



**OPCW**

**Technical Secretariat**

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**NOTE BY THE TECHNICAL SECRETARIAT**

**REPORT OF THE OPCW FACT-FINDING MISSION IN SYRIA REGARDING  
THE INCIDENT OF ALLEGED USE OF CHEMICALS AS A WEAPON  
IN SARAQIB, SYRIAN ARAB REPUBLIC, ON 1 AUGUST 2016**

**1. INTRODUCTION**

- 1.1 This document contains the findings and conclusions of the investigation of the OPCW Fact-Finding Mission in Syria (FFM) into the alleged use of toxic chemicals as a weapon in Saraqib, in the Syrian Arab Republic, on 1 August 2016. The FFM investigation was conducted in accordance with decisions of the OPCW Executive Council (hereinafter, “the Council”) EC-M-48/DEC.1, dated 4 February 2015, and EC-M-50/DEC.1, dated 23 November 2015, as well as other relevant Council decisions and the Director General’s authority to seek to uphold at all times the object and purpose of the Chemical Weapons Convention (hereinafter “the Convention”) as reinforced by United Nations Security Council resolutions 2118 (2013) and 2209 (2015), as applicable to this investigation.
- 1.2 The terms of reference of the FFM were mutually agreed upon by the OPCW and the Syrian Arab Republic through the exchange of letters between the Director-General of the OPCW Technical Secretariat (hereinafter, “the Secretariat”) and the Government of the Syrian Arab Republic, dated 1 and 10 May 2014, respectively (Annex to the Note by the Secretariat S/1255/2015\*, dated 10 March 2015).
- 1.3 Both the Executive Council and the United Nations Security Council have called upon the FFM to study all available information relating to allegations of the use of chemical weapons in the Syrian Arab Republic, including information provided by the Syrian Arab Republic and others.



## **2. SUMMARY**

- 2.1 On 2 August 2016, open sources broadcasted information reporting the alleged use of toxic chemicals as a weapon in Saraqib, a town in the Idlib Governorate of the Syrian Arab Republic. Subsequently, the FFM conducted open-source research in order to assess the credibility of the allegations. Based on the initial assessment, the FFM was tasked with looking further into the incident, and continued its activities; the first interview was conducted remotely on 6 August 2016 to gather additional information regarding the alleged incident.
- 2.2 Between 2 September 2016 and 16 February 2018, the FFM conducted eleven interviews with nine witnesses and was able to corroborate their presence at the site at the time of the allegation. Witness narratives of events were consistent and in line with the described medical signs and symptoms.
- 2.3 Based upon witness and patient testimonies, physician reports, medical records, and the time of onset in relation to the allegations, the affected persons demonstrated a toxidrome characteristic of exposure to an irritant substance.
- 2.4 The FFM was not able to visit the site of the alleged incident. The team therefore relied on the testimony of interviewees, the materials that were made available by the interviewees, and hospital records.
- 2.5 The FFM obtained digital video and still photography of the scene, and then analysed the videos and photographs to ascertain their authenticity and assess their validity as corroborative information. The analysis included metadata, geolocation, witness accounts, and the signs and symptoms of chemical exposure in photos, videos, and witness statements.
- 2.6 The digital information reviewed showed structural damage to a building, metal remnants, and people being treated in a medical facility.
- 2.7 The FFM was able to corroborate the presence of witnesses at the site at the time of the allegation. Witness narratives of events were consistent and in line with the described medical signs and symptoms.
- 2.8 The FFM had access to available medical records, but was unable to visit the hospital that was reported to have admitted patients. It was determined that 26 people were registered as presenting with signs and symptoms associated with potential exposure to an irritant substance. However, from the data gathered by the FFM, it was not possible to identify the irritant substance. It was also not possible to ascertain that the metal remnants were the origin of the irritant substance, and the patient signs and symptoms.
- 2.9 The results of the analysis of all available data obtained up until the issuance of this report did not allow the FFM to establish whether or not chemicals were used as a weapon in the incident that took place in Saraqib, in the Idlib Governorate of the Syrian Arab Republic, on 1 August 2016.

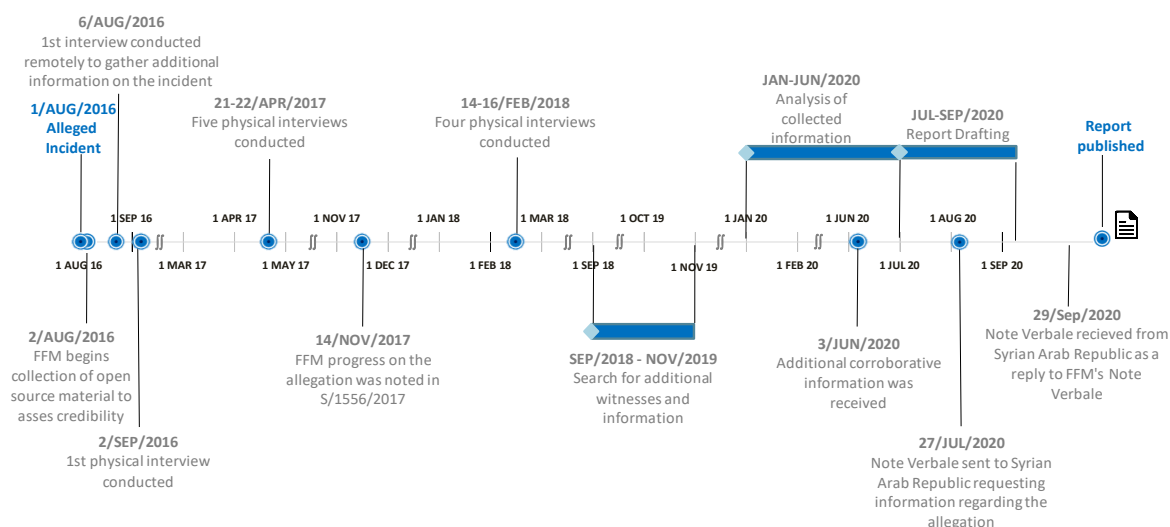
### 3. BACKGROUND

- 3.1 Information about an alleged toxic chemical attack appeared in the press and on social media on 2 August 2016. The event reportedly took place on the night of 1 August 2016 in Saraqib, which belongs administratively to the Idlib Governorate and is located in the north-west of the Syrian Arab Republic. Initial information in open sources reported that approximately 30 people, mostly women and children, had been affected and developed symptoms, including breathing difficulties, coughing and lacrimation. These sources indicated the presence of a substance with an odour similar to that of chlorine.
- 3.2 Photographs and videos posted online showed casualties being treated at a medical facility, in addition to remnants of cylinders suspected to be the source of contamination.
- 3.3 Open source information indicated that armed opposition groups attributed the responsibility for the incident to the Syrian Arab Armed Forces and that the attack was carried out by a helicopter. The Syrian Arab News Agency published a news release denying that the Syrian Arab Armed Forces carried any responsibility for the incident and stated that these claims were fabricated by the media.

### 4. PRE-DEPLOYMENT ACTIVITIES AND MISSION TIMELINE

- 4.1 Subsequent to media report coverage of the allegation on 1 August 2016, the FFM conducted research on open-source information to assess the credibility of the allegations. The primary sources comprised news outlets, blogs, and websites (Annex 2). Subsequently, the FFM conducted its first remote interview on 6 August 2016 to gather additional information on the allegations.
- 4.2 Based on the initial assessment, the FFM was tasked with collecting information related to the allegation in accordance with its mandate. The activities carried out by the FFM in relation to the alleged use of chemical in Saraqib on 1 August 2016 are shown in the mission timeline (Figure 1 and Annex 3).

**FIGURE 1: MISSION TIMELINE**



## **5. MISSION ACTIVITIES**

### **Methodological considerations**

- 5.1 The FFM followed the same general methodological approach outlined in previous FFM reports, adhering to the most stringent protocols throughout its activities.
- 5.2 Due to security concerns in the north-west region of Syria at the time of the incident, and considering the constantly changing situation in the ongoing conflict, the risks associated with visiting the site of the allegation were prohibitive. Therefore, the FFM did not visit the site of alleged use.
- 5.3 Information related to the alleged incident in Saraqib was collected by the FFM, using its own equipment and ensuring the chain of custody and witness identity protection throughout each deployment in accordance with the OPCW's standard operating procedures (SOPs), work instructions (WIs), and guidelines.
- 5.4 Interviews were conducted by inspectors proficient in interviewing techniques, following the procedures set out in the OPCW WIs. Prior to commencing the interviews, the process was described to the interviewees, with emphasis on the fact that with the consent of the interviewee, the interviews would be recorded using audio, video, or both. After confirming that the process had been understood, interviewees were requested to sign a consent form. The interview process used the free-recall approach, with follow-up questions to elicit information of potential evidentiary value and to clarify aspects of the testimony.
- 5.5 Available open-source materials were used primarily for planning activities, but also for comparative purposes with material directly collected by the FFM during the course of the investigation.
- 5.6 The FFM examined all the data made available, both individually and combined. The conclusions of this report were derived based on an analysis of all the evidence taken as a whole: interviews, supporting material gathered during the interview process, and subsequent cross-reference and corroboration of the evidence. The FFM reports its findings on whether there were reasonable grounds to believe that chemical weapons were used, based on a reliable body of evidence consistent with other information tending to show whether or not an incident or event of the use of toxic chemical as a weapon took place.

### **Activities**

- 5.7 The activities of the FFM were conducted in accordance with OPCW guidelines as well as SOPs and WIs as per Annex 1, and included:
  - a) conducting an analysis of interviews with medical staff, casualties, first responders, and witnesses of the alleged chemical incident in Saraqib;
  - b) reviewing and analysing photographs, videos, and files gathered by the FFM; and
  - c) reviewing open-source material.

- 5.8 The FFM has actively pursued further information, including potentially available information in the possession of States Parties<sup>1</sup>, non-governmental organisations (NGOs), and potential witnesses, as well as in-depth research into open sources.
- 5.9 On 27 July 2020, the FFM requested, through a note verbale, that the Syrian Arab Republic provide any information and material it may have in its possession related to the alleged incident.
- 5.10 On 29 September 2020, the Syrian Arab Republic replied with a one-page document attached to a Protected note verbale. This note verbale did not contain any new information regarding the alleged incident that is the subject of this report.

## **6. FACTUAL FINDINGS**

### **Alleged site – Saraqib**

- 6.1 As noted above, Saraqib is a town in the Idlib Governorate of the Syrian Arab Republic. It is located approximately 20 km south-east of the city of Idlib and 50 km south-west of Aleppo on the Damascus-Aleppo Highway (M5). Prior to the conflict—according to figures from the 2004 census—the population of the town and the surrounding district was approximately 34,000 people.
- 6.2 In August 2016, at the time of the allegation, the town was not under Government control.

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<sup>1</sup>

Requests for information were made in the following Notes by the Secretariat: S/1445/2016, dated 27 December 2016; S/1556/2017, dated 14 November 2017; S/1677/2018, dated 10 October 2018; and S/1798/2019, dated 3 October 2019.

**FIGURE 2: IDLIB GOVERNORATE**



**FIGURE 3: LOCATION OF SARAQIB**





**FIGURE 4: AERIAL VIEW OF SARAQIB**



- 6.3 The alleged incident is reported to have taken place in the central part of Saraqib, in the residential area between the Al Ihsan roundabout and the local market. According to witnesses, a barrel fell on a commercial store in the area. The witnesses pointed to a second location,<sup>2</sup> where another barrel was dropped. The second location is described as a landfill in the agricultural area in the south-west of Saraqib, to the south of the Silos complex.

**FIGURE 5: INCIDENT – LOCATION 1**



<sup>2</sup>

Approximately at 3 km south of the first location (location 1).

**FIGURE 6: INCIDENT – LOCATION 2**



- 6.4 The meteorological conditions in Saraqib around the time of the alleged use of chemicals as weapons as registered in open sources (worldweatheronline.com) are shown in Table 1.

**TABLE 1: METEOROLOGICAL CONDITIONS**

Time	Temperature	Wind Direction	Wind Speed	Precipitation	Clouds	Humidity
00:00	25°C	From W	8 Km/h	0.0 mm	0%	55%

### Interviews

- 6.5 A total of eleven interviews were conducted with nine individuals. A breakdown of the profiles of the interviewees is provided in Table 2.

**TABLE 2: PROFILES OF INTERVIEWEES**

	Interviewees	Male	Female	Primary Casualty	Secondary Casualty
Treating Physicians	1	1	0	0	0
First Responders	4	4	0	1	0
Others	4	4	0	1	0
<b>Total</b>	<b>9</b>	<b>9</b>	<b>0</b>	<b>2</b>	<b>0</b>



- 6.6 Of the nine interviewees, two were reportedly exposed to a toxic chemical. A total of four rescuers, four witnesses, and one treating physician were interviewed.
- 6.7 The following is a composite summary of the statements collected from the witnesses interviewed by the FFM team.
- 6.8 According to witness accounts, at approximately 23:00 on the night of 1 August 2016, information was communicated via radio that a helicopter took off from Al Safira Airport and was heading south-west in the direction of Saraqib. Witnesses reported hearing a helicopter in the airspace of Saraqib. They also stated that at approximately 23:20, they heard what witnesses described as the sound of a barrel falling. The sound generated by the impact was described as being weaker than usual explosions, as if the barrel did not explode.
- 6.9 Approximately five minutes later, another barrel was heard falling and making impact. A spotter confirmed the execution of the air raids via radio.
- 6.10 A spotter reportedly alerted the local response unit of the Syrian Civil Defence to barrels containing chemicals and cases of breathing difficulties.
- 6.11 A witness in the vicinity of Location 1 recounted smelling a strong odour seconds after the impact of the barrel. Later, the odour was perceived by additional witnesses and was described as similar to the smell of a household cleaning product, but much stronger, causing redness in the eyes, difficulty breathing, coughing, vomiting, frothing at the mouth, loss of consciousness, and muscle spasms in casualties.
- 6.12 Witnesses placed Location 1 in a neighbourhood in the centre of Saraqib, approximately 200 meters to the south-east of the Al Ihsan roundabout. According to their accounts, the barrel damaged the wall of a property located at the corner of the street and fell into an adjacent sewage access hole.
- 6.13 Accounts reported that the Syrian Civil Defence alerted the population via radio and mosques to move upwind in order to limit the number of casualties. Guided by the spotter, the Syrian Civil Defence and other rescue organisations responded to Location 1 and found casualties presenting with the signs and symptoms described in Paragraph 6.11.
- 6.14 First responders reported a strong smell similar to chlorine at Location 1. They were wearing a variety of respiratory protection gear.
- 6.15 Witnesses reported that first responders evacuated people from the area and transported all casualties to the only local medical facility in service at the time, Al Ihsan Hospital, also known as Uday Hospital. Rescuers reported rescuing a total of 40 people (18 women, 12 children, and 10 men). Reportedly, first responders rinsed the casualties with water and undressed them at the entrance of the medical facility.
- 6.16 According to a treating physician, 29 casualties were admitted to the medical facility. Most casualties came from a few houses in close proximity to one another and reportedly presented with shortness of breath, a cough, redness in the eyes, and

lacrimation, without any signs of trauma injury. They were treated with a nebulizer, oxygen, salbutamol<sup>3</sup>, and dexamethasone,<sup>4</sup> and discharged two hours later. Two casualties were reported to be more severely affected and were kept at the medical facility. After six to seven hours, once their condition had improved, these two casualties were discharged. No fatalities were reported from this incident.

- 6.17 According to accounts, at approximately 7:00 the following morning, the first responders from the Syrian Civil Defence returned to Location 1 and found remnants of a barrel, three to five metal cylinders, and small metal balls that had been dispersed in the area. They collected the items and washed the area with water from a firefighting truck. When the metal remnants were washed, an odour similar to household detergent was observed.
- 6.18 Several witnesses stated that the house next to the impact point, the street, and tree leaves were covered with dust or powder. Upon contact with water, the resulting liquid turned pink, and an odour similar to that mentioned in the paragraph above was noted. Two birds were found dead at the house near the impact point.
- 6.19 According to the accounts of first responders, the second barrel made impact in a landfill in the south of Saraqib (Location 2), located outside of the residential area. However, witnesses did not possess any further information about the second barrel.
- 6.20 The weather on the night of the incident was described as a dry, hot summer night with a light breeze coming from the west.

### **Samples**

- 6.21 The FFM did not gain access to any samples related to this incident.

### **Analysis of the suspected source of contamination**

- 6.22 According to witness accounts, an object made impact in a store in Saraqib and partially destroyed the reinforced concrete ceiling, in addition to damaging the front of the building. For reporting purposes, this location is referred to as Location 1.
- 6.23 Witnesses reported that the object did not produce a typical explosion sound. Remnants of the object were found in and around a sewage access hole at the corner of the building. The photograph taken at Location 1 (Figure 7) shows a square sewage access and a tubular object, which was described by witnesses as a small industrial cylinder.

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<sup>3</sup> Salbutamol is a  $\beta_2$  agonist used to treat shortness of breath caused by constriction of airway smooth muscle.

<sup>4</sup> Dexamethasone is a corticosteroid used to treat inflammation in the airways.

**FIGURE 7: IMPACT POINT AT LOCATION 1**



- 6.24 Three to five “small cylinders” were reportedly seen around the impact point. One of the described cylinders appears in the bottom left corner of Figure 7 covered in dust. According to the description, the dimensions of the cylinders were approximately 25 cm in diameter and 50 – 70 cm in length.

**FIGURE 8: CLOSE-UP TO ONE OF THE OBJECTS DESCRIBED AS A “SMALL CYLINDER”**



- 6.25 Witnesses described the cylinders as white or grey and covered in dust. When the latter was put in contact with water, the resulting liquid turned pink.
- 6.26 Figure 9 shows a photograph of a person equipped with a respirator handling the cylinder with bare hands on the night of the incident. The person is standing at the impact point wearing open-toe footwear. The presence of dust on the object indicates that no decontamination took place before taking the photographs. First responders and medical workers did not report dermal signs after handling the objects.

**FIGURE 9: FIRST RESPONDER AT THE IMPACT POINT**



- 6.27 The metallic cylinder shows a fissure in the middle and an outwards deformation creating a protuberance on one side. It is not clear from Figures 8 and 9 whether the cylinder retained its head or base, or if it was open at both ends.
- 6.28 Figure 10 is a screenshot from a video filmed shortly after the reported incident and depicts part of the building above the impact point with the damage sustained on the roof and the front-facing wall, which has a rolling shutter. The video also shows debris scattered around the impact point on the ground.

**FIGURE 10: THE DAMAGE TO THE ROOF**



- 6.29 A screenshot taken from a video (Figure 11) shows the reported damage from a different angle, where the inside of the building is partially visible and is filled with sacks of unknown content. It is unclear if these sacks are related to the dust scattered around or some of the effects that were described by witnesses.

**FIGURE 11: INSIDE THE DAMAGED BUILDING**



- 6.30 Figure 12 is a photograph taken on the morning after the day of the reported incident. The damage can be observed from a different angle. The position and shape of the metal rebar protruding from the reinforced concrete indicates that the damage was caused by a force exerted from above.

**FIGURE 12: THE DAMAGE TO THE ROOF ON THE MORNING FOLLOWING THE DAY OF THE REPORTED INCIDENT**



- 6.31 The photograph in Figure 13 was reportedly taken on the morning after the day of the reported incident and shows a close-up of one of the cylinders. However, the object in the photograph is different from the one seen in Figures 7, 8, and 9.



**FIGURE 13: PHOTO OF PARTS OF A CYLINDER TAKEN ON THE DAY AFTER THE INCIDENT**



- 6.32 The cylinder in Figure 13 is sealed on one end. Another piece is present next to it and has a hole in its centre. The body of the cylinder is dented in several places and twisted. Furthermore, at the time the picture was taken, the metal was already showing a certain degree of corrosion on the surface. It is not possible to determine the cause of the damage without a more detailed examination of the cylinder.
- 6.33 In Figure 13, metal balls of various diameters are visible next to the deformed cylinder. Witnesses reported that those items were found scattered around the impact point. The exact function of the metal balls, or their relation to the cylinders, could not be established.

**FIGURE 14: REMNANTS OF TWO CYLINDERS**



- 6.34 Figure 14 consists of two side-by-side photographs: One was taken on the evening of the incident (left), and the other on the following day (right). Both cylinders display significant deformation. The liquid present next to the cylinder on Figure 14 (in the photograph on the right-hand side) is most likely the water used to rinse them.

- 6.35 Figure 15 shows photographs of the cleaning process on the morning following the reported incident, according to witnesses.

**FIGURE 15: PHOTOS OF THE DECONTAMINATION PROCESS**



- 6.36 From the data gathered by the FFM, it was not possible to identify the grey/white dust that reportedly resulted in a pink liquid upon contact with water, nor was it possible to determine its origin.
- 6.37 One witness mentioned that these cylinders were contained in a larger outer case, in addition to the metal balls found around them; however, the FFM could not corroborate this information with the data it collected.
- 6.38 The FFM did not receive any information that could be corroborated regarding the device that was reportedly dropped at Location 2.

#### **Analysis of media evidence**

- 6.39 The FFM obtained video and still photography relevant to the allegation from witnesses.
- 6.40 The FFM analysed the videos and photographs to ascertain their authenticity and assess their validity as corroborative information. The analysis involved, inter alia, metadata, geolocation, witness accounts, and the signs and symptoms of possible chemical exposure in photos, videos, and witness statements.
- 6.41 The team collected a total of 43 photographs with metadata, 24 of which had metadata consistent with witness accounts.
- 6.42 The remaining 19 photographs registered inaccurate times and dates<sup>5</sup>. However, the content of the photographs corroborated witness accounts. In addition, seven videos were collected without metadata, and these also corroborated witness accounts.

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<sup>5</sup> These remaining 19 photographs were assessed as having lower evidentiary value compared to the 24 photographs with metadata.

## Analysis of medical files: Epidemiology and toxicology

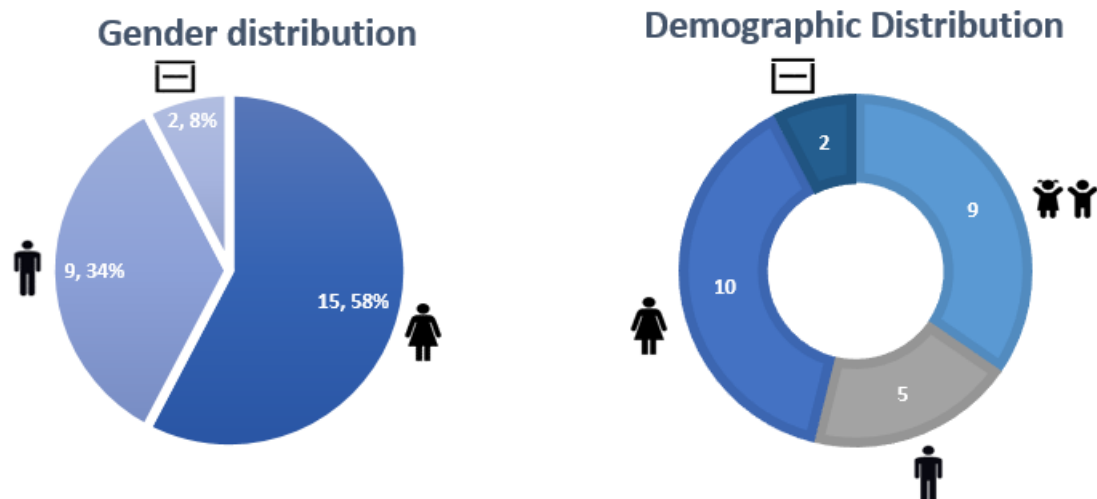
### General

- 6.43 The FFM interviewed one treating physician who was present at Uday Hospital in Saraqib on the night of 1 August 2016, as well as seven witnesses, and one allegedly exposed casualty.
- 6.44 Patients were reported to have a cough, shortness of breath, and in some cases, non-specifically described spasms.
- 6.45 Casualties were reportedly treated at Uday Hospital.
- 6.46 A majority of patients were described as presenting with mild to moderate signs and symptoms while two patients were categorised as severe. The primary complaint of the casualties was respiratory in nature. There were no reports of external trauma.
- 6.47 Seven patients were discharged after three hours of observation and treatment. Two patients, assessed to be severe, were discharged after approximately seven hours.

### Documentation

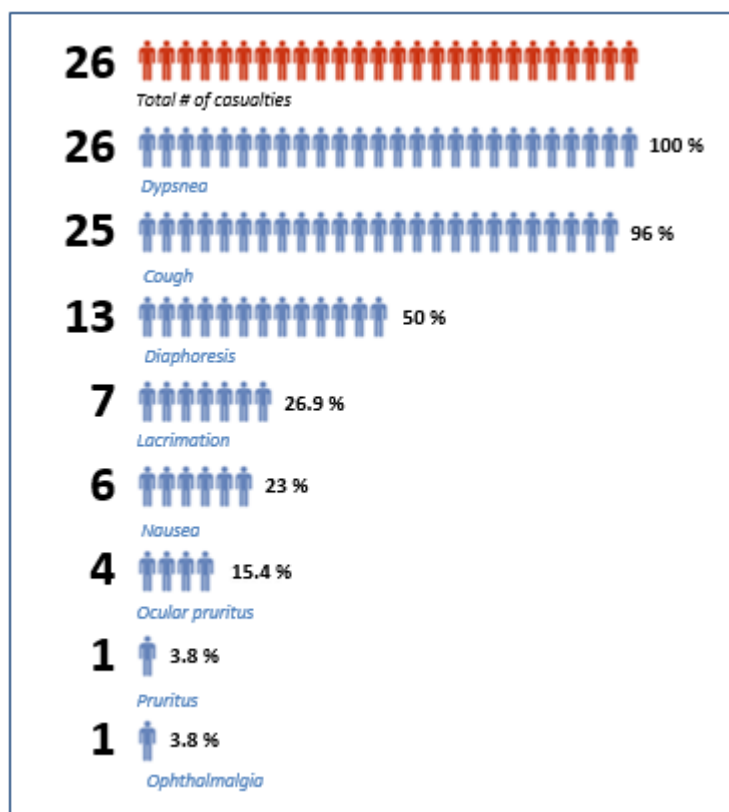
- 6.48 Treating medical personnel provided the FFM with 26 hospital admission records. One record did not document patient age, and another omitted both age and gender (see Figure 16).

**FIGURE 16: DISTRIBUTION OF REPORTED GENDER AND AGE OF REGISTERED CASUALTIES**







- 6.49 A majority of documented patients presented with dyspnoea and cough. Additional complaints were nausea, ophthalmalgia, ocular pruritus, and pruritus (Figures 17 and 18).

**FIGURE 17: DISTRIBUTION OF REPORTED SYMPTOMS**



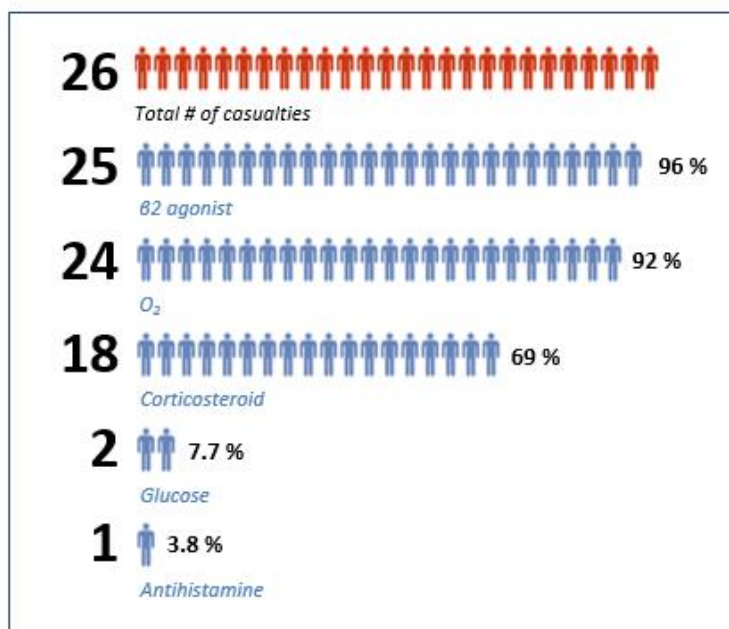
**FIGURE 18: LEVELS OF REPORTED VITAL SIGNS**

Levels of Reported Vital Signs				
Above Normal	5	1	7	N/A
Normal Levels	19	23	4	5
Below Normal	24	0	0	10
				
Records	Heart Rate	Blood Pressure	Ventilatory Rate	Oxygen saturation
26	24	24	11	15

- 6.50 Physical examination results reported: cough, auspicious breathing sounds described as gurgles or wheezing, conjunctivitis, diaphoresis, lacrimation, rhinorrhoea, and agitation.
- 6.51 Five patients were stated to be in a state of agitation, presumably secondary to dyspnoea. It was specifically stated that no patients presented with myosis or seizure activity.

- 6.52 Broadly, the casualties were treated with general decontamination with water prior to hospital entry, and were administered oxygen and inhaled  $\beta_2$  selective agonists, as well as corticosteroids<sup>6</sup>. Two patients were treated with glucose for unspecified reasons, and one patient was provided with antihistamine for nausea (see Figure 19).

**FIGURE 19: DISTRIBUTION OF REPORTED TREATMENT**



- 6.53 Initial diagnoses were listed as chlorine intoxication, possible chlorine intoxication, and intoxication by gas.

#### Video and photographic information

- 6.54 The information reviewed indicated five alleged victims: three adults, one juvenile, and one infant. Two adults appear to be in distress, but otherwise not ill. On the videos and in the photographs, the adults and juvenile are receiving unspecified treatment via a small-volume nebulizer. No further treatment is noted among the patients. One adult, the juvenile, and the infant do not appear ill and do not exhibit obvious signs of distress.

#### Assessment

- 6.55 Based upon witness and patient testimony, the reports by physicians, medical records, and the time of onset in relation to the allegation, the patients demonstrate a toxidrome characteristic of exposure to an irritant substance.

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<sup>6</sup> Beta 2 selective agonists improve gas exchange in the lungs by directly acting on the smooth muscle receptors responsible for dilation of the airways.



## **7. CONCLUSIONS**

- 7.1 The FFM was not able to visit the location of the alleged incident. The team therefore relied on the testimony of interviewees, materials made available by the interviewees, and hospital records. The FFM analysed the videos and photographs to ascertain their authenticity and assess their validity as corroborative information. The digital information reviewed showed structural damage to a building, metal remnants, and people being treated at a medical facility.
- 7.2 The FFM was able to corroborate the presence of witnesses at the site at the time of the allegation. Witness narratives of events were consistent and in line with the described medical signs and symptoms.
- 7.3 The FFM had access to available medical records but was unable to visit the hospital that was reported to have admitted patients. It was determined that 26 people presented with signs and symptoms associated with potential exposure to an irritant substance.
- 7.4 Based upon witness and patient testimonies, physician reports, medical records, and the time of onset in relation to the allegation, the affected persons demonstrated a toxidrome characteristic of exposure to an irritant substance. However, from the data gathered by the FFM, it was not possible to identify the irritant substance. It was also not possible to ascertain whether or not the metal remnants were the origin of the irritant substance and the patients' signs and symptoms.
- 7.5 The results of the analysis of all available data obtained up until the issuance of this report did not allow the FFM to establish whether or not chemicals were used as a weapon in the incident that took place in Saraqib, in the Idlib Governorate of the Syrian Arab Republic, on 1 August 2016.

### **Annexes (English only):**

- Annex 1: Reference Documentation
- Annex 2: Open Sources
- Annex 3: Mission Timelines
- Annex 4: Documents and Files Collected by the FFM

**Annex 1****REFERENCE DOCUMENTATION**

	<b>Document Reference</b>	<b>Full Title of Document</b>
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/GG011 (Issue 1, Revision 0)	Standard Operating Procedure for Managing Inspection Laptops and other Confidentiality Support Materials
5.	QDOC/LAB/SOP/OSA2 (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<sup>7</sup>

## Open Source Internet Links Related to the Incident in Saraqib on 01 August 2016

1. Tweet of alleged attack:  
<https://twitter.com/AJABreaking/status/760231221653827584>
2. Tweet with video of alleged attack:  
<https://twitter.com/Conflicts/status/760350223843680256>
3. Tweet of alleged attack:  
<https://twitter.com/reportedly/status/760233110835335169>
4. Tweet of alleged attack:  
<https://twitter.com/JoeEEnglish/status/760348715605434369>
5. Tweet with video of alleged attack:  
<https://twitter.com/JakeGodin/status/760285721475198976>
6. Tweet with video of alleged attack:  
<https://twitter.com/NoorNahas1/status/760284229741740032>
7. Tweet of alleged attack:  
[https://twitter.com/whitehelmets\\_sy/status/760239870354792448](https://twitter.com/whitehelmets_sy/status/760239870354792448)
8. Tweet of alleged attack:  
<https://twitter.com/EagleSyrian1/status/760229732877266945>
9. <http://syria.liveuamap.com/en/2016/1-august-several-suffocated-including-a-child-and-woman-in>
10. Tweet of alleged attack:  
[https://twitter.com/Syria\\_Rebels/status/760213137505259520](https://twitter.com/Syria_Rebels/status/760213137505259520)
11. Tweet of alleged attack:  
<https://twitter.com/salqin/status/760218226764738560>
12. Tweet of alleged attack:  
<https://twitter.com/RadioAlKul/status/760214312636088320>
13. Tweet of alleged attack:  
<https://twitter.com/HosamAlhaji/status/760217421479280641>
14. Tweet of alleged attack:  
<http://syria.liveuamap.com/en/2016/1-august-several-suffocated-including-a-child-and-woman-in>
15. Online article regarding alleged chemical attack:  
<http://www.interpretermag.com/august-01-2016/#14721>
16. Online article regarding alleged chemical attack:  
<http://globalnews.ca/news/2861443/authorities-play-blame-game-after-toxic-gas-attack-in-syrias-aleppo/>
17. Online article regarding alleged chemical attack:  
<http://www.presstv.us/Detail/2016/08/03/478214/Syria-Aleppo-gas-attack-Saraqib>
18. Online article regarding alleged chemical attack: <http://www.jpost.com/Middle-East/Terrorist-chemical-weapon-attack-kills-5-in-Aleppo-Syrian-regime-claims-463042>

### Open Source Internet Links Related to the Incident in Saraqib on 01 August 2016

19. Video of alleged casualties at hospital:  
[https://youtu.be/A\\_zlUzpLJrs](https://youtu.be/A_zlUzpLJrs)
20. Video of alleged casualties at hospital:  
<https://youtu.be/um6uvwqT0kU>
21. RT video news report about the alleged attack:  
<https://www.youtube.com/watch?v=eJncYIr-TSg>
22. Online article from SN4HR about the alleged incident:  
[http://sn4hr.org/wp-content/pdf/english/Russian\\_and\\_government\\_forces\\_retaliat\\_e\\_violently\\_from\\_the\\_city\\_of\\_Saraqeb\\_en.pdf](http://sn4hr.org/wp-content/pdf/english/Russian_and_government_forces_retaliat_e_violently_from_the_city_of_Saraqeb_en.pdf)
23. Online article regarding alleged chemical attack:  
<https://sana.sy/en/?p=84232>
24. Online article regarding alleged chemical attack:  
<https://edition.cnn.com/2016/08/02/middleeast/syria-aleppo/>
25. Online article regarding alleged chemical attack:  
<http://www.bbc.com/news/world-middle-east-36951783>
26. Online article regarding alleged chemical attack:  
<http://edition.cnn.com/2016/08/02/middleeast/syria-aleppo/>
27. Online article regarding alleged chemical attack:  
<https://www.theguardian.com/world/2016/aug/02/chlorine-attack-syria-dozens-ill-saraqeb-idlib>
28. Online article regarding alleged chemical attack:  
<http://www.reuters.com/article/us-mideast-crisis-syria-idlib-idUSKCN10D0OZ>
29. Online article regarding alleged chemical attack:  
<http://www.aljazeera.com/news/2016/08/syria-civil-war-chlorine-gas-dropped-idlib-town-160802083551947.html>
30. Online article regarding alleged chemical attack:  
<http://themillenniumreport.com/2016/08/syrian-conflict-saraqeb-attacked-with-chlorine-gas/>
31. Online article regarding alleged chemical attack:  
<http://www.nbcnews.com/news/world/syrian-first-responders-claim-helicopter-dropped-gas-dozens-rebel-held-n621511>
32. Online article regarding alleged chemical attack:  
<https://www.stratfor.com/situation-report/syria-suspected-chemical-attack-idlib-province>
33. Online article regarding alleged chemical attack:  
<http://rudaw.net/mobile/english/middleeast/syria/020820162>
34. Online article regarding alleged chemical attack:  
[http://www.upi.com/Top\\_News/World-News/2016/08/03/Russian-military-to-US-Rebels-were-behind-chemical-attack-in-Aleppo/8481470224887/](http://www.upi.com/Top_News/World-News/2016/08/03/Russian-military-to-US-Rebels-were-behind-chemical-attack-in-Aleppo/8481470224887/)
35. Online article regarding alleged chemical attack:  
<http://eaworldview.com/2016/08/syria-feature-russias-propaganda-over-rebel-chemical-attack-in-aleppo/>
36. Online article regarding alleged chemical attack:  
<http://www.dailymail.co.uk/news/article-3719732/Helicopter-seen-dropping-chemical-weapons-Syrian-town.html>

**Open Source Internet Links Related to the Incident in Saraqib on 01 August 2016**

37. Online article regarding alleged chemical attack:  
[http://orient-news.net/en/news\\_show/119343/0/Fatth-al-Sham-publishes-statement-about-Russian-chlorine-attacks-on-Saraqeb](http://orient-news.net/en/news_show/119343/0/Fatth-al-Sham-publishes-statement-about-Russian-chlorine-attacks-on-Saraqeb)
38. Online article regarding alleged chemical attack:  
<http://www.middleeasteye.net/news/white-helmets-33-affected-toxic-gas-attack-city-saraqeb-2071032733>
39. Online article regarding alleged chemical attack:  
<http://www.independent.co.uk/news/world/middle-east/syria-war-russia-helicopter-toxic-gas-chemical-weapon-vladimir-putin-assad-a7167836.html>
40. Online article regarding alleged chemical attack:  
[http://acloserlookonsyria.shoutwiki.com/wiki/Alleged\\_Chemical\\_Attack,\\_August\\_2,\\_2016](http://acloserlookonsyria.shoutwiki.com/wiki/Alleged_Chemical_Attack,_August_2,_2016)
41. Online article regarding alleged chemical attack:  
<http://www.efe.com/efe/english/portada/syrian-humanitarian-organization-condemns-alleged-chemical-attack/50000260-3002179>
42. Online article regarding alleged chemical attack:  
<http://www.libyanexpress.com/syrian-warplanes-drop-chlorine-gas-on-idlib-town-saraqeb/>
43. Online article regarding alleged chemical attack:  
<https://twitter.com/syriainstitute/status/760492115860287488>
44. Online article regarding alleged chemical attack:  
<https://cdanews.com/2016/08/chemical-weapons-attack-reported-in-syria/>
45. Online article regarding alleged chemical attack:  
<http://www.telegraph.co.uk/news/2016/08/02/toxic-gas-in-the-darkness-assad-regime-drops-chemical-weapons-on/>
46. Online article regarding alleged chemical attack:  
<http://us.blastingnews.com/world/2016/08/chemical-weapons-allegedly-used-on-civilians-in-syria-001046465.html>
47. Online article regarding alleged chemical attack:  
<http://en.people.cn/n3/2016/0803/c90777-9094415.html>
48. Online article regarding alleged chemical attack:  
<http://www.libertyradio.com/syrian-conflict-saraqeb-attacked-with-chlorine-gas/>
49. Online article regarding alleged chemical attack:  
<http://www.unian.info/world/1449926-cnn-reports-of-chemical-gas-attacks-in-2-syrian-cities.html>
50. Online article regarding alleged chemical attack:  
<http://www.al-monitor.com/pulse/afp/2016/08/syria-conflict-chemical-opcw.html>
51. Online article regarding alleged chemical attack:  
<http://www.policemc.gov.bh/mcms-lib/controls/scroller.aspx?slug=54521&lang=eng>
52. Online article regarding alleged chemical attack:  
<http://gantdaily.com/2016/08/02/reports-of-chemical-gas-attacks-in-2-syrian-cities/>
53. Online article regarding alleged chemical attack:  
<http://www.ibtimes.co.in/syrian-civilians-attacked-by-chemical-weapons-reports-688734>



### Open Source Internet Links Related to the Incident in Saraqib on 01 August 2016

54. Online article regarding alleged chemical attack:  
<http://www.abc.net.au/news/2016-08-03/toxic-gas-syria-town-russia-helicopter-downed/7684180>
55. Online article regarding alleged chemical attack:  
<http://www.siasat.com/news/syrian-conflict-saraqeb-attacked-chlorine-gas-995518/>
56. Online article regarding alleged chemical attack:  
<http://112.international/politics/toxic-gas-dropped-on-the-syrian-city-serakab-this-night-7928.html>
57. Online article regarding alleged chemical attack:  
<http://www.france24.com/en/20160802-rescuers-say-toxic-gas-dropped-syria-russian-helicopter-saraqeb>
58. Online article regarding alleged chemical attack:  
<https://baytalmasadir.com/2016/08/03/text-jabhat-fat%E1%B8%A5-al-sham-statement-regarding-a-revenge-chemical-attack-on-the-civilians-of-saraqib-saraqeb/>
59. Online article regarding alleged chemical attack:  
<https://francais.rt.com/international/24681-syrie-attaque-presumee-chlore-idlib>
60. Online article regarding alleged chemical attack:  
<http://www.hindustantimes.com/analysis/chemical-gas-attacks-in-syria-the-civil-war-is-far-from-over/story-PgRD3sPEXxshKyeL4A75rM.html>
61. Online article regarding alleged chemical attack:  
<http://www.localsyr.com/news/30-dead-from-rebel-shelling-in-syrias-aleppo-monitor-says>
62. Online article regarding alleged chemical attack:  
<https://www.yahoo.com/news/rescuers-toxic-gas-dropped-syrian-town-where-russian-083025842.html>
63. Online article regarding alleged chemical attack:  
<http://www.skynews.com.au/news/world/mideast/2016/08/03/claims-of-chemical-warfare-in-syria.html>
64. Online article regarding alleged chemical attack:  
<http://www.cbrneportal.com/syrias-chemical-crossfire/>
65. Online article regarding alleged chemical attack:  
<http://www.thenational.ae/world/middle-east/syrian-air-strikes-hit-displaced-peoples-camp-near-aleppo>
66. YouTube video regarding alleged chemical attack:  
<https://www.youtube.com/watch?v=LqviwKPRHz8>
67. YouTube video regarding alleged chemical attack:  
<https://www.youtube.com/watch?v=9V2ksVufPpg>
68. YouTube video regarding alleged chemical attack:  
<https://www.youtube.com/watch?v=biICgHDSloc>
69. YouTube video regarding alleged chemical attack:  
<https://www.youtube.com/watch?v=2QIqsWVYVwY>
70. YouTube video regarding alleged chemical attack:  
<https://www.youtube.com/watch?v=As8CWcY6sXU>
71. YouTube video regarding alleged chemical attack:  
<https://www.youtube.com/watch?v=FoArJz7py0I>

**Open Source Internet Links Related to the Incident in Saraqib on 01 August 2016**

72. YouTube video regarding alleged chemical attack:  
<https://www.youtube.com/watch?v=Qv8AclQS9BA>
73. Online article regarding alleged chemical attack:  
<http://sn4hr.org/blog/2016/08/16/25737/>
74. Online article regarding alleged chemical attack:  
<http://www.independent.co.uk/news/world/middle-east/syria-war-russia-helicopter-toxic-gas-chemical-weapon-vladimir-putin-assad-a7167836.html>
75. Online article regarding alleged chemical attack:  
[http://www.bbc.com/arabic/middleeast/2016/08/160802\\_syria\\_idlib\\_gas\\_dropped](http://www.bbc.com/arabic/middleeast/2016/08/160802_syria_idlib_gas_dropped)
76. YouTube video regarding alleged chemical attack:  
<https://www.youtube.com/watch?v=eM1u7G-b0e8>

### Annex 3

#### MISSION TIMELINE

Date	Activities
02 August 2016	Reports of an alleged chemical attack in Saraqib, Syrian Arab Republic. The team begins the collection of open-source material to assess credibility of the allegation.
06 August 2016	First interview conducted remotely to gather further information on the incident, in addition to the information found on the open sources.
02 September 2016	One physical interview conducted.
20-21 April 2017	Five physical interviews conducted.
14 November 2017	FFM progress on the allegation was noted in S/1556/2017, dated 14 November 2017.
14 – 16 February 2018	Four physical interviews conducted.
September 2018 – November 2019	Search for additional witnesses and information.
January – June 2020	A total of 11 interviews and the data collected from witnesses were analysed.
3 June 2020	Additional corroborative information was received.
27 July 2020	Note verbale sent to the Syrian Arab Republic requesting information regarding the allegation.
Mid-June – August 2020	Report drafted.
29 September 2020	A protected note verbale received from the Syrian Arab Republic as a reply to the FFM request sent through a note verbale dated 27 July 2020.

**Annex 4****INFORMATION COLLECTED BY THE FFM**

The tables 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.

**TABLE A5.1: ELECTRONIC DATA COLLECTED BY THE FACT-FINDING MISSION**

Entry Number	Assigned Code			
1	1307			
File names				
dsc_0042.jpg	img_2525.jpg	dscf3033.jpg	dscf3060.jpg	dscf3087.jpg
dsc_0043.jpg	img_2526.jpg	dscf3034.jpg	dscf3061.jpg	dscf3088.jpg
dsc_0044.jpg	img_2527.jpg	dscf3035.jpg	dscf3062.jpg	dscf3089.jpg
dsc_0045.jpg	img_2528.jpg	dscf3036.jpg	dscf3063.jpg	dscf3090.jpg
dsc_0046.jpg	img_2529.jpg	dscf3037.jpg	dscf3064.jpg	dscf3091.jpg
dsc_0047.jpg	img_2530.jpg	dscf3038.jpg	dscf3065.jpg	dscf3092.jpg
dsc_0048.jpg	img_2531.jpg	dscf3039.jpg	dscf3066.jpg	dscf3093.jpg
dsc_0049.jpg	img_2532.jpg	dscf3040.jpg	dscf3067.jpg	dscf3094.jpg
dsc_0050.jpg	img_2552.jpg	dscf3041.jpg	dscf3068.jpg	dscf3095.jpg
dsc_0051.jpg	img_2553.jpg	dscf3042.jpg	dscf3069.jpg	dscf3096.jpg
dsc_0052.jpg	img_2554.jpg	dscf3043.jpg	dscf3070.jpg	dscf3097.jpg
dsc_0053.jpg	img_2555.jpg	dscf3044.jpg	dscf3071.jpg	dscf3098.jpg
dsc_0054.jpg	img_2556.jpg	dscf3045.jpg	dscf3072.jpg	dscf3099.jpg
dsc_0055.jpg	img_2557.jpg	dscf3046.jpg	dscf3073.jpg	dscf3100.jpg
dsc_0056.jpg	img_2558.jpg	dscf3047.jpg	dscf3074.jpg	dscf3101.jpg
dsc_0057.jpg	img_2559.jpg	dscf3048.jpg	dscf3075.jpg	dscf3102.jpg
dsc_0058.jpg	mov_0038.mp4	dscf3049.jpg	dscf3076.jpg	dscf3103.jpg
dsc_0059.jpg	mov_0040.mp4	dscf3050.jpg	dscf3077.jpg	dscf3104.jpg
dsc_0060.jpg	mov_0041.mp4	dscf3051.jpg	dscf3078.jpg	dscf3105.jpg
dsc_0061.jpg	mov_0064.mp4	dscf3052.jpg	dscf3079.jpg	dscf3106.jpg
dsc_0062.jpg	mov_0065.mp4	dscf3053.jpg	dscf3080.jpg	dscf3107.jpg
dsc_0063.jpg	gopr0332.mp4	dscf3054.jpg	dscf3081.jpg	dscf3108.jpg
dsc_0066.jpg	gopr0333.mp4	dscf3055.jpg	dscf3082.jpg	dscf3109.jpg
dsc_0067.jpg	dscf3029.jpg	dscf3056.jpg	dscf3083.jpg	dscf3110.jpg
img_2522.jpg	dscf3030.jpg	dscf3057.jpg	dscf3084.jpg	dscf3111.jpg
img_2523.jpg	dscf3031.jpg	dscf3058.jpg	dscf3085.jpg	
img_2524.jpg	dscf3032.jpg	dscf3059.jpg	dscf3086.jpg	

**TABLE A5.1: ELECTRONIC DATA COLLECTED BY THE FACT-FINDING MISSION (continuation)**

Entry Number	Assigned Code			
2	1538			
dsc_0042.jpg	dsc_0052.jpg	dsc_0062.jpg	img_2528.jpg	img_2557.jpg
dsc_0043.jpg	dsc_0053.jpg	dsc_0063.jpg	img_2529.jpg	img_2558.jpg
dsc_0044.jpg	dsc_0054.jpg	dsc_0066.jpg	img_2530.jpg	img_2559.jpg
dsc_0045.jpg	dsc_0055.jpg	dsc_0067.jpg	img_2531.jpg	mov_0038.mp4
dsc_0046.jpg	dsc_0056.jpg	img_2522.jpg	img_2532.jpg	mov_0040.mp4
dsc_0047.jpg	dsc_0057.jpg	img_2523.jpg	img_2552.jpg	mov_0041.mp4
dsc_0048.jpg	dsc_0058.jpg	img_2524.jpg	img_2553.jpg	mov_0064.mp4
dsc_0049.jpg	dsc_0059.jpg	img_2525.jpg	img_2554.jpg	mov_0065.mp4
dsc_0050.jpg	dsc_0060.jpg	img_2526.jpg	img_2555.jpg	تقرير كيمائي.docx
dsc_0051.jpg	dsc_0061.jpg	img_2527.jpg	img_2556.jpg	
Entry number	Assigned Code			
3	1571			
File names				
dsc_0047.jpg	dsc_0054.jpg		mov_0040.mp4	
dsc_0048.jpg	dsc_0062.jpg		mov_0041.mp4	
dsc_0049.jpg	dsc_0063.jpg		mov_0064.mp4	
dsc_0050.jpg	gopr0332.mp4		mov_0065.mp4	
dsc_0051.jpg	gopr0333.mp4		تقرير كيمائي.docx	
dsc_0052.jpg	mov_0038.mp4			

**TABLE A5.2: HARD COPY OF DATA COLLECTED BY THE FACT-FINDING MISSION**

Entry Number	Assigned Package Code	Evidence Reference Number	Description
1.	1036	20180214103603	Drawing
2.	1708	20180216170803	Drawing
3.	1725	20180214172504	Drawing