ongoing, using the same road the team would have to take.
- 5.2 At the outset, the formal position of the FFM team, as instructed by the TS, was that security of the mission should be the responsibility of the SAR. During the initial meetings in Damascus, the FFM team was informed by Syrian and Russian representatives that the SAR could only guarantee the security of the FFM team if it were provided jointly with the Russian MP.
- 5.3 Following consultations with headquarters it was agreed between the TS, the SAR, the Russian MP, the United Nations Office for Project Services (UNOPS) and UNDSS representatives that security within Douma could be provided by Russian MP and this was formalized on 16 April. Consequently, it was agreed that the SAR would provide security during the trajectory from the hotel where the inspectors were lodged, to the final checkpoint at El Wafadin before entering Douma. From that point on, the SAR would relinquish responsibility for security to the Russian MP. It was also agreed that the FFM team would be accompanied by SAR representatives during the on-site activities, with Russian personnel limited to providing security.
- 5.4 During the reconnaissance visit by UNDSS on 18 April 2018 to assess the first two locations planned for visiting the following day, the security detail was confronted by a hostile crowd and came under small arms fire and a hand-grenade explosion at Location 2. The incident, reportedly, resulted in two fatalities and injury to a Russian soldier.
- 5.5 Following the incident, the planned deployment of the FFM team was postponed until the security situation could be re-assessed. Additional measures to mitigate the high security risks were proposed by the UNDSS representative, which included:
- i. Clearing the areas to be visited by the FFM team
 - ii. Securing the areas during the 24-hour period before deployment
 - iii. Increasing the number of escorts and having advance teams from UNDSS and Russian MP monitor the area prior to the arrival of the team at the sites
 - iv. Using the police force for crowd control

- v. Minimizing movement of civilians near the areas of interest given the possibility of suicide bombers getting within close proximity of the inspection team
 - vi. Deploying snipers on rooftops around the sites of interest
- 5.6 New routes of access to the locations of interest were identified and modifications to the initial FFM deployment plans were formulated. These included reducing the size of the FFM teams deploying to the field to facilitate better security control and limiting the number of sites to be visited during each deployment. All parties agreed that media reports and public pronouncements on operational aspects of the FFM were compounding the security risk for the team and efforts were made to mitigate this risk element.
- 5.7 Once the security re-assessment had been concluded and the proposed additional mitigation measures implemented, the FFM team deployed to the sites of investigation in accordance with the updated priorities and proposed schedule.
- 5.8 For the remainder of the mission, the deployment by the FFM team proceeded without any security incidents. Access was granted to locations identified by the team as soon as adequate security conditions could be assured by the SAR, Russian MP and UNDSS. The Russian MP ensured the team was fully isolated from local crowds and media personnel during the on-site visits, thereby allowing it to conduct its activities without interference.
- 5.9 During the visit to Location 2, SAR representatives did not provide the access requested by the FFM team to some apartments within the building which were closed at the time (details in Annex 6). The FFM was allowed to re-visit Location 4 on 1 May 2018 to conduct additional physical measurements and take photographs.

6. MISSION ACTIVITIES

Methodological Considerations

- 6.1 The FFM followed the same general methodological approach outlined in previous FFM reports, with the team adhering throughout to the most stringent protocols available. Three FFM sub-teams were deployed to two locations at different time intervals to conduct activities relevant to the respective mandates.
- 6.2 Environmental sampling at the alleged incident sites in Douma was conducted by the FFM team, using its own equipment and ensuring full chain of custody throughout, in accordance with OPCW Standard Operation Procedures (SOPs), Work Instructions (WIs) and guidelines. Samples were collected, sealed and documented in photos and videos, in the presence of SAR representatives, and unpacked at the OPCW Laboratory for splitting and redistribution to the OPCW Designated Laboratories (DLs), in the presence of the Permanent Representatives of SAR to the OPCW.
- 6.3 Some environmental and biological samples were received by the FFM in Country X. These samples were handled as described above from the moment of receipt. The FFM team also directly oversaw the drawing of blood samples in Country X from witnesses allegedly exposed to toxic chemicals on 7 April 2018.

- 6.4 Interviews were conducted by inspectors proficient in interviewing techniques following strict procedures set out in the OPCW WIs. Prior to commencing the interviews, the process was described to the interviewee, with emphasis on the fact that, with the consent of the interviewee, the interviews would be audio and video recorded. After confirming the process was understood, the interviewee was requested to sign a consent form. The interview process followed the free recall approach with follow-up questions to elicit information of potential evidentiary value.
- 6.5 Open-source materials including, but not limited to, videos and photos were used primarily for planning activities but also for comparative purposes with material collected by the FFM team in the course of the investigation. Further details on the methodology are provided in Annex 4.

Activities

- 6.6 The individual activities of the FFM were conducted in accordance with OPCW guidelines as well as SOPs and WIs (Annex 1).
- 6.7 The activities included:
- a) Collecting environmental samples at sites relevant to the allegation, namely Locations 1, 2 and 4 as well as at two locations, a production facility and warehouse, suspected by the SAR to be engaged in the production of chemical weapons production facility and warehouse.
 - b) Receiving and documenting biomedical and environmental samples brought to Country X by alleged casualties or witnesses, as well as overseeing the direct taking of blood samples.
 - c) Taking photographs and collecting data on the cylinders found at Locations 2 and 4, as well as the physical surroundings.
 - d) Taking photographs and collecting data from a facility and a warehouse suspected of producing chemical weapons.
 - e) Conducting interviews with medical staff, casualties, first responders and witnesses of the alleged chemical attack in Douma.
 - f) Reviewing open-source materials.
- 6.8 The possibility of exhuming bodies from mass graves to collect biomedical samples and examine cadavers possibly exposed to toxic chemicals from the alleged attack on 7 April was considered by the TS. The intention to do so was communicated to the SAR through Note Verbale (NV/ODG/214827/18) and preliminary preparations were undertaken by the TS for this eventuality.
- 6.9 When the analytical results of the first round of environmental and biological samples were received and no nerve agents or their degradation products were identified in either environmental or biological samples, the plans for exhumations were halted as the risk of not finding substantive evidence of the alleged attack was now considered high and proceeding with the exhumations presented a risk to benefit ratio that was no longer acceptable.

7. FACTUAL FINDINGS

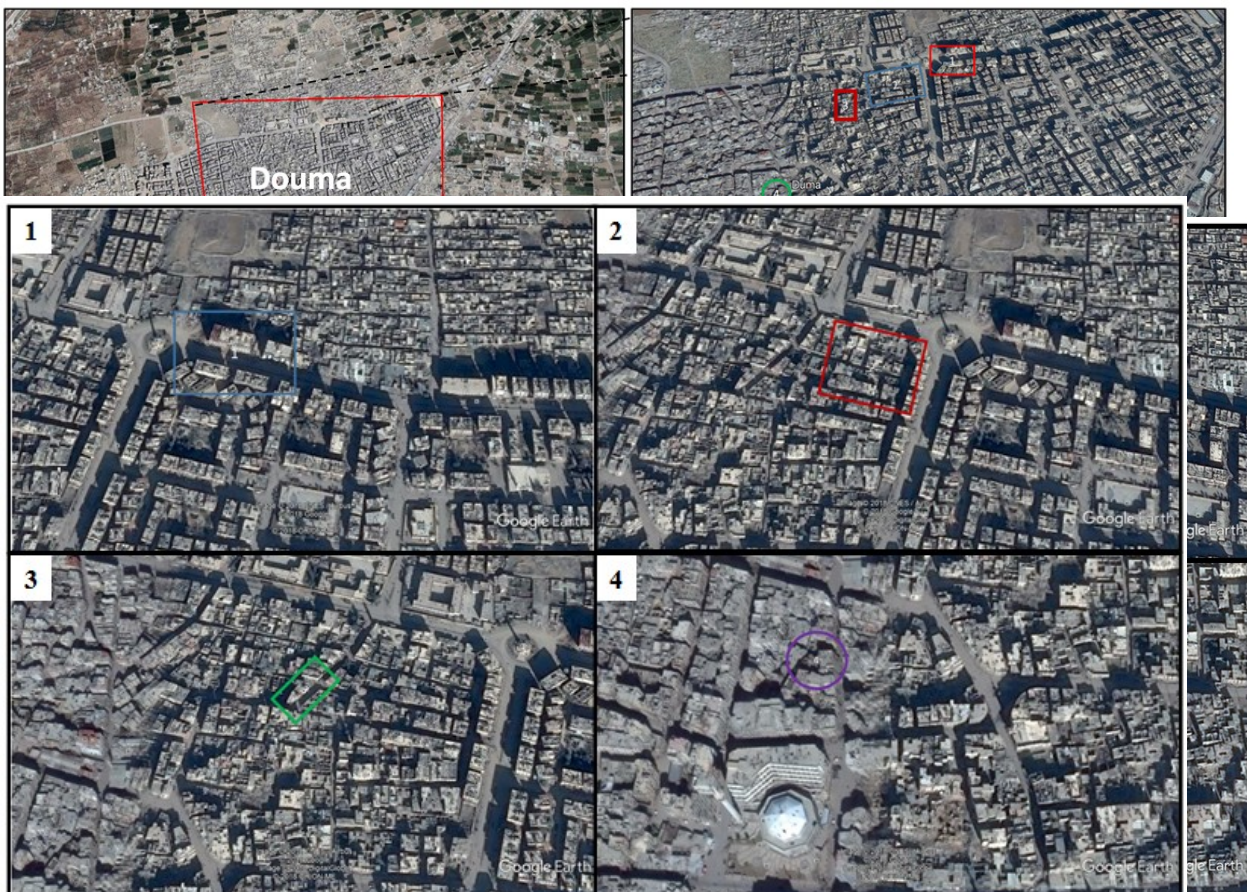
Alleged Sites

7.1 The sites visited during the FFM included Location 1, Location 2 and Location 4, which refer to the hospital where victims were allegedly treated for chemical exposure, the residential block with the cylinder on the roof-terrace, and the apartment with the cylinder lying on a bed, respectively. Location 3 was initially considered a site of interest, but was discarded based on subsequent information. Two other locations, a facility and a warehouse were visited to gather information to assess any possible connection with chemical weapons manufacture. Locations 1 to 4 are shown on the satellite images below of Douma.

Figure 1: **LOCATION OF DOUMA IN SYRIA**



Figure 2: **LOCATIONS OF INTEREST FOR THE FFM IN DOUMA**



7.2 The meteorological conditions in Douma on 7 April around the time of the alleged incident, as registered in open sources (darksky.net), are shown in Table 1, below.

TABLE 1 METEOROLOGICAL CONDITIONS IN DOUMA ON 07 APRIL 2018

Time	Temperature	Wind Direction	Wind Speed	Precipitation	Clouds	Humidity
19:00	26°C	From SE	11 Km/h	0.0 mm	overcast	27 %

Sampling

7.3 The FFM team formulated detailed sampling plans for each site of allegation. The plans relied on robust scientific principles, buttressed where possible by peer-reviewed scientific literature or proven experience, to identify sample types and locations of greatest potential probative value to the mission. Details of the scientific rationale behind the sampling process are given in Annex 4.

7.4 The team executed the original sampling plans to the extent possible, adapting to actual conditions on site where necessary. With respect to the legal considerations on sampling personal items as evidentiary material (see Annex 4) the FFM notes that it was not restricted in collecting any personal items deemed necessary by the team. Likewise, there were no restrictions on taking samples that resulted in minor damage to personal property, albeit this was kept to the absolute minimum by the FFM team.

7.5 Given the number of locations visited and the diversity of potential evidentiary material available, over 100 samples in total were collected and transported to the

OPCW Laboratory. To expedite analysis of those environmental samples considered to be of greatest probative value or of highest susceptibility to degradation, 31 samples were identified as priority for the first round of analysis by the OPCW designated laboratories. The results of analysis are presented in Annex 5.

Discussion of Analysis Results

- 7.6 The results of analysis on the prioritised samples were received by the FFM team on 22 May. The conclusion from those results is that all the wood samples collected from Locations 2 and 4 had been in contact with a substance containing a reactive chlorine species.
- 7.7 No scheduled chemicals or degradation products of scheduled chemicals were detected except: (a) The Schedule 3.B.17 chemical triethanolamine, which was detected at trace levels in various clothing samples belonging to alleged victims and in grouting from the tunnel beneath the hospital (Location 1) (b) A Schedule 2.B.04 chemical known as “AmgardV19” which was detected at trace levels in one item of clothing of one alleged victim. The presence of both these chemicals is readily explained given their common use as a surfactant and flame retardant in textiles respectively.
- 7.8 Other compounds detected across a broad range of samples included 2,4,6-trinitrotoluene (TNT), chlorinated derivatives of acetic acid, various mono, di, and tri chlorophenols and chloral hydrate. All the wood samples showed varying amounts of bornyl chloride or alpha-pinene or both.
- 7.9 The conclusion regarding the presence of chlorine-reactive species is based primarily on the detection of bornyl chloride and/or trichlorophenol in the wood samples. Bornyl chloride is a chemically-stable chlorinated derivative of alpha-pinene, a common terpene-type compound found mainly in coniferous wood [1]. When exposed to chlorine, alpha-pinene can be converted to bornyl chloride which is a chemical not naturally present in the environment. Although molecular chlorine (chlorine gas) does not react directly with alpha-pinene, hydrogen chloride, a decomposition product of molecular chlorine, is known to readily react with it to generate bornyl chloride [1] [2]. Two of the wood samples collected at the alleged sites showed the presence of bornyl chloride.
- 7.10 Based on these findings alone, it cannot be unequivocally stated that the wood was exposed to chlorine gas, but rather to hydrogen chloride or hydrochloric acid. Other chemicals such as phosgene or cyanogen chloride which also decompose to give hydrogen chloride or hydrochloric acid also could theoretically give rise to bornyl chloride from interaction with alpha-pinene in the wood.
- 7.11 In all the wood samples analysed, an analogue of phenol, trichlorophenol was also detected. Like bornyl chloride, this compound is not naturally present in wood and in experiments conducted by one designated laboratory, the chlorinated phenol could be generated by exposing wood samples to chlorine gas. The phenols themselves are thought to originate naturally in wood from decomposition of the phenolic macromolecule Lignine.

- 7.12 One of the methods by which phenol can undergo ring chlorination is through a process known as electrophilic aromatic substitution with hypochlorous acid, a disproportionation product of molecular chlorine [3]. Hydrochloric acid, the decomposition product of phosgene and cyanogen chloride, on the other hand, does not chlorinate phenols and consequently neither phosgene nor cyanogen chloride should give rise to the trichlorophenol found in the samples. This observation would tend to discount therefore, the possibility that the toxic chemical containing reactive chlorine was neither phosgene nor cyanogen chloride, at least not as the only agent present. It should be noted that phenol can also be chlorinated to trichlorophenol with sodium hypochlorite, the main component of chlorine-based bleach [4] [5].
- 7.13 In addition to bornyl chloride and trichlorophenol being detected in the wood samples, various other chlorinated compounds such as di and trichloroacetic acid as well as chloral hydrate were found in soil, concrete, wood and textile samples taken at the alleged incident sites. These are all compounds that are not generally present naturally in the environment and can be generated from reaction with active chlorine species (e.g. molecular chlorine, hypochlorous acid, sodium hypochlorite or chlorine-based bleaching agents) [5]. Studies have demonstrated that when humic material in soil or sewage for example is mixed with active chlorine solutions various chlorinated acetic acids, chloroaldehydes chlorinated phenols, among others, are formed [5]. Many such compounds were detected in the samples analysed.
- 7.14 In conclusion, the findings indicate that a substance, or a combination of substances, (such as molecular chlorine, phosgene, cyanogen chloride, hydrochloric acid, hypochlorous acid or sodium hypochlorite) containing a reactive chlorine atom was in contact with many of the samples collected at both alleged incident sites (Locations 2 and 4). The exact identity of the active chlorine-containing compound was not determined. No nerve agents or their decomposition products were detected in the samples analysed.

Physical Data Collection

- 7.15 Aside from sampling, a large volume of information was gathered by the FFM team included photographs, video recordings, detection readings, measurements on the weaponised cylinders and spatial arrangement of the environment of the cylinders both above and below the points of alleged impact.

Location 2 ("cylinder on the roof")

- 7.16 The team deployed to Location 2 (N 33° 34' 25.6", E 036° 24' 17.3") on 21 April 2018. Further details of the findings and analysis are contained in Annex 6.
- 7.17 The FFM team was unable to gain full access to all the apartments at Location 2. In particular, the FFM team requested entry to the apartment it had seen in open-source videos, (ground floor apartment on the east side) where several decedents, showing apparent effects of chemical poisoning, were strewn on the floor of the apartment. In the same videos, the front door of this apartment was seen to be unhinged, potentially providing the FFM team with a means of easily identifying and gaining access to it. During the visit however, it was noted that a front door had been re-hung and was now locked. There was no response to the calls by the FFM team at any of the locked apartments and the position of the SAR representatives was that they could not force

entry. This situation was relayed to the TS headquarters during the post-mission debrief that same evening.

- 7.18 The FFM had full access to the other areas of interest within the same apartment block, namely the roof-terrace where the cylinder had allegedly impacted, the apartment directly below this, and the basement of the same apartment block. No readings were recorded on the team detection equipment at Location 2. Discussions on the findings follow:

Discussion 1: Analysis of the possible route of dispersion of the alleged toxic chemical or chemicals in Location 2

- 7.19 The apartment block at Location 2 comprises five levels, namely a basement, ground, first, second and third floors. Access to each floor from the main entrance at ground level is through a central staircase that ascends counter-clockwise, with two sets of stairs and landings on each level. On the first landing of each floor, with the exception of the top floor, there is an apartment on the right and another on the left. The top floor has just one large apartment. Each level on the staircase has a tall glass-shattered window facing onto the street.
- 7.20 The central staircase does not descend into the basement and access can only be gained through an independent entrance at street level. Just below the ceiling at each end of the basement, located either side of the entrance, there are two narrow windows that open to the exterior just above street pavement level. Inside the basement there was, what seems to be, a narrow ventilation pipe, though it was not clear to where this tube vented.
- 7.21 The cylinder alleged to be the source of the toxic chemical lay on the floor of the roof-terrace on the third floor (which also corresponds to the ceiling of a room in the apartment on the east side of the building on the second floor) with its nozzle poised over a circular opening in the concrete, allegedly caused by the impact of the cylinder.
- 7.22 The following three dimensional layouts of the apartment block depict the spatial relationship between the alleged point of impact of the cylinder and the rooms where fallen victims of the alleged chemical attack were located according to the videos and some witness accounts.

Figure 3: **3D LAYOUT OF LOCATION 2 WITH DISTRIBUTION OF ROOMS AND REPORTED LOCATIONS OF ALLEGED VICTIMS**

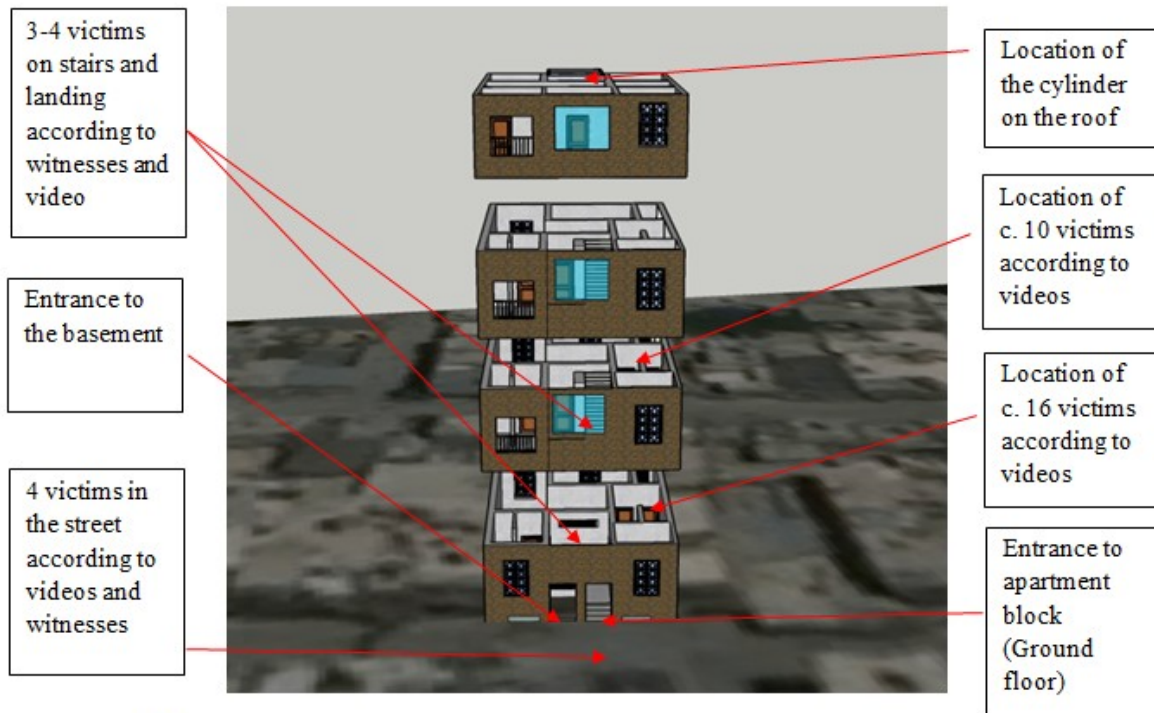


Figure 4: **POSSIBLE DISPERSION ROUTE OF THE CHEMICAL FROM TOP FLOOR THROUGH THE STAIRWELL (VIEWED FROM EASTERN SIDE OF THE BUILDING)**

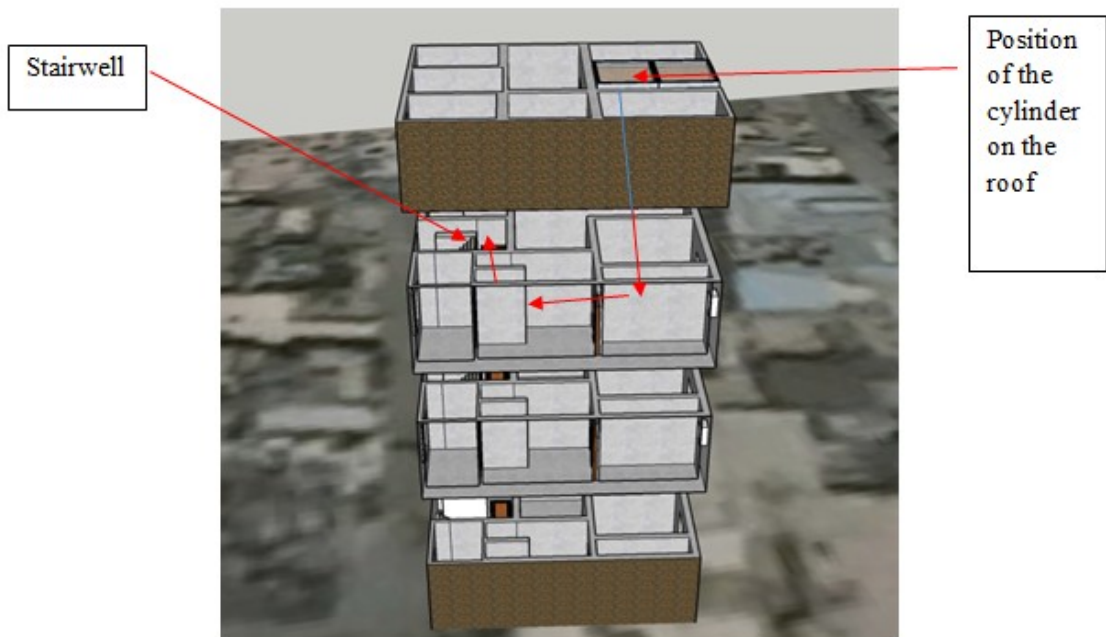
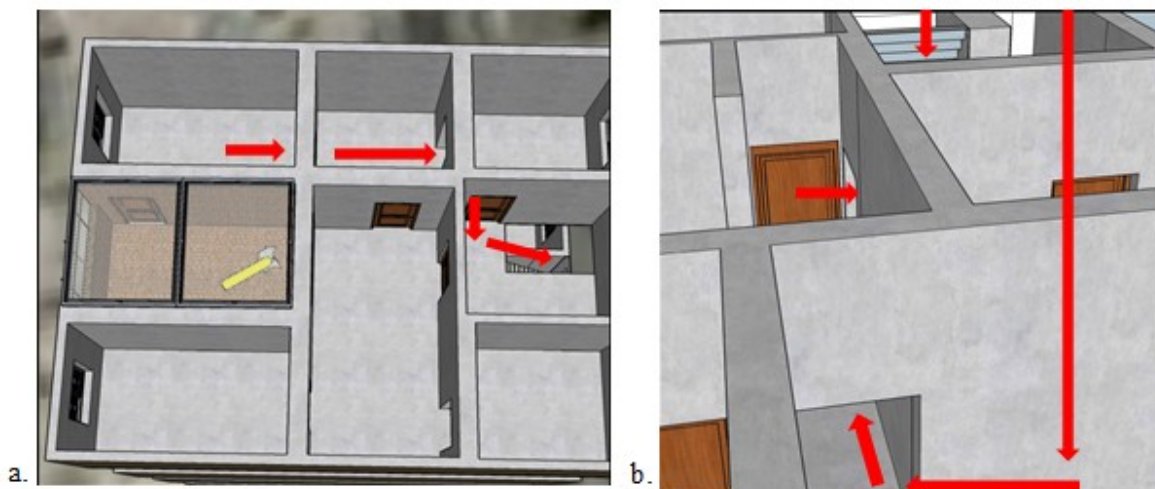


Figure 5: **POSSIBLE DISPERSION ROUTE OF THE CHEMICAL FROM THE TOP FLOOR TO THE STAIRWELL**



- 7.23 In figure 5.a the arrows correspond to the floor beneath (2nd floor), where the spatial layout varies slightly from that on the third floor shown in figure 5.a. Figure 5.b corresponds to the floor directly below (2nd floor) the point of impact where the cylinder is located.
- 7.24 It can be seen from the three-dimensional diagrams that there is a possible conduit for a downward dispersion of a toxic gas or vapour that is denser than air, from the room (in the 2nd floor) below the point of impact, through the stairwell, and into the various apartments. For this to happen, the hall door from the right east-side apartment on the second floor to the stairwell would have to have been open to facilitate a swift diffusion of the toxic chemical into the central stairwell. From video recordings taken by witnesses who arrived shortly after the alleged event, this seems to have been the case. Moreover, the hall doors from the stairway to the apartments where the victims succumbed to the toxic vapours or gas would also presumably need to have been open for lethal concentrations of chlorine to rapidly accumulate. According to one witness who claimed to have arrived at the scene shortly after the alleged attack, all the apartments were open.
- 7.25 It should be noted that in addition to a purely downward dispersion of any toxic chemical, the various apertures in the building, primarily the shattered-glass windows in the stairwell and the broken window in the room where the initial alleged chemical release took place (2nd floor), all provide routes for horizontal dissipation of the toxic gas towards the exterior. It would also appear that for chlorine to reach lethal concentration in the basement, the gas dispersion would almost certainly need to have come from the exterior, given the absence of a clear dispersion path from within the building.
- 7.26 Two casualties did state that another cylinder had landed and released chlorine gas in front of their house approximately 50-60 meters from the basement at Location 2. Although this might offer an additional source of toxic gas, the FFM team could not corroborate this statement and found no evidence that this was the case.

Discussion 2: Analysis of the ballistic effects of the cylinder found on the roof-terrace in Location 2

- 7.27 The FFM team took numerous photos of the cylinder on the roof-terrace, the aperture ostensibly created by the cylinder, the terrace and its surroundings, and the room directly beneath the point of impact. The team noted the dimensions of the aperture in the rebar-reinforced concrete roof as well as the damage to the cylinder itself.
- 7.28 The team had insufficient information to draw clear conclusions as to the provenance of the cylinder on the roof and to be able to provide a rationale for the relatively minor damage caused to the cylinder with respect to the more extensive structural damage to the rebar-reinforced concrete terrace. The FFM team considers that experts in structural engineering and metallurgy would be required to provide a competent assessment of the relative damages.

Location 4 ("cylinder on the bed")

- 7.29 The team deployed to Location 4 (N 33° 34' 24.", E 036° 23' 41.1"), on 25 April, where it also took photos, measurements, and detection readings in addition to gathering a broad selection of sample types. Photos and measurements were taken of the roof-terrace where the cylinder is alleged to have penetrated and the room below where it supposedly came to rest on the bed. Further details of the findings and analysis are contained in Annex 7.
- 7.30 From what the team observed, there did not appear to be any leakage from the cylinder at the time the team visited the location or any cracks or openings in the cylinder itself. The team noted that a slat of wood that was lying under the cylinder on the bed, part of which was taken as a sample, was quite wet and soggy. No chlorine gas was detected in the room. On analysis, this wood sample showed the highest content of chlorinated organic compounds of all the wood samples taken.
- 7.31 Based on the physical data gathered, the FFM team endeavoured to reconstruct a likely incoming trajectory of the cylinder before impact on the roof terrace and the subsequent trajectory after piercing the rebar-reinforced concrete roof, to the final resting position on the bed. While it was not possible for the team to define a clear and plausible trajectory, it appears the cylinder would have had to approach the roof-terrace, just prior to impact, at an angle of almost 90 degrees because of the surrounding walls and high building in the immediate vicinity of the hole (see 3D models below).

Figure 6: **COMPUTER-GENERATED VIEW OF THE CRATER ON THE ROOF-TERRACE**

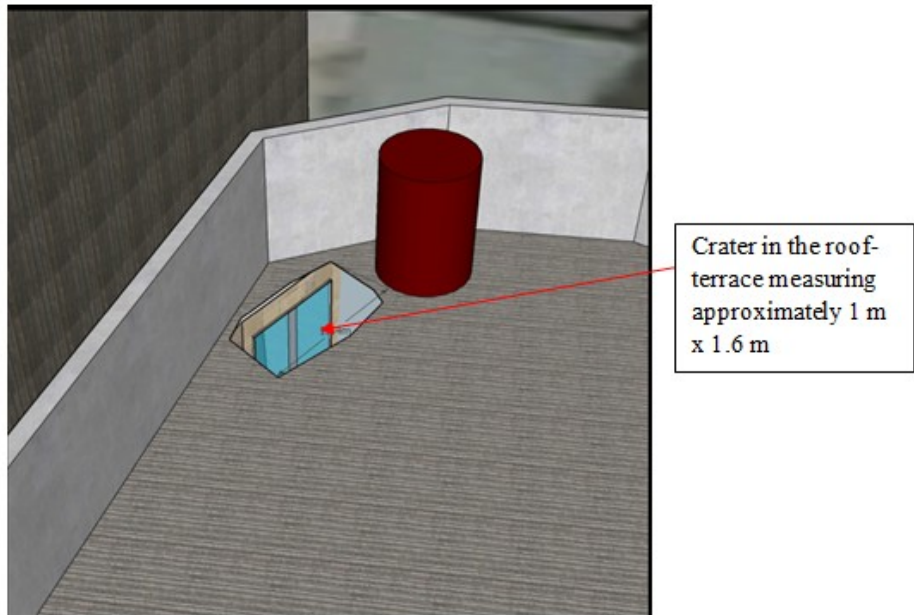


Figure 7:

COMPUTER GENERATED VIEW OF THE TERRACE WITH THE CRATER FROM THE ROOF OF ADJACENT BUILDING

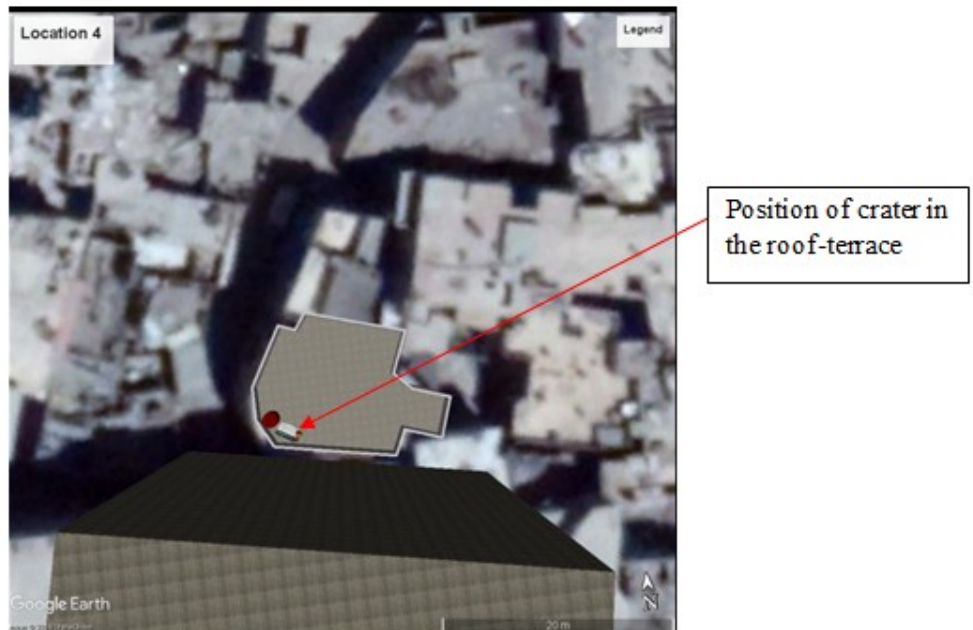
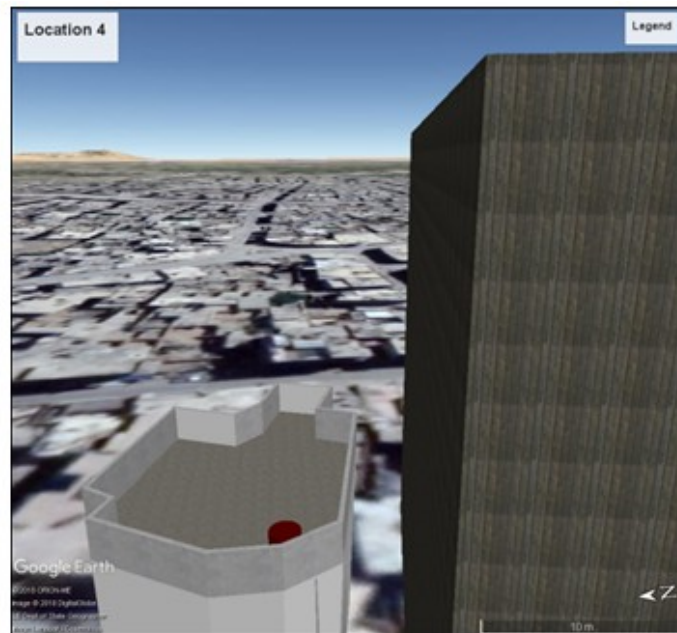
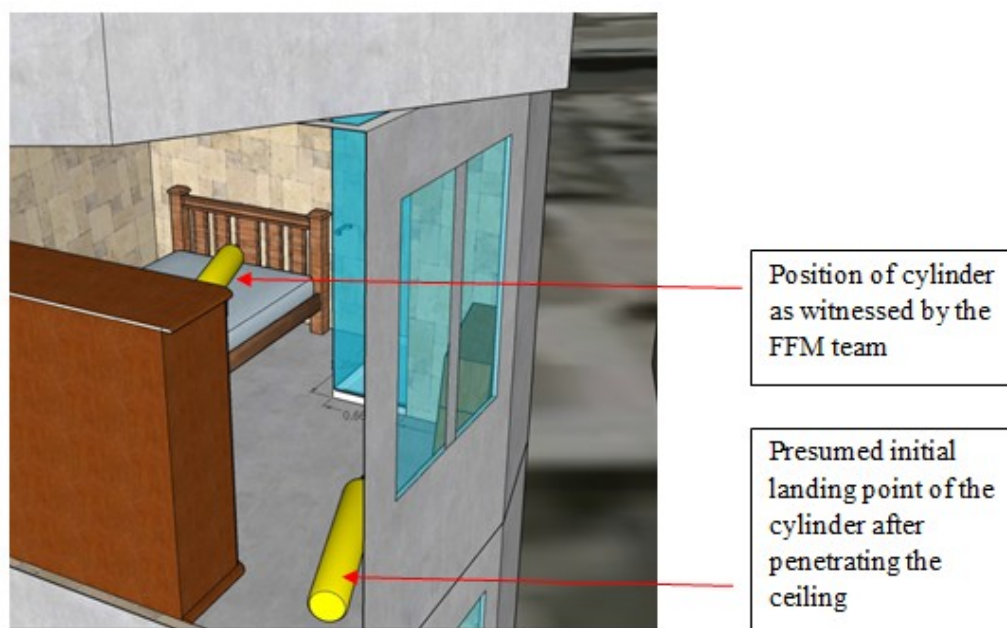


Figure 8: **COMPUTER GENERATED VIEW OF THE ROOF-TERRACE WITH THE CRATER AND THE NEIGHBOURING BUILDING**



7.32 It was not apparent how a cylinder that seems to have entered the room at an angle perpendicular to the floor might have sufficient lateral momentum to travel more than three meters from the presumed impact point inside the bedroom (the floor directly beneath the hole in the ceiling) to its final resting position on the bed. Witness testimonies state that the cylinder was originally found on the bed by the first responders who were the first to enter the building, ruling out the possibility therefore that it was moved by someone from the impact point on the floor on to the bed.

Figure 9: **VIEW OF THE BEDROOM AND CYLINDER POSITION**



- 7.33 The team considers that further analysis would need to be conducted by suitable experts, possibly in mechanical engineering, to provide a qualified competent assessment of the trajectory of the cylinder.
- 7.34 In a similar manner, the FFM team tried to assess the consistency between the structural damage appearing on the cylinder against the structural harm to the rebar-reinforced concrete roof through which the cylinder allegedly traversed, and considered that likewise, experts most likely in structural engineering or metallurgy would be required in order to provide a competent assessment of the relative damage.

Location 1 (hospital)

- 7.35 The FFM team visited Location 1 on 1 May 2018. The hospital, which is located at coordinates N 33° 34' 27.3", E 36° 24' 25", operates in a basement of a multi-story building. The facility, which the team was informed, has a staff of about 200 and was conducting regular activities at the time the team visited, includes an operation room, a recovery room, wards, intensive care units, a laboratory, and a pharmacy. The hospital is connected to a network of underground tunnels.
- 7.36 The FFM team requested information about procedures related to deceased patients in the hospital. They were informed that deceased patients normally would be taken to "Point 200", a room used as a morgue inside the hospital, where they would be collected by the Local Council. Subsequent information from witnesses indicated that the Syrian Civil Defence (SCD) assisted in this task.
- 7.37 The team was taken to the tunnel that had appeared in videos and photographs showing bodies that were reportedly the result of the alleged chemical attack, together with victims of conventional bombing. At the time of the visit of the FFM team there were no bodies in the area of the tunnel. Various parts of the tunnel floor were tested with a chemical agent detector. No positive readings were recorded. Samples for analysis were also collected in the tunnel following the sampling plan.

Production Facility and Warehouse Suspected of Producing Chemical Weapons

- 7.38 At the alleged chemical weapons production facility and warehouse in Douma, information was gathered to assess whether these facilities were associated with the production of chemical weapons. A preliminary assessment, based on data provided by the SAR and open source videos, of the potential relevance of the warehouse and facility suspected of producing chemical weapons, was conducted by the FFM team and submitted to the TS to facilitate planning.
- 7.39 From the information gathered during the two on-site visits to these locations, there was no indication of either facility being involved in the manufacture of chemical weapons. The overwhelming evidence was that both facilities were related to the production of explosives. This conclusion was based on the fact that virtually all the chemicals present were common precursors for explosives manufacture and neither facility had the raw materials or the appropriate equipment to manufacture chemical weapons, particularly nerve agents or vesicants. Full details in Annex 8.

Interviews

- 7.40 Interviews were held with a total of 34 witnesses, 13 of which were conducted in Damascus and the remainder in Country X. A breakdown of the profiles of the interviewees is given in Table 2. Two broad and distinct narratives were derived from the discussions with the interviewees, one corresponding to the group interviewed in Country X and the other to the group interviewed in Damascus. Both narratives are given below.

TABLE 2: PROFILES OF INTERVIEWEES

	Interviewee	Male	Female	Primary Casualty	Secondary Casualty
Treating physicians	4	4	0	0	0
Medical support staff	7	6	1	1	0
Witness	23	22	1	6	0
Sampler	0	0	0	0	0
Total	34	32	2	7	0

- 7.41 Of the 34 interviewees, seven (7) were alleged casualties who had been exposed to a toxic chemical. The three (3) victims were purportedly exposed at two buildings, the exact locations of which were not known to or visited by the FFM team. No photographs or videos of the locations or victims of the alleged attacks at these locations were available to the FFM team.

Narrative from group interviewed in Damascus regarding events on 7 April 2018

- 7.42 The following narrative is not presumed to be factual but merely a composite summary of the statements from witnesses interviewed by the FFM team.
- 7.43 A military campaign took place in Douma from approximately 16:00 on Friday 6 of April 2018 until the morning of Sunday 8 April 2018. The heavy shelling resulted in a lot of fires, dust and smoke in Douma. It is common practice to burn wood, rubber or plastic for heating and cooking inside basements. Most people were taking shelter during this period in basements and also on the ground floor of Douma Hospital.
- 7.44 On 7 April, physicians were receiving and treating trauma patients. The hospital was understaffed because many physicians and medical support staff had evacuated to the north a few days earlier. For that reason, many volunteers were helping hospital staff that day.
- 7.45 Furthermore, there were many fatalities by suffocation from dust and rubble as a consequence of the heavy shelling. The number of deaths was exacerbated by the absence of ambulance and rescue services.
- 7.46 Shortly after 19:00, 10 to 20 patients (children and adults) arrived in groups at the emergency department of Douma Hospital with blackened faces and covered in dust.

They presented with respiratory symptoms that included dyspnoea, coughing and asthmatic exacerbation secondary to exposure to smoke and dust. Medical staff from other medical points close to Douma hospital who were interviewed, also stated that they received casualties with similar symptoms.

- 7.47 A witness was asked at the emergency department to help hospital staff to wash casualties. While performing this task, a man, who was not from the hospital, entered shouting “chemical!, chemical!” and panic ensued. By-standers then began undressing and washing people, and proceeded to give inappropriate treatment.
- 7.48 The medical staff treated casualties with salbutamol, dexamethasone and oxygen and discharged all casualties by 01:00 AM on 8 April 2018. Casualties were not registered that day because of lack of staff.
- 7.49 Some witnesses stated many people died in the hospital on 7 April as result of the heavy shelling and/or suffocation due to inhalation of smoke and dust. As many as 50 bodies were lying on the ground of the emergency department awaiting burial. Others stated that there were no fatalities in Douma Hospital on 7 April, and neither were bodies brought to the hospital that day.
- 7.50 The SCD were in charge of burying the deceased in coordination with the local council. Most of the witnesses reported to be unaware of the location of the burial sites.
- 7.51 Some medical staff who were interviewed only heard about the alleged chemical attack from videos circulating on the internet or from other people, a couple of days after the alleged attack on 7 April.
- 7.52 Most of the medical staff present in the emergency department on the 7 April, who were interviewed, emphasised that the symptoms of the casualties were not consistent with those expected from a chemical attack. They also reported not having experience treating casualties of chemical weapons and some witnesses mentioned not being aware of any chemical attacks in Douma or Syria. Some interviewees stated that no odour emanated from the patients, while other witnesses declared that they perceived a smell of smoke on the patients’ clothes.

Narrative from group interviewed in Country X regarding events on 7 April 2018

- 7.53 The following narrative is not presumed to be factual but merely a composite summary of the statements from witnesses interviewed by the FFM team.
- 7.54 According to witness accounts, the SAR forces started a campaign to take control of Douma on Friday 6 April 2018 around 16:00. The shelling was reported to be intense, lasting until the morning of Sunday 8 April 2018. During this period, witnesses stated that most people took shelter in the basements of houses or buildings across the city, including over 1000 people inside the fortified underground tunnels leading to Rif Dimashq Specialized Hospital, also known as Point One.
- 7.55 At approximately 16:00 on Saturday 7 April, a civilian notified SCD first responders, of an alleged chemical attack nearby. Fifteen to eighteen people were affected. Ten of

them went to the SCD centre, presenting with breathing difficulties, and were washed, and treated with salbutamol.

- 7.56 At around 19:00 on the same day, a witness reported seeing a device falling from a helicopter. The device landed on the terrace of the top floor a three storey building located approximately 50 metres from the west entrance of the tunnel leading to Point One. The mentioned device did not explode.
- 7.57 Between 19:30 and 20:00, a strong smell was perceived within at least a 500 meter radius of the impact location. The smell was described as being similar to cleaning products containing chlorine and local commercial brands such as “Clor” and “Flash” were mentioned. They added that the odour was significantly stronger, more pungent and acidic than the cleaning products.
- 7.58 Many people were sheltered in basements in the area of the incident, including the building where the cylinder was found (Location 2). As the population had been advised to seek higher ground in the event of a chemical attack, they moved from the basements to the top floors.
- 7.59 Others sought immediate assistance at Point One, the Red Crescent and SCD centres. Due to the heavy shelling, rescue operations were delayed and SCD first responders, who were interviewed, didn’t arrive at Location 2 until approximately 21:10. A number of casualties made their own way to the hospital and 20 to 25 people were rescued by the first responders. The casualties were taken to the hospital where they were washed and treated with nebulizers.
- 7.60 The following symptoms were reported by casualties: shortness of breath, excess salivation or foaming from the mouth, severe cough, nausea, vomiting, redness and a burning sensation in the eyes and upper airways, lacrimation, and vision impairment. Hallucination and constricted pupils were also reported.
- 7.61 At Location 2, casualties were lying immobile on the ground of the basement, ground floor and on the stairs. They presented with excess foaming from the mouth and cyanosis and were presumed dead. When the first bodies were brought to the hospital, a doctor advised first responders not to bring the bodies to avoid secondary contamination as the smell on their clothes was very strong.
- 7.62 Some witnesses reported seeing a cylinder on the terrace of the second floor of Location 2 on the night of 7 April. The strong smell prevented anyone without respiratory protection from approaching it. During the following days, many had access to the top floor of the building.
- 7.63 The cylinder was described by witnesses as a yellow “barrel” or “rocket” with dimensions of approximately 1.5 by 0.4 meters. It was lying at an angle, with its orifice inside the hole on the floor of the terrace, which corresponds to the ceiling of the room beneath.
- 7.64 On the morning of 8 April, the SCD resumed the rescue activities at Location 2 and removed the bodies from the building and laid them on the street, in front of the building. They were doused with water and brought to the hospital to be prepared for burial.

- 7.65 The number of fatalities at Location 2 ranged between 40 and 45, according to first responders. Up to 50 fatalities and 70 casualties of the chemical attack were reported. The FFM team also received the names of 43 of the deceased.
- 7.66 Witnesses who were involved in burial preparations recounted that the victims of the alleged chemical attack were buried in a mass grave with other casualties.
- 7.67 First responders were notified of the presence of another cylinder in a residential building (identified as Location 4 by the FFM team) close to the Great Mosque. A witness arrived there around midnight on 7 April. The cylinder was lying on a bed inside a top-floor apartment and a strong smell was present which he described as being similar to chlorine. The witness recounted that there was a hole in the roof where the cylinder (1.5 by 0.5 meter) had entered the room. The witness stated that the cylinder was leaking gas and the smell was too strong to remain inside the room. No casualties from this allegation were reported to the FFM.

Analysis of media evidence

- 7.68 The FFM team received numerous photos and an abundance of video footage from witnesses of events surrounding the alleged chemical incident on 7 April and the following days. Many of the videos given by the witnesses had been or were later uploaded by the same witnesses on internet. The materials included, *inter alia*, videos and photos of decedents laying on the floor and stairs of apartments in Location 2, bodies being removed from this building, doused with water and placed in vans, shrouded corpses in Location 1, blood samples being withdrawn from alleged victims of the chemical attack and videos and photos of the cylinders purported to have been the source of the toxic chemical agent(s).
- 7.69 The FFM team analysed the videos and photos in detail to try to ascertain their authenticity and potential as corroborative evidence. The analysis involved, *inter alia*, gathering metadata to verify the dates and time the videos and photos were created, assessing the consistency of the symptoms of chemical exposure displayed by the victims in the videos with chemical analyses and witness statements (elaborated on under the section on epidemiology), and the consistency of bodily injuries with death from exposure to a chemical agent. The following observations are noted by the FFM team:
- From an examination of the metadata, the FFM team was confident that the videos and photos provided by witnesses in relation to Locations 2 and 4 were created posterior to the alleged incident and were generally consistent with the alleged timings of events (See Annex 11 for the results of metadata analysis).
 - From the various videos showing the deceased victims throughout the interior of Location 2, it is apparent that some of the victims have been moved and re-positioned between video recordings.
 - There were variations (see table and footnotes below) in the numbers of bodies and their distribution throughout Location 2 as observed in video footage and photos, compared to the numbers provided by various witnesses who were interviewed. According to statements from witnesses, “many people they presumed dead, were lying on the floor of the basement”. The FFM did not

obtain any video footage or photos of dead casualties lying in the basement of Location 2 or being removed from there. There were also no photos or video footage available to the FFM team of the other two basements or of decedents, where three witnesses interviewed claimed to have been exposed to chlorine.

Source ¹	Total dead ²	Distribution of mortal victims in Location 2 ³						Total victims of exposure ⁴
		Basement ⁵	Ground floor ⁶	1st floor ⁶	2nd floor ⁶	Stairs ⁶	Out-side ⁶	
Video ⁶	133 ⁶	None seen ⁶	c.16 ⁶	c.10 ⁶	0 ⁶	3-4 ⁶	4 ⁶	Not indicated ⁶
1757 ⁶	⁶	⁶	⁶	⁶	⁶	⁶	⁶	500 ⁶
1770 ⁶	²⁶⁽¹⁾ ⁶	⁶	⁶	⁶	⁶	⁶	⁶	⁶
1919 ⁶	⁶	40-50 ⁶	⁶	⁶	⁶	⁶	⁶	⁶
1900 ⁶	⁶	- ⁶	10 ⁶	10 ⁶	⁶	4 ⁶	⁶	⁶
1741 ⁶	43 ⁶	⁶	⁶	⁶	⁶	⁶	⁶	⁶
1742 ⁶	40-45 ⁶	10-15 ⁶	³ 10 ⁶	⁶	⁶	3 ⁶	⁶	500 ⁶
1743 ⁶	45 ⁶	3 ⁶	20 ⁶	⁶	15-16 ⁶	⁶	4 ⁶	⁶
1753 ⁶	40-45 ⁶	"Some" ⁶	⁶	⁶	⁶	⁶	⁶	50-100 (exc. dead victims) ⁶
1920 ⁶	⁶	c.30 ⁶	9 ⁶	12? ⁶	⁶	⁶	⁶	⁶
1757 ⁶	⁴² ⁶	⁶	⁶	⁶	⁶	⁶	⁶	⁶
1787 ⁶	³⁰⁰ ⁶	⁶	⁶	⁶	⁶	⁶	⁶	⁶
1902 ⁶	⁶	⁶	⁶	⁶	⁶	⁶	⁶	^{670, 790} ⁶
1780 ⁶	¹⁵⁰ ⁶	⁶	⁶	⁶	⁶	⁶	⁶	⁶
1757 ⁶	⁶	⁶	⁶	⁶	⁶	⁶	⁶	⁹⁴² ⁶
1749 ⁶	⁶	⁶	⁶	⁶	⁶	⁶	⁶	¹⁰¹⁵ ⁶

¹Location 2 only. This was the number counted in the house prior to the bodies being removed. About 33 were counted being removed from the apartments on the following day. None were seen been removed from the basement

²This was not at Location 2. Two witness statements place it approximately 50-60 meters from Location 2. According to one of the witnesses, who was an alleged casualty at this location, there were six fatalities resulting from toxic exposure at this location. According to the second witness, who was also a casualty, there was one fatal casualty at this location.

³Inside the apartment. Exact room not specified

⁴Number quoted as being brought to hospital by first responders

⁵Subject stated to have assisted in burial of more than 300 persons stated to be related to the alleged chemical incident.

⁶The number of patients from the alleged chemical attack treated by the witness

⁷Number of chemical casualties admitted to the intensive-care unit at hospital according to the witness

⁸At the medical point subject describes seeing up to 150 casualties both alive and dead and estimates 150 in total dead secondary to chemical exposure

⁹Witness stated that in total, there were around 180-185 casualties that night (unclear if referring to chemical casualties). 42 as result of alleged chemical attack were brought to the hospital by first responders. Two died at the emergency care unit".

¹⁰The witness said he saw people (approximately 15) on the street foaming from the mouths, shaking, screaming, shivering...

Epidemiology

- 7.70 The FFM team applied forensic epidemiology [6] to formulate evidence-based probabilistic conclusions on a causal association between the alleged use of chemical weapons in Douma on 7 April 2018 and over forty alleged chemical-related deaths and numerous injuries on the same date.
- 7.71 As the scientific basis to the investigation, the analysis of causation adopted the Hill Criteria [6], which includes factors of plausibility, temporality, and possible alternative explanations.

Plausibility:

- 7.72 The following paragraphs discuss the results of chemical analysis of prioritised samples, the symptoms presented by victims of the alleged chemical attack, as described by witnesses and observed in photos and video footage, and an analysis of the inter-relationship of both.
- 7.73 At the outset, it was imperative to establish whether and which toxic chemicals were released at the alleged sites. To this end, over 100 environmental and biological samples were taken and those considered of highest probative value were prioritized for analysis at designated laboratories. Symptoms, as reported by alleged casualties and witnesses and seen in photographs and video footage, could then be interpreted in light of the chemical analytical results.
- 7.74 *Chemical analysis results:* The conclusions from the results of samples analysed by designated laboratories were that some samples collected at Locations 2 and 4 had been in contact with one or more chemicals containing reactive chlorine. Examples of such chemicals include, molecular chlorine, phosgene, cyanogen chloride, hydrochloric acid, hypochlorous acid and sodium hypochlorite. From the analytical results the actual chemical could not be confirmed. No organophosphates or their degradation products were identified by either of the designated laboratories.
- 7.75 On the day following the alleged attack, first responders entered Location 2 wearing no personal protective equipment and extracted supposedly contaminated victims. There were no reports of secondary contamination.
- 7.76 *Symptoms:* The team notes that it did not witness first-hand any patients or decedents showing symptoms of exposure to toxic chemicals and that all the evidence came either from witness statements or recorded material available to the team.

- 7.77 The range of symptoms reported varies substantially depending on where and from whom the information was gathered. Witnesses interviewed in Damascus present a narrative whereby, on 7 April around the time of the alleged chemical attacks, casualties arrived at Location 1 displaying symptoms commensurate with asphyxiation from dust and fumes as a result of bombing. The symptoms included dyspnoea, cough and asthmatic exacerbation secondary to exposure to smoke and dust. Witnesses and victims interviewed in Country X describe symptoms that included shortness of breath, a burning sensation in the chest, oral hypersecretion, ocular irritation, visual disturbances, lacrimation, dysphonia, nausea, vomiting, pruritus, and in the case of some surviving victims, constricted pupils.
- 7.78 Open source videos and photographs as well as recorded media given to the FFM team by interviewees, were analysed for external presentations of toxic chemical exposure. In one video showing decedents from the alleged chemical attack, several of the subjects display corneal opacity and some degree of thoracic or cervical extension. Many present various amounts of either white or clear oral secretions, similar in appearance to fulminate pulmonary edema. The secretions either lie in pools near the victims' mouths on the floor or extruding 'froth like' from the mouth. The skin of some of the victims is brown stained, which may be vomitus or old blood. None of froth or secretions displays hues of pink that would have originated from the presence of blood. According to witness statements, the onset of frothing was quite rapid, and this is consistent with the images seen in the video footage and the time of their recording. Several victims show degrees of periorbital discoloration and early signs of livor mortis, and in one case an adolescent male displays obvious signs of rigor mortis. Most of the subjects appear to have wet hair.
- 7.79 In another video, widely circulated on social media immediately after the alleged chemical event, decontamination procedures are being carried out on a number of adults and children in a medical facility (Location 1). In the video at least 3 infants seem to display signs of respiratory distress, with rapid breathing and cyanosis/pallor. Children are seen being treated with an unknown medication via metered dose inhalers or small volume nebulizers. Other children are shown being either washed with water or treated with an oxygen mask. None appear ill.
- 7.80 The adults seen being treated in the video show apparent signs of mild or moderate respiratory distress and cough. There are no visible signs of external trauma or frothing from the mouth.
- 7.81 *Analysis:* A highly debilitating agent, in the opinion of the FFM team, would have to have been released in order to cause the rapid onset of symptoms described by witnesses and observed in the videos where large numbers of decedents are concentrated in different apartments at Location 2. The rapid onset of heavy salivation and frothing from the mouth would be more consistent with exposure to a highly toxic nerve agent than a choking agent such as chlorine or phosgene. However, analytical results shown no indication of organophosphorus nerve agents or their degradation products present in samples collected at the scene of the alleged attack or in biomedical samples from victims.
- 7.82 Pulmonary edema and excessive frothing from the mouth *have* been reported in cases of exposure to lethal doses of chlorine gas or other toxic chlorine-based agents such as

phosgene or cyanogen chloride [7] [8] [9]. However, indications are that pulmonary edema, particularly in the case of phosgene, is a late pathological effect of exposure and in cases of high exposure levels death can result before pulmonary edema develops [8] [9]. The white or light-cream colour of the froth presented by victims is not in keeping with exposure to choking agents, where secretions are characteristically pinkish in colour when frothing does occur. The rapid, and in some reported cases, immediate onset of frothing described by victims is not considered consistent with exposure to chlorine-based choking or blood agents. The opinion of a number of toxicologists, specialists in chemical-weapons-related intoxication supported this assessment.

- 7.83 In order to produce such rapid incapacitation that victims would be unable to escape the toxic gas from the location of the alleged chemical attack (see 3D layout of the building and description), a respiratory irritant such as chlorine or phosgene would almost certainly need to have rapidly accumulated to very high concentrations. It is considered unlikely, given the location of the suspected source of the toxic chemical as well as the configuration and condition of the building, that such concentrations would not have been attained, particularly in the basement. Moreover, if such high concentrations had developed, as mentioned above, reports suggest that asphyxiation would have been the likely cause of death before pulmonary edema and frothing could develop [10].
- 7.84 Witness statements recount that victims ran from the basement towards the upper floors of the building, and therefore counter to the direction of dissemination of the toxic gas, which reportedly came from the roof-top downwards. It should be expected that on encountering the irritant gas, victims would instinctively have retreated and exited the building, which was within a few metres away. An assessment report on a major chlorine-release disaster illustrated that in a mass-casualty situation, people will escape however possible and present to emergency departments of their own choosing [10].
- 7.85 Based on the above observations, expert opinions of toxicologists specialised in chemical weapons exposure, and published scientific knowledge in this area, the FFM team considers that chlorine gas or other reactive chlorine-containing toxic agents such as phosgene or cyanogen chloride would not have resulted in the severe and rapid frothing symptoms reported by witnesses and observed in video footage and photos.

Temporal Relationship:

- 7.86 To establish a coherent temporal relationship, the exposure must always precede the outcome in time. Although the FFM team did consider to some extent witness accounts to evaluate this relationship, the main activity involved an analysis of metadata of recorded materials given to the FFM team by witnesses.
- 7.87 With the assistance of IT specialists from the TS, the metadata of over two hundred videos and photographs was examined for temporal evidence. Although it was not possible to acquire data on all the materials, what was obtained demonstrated in all cases that the videos and photos of victims and munitions related to the alleged chemical attack were created after the date and time of the alleged events.

- 7.88 Although many of the bodies in Location 2 present signs of rigor mortis, it is difficult to determine from the video the time of death. To establish this and the origin of certain features identifiable on many of the bodies, the team considers that an expert in forensic pathology would be required to provide an authoritative assessment.

Possible alternative explanations:

- 7.89 One criterion used in forensic epidemiology to assess causation considers the possibility of an alternative explanation or, more specifically, the lack of one [6]. The team considered alternative injury events, but stresses they are founded on few or no substantiated supportive facts.
- 7.90 Firstly, the team considered the possibility that some unknown highly toxic chemical, which so far has eluded detection, might have been co-present or released simultaneously with the putative chlorine-containing agent. The team had no evidence however that this is the case and to date the prospect is merely speculative.
- 7.91 Secondly, the possibility that the casualties observed in video footage and photos may not have died *in situ* or are the victims of a non-chemical event cannot be discounted, although the FFM team does not have sufficient evidence to reach an authoritative conclusion on this possibility.

8. CONCLUSIONS

- 8.1 From the information gathered during the two on-site visits to the warehouse and facility suspected of producing chemical weapons, there was no indication of either facility being involved in the manufacture of chemical weapons. The overwhelming evidence was that both facilities were related to the production of explosives.
- 8.2 Based on the levels of various chlorinated organic derivatives, which are not naturally present in the environment, detected in environmental samples gathered at the sites of alleged use of toxic chemicals (Locations 2 and 4), the FFM concludes that the materials from which the samples were taken at both locations had been in contact with a substance containing reactive chlorine. The specific chemical has not been identified.
- 8.3 Two industrial gas cylinders with dimensions of approximately 1.4 x 0.35 meters were observed by the FFM team, one at each of the two locations where the alleged chemical attacks took place. Although the cylinders might have been the sources of the suspected chemical release, there is insufficient evidence to affirm this.
- 8.4 No organophosphorous nerve agents, their degradation products, or synthesis impurities were detected either in environmental samples or biological samples from alleged casualties.
- 8.5 Apart from the Schedule 3.B.17 chemical triethanolamine and a Schedule 2.B.04 chemical known as "AmgardV19", the presence of which was satisfactorily explained, no other scheduled chemicals listed in the Annex on Chemicals of the Chemical Weapons Convention, or their degradation products were detected in the samples analysed so far.
- 8.6 Some of the signs and symptoms described by witnesses and noted in photos and video recordings taken by witnesses, of the alleged chemical victims, are not consistent with exposure to choking agents such as chlorine or phosgene. The rapid onset of heavy buccal and nasal frothing in some victims, as well as the colour of the secretions, are not indicative of intoxication from these agents.
- 8.7 The high number of decedents in the one location (allegedly 40 to 45), most of whom were seen in videos and photos strewn on the floor of the apartments away from open windows, within just a few meters of an escape to un-poisoned or less toxic air, is inconsistent with intoxication by toxic choking agents, even at very high concentrations.
- 8.8 The FFM team is unable to provide satisfactory explanations for the relatively moderate damage to the cylinders allegedly dropped from an unknown height, compared to the destruction caused to the rebar-reinforced concrete roofs. In the case of Location 4, how the cylinder ended up on the bed, given the point at which it allegedly penetrated the room, remains unclear. The view of the team is that further studies by specialists in metallurgy and structural engineering or mechanics are required to provide an authoritative assessment of the team's observations.
- 8.9 The inconsistency between the presence of a putative chlorine-containing toxic choking or blood agent on the one hand and the testimonies of alleged witnesses and

symptoms observed from video footage and photographs, on the other, cannot be rationalised. The team considered two possible explanations for the incongruity:

- a. The victims were exposed to another highly toxic chemical agent that gave rise to the symptoms observed and has so far has gone undetected.
 - b. The fatalities resulted from a non-chemical-related incident.
- 8.10 The team has insufficient evidence at this time to be able to formulate an authoritative conclusion in either regard. To this end, the investigation remains on-going.

9. ANNEXES (ENGLISH ONLY):

- Annex 1: Reference Documentation
- Annex 2: Open Sources
- Annex 3: Mission Timelines
- Annex 4: Methodology Details
- Annex 5: Results of Analysis
- Annex 6: Visit to Location 2 (“cylinder on the roof”)
- Annex 7: Visit to Location 4 (“cylinder on the bed”)
- Annex 8: Visit to the Warehouse and Production Facility
- Annex 9: Evidence Obtained by the FFM
- Annex 10: Documents received from the State Party
- Annex 11: Metadata

Annex 1

REFERENCE DOCUMENTATION

	Document Reference	Full title of Document
1.	QDOC/INS/SOP/IAU01 (Issue 1, Revision 1)	Standard Operating Procedure for Evidence Collection, Documentation, Chain-of-Custody and Preservation during an Investigation of Alleged Use of Chemical Weapons
2.	QDOC/INS/WI/IAU05 (Issue 1, Revision 2)	Work Instruction for Conducting Interviews during an Investigation of Alleged Use
3.	QDOC/INS/SOP/IAU02 (Issue 1, Revision 0)	Standard Operating Procedure Investigation of Alleged Use (IAU) Operations
4.	QDOC/INS/SOP/GG01 1 (Issue 1, Revision 0)	Standard Operating Procedure for Managing Inspection Laptops and other Confidentiality Support Materials
5.	QDOC/LAB/SOP/OSA 2 (Issue 1, Revision 2)	Standard Operating Procedure for Off-Site Analysis of Authentic Samples
6.	QDOC/LAB/WI/CS01 (Issue 1, Revision 2)	Work Instruction for Handling of Authentic Samples from Inspection Sites and Packing Off-Site Samples at the OPCW Laboratory
7.	QDOC/LAB/WI/OSA3 (Issue 2, Revision 1)	Work Instruction for Chain of Custody and Documentation for OPCW Samples On-Site
8.	QDOC/LAB/WI/OSA4 (Issue 1, Revision 3)	Work Instruction for Packing of Off-Site Samples

Annex 2

OPEN SOURCES

Open source internet links related to the incident in Douma on 07 April 2018

- <https://edition.cnn.com/2018/04/07/middleeast/syria-suspected-chemical-attack/index.html>
- <http://www.heraldsun.com.au/news/breaking-news/syria-denies-chemical-attacks-on-douma/news-story/ddd7bfdc568594195f594f653ecab59f>
- <https://www.aljazeera.com/news/2018/04/suspected-chemical-attack-kills-dozens-syria-douma-180407202906316.html>
- <https://youtu.be/m4lkf1SNcJI>
- https://youtu.be/KpwcV0sup_o
- <https://youtu.be/8TElceE3aLI>
- <https://twitter.com/inegazili/status/982850611665428480>
- https://twitter.com/Common_Mohammad/status/982854571952431104
- <https://twitter.com/KokachOmar/status/982851902223286272>
- <https://twitter.com/KokachOmar/status/982851294154108929>
- <https://youtu.be/-VmqS8786Q8>
- https://twitter.com/Charles_Lister/status/982714880154365952
- <https://www.aljazeera.com/news/2018/04/syrian-forces-press-offensive-rebel-held-douma-180407135235699.html>
- https://m.facebook.com/story.php?story_fbid=1739236919490549&id=111632495584341&refid=52&_tn_=-R
- <https://twitter.com/SyriaCivilDef/status/982623580180635648>
- <https://twitter.com/talentosprecato/status/982619592458752001>
- <https://twitter.com/Elizrael/status/982640972218675202>
- <https://twitter.com/SiegeUpdates/status/982630326387335170>
- <https://twitter.com/FSAPlatform/status/982627437082218496>
- <https://twitter.com/HusamHezaber/status/982626159518277633>

Open source internet links related to the incident in Douma on 07 April 2018

- <http://www.bbc.com/news/world-middle-east-43686157>
- https://www.sams-usa.net/press_release/sams-syria-civil-defense-condemn-chemical-attack-douma/
- <http://www.syriahr.com/en/?p=88799>
- <https://twitter.com/SyriaCivilDef/status/982976756163514368>
- <https://www.reuters.com/article/us-mideast-crisis-syria-deals/hostages-and-rebels-leave-douma-under-evacuation-deal-state-media-idUSKBN1HF0XO>
- <https://www.reuters.com/article/us-mideast-crisis-syria-ghouta-negotiati/rebel-fighters-begin-leaving-syrias-douma-after-weeks-long-military-assault-idUSKBN1HF09Z>
- <https://twitter.com/AsaadHannaa/status/982998575222312961>
- <http://www.syriahr.com/en/?p=88870>
- <https://www.youtube.com/watch?v=PIyGJugmGal>
- <https://www.youtube.com/watch?v=8TElceE3aLI>
- <https://www.youtube.com/watch?v=LozZlXcYQ9c>
- <https://www.youtube.com/watch?v=6F5ZNF8MDIA>
- <https://www.youtube.com/watch?v=JPFaEG9vJT4>
- <https://www.youtube.com/watch?v=2mw8DZEiSR0&feature=youtube.be>
- <https://www.bellingcat.com/news/mena/2018/04/11/open-source-survey-alleged-chemical-attacks-douma-7th-april-2018/>
- <https://sputniknews.com/middleeast/201804201063754094-russia-syria-douma-militants-lab/>
- https://www.youtube.com/watch?v=t99NFijj4Pg&oref=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Dt99NFijj4Pg&has_verified=1
- https://www.youtube.com/watch?v=DfQiFEyin_4&oref=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DDfQiFEyin_4&has_verified=1
- https://www.youtube.com/watch?v=0K9H8dh12uE&oref=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3D0K9H8dh12uE&has_verified=1

Open source internet links related to the incident in Douma on 07 April 2018

- https://www.youtube.com/watch?v=ajpjrYSOoYM&oref=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DajpjrYSOoYM&has_verified=1
- https://smartnews-agency.com/images/videos/2018/04/08/VNC-SY-180408-286/clip.mp4_1080.mp4

Annex 3

MISSION TIMELINE

Date	Activities
7 April	Reports of alleged chemical attack in Douma, SAR. TS Infocell begins immediate collection of open source materials to assess credibility of the allegation.
10 April	Technical Secretariat requests the Syrian Arab Republic, through Note Verbale (NV/ODG/214589), to provide any information it might have regarding the allegation of use of chemical weapons on 07 April 2018 in Douma.
10 April	Permanent Mission of the Syrian Arab Republic requests, through Note Verbale No. 38, that a Fact-Finding Mission be dispatched urgently to visit the town of Douma to verify the information surrounding the alleged use of toxic chemicals on 7 April 2018.
10 April	Permanent Representative of the Russian Federation submits a letter to the OPCW welcoming the request from the SAR and pledged to facilitate the FFM.
10 April	Technical Secretariat informs the Syrian Arab Republic in Note Verbale (NV/ODG/214589) of the intention to deploy a team of the OPCW Fact-Finding Mission (FFM) to Damascus on Thursday 12 April 2018.
10 April	Technical Secretariat informs the Syrian Arab Republic in Note Verbale (NV/ODG/214603/18) of its intention to deploy an additional team of the OPCW FFM to Damascus on Friday 13 April.
12 April	Advance team arrives at a neighbouring country.
13 April	Advance team discusses logistic arrangements with UNOPS in neighbouring country.
13 April	Advance team joined by the follow-on team.
14 April	Team preparations and meetings in neighbouring country
14 April	FFM team departs for Damascus.
14 April	FFM team meets with SP representatives and military representative from Russian Federation for mandate handover, preliminary security discussions and submission of the prepared list of questions and requests.

Date	Activities
15 April	Written communication (FFM/05018-DOC 02) from the Director General through the FFM team to the SAR representatives conveying his request for the SAR to expedite security arrangements to facilitate the FFM.
15 April – 12 May	34 interviews conducted by FFM team, including 13 in Damascus and 21 in Country X.
16 April	Second element of the FFM team deploys from headquarters to Country X to conduct interviews and sampling activities.
16 April	Note Verbale (NV/ODG/18) from TS to the Permanent Representative of the SAR to the OPCW accepting the SAR proposal that the MP from the Russian Federation present in Douma provide a security escort to the FFM, from the point of entry to the final point of exit to the sites relevant to the FFM's mandate.
16 April	Meeting between members of the FFM team, UNOPS, UNDSS, and representatives of the SAR and Russian military personnel to discuss security arrangements. First deployment agreed for 18 April.
17 April	A UNDSS team, accompanied by Russian MP, conducts a reconnaissance mission to Locations 1 and 2 to assess security for the proposed deployment on 18 April.
17 April	Security incident during the reconnaissance mission, involving use of light arms and hand-grenade explosion, requiring rapid exit of the recce team from target site at Location 2.
17 April	Team Leader (TL) redeployed to new location. Deputy TL takes over leadership of FFM/050/18
18 April	FFM 049 receives environmental samples from a witness, in Country X.
18 April	FFM 049 receives biological samples from a witness, in Country X.
18 April	Meeting between representatives of the SAR, Russian military personnel, the FFM team, UNOPS and UNDSS to discuss security situation in Douma, in particular the security related incident on 17 April.
18 April	FFM team received written reply to the questions and requests submitted to the SAR on 15 April.
19 April	UNDSS and OMS representatives approached the team with a proposal to conduct a reconnaissance of Location 1(hospital) on 19 April with a possibility of deploying a reduced team to the same location on 20 April 2018. Due to the priorities of the FFM team, the proposal was not accepted.
19 April	FFM team requests advice from HQ on legal implications of collecting privately owned items for evidence purposes.

Date	Activities
20 April	Note Verbale (NV/ODG/214771/18) from TS to the Permanent Representative of the SAR to the OPCW regarding the rights of the FFM team with regard to collecting items of personal property as evidence for the investigation.
20 April	Note Verbale from the SAR to the Director General of the OPCW requesting him to instruct the FFM team to conduct a visit to a warehouse containing chemicals and equipment, within the framework of the FFM's mandate, to collect information surrounding the allegation of use of toxic chemical substances in the city of Duma in Rif Dimashq on 7 April 2018.
20 April	Reconnaissance mission to Location 2 by UNDSS escorted by Russian MP.
21 April	FFM 049 receives environmental samples in Country X.
21 April	FFM 049 receives biological samples in Country X
21 April	FFM team deploys to Location 2. Team collects samples, takes photos and conducts physical measurements.
22 April	FFM 049 receives environmental samples from a witness, in Country X.
22 April	First FFM progress report submitted to the Director General on the activities conducted from 14-21 April 2018.
22 April	FFM team submits a technical assessment and recommendations regarding the suspected chemical weapons related warehouse and facility containing chemicals, production equipment and munitions as detailed in a NV from SAR on 20 April.
23 April	Receipt of written reply to the FFM team's request for information on any activities by Russian military personnel at Location 2 since the alleged incident.
23 April	Photos of seals on samples taken at Location 2 given to SAR.
23 April	Team informed of TS approval to deploy to Location 4 as next priority and instructed to also consider a visit to the warehouse referred to in the NV from the SAR.
23 April	FFM team meets with UNDSS, UNOPS, SAR and Russian Federation military representatives to agree security arrangements for deployment to Location 4.
24 April	Reconnaissance of Location 4 by UNDSS escorted by Russian MP and approval from HQ for the team to deploy.
25 April	FFM team deploys to Location 4. Team collects samples, takes photos and conducts physical measurements.

Date	Activities
25 April	Second FFM progress report submitted to the Director General
26 April	Note Verbale (NV/ODG/214827/18) from TS to the Permanent Representative of the SAR to the OPCW, requesting information and assistance from the Government of the SAR in getting the FFM access to the remains of any interred persons whose death might have been associated with the alleged incident on 7 April, including the exhumation of human remains.
26 April	Note Verbale (NV/ODG/214836/18) from the TS to the Permanent Representative of the SAR to the OPCW, requesting that the SAR transport the cylinders at Locations 2 and 4 to a secure location for packing and facilitate the application of OPCW seals by the FFM team for possible future evaluation by the Secretariat.
27 April	FFM team visits the warehouse; collects samples, takes photos and conducts physical measurements.
27 April	Third FFM progress report submitted to the Director General
30 April	Team deploys to the facility suspected of producing chemical weapons; collects samples, takes photos and conducts physical measurements. A SAR representative informs the FFM team that no decision had been made regarding the sealing of the cylinders.
30 April	Fourth FFM progress report submitted to the Director General
01 May	FFM team visits Location 1 (hospital) and revisits Location 4 (takes photos and physical measurements). A SAR representative informs the TL that SAR Government will not accept the sealing of the cylinders.
02 May	FFM team departs Damascus
03 May	FFM team returned to OPCW headquarters.
4 May	Technical Secretariat receives Note Verbale (No. 44) replying to TS request to seal the cylinders in Note Verbale NV/ODG/214836/18
4 May	Technical Secretariat receives Note Verbale (No. 45) from the SAR replying to the Technical Secretariat's request in Note Verbale (NV/ODG/214827/18) to exhume bodies for the purpose of taking bio samples
9-15 May	An element of the FFM team redeploys to Country X to conduct interviews.

Date	Activities
24 May	FFM team member delivers fractions of samples to the SAR
3 June	FFM team members tag and seal cylinders from Locations 2 and 4. The procedure is documented.

METHODOLOGY DETAILS

SAMPLING

(i) Sample types

1. Sampling was considered a key source of primary evidence in assessing whether toxic chemicals had been used as a weapon on 7 April 2018 in Douma. Given the FFM team would potentially have direct access to alleged incident sites and would therefore be able to select and collect samples where the full chain of custody could be preserved, very careful and meticulous consideration was given to selecting sample types, particularly in relation to environmental samples that would be of greatest potential probative value. The selection, to the greatest extent possible was founded on scientific rationale, ideally backed by proven scientific experience or peer-reviewed literature.

9. There were a few key considerations when determining sample types and these are discussed below.
 - (a) Legal responsibilities relating to personal items as evidentiary material
 - (b) The possibility that at least two potential toxic chemicals, namely chlorine and sarin, might have been used.
 - (c) The fact that samples were being collected approximately two weeks after the alleged incident with subsequent analysis taking at least an additional two weeks from the time of sampling.
 - (d) Concerns about the lack of integrity of, and tampering with, the sites of interest from the time of the alleged incidents to the time the FFM team arrived to take samples and document the scenes.

10. **Legal Considerations:** Prior to formulating the sampling plans, the FFM team requisitioned clarification on a legal issue relating to sampling within the context of the current investigation. The alleged incident in Douma represented a unique situation for FFM investigations in that it allegedly took place, and the alleged victims were located, within the confines of private residential properties that were, in some cases, still occupied at the time of the investigation. As it was reasonable to expect items of personal property might need to be collected by the FFM team as evidentiary materials, the team sought legal advice in this regard in light of its potential impact on the development and execution of the sampling plan.

11. To this end the Office of the Legal Advisor of the Technical Secretariat articulated an explanatory legal opinion and Note Verbale (NV/ODG/214771/18) regarding the collection of evidence in Douma and potential legal exposure of the FFM team or the OPCW. The Note Verbale was submitted to the Permanent Representative of the SAR to the OPCW on 20 April 2018 requesting the SAR to authorize the FFM team to take custody of any personal property which might be collected as evidence in furtherance of its mandate, and hold the OPCW harmless in respect of any future claims, including any third party claims.

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12. **Toxic Chemicals:** Two toxic chemicals, chlorine gas and the nerve agent sarin, were reportedly used as chemical weapons in the alleged incidents in Douma. The particular physical and chemical behaviour of both, and any other potential toxic agents, played a determining role in how the sampling plan was developed. The FFM team took this into consideration to try to mitigate any possible negative impact of collecting samples two weeks after the alleged incident and to circumvent the effect of possible removal of or tampering with evidence. An account of the thought process that led to the selection of sample types and sampling locations follows:
 13. *Sampling for chlorine or chlorine derivatives:* Chlorine is a volatile gas that is two and a half times heavier than air. It is unstable both in the environment and *in vivo*, and generates decomposition products which are also very reactive or non-specific. Once released to the environment chlorine rapidly reacts with water or atmospheric moisture, generating hydrochloric acid and hypochlorous acid [11] [12]. Similarly, when chlorine comes in contact with moisture in nasal, trachial and lung tissue, the chlorine disproportionates to the same acids [13]. Moreover, chlorine gas rapidly degrades with ultraviolet radiation, generating chlorine free radicles in daylight [12]. For that reason, detecting chlorine gas *per se* in the environment or in body tissue or fluids following exposure is highly unlikely, particularly if there is a significant delay in collecting the samples, as in this particular case.
 14. Although chlorine decomposes rapidly in the environment, the gas itself or its decomposition products are known to react with a variety of other chemicals in the environment, including organic materials and metals [12] [14] [15]. Such products can be quite stable and therefore could provide long-lived chemical signatures of chlorine exposure. The possibility of finding such chlorine derivatives guided the FFM team in its selection of sample types as a means of indirectly demonstrating with a high level of confidence that chlorine gas, or at least a substance containing reactive chlorine, had been present in the environment of the alleged incident. The chlorine derivatives of interest and the material types in which they might be found are discussed below.
 15. Chlorine is known to undergo addition reactions across double bonds of unsaturated organic compounds thus incorporating chlorine atoms into their molecular structure [16]. Such compounds can be relatively stable and could therefore provide potential markers for the use of chlorine gas. Naturally occurring unsaturated compounds include terpenes such as α pinene which is a constituent of many types of wood, particularly coniferous pine [1] [2]. α -pinene is known to incorporate chlorine into its chemical structure and in fact was a key marker supporting the findings of a previous investigation of alleged use of chlorine. Sampling wooden items therefore, particular untreated pine-wood, was considered a priority sample type.
 16. Chlorine gas, through free radicle mechanisms, also reacts quite readily with saturated organic compounds [12]. Such types of compounds were also identified as potentially useful samples.

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17. In addition to being very reactive towards many organic substances, chlorine reacts readily with metals such as copper, iron, tin and zinc forming copper chloride, iron chloride, tin chloride and zinc chloride respectively [15] [14]. Evidence of any of these metal salts in the vicinity of the alleged use of chlorine was considered to be of probative value. Moreover, chlorine is known to cause pitting in metals, resulting in the formation of tiny microscopic pores in metal objects. Metal objects presenting evidence of such pitting could provide supportive evidence of exposure to chlorine.
 18. Although, as described above, chlorine dissipates and decomposes rapidly in the environment, it has been suggested that it might be possible to detect pockets of adsorbed, unreacted chlorine or chlorinated organic materials in certain porous materials such as soil and concrete or even in the metal containers used to store chlorine where the gas might be adsorbed or trapped in pores in the metal [17]. While scientific literature is abundant with examples of chlorine being adsorbed onto many carbon based materials, no reports of experimental work on chlorine being adsorbed within concrete were found. It was nonetheless, a sampling option that the team considered.
 19. The fact that chlorine gas generates hydrochloric acid on contact with reservoirs of water can have the effect of lowering the pH of the water. This was considered by the FFM team when evaluating potential sampling materials. Although finding aqueous samples with lower than usual pH values would not specifically indicate chlorine gas had been present in the environment, it could serve as a possible screening tool when prioritizing samples for selection, particularly if the water reservoirs contained organic debris such as oil or grease.
 20. Just as chlorine or its decomposition product hypochlorous acid interact with alkene moieties of inanimate organic matter, similar interactions can take place with biological materials. Although biomarkers that specifically indicate chlorine exposure remain unclear a limited number of biomarker studies for chlorine involving animal and human exposure have been published. They include studies on chlorinated derivatives of surfactant proteins in lung tissue, chlorotyrosines and phosphatidylglycerol chlorohydrins [18] [19] [20] [21] [22] [23]. While all of these chlorinated derivatives provide promising possibilities for detecting human or animal exposure to chlorine gas, reports indicate that, *in vivo*, they are relative short-lived biomarkers, with levels returning to baseline within periods ranging from 24 to 72 hours post-exposure.
 21. Other studies have been conducted where markers for chlorine exposure have been detected up to periods of 7-10 days post-exposure [24]. The studies relate to the effects of chlorine on Clara cell secretory proteins in which chlorine exposure results in sloughing of Clara cells from tracheal epithelium.
 22. Human hair was considered another relevant sample type as evidence for possible exposure to chlorine [25]. The interaction of chlorine with proteins such as cysteine and keratin in hair has been well studied.

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23. Although molecular chlorine is not naturally present in the environment, chloride ions and many chlorinated organic derivatives exist in the natural background. For that reason it was important to gather control samples, wherever feasible, in locations not expected to have been exposed to chlorine gas.
 24. *Sampling for sarin:* Sarin is a volatile liquid that boils at 147 °C and has a vapour pressure of 2.1 mmHg at 20°C (NIOSH). Unlike chlorine which primarily presents an inhalation hazard, sarin is both a vapour and a contact hazard, i.e. it can intoxicate by inhalation and by contact with the skin. Its physical and chemical behaviour in the environment and *in vivo*, is very distinct from that of chlorine gas and as such the approach to gathering potential evidence for sarin in the environment or in body tissue requires different considerations.
 25. Like chlorine, sarin is quite reactive, although not nearly to the same extent, and decomposes relatively quickly both in the environment [26] and *in vivo* [27]. It does however, leave degradation products which are very stable and quite specific, due to the phosphorus-alkyl bond typical of many nerve agents [28]. A characteristic feature of sarin and most nerve agents is the presence within its molecular structure of a phosphonyl group bonded to a methyl group. The juxtaposition of these groups is highly stable under the harshest of conditions and in fact even survives fragmentation under electron impact mass spectrometry [29]. Furthermore, the phosphonyl-methyl moiety of sarin is quite unique to nerve agents and is not present naturally in the environment, with possibly some very exceptional cases [30] [31]. This same functional combination does exist in some common synthetic fertilizers such as glufosinate, but these compounds have an additional alkyl group bound to the phosphorous, resulting in decomposition products which are quite distinct from those of the nerve agents [32].
 26. The implications of this for sampling are two-fold. Firstly, while sarin *per se* might not be detected in the environment days or weeks after the alleged incident, the degradation products of sarin such as methylphosphonic acid, which retains the unique phosphonyl-methyl bond and is itself a stable non-volatile compound, can be detected for quite an extended period after the alleged use [26] [28]. Furthermore, impurities such as diisopropyl methyl phosphonate generated in the manufacture of sarin, are relatively stable in the environment and are good indicators of sarin use [33]. Secondly, since sarin or its degradation products, or any organic compounds containing the distinctive phosphonyl-methyl bond, are not expected to be present naturally in the environment, the task of collecting control samples was not as critical as it was for samples potentially contaminated with chlorine.
 27. A major difference when sampling to detect potential use of chlorine or sarin in the environment is the fact that in the case of chlorine, samples are generally collected for their potential to have reacted chemically with chlorine gas or its decomposition products, thus giving rise to chlorinated organic derivatives. Sarin, or its decomposition products, on the other hand, show little interaction with other environmental materials and are therefore found either physically adsorbed to solid materials or dissolved in liquid media such as water, oils or even rubber products. These differences in chemical and physical properties were determining factors when deciding on what samples could be gathered.

28. With respect to bio samples, nerve agent adducts of acetyl and butyl cholinesterase have been used as reliable biomarkers for exposure to these agents [34]. These adducts can be detected for significant periods post-exposure [35] and therefore provide important conclusive forensic evidence of nerve agent exposure for some time after the chemical event. It should be noted however, that with the progression of time, the nerve agent–cholinesterase adducts undergo an ageing process that complicates the analysis. While it is still possible to identify nerve agent, it may not be possible to specify exactly which nerve agent was involved [36].

(ii) Sampling locations

29. When the most appropriate sample types had been identified, the FFM team proceeded to identify suitable locations to gather samples prior to deploying to the alleged incident sites. To this end, the team took recourse to open source videos of the alleged incident sites which were analysed to identify locations where sample types already considered as of high probative value could be gathered. The consequence of being able to do so would maximise the efficiency and effectiveness of the FFM team on the ground and consequently minimize the security risk by reducing time in the field.

30. The value of conducting such an exercise is exemplified in the case of one sampling activity the FFM team conducted at an underground tunnel, beneath the hospital where victims of chemical exposure were allegedly taken before being interred. Video material available to the FFM team showed numerous bodies strewn on the floor of the tunnel, some purportedly the victims of the chemical attack and others the result of trauma injuries. Given the vast extension of the tunnels and presuming the bodies would not be present in the tunnel at the time of the team’s arrival, it was crucial to be able to exactly geo-locate suspected victims in the video recording in order to target sampling to locations with the highest probability of being cross contaminated with toxic agent.

31. To this end a meticulous examination was undertaken of video material showing tens of decedents with apparent symptoms of chemical exposure laid strewn in an apartment at the site of one of the alleged chemical attacks. Through facial examination and comparison of clothing materials and personal artefacts, twelve corpses present inside the building where the alleged attack took place were identified as also being present in the tunnel underneath the hospital, where it appears the bodies were taken after removal from the site of the alleged attack. Furthermore, it was possible to precisely geo-locate the same twelve corpses inside the tunnel and take samples from tile grouting and dust underneath where the bodies were seen to be positioned according to the video recordings.

32. With the information on the most appropriate sample types and locations now available to the team, comprehensive sampling plans for deployment to all locations were drafted. Each plan included details of sample types to be taken, the sampling points, equipment needed to take each sample, photos of each sampling point, possible control samples to be taken, solvent type to be used to collect samples and sub-teams conducting the sampling and recording. To facilitate better orientation and easier identification of sampling points once inside the buildings of interest, the FFM

team drafted, as accurately as possible, floor plans of the locations to be visited using open source videos and other materials.

PHYSICAL DATA COLLECTION

33. As with sampling, pre-deployment plans were developed to identify key measurements and photos to be taken during the visits to the various locations. In particular, a series of key photos and measurements were planned for Location 4 where the weaponised cylinder allegedly penetrated the building through a roof terrace and settled on a bed inside the room beneath the point of impact.

Annex 5
RESULTS OF ANALYSIS

TABLE 2: ENVIRONMENTAL SAMPLES RECEIVED OR COLLECTED BY THE FACT FINDING MISSION

Entry number	Sample Code	Description	Evidence Reference Number	DL 02 code	Results DL02	DL 03 code	Results DL03
1.	01SLS	Concrete debris from the street, left side below window (level 0)	20180421190901	B	Dichloroacetic acid, trichloroacetic acid, chlorophenol, trinitrotoluene*.	C01	No CWC-scheduled chemicals detected. 2,4,6-Trinitrotoluene*.
2.	03SLS	Concrete debris from the middle of street opposite to the window (level 0)	20180421190903	C	Dichloroacetic acid, trichloroacetic acid, chlorophenol, dichlorophenol, trinitrotoluene*.	C03	No CWC-scheduled chemicals detected. 2,4,6-Trinitrotoluene*.
3.	10WPS	Swab from inside the cylinder orifice (level 3)	20180421190910	D	No chemicals relevant to CWC have been found.	E10	No CWC-scheduled chemicals detected.
4.	11WPS	Swab with water from inside the cylinder orifice (level 3)	20180421190911	E	Dichloroacetic acid, chloride.	E11	No CWC-scheduled chemicals detected.
5.	19SLS	Concrete debris from the crater-edge in front of the cylinder nose (level 3)	20180421190919	F	Dichloroacetic acid, trichloroacetic acid, chloral hydrate, trichlorophenol.	C19	No CWC-scheduled chemicals detected. 2,4,6-Trinitrotoluene*.

Entry number	Sample Code	Description	Evidence Reference Number	DL 02 code	Results DL02	DL 03 code	Results DL03
6.	25SDS	Wood fragment from kitchen door (level 2)	20180421190925	G	Dichloroacetic acid, trichloroacetic acid, chlorophenol.	V25	No CWC-scheduled chemicals detected. Phenol, 2,4,6-trichlorophenol [†] , 2,4,6-Trinitrotoluene*.
7.	30WPS	Dry wipe from bicycle rear cassette in basement (level -1)	20180421190930	H	No chemicals relevant to CWC have been found.	S30	No CWC-scheduled chemicals detected.
8.	32SDS	Water tank wood support in basement (level -1)	20180421190932	I	Dichloroacetic acid, trichloroacetic acid.	V32	No CWC-scheduled chemicals detected. alpha-Pinene, bornyl chloride [†] , phenol, 2,4,6-trichlorophenol [†] , 2,4,6-Trinitrotoluene*.
9.	34SDS	Wood from partition frame in basement (level -1)	20180421190934	J	Dichloroacetic acid, trichloroacetic acid.	V34	No CWC-scheduled chemicals detected. Phenol, 2,4,6-trichlorophenol [†] , 2,4,6-Trinitrotoluene*.
10.	35AQS	Water from water tank in basement (level -1)	20180421190935	K	No chemicals relevant to CWC have been found.	W35	No CWC-scheduled chemicals detected.

Entry number	Sample Code	Description	Evidence Reference Number	DL 02 code	Results DL02	DL 03 code	Results DL03
11.	04SDS-L4	Blanket under cylinder	20180425178804	L	Dichloroacetic acid, trichloroacetic acid, chloral hydrate, trichlorophenol, trinitrotoluene*, chloride.	TL4	No CWC-scheduled chemicals detected. 2,4,6-Trinitrotoluene*.
12.	06SDS-L4	Wet wood from under the cylinder	20180425178806	M	Bornyl chloride [†] , chloride.	V06	No CWC-scheduled chemicals detected. alpha-Pinene, bornyl chloride [†] , phenol, 2,4,6-trichlorophenol [†] ,
13.	10SDS-L4	Pillow cover on the bed , closer to the wall	20180425178810	N	Dichloroacetic acid, trichloroacetic acid, trichlorophenol, tetrachlorophenol, chloral hydrate, trinitrotoluene*, chloride.	T10	No CWC-scheduled chemicals detected. 2,4,6-Trinitrotoluene*.
14.	13WPS-L4	Dry wipe from stains on the wall, behind the bed	20180425178813	O	No chemicals relevant to CWC have been found.	S13	No CWC-scheduled chemicals detected. 2,4,6-Trinitrotoluene*.

Entry number	Sample Code	Description	Evidence Reference Number	DL 02 code	Results DL02	DL 03 code	Results DL03
15.	04WPS-PF	Swab sample with water from outlet valve on reactor	20180430150804	P	No chemicals relevant to CWC have been found.	E04	No CWC-scheduled chemicals detected.
16.	S7	Grouting from 5-13 c. 1 m out from LHS wall	20180501177907	Q	No chemicals relevant to CW have been found.	C07	No nerve agent related chemicals detected. Triethanolamine [‡]
17.	FFM-49-18-SDS04 ¹	Piece of clothes from victim	20180421178219	S	Dichloroacetic acid, trichloroacetic acid, dichlorophenol, trichlorophenol.	T04	No nerve agent related chemicals detected.. Triethanolamine [‡] , 2,4,6-trinitrotoluene*.
18.	FFM-49-18-SDS05	Pieces of timber	20180421178220	T	No chemicals relevant to CWC have been found.	V05	No CWC-scheduled chemicals detected. Phenol, 2,4,6-trichlorophenol [†] , 2,4,6-trinitrotoluene*.
19.	FFM-49-18-SDS07	Scarf collected from the basement	20180422174805	U	No chemicals relevant to CWC have been found.	T07	No nerve agent chemicals detected. Triethanolamine [‡] , "AmgardV19" phosphonate [†] , malathion, 2,4,6-trinitrotoluene*.

1 Samples in rows 17, 18, 19 and 20 were received by the FFM team from witnesses.

Entry number	Sample Code	Description	Evidence Reference Number	DL 02 code	Results DL02	DL 03 code	Results DL03
20.	FFM-49-18-SDS08	Stuffed animal collected from basement	20180422174804	V	No chemicals relevant to CWC have been found.	T08	No nerve agent chemicals detected. Triethanolamine [‡] , 2,4,6-trinitrotoluene*.

Explosive, [†]Chlorinated compounds from wood, [‡]Surfactant for textiles, ^{}Flame retardant for polyester textiles

TABLE 2: BIOMEDICAL SAMPLES RECEIVED OR COLLECTED BY THE FACT FINDING MISSION

Entry number	Sample Code	Description	Evidence Reference Number	DL 02 code	Results DL02	DL 03 code	Results DL03
1.	178201	Plasma	20180421178201	A	No relevant chemicals found	A	Nerve agent-adducts of BChE derived nonapeptide (G- and V-type agents): No compound found. Aged G agent-adduct of BChE-derived nonapeptide: No compound found. Nerve agent-adduct of tyrosine (G- and V-type agents): No compound found.
2.	178204	Plasma	20180421178204	B	No relevant chemicals found	B	
3.	178207	Plasma	20180421178207	C	No relevant chemicals found	C	
4.	178210	Plasma	20180421178210	D	No relevant chemicals found	D	
5.	178213	Plasma	20180421178213	E	No relevant chemicals found	E	
6.	175704A	Plasma	20180418175704A	F	Sample was not analysed	F	
7.	175703A	Plasma	20180418175703A	G	Sample was not analysed	G	
8.	1748PL	Plasma	201804211748PL	H	No relevant chemicals found	H	
9.	1753PL	Plasma	201804251753PL	I	No relevant chemicals found	I	

Entry number	Sample Code	Description	Evidence Reference Number	DL 02 code	Results DL02	DL 03 code	Results DL03
10.	1770PL	Plasma	201804211770PL	J	No relevant chemicals found	J	
11.	1795PL	Plasma	201804211795PL	K	No relevant chemicals found	K	

BChE = butyrylcholinesterase

VISIT TO LOCATION 2

(i) Visit to Location 2 (“cylinder on the roof”)

1. In light of the security incident that occurred during the reconnaissance visit to Location 2 on 17 April, a tarpaulin was placed, during the second reconnaissance visit on 20 April, across the exposed north-facing end of the roof-terrace to minimise exposure of the FFM team to potential sniper fire from adjacent buildings while conducting investigation activities. The team also had to exercise special precautions when working on the terrace given the uncertainty of its structural integrity as a result of the aperture that had been created allegedly by the falling cylinder.

34. Selected photos taken by the FFM of the terrace, crater, cylinder and room beneath team are shown below.





35. The crater observed was circular in shape with approximately 45 degrees angular edges. Considering its location, position and the shape of the impact point, dimensions, thickness of the ceiling and other factors, the team considered that the crater was created by a device falling almost vertically towards the impact point.
36. From the mangled ironwork present on the patio, the team surmised that there would have been a metallic frame and mesh covering it at one stage, though it was not clear whether this would have been present at the time of the alleged incident or had been demolished prior to that. If it had been present at the time of the alleged attack, the impact of the falling cylinder would likely have dampened its kinetic energy before penetrating the concrete floor of the patio.
37. Considering, on the one hand, the size of the cylinder and its estimated weight, and on the other, the almost perfectly circular shape of the crater purportedly created by the cylinder in the reinforced concrete, the damage to the body of the cylinder appears slight, particularly at the head of the cylinder where there is only a few minor indentations. Moreover, it is unclear why the cylinder did not pass through the crater after penetrating it.
38. The FFM team noted that a similar crater (see photos below) was present on a nearby building and considered the possibility that the crater could have already been present in the terrace at the time of the alleged incident and therefore not the result of the impact by the cylinder.

Adjacent roof showing a crater similar to the one on the roof-terrace at Location 2



39. In theory the cylinder could have penetrated the wire mesh described above, thereby softening its impact on the concrete terrace, before landing with insufficient kinetic energy to cause damage to the roof or serious harm to the cylinder. The cylinder would however have had to land, quite coincidentally, with its nozzle poised directly over the crater. The fact that any object that might have given rise to the crater before the alleged event should also have destroyed the wire meshing mentioned, discounting the theory of the soft landing of the cylinder.
40. The FFM team noted the blackening of the ceiling and the rim of the aperture from the room immediately below the point of impact (see photo above). It also noted the blackened sooty walls in the corner of the room, as well as what appeared to be the ashen remnants of a small fire. One witness who was interviewed stated that a fire had been lit in the room after the alleged incident, reportedly to detoxify it of the alleged chemical.
- (iii) Observed Changes to the Scene
41. The team observed during the visit that certain items were not present that had been seen in open source videos shortly after the alleged event. The following points are noted:
- o The cylinder was sampled at least 1 (one) time prior to the FFM sampling
 - o The cylinder was moved a number of times, prior to the FFM visit
 - o Debris was moved in front of the cylinder
 - o The metal frame and fins, similar to those attached to the cylinder at Location 4, visible on the terrace in videos, were missing at the time of the FFM visit.
42. On 26 April the TS requested the SAR to transport the two cylinders that had been observed by the FFM team at Locations 2 and 4 to a safe storage area where the FFM team could apply OPCW tags and seals. SAR representatives informed the team that this would not be possible as the SAR wished to retain the cylinders for criminal investigation purposes. The TL requested that the SAR inform the TS of this decision through a formal written reply to Note Verbale NV/ODG/214836/18. This was sent to the Technical Secretariat on 4 May. On 4 June, FFM team members tagged and sealed the cylinders from Locations 2 and 4, and documented the procedure.

VISIT TO LOCATION 4

(i) Visit to Location 4 (“cylinder on the bed”)

Figure 10: THE LOCATION OF WHERE THE CYLINDER LANDED ON A BED IN A TOP FLOOR APARTMENT IS SHOWN BELOW.



Figure 11: SATELLITE IMAGE OF DOUMA INDICATING THE POSITION OF LOCATION 4



Building Location 4



Position of crater in the roof terrace.

1. The crater is located close to a surrounding wall and next to the water tank. The dimensions of the crater are approximately 166 x 105 cm. The distance from the adjacent building is less than 250 cm.



Figure 12: **LIKELY STRUCTURE OF THE CYLINDER WITH HARNESS AND STABILISING FINS**

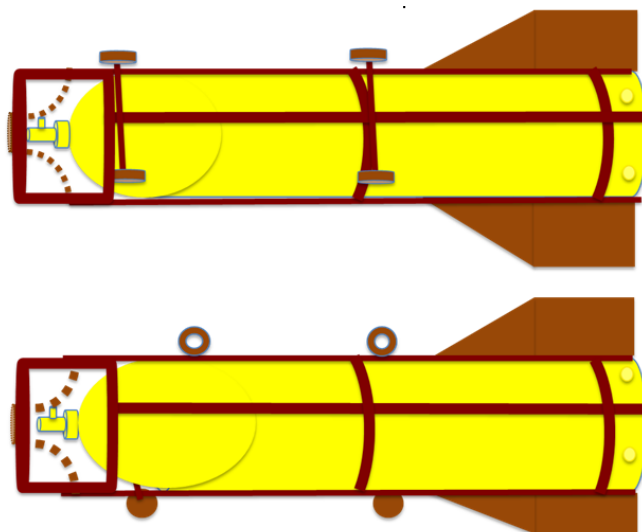


Figure 13: LAYOUT (TO SCALE) OF LOCATION 4 ("CYLINDER ON THE BED") SHOWING THE LIKELY IMPACT POINT OF THE ALLEGED WEAPON ON ENTERING THE APARTMENT AND THE FINAL RESTING PLACE ON THE BED.



Figure 14: PROPOSED TRAJECTORY OF THE ALLEGED WEAPON BEFORE IMPACT WITH THE ROOF TERRACE

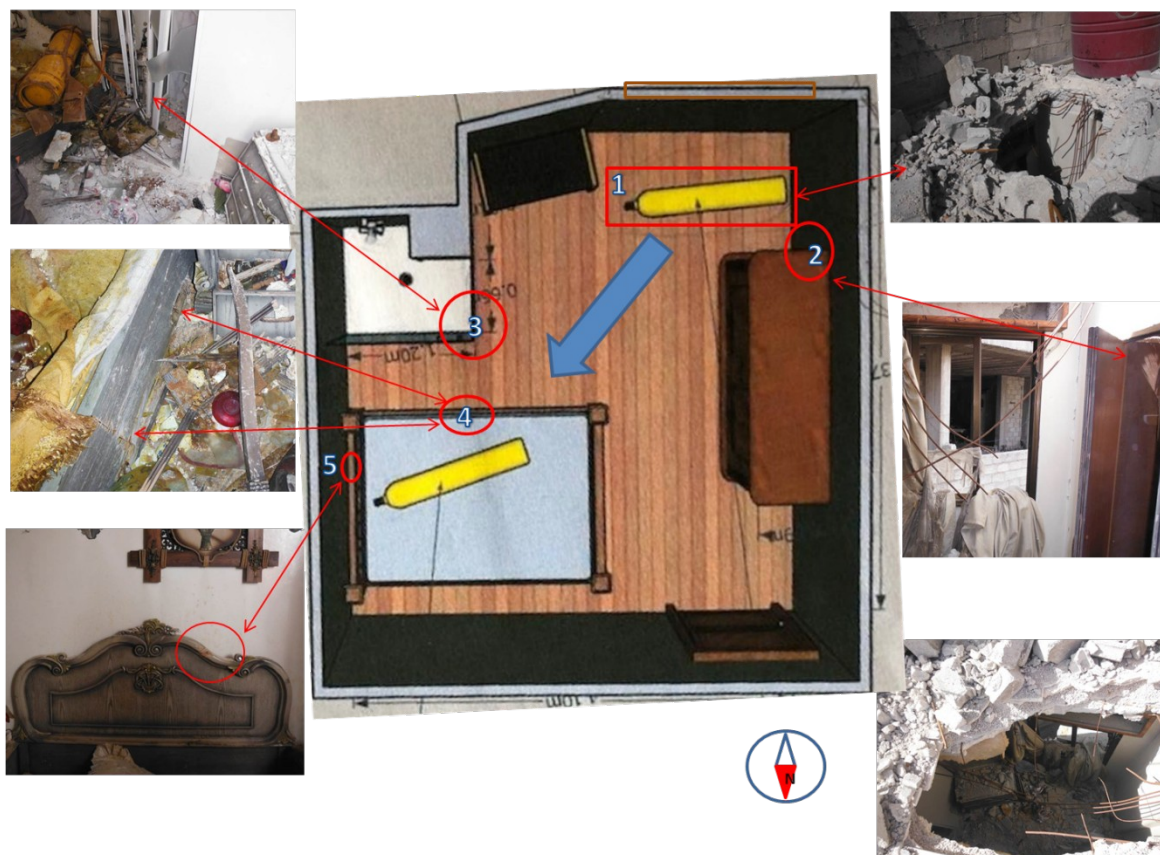


43. Considering the proximity of the water tank, the neighbouring buildings, the surrounding wall adjacent to the hole in the roof, the cylinder is likely to have

impacted the roof at a vertical angle. From the shape of the crater and damage on the cylinder, it is also likely the cylinder landed parallel to the ground creating a crater with dimensions of approximately 166 x 105 cm which is in keeping with the dimensions of cylinder of 140 x 35 cm. It should be noted that cylinder had an additional structure attached to the body which is still in line with the dimensions of the crater.

44. It appears that the cylinder would have penetrated the ceiling at the spot marked 1 in the diagram below. Beneath the hole, allegedly made by the passing cylinder, there is damage to the side of the large wardrobe (number 2). It is not clear what would have caused the cylinder to change trajectory towards the bed, since there are no indications that it made contact with any of the walls or window underneath. It is unclear also how the cylinder would have sufficient kinetic energy to travel the more than three meters towards the bed and land atop without causing significant damage to the bed.

FIGURE 15: TRAJECTORY OF THE CYLINDER INSIDE THE ROOM



The FFM team could not rule out the possibility that the cylinder had come to rest directly beneath the hole in the ceiling and that it had been transported subsequently by persons and laid on the bed. This does not seem to be the case however, as witnesses who claimed to have been the first on the scene shortly after the alleged event, describe the cylinder as being on the bed on arrival. Video footage supports this. In this regard it is worth noting some changes to the scene between what was observed in open source videos shortly after the alleged event and what was witnessed by the FFM team during the on-site visit.

(iv) Observed Changes to the Scene

45. As with Location 2 the team observed some differences in the state and content as well as location of certain items in the room, when referenced to open source videos released shortly after the alleged event. The observed changes are listed below:

- The cylinder appears to have been cleaned. The layer of a white powder seen in the videos was not present when the FFM team visited the location. The possibility of the 'dust' being ice from evaporation of chlorine was considered but rejected given it was only present on the upper side of the cylinder and was also present on many other objects in the room.





- The bedside lamp on the right side (towards the window) has been moved and is also missing in some photos.
- The FFM team observed splashes of a viscous liquid throughout the room, which was not apparent in videos. The same liquid was observed on disposable gloves present at the location.

VISIT TO THE WAREHOUSE AND FACILITY SUSPECTED OF PRODUCING CHEMICAL WEAPONS

Pre-deployment technical assessment

This document is a copy of the technical evaluation conducted by the FFM team and provided to the TS prior to deploying to the warehouse and factory referred to in the Note Verbale sent by the SAR to the TS requesting the FFM team to investigate a suspected chemical weapons factory discovered in East Gouta on 19 April 2018.

INTRODUCTION

1. In a Note Verbal to the OPCW TS on 20 April 2018, a request was made by the SAR for the FFM team, which is currently deployed in Damascus to investigate the alleged use of chemical weapons in Douma on 7 April 2018, to visit, as part of a broader investigation into the above incident, a warehouse where numerous chemical substances were found. After SAR forces commandeered the area, a specialized team was tasked by the Syrian authorities to visit the warehouse on 19 April 2018. The team reported that the warehouse was a six room basement containing a large number of various chemical substances that were relevant both to the production of chemical weapons and explosives. Posterior to receiving the Note Verbale a public source video-recording of the warehouse was provided by HQ to the FFM team along with a request for the team to conduct a technical evaluation and provide a recommendation on the relevance of the request to the FFM mission.

METHODOLOGY

46. The FFM team based its analysis and recommendations on the information provided in the Note Verbale, the video recording, and the personal knowledge and experience of individuals from various specialties within the team. Translation of the Note Verbale as well as audio and written material in the video was provided by the translators to assist in the evaluation.

ANALYSIS

47. Note Verbale: The lists of chemicals provided in the Note Verbale are listed by the drafters in two categories; substances used in the manufacture of chemical weapons and substances used in the manufacture of explosives.
48. Chemicals listed as relevant to the manufacture of chemical weapons:
 - Hexamine (one tonne in bags)
 - A 250 kilogram chlorine cylinder
 - Diethylene glycol
 - Sodium cyanide
49. An analysis of the relevance of each chemical follows:
50. Hexamine: Hexamine is a key ingredient in the production of explosives such as RDX which is manufactured from the reaction of hexamine with nitric acid (see comment below regarding nitric acid). Hexamine is also an additive in a binary production

process of sarin where it is mixed with isopropanol, one component of the binary system, to act as an acid scavenger.

51. The presence of hexamine however, in terms of quantity (one tonne) and chemical relevance, is not consistent with the small scale production of Sarin, given none of the other chemicals used for its synthesis (phosphorous trichloride, methanol, hydrogen fluoride, isopropanol, aluminium trichloride, chlorinating agents such as thionyl chloride or phosgene) are apparently present. The reason for the presence of this chemical is unlikely for the purpose of serving as an additive for binary sarin and is more probably there as an ingredient in the manufacture of explosives.
52. Chlorine: While chlorine is clearly a relevant chemical in the context of this analysis, given its potential as a chemical weapon itself, it is not particularly relevant as a reagent in the synthesis of either nerve agents or nitrogen and sulfur mustards. It is not a useful chlorinating agent in the synthesis of any of the above chemical agents, except when used in conjunction with phosphorous trichloride which apparently is not present. It is, however, a reagent in the production of cyanogen chloride. (see below)
53. Diethylene glycol: Diethylene glycol is not a chemical normally associated with the manufacture of chemical weapons agents. It is not one of the building blocks in CW synthesis and neither is it a useful solvent in their manufacture given it is, what is classed as, a nucleophilic polar protic solvent. It is, however, a common solvent for resins, oils and nitrocellulose, (one of the chemicals found at the warehouse) a key component in explosives manufacture where it can be nitrated with nitric acid to generate the explosive ethylene glycol dinitrate or nitroglycol.
54. Sodium Cyanide: Sodium cyanide is a key ingredient in the manufacture of the nerve agent Tabun. However, none of the other ingredients necessary for the production of Tabun, namely phosphorous trichloride or phosphorous oxychloride, dimethylamine or other dialkyl amines, ethanol or cyanogen bromide) are seen to be present.
55. Sodium cyanide when reacted with chlorine (both chemicals listed in the Note Verbale) generates cyanogen chloride, a highly toxic blood agent and Schedule 3 A chemical. Cyanogen chloride can also be produced from the reaction of chlorine and hydrogen cyanide (a highly toxic gas listed under Schedule 3A of the CWC), which in turn can be generated from the reaction of sodium cyanide and sulphuric acid (a chemical listed in the Note Verbale under item 3, Diverse multiuse substances). Sodium cyanide is not a chemical used in the manufacture of explosives. It should be noted however, that although sodium cyanide was listed as a chemical in the Note Verbale, it could not be seen in the video.
56. Other chemicals: Although not mentioned in the Note Verbale, an examination of the video showed that litre quantities of nitric acid (UN2031) were present in the basement. Nitric acid can be reacted with acetone and sodium nitrite followed by chlorination with chlorine to produce chloropicrin, an asphyxiating agent listed as a Schedule 3A chemical. There is no evidence that sodium nitrite or acetone is present, although this latter is a common chemical in explosives manufacture.
57. It can be noted also that no appropriate solvents (polar aprotic solvents) seem to be present that would be suitable for the production of nerve agents.
58. Chemicals listed as relevant to the manufacture of explosives:

-
- Nitrocellulose
 - Glycerin
 - Perchlorate
 - Ammonium nitrate
59. All of these chemicals are appropriate for the production of explosives and not relevant to the production of toxic chemicals.
60. An analysis of the videos available on open sources is described below:
61. The video analysis focused on chemicals present, notebooks, manufacturing equipment as well as safety and personal protection features from toxic chemicals.
62. Chemicals observed: Apart from nitric acid it was not possible to identify any other chemicals from the video.
63. Notebooks: Translation of the notebook contents from Arabic was provided by the team translators. The notebooks contained recipes for the production of various types of explosives. In addition to the chemicals listed above, the recipes contain references to various other chemicals, namely dibutyl phthalate, nitroglycerine, Vaseline, potassium nitrate, charcoal, oil and sulfur. All of these chemicals are common for the production of explosives or propellants. The only chemical of interest to CW production is sulfur, which is one component for binary production of VX. However, none of the chemicals needed to produce the other component of the VX binary system, namely QL are present.
64. Manufacturing equipment: The equipment observed in the video includes a stainless steel enclosed vessel with removable lid and viewing glass, electric motors and stirrers, holding tanks, and various small laboratory glasswares including the condensation column of a laboratory distillation unit. The reaction vessel has a valve underneath to discharge the contents. There is a local control panel with apparently capability to control or monitor vacuum, temperature and control steam supply. It is not clear whether the reactor itself actually has heating cooling, vacuum or pressure capability-
65. Personal Protective Measures: From the video and the information provided in the Note Verbale, there does not seem to be any equipment present to protect against toxic chemical. There are no fume hoods, extractors or scrubbing systems, condensers, gas masks or other protective equipment present, making it very difficult to safely handle highly toxic chemicals.

CONCLUSION

66. Based on the chemicals and the equipment present as well as the lack of protective mechanisms against toxic chemicals, it can be concluded that it is highly unlikely that CW agents are being manufactured in the location described. With the chemical ingredients present, or suggested to be present, it is not possible to manufacture either nerve agents or vesicants. There are chemicals however that could be used to manufacture at least two of the Schedule 3A chemicals, hydrogen cyanide and cyanogen chloride, both highly toxic blood agents. As these are either low boiling liquids (Hydrogen cyanide boils at 26 °C) or gases (cyanogen chloride boils at 13 °C) it would make it very difficult to handle these chemicals, particularly in the absence of any personal protective equipment or abatement systems.

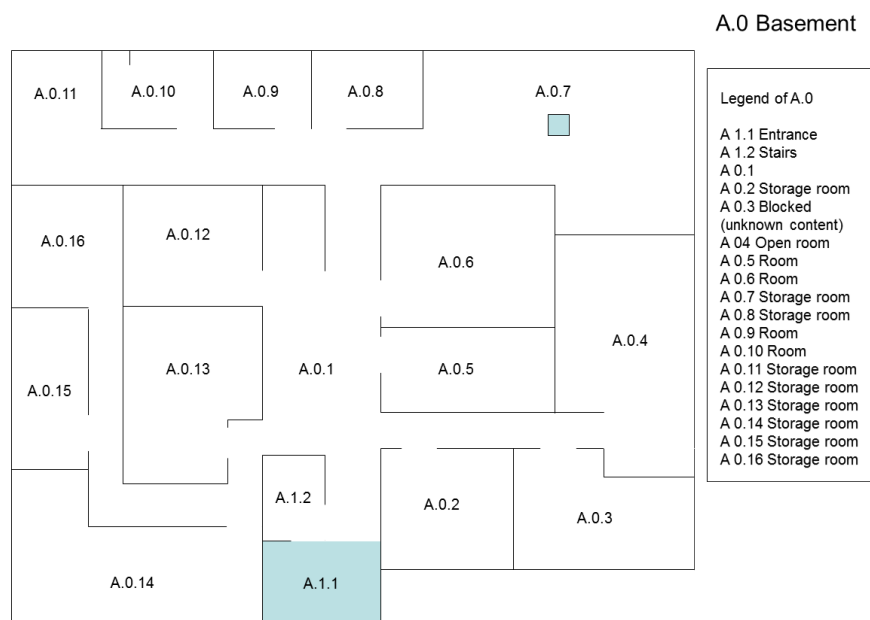
67. On the other hand there is high consistency between the equipment and chemicals present in terms of production of explosives. All of the chemicals present (except sodium cyanide, which was not seen in the video) are common in the production of explosives and propellants.

Visit to Warehouse

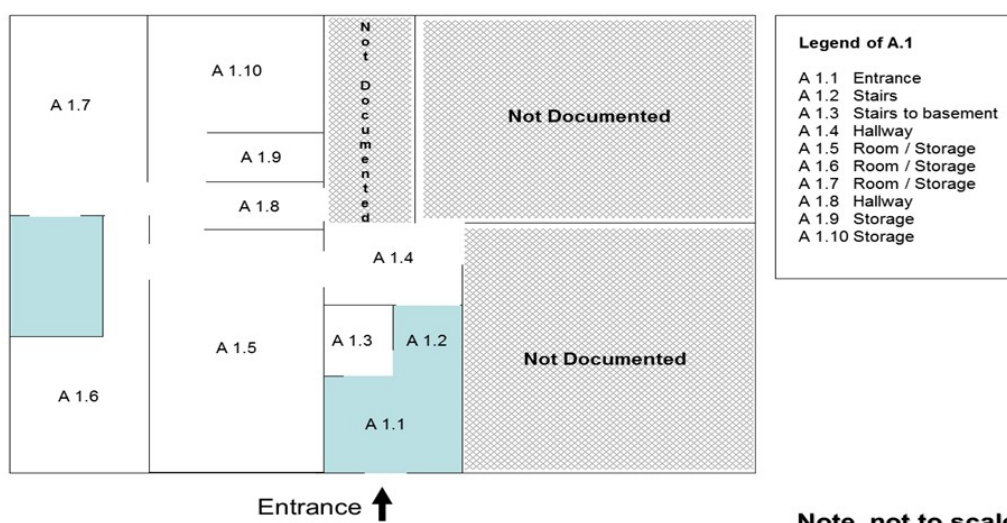
68. The FFM team deployed to the warehouse on 27 April 2018 to collect samples and take photos and physical measurements. The coordinates for the warehouse were measured as N 33° 34' 24.3", E 036° 23' 41.1". There were difficulties initially for the FFM team in gaining safe access to the basement where the warehouse was located. The team's monitoring equipment showed low oxygen levels in the basement as well as high levels of nitrous oxides. Both readings precluded a safe entry of the team and corrective measures had to be instigated. With the assistance of the representatives of the SAR it was possible to ventilate the basement sufficiently to bring oxygen and nitrous oxide levels to within acceptable levels to allow the team to safely work.

69. The warehouse was located in the basement and ground floor of a structurally damaged apartment block. The storage area comprised multiple rooms segregated by concrete walls where chemicals of various types and quantities were stored. Numerous anti-tank mines and mortars were scattered on the floor throughout the basement. On the floor directly above the storage area there was an item of equipment which appeared to be an oxygen generator along with bags of "Dr Oxygen", a substance used to produce oxygen. All the chemicals present, many of which had labels or markings written in Arabic, were photographed, translated where necessary and subsequently classified.

A layout of the warehouse is given below (not to scale)



A.1 Ground Floor



The table below shows details of the chemicals that were identified from labelling and signage by the FFM team as being present in the warehouse.

Chemical Name	Chemical Name
Cobalt octoate	Packing substances
Dr. Oxygen (for oxygen generation)	Stearic acid
Methyl ethyl ketone (MEK)	Enamel paint
Butyl acetate	Nickel sulfate
Butyl glycolether	Sodium carbonate
Dibutyl phthalate (DBP)	Sulfur
Toluene	Agricultural sulfur
Desmophen A 760 BA/X (hydroxyl bearing polyacrylate)	Oil 2.5
Carboxyl methyl cellulose (CMC)	Resin
TAJ Brilliant Freshness (Detergent)	Sulfuric acid
Engineering Plastics	Sodium nitrate
Aqua 95	Potassium nitrate
MHM	Ammonium perchlorate
Uplex	Polyamide granules
Methyl acetate	Wax
Desmodur NS (Resin solution)	Iron oxide
Lead octoate	Sodium hydroxide
Acetone	Butoxyethanol
Desmodur L 75 (Aromatic polyisocyanate based on toluene diisocyanate)	Burnt oil
EcoC (wetted with)	Hexanoic acid
Lama (Waterproofing polymer)	Anti-freeze
Calcium carbonate	Chlorinated paraffin
ROSK K 26 FASS 226 (contains styrene)	Propyl acetate
Diethanolamine	Sodium bicarbonate
LG – PP Seetec (polypropylene)	Potassium carbonate
Plastichem (plastics from Sprea Group)	Diesel
Hexamine	Polyethylene

Hydrochloric acid	Glycol
Propylene glycol	Vaseline
Diethylene glycol	Cytidine
Acrylic resin	Nitrocellulose
Xanthan	Aluminium sulfate
FLASH (Detergent for bathrooms)	

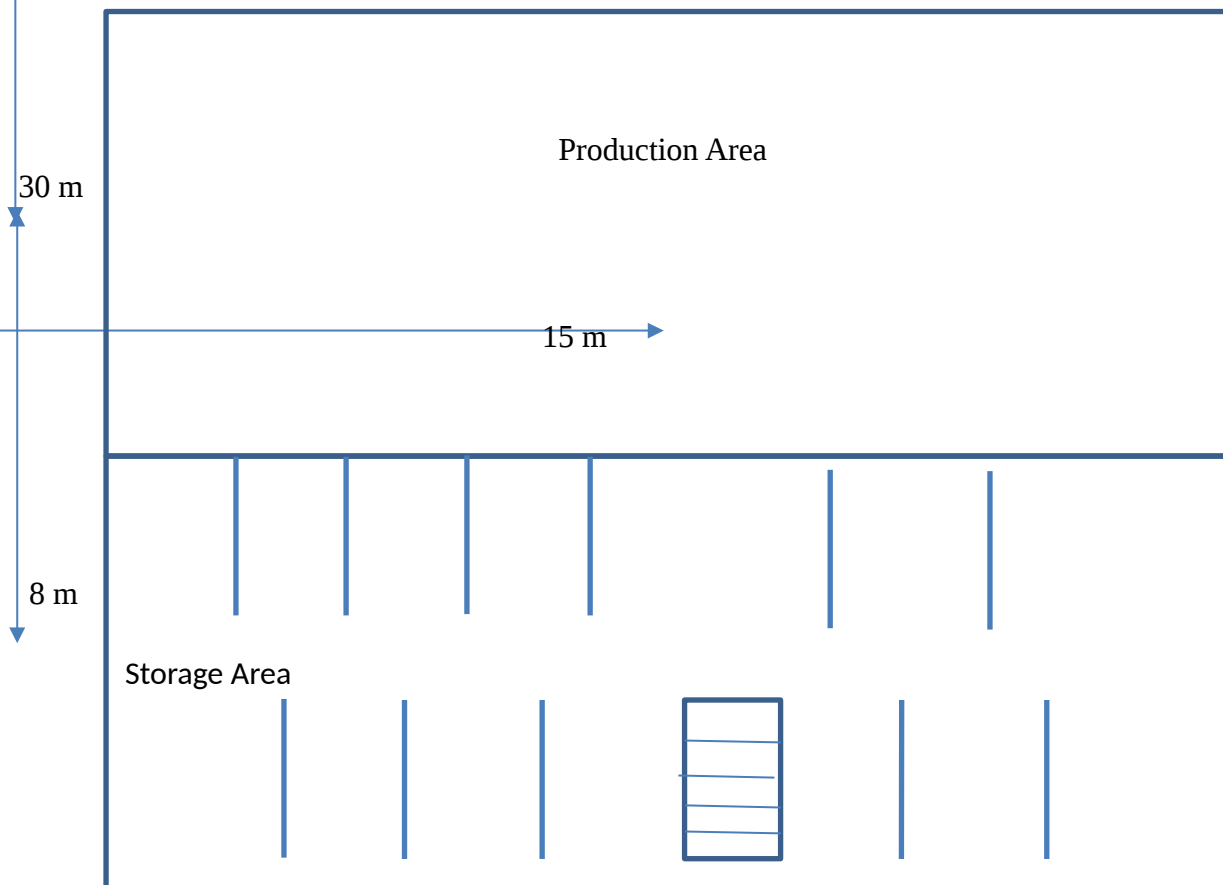
70. The chemicals identified, which were present in bulk quantities, are precursors that are consistent with the production of explosives and propellants. Chemicals such as hexamine, which was stored in quantities estimated at approximately one tonne, diethylene glycol, carboxymethyl cellulose, toluene, acetone, sulfur, potassium nitrate, dibutyl phthalate, and diethanolamine are all key precursors for the production of explosives and propellants such as RDX, trinitrotoluene (TNT), nitrocellulose, nitrodiethanolamine dinitrate, ethylene glycol dinitrate and gun powder. Although nitric acid, the key nitrating agent for explosives production, was not observed by the FFM team, several litre-quantities were seen in the open source video of the same warehouse. Large quantities of sulfuric acid, an important chemical in nitration processes, were also present.
71. The FFM team did not observe any major key precursors for the synthesis of chemical weapons agents, particularly for nerve agents such as sarin, or vesicants such as sulfur or nitrogen mustard. Although large quantities of hexamine, which can be used as an acid scavenger in binary-type sarin systems, though not as a reactive ingredient, were present, no other sarin precursors were observed. The presence of hexamine, in the view of the FFM team, was more consistent with the production of explosives such as RDX, for which it is the key ingredient.
72. Sulfur powder, which serves as one component of binary VX, was also observed. None of the precursors for the other component of the binary system, namely QL, were noted. The storage of sulfur at the site, again in the view of the FFM team, was more consistent with the manufacture of gun powder, particularly since potassium nitrate was also present.
73. Although the team confirmed the presence of a large yellow cylinder in the warehouse, reportedly a chlorine cylinder, no attempt was made to verify or sample the contents (see photo below). There were minor differences in this cylinder compared to those witnessed at Locations 2 and 4. Were the cylinder to contain chlorine gas, this, in the opinion of the FFM team, would not be consistent either with the production of explosives or the production of chemical weapons agents. Chlorine gas is generally not a common chlorinating agent in the production of chemical weapons agents except when used in conjunction with phosphorous trichloride, which was not seen to be present. It should be noted that the cylinder was present in its original state and had not been modified for aerial delivery.



Cylinder observed by the FFM team at the warehouse

Visit to the Facility Suspected of Producing Chemical Weapons

74. The facility was visited by the FFM team on 30 April. A description of the building and the main features as observed by the FFM team are provided below.
75. The facility is located in the basement of a multi-story building located at GPS coordinates N 33° 34' 44.7", E 36° 24' 2.9". There are two main sections to the facility, one apparently for storage of materials and the other, a larger open production area. The storage area in the basement which is demarcated by concrete walls into partly-separated bays, is accessed directly from road level and has dimensions of approximately 15 by 8 metres.
76. Adjacent to the storage area, is a larger open area of approximately 30 by 15 metres where a small amount of chemical production equipment is housed.



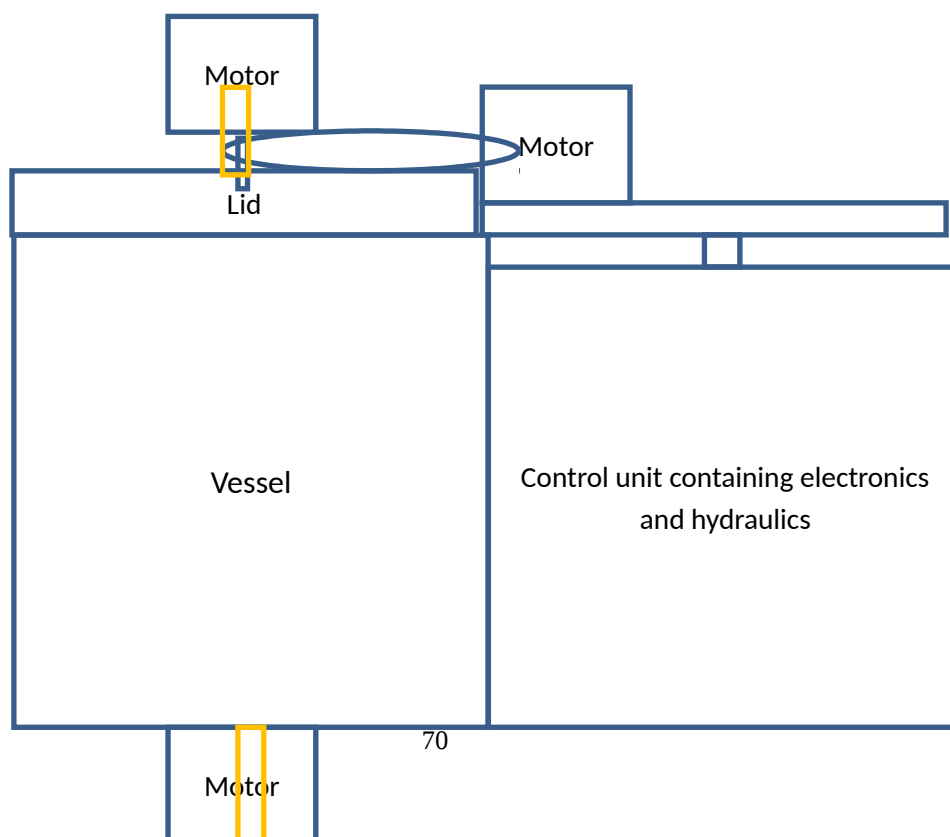
The principal features and materials observed in the storage area included:

- Semi-open bays with concrete-partitioning walls between storage areas
- Absence of any mechanical ventilation system
- Bags of solid powder or crystalline material, mostly unlabelled and some indicating materials such as “Lama”, “Bela”, and wheat flour
- Unmarked metallic and plastic drums. An oily leakage on top of one unmarked plastic drum indicated the presence of nitrogen containing compounds on the team’s detection equipment
- Materials related to explosives, such as hand-manufactured detonation cord and a bag labelled “RDX”
- Two cardboard boxes containing items of laboratory glassware, mostly Erlenmeyer flasks and another containing what appeared to be white ceramic balls
- A number of 20-litre metallic drums, some fitted with crude cord-type fuses, which appeared to have been filled with plastic explosives to serve as improvised explosive devices
- A number of glass jars filled with a light-brown waxy solid material.

The main features observed in the production included:

- An open area of approximate dimensions 30 by 12 metres
- A tiled area that appeared to have been part of a bathroom and toilet
- An improvised extraction hood connected to a vent that was routed through the ceiling Below this were indications of a small open fireplace as well as a cooking pot filled with solid dark flaky material in the fireplace
- An electrical cabinet

- Chemical production equipment. Details of the production equipment are given below.
77. There were no indications that chemical warfare agents or highly toxic chemicals were being manufactured at this facility. As supporting evidence, the team took two wipe samples from the outlet of the vessel. No chemicals related to the production of chemical weapons were detected.
78. The mixing vessel was of a specific design, and the team considered that these design features did not make the unit particularly suited for chemical synthesis of toxic or any other chemicals. The installation appeared to be a heating and kneading unit that could be used for filling ammunition with liquid explosives, or for mixing explosives with additives. Examples would include mixing of TNT with aluminium to produce tritonal, and mixing of RDX with liquid rubber for the production of plastic explosives.
79. From the available evidence, the FFM team could not conclude if there was any connection between the warehouse visited on 27 April and the facility.
- (v) Details of the production equipment present in the Facility suspected of producing chemical weapons
- The production equipment appeared to be a purpose-designed stainless steel unit mounted on a sturdy stainless steel frame.
 - The main item of equipment included a jacketed stainless steel vessel of roughly 0.75m in diameter, 1.2m in height and volume of 500 litres.
 - The vessel was fitted with three motors connected to multiple mixing paddles and a removable lid with a sight glass that could be raised by hydraulic piston.
 - Through the sight glass residues of a brown paste on the mixing paddles and the walls of the vessel were observed.
 - The vessel was fitted with a pressure gauge calibrated to 15 bar.
 - There was a service line to the top of the jacket, entering through the ceiling from the ground floor above (but this was not connected to anything at that location). There



was another line of similar size exiting the bottom of the vessel jacket, which included a simple pressure relief valve. This appeared to be consistent with a steam jacket serving the vessel for heating, with condensate removal at the bottom.

- There was a line going into the top of the reactor, presumably for addition of water given the supply line was also connected to washbasins in the room.
- The vessel was served by a control unit in the same support frame. This unit showed a control panel, a hydraulic motor and pump, and electrical connectors. There were controls for lifting the lid (“up” and “down”), temperature and vacuum.
- There was an outlet valve at the bottom of the vessel.
- The entire assembly was installed within a tiled basin. At one corner of the basin was a loose plastic hose of about 20cm diameter, apparently used for extraction of vapours or fumes. This was manifolded into plastic piping that was routed up through the ceiling to the next floor (the ground floor), to an induced draught extractor fan. This in turn was connected to plastic piping that went further up the building.
- Next to the production unit was an assembly that appeared to be an improvised cooling water circuit. This included an air conditioning unit manifolded to a heat exchanger with interconnected circulating lines. It was not connected to the main production unit.
- Other items seen in the area included gloves, dust masks and a bag of zinc oxide powder.

Annex 9

INFORMATION COLLECTED BY THE FFM

Tables A9.1, A9.2, and A9.3 below summarise the list of physical evidence collected from various sources by the FFM. It is split into electronic evidence stored in electronic media storage devices such as USB sticks and micro SD cards, hard copy evidence, and samples. Electronic files include audio-visual captions, still images, and documents. Hard copy files consist of various documents, including drawings made by witnesses. The tables also shows the list of samples collected from various sources which include environmental and biomedical samples.

Table A9.1 ELECTRONIC DATA COLLECTED BY THE FACT-FINDING MISSION

Electronic data collected by the FFM									
Entry number	Assigned Package Code			Folder location					
1.	1508			D:\1508\Camera 1 - 1508\removable disk\dcim\104_fuji\					
File names									
dscf4405.jpg	dscf4424.jp g	dscf4443.jp g	dscf4462.jp g	dscf4481.jp g	dscf4500.jp g	dscf4519.jp g	dscf4538.jp g	dscf4557.jp g	dscf4576.jp g
dscf4406.jpg	dscf4425.jp g	dscf4444.jp g	dscf4463.jp g	dscf4482.jp g	dscf4501.jp g	dscf4520.jp g	dscf4539.jp g	dscf4558.jp g	dscf4577.jp g
dscf4407.jpg	dscf4426.jp g	dscf4445.jp g	dscf4464.jp g	dscf4483.jp g	dscf4502.jp g	dscf4521.jp g	dscf4540.jp g	dscf4559.jp g	dscf4578.jp g
dscf4408.jpg	dscf4427.jp g	dscf4446.jp g	dscf4465.jp g	dscf4484.jp g	dscf4503.jp g	dscf4522.jp g	dscf4541.jp g	dscf4560.jp g	dscf4579.jp g
dscf4409.jpg	dscf4428.jp g	dscf4447.jp g	dscf4466.jp g	dscf4485.jp g	dscf4504.jp g	dscf4523.jp g	dscf4542.jp g	dscf4561.jp g	dscf4580.jp g
dscf4410.jpg	dscf4429.jp g	dscf4448.jp g	dscf4467.jp g	dscf4486.jp g	dscf4505.jp g	dscf4524.jp g	dscf4543.jp g	dscf4562.jp g	dscf4581.jp g
dscf4411.jpg	dscf4430.jp g	dscf4449.jp g	dscf4468.jp g	dscf4487.jp g	dscf4506.jp g	dscf4525.jp g	dscf4544.jp g	dscf4563.jp g	dscf4582.jp g

Electronic data collected by the FFM									
dscf4412.jpg	dscf4431.jp g	dscf4450.jp g	dscf4469.jp g	dscf4488.jp g	dscf4507.jp g	dscf4526.jp g	dscf4545.jp g	dscf4564.jp g	dscf4583.jp g
dscf4413.jpg	dscf4432.jp g	dscf4451.jp g	dscf4470.jp g	dscf4489.jp g	dscf4508.jp g	dscf4527.jp g	dscf4546.jp g	dscf4565.jp g	dscf4584.jp g
dscf4414.jpg	dscf4433.jp g	dscf4452.jp g	dscf4471.jp g	dscf4490.jp g	dscf4509.jp g	dscf4528.jp g	dscf4547.jp g	dscf4566.jp g	dscf4585.jp g
dscf4415.jpg	dscf4434.jp g	dscf4453.jp g	dscf4472.jp g	dscf4491.jp g	dscf4510.jp g	dscf4529.jp g	dscf4548.jp g	dscf4567.jp g	dscf4586.jp g
dscf4416.jpg	dscf4435.jp g	dscf4454.jp g	dscf4473.jp g	dscf4492.jp g	dscf4511.jp g	dscf4530.jp g	dscf4549.jp g	dscf4568.jp g	dscf4587.jp g
dscf4417.jpg	dscf4436.jp g	dscf4455.jp g	dscf4474.jp g	dscf4493.jp g	dscf4512.jp g	dscf4531.jp g	dscf4550.jp g	dscf4569.jp g	dscf4588.jp g
dscf4418.jpg	dscf4437.jp g	dscf4456.jp g	dscf4475.jp g	dscf4494.jp g	dscf4513.jp g	dscf4532.jp g	dscf4551.jp g	dscf4570.jp g	dscf4589.jp g
dscf4419.jpg	dscf4438.jp g	dscf4457.jp g	dscf4476.jp g	dscf4495.jp g	dscf4514.jp g	dscf4533.jp g	dscf4552.jp g	dscf4571.jp g	dscf4590.jp g
dscf4420.jpg	dscf4439.jp g	dscf4458.jp g	dscf4477.jp g	dscf4496.jp g	dscf4515.jp g	dscf4534.jp g	dscf4553.jp g	dscf4572.jp g	dscf4591.jp g
dscf4421.jpg	dscf4440.jp g	dscf4459.jp g	dscf4478.jp g	dscf4497.jp g	dscf4516.jp g	dscf4535.jp g	dscf4554.jp g	dscf4573.jp g	dscf4592.jp g
dscf4422.jpg	dscf4441.jp g	dscf4460.jp g	dscf4479.jp g	dscf4498.jp g	dscf4517.jp g	dscf4536.jp g	dscf4555.jp g	dscf4574.jp g	dscf4593.jp g
dscf4423.jpg	dscf4442.jp g	dscf4461.jp g	dscf4480.jp g	dscf4499.jp g	dscf4518.jp g	dscf4537.jp g	dscf4556.jp g	dscf4575.jp g	dscf4594.jp g
Entry number	Assigned Package Code			Folder location					
1.	1508			D:\1508\Camera 2 - 1508\removable disk\dcim\100nikon\					
dscn2306.mov	dscn2313.jp g	dscn2320.jp g	dscn2327.jp g	dscn2334.jp g	dscn2341.jp g	dscn2348.jp g	dscn2355.jp g	dscn2362.jp g	dscn2369.jp g
dscn2307.jp	dscn2314.jp	dscn2321.jp	dscn2328.jp	dscn2335.jp	dscn2342.jp	dscn2349.jp	dscn2356.jp	dscn2363.jp	dscn2370.jp

Electronic data collected by the FFM									
g	g	g	g	g	g	g	g	g	g
dscn2308.jp	dscn2315.jp	dscn2322.jp	dscn2329.jp	dscn2336.jp	dscn2343.jp	dscn2350.jp	dscn2357.jp	dscn2364.jp	dscn2371.jp
g	g	g	g	g	g	g	g	g	g
dscn2309.jp	dscn2316.jp	dscn2323.jp	dscn2330.jp	dscn2337.jp	dscn2344.jp	dscn2351.jp	dscn2358.jp	dscn2365.jp	dscn2372.jp
g	g	g	g	g	g	g	g	g	g
dscn2310.jp	dscn2317.jp	dscn2324.jp	dscn2331.jp	dscn2338.jp	dscn2345.jp	dscn2352.jp	dscn2359.jp	dscn2366.jp	dscn2373.jp
g	g	g	g	g	g	g	g	g	g
dscn2311.jp	dscn2318.jp	dscn2325.jp	dscn2332.jp	dscn2339.jp	dscn2346.jp	dscn2353.jp	dscn2360.jp	dscn2367.jp	dscn2374.jp
g	g	g	g	g	g	g	g	g	g
dscn2312.jp	dscn2319.jp	dscn2326.jp	dscn2333.jp	dscn2340.jp	dscn2347.jp	dscn2354.jp	dscn2361.jp	dscn2368.jp	dscn2375.jp
g	g	g	g	g	g	g	g	g	g
dscn2306.mov	dscn2313.jp	dscn2320.jp	dscn2327.jp	dscn2334.jp	dscn2341.jp	dscn2348.jp	dscn2355.jp	dscn2362.jp	dscn2369.jp
g	g	g	g	g	g	g	g	g	g
Entry number	Assigned Package Code			Folder location					
1.	1508			D:\1508\Video Camera - 1508\removable disk\avf_info\					
	avin0001.bnp		avin0001.inp		avin0001.int		prv00001.bin		
Entry number	Assigned Package Code			Folder location					
1.	1508			D:\1508\Video Camera - 1508\removable disk\dcim\100msdcf\					
dsc00682.jpg	dsc00683.jpg	dsc00684.jpg	dsc00685.jpg	dsc00686.jpg	dsc00687.jpg	dsc00688.jpg	dsc00689.jpg	dsc00690.jpg	
Entry number	Assigned Package Code			Folder location					
1.	1508			D:\1508\Video Camera - 1508\removable disk\mp_root\100anv01\					
mah00681.mp4	mah00692.mp4	mah00694.mp4	mah00696.mp4	mah00698.mp4	mah00700.mp4	mah00702.mp4	mah00681.mp4		
mah00681.thm	mah00692.thm	mah00694.thm	mah00696.thm	mah00698.thm	mah00700.thm	mah00702.thm	mah00681.thm		
mah00691.mp4	mah00693.mp4	mah00695.mp4	mah00697.mp4	mah00699.mp4	mah00701.mp4	mah00703.mp4	mah00691.mp4		
Entry number	Assigned Package Code			Folder location					
2.	1741			D:\1741\vidence\1741 original\مجزرة الكيماوى اخر ائط					
	١٥٠٣٢٢_٢٠١٨٠٤٢٥.png		١٥١٠١٤_٢٠١٨٠٤٢٥.png		١٥١٣٠٢_٢٠١٨٠٤٢٥.png		١٥١٤٠٢_٢٠١٨٠٤٢٥.png		

Electronic data collected by the FFM				
Entry number	Assigned Package Code	Folder location		
2.	1741	D:\1741\evidence\1741 original\050\الشهداء\صور الكيماوى\مجزة الكيماوى		
مجزة الكيماوى a4443.jpg	مجزة الكيماوى a4666-1.jpg	مجزة الكيماوى a4707-1.jpg	مجزة الكيماوى a4727.jpg	مجزة الكيماوى a4732.jpg
مجزة الكيماوى a4783.jpg	مجزة الكيماوى a4787.jpg	مجزة الكيماوى a4789.jpg	مجزة الكيماوى a4792.jpg	مجزة الكيماوى a4807.jpg
مجزة الكيماوى a4808.jpg	مجزة الكيماوى a4814.jpg	مجزة الكيماوى a4837.jpg	مجزة الكيماوى a4838.jpg	
Entry number	Assigned Package Code	Folder location	File Name	
2.	1741	D:\1741\evidence\1741 original\الشهداء\صور الكيماوى\مجزة الكيماوى	1-1.jpg	
Entry number	Assigned Package Code	Folder location		
2.	1741	D:\1741\evidence\1741 original\050\الفيديو\مجزة الكيماوى		
	مجزة الكيماوى a4774.mp4	مجزة الكيماوى a4799.mp4	مجزة الكيماوى a4836.mp4	
Entry number	Assigned Package Code	Folder location		
2.	1741	D:\1741\evidence\1741 working copy\1741 working copy\مجزة الكيماوى\maps\		
	10٠٣٢٢_٢٠١٨٠٤٢٥.png	١٥١٠١٤_٢٠١٨٠٤٢٥.png	١٥١٣٠٢_٢٠١٨٠٤٢٥.png	١٥١٤٠٢_٢٠١٨٠٤٢٥.png
Entry number	Assigned Package Code	Folder location		
2.	1741	D:\1741\evidence\1741 working copy\1741 working copy\مجزة الكيماوى\photos\		
	a4443.jpg	a4666-1.jpg	a4707-1.jpg	a4727.jpg
	a4783.jpg	a4787.jpg	a4789.jpg	a4792.jpg
	a4808.jpg	a4814.jpg	a4837.jpg	a4838.jpg
				1-1.jpg
Entry number	Assigned Package Code	Folder location		
2.	1741	D:\1741\evidence\1741 working copy\1741 working copy\مجزة الكيماوى\video\		
	a4774.mp4	a4799.mp4	a4836.mp4	
Entry number	Assigned Package Code	Folder location		
3.	1742	D:\1742\evidence\original\		
	050a4783.jpg	050a4792.jpg	١٦٠٩٢٦_٢٠١٨٠٤٠٧.jpg	١٦٢٨٤٨_٢٠١٨٠٤٠٧.mp4
	٠٢٠٣٢٩_٢٠١٨٠٤٠٨.mp4	٠٢٠٤٠٩_٢٠١٨٠٤٠٨.jpg	٠٢٠٤٢٧_٢٠١٨٠٤٠٨.mp4	٠٢٠٥٢٥_٢٠١٨٠٤٠٨.jpg
	٠٠٣٥٢٥_٢٠١٨٠٤١١.mp4	٠٠٣٥٣٢_٢٠١٨٠٤١١.jpg	٠٠٣٦٣٨_٢٠١٨٠٤١١.jpg	٠٠٣٦٤٤_٢٠١٨٠٤١١.jpg
				٠٠٤١٠٠_٢٠١٨٠٤١١.mp4
Entry number	Assigned Package Code	Folder location		
3.	1742	D:\1742\evidence\working copy\		
	050a4783.jpg	050a4792.jpg	١٦٠٩٢٦_٢٠١٨٠٤٠٧.jpg	١٦٢٨٤٨_٢٠١٨٠٤٠٧.mp4
				٠٢٠٣١٩_٢٠١٨٠٤٠٨.mp4

Electronic data collected by the FFM										
٠٢٠٣٢٩_٢٠١٨٠٤٠٨.mp4	٠٢٠٤٠٩_٢٠١٨٠٤٠٨.jpg	٠٢٠٤٢٧_٢٠١٨٠٤٠٨.mp4	٠٢٠٥٢٥_٢٠١٨٠٤٠٨.jpg	٠٠٣٤٣١_٢٠١٨٠٤١١.mp4						
٠٠٣٥٢٥_٢٠١٨٠٤١١.mp4	٠٠٣٥٣٢_٢٠١٨٠٤١١.jpg	٠٠٣٦٣٨_٢٠١٨٠٤١١.jpg	٠٠٣٦٤٤_٢٠١٨٠٤١١.jpg	٠٠٤١٠٠_٢٠١٨٠٤١١.mp4						
Entry number	Assigned Package Code		Folder location							
4.	1748		D:\1748\evidence\							
fb_img_1439762277929.jpg	vid-20180416-wa0057.mp4		010 صوت_sd.m4a			١١٤٠١٩_٢٠١٨٠٤١٠.jpg				
Entry number	Assigned Package Code		Folder location				File Name			
5.	1757		D:\1757\evidence\				00010.mts			
Entry number	Assigned Package Code		Folder location							
5.	1757		D:\1757\evidence\تحقيق\							
imag0090.jpg	video0005.mp4	video0006.mp4	video0007.mp4	video0008.mp4	video0009.mp4	video0010.mp4	video0016.mp4			
video0017.mp4	video0018.mp4	video0019.mp4	video0028.mp4	video0029.mp4	video0030.mp4	video0053.mp4	video0054.mp4			
Entry number	Assigned Package Code		Folder location							
6.	1779		D:\1779\Camera 1 - 1779\removable disk\dcim\103_fuji\							
dscf3538.jpg	dscf3547.jpg	dscf3556.jpg	dscf3565.jpg	dscf3574.jpg	dscf3583.jpg	dscf3592.jpg	dscf3601.jpg	dscf3610.jpg		
dscf3539.jpg	dscf3548.jpg	dscf3557.jpg	dscf3566.jpg	dscf3575.jpg	dscf3584.jpg	dscf3593.jpg	dscf3602.jpg	dscf3611.jpg		
dscf3540.jpg	dscf3549.jpg	dscf3558.jpg	dscf3567.jpg	dscf3576.jpg	dscf3585.jpg	dscf3594.jpg	dscf3603.jpg	dscf3612.jpg		
dscf3541.jpg	dscf3550.jpg	dscf3559.jpg	dscf3568.jpg	dscf3577.jpg	dscf3586.jpg	dscf3595.jpg	dscf3604.jpg	dscf3613.jpg		
dscf3542.jpg	dscf3551.jpg	dscf3560.jpg	dscf3569.jpg	dscf3578.jpg	dscf3587.jpg	dscf3596.jpg	dscf3605.jpg	dscf3614.jpg		
dscf3543.jpg	dscf3552.jpg	dscf3561.jpg	dscf3570.jpg	dscf3579.jpg	dscf3588.jpg	dscf3597.jpg	dscf3606.jpg	dscf3615.jpg		
dscf3544.jpg	dscf3553.jpg	dscf3562.jpg	dscf3571.jpg	dscf3580.jpg	dscf3589.jpg	dscf3598.jpg	dscf3607.jpg	dscf3616.jpg		
dscf3545.jpg	dscf3554.jpg	dscf3563.jpg	dscf3572.jpg	dscf3581.jpg	dscf3590.jpg	dscf3599.jpg	dscf3608.jpg	dscf3617.jpg		
Entry number	Assigned Package Code		Folder location							
6.	1779		D:\1779\Camera 2 - 1779\removable disk\dcim\104_fuji\							
dscf4595.jp	dscf4600.jp	dscf4605.jp	dscf4610.jp	dscf4615.jp	dscf4620.jp	dscf4625.jp	dscf4630.jp	dscf4635.jp	dscf4640.jp	
g	g	g	g	g	g	g	g	g	g	
dscf4596.jp	dscf4601.jp	dscf4606.jp	dscf4611.jp	dscf4616.jp	dscf4621.jp	dscf4626.jp	dscf4631.jp	dscf4636.jp	dscf4641.jp	
g	g	g	g	g	g	g	g	g	g	
dscf4597.jp	dscf4602.jp	dscf4607.jp	dscf4612.jp	dscf4617.jp	dscf4622.jp	dscf4627.jp	dscf4632.jp	dscf4637.jp	dscf4642.jp	
g	g	g	g	g	g	g	g	g	g	

Electronic data collected by the FFM									
dscf4598.jp g	dscf4603.jp g	dscf4608.jp g	dscf4613.jp g	dscf4618.jp g	dscf4623.jp g	dscf4628.jp g	dscf4633.jp g	dscf4638.jp g	dscf4643.jp g
dscf4599.jp g	dscf4604.jp g	dscf4609.jp g	dscf4614.jp g	dscf4619.jp g	dscf4624.jp g	dscf4629.jp g	dscf4634.jp g	dscf4639.jp g	dscf4644.jp g
dscf4645.jpg		dscf4646.jpg		dscf4647.jpg		dscf4648.jpg		dscf4649.jpg	
Entry number	Assigned Package Code			Folder location					
6.	1779			D:\1779\Camera 3 - 1779\removable disk\dcim\100nikon\					
dscn2376.jp g	dscn2377.jp g	dscn2378.jp g	dscn2379.jp g	dscn2380.jp g	dscn2381.jp g	dscn2382.jp g	dscn2383.jp g	dscn2384.jp g	dscn2385.jp g
dscn2386.jp g	dscn2387.jp g	dscn2388.jp g	dscn2389.jp g	dscn2390.jp g	dscn2391.jp g	dscn2392.jp g	dscn2393.jp g	dscn2394.jp g	dscn2395.jp g
dscn2396.jp g	dscn2397.jp g	dscn2398.jp g	dscn2399.jp g	dscn2400.jp g	dscn2401.jp g	dscn2402.jp g	dscn2403.jp g	dscn2404.jp g	dscn2405.jp g
dscn2406.jp g	dscn2407.jp g	dscn2408.jp g	dscn2409.jp g	dscn2410.jp g	dscn2411.jp g	dscn2412.jp g	dscn2413.jp g	dscn2414.jp g	dscn2415.jp g
dscn2416.jp g	dscn2417.jp g	dscn2418.jp g	dscn2419.jp g	dscn2420.jp g	dscn2421.jp g	dscn2422.jp g	dscn2423.jp g	dscn2424.jp g	dscn2425.jp g
dscn2426.jpg	dscn2427.jpg	dscn2428.mov	dscn2429.jpg	dscn2430.jpg	dscn2431.jpg	dscn2432.jpg	dscn2433.jpg		
Entry number	Assigned Package Code			Folder location					
6.	1779			D:\1779\Video of repacking samples - 1779\removable disk\mp_root\100anv01\					
avin0001.bnp		avin0001.inp		avin0001.int			prv00001.bin		
Entry number	Assigned Package Code			Folder location					
6.	1779			D:\1779\Video of repacking samples - 1779\removable disk\avf_info\					
mah00704.mp4		mah00704.thm		mah00705.mp4			mah00705.thm		
Entry number	Assigned Package Code			Folder location					
6.	1779			D:\1779\Video of repacking samples - 1779\removable disk\private\avchd\bdmv\clipinf\					
00000.cpi			00001.cpi			00002.cpi			
Entry number	Assigned Package Code			Folder location					
6.	1779			D:\1779\Video of repacking samples - 1779\removable disk\private\avchd\bdmv\					

Electronic data collected by the FFM									
index.bdm					movieobj.bdm				
Entry number	Assigned Package Code			Folder location					File Name
8.	1788			D:\1779\Video of repacking samples - 1779\removable disk\private\avchd\bdmv\playlist\					00000.mpl
Entry number	Assigned Package Code			Folder location					File Name
6.	1779			D:\1779\Video of repacking samples - 1779\removable disk\private\avchd\bdmv\stream\					
00000.mts			00001.mts			00002.mts			
Entry number	Assigned Package Code			Folder location					File Name
7.	1782			D:\1782\1782\sd\dcim\105_fuji\					
dscf5499.jp	dscf5515.jp	dscf5531.jp	dscf5547.jp	dscf5563.jp	dscf5579.jp	dscf5595.jp	dscf5611.jp	dscf5627.jp	dscf5643.jp
g	g	g	g	g	g	g	g	g	g
dscf5500.jp	dscf5516.jp	dscf5532.jp	dscf5548.jp	dscf5564.jp	dscf5580.jp	dscf5596.jp	dscf5612.jp	dscf5628.jp	dscf5644.jp
g	g	g	g	g	g	g	g	g	g
dscf5501.jp	dscf5517.jp	dscf5533.jp	dscf5549.jp	dscf5565.jp	dscf5581.jp	dscf5597.jp	dscf5613.jp	dscf5629.jp	dscf5645.jp
g	g	g	g	g	g	g	g	g	g
dscf5502.jp	dscf5518.jp	dscf5534.jp	dscf5550.jp	dscf5566.jp	dscf5582.jp	dscf5598.jp	dscf5614.jp	dscf5630.jp	dscf5646.jp
g	g	g	g	g	g	g	g	g	g
dscf5503.jp	dscf5519.jp	dscf5535.jp	dscf5551.jp	dscf5567.jp	dscf5583.jp	dscf5599.jp	dscf5615.jp	dscf5631.jp	dscf5647.jp
g	g	g	g	g	g	g	g	g	g
dscf5504.jp	dscf5520.jp	dscf5536.jp	dscf5552.jp	dscf5568.jp	dscf5584.jp	dscf5600.jp	dscf5616.jp	dscf5632.jp	dscf5648.jp
g	g	g	g	g	g	g	g	g	g
dscf5505.jp	dscf5521.jp	dscf5537.jp	dscf5553.jp	dscf5569.jp	dscf5585.jp	dscf5601.jp	dscf5617.jp	dscf5633.jp	dscf5649.jp
g	g	g	g	g	g	g	g	g	g
dscf5506.jp	dscf5522.jp	dscf5538.jp	dscf5554.jp	dscf5570.jp	dscf5586.jp	dscf5602.jp	dscf5618.jp	dscf5634.jp	dscf5650.jp
g	g	g	g	g	g	g	g	g	g
dscf5507.jp	dscf5523.jp	dscf5539.jp	dscf5555.jp	dscf5571.jp	dscf5587.jp	dscf5603.jp	dscf5619.jp	dscf5635.jp	dscf5651.jp
g	g	g	g	g	g	g	g	g	g
dscf5508.jp	dscf5524.jp	dscf5540.jp	dscf5556.jp	dscf5572.jp	dscf5588.jp	dscf5604.jp	dscf5620.jp	dscf5636.jp	dscf5652.jp
g	g	g	g	g	g	g	g	g	g
dscf5509.jp	dscf5525.jp	dscf5541.jp	dscf5557.jp	dscf5573.jp	dscf5589.jp	dscf5605.jp	dscf5621.jp	dscf5637.jp	dscf5653.jp
g	g	g	g	g	g	g	g	g	g

Electronic data collected by the FFM												
dscf5510.jp g	dscf5526.jp g	dscf5542.jp g	dscf5558.jp g	dscf5574.jp g	dscf5590.jp g	dscf5606.jp g	dscf5622.jp g	dscf5638.jp g	dscf5654.jp g			
dscf5511.jp g	dscf5527.jp g	dscf5543.jp g	dscf5559.jp g	dscf5575.jp g	dscf5591.jp g	dscf5607.jp g	dscf5623.jp g	dscf5639.jp g	dscf5655.jp g			
dscf5512.jp g	dscf5528.jp g	dscf5544.jp g	dscf5560.jp g	dscf5576.jp g	dscf5592.jp g	dscf5608.jp g	dscf5624.jp g	dscf5640.jp g	dscf5656.jp g			
dscf5513.jp g	dscf5529.jp g	dscf5545.jp g	dscf5561.jp g	dscf5577.jp g	dscf5593.jp g	dscf5609.jp g	dscf5625.jp g	dscf5641.jp g	dscf5657.jp g			
dscf5514.jp g	dscf5530.jp g	dscf5546.jp g	dscf5562.jp g	dscf5578.jp g	dscf5594.jp g	dscf5610.jp g	dscf5626.jp g	dscf5642.jp g	dscf5658.jp g			
dscf5659.jpg												
Entry number	Assigned Package Code		Folder location									
8.	1788		D:\1788\100GOPRO A.G\									
gopr0001.jpg		gopr0002.jpg		gopr0003.jpg		gopr0004.lrv		gopr0004.mp4		gopr0004.thm		
Entry number	Assigned Package Code		Folder location									
8.	1788		D:\1788\100GOPRO M.F\									
gopr0001.lrv		gopr0001.mp4		gopr0001.thm		gp010001.lrv		gp010001.mp4		gp020001.lrv	gp020001.mp4	
gp030001.lrv		gp030001.mp4		gp040001.lrv		gp040001.mp4		gp050001.lrv		gp050001.mp4		gp060001.lrv
gp060001.mp4		gp070001.lrv		gp070001.mp4		gp080001.lrv		gp080001.mp4		gp090001.lrv		gp090001.mp4
Entry number	Assigned Package Code		Folder location									
8.	1788		D:\1788\101GOPRO M.L\									
gopr0001.lrv		gopr0001.lrv		gopr0001.lrv		gopr0001.lrv		gopr0001.lrv		gopr0001.lrv		
Entry number	Assigned Package Code		Folder location									
8.	1788		D:\1788\101NIKON M.L\100gopro m.l\									
gopr0001.lrv		gopr0001.mp4		gopr0001.thm		gopr0002.lrv		gopr0002.mp4		gopr0002.thm		
Entry number	Assigned Package Code		Folder location									
8.	1788		D:\1788\101NIKON M.L\									
dscn2096.jpg	dscn2103.jpg	dscn2110.jpg	dscn2117.jpg	dscn2124.mo v	dscn2131.jpg	dscn2138.jpg	dscn2145.jpg	dscn2152.jpg				

Electronic data collected by the FFM									
dscn2097.jpg	dscn2104.jpg	dscn2111.jpg	dscn2118.jpg	dscn2125.mo v	dscn2132.jpg	dscn2139.jpg	dscn2146.jpg	dscn2153.jpg	
dscn2098.jpg	dscn2105.jpg	dscn2112.jpg	dscn2119.jpg	dscn2126.mo v	dscn2133.jpg	dscn2140.jpg	dscn2147.jpg	dscn2154.jpg	
dscn2099.jpg	dscn2106.jpg	dscn2113.jpg	dscn2120.jpg	dscn2127.jpg	dscn2134.jpg	dscn2141.jpg	dscn2148.jpg	dscn2155.jpg	
dscn2100.jpg	dscn2107.jpg	dscn2114.jpg	dscn2121.jpg	dscn2128.mo v	dscn2135.jpg	dscn2142.jpg	dscn2149.jpg	dscn2156.jpg	
dscn2101.jpg	dscn2108.jpg	dscn2115.jpg	dscn2122.jpg	dscn2129.jpg	dscn2136.jpg	dscn2143.jpg	dscn2150.jpg	dscn2157.jpg	
dscn2102.jpg	dscn2109.jpg	dscn2116.jpg	dscn2123.jpg	dscn2130.jpg	dscn2137.jpg	dscn2144.jpg	dscn2151.jpg	dscn2158.jpg	
dscn2159.jpg			dscn2160.jpg			dscn2161.jpg			
Entry number	Assigned Package Code			Folder location					
8.	1788			D:\1788\103_FUJI A.G\					
dscf3444.jp g	dscf3452.jp g	dscf3460.jp g	dscf3468.jp g	dscf3476.jp g	dscf3484.jp g	dscf3492.jp g	dscf3500.jp g	dscf3508.jp g	dscf3516.jp g
dscf3445.jp g	dscf3453.jp g	dscf3461.jp g	dscf3469.jp g	dscf3477.jp g	dscf3485.jp g	dscf3493.jp g	dscf3501.jp g	dscf3509.jp g	dscf3517.jp g
dscf3446.jp g	dscf3454.jp g	dscf3462.jp g	dscf3470.jp g	dscf3478.jp g	dscf3486.jp g	dscf3494.jp g	dscf3502.jp g	dscf3510.jp g	dscf3518.jp g
dscf3447.jp g	dscf3455.jp g	dscf3463.jp g	dscf3471.jp g	dscf3479.jp g	dscf3487.jp g	dscf3495.jp g	dscf3503.jp g	dscf3511.jp g	dscf3519.jp g
dscf3448.jp g	dscf3456.jp g	dscf3464.jp g	dscf3472.jp g	dscf3480.jp g	dscf3488.jp g	dscf3496.jp g	dscf3504.jp g	dscf3512.jp g	dscf3520.jp g
dscf3449.jp g	dscf3457.jp g	dscf3465.jp g	dscf3473.jp g	dscf3481.jp g	dscf3489.jp g	dscf3497.jp g	dscf3505.jp g	dscf3513.jp g	dscf3521.jp g
dscf3450.jp g	dscf3458.jp g	dscf3466.jp g	dscf3474.jp g	dscf3482.jp g	dscf3490.jp g	dscf3498.jp g	dscf3506.jp g	dscf3514.jp g	dscf3522.jp g
dscf3451.jp g	dscf3459.jp g	dscf3467.jp g	dscf3475.jp g	dscf3483.jp g	dscf3491.jp g	dscf3499.jp g	dscf3507.jp g	dscf3515.jp g	dscf3523.jp g
dscf3524.jpg		dscf3525.jpg		dscf3526.jpg		dscf3527.jpg		dscf3528.jpg	
dscf3529.jpg		dscf3525.jpg		dscf3526.jpg		dscf3527.jpg		dscf3528.jpg	
Entry number	Assigned Package Code			Folder location					

Electronic data collected by the FFM

8.	1788			D:\1788\103_FUJI M.F\					
dscf3775.jp g	dscf3792.jp g	dscf3809.jp g	dscf3826.jp g	dscf3843.jp g	dscf3860.jp g	dscf3877.jp g	dscf3894.jp g	dscf3911.jp g	dscf3928.jp g
dscf3776.jp g	dscf3793.jp g	dscf3810.jp g	dscf3827.jp g	dscf3844.jp g	dscf3861.jp g	dscf3878.jp g	dscf3895.jp g	dscf3912.jp g	dscf3929.jp g
dscf3777.jp g	dscf3794.jp g	dscf3811.jp g	dscf3828.jp g	dscf3845.jp g	dscf3862.jp g	dscf3879.jp g	dscf3896.jp g	dscf3913.jp g	dscf3930.jp g
dscf3778.jp g	dscf3795.jp g	dscf3812.jp g	dscf3829.jp g	dscf3846.jp g	dscf3863.jp g	dscf3880.jp g	dscf3897.jp g	dscf3914.jp g	dscf3931.jp g
dscf3779.jp g	dscf3796.jp g	dscf3813.jp g	dscf3830.jp g	dscf3847.jp g	dscf3864.jp g	dscf3881.jp g	dscf3898.jp g	dscf3915.jp g	dscf3932.jp g
dscf3780.jp g	dscf3797.jp g	dscf3814.jp g	dscf3831.jp g	dscf3848.jp g	dscf3865.jp g	dscf3882.jp g	dscf3899.jp g	dscf3916.jp g	dscf3933.jp g
dscf3781.jp g	dscf3798.jp g	dscf3815.jp g	dscf3832.jp g	dscf3849.jp g	dscf3866.jp g	dscf3883.jp g	dscf3900.jp g	dscf3917.jp g	dscf3934.jp g
dscf3782.jp g	dscf3799.jp g	dscf3816.jp g	dscf3833.jp g	dscf3850.jp g	dscf3867.jp g	dscf3884.jp g	dscf3901.jp g	dscf3918.jp g	dscf3935.jp g
dscf3783.jp g	dscf3800.jp g	dscf3817.jp g	dscf3834.jp g	dscf3851.jp g	dscf3868.jp g	dscf3885.jp g	dscf3902.jp g	dscf3919.jp g	dscf3936.jp g
dscf3784.jp g	dscf3801.jp g	dscf3818.jp g	dscf3835.jp g	dscf3852.jp g	dscf3869.jp g	dscf3886.jp g	dscf3903.jp g	dscf3920.jp g	dscf3937.jp g
dscf3785.jp g	dscf3802.jp g	dscf3819.jp g	dscf3836.jp g	dscf3853.jp g	dscf3870.jp g	dscf3887.jp g	dscf3904.jp g	dscf3921.jp g	dscf3938.jp g
dscf3786.jp g	dscf3803.jp g	dscf3820.jp g	dscf3837.jp g	dscf3854.jp g	dscf3871.jp g	dscf3888.jp g	dscf3905.jp g	dscf3922.jp g	dscf3939.jp g
dscf3787.jp g	dscf3804.jp g	dscf3821.jp g	dscf3838.jp g	dscf3855.jp g	dscf3872.jp g	dscf3889.jp g	dscf3906.jp g	dscf3923.jp g	dscf3940.jp g
dscf3788.jp g	dscf3805.jp g	dscf3822.jp g	dscf3839.jp g	dscf3856.jp g	dscf3873.jp g	dscf3890.jp g	dscf3907.jp g	dscf3924.jp g	dscf3941.jp g
dscf3789.jp	dscf3806.jp	dscf3823.jp	dscf3840.jp	dscf3857.jp	dscf3874.jp	dscf3891.jp	dscf3908.jp	dscf3925.jp	dscf3942.jp

Electronic data collected by the FFM									
g	g	g	g	g	g	g	g	g	g
dscf3790.jp	dscf3807.jp	dscf3824.jp	dscf3841.jp	dscf3858.jp	dscf3875.jp	dscf3892.jp	dscf3909.jp	dscf3926.jp	dscf3943.jp
g	g	g	g	g	g	g	g	g	g
dscf3791.jp	dscf3808.jp	dscf3825.jp	dscf3842.jp	dscf3859.jp	dscf3876.jp	dscf3893.jp	dscf3910.jp	dscf3927.jp	dscf3944.jp
g	g	g	g	g	g	g	g	g	g
Entry number	Assigned Package Code	Folder location							
8.	1788	D:\1788\Recce 24042018\removable disk\dcim\100gopro\							
gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gp010001.lrv	gp010001.mp4					
gp020001.lrv	gp020001.mp4	gp030001.lrv	gp030001.mp4	gp040001.lrv					
gp040001.mp4	gp050001.lrv	gp050001.mp4	gp060001.lrv	gp060001.mp4					
Entry number	Assigned Package Code	Folder location	File Name						
8.	1788	D:\1788\Recce 24042018\removable disk\misc\	version.txt						
Entry number	Assigned Package Code	Folder location							
9.	1799	D:\1799\evidence\							
إخلاء شهادة الكيماوى	إخلاء كيميائى	شهادة الكيماوى	طفل	مقاطع لإخلاء شهادة مجزأة الكيماوى					
Entry number	Assigned Package Code	Folder location							
9.	1799	D:\1799\evidence\أتصويرات أخرى							
photo_2018-04-07_16-55-05.jpg	photo_2018-04-07_23-31-13.jpg	photo_2018-04-07_23-31-17.jpg							
photo_2018-04-07_16-55-07.jpg	photo_2018-04-07_23-31-14.jpg	photo_2018-04-07_23-31-20.jpg							
photo_2018-04-07_23-31-10.jpg	photo_2018-04-07_23-31-15.jpg	photo_2018-04-08_01-01-38.jpg							
photo_2018-04-07_23-31-12.jpg	photo_2018-04-07_23-31-16.jpg	photo_2018-04-08_02-24-57.jpg							
	photo_2018-04-08_02-25-03.jpg								
Entry number	Assigned Package Code	Folder location	File Name						
9.	1799	D:\1799\evidence\أتصويرى	20180409_190227.mp4						
Entry number	Assigned Package Code	Folder location							
9.	1799	D:\1799\evidence\							
dsc_0060.jpg	mov_0059.mp4	mov_0062.mp4							
Entry number	Assigned Package Code	Folder location							
10.	1900	D:\1900\evidence\							

Electronic data collected by the FFM									
dsc_0153.mov	dsc_0233.mov	dsc_0234.mov	dsc_0235.mov	imag0957.jpg	imag0958.jpg	imag0959.jpg	imag0960.jpg		
video0219.mp4				20180427-134702z-001.zip					
Entry number	Assigned Package Code			Folder location					
11.	1909			D:\1909\100GOPRO A.G\					
gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm	gp010001.lrv			
gp010001.mp4	gp020001.lrv	gp020001.mp4	gp030001.lrv	gp030001.mp4	gp040001.lrv	gp040001.mp4			
Entry number	Assigned Package Code			Folder location					
11.	1909			D:\1909\100GOPRO I.H\					
gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm	gp010001.lrv	gp010001.mp4		
gp020001.lrv	gp020001.mp4	gp030001.lrv	gp030001.mp4	gp040001.lrv	gp040001.mp4	gp050001.lrv	gp050001.mp4		
Entry number	Assigned Package Code			Folder location					
11.	1909			D:\1909\100GOPRO M.F\					
gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gp010001.lrv	gp010001.mp4	gp020001.lrv	gp020001.mp4			
gp030001.lrv	gp030001.mp4	gp040001.lrv	gp040001.mp4	gp050001.lrv	gp050001.mp4	gp060001.lrv			
gp060001.mp4	gp070001.lrv	gp070001.mp4	gp080001.lrv	gp080001.mp4	gp090001.lrv	gp090001.mp4			
Entry number	Assigned Package Code			Folder location					
11.	1909			D:\1909\100GOPRO M.L\					
gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm	gopr0003.lrv			
gopr0003.mp4	gopr0003.thm	gp010003.lrv	gp010003.mp4	gp020003.lrv	gp020003.mp4	gp030003.lrv			
gp030003.mp4	gp040003.lrv	gp040003.mp4	gp050003.lrv	gp050003.mp4	gp060003.lrv	gp060003.mp4			
Entry number	Assigned Package Code			Folder location					
11.	1909			D:\1909\100NIKON M.L\					
dscn2042.jp	dscn2047.jp	dscn2052.jp	dscn2057.jp	dscn2062.jp	dscn2067.jp	dscn2072.jp	dscn2077.jp	dscn2082.jp	dscn2087.jp
g	g	g	g	g	g	g	g	g	g
dscn2043.jp	dscn2048.jp	dscn2053.jp	dscn2058.jp	dscn2063.jp	dscn2068.jp	dscn2073.jp	dscn2078.jp	dscn2083.jp	dscn2088.jp
g	g	g	g	g	g	g	g	g	g
dscn2044.jp	dscn2049.jp	dscn2054.jp	dscn2059.jp	dscn2064.jp	dscn2069.jp	dscn2074.jp	dscn2079.jp	dscn2084.jp	dscn2089.jp
g	g	g	g	g	g	g	g	g	g
dscn2045.jp	dscn2050.jp	dscn2055.jp	dscn2060.jp	dscn2065.jp	dscn2070.jp	dscn2075.jp	dscn2080.jp	dscn2085.jp	dscn2090.jp

Electronic data collected by the FFM									
g	g	g	g	g	g	g	g	g	g
dscn2046.jp	dscn2051.jp	dscn2056.jp	dscn2061.jp	dscn2066.jp	dscn2071.jp	dscn2076.jp	dscn2081.jp	dscn2086.jp	dscn2091.jp
g	g	g	g	g	g	g	g	g	g
dscn2092.jpg		dscn2093.jpg			dscn2094.jpg			dscn2095.jpg	
Entry number	Assigned Package Code			Folder location					
11.	1909			D:\1909\103_FUJI A.G\					
dscf3322.jp	dscf3334.jp	dscf3346.jp	dscf3358.jp	dscf3370.jp	dscf3382.jp	dscf3394.jp	dscf3406.jp	dscf3418.jp	dscf3430.jp
g	g	g	g	g	g	g	g	g	g
dscf3323.jp	dscf3335.jp	dscf3347.jp	dscf3359.jp	dscf3371.jp	dscf3383.jp	dscf3395.jp	dscf3407.jp	dscf3419.jp	dscf3431.jp
g	g	g	g	g	g	g	g	g	g
dscf3324.jp	dscf3336.jp	dscf3348.jp	dscf3360.jp	dscf3372.jp	dscf3384.jp	dscf3396.jp	dscf3408.jp	dscf3420.jp	dscf3432.jp
g	g	g	g	g	g	g	g	g	g
dscf3325.jp	dscf3337.jp	dscf3349.jp	dscf3361.jp	dscf3373.jp	dscf3385.jp	dscf3397.jp	dscf3409.jp	dscf3421.jp	dscf3433.jp
g	g	g	g	g	g	g	g	g	g
dscf3326.jp	dscf3338.jp	dscf3350.jp	dscf3362.jp	dscf3374.jp	dscf3386.jp	dscf3398.jp	dscf3410.jp	dscf3422.jp	dscf3434.jp
g	g	g	g	g	g	g	g	g	g
dscf3327.jp	dscf3339.jp	dscf3351.jp	dscf3363.jp	dscf3375.jp	dscf3387.jp	dscf3399.jp	dscf3411.jp	dscf3423.jp	dscf3435.jp
g	g	g	g	g	g	g	g	g	g
dscf3328.jp	dscf3340.jp	dscf3352.jp	dscf3364.jp	dscf3376.jp	dscf3388.jp	dscf3400.jp	dscf3412.jp	dscf3424.jp	dscf3436.jp
g	g	g	g	g	g	g	g	g	g
dscf3329.jp	dscf3341.jp	dscf3353.jp	dscf3365.jp	dscf3377.jp	dscf3389.jp	dscf3401.jp	dscf3413.jp	dscf3425.jp	dscf3437.jp
g	g	g	g	g	g	g	g	g	g
dscf3330.jp	dscf3342.jp	dscf3354.jp	dscf3366.jp	dscf3378.jp	dscf3390.jp	dscf3402.jp	dscf3414.jp	dscf3426.jp	dscf3438.jp
g	g	g	g	g	g	g	g	g	g
dscf3331.jp	dscf3343.jp	dscf3355.jp	dscf3367.jp	dscf3379.jp	dscf3391.jp	dscf3403.jp	dscf3415.jp	dscf3427.jp	dscf3439.jp
g	g	g	g	g	g	g	g	g	g
dscf3332.jp	dscf3344.jp	dscf3356.jp	dscf3368.jp	dscf3380.jp	dscf3392.jp	dscf3404.jp	dscf3416.jp	dscf3428.jp	dscf3440.jp
g	g	g	g	g	g	g	g	g	g
dscf3333.jp	dscf3345.jp	dscf3357.jp	dscf3369.jp	dscf3381.jp	dscf3393.jp	dscf3405.jp	dscf3417.jp	dscf3429.jp	dscf3441.jp
g	g	g	g	g	g	g	g	g	g

Electronic data collected by the FFM									
dscf3442.jpg			dscf3443.jpg				dscf3444.jpg		
Entry number	Assigned Package Code		Folder location						
11.	1909		D:\1909\103_FUJI M.F						
dscf3661.jp g	dscf3672.jp g	dscf3683.jp g	dscf3694.jp g	dscf3705.jp g	dscf3716.jp g	dscf3727.jp g	dscf3738.jp g	dscf3749.jp g	dscf3760.jp g
dscf3662.jp g	dscf3673.jp g	dscf3684.jp g	dscf3695.jp g	dscf3706.jp g	dscf3717.jp g	dscf3728.jp g	dscf3739.jp g	dscf3750.jp g	dscf3761.jp g
dscf3663.jp g	dscf3674.jp g	dscf3685.jp g	dscf3696.jp g	dscf3707.jp g	dscf3718.jp g	dscf3729.jp g	dscf3740.jp g	dscf3751.jp g	dscf3762.jp g
dscf3664.jp g	dscf3675.jp g	dscf3686.jp g	dscf3697.jp g	dscf3708.jp g	dscf3719.jp g	dscf3730.jp g	dscf3741.jp g	dscf3752.jp g	dscf3763.jp g
dscf3665.jp g	dscf3676.jp g	dscf3687.jp g	dscf3698.jp g	dscf3709.jp g	dscf3720.jp g	dscf3731.jp g	dscf3742.jp g	dscf3753.jp g	dscf3764.jp g
dscf3666.jp g	dscf3677.jp g	dscf3688.jp g	dscf3699.jp g	dscf3710.jp g	dscf3721.jp g	dscf3732.jp g	dscf3743.jp g	dscf3754.jp g	dscf3765.jp g
dscf3667.jp g	dscf3678.jp g	dscf3689.jp g	dscf3700.jp g	dscf3711.jp g	dscf3722.jp g	dscf3733.jp g	dscf3744.jp g	dscf3755.jp g	dscf3766.jp g
dscf3668.jp g	dscf3679.jp g	dscf3690.jp g	dscf3701.jp g	dscf3712.jp g	dscf3723.jp g	dscf3734.jp g	dscf3745.jp g	dscf3756.jp g	dscf3767.jp g
dscf3669.jp g	dscf3680.jp g	dscf3691.jp g	dscf3702.jp g	dscf3713.jp g	dscf3724.jp g	dscf3735.jp g	dscf3746.jp g	dscf3757.jp g	dscf3768.jp g
dscf3670.jp g	dscf3681.jp g	dscf3692.jp g	dscf3703.jp g	dscf3714.jp g	dscf3725.jp g	dscf3736.jp g	dscf3747.jp g	dscf3758.jp g	dscf3769.jp g
dscf3771.jpg		dscf3772.jpg			dscf3773.jpg		dscf3774.jpg		
Entry number	Assigned Package Code		Folder location						
11.	1909		D:\1909\Recce 17042018\sd\dcim\100gopro\						
gopr0001.lrv	gopr0001.mp 4	gopr0001.th m	gopr0002.lrv	gopr0002.mp 4	gopr0002.th m	gopr0003.lrv	gopr0003.mp 4	gopr0003.th m	
gopr0004.lrv	gopr0004.mp 4	gopr0004.th m	gopr0005.lrv	gopr0005.mp 4	gopr0005.th m	gopr0006.lrv	gopr0006.mp 4	gopr0006.th m	

Electronic data collected by the FFM									
Entry number	Assigned Package Code			Folder location					
11.	1909			D:\1909\Recce20042018\sd\dcim\100gopro\					
gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm	gopr0003.lrv	gopr0003.mp4		
gopr0003.thm	gopr0004.lrv	gopr0004.mp4	gopr0004.thm	gopr0005.lrv	gopr0005.mp4	gopr0005.thm	gopr0006.lrv		
gopr0006.mp4	gopr0006.thm		gp010006.lrv	gp010006.mp4	gp020006.lrv		gp020006.mp4		
Entry number	Assigned Package Code			Folder location					
12.	1914			D:\1914\Camera 1 - 1914\removable disk\dcim\103_fuji\					
dscf3946.jp	dscf3947.jp	dscf3948.jp	dscf3949.jp	dscf3950.jp	dscf3951.jp	dscf3952.jp	dscf3953.jp	dscf3954.jp	dscf3955.jp
g	g	g	g	g	g	g	g	g	g
dscf3956.jp	dscf3957.jp	dscf3958.jp	dscf3959.jp	dscf3960.jp	dscf3961.jp	dscf3962.jp	dscf3963.jp	dscf3964.jp	dscf3965.jp
g	g	g	g	g	g	g	g	g	g
dscf3966.jp	dscf3967.jp	dscf3968.jp	dscf3969.jp	dscf3970.jp	dscf3971.jp	dscf3972.jp	dscf3973.jp	dscf3974.jp	dscf3975.jp
g	g	g	g	g	g	g	g	g	g
dscf3976.jp	dscf3977.jp	dscf3978.jp	dscf3979.jp	dscf3980.jp	dscf3981.jp	dscf3982.jp	dscf3983.jp	dscf3984.jp	dscf3985.jp
g	g	g	g	g	g	g	g	g	g
dscf3986.jp	dscf3987.jp	dscf3988.jp	dscf3989.jp	dscf3990.jp	dscf3991.jp	dscf3992.jp	dscf3993.jp	dscf3994.jp	dscf3995.jp
g	g	g	g	g	g	g	g	g	g
dscf3996.jpg		dscf3997.jpg			dscf3998.jpg		dscf3999.jpg		
Entry number	Assigned Package Code			Folder location					
12.	1914			D:\1914\Camera 1 - 1914\removable disk\dcim\104_fuji\					
dscf4001.jp	dscf4041.jp	dscf4081.jp	dscf4121.jp	dscf4161.jp	dscf4201.jp	dscf4241.jp	dscf4281.jp	dscf4321.jp	dscf4361.jp
g	g	g	g	g	g	g	g	g	g
dscf4002.jp	dscf4042.jp	dscf4082.jp	dscf4122.jp	dscf4162.jp	dscf4202.jp	dscf4242.jp	dscf4282.jp	dscf4322.jp	dscf4362.jp
g	g	g	g	g	g	g	g	g	g
dscf4003.jp	dscf4043.jp	dscf4083.jp	dscf4123.jp	dscf4163.jp	dscf4203.jp	dscf4243.jp	dscf4283.jp	dscf4323.jp	dscf4363.jp
g	g	g	g	g	g	g	g	g	g
dscf4004.jp	dscf4044.jp	dscf4084.jp	dscf4124.jp	dscf4164.jp	dscf4204.jp	dscf4244.jp	dscf4284.jp	dscf4324.jp	dscf4364.jp
g	g	g	g	g	g	g	g	g	g
dscf4005.jp	dscf4045.jp	dscf4085.jp	dscf4125.jp	dscf4165.jp	dscf4205.jp	dscf4245.jp	dscf4285.jp	dscf4325.jp	dscf4365.jp
g	g	g	g	g	g	g	g	g	g

Electronic data collected by the FFM									
dscf4006.jp g	dscf4046.jp g	dscf4086.jp g	dscf4126.jp g	dscf4166.jp g	dscf4206.jp g	dscf4246.jp g	dscf4286.jp g	dscf4326.jp g	dscf4366.jp g
dscf4007.jp g	dscf4047.jp g	dscf4087.jp g	dscf4127.jp g	dscf4167.jp g	dscf4207.jp g	dscf4247.jp g	dscf4287.jp g	dscf4327.jp g	dscf4367.jp g
dscf4008.jp g	dscf4048.jp g	dscf4088.jp g	dscf4128.jp g	dscf4168.jp g	dscf4208.jp g	dscf4248.jp g	dscf4288.jp g	dscf4328.jp g	dscf4368.jp g
dscf4009.jp g	dscf4049.jp g	dscf4089.jp g	dscf4129.jp g	dscf4169.jp g	dscf4209.jp g	dscf4249.jp g	dscf4289.jp g	dscf4329.jp g	dscf4369.jp g
dscf4010.jp g	dscf4050.jp g	dscf4090.jp g	dscf4130.jp g	dscf4170.jp g	dscf4210.jp g	dscf4250.jp g	dscf4290.jp g	dscf4330.jp g	dscf4370.jp g
dscf4011.jp g	dscf4051.jp g	dscf4091.jp g	dscf4131.jp g	dscf4171.jp g	dscf4211.jp g	dscf4251.jp g	dscf4291.jp g	dscf4331.jp g	dscf4371.jp g
dscf4012.jp g	dscf4052.jp g	dscf4092.jp g	dscf4132.jp g	dscf4172.jp g	dscf4212.jp g	dscf4252.jp g	dscf4292.jp g	dscf4332.jp g	dscf4372.jp g
dscf4013.jp g	dscf4053.jp g	dscf4093.jp g	dscf4133.jp g	dscf4173.jp g	dscf4213.jp g	dscf4253.jp g	dscf4293.jp g	dscf4333.jp g	dscf4373.jp g
dscf4014.jp g	dscf4054.jp g	dscf4094.jp g	dscf4134.jp g	dscf4174.jp g	dscf4214.jp g	dscf4254.jp g	dscf4294.jp g	dscf4334.jp g	dscf4374.jp g
dscf4015.jp g	dscf4055.jp g	dscf4095.jp g	dscf4135.jp g	dscf4175.jp g	dscf4215.jp g	dscf4255.jp g	dscf4295.jp g	dscf4335.jp g	dscf4375.jp g
dscf4016.jp g	dscf4056.jp g	dscf4096.jp g	dscf4136.jp g	dscf4176.jp g	dscf4216.jp g	dscf4256.jp g	dscf4296.jp g	dscf4336.jp g	dscf4376.jp g
dscf4017.jp g	dscf4057.jp g	dscf4097.jp g	dscf4137.jp g	dscf4177.jp g	dscf4217.jp g	dscf4257.jp g	dscf4297.jp g	dscf4337.jp g	dscf4377.jp g
dscf4018.jp g	dscf4058.jp g	dscf4098.jp g	dscf4138.jp g	dscf4178.jp g	dscf4218.jp g	dscf4258.jp g	dscf4298.jp g	dscf4338.jp g	dscf4378.jp g
dscf4019.jp g	dscf4059.jp g	dscf4099.jp g	dscf4139.jp g	dscf4179.jp g	dscf4219.jp g	dscf4259.jp g	dscf4299.jp g	dscf4339.jp g	dscf4379.jp g
dscf4020.jp g	dscf4060.jp g	dscf4100.jp g	dscf4140.jp g	dscf4180.jp g	dscf4220.jp g	dscf4260.jp g	dscf4300.jp g	dscf4340.jp g	dscf4380.jp g

Electronic data collected by the FFM

dscf4021.jp g	dscf4061.jp g	dscf4101.jp g	dscf4141.jp g	dscf4181.jp g	dscf4221.jp g	dscf4261.jp g	dscf4301.jp g	dscf4341.jp g	dscf4381.jp g
dscf4022.jp g	dscf4062.jp g	dscf4102.jp g	dscf4142.jp g	dscf4182.jp g	dscf4222.jp g	dscf4262.jp g	dscf4302.jp g	dscf4342.jp g	dscf4382.jp g
dscf4023.jp g	dscf4063.jp g	dscf4103.jp g	dscf4143.jp g	dscf4183.jp g	dscf4223.jp g	dscf4263.jp g	dscf4303.jp g	dscf4343.jp g	dscf4383.jp g
dscf4024.jp g	dscf4064.jp g	dscf4104.jp g	dscf4144.jp g	dscf4184.jp g	dscf4224.jp g	dscf4264.jp g	dscf4304.jp g	dscf4344.jp g	dscf4384.jp g
dscf4025.jp g	dscf4065.jp g	dscf4105.jp g	dscf4145.jp g	dscf4185.jp g	dscf4225.jp g	dscf4265.jp g	dscf4305.jp g	dscf4345.jp g	dscf4385.jp g
dscf4026.jp g	dscf4066.jp g	dscf4106.jp g	dscf4146.jp g	dscf4186.jp g	dscf4226.jp g	dscf4266.jp g	dscf4306.jp g	dscf4346.jp g	dscf4386.jp g
dscf4027.jp g	dscf4067.jp g	dscf4107.jp g	dscf4147.jp g	dscf4187.jp g	dscf4227.jp g	dscf4267.jp g	dscf4307.jp g	dscf4347.jp g	dscf4387.jp g
dscf4028.jp g	dscf4068.jp g	dscf4108.jp g	dscf4148.jp g	dscf4188.jp g	dscf4228.jp g	dscf4268.jp g	dscf4308.jp g	dscf4348.jp g	dscf4388.jp g
dscf4029.jp g	dscf4069.jp g	dscf4109.jp g	dscf4149.jp g	dscf4189.jp g	dscf4229.jp g	dscf4269.jp g	dscf4309.jp g	dscf4349.jp g	dscf4389.jp g
dscf4030.jp g	dscf4070.jp g	dscf4110.jp g	dscf4150.jp g	dscf4190.jp g	dscf4230.jp g	dscf4270.jp g	dscf4310.jp g	dscf4350.jp g	dscf4390.jp g
dscf4031.jp g	dscf4071.jp g	dscf4111.jp g	dscf4151.jp g	dscf4191.jp g	dscf4231.jp g	dscf4271.jp g	dscf4311.jp g	dscf4351.jp g	dscf4391.jp g
dscf4032.jp g	dscf4072.jp g	dscf4112.jp g	dscf4152.jp g	dscf4192.jp g	dscf4232.jp g	dscf4272.jp g	dscf4312.jp g	dscf4352.jp g	dscf4392.jp g
dscf4033.jp g	dscf4073.jp g	dscf4113.jp g	dscf4153.jp g	dscf4193.jp g	dscf4233.jp g	dscf4273.jp g	dscf4313.jp g	dscf4353.jp g	dscf4393.jp g
dscf4034.jp g	dscf4074.jp g	dscf4114.jp g	dscf4154.jp g	dscf4194.jp g	dscf4234.jp g	dscf4274.jp g	dscf4314.jp g	dscf4354.jp g	dscf4394.jp g
dscf4035.jp g	dscf4075.jp g	dscf4115.jp g	dscf4155.jp g	dscf4195.jp g	dscf4235.jp g	dscf4275.jp g	dscf4315.jp g	dscf4355.jp g	dscf4395.jp g

Electronic data collected by the FFM									
dscf4036.jp g	dscf4076.jp g	dscf4116.jp g	dscf4156.jp g	dscf4196.jp g	dscf4236.jp g	dscf4276.jp g	dscf4316.jp g	dscf4356.jp g	dscf4396.jp g
dscf4037.jp g	dscf4077.jp g	dscf4117.jp g	dscf4157.jp g	dscf4197.jp g	dscf4237.jp g	dscf4277.jp g	dscf4317.jp g	dscf4357.jp g	dscf4397.jp g
dscf4038.jp g	dscf4078.jp g	dscf4118.jp g	dscf4158.jp g	dscf4198.jp g	dscf4238.jp g	dscf4278.jp g	dscf4318.jp g	dscf4358.jp g	dscf4398.jp g
dscf4039.jp g	dscf4079.jp g	dscf4119.jp g	dscf4159.jp g	dscf4199.jp g	dscf4239.jp g	dscf4279.jp g	dscf4319.jp g	dscf4359.jp g	dscf4399.jp g
dscf4040.jp g	dscf4080.jp g	dscf4120.jp g	dscf4160.jp g	dscf4200.jp g	dscf4240.jp g	dscf4280.jp g	dscf4320.jp g	dscf4360.jp g	dscf4400.jp g
dscf4401.jpg		dscf4402.jpg			dscf4403.jpg			dscf4404.jpg	
Entry number	Assigned Package Code		Folder location						
12.	1914		D:\1914\Camera 2 - 1914\removable disk\dcim\100nikon\						
dscn2162.jp g	dscn2177.jp g	dscn2192.jp g	dscn2207.jp g	dscn2222.jp g	dscn2236.jp g	dscn2250.jp g	dscn2264.jp g	dscn2278.jp g	dscn2292.jp g
dscn2163.jp g	dscn2178.jp g	dscn2193.jp g	dscn2208.jp g	dscn2223.jp g	dscn2237.jp g	dscn2251.jp g	dscn2265.jp g	dscn2279.jp g	dscn2293.jp g
dscn2164.jp g	dscn2179.jp g	dscn2194.jp g	dscn2209.jp g	dscn2224.jp g	dscn2238.jp g	dscn2252.jp g	dscn2266.jp g	dscn2280.jp g	dscn2294.jp g
dscn2165.jp g	dscn2180.jp g	dscn2195.jp g	dscn2210.jp g	dscn2225.jp g	dscn2239.jp g	dscn2253.jp g	dscn2267.jp g	dscn2281.jp g	dscn2295.jp g
dscn2166.jp g	dscn2181.jp g	dscn2196.jp g	dscn2211.jp g	dscn2226.jp g	dscn2240.jp g	dscn2254.jp g	dscn2268.jp g	dscn2282.jp g	dscn2296.jp g
dscn2167.jp g	dscn2182.jp g	dscn2197.jp g	dscn2212.jp g	dscn2227.jp g	dscn2241.jp g	dscn2255.jp g	dscn2269.jp g	dscn2283.jp g	dscn2297.jp g
dscn2168.jp g	dscn2183.jp g	dscn2198.jp g	dscn2213.jp g	dscn2228.jp g	dscn2242.jp g	dscn2256.jp g	dscn2270.jp g	dscn2284.jp g	dscn2298.jp g
dscn2169.jp g	dscn2184.jp g	dscn2199.jp g	dscn2214.jp g	dscn2229.jp g	dscn2243.jp g	dscn2257.jp g	dscn2271.jp g	dscn2285.jp g	dscn2299.jp g
dscn2170.jp	dscn2185.jp	dscn2200.jp	dscn2215.jp	dscn2230.jp	dscn2244.jp	dscn2258.jp	dscn2272.jp	dscn2286.jp	dscn2300.jp

Electronic data collected by the FFM									
g	g	g	g	g	g	g	g	g	g
dscn2171.jp	dscn2186.jp	dscn2201.jp	dscn2216.jp	dscn2231.jp	dscn2245.jp	dscn2259.jp	dscn2273.jp	dscn2287.jp	dscn2301.jp
g	g	g	g	g	g	g	g	g	g
dscn2172.jp	dscn2187.jp	dscn2202.jp	dscn2217.jp	dscn2232.jp	dscn2246.jp	dscn2260.jp	dscn2274.jp	dscn2288.jp	dscn2302.jp
g	g	g	g	g	g	g	g	g	g
dscn2173.jp	dscn2188.jp	dscn2203.jp	dscn2218.jp	dscn2233.jp	dscn2247.jp	dscn2261.jp	dscn2275.jp	dscn2289.jp	dscn2303.jp
g	g	g	g	g	g	g	g	g	g
dscn2174.jp	dscn2189.jp	dscn2204.jp	dscn2219.jp	dscn2234.jp	dscn2248.jp	dscn2262.jp	dscn2276.jp	dscn2290.jp	dscn2304.jp
g	g	g	g	g	g	g	g	g	g
dscn2175.jp	dscn2190.jp	dscn2205.jp	dscn2220.jp	dscn2235.jp	dscn2249.jp	dscn2263.jp	dscn2277.jp	dscn2291.jp	dscn2305.jp
g	g	g	g	g	g	g	g	g	g
dscn2176.jpg		dscn2191.jpg			dscn2206.jpg			dscn2221.jpg	
Entry number	Assigned Package Code		Folder location						
12.	1914		D:\1914\Camera 3 - 1914\removable disk\dcim\103_fuji\						
dscf3530.jpg	dscf3531.jpg	dscf3532.jpg	dscf3533.jpg	dscf3534.jpg	dscf3535.jpg	dscf3536.jpg	dscf3537.jpg		
Entry number	Assigned Package Code		Folder location						
12.	1914		D:\1914\Go Pro Camera - 1914\removable disk\dcim\100gopro\						
gopr0001.lrv	gopr0001.mp 4	gopr0001.th m	gopr0002.lrv	gopr0002.mp 4	gopr0002.th m	gp010001.lrv	gp010001.mp 4	gp010002.lrv	gp010002.mp
gp010002.mp 4	gp020002.lrv	gp020002.mp 4	gp030002.lrv	gp030002.mp 4	gp040002.lrv	gp040002.mp 4	gp050002.lrv	gp050002.mp 4	
Entry number	Assigned Package Code		Folder location						
13.	1919		D:\1919\evidence\dcim\						
img_20180411_131125.jpg		img_20180411_132009.jpg			img_20180411_133516.jpg		vid_20180411_132233.mp4		
img_20180411_131138.jpg		img_20180411_132031.jpg			img_20180411_133519.jpg		vid_20180411_132501.mp4		
img_20180411_131155.jpg		img_20180411_132035.jpg			img_20180411_133523.jpg		vid_20180411_132616.mp4		
img_20180411_131357.jpg		img_20180411_132039.jpg			img_20180411_133536.jpg		vid_20180411_132706.mp4		
img_20180411_131402.jpg		img_20180411_132253.jpg			img_20180411_133542.jpg		vid_20180411_132832.mp4		
img_20180411_131405.jpg		img_20180411_132256.jpg			img_20180411_133545.jpg		vid_20180411_132904.mp4		

Electronic data collected by the FFM

img_20180411_131408.jpg	img_20180411_132258.jpg	img_20180411_133646.jpg	vid_20180411_133149.mp4
img_20180411_131453.jpg	img_20180411_132301.jpg	img_20180411_133648.jpg	vid_20180411_133222.mp4
img_20180411_131552.jpg	img_20180411_132304.jpg	img_20180411_133650.jpg	vid_20180411_133254.mp4
img_20180411_131555.jpg	img_20180411_132308.jpg	img_20180411_133655.jpg	vid_20180411_133326.mp4
img_20180411_131559.jpg	img_20180411_132310.jpg	img_20180411_134047.jpg	vid_20180411_133553.mp4
img_20180411_131605.jpg	img_20180411_132426.jpg	img_20180411_134051.jpg	vid_20180411_133631.mp4
img_20180411_131614.jpg	img_20180411_132429.jpg	img_20180411_134107.jpg	vid_20180411_134152.mp4
img_20180411_131620.jpg	img_20180411_132433.jpg	img_20180411_134113.jpg	vid_20180411_135015.mp4
img_20180411_131707.jpg	img_20180411_132446.jpg	img_20180411_134117.jpg	vid_20180411_135051.mp4
img_20180411_131713.jpg	img_20180411_132449.jpg	img_20180411_134119.jpg	172900_2018.04.08.mp4
img_20180411_131716.jpg	img_20180411_132746.jpg	img_20180411_134130.jpg	173.07_2018.04.08.jpg
img_20180411_131719.jpg	img_20180411_132749.jpg	img_20180411_134941.jpg	173.07_2018.04.08.jpg
img_20180411_131942.jpg	img_20180411_132751.jpg	img_20180411_134950.jpg	173.00_2018.04.08.jpg
img_20180411_131944.jpg	img_20180411_132753.jpg	img_20180411_134956.jpg	173.08_2018.04.08.jpg
img_20180411_131946.jpg	img_20180411_132756.jpg	img_20180411_135000.jpg	173133_2018.04.08.jpg
img_20180411_131950.jpg	img_20180411_132759.jpg	img_20180411_135005.jpg	173050_2018.04.08.mp4
img_20180411_131952.jpg	img_20180411_133131.jpg	img_20180411_135008.jpg	173734_2018.04.08.jpg
img_20180411_131954.jpg	img_20180411_133137.jpg	vid_20180411_131315.mp4	173739_2018.04.08.jpg
img_20180411_132001.jpg	img_20180411_133146.jpg	vid_20180411_131348.mp4	173742_2018.04.08.jpg
img_20180411_132003.jpg	img_20180411_133357.jpg	vid_20180411_131902.mp4	173920_2018.04.08.jpg
img_20180411_132007.jpg	img_20180411_133505.jpg	vid_20180411_131933.mp4	173923_2018.04.08.jpg
174.10_2018.04.08.mp4	170220_2018.04.08.mp4	180809_2018.04.08.mp4	174.10_2018.04.08.mp4
170220_2018.04.08.mp4	180809_2018.04.08.mp4	174.10_2018.04.08.mp4	170220_2018.04.08.mp4
img_20180411_131125.jpg	img_20180411_132009.jpg	img_20180411_133516.jpg	vid_20180411_132233.mp4
180809_2018.04.08.mp4			

TABLE A9.2 HARD COPY OF DATA COLLECTED BY THE FACT-FINDING MISSION

Entry number	Assigned Package Code	Evidence Reference Number	Description
1.	1748	20180422174806	Drawing
2.	1748	20180422174807	Drawing
3.	1900	20180427190004	Drawing
4.	1920	20180425192003	Drawing
5.	1793	20180416179303	Drawing
6.	1916	20180416191603	Drawing
7.	1907	20180415190703	Drawing

Table A9.3 LIST OF SAMPLES COLLECTED OR RECEIVED BY THE FACT-FINDING MISSION

Entry number	Sample description	Evidence Reference Number	Source
1	Concrete debris from the street, left side below window (level 0)	20180421190901	Collected by the FFM
2	Concrete debris from the street opposite side of the entry of location 2 (level 0)	20180421190902	Collected by the FFM
3	Concrete debris from the middle of street opposite to the window (level 0)	20180421190903	Collected by the FFM
4	Control sample: debris 20 m west of building's entry (level 0)	20180421190904	Collected by the FFM
5	Swab blank with DCM	20180421190905	Collected by the FFM
6	Wipe blank with DCM	20180421190906	Collected by the FFM
7	Swab blank with water	20180421190907	Collected by the FFM
8	Wipe blank with water	20180421190908	Collected by the FFM
9	Fabric stuck to metal bars from the terrace where the cylinder is (level 3)	20180421190909	Collected by the FFM
10	Swab from inside the cylinder orifice (level 3)	20180421190910	Collected by the FFM
11	Swab with water from inside the cylinder orifice (level 3)	20180421190911	Collected by the FFM
12	Metal fragment from the terrace (level 3)	20180421190912	Collected by the FFM
13	Wipe with DCM from the external surface of the cylinder (level 3)	20180421190913	Collected by the FFM
14	Wipe with water from the external surface of the cylinder (level 3)	20180421190914	Collected by the FFM
15	Dry wipe of the cylinder thread (level 3)	20180421190915	Collected by the FFM
16	Metal object from the terrace (Level 3)	20180421190916	Collected by the FFM
17	Concrete debris from the base of the cylinder (level 3)	20180421190917	Collected by the FFM
18	Metal bar at cylinder nose (Level 3)	20180421190918	Collected by the FFM
19	Concrete debris from the crater-edge in front of the cylinder nose (level 3)	20180421190919	Collected by the FFM
20	Tile from the terrace wall (level 3)	20180421190920	Collected by the FFM
21	Wipe with water from the burnt wall in the room located under the cylinder (level 2)	20180421190921	Collected by the FFM

Entry number	Sample description	Evidence Reference Number	Source
22	Wipe with DCM from burnt wall from room under the cylinder (level 2)	20180421190922	Collected by the FFM
23	Swab with water from wall plug in the room under the cylinder (level 2)	20180421190923	Collected by the FFM
24	Dry wipe from kitchen wall above the oven (level 2)	20180421190924	Collected by the FFM
25	Wood fragment from kitchen door (level 2)	20180421190925	Collected by the FFM
26	Towel from the room located under the cylinder (level 2)	20180421190926	Collected by the FFM
27	Exposed electrical wires from room under the cylinder (level 2)	20180421190927	Collected by the FFM
28	Lump of concrete from floor-debris from room under the cylinder (level 2)	20180421190928	Collected by the FFM
29	Soap bar from room under the cylinder (level 2)	20180421190929	Collected by the FFM
30	Dry wipe from bicycle rear cassette in basement (level -1)	20180421190930	Collected by the FFM
31	Swab with DCM from bicycle rear cassette in basement (level -1)	20180421190931	Collected by the FFM
32	Water tank wood support in basement (level -1)	20180421190932	Collected by the FFM
33	Light bulb from basement(level -1)	20180421190933	Collected by the FFM
34	Wood from partition frame in basement (level -1)	20180421190934	Collected by the FFM
35	Water from water tank in basement (level -1)	20180421190935	Collected by the FFM
36	Telephone from basement (level -1)	20180421190936	Collected by the FFM
37	2 nails and 2 screws from basement wall (level -1)	20180421190937	Collected by the FFM
38	Swab with water from electric socket basement (level -1)	20180421190938	Collected by the FFM
39	Swab with DCM from electric socket basement (level -1)	20180421190939	Collected by the FFM
40	Damp wall board from basement left from stairs (level -1)	20180421190940	Collected by the FFM
41	Wipe with water from basement wall (level -1)	20180421190941	Collected by the FFM
42	Wipe with DCM from basement wall (level -1)	20180421190942	Collected by the FFM
43	Wipe with water from lavatory extractor pipe in basement (level -1)	20180421190943	Collected by the FFM
44	Insect from lavatory in basement (level -1)	20180421190944	Collected by the FFM

Entry number	Sample description	Evidence Reference Number	Source
45	Pillow from bed under the cylinder	20180425178801	Collected by the FFM
46	Metal fragment from bedroom floor	20180425178802	Collected by the FFM
47	Metal object from dresser	20180425178803	Collected by the FFM
48	Piece of blanket under cylinder	20180425178804	Collected by the FFM
49	Control sample: piece of blanket opposite side of bed, on the floor	20180425178805	Collected by the FFM
50	Wet wood from under the cylinder	20180425178806	Collected by the FFM
51	Insects and dust from tray in bedroom shower	20180425178807	Collected by the FFM
52	Bedside lamp on top of mattress	20180425178808	Collected by the FFM
53	Copper wire attached to the roof, hanging from the ceiling lamp	20180425178809	Collected by the FFM
54	Pillow cover on the bed , closer to the wall	20180425178810	Collected by the FFM
55	Dry wipe from nozzle , front part next to thread	20180425178811	Collected by the FFM
56	Dry wipe from cylinder thread	20180425178812	Collected by the FFM
57	Dry wipe from stains on the wall, behind the bed	20180425178813	Collected by the FFM
58	Chips of paint from wall behind bed .	20180425178814	Collected by the FFM
59	Wipe with DCM blank	20180425178815	Collected by the FFM
60	Wipe with DCM from headbed	20180425178816	Collected by the FFM
61	Wipe with DCM of cylinder nozzle	20180425178817	Collected by the FFM
62	Calid paper from wall	20180425178818	Collected by the FFM
63	Gloves from stairs	20180425178819	Collected by the FFM
64	Wipe with DCM from door threshold, entrance of apartment	20180425178820	Collected by the FFM
65	Solid sample from white bag under jar (made in China) labelled as hexamine	20180427191401	Collected by the FFM
66	Solid sample from jar labelled as hexamine	20180427191402	Collected by the FFM
67	Solid sample from white bag next to jar labelled as hexamine	20180427191403	Collected by the FFM

Entry number	Sample description	Evidence Reference Number	Source
68	Solid sample from white bag with Cheminol label and labelled as hexamine	20180427191404	Collected by the FFM
69	Solid sample of unknown blue crystalline solid	20180427191405	Collected by the FFM
70	Solid sample of unknown green solid	20180427191406	Collected by the FFM
71	Swab blank with DCM	20180430150801	Collected by the FFM
72	Swab blank with water	20180430150802	Collected by the FFM
73	Swab sample with DCM from outlet valve on reactor	20180430150803	Collected by the FFM
74	Swab sample with water from outlet valve on reactor	20180430150804	Collected by the FFM
75	DCM wipe of wall and floor at hose down area seen in open source video	20180501177901	Collected by the FFM
76	Water wipe of wall and floor at hose down area seen in open source video	20180501177902	Collected by the FFM
77	Swab blank with DCM	20180501177903	Collected by the FFM
78	Wipe blank with water	20180501177904	Collected by the FFM
79	Concrete dust scraping at pillar 51 (control)	20180501177905	Collected by the FFM
80	Concrete dust 5-13 on right hand side at wall	20180501177906	Collected by the FFM
81	Grouting from 5-13 c. 1m out from LHS wall	20180501177907	Collected by the FFM
82	Piece of clothes from victim	20180421178219	Handed over by 1782
83	Pieces of timber	20180421178220	Handed over by 1782
84	Dark blue vest	20180421178215	Handed over by 1782
85	Scarf collected from the basement	20180422174805	Handed over by 1748
86	Stuffed animal collected from basement	20180422174804	Handed over by 1748
87	Plasma samples	20180421178201	Handed over by 1782
88	Plasma samples	20180421178204	Handed over by 1782
89	Plasma samples	20180421178207	Handed over by 1782
90	Plasma samples	20180421178210	Handed over by 1782
91	Plasma samples	20180421178213	Handed over by 1782

Entry number	Sample description	Evidence Reference Number	Source
92	Plasma samples	20180418175704A	Handed over by 1757
93	Plasma samples	20180418175703A	Handed over by 1757
94	Plasma samples	20180418175702A	Handed over by 1757
95	Plasma samples	20180418175701A	Handed over by 1757
96	Plasma samples	201804211748PL	Collected by the FFM
97	Plasma samples	201804211795PL	Collected by the FFM
98	Plasma samples	201804211770PL	Collected by the FFM
99	Plasma samples	201804251753PL	Collected by the FFM
100	Blood cells samples	20180421178202	Handed over by 1782
101	Blood cells samples	20180421178205	Handed over by 1782
102	Blood cells samples	20180421178208	Handed over by 1782
103	Blood cells samples	20180421178211	Handed over by 1782
104	Blood cells samples	20180421178214	Handed over by 1782
105	Blood cells samples	20180418175704B	Handed over by 1757
106	Blood cells samples	20180418175703B	Handed over by 1757
107	Blood cells samples	20180418175702B	Handed over by 1757
108	Blood cells samples	20180418175701B	Handed over by 1757
109	Blood cells samples	201804211748BC	Collected by the FFM
110	Blood cells samples	201804211795BC	Collected by the FFM
111	Blood cells samples	201804211770BC	Collected by the FFM
112	Blood cells samples	201804251753BC	Collected by the FFM
113	Full blood samples	20180421178203	Handed over by 1782
114	Full blood samples	20180421178206	Handed over by 1782

Entry number	Sample description	Evidence Reference Number	Source
115	Full blood samples	20180421178209	Handed over by 1782
116	Full blood samples	20180421178212	Handed over by 1782
117	Hair samples	20180418175705H S	Handed over by 1757
118	Hair samples	20180418175706H S	Handed over by 1757
119	Hair samples	20180418175707H S	Handed over by 1757
120	Hair samples	20180430178226	Handed over by 1782
121	Hair samples	20180430178227	Handed over by 1782
122	Hair samples	20180430178228	Handed over by 1782
123	Hair samples	20180430178229	Handed over by 1782
124	Hair samples	20180430178230	Handed over by 1782
125	DNA samples	20180426178221	Collected by the FFM
126	DNA samples	20180426178222	Collected by the FFM
127	DNA samples	20180426178223	Collected by the FFM
128	DNA samples	20180426178224	Collected by the FFM
129	DNA samples	20180426178225	Collected by the FFM

Annex 10

DOCUMENTS RECEIVED FROM THE STATE PARTY

TABLE 10.1 NOTES VERBALE RECEIVED FROM THE SYRIAN ARAB REPUBLIC

1. **Note Verbale No. 38:** Permanent Representative of the Syrian Arab Republic requests that a Fact-Finding Mission be dispatched urgently to visit the town of Douma to verify the information surrounding the alleged use of toxic chemicals on 7 April 2018.
2. **Note Verbale No. 43:** from the SAR to the Director General of the OPCW requesting the Director General to instruct the FFM team to carry out, within the framework of the FFM's mission to gather facts surrounding the allegation of use of toxic chemical substances in the city of Duma in Rif Dimashq on 07/04/2018, a visit to a warehouse containing chemicals and equipment.
3. **Note Verbale No. 44:** from the SAR to the Director General of the OPCW replying to the Technical Secretariat's note NV/ODG/214836/18 dated April 26th 2018.
4. **Note Verbale No. 45:** from the SAR to the Director General of the OPCW replying to the Technical Secretariat's note NV/ODG/214827/18 dated April 26th 2018.
5. **Note Verbale No. 56:** from the SAR to TS replying to the request to seal the cylinders in Note Verbale NV/ODG/214836/18.
6. **Note Verbale No. 57:** from the SAR replying to the Technical Secretariat's request in Note Verbale (NV/ODG/214827/18) to exhume bodies for the purpose of taking bio samples.

TABLE 10.2 ELECTRONIC DATA HANDED OVER BY THE SYRIAN ARAB REPUBLIC

Entry number	Assigned Package Code	Folder location					
1.	1744	E:\1744\DVD 1\video_ts\					
File names							
video_ts.bup	video_ts.ifo	video_ts.vob	vts_01_0.bup	vts_01_0.ifo	vts_01_0.vob	vts_01_1.vob	vts_01_2.vob
Entry number	Assigned Package Code	Folder location					

1.	1744	E:\1744\DVD 2\video_ts\					
File names							
video_ts.bup	video_ts.ifo	video_ts.vob	vt_s_01_0.bup	vt_s_01_0.ifo	vt_s_01_1.vob	video_ts.bup	video_ts.ifo

Annex 11

METADATA EXTRACTED FROM MEDIA RECEIVED FROM WITNESSES

#	File name	Directory	Date/Time Original	Create Date	Modify Date
1	<u>VID-20180416-WA0057.mp4</u>	D:\Images\1748\Evidence\	Not found	0000:00:00 00:00:00	0000:00:00 00:00:00
2	<u>MP4. طفل</u>	D:\Images\1799\Evidence\	Not found	2015:06:12 00:20:54	2015:06:12 00:20:54
3	<u>MP4. طفل</u>	D:\Images\1900\Evidence\	Not found	2015:06:12 00:20:54	2015:06:12 00:20:54
4	<u>MP4. إخلاء شهاد الكيماوى</u>	D:\Images\1799\Evidence\	Not found	2015:06:12 00:22:00	2015:06:12 00:22:00
5	<u>MP4. إخلاء شهاد الكيماوى</u>	D:\Images\1900\Evidence\	Not found	2015:06:12 00:22:00	2015:06:12 00:22:00
6	<u>MP4. إخلاء كيماوى</u>	D:\Images\1799\Evidence\	Not found	2015:06:12 00:23:13	2015:06:12 00:23:13
7	<u>MP4. إخلاء كيماوى</u>	D:\Images\1900\Evidence\	Not found	2015:06:12 00:23:13	2015:06:12 00:23:13
8	<u>MP4. شهاد الكيماوى</u>	D:\Images\1799\Evidence\	Not found	2015:06:12 00:24:25	2015:06:12 00:24:25
9	<u>MP4. شهاد الكيماوى</u>	D:\Images\1900\Evidence\	Not found	2015:06:12 00:24:25	2015:06:12 00:24:25
10	<u>١٦٢٨٤٨ ٢٠١٨٠٤٠٧.mp4</u>	D:\Images\1742\Evidence\Working Copy\	Not found	2018:04:07 13:29:02	2018:04:07 13:29:02

#	File name	Directory	Date/Time Original	Create Date	Modify Date
11	sd.m4a_010 صوت	D:\Images\1748\Evidence\	Not found	2018:04:07 15:39:20	2018:04:07 15:39:20
12	١٦٠٩٢٦ ٢٠١٨٠٤٠٧.jpg	D:\Images\1742\Evidence\Working Copy\	2018:04:07 16:09:26	2018:04:07 16:09:26	2018:04:07 16:09:26
13	١-1.JPG	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزرة الكيماوى\photos\	2018:04:07 21:41:36	2018:04:07 21:41:36	2018:04:07 21:41:36
14	050A4443.JPG	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزرة الكيماوى\photos\	2018:04:07 22:01:15	2018:04:07 22:01:15	2018:04:07 22:01:15
15	#NAME?	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزرة الكيماوى\photos\	2018:04:07 22:06:36	2018:04:07 22:06:36	2018:04:07 22:06:36
16	050A4707-1.JPG	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزرة الكيماوى\photos\	2018:04:07 22:25:40	2018:04:07 22:25:40	2018:04:07 22:25:40
17	050A4727.JPG	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزرة الكيماوى\photos\	2018:04:07 22:30:36	2018:04:07 22:30:36	2018:04:07 22:30:36
18	050A4732.JPG	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزرة الكيماوى\photos\	2018:04:07 22:33:06	2018:04:07 22:33:06	2018:04:07 22:33:06
19	٠٢٠٢١٩ ٢٠١٨٠٤٠٨.mp4	D:\Images\1742\Evidence\Working Copy\	Not found	2018:04:07 23:02:32	2018:04:07 23:02:32
20	٠٢٠٢٢٩ ٢٠١٨٠٤٠٨.mp4	D:\Images\1742\Evidence\Working Copy\	Not found	2018:04:07 23:04:19	2018:04:07 23:04:19
21	٠٢٠٤٢٧ ٢٠١٨٠٤٠٨.mp4	D:\Images\1742\Evidence\Working Copy\	Not found	2018:04:07 23:04:46	2018:04:07 23:04:46
22	٠٢٠٤٠٩ ٢٠١٨٠٤٠٨.jpg	D:\Images\1742\Evidence\Working Copy\	2018:04:08	2018:04:08	2018:04:08

#	File name	Directory	Date/Time Original	Create Date	Modify Date
			02:04:09.0582	02:04:09.0582	02:04:09.0582
23	<u>٠٢٠٥٢٥ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1742\Evidence\Working Copy\	2018:04:08 02:05:25.0118	2018:04:08 02:05:25.0118	2018:04:08 02:05:25.0118
24	<u>MOV_0059.mp4</u>	D:\Images\1799\Evidence\التصويري\		2018:04:08 08:14:20	2018:04:08 08:14:20
25	<u>DSC_0060.JPG</u>	D:\Images\1799\Evidence\التصويري\	2018:04:08 11:14:41	2018:04:08 11:14:41	2018:04:08 11:14:41.95
26	<u>050A4783.JPG</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزة الكيماوي\photos\	2018:04:08 12:24:59	2018:04:08 12:24:59	2018:04:08 12:24:59
27	<u>050A4783.JPG</u>	D:\Images\1742\Evidence\Working Copy\	2018:04:08 12:24:59	2018:04:08 12:24:59	2018:04:08 12:24:59
28	<u>050A4787.JPG</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزة الكيماوي\photos\	2018:04:08 12:25:39	2018:04:08 12:25:39	2018:04:08 12:25:39
29	<u>050A4789.JPG</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزة الكيماوي\photos\	2018:04:08 12:25:55	2018:04:08 12:25:55	2018:04:08 12:25:55
30	<u>050A4792.JPG</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزة الكيماوي\photos\	2018:04:08 12:26:12	2018:04:08 12:26:12	2018:04:08 12:26:12
31	<u>050A4792.JPG</u>	D:\Images\1742\Evidence\Working Copy\	2018:04:08 12:26:12	2018:04:08 12:26:12	2018:04:08 12:26:12
32	<u>050A4807.JPG</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزة الكيماوي\photos\	2018:04:08 12:36:18	2018:04:08 12:36:18	2018:04:08 12:36:18
33	<u>050A4808.JPG</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزة الكيماوي\photos\	2018:04:08 12:36:23	2018:04:08 12:36:23	2018:04:08 12:36:23
34	<u>050A4814.JPG</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزة الكيماوي\photos\	2018:04:08 12:36:59	2018:04:08 12:36:59	2018:04:08 12:36:59
35	<u>050A4837.JPG</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزة الكيماوي\photos\	2018:04:08 12:46:33	2018:04:08 12:46:33	2018:04:08 12:46:33
36	<u>050A4838.JPG</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزة الكيماوي\photos\	2018:04:08	2018:04:08	2018:04:08 12:46:40

#	File name	Directory	Date/Time Original	Create Date	Modify Date
			12:46:40	12:46:40	
37	<u>050A4774.mp4</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزرة الكيماوي\video\	Not found	2018:04:08 13:47:43+03:00	2018:04:08 13:47:44+03:00
38	<u>050A4836.mp4</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزرة الكيماوي\video\	Not found	2018:04:08 13:52:12+03:00	2018:04:08 13:52:13+03:00
39	<u>050A4799.mp4</u>	D:\Images\1741\Evidence\1741 working copy\1741 working copy\مجزرة الكيماوي\video\	Not found	2018:04:08 13:58:49+03:00	2018:04:08 13:58:50+03:00
40	<u>١٧٢٩٥٥ ٢٠١٨٠٤٠٨.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:08 14:32:03	2018:04:08 14:32:03
41	<u>١٧٣٤٥٠ ٢٠١٨٠٤٠٨.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:08 14:40:07	2018:04:08 14:40:07
42	<u>١٧٤٠١٠ ٢٠١٨٠٤٠٨.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:08 14:40:18	2018:04:08 14:40:18
43	<u>١٧٥٢٢٠ ٢٠١٨٠٤٠٨.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:08 14:52:34	2018:04:08 14:52:34
44	<u>١٨٥٨٥٩ ٢٠١٨٠٤٠٨.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:08 16:02:30	2018:04:08 16:02:30
45	<u>مقاطع لإخلاء شهداء مجزرة الكيماوي. mp4</u>	D:\Images\1799\Evidence\	Not found	2018:04:08 17:30:29+03:00	2018:04:08 17:30:31+03:00
46	<u>مقاطع لإخلاء شهداء مجزرة الكيماوي. mp4.MP4</u>	D:\Images\1900\Evidence\	Not found	2018:04:08 17:30:29+03:00	2018:04:08 17:30:31+03:00
47	<u>١٧٣٠٤٧ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1919\Evidence\DCIM\	2018:04:08 17:30:47	2018:04:08 17:30:47	2018:04:08 17:30:47
48	<u>١٧٣٠٥٣ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1919\Evidence\DCIM\	2018:04:08 17:30:53	2018:04:08 17:30:53	2018:04:08 17:30:53
49	<u>١٧٣٠٥٥ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1919\Evidence\DCIM\	2018:04:08 17:30:55	2018:04:08 17:30:55	2018:04:08 17:30:55
50	<u>١٧٣٠٥٨ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1919\Evidence\DCIM\	2018:04:08	2018:04:08	2018:04:08 17:30:58

#	File name	Directory	Date/Time Original	Create Date	Modify Date
			17:30:58	17:30:58	
51	<u>١٧٣١٣٣ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1919\Evidence\DCIM\	2018:04:08 17:31:33	2018:04:08 17:31:33	2018:04:08 17:31:33
52	<u>١٧٣٧٣٤ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1919\Evidence\DCIM\	2018:04:08 17:37:33	2018:04:08 17:37:33	2018:04:08 17:37:33
53	<u>١٧٣٧٣٩ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1919\Evidence\DCIM\	2018:04:08 17:37:39	2018:04:08 17:37:39	2018:04:08 17:37:39
54	<u>١٧٣٧٤٢ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1919\Evidence\DCIM\	2018:04:08 17:37:42	2018:04:08 17:37:42	2018:04:08 17:37:42
55	<u>١٧٣٩٢٠ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1919\Evidence\DCIM\	2018:04:08 17:39:20	2018:04:08 17:39:20	2018:04:08 17:39:20
56	<u>١٧٣٩٢٣ ٢٠١٨٠٤٠٨.jpg</u>	D:\Images\1919\Evidence\DCIM\	2018:04:08 17:39:23	2018:04:08 17:39:23	2018:04:08 17:39:23
57	<u>MOV_0062.mp4</u>	D:\Images\1799\Evidence\التصويرى	Not found	2018:04:08 17:52:46	2018:04:08 17:52:46
58	<u>VIDEO0005.mp4</u>	D:\Images\1757\Evidence\تحقيق	Not found	2018:04:09 05:16:12	2018:04:09 05:16:12
59	<u>VIDEO0006.mp4</u>	D:\Images\1757\Evidence\تحقيق	Not found	2018:04:09 05:17:12	2018:04:09 05:17:12
60	<u>VIDEO0007.mp4</u>	D:\Images\1757\Evidence\تحقيق	Not found	2018:04:09 05:21:43	2018:04:09 05:21:43
61	<u>VIDEO0008.mp4</u>	D:\Images\1757\Evidence\تحقيق	Not found	2018:04:09 05:27:57	2018:04:09 05:27:57
62	<u>VIDEO0009.mp4</u>	D:\Images\1757\Evidence\تحقيق	Not found	2018:04:09 05:30:29	2018:04:09 05:30:29
63	<u>VIDEO0010.mp4</u>	D:\Images\1757\Evidence\تحقيق	Not found	2018:04:09 05:32:55	2018:04:09 05:32:55
64	<u>VIDEO0016.mp4</u>	D:\Images\1757\Evidence\تحقيق	Not found	2018:04:09	2018:04:09 05:35:39

#	File name	Directory	Date/Time Original	Create Date	Modify Date
				05:35:39	
65	<u>VIDEO0219.mp4</u>	D:\Images\1900\Evidence\	Not found	2018:04:09 12:43:19	2018:04:09 12:43:19
66	<u>20180409_190227.mp4</u>	D:\Images\1799\Evidence\التصويرى	Not found	2018:04:09 16:03:32	2018:04:09 16:03:32
67	<u>IMAG0957.jpg</u>	D:\Images\1900\Evidence\	2018:04:09 17:32:27	2018:04:09 17:32:27	2018:04:09 17:32:27
68	<u>IMAG0958.jpg</u>	D:\Images\1900\Evidence\	2018:04:09 17:32:40	2018:04:09 17:32:40	2018:04:09 17:32:40
69	<u>IMAG0959.jpg</u>	D:\Images\1900\Evidence\	2018:04:09 17:32:51	2018:04:09 17:32:51	2018:04:09 17:32:51
70	<u>IMAG0960.jpg</u>	D:\Images\1900\Evidence\	2018:04:09 17:33:52	2018:04:09 17:33:52	2018:04:09 17:33:52
71	<u>IMAG0962.jpg</u>	D:\Images\1900\Evidence\	2018:04:09 17:34:08	2018:04:09 17:34:08	2018:04:09 17:34:08
72	<u>١١٤٠١٩ ٢٠١٨٠٤١٠.jpg</u>	D:\Images\1748\Evidence\	2018:04:10 11:40:19	2018:04:10 11:40:19	2018:04:10 11:40:19
73	<u>DSC_0153.MOV</u>	D:\Images\1900\Evidence\	2018:04:10 12:32:43	2018:04:10 12:33:30	2018:04:10 12:33:30
74	<u>VIDEO0017.mp4</u>	D:\Images\1757\Evidence\التحقيق	Not found	2018:04:10 16:07:26	2018:04:10 16:07:26
75	<u>VIDEO0018.mp4</u>	D:\Images\1757\Evidence\التحقيق	Not found	2018:04:10 16:08:35	2018:04:10 16:08:35
76	<u>VIDEO0019.mp4</u>	D:\Images\1757\Evidence\التحقيق	Not found	2018:04:10 16:10:23	2018:04:10 16:10:23
77	<u>IMAG0090.jpg</u>	D:\Images\1757\Evidence\التحقيق	2018:04:10 19:07:00	2018:04:10 19:07:00	2018:04:10 19:07:00
78	<u>٠٠٣٤٣١ ٢٠١٨٠٤١١.mp4</u>	D:\Images\1742\Evidence\Working Copy\	Not found	2018:04:10	2018:04:10 21:34:56

#	File name	Directory	Date/Time Original	Create Date	Modify Date
				21:34:56	
79	<u>٠٠٣٥٢٥ ٢٠١٨٠٤١١.mp4</u>	D:\Images\1742\Evidence\Working Copy\	Not found	2018:04:10 21:36:13	2018:04:10 21:36:13
80	<u>٠٠٤١٠٠ ٢٠١٨٠٤١١.mp4</u>	D:\Images\1742\Evidence\Working Copy\	Not found	2018:04:10 21:41:05	2018:04:10 21:41:05
81	<u>٠٠٣٥٣٢ ٢٠١٨٠٤١١.jpg</u>	D:\Images\1742\Evidence\Working Copy\	2018:04:11 00:35:32.0800	2018:04:11 00:35:32.0800	2018:04:11 00:35:32.0800
82	<u>٠٠٣٦٣٨ ٢٠١٨٠٤١١.jpg</u>	D:\Images\1742\Evidence\Working Copy\	2018:04:11 00:36:38.0156	2018:04:11 00:36:38.0156	2018:04:11 00:36:38.0156
83	<u>٠٠٣٦٤٤ ٢٠١٨٠٤١١.jpg</u>	D:\Images\1742\Evidence\Working Copy\	2018:04:11 00:36:44.0851	2018:04:11 00:36:44.0851	2018:04:11 00:36:44.0851
84	<u>VIDEO0028.mp4</u>	D:\Images\1757\Evidence\تحقيق\	Not found	2018:04:11 07:46:56	2018:04:11 07:46:56
85	<u>VIDEO0029.mp4</u>	D:\Images\1757\Evidence\تحقيق\	Not found	2018:04:11 07:47:22	2018:04:11 07:47:22
86	<u>VIDEO0030.mp4</u>	D:\Images\1757\Evidence\تحقيق\	Not found	2018:04:11 07:52:21	2018:04:11 07:52:21
87	<u>VID 20180411 131315.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:13:23	2018:04:11 10:13:23
88	<u>VID 20180411 131348.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:13:52	2018:04:11 10:13:52
89	<u>VID 20180411 131902.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:19:12	2018:04:11 10:19:12
90	<u>VID 20180411 131933.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:19:35	2018:04:11 10:19:35
91	<u>VID 20180411 132233.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:22:37	2018:04:11 10:22:37
92	<u>VID 20180411 132501.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11	2018:04:11 10:25:32

#	File name	Directory	Date/Time Original	Create Date	Modify Date
				10:25:32	
93	<u>VID_20180411_132616.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:26:48	2018:04:11 10:26:48
94	<u>VID_20180411_132706.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:27:38	2018:04:11 10:27:38
95	<u>VID_20180411_132832.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:29:03	2018:04:11 10:29:03
96	<u>VID_20180411_132904.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:29:35	2018:04:11 10:29:35
97	<u>VID_20180411_133149.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:32:20	2018:04:11 10:32:20
98	<u>VID_20180411_133222.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:32:53	2018:04:11 10:32:53
99	<u>VID_20180411_133254.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:33:25	2018:04:11 10:33:25
100	<u>VID_20180411_133326.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:33:52	2018:04:11 10:33:52
101	<u>VID_20180411_133553.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:36:24	2018:04:11 10:36:24
102	<u>VID_20180411_133631.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:36:42	2018:04:11 10:36:42
103	<u>VID_20180411_134152.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:42:23	2018:04:11 10:42:23
104	<u>VID_20180411_135015.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:50:47	2018:04:11 10:50:47
105	<u>VID_20180411_135051.mp4</u>	D:\Images\1919\Evidence\DCIM\	Not found	2018:04:11 10:51:09	2018:04:11 10:51:09
106	<u>DSC_0233.MOV</u>	D:\Images\1900\Evidence\	2018:04:11	2018:04:11	2018:04:11 11:58:19

#	File name	Directory	Date/Time Original	Create Date	Modify Date
			11:58:08	11:58:19	
107	<u>DSC_0234.MOV</u>	D:\Images\1900\Evidence\	2018:04:11 11:58:25	2018:04:11 12:00:13	2018:04:11 12:00:13
108	<u>DSC_0235.MOV</u>	D:\Images\1900\Evidence\	2018:04:11 12:02:17	2018:04:11 12:03:26	2018:04:11 12:03:26
109	<u>VIDEO0053.mp4</u>	D:\Images\1757\Evidence\تحقيق\	Not found	2018:04:16 15:33:18	2018:04:16 15:33:18
110	<u>VIDEO0054.mp4</u>	D:\Images\1757\Evidence\تحقيق\	Not found	2018:04:16 15:36:20	2018:04:16 15:36:20
111	<u>20180427T134702Z--كاميرا-001.zip</u>	D:\Images\1900\Evidence\	Not found	Not found	2018:04:26 10:43:29
112	<u>photo_2018-04-08_02-24-57.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى\	Not found	Not found	Not found
113	<u>photo_2018-04-08_02-25-03.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى\	Not found	Not found	Not found
114	<u>00010.MTS</u>	D:\Images\1757\Evidence\	2018:04:09 15:25:00+02:00	Not found	Not found
115	<u>FB_IMG_1439762277929.jpg</u>	D:\Images\1748\Evidence\	Not found	Not found	Not found
116	<u>photo_2018-04-07_16-55-05.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى\	Not found	Not found	Not found
117	<u>photo_2018-04-07_16-55-07.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى\	Not found	Not found	Not found
118	<u>photo_2018-04-07_23-31-10.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى\	Not found	Not found	Not found
119	<u>photo_2018-04-07_23-31-12.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى\	Not found	Not found	Not found
120	<u>photo_2018-04-07_23-31-13.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى\	Not found	Not found	Not found

#	File name	Directory	Date/Time Original	Create Date	Modify Date
121	<u>photo 2018-04-07 23-31-14.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى	Not found	Not found	Not found
122	<u>photo 2018-04-07 23-31-15.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى	Not found	Not found	Not found
123	<u>photo 2018-04-07 23-31-16.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى	Not found	Not found	Not found
124	<u>photo 2018-04-07 23-31-17.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى	Not found	Not found	Not found
125	<u>photo 2018-04-07 23-31-20.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى	Not found	Not found	Not found
126	<u>photo 2018-04-08 01-01-38.jpg</u>	D:\Images\1799\Evidence\تصويرات أخرى	Not found	Not found	Not found
127	<u>IMG 20180411 131125.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
128	<u>IMG 20180411 131138.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
129	<u>IMG 20180411 131155.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
130	<u>IMG 20180411 131357.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
131	<u>IMG 20180411 131402.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
132	<u>IMG 20180411 131405.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
133	<u>IMG 20180411 131408.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
134	<u>IMG 20180411 131453.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
135	<u>IMG 20180411 131552.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
136	<u>IMG 20180411 131555.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
137	<u>IMG 20180411 131559.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
138	<u>IMG 20180411 131605.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
139	<u>IMG 20180411 131614.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
140	<u>IMG 20180411 131707.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
141	<u>IMG 20180411 131713.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
142	<u>IMG 20180411 131716.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found

#	File name	Directory	Date/Time Original	Create Date	Modify Date
143	<u>IMG_20180411_131719.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
144	<u>IMG_20180411_131942.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
145	<u>IMG_20180411_131944.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
146	<u>IMG_20180411_131946.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
147	<u>IMG_20180411_131950.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
148	<u>IMG_20180411_131952.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
149	<u>IMG_20180411_131954.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
150	<u>IMG_20180411_132001.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
151	<u>IMG_20180411_132003.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
152	<u>IMG_20180411_132007.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
153	<u>IMG_20180411_132009.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
154	<u>IMG_20180411_132031.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
155	<u>IMG_20180411_132035.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
156	<u>IMG_20180411_132039.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
157	<u>IMG_20180411_132253.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
158	<u>IMG_20180411_132256.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
159	<u>IMG_20180411_132258.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
160	<u>IMG_20180411_132301.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
161	<u>IMG_20180411_132304.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
162	<u>IMG_20180411_132308.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
163	<u>IMG_20180411_132310.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
164	<u>IMG_20180411_132426.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
165	<u>IMG_20180411_132429.jpg</u>	D:\Images\1919\Evidence\DCIM\	Not found	Not found	Not found
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