

KAFR ZITA CHEMICAL ATTACK

January - April 2018

**Human Rights in Practice Clinic
at the University of Hong Kong**



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Introduction and explanation of methodology

Kafr Zita (literally “oil farm” or “oil village” because of its production of olive oil) is a town located in northwest Syria. More than a decade ago, according to the Syrian Central Bureau of Statistics, its population numbered roughly 17,000 people, although that number is likely to have decreased substantially since the outbreak of the Syrian civil war in 2011. That conflict is ongoing.

In April 2014, media outlets widely reported one or more aerial chemical attacks on Kafr Zita, attacks which used barrel bombs dropped to release what was believed to be chlorine gas on the civilian population.¹ According to a local doctor, 2 people died as a result of these attacks, and approximately 200 others were affected by the toxic fumes, in varying degrees of severity.

Some new outlets, including Al Jazeera² and the Telegraph³ repeated eyewitness statements blaming the regime of President Bashar Al Assad for the attacks, in part because of the regime’s history of chemical weapons use, as well as its access to both chemical weapons and aircraft capable of dropping barrel bombs (which the Syrian rebels on the other side of the conflict lack). Other outlets such as the Guardian⁴ conveyed the challenges inherent in substantiating these claims in a time of war. The Syrian government, via State television, denied responsibility and instead blamed Jabhat Al Nusra, an affiliate of Al Qaeda, for the attacks.

This report examines 28 videos uploaded around the time of the attacks on Kafr Zita in April 2014. This report does not attempt to take political sides or determine the responsible party for the attacks that have been documented. **Rather, we have attempted to match what the videos visually show, and what people in the videos say and claim, to external, independent facts – to the extent possible and with the evidence available.**

Of 28 videos total, we determined that it is likely that 5 days are depicted, in the range of 11 April to 18 April 2014. Gas attacks are alleged to have occurred on two of these days: 11 and 18 April (see timeline, included later in the report). A summary of the key video groupings is as follows:

¹ For these and other facts referenced in the introduction, see e.g. the Human Rights Watch report available at: <https://www.hrw.org/news/2014/05/13/syria-strong-evidence-government-used-chemicals-weapon>

² <https://www.aljazeera.com/news/middleeast/2014/04/syrian-regime-accused-chlorine-gas-attacks-201441703230338216.html>

³ <https://www.telegraph.co.uk/news/worldnews/middleeast/syria/10823180/Syrian-chemical-weapons-use-backed-up-by-second-investigation.html>

⁴ <https://www.theguardian.com/world/2014/apr/29/syria-chemical-weapons-chlorine-gas>

Hospitals

As a group, the videos depict two different hospital locations – which could either be different hospitals or different areas of the same hospital. We have distinguished these locations through features such as distinctive posters and other wall features or decorations, architectural features and layout, floor details, medical uniforms, presence of specific equipment, etc. Five videos show the first location, and 8 videos depict the second possible location.

Symptoms

We found depictions of at least one of the common symptoms of chlorine gas exposure in 18 of the 28 videos. We have listed these typical symptoms and have summarized which videos show people either acting in a way so as to indicate the presence of those symptoms, or in which doctors describe the symptoms they have treated.

Bomb casings and canisters

Two videos provide close-up views of bomb casings or canisters. The bombs depicted in the videos suggest the use of chlorine tanks in the Kafr Zita attacks. The most credible videos suggest the use of barrel bombs, although there is no conclusive evidence as to the time and location of filming, nor of a definite link between the bombs depicted and the actual attacks.

Landscapes and geo-locating

5 videos show long angles of bombs falling over a landscape. Based on our findings, Videos 15 and 20 do not contradict the circumstances of the relevant chemical attack. Given the corroborating features of the explosion and the weather conditions, it is possible that they do depict the moment at which the bomb fell on 11 April 2014. Nevertheless, without substantial knowledge on chlorine attacks it is questionable whether the videos could be considered as strong evidence since the smoke had only a slight yellow coloration (known to be associated with chlorine gas); whether these videos would be indicative of chlorine is left undetermined. The landscape section which follows describes the assessments made in detail for each of these 5 videos.

This exercise has posed significant challenges: some videos take place indoors or at night, so geographic clues are limited. Other videos, such as hospital scenes, show symptoms which may be consistent with exposure to chlorine gas – however it is not possible to link these videos individually to a specific attack or place. **Nevertheless, taken together, this collection of videos shows the picture of a group of people, many of whom recur over the course of several videos, displaying behaviors and characteristics which could be consistent with the stories that they tell.** We have analyzed each video one by one, and we have grouped our analysis by theme and location on the pages that follow. We have used a variety of techniques to verify the videos' contents – **we have noted these techniques and tools, and some of the limitations we encountered when using them, in the discussion of each section.** Where metadata was available, we have noted what we were able to uncover about timeline – when the video was recorded, when uploaded, by whom, whether this tells us anything, and how confident we are in this assessment.

Hospitals

Videos Concerning Hospitals - Overview (“WHERE”)

In verifying the set of videos that involve hospital scenes, our **primary goal** was to ascertain the exact **locations** of where the videos were taken. To do this, we conducted research in two stages:

Stage 1: By examining and comparing observable visual details, we were able to categorize most videos into two groups based on the two main hospitals’ locations, the Eastern Hospital and the Western Hospital. (Refer to Appendix 1 and 2 for the categorization process.)

Stage 2: By reviewing various NGO reports, UN reports and news reports on Syria’s medical facilities, we attempted to pinpoint the **exact location** for the each of the above two hospitals.

Our **second goal** was to look for other visual details that would confirm the occurrence of a chemical attack in Kafr Zita.

Eastern Hospital Verification

Videos 9, 23, 24, 26, and 21 (3:20-4:12), provide footage which suggests that one of the locations was Eastern Hospital.

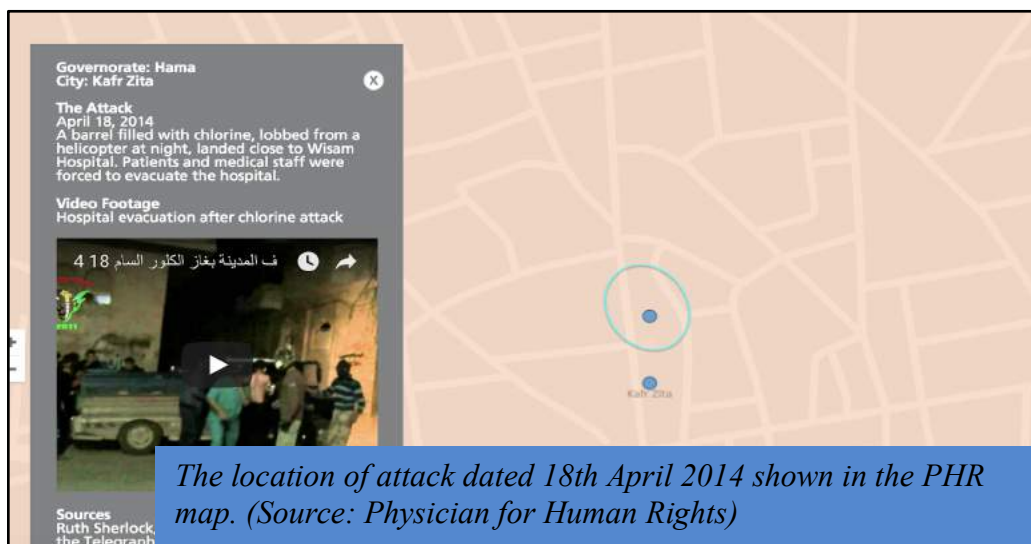
According to the findings published by the Organisation for the Prohibition of Chemical Weapons (“OPCW”) and the United Nations Security Council (“UNSC”) in 2014 and 2016 respectively, there were only 2 hospitals in the town of Kafr Zita in Spring 2014, namely the Eastern Hospital and the Western Hospital.⁵ Although the 2 hospitals were identified by their respective locations within the town in both of the reports, the actual names of the 2 hospitals were not provided and both reports provided different numberings in identifying the 2 hospitals, apart from the labelling of “Eastern/Western” hospitals. The OPCW report identified Eastern Hospital as “hospital number 5”, whereas the UNSC report identified the same hospital, “Eastern Hospital”, with specific reference to the OPCW report but assigned the hospital a different number (No. 6). In considering such a difference in the labelling of hospitals, we made an assumption that the discrepancy was a typo because the UNSC report cited the specific paragraph in the OPCW report that identifies the hospitals but then assigns a different number to the

⁵ See Organization for the Prohibition of Chemical Weapons. (2014). *Third Report of the OPCW Fact-Finding Mission in Syria*, 18 December 2014 (No.S/1230/2014) at paragraph 5.56. Retrieved 26 March 2018 from https://www.opcw.org/fileadmin/OPCW/Fact_Finding_Mission/s-1230-2014_e_.pdf, and see Security Council Report. (2016). *Third Report of the OPCW-United Nations Joint Investigative Mechanism*. 24 August 2016 (No.S/2016/738) at Annex 2, page 26, paragraph 14. Retrieved 26 March 2018 from http://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_2016_738.pdf

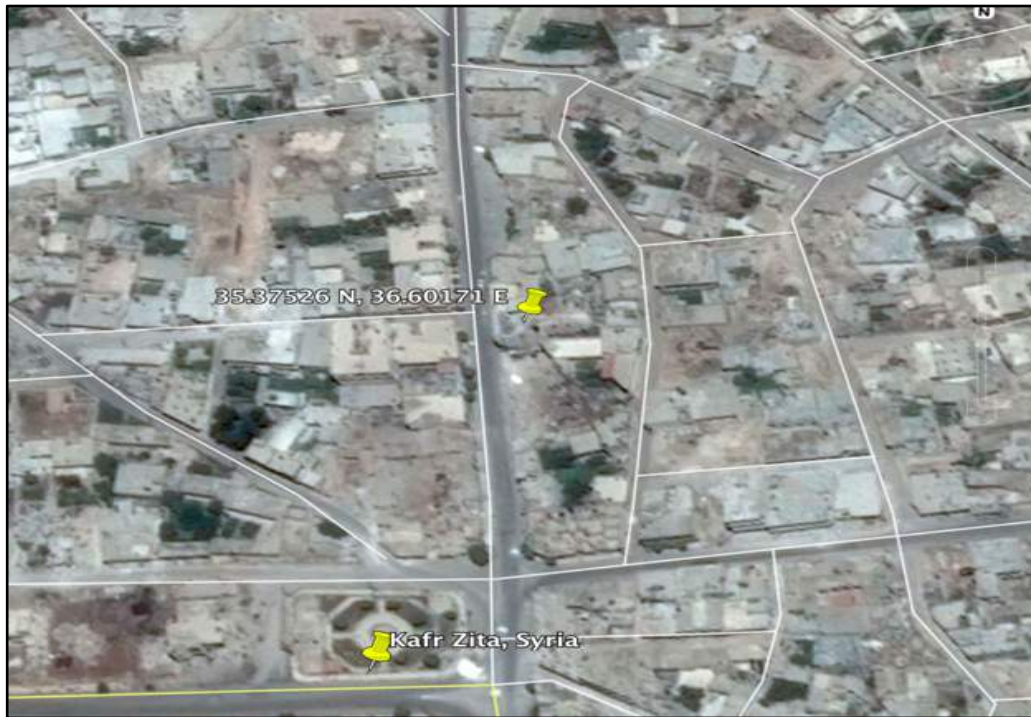
hospital name than the number that is provided in the paragraph from the OPCW report. Whatever the reason for the discrepancy, this discrepancy gives us pause as to whether the discrepancy is in fact a material difference or solely a typo.

To investigate further, we looked into the particulars of chemical attacks relevant to “Eastern Hospital” as well as the two reports’ descriptions of the locations, comparing the findings to other corroborating evidence, including reports and documentation published by other organisations, and eventually we concluded that, the “Eastern Hospital” that was identified in both the OPCW and UNSC reports, was the same hospital in Kafr Zita and its name was “Al-Wisam Hospital” (an English translated version we adopted).

According to the UNSC report, witnesses stated that around 22:45-23:00 on 18 April 2014, two barrel bombs were dropped on Kafr Zita and one of the bombs exploded within a 50-metre radius of the Eastern Hospital. The witness statements in the UNSC report match the findings from the report and map of attack provided by the Physician for Human Rights (“PHR”).⁶ The PHR Report asserts that a chemical attack occurred around 23:00 on 18 April 2014 in Kafr Zita, very close to a hospital located in the eastern part of the town (see the below screenshots from the PHR map). Referring to the videos, we found that the findings in the UNSC report and the PHR map could corroborate information found in video 9. As described in the video caption and description bar, video 9 captured the evacuation of hospital patients and staff in Kafr Zita on 18 April 2014 due to a chlorine gas attack. Considering the information as to the date of the attack, the location and the uploading time of video 9, combined with our findings of the same hospital in videos 23, 24, 26 and 21 (second part) [please refer to Appendix 2], it is likely that the hospital in the abovementioned videos was the Eastern Hospital as identified and reported in the UNSC report.



⁶ See https://s3.amazonaws.com/PHR_syria_map/web/index.html



The exact location of **Al-Wisam hospital** as purported by *Physicians for Human Rights*. (Source: Google Earth Pro)

The OPCW report, however, does not provide particulars as to the attack dated 18 April 2014. The report instead mentions an attack dated 22 June 2014 that completely destroyed the Eastern Hospital. To corroborate this information and the identification of the hospital in our given videos, we referred to a video re-uploaded by the Syrian Network for Human Rights (“SNHR”) on 25 May 2016⁷, with the original source published on 23 June 2014. The video alleges to depict the Wesam Hospital after the barrel bomb attack dated 23 June 2014. We noted several common features regarding the physical structure and interior design of the hospital shown in videos 9, 23, 24, 26 and 21 (second part). The information given by the SNHR in the re-uploading and the information given by the original uploader indicated that there was an attack on 23 June 2014 in Kafr Zita. A barrel bomb was dropped over a spot close to the Wesam Hospital (as captured in the videos), causing complete destruction of the hospital. In view of the conflicting dates of attack as found from different reports, it is possible for the OPCW to have mistaken the exact date of attack. The OPCW report provided limited information regarding Eastern Hospital and among the reports from other organisations on the attack destroying Eastern Hospital, the findings were consistent and more comprehensive supported by details, therefore we could confirm that the date of attack that destroyed Eastern Hospital (on 23rd June 2014) was corroborated.

⁷ See <https://www.youtube.com/watch?v=6Q6tXDP26nU>

Using Google Translate, we translated the video caption’s Arabic term, “مستشفى الوسام”, into English and tried to search with the English name, “Wesam Hospital”. (Translated as “Al Wasam/Wesam/Wisam Hospital” in English). Considering the variety of spellings for the English translation of the term and that “Al” actually means “the” in Arabic, the findings potentially indicate that there was not an official English name for the hospital. Nonetheless, by linking our findings on the common geolocation and physical features observed from the SNHR video and videos 9, 23, 24, 26 and 21, we could confirm that “Al-Wesam/Wisam” hospital filmed in the video re-uploaded by SNHR was the same hospital as we found in videos 9, 23, 24, 26 and 21. Combined with the similar findings on dates and times of attacks, locations and severity of destruction shown in different reports published by organisations, we can corroborate that the “Eastern Hospital” referred to in the OPCW and UNSC reports, was the “Al-Wisam” Hospital identified in the PHR report. From our observation of the hospital’s physical features in the SNHR video and videos 9, 23, 24, 26 and 21, it is highly likely that the hospital that appeared in videos 9, 23, 24, 26 and 21 (second part) was the Al-Wisam Hospital referred to in the reports published by various organisations.

Western Hospital Verification (ie. Specialty Hospital / Specialist Hospital)

This section discusses videos 4, 6, 7, 10, 17, 18, 25 and 21 (00:00 - 3:20).

For all information summarized below, please refer to the verification process at Appendix 1.

Physicians for Human Rights⁸ (“PHR”) provides interior photos and locations of “Specialty Hospital” and “Al Wisam Hospital” in Kafr Zita:

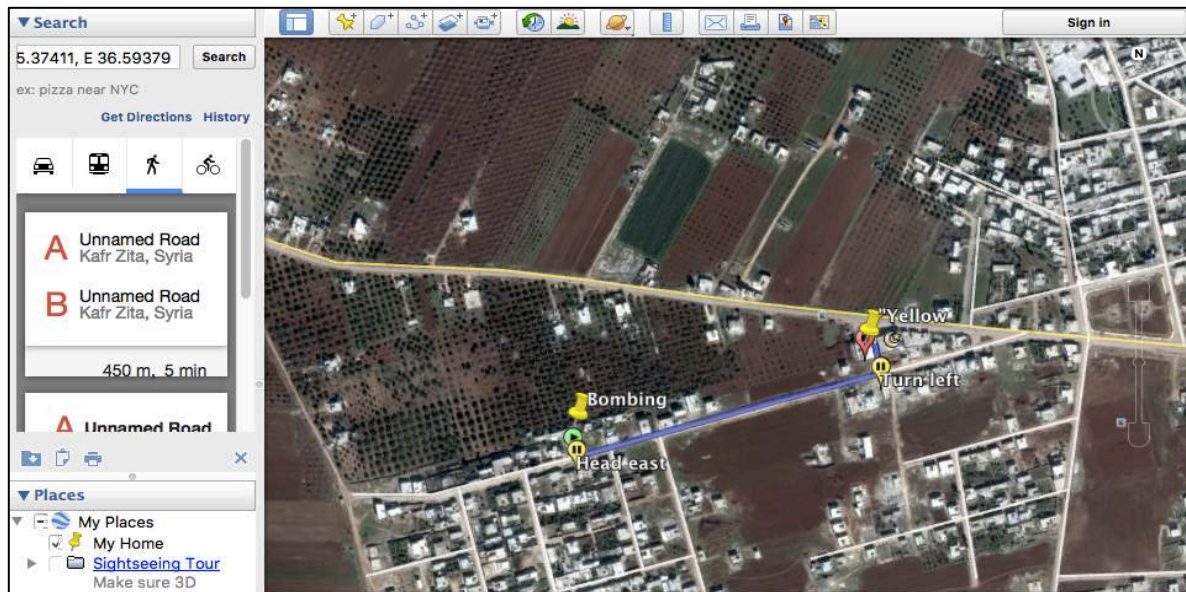
 <p>Governorate: Hama City: Kafr Zita Damage to Kafr Zita Specialty Hospital</p> <p>The Attack April 12, 2015 Government forces barrel bombed the emergency department of Kafr Zita Specialty Hospital, causing serious damage and putting the hospital out of service. image Evidence inside Kafr Zita Specialty Hospital</p> <p>Sources "رسائل مفقود مستشفى مركز الإسعاف في مدينة كافر زيتا", Syrian Interim Government, April 13, 2015. https://www.phr.org/en/1/index.php/information/2015-04-13-12-59-53</p>	 <p>Governorate: Hama City: Kafr Zita Damage inside Wisam Hospital</p> <p>The Attack June 23, 2014 Government forces dropped two barrel</p>
Specialist Hospital	Al Wisam Hospital
(Source: Map, Physicians for Human Rights)	

⁸ See https://s3.amazonaws.com/PHR_syria_map/web/index.html

The video found at the YouTube link⁹ inserted in PHR's information box regarding the Specialty Hospital shows interior designs matching that of our categorized videos. This is shown in Appendix 1. We also found that some of the interior designs in the categorized videos were consistent with interior descriptions in the OPCW report (Refer to Appendix 1).

According to AAAS report¹⁰, the coordinates of Specialist hospital are 35.37411 N, 36.59379 E. Using Google Earth Pro, we confirmed the location of said hospital.

Per *The Telegraph*¹¹, Dr Abdullah Darwish, a doctor who worked at the Speciality Hospital, confirmed witnessing the bombing at less than 400m away from the hospital window. We have further investigated using Google Earth Pro the distances between the bombing coordinates according to the UNSC Third Report¹² (N35.372950° E36.589800°) and the Specialty Hospital coordinates from AAAS. We confirmed the distance as 450m, corroborating Dr Abdullah Darwish's witness account.



Map showing distance between bombing and Specialty Hospital as 450m. (Source: Google Earth Pro).

⁹ See <https://www.youtube.com/watch?v=Fb7aTbsA5Xo&feature=youtu.be>

¹⁰ See https://mcmprodaaas.s3.amazonaws.com/s3fs-public/reports/Syria_Hospitals_Report3.pdf

¹¹ See <https://www.telegraph.co.uk/news/worldnews/middleeast/syria/10796150/Syria-chemical-weapons-how-th-e-Telegraph-found-evidence-of-chlorine-and-ammonia-gas-bombs.html>

¹² See http://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_2016_738.pdf

The UNSC Third Report identified that the bombing on 11 April 2014 happened near “Western Hospital”. We are highly persuaded that UNSC’s “Western Hospital” is indeed the “Specialty Hospital” mentioned in PHR and AAAS (coordinates of 35.37411 N, 36.59379 E).

We further corroborated the landscapes shown in the videos with purported locations of hospitals in the *Violations Documentation Centre Report*¹³. Despite slight discrepancies, the marked locations of bombing, Specialty Hospital and Al Wisam Hospital are mostly consistent:



Three hospital locations in Kafr Zita. (Source: Violations Documentation Centre)

¹³ See <http://eaworldview.com/2014/04/syria-vdc-report-regimes-chemical-weapons-attack-kafrzita/>

Conclusions for hospital locations

Our conclusion is that the majority of hospital videos were taken in Kafr Zita at two different hospitals:

1. "Eastern Hospital" (N 35.37526 E 36.60171), also known as "Al-wisam Hospital",
and
2. "Western Hospital" (N 35.37411 E36.59379), also known as "Specialty Hospital".

There are hospital videos (Videos 1, 2, 8, 13, 14, 21 (4:20-4:48) and 22) that we were unable to categorize into verified locations. They might have been taken in other hospitals, or in corners of the Eastern / Western hospitals that we did not cover. However, based on various NGO reports from reputable organisations which can corroborate each other, we are convinced that the majority of hospital videos were taken in the Eastern Hospital and the Western Hospital in Kafr Zita, after the alleged chemical attacks.

Patient symptoms (as observed, and as reported in doctor statements)

Chlorine:

This section of the report focuses on the patient symptoms seen in the hospital videos and reported in doctor statements in an attempt to verify the type of bombing experienced in Kafr Zita in April 2014. Our findings suggest that the bombing on Kafr Zita in April 2014 was a chemical attack and most likely contained Chlorine (Cl).

High level exposures to chlorine:

According to the U.S. Department of Health and Human Services' Centers for Disease Control and Prevention, immediate signs and symptoms of chlorine exposure include the following: ¹⁴

- Blurred vision
- Burning pain, redness, and blisters on the skin if exposed to gas. Skin injuries similar to frostbite can occur if it is exposed to liquid chlorine
- Burning sensation in the nose, throat, and eyes
- Coughing
- Chest tightness
- Difficulty breathing or shortness of breath. These may appear immediately if high concentrations of chlorine gas are inhaled, or they may be delayed if low concentrations of chlorine gas are inhaled.
- Fluid in the lungs (pulmonary edema) that may be delayed for a few hours
- Nausea and vomiting
- Watery eyes
- Wheezing

Signs and symptoms visible would depend on when the chemical attack took place and when medical attention was sought. Symptoms and signs of a chlorine attack may wear off due to oxygen diluting the chlorine concentration, and such could well indicate the timing of the attack and when the victim was admitted to the hospital, either immediately after the attack or several dates after the attack.

¹⁴ <https://emergency.cdc.gov/agent/chlorine/basics/facts.asp>

	<i>Shortage of breath</i>	<i>Blurred vision</i>	<i>Redness</i>	<i>coughing</i>	<i>Chest tightness</i>	<i>Watery eyes</i>	<i>Nausea and vomiting</i>	<i>Injury</i>	<i>Unconscious</i>	<i>Remarks</i>
Video #										
1	✓				✓					Symptoms wearing off→ this may suggest that the children were admitted long after the chemical attack.
2	✓				✓					Symptoms wearing off.
4	✓			✓	✓					Mention of Chlorine as the gas attack.
6	✓									Both victims look rather calm and stable.
7	✓		✓	✓	✓	✓				Mention of Chlorine as a gas and Kafr Zita. All victims were presented with the following symptoms.
8	✓				✓					Same video as video 1. Mention of Kafr Zita
10	✓	✓		✓	✓	✓	✓			Victim arguably cannot walk straight, therefore suggesting blurry vision.
12	✓	✓		✓			✓			The victim who is doing constructions seems to be suffering from the following: NOTE: Video is not taken in hospital.
13	✓		✓	✓						Victims were wearing masks and seems to be suffering the following:
14	✓				✓	✓				The victim sitting down is visibly tired and arguably unconscious
17	✓		✓	✓	✓	✓	✓			There is a victim lying on the floor, alongside kids suffering from a shortage of breath.
18	✓		✓	✓	✓				✓	There are multiple victims to which most victims are suffering from the following: some is also unconscious and therefore suggesting the attack might have taken place relatively recently.

	<i>Shortage of breath</i>	<i>Blurred vision</i>	<i>Redness</i>	<i>coughing</i>	<i>Chest tightness</i>	<i>Watery eyes</i>	<i>Nausea and vomiting</i>	<i>Injury</i>	<i>Unconscious</i>	<i>Remarks</i>
19	✓		✓	✓						Victims are running on the street and all of them are suffering from the following: NOTE: Video is not taken in hospital
21	✓			✓			✓	✓	✓	Victims are lying down on hospital beds and being treated by the hospital staff suffering from the following: some are even badly injured and unconscious, therefore suggesting that this happened recently after the bombing.
22	✓		✓		✓					Victims are children being treated at the hospital suffering from the following:
23	✓			✓	✓					Victims are being treated as the hospital suffering from the following:
24	✓				✓					Victims are being given additional oxygen at the hospital. They are suffering from the following:
26	✓			✓	✓					Similar to videos 23 and 24. The victims are being given additional oxygen in the hospital and are suffering from the following:

Targeting of doctors in Syria

During our research, we found the names of various doctors who gave reports of the attacks in Kafr Zita. The names of the doctors include: Mohammad Tennari, Hazem Halabi, (Medical student) Dr Abdullah Darwish, Ahmad al-Dbis and Hasan Al Araj. After we found the names of the doctors, we tried to independently verify the names of the doctors with other reports and also Facebook accounts or google images. This proved to be a difficult task because many of the medical staff in Syria have been targeted.¹⁵ Therefore, many medical professionals have chosen to use fake names. In addition, it was hard to put a face to the name because none of the doctors had Facebook or twitter accounts, probably in fear of retaliation.

DOCTOR A



Doctor A video 4.

The footage in video 4 shows a male doctor we called “Doctor A”. In the video, Doctor A is describing in English how the village has been hit by Chlorine. The doctor in video 4 is wearing a mask throughout so it is difficult to know for certain what his whole face looks like. We were not able to confirm the identity of the doctor in video 4 because apart from this video and a few similar videos posted by the same uploader around the time of the first attack in Kafr Zita (see the pictures below) this doctor did not appear anywhere else in our online research. He is not seen in other videos nor does his picture appear on other websites, social media outlets or other online news sources, apart from in these videos. We performed checks on all social media accounts from present day going back to April 2014 as well as conducted a reverse image search but the doctor does not appear anywhere.

The doctor in this set of videos appears quite prominent, so we expected to find his picture in other reports. While the lack of media prominence gave us pause, we note that the conditions in Syria make many doctors wary of publicity due to fear of attack.



Doctor A in video 7.



Doctor A in video 24.

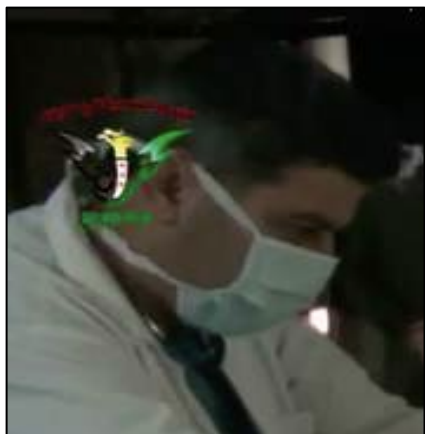


Doctor A in video 25.

¹⁵ https://www.washingtonpost.com/news/morning-mix/wp/2015/03/13/conflict-has-ravaged-syrias-health-system-just-when-its-most-needed/?utm_term=.8f98960a12ad

DOCTOR B

One of the doctors we were able to positively verify is Dr Hasan Al Araj (the Doctor B in video 10 and 14). He was a prominent surgeon in Kafr Zita who was killed in 2016. We found numerous reports corroborating this finding.¹⁶ He was a Health Director of Hama, a very prominent figure who also worked in a SAMS- supported cave hospital built into the side of a mountain near Kafr Zita. The Syrian American Medical Society (SAMS) is a nonpolitical, nonprofit medical relief organization that is working on the front lines of crisis relief in Syria.



Doctor B, video 10



Doctor B, video 14

On the SAMS website we found a photo showing Dr Araj and Dr Darwish (see Doctor D below). The article gives account of Dr Araj work and death.¹⁷ The reverse search of an image did not produce any result which makes us believe it is an original photograph.



He is considered a hero in his community and appears in many social media posts and YouTube videos where people are praising him for his work and heroism. This prominence allowed us to make connections when identifying other doctors below.

¹⁶ <https://www.sams-usa.net/our-fallen-heroes/>

¹⁷ https://www.sams-usa.net/press_release/sams-is-deeply-saddened-by-the-loss-of-dr-hasan-al-a-raj-a-leading-humanitarian/

DOCTOR C



Doctor C, video 13

In video 13 there was another doctor who we were not able to identify. However, we did find video footage of the funeral procession of Dr Hasan Al Araj where we believe that we have identified a doctor that looks facially similar to doctor C.¹⁸ We believe this to be a strong link because the doctors work in a similar region. Therefore, we are inclined to believe that there is a connection between the two. So although, we were not able to identify doctor C's name we are fairly confident that he worked in the Kafr Zita area. Furthermore, this is backed up by the fact that we found photos on a Hama health Directorate Facebook page which appears to show Doctor C.¹⁹ The photos also show another connection as he appears alongside doctor D (see below) that we were able to identify.

The screenshot below was taken from a Youtube video titled “Doctors and medical cadres around the grave of the martyr Dr. Hasan Al-Araj in the city of Kafrzita in the countryside of Hama” (translated). It was uploaded by Mahmoud Hamwi (translated) who seems to be posting videos from Kafr Zita regularly. It shows doctors gathering around the grave of the late doctor Hasan Al Araj. Circled on the left is Doctor C, on the right Doctor D.



¹⁸ <https://www.youtube.com/watch?v=GjXkz0ksJbE>

¹⁹ <https://www.facebook.com/HamaHealthDirectorate/>

Screenshots below were taken from another video from the same uploader

(<https://www.youtube.com/watch?v=XcZuW0YjIn8>)



The pictures below were found on the Hama Health Directorate



DOCTOR D



Doctor D, video 18

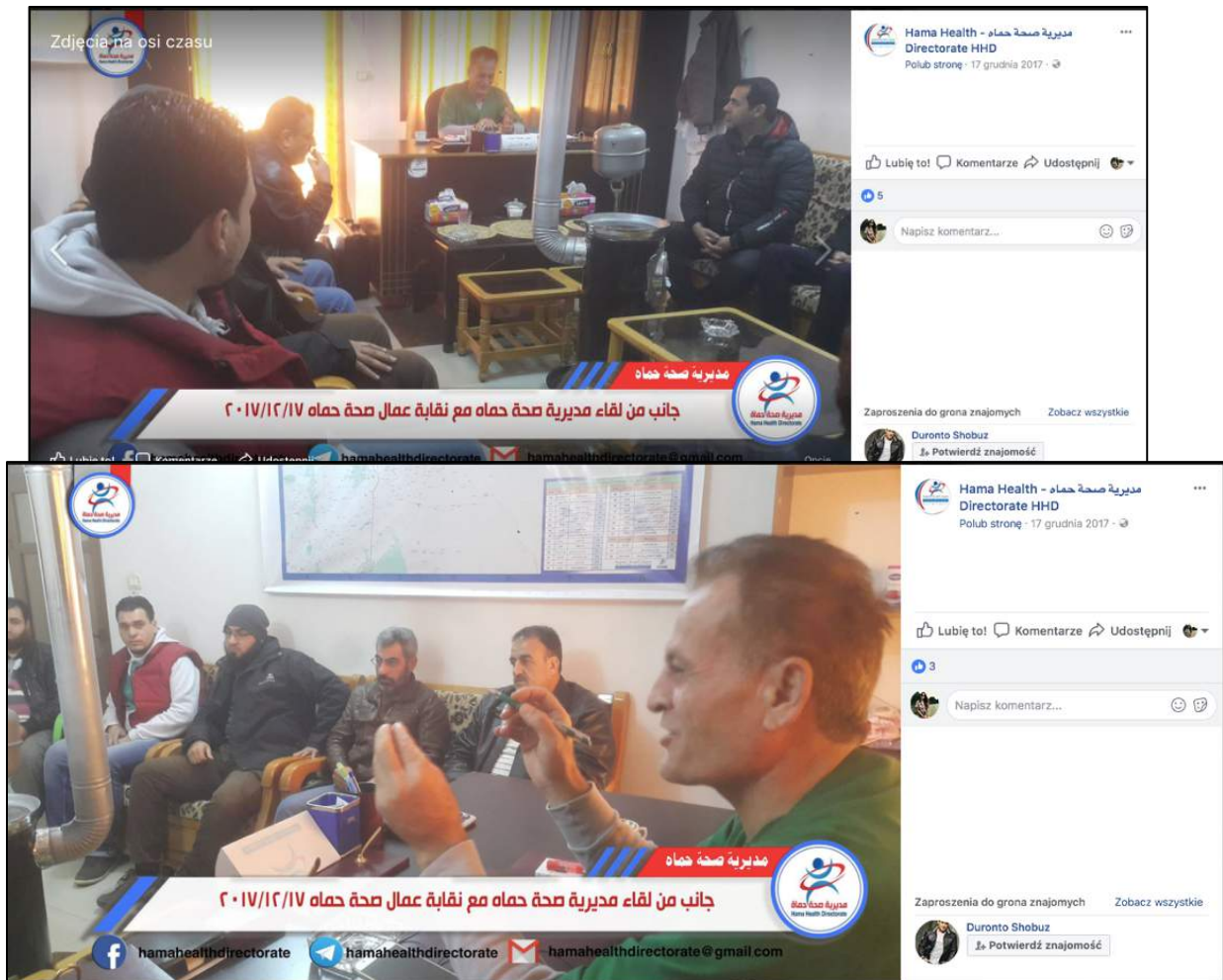
The last doctor that we were able to identify is the doctor that appears towards the end of video 18. We believe that he is Dr Abdullah Darwish, who is the director of the cave Kafr Zita Hospital. In an article published by Zamanalwsl²⁰ they show a picture of a doctor along with the name of the doctor. From this we compared all the videos and concluded that based on facial similarities they were the same doctor. To confirm the legitimacy of the website in which the picture of the doctor was found, we did a reverse image search of the Arabic heading which appeared to be the name of the website due to its prominent position on the page.

From the reverse image search we were able to ascertain that the website was actually an independent Syria newspaper which was created by Fathi Ibrahim Bayoud in the city of Homs. From a search in Facebook we were able to find Fathi Bayoud, who stated in his introduction that he was the editor of the above newspaper. His profile picture on facebook also matches a picture alongside an article published on the website in his name. This seems to suggest that we can trust the validity of this website. The website showed this picture:



²⁰ <https://www.youtube.com/watch?v=GjXkz0ksJbE>

We used this lead as a starting point. From this we were able to find out that he and Dr Araj were working closely.²¹ Dr Darwish succeeded Dr Araj as the Director of Hama Health Directorate and head doctor of cave hospital in Kafr Zita after Dr. Araj passed away.²² We managed to find Dr. Darwish on many photos from Hama Health's Facebook page as displayed below:



²¹ https://www.sams-usa.net/press_release/kafr-zeita-cave-hospital-targeted-five-airstrikes-sams-alarmed-heightened-attacks-healthcare-syria/

²² https://www.sams-usa.net/press_release/press-release-sams-treats-victims-incendiary-weapon-attacks-syria/

<https://www.reuters.com/article/us-mideast-crisis-syria-hospital/even-in-a-bunker-under-a-mountain-syrian-hospital-knocked-out-by-strikes-idUSKCN1231RQ> <http://eaworldview.com/2017/03/regimes-suspected-chlorine-attack-on-hospital-in-hama-province/>

<http://syriadirect.org/news/despite-50-feet-of-stone-'bunker-busters'-wreck-underground-hama-hospital/>



From: <http://www.umayyapress.com/director-free-hama-health-supporting-projects-shortage-medical-staff-challenges-confront-us/?lang=en> interview with Abdullah Darwish



Here Doctor Darwish is speaking at Dr Araj's funeral.²³ This screenshot was taken from a video titled "Dr. Abdullah Al-Darwish, speaking to doctors about the targeting of the Russian fighter for the martyr Dr. Hassan Al-Araj (translated). It was uploaded by a previously mentioned uploader: Mahmoud Hamwi (translated).

²³ <https://www.youtube.com/watch?v=XcZuW0Yjn8>



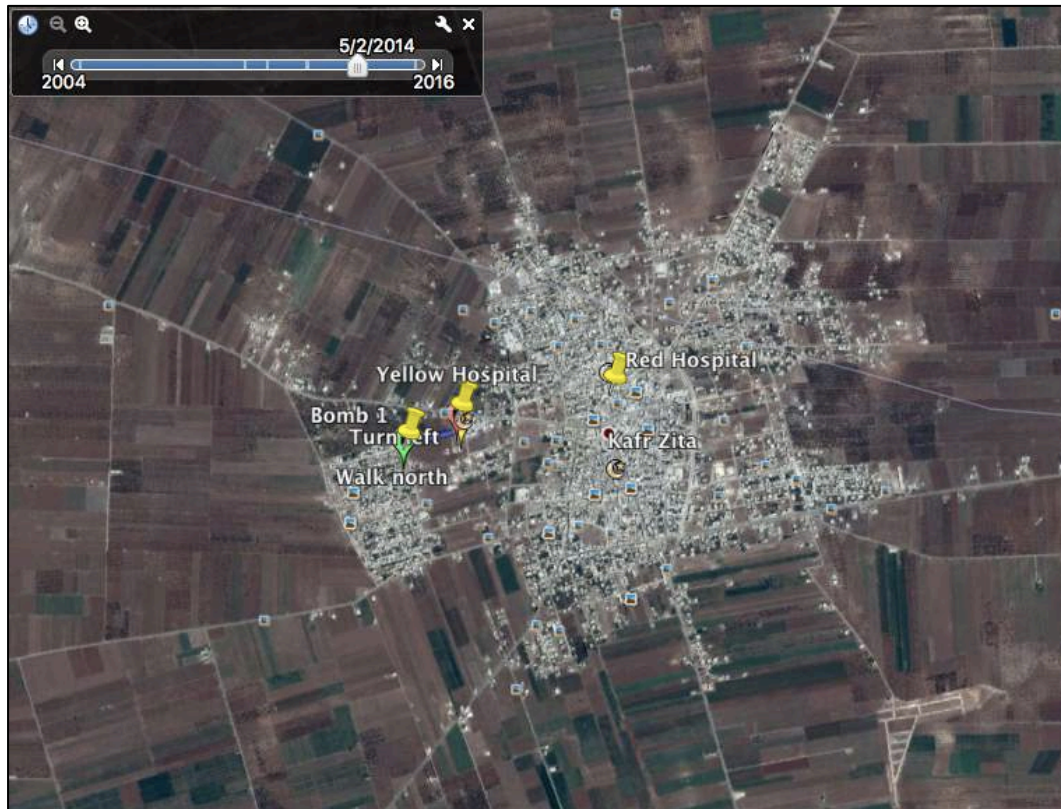
In the video²⁴ uploaded by a Syria network for Human Rights, Dr Darwish is seen wearing quite a distinctive gold band on his right hand and in the video 18 (although it is just for a second) you can see a gold band on this hand as well. This is another link between Darwish and our videos



²⁴ <https://www.youtube.com/watch?v=Za3MFA8xdXA>

Finally, we found reports after the 2014 alleged chemical attack where Dr Darwish gave a following testimony: “From the hospital window I saw the bomb fall. It landed less than 400 metres away and sent a huge yellow cloud into the air.”²⁵ Based on a possible bombing sites²⁶ and location of the hospital in video 18 (Western Specialist Hospital [N35.37411 E36.59379]) we were able to corroborate this statement. We did this by comparing the distance between the hospital where Dr Darwish works and the site of one of the bombings. This was measured by google maps to be 350m which is very close to that estimated by Dr Darwish. This adds further legitimacy to the fact that Dr Darwish was present in Kafr Zita at the time of the alleged attack.

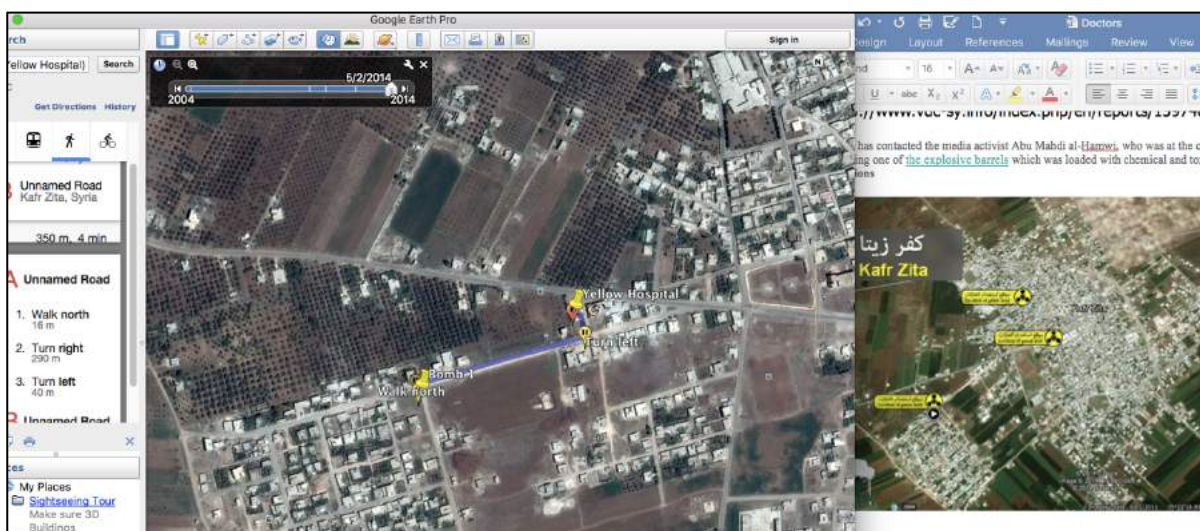
Location of the hospitals:



²⁵ <https://www.telegraph.co.uk/news/worldnews/middleeast/syria/10796150/Syria-chemical-weapons-how-the-Telegraph-found-evidence-of-chlorine-and-ammonia-gas-bombs.html>

²⁶ http://www.vdcy.info/index.php/en/reports/1397487934#.Wnrn_WZ7FAa

Side by side comparison:



MEDICAL RELIEF FOR SYRIA

We identified the medical team appearing in video 10 by using the Reverse Eye Search software. The medical team in the video was 'Medical Relief for Syria' which is a humanitarian not-for-profit organization that offers medical support in Syria.

We concluded that the medical team in the Medical Relief for Syria is providing medical service – diagnosis and simple medical treatments - who suffer from coughing and potentially shortness of breath and redness of eyes caused by a chemical attack in Kafr Zita village.

Conclusion for doctors

In conclusion, we believe that we have been able to identify Doctor B and Doctor D. In particular, there seems to be a connection between all the doctors as they all appear in videos on Youtube together suggesting that they are who they say they are.

Bombs and canisters

Bomb markings suggest use of Chinese origin Chlorine tank



This video²⁷ was uploaded by political activist group 'KafrZita'.²⁸ Both of the bombs depicted have consistent markings, which suggest that the chemical used in this bomb was chlorine (chemical symbol: Cl₂).

The name 'Norinco' also appears on the shell. Research suggests this is a Chinese arms dealing company²⁹. Norinco denies the production of these gas cylinders, and further deny any exportation of chlorine gas, or its cylinders, to Syria..³⁰

However, a level of skepticism must remain, given that we cannot verify that the barrel bombs presented were involved in the chemical attack. They could be remains, or dug up from the scrapyards that seem to be depicted in the second half of the video. This

²⁷ Video 3: 'The Engineering Corps confirms the use of the toxic gas system in the city of Kafr Zeita for the fourth time'# [https://www.youtube.com/watch?v=b2X6VUwe6_8]Original text: هام للإعلام عناصر كتيبة الهندسة تؤكد استعمال النظام الغازات السامة في مدينة كفرزيتا للمرة الرابعة (Google Translate).

²⁸ Verified using Reverse Image Search on logo of 'KafrZita'; discovered they have possess a Facebook Page (<http://www.facebook.com/kafrzita2011>) and a regularly updated YouTube account (<https://www.youtube.com/channel/UC3q4wY8QQeH1fXKGYQEdzCw>).

²⁹ <https://www.telegraph.co.uk/news/worldnews/middleeast/syria/10823180/Syrian-chemical-weapons-use-backed-up-by-second-investigation.html>

³⁰ <https://www.bellingcat.com/news/mena/2016/10/13/examining-chlorine-attack-kafarzita-hama-october-1st-2016/>; <http://apps.militaryperiscope.com/SpecialReports/ShowReport.aspx?report=762>

scrapyard has been documented in the mainstream media as being a storage site for many remains of bombs and other incendiary devices³¹.

Using the terrain shown in the first part of the video (up to 1:15), a potential location has been identified. This location is based on the existence of four trees lined up in front of a white building, and a dirt track running in front of the white building perpendicular to the trees. The coordinates of this position are: 35°21'15.53"N 36°36'53.95"E.

Below: Satellite image of Kafr Zita,. (Google Earth Pro)



³¹ <https://www.telegraph.co.uk/news/worldnews/middleeast/syria/10820440/Found-the-bombs-that-delivered-Syrias-chlorine-gas.html>

Below: Closer satellite image of likely location. (Google Earth Pro)



Below: Screenshot of video at 0:10 showing a plain with four trees behind it and a white structure behind trees, and a slight incline adjacent to trees.



Barrel Bomb remains are consistent with potential use of chlorine

This video³² depicts two individuals dismantling an unexploded chemical bomb. In the video, we see two men unwrapping a blue cord from the nozzle of a chemical tank under torchlight.

The shape and features of the canister in this video are consistent with the notion that the cylindrical casing would house gas, with the metal bar functioning to hold the cylinder nozzle away from the ground upon impact. Therefore, it would have enough room to release the gas contained in the cylinder on impact after the blue cord blasted the nozzle off.

The significant dent in the top of the canister in the video also suggests that it has been subject to a significant force. Such force would not otherwise have been inflicted by a person on the ground on a canister full of gas due to the risk of damaging the canister and causing harm to those around it. This is further evidence to suggest that the canister was actually dropped from a height.

The bomb contained in this video can also be seen in photographs by Italian photojournalist Daniele Raineri.³³ However, despite that the same canister appearing in the set of photos, it is not possible to verify that the canister has 'Cl₂' inscribed on it, as the Raineri photos are from the aforementioned site where many bomb casings are stored.

³² Video 11: 'Hama Kfrzita Engineering Battalion Mohammed Sut Al Haq dismantles the mechanism of the explosion of a barrel containing chlorine gas poison'#
[<https://www.youtube.com/watch?v=bx9ebxU38YA>]

³³ Available here: <https://imgur.com/a/y1joC>. The Telegraph reported on some of Raineri's photography here: <https://www.telegraph.co.uk/news/worldnews/middleeast/syria/10820440/Found-the-bombs-that-delivered-Syrias-chlorine-gas.html>.

Below: Screenshot of video at 0:01 showing bomb shape and distinctively-shaped metal bar.



Below: Screenshot of video at 0:35 showing bomb shape and distinctively-shaped metal bar.



Below: A photograph from the Raineri set of images showing the bomb in the video.



A second short video³⁴ presents different angles of another alleged bomb. It is worth noting that the appearance is similar to the bomb depicted in the previous video. However, it is slightly different in design and only displays the shell, lacking any gas canister. We can see that its anatomy is consistent with that of a barrel bomb. The Brown Moses Blog further indicates that this cylindrical casing would house the chlorine cylinder, with the bar (attached to the top of the cylinder, and appearing to stick out at an angle) functioning to hold the cylinder away from the ground, so it would have enough room to release the gas contained in the cylinder on impact.³⁵

Unfortunately, this video fails to provide further substance given its lack of content. It is however consistent with previous bomb displaying videos, which can help to identify the potential chlorine filled barrel bombs occurring in the attack.

³⁴ Video title: حمأة كفرزيتا الحاوية الضخمة التي كانت تحمل بداخلها خزان الكور السام الملقاة من الطيران المروحي على ا. The description of the video here is the author's own. This translates to: "Remains of barrel dropped during the chemical attack."

³⁵ <http://brown-moses.blogspot.hk/2014/06/evidence-of-possible-failed-chlorine.html>

Below: Infographic from the Brown Moses Blog describing a barrel bomb.



Below: Screenshot of video at 0:08 depicting casing and metal bar.



Below: Screenshot of video at 0:17 depicting casing.



The final video³⁶ depicts some individuals dismantling unexploded chemical bombs. In the video, we can see some craters that were made due to the digging by the individuals of the engineering group, possibly in order to dismantle the bombs that are underground.

All the individuals are wearing masks, likely in order to prevent breathing in potentially toxic gases surrounding the devices. One individual towards the end of the video took off his mask and then started becoming nauseous. This coincides with one of the symptoms of breathing in too much chlorine gas. Although the dismantling of the unexploded bomb might not itself emit toxic gases, the area could still be affected by the chlorine gas. This may explain why the individuals still had to wear masks, being in order to prevent breathing in excessive toxic gas.

The main difficulty with this video, however, is that the bomb itself is not depicted. The large sheet of metal (which can be viewed in the screenshot) merely displays a deformed object, potentially a chair. As a result, we cannot confirm or strongly verify the video, even though its description is more likely than not to be true when viewed with other corroborating evidence in this report.

Below: Screenshot of video at 0:00.



³⁶ Video 12: 'Hamat Kfrzita Mohammed Sout Al Haq Engineering Group dismantles one of the non-explosive drums carrying toxic materials' [https://www.youtube.com/watch?v=PqAz5s_loeY] Original text: حملة كفرزيتا كتيبة محمد صوت الحق للهندسة تقوم بتفكيك احد البراميل الغير متفجرة الحاملة للمواد السامة. (Google Translate)

Concluding Comments on Bombs and Canisters

The bombs depicted in the videos suggest the use of chlorine tanks in the Kafr Zita attacks. The most credible videos suggest the use of barrel bombs, although there is no conclusive evidence as to the time and location of filming.

The lack of objective evidence - that is, evidence beyond the claims of the uploaders and the people in the video - connecting the subject matter of each video and the attacks mean that it is not possible to state there there is a definite link between the bombs depicted and the actual attacks.

As a result, we cannot confirm that these are linked to the alleged attacks.

Bombs falling – landscape synchronous with the attacks

Brief Background of Landscape Videos 15, 19, 20, 27, 28

The Violations Documentation Centre’s (VDC) press statement suggests that multiple chemical attacks occurred in Kafr Zita³⁷ on 11 April 2014; one allegedly occurred at 6pm and two at 11pm³⁸. Our report will be based on the assumption that the videos relate to the 6pm attack because this time has been corroborated by witness accounts taken by Human Rights Watch³⁹.

Video 15, 20 and 28 purportedly show the moment that the barrel bomb, containing toxic chemical gases, descended and exploded in Kafr Zita on 11 April 2014. In comparison, **Video 19** shows the immediate after-effects of the barrel bomb explosion; it depicts people running away from smoke, injured and coughing people, and debris. **Video 27** conveys the damaged infrastructure in the location that the barrel bomb exploded.

General Information

Videos depicting the bomb falling from a distance (Video 15, 20, 28)

	Video 15 https://www.youtube.com/watch?v=i9x_6tCqQL4	Video 20 https://www.youtube.com/watch?v=Qcvui5uUKe4	Video 28 https://www.youtube.com/watch?time_continue=1&v=WtNcG79SV6w
Time of upload ⁴⁰	11 April 2014 20:24	11 April 2014 23:20	13 April 2014 14:10

Videos depicting the after-effects of the bomb on the streets (Video 19, 27)

	Video 19 https://www.youtube.com/watch?time_continue=2&v=L62fDntiGj8	Video 27 https://www.youtube.com/watch?v=IsCXUceEKr0
Time of upload ⁴¹	11 April 2014 22:32	12 April 2014 16:33

³⁷ Alternative spellings used in news reports and social media posts - Kafer Zita, Keferzita, Kfar Zita, Kafr Zayta, Kfar Zeita

³⁸ <http://www.vdc-sy.info/index.php/en/reports/1397487934#.WoVFRZNuaTe>;
<https://photos.state.gov/libraries/netherlands/328666/pdfs/THIRDREPORTOFTHEOPCWFACTFINDINGMISSIONINSYRIA.pdf>

³⁹ <https://www.hrw.org/news/2014/05/13/syria-strong-evidence-government-used-chemicals-weapon>

⁴⁰ Youtube DataViewer

⁴¹ Youtube DataViewer

Verification of the originality of the videos

As far as we are aware, the videos have not been uploaded before they were uploaded on Youtube⁴². All the videos were uploaded after the time of the alleged chemical attack (11 April 2014) and so do not contradict the originality of the content. Even so, there remains a risk that the tools we have available were unable to detect previous uploads.

It should also be noted that since 11 April 2014, multiple news reports have referred to Video 15 as evidence of the chemical attack⁴³.

Analysis of Findings - Video 15, 20 and 28 The visual features of the explosion

Comparison of the colour and shape of smoke in each video



News reports outline that chemical chlorine attacks have a tell-tale yellow smoke.⁴⁴ From around 0:10 of Video 15 and 0:56 of Video 20, yellow smoke is visible, although

⁴² We used reverse image search to check the web for previous uploads of the video

⁴³ News reports

- <http://eaworldview.com/2014/04/syria-chemical-warfare-regime-uses-chlorine-gas-kafrzita-hama-province/comment-page-1/> 13 April 2014
- <https://www.hrw.org/news/2014/05/13/syria-strong-evidence-government-used-chemicals-weapon> 13 May 2014
- <http://www.bbc.com/news/world-middle-east-27900320> 18 June 2014
- <https://littlegreyrabbit.wordpress.com/2014/06/> 24 June 2014




⁴⁴ <https://photos.state.gov/libraries/netherlands/328666/pdfs/THIRDREPORTOFTHEOPCWFACTFINDINGMISSIONINSYRIA.pdf>

<https://www.hrw.org/news/2014/05/13/syria-strong-evidence-government-used-chemicals-weapon>

admittedly, the majority of the smoke is dark grey in colour. The smoke in Video 28 has more of a yellow tinge, providing stronger evidence that the bomb contained chlorine. However, it is also possible that this may be attributed to the lighting in the video.

The shape of the smoke in Video 15 and Video 20 are very similar; they are almost reverse images of each other. It is therefore plausible that they are depicting the same barrel bomb attack. The low quality footage of Video 28 and the fact that the smoke is only visible for two seconds, make it difficult to compare whether it is the same explosion.

Comparison of the weather in the videos with the weather on the day of attack

	<p>On 11 April 2014, the sun set at 7:03pm and there was 30% cloud coverage⁴⁵. We compared this information to the conditions of the sky in the videos to evaluate whether the videos were filmed at the correct date and time of day.</p>
<p>Video 15 (time 0:02)</p>	<p>Although the colour of the sky appears to be different in Video 15, 20 and 28, this can be explained if the videos were shot from different perspectives. Presumably, the sun is behind the person filming Video 15 and 28 so the sky only has a light pink tinge, whereas Video 20 is facing the sunset so the sky is bright orange. These differences may also be explained by the use of different devices to record the videos as this would affect the colour tones and lighting.</p>
	<p>Despite the variations in the appearance of the sky in these videos, it is still possible to conclude that all three videos depict the 6pm attack. Each video portrays weather conditions that are consistent with reported weather data around 6pm in Kafr Zita on 11 April 2014.</p>
<p>Video 20 (time 0:43)</p>	
	
<p>Video 28 (time 0:17)</p>	

⁴⁵ <https://www.wolframalpha.com/input/?i=sunset+time+kafr+zita+2014+april+11>

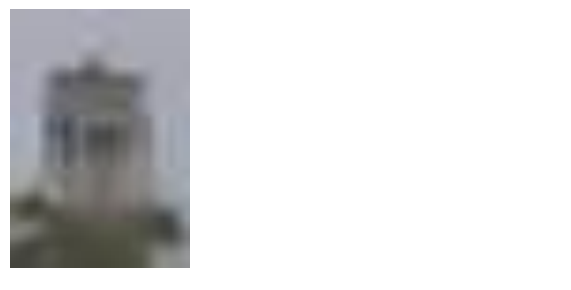
It should be noted that in Video 15 there is a call to prayer which can be heard from 0:08 onwards throughout the video. This would have been at 7:03pm⁴⁶ which is consistent with the approximate time of the attack.

Geolocation of the videos

Video 15

There are aspects of Video 15 which point to a conclusion that the video depicts Kafr Zita.

1. The style of house featured. The house and its surroundings are consistent with the style of plots in Kafr Zita.
2. The tower in the video. In the first 0.01 of the video, there is a tower to the far left of the building. Images and Google Earth shots of Kafr Zita show a similar style of tower exists there. However, it should be noted that similar towers appear in other Syrian towns.

	
<p>Example of one Kafr Zita house (Appendix 3)</p>	<p>Tower featured at 0.01 seconds</p>

Video 20

The landscape is consistent with the landscape and style of buildings in Kafr Zita, but there were no distinctive buildings to verify the exact location.

Video 28

Video 28 did not contain any distinctive features that would enable us to geolocate it.

Cut in Video 20 raising questions as to reliability

Video 20 begins with footage of a helicopter dropping a 'bomb' which subsequently falls through the sky. The credibility of this part of the video is questionable due to a cut in the video (0.39s) between the bomb drop and the explosion. Hence, the footage of the helicopter cannot be verified.

However, corroborating the shape of the smoke with the plume in Video 15 means that footage from 0.39s onwards is more likely to be trustworthy.

⁴⁶ <https://www.islamicfinder.org/world/syria/47235017/kafr-zita-prayer-times/>

Corroborating or Contradicting evidence - Other videos

 <p>Video A</p>	 <p>Video B</p>
<p>https://www.youtube.com/watch?time_continue=67&v=O6Ucs2nfm0</p> <ul style="list-style-type: none"> • Time of upload: 11 April 2014 18:40 	<p>https://www.youtube.com/watch?v=wF73w9EmLtg&feature=youtube_gdata_player</p> <ul style="list-style-type: none"> • Time of upload: 11 April 2014 14:24

Two other videos were uploaded by *Kafrzita* on 11 April 2014, allegedly depicting the same chemical attack in Kafr Zita. However, the time of day and features of the explosion are substantially different. It would not be possible for all the videos to legitimately depict the same chemical attack.

There are aspects of Video 29 and 30 which suggest that they do relate to the relevant attack. In both videos, the speaker repeats 'Kafr Zita' and in Video 30 the speaker mentions the date of the purported attack. Moreover, Video 29 depicts thick yellow smoke which is indicative of the presence of chlorine gas, a chemical that was used in this specific attack.

However, there are several issues which raise doubts as to the validity of both Video 29 and 30.

- According to the Organisation for the Prohibition of Chemical Weapons report, there was only one chemical attack during daylight hours in Kafr Zita on 11 April 2014, and this occurred around sunset at 6pm-7pm⁴⁷. The blue colour of the sky in Video 29 and 30 indicate that the videos were taken in the morning or early afternoon. Therefore, it is more likely that Video 15, 20 and 28, depicting a pinkish or orange sky, were filmed at the relevant time when the barrel bomb was dropped.
- Video 29 was uploaded briskly upon its purported filming (a maximum of 40 minutes after the bomb allegedly fell - if 6pm is believed to be the exact time that it did fall).

⁴⁷ Table 6, Page 24.

<https://photos.state.gov/libraries/netherlands/328666/pdfs/THIRDREPORTOFTHEOPCWFACTFINDINGMISSIONSYRIA.pdf>

- Video 30 was uploaded at 2.24pm which is before the chemical attack actually occurred. This upload time eliminates the possibility of Video 30 depicting the attack in question.

Our tentative conclusion is that Video 29 and 30 portray separate attacks, either in another city or on a different date. This is supported by the fact that *Kafzita* uploads numerous videos and may be presumed to upload unverified videos sent to them by others.

Analysis of Findings - Video 19 and 27

Features of Video 19 (Fri 11 Apr 2014 22:32)

Comparison of the features in the video with the presumed environment on the day of attack



The sky has a tinge of pink which indicates that Video 19 was filmed around sunset. This is consistent with the reports that this attack occurred between 6-7pm.

The video depicts a dusty, hazy scene; many individuals are covered in dust and debris which suggests a nearby explosion has taken place. There is a cut in the video at 1:51 which then goes on to show the debris. This could have been filmed after the initial aid was given to the people explaining the stop and start video. However, there is no certainty that this is the aftermath of the purported chemical attack.


Buildings

Unfortunately, the buildings do not have any distinctive features but appear to be in a similar style to others in Kafr Zita. Without street view it is difficult to pinpoint an exact location.



Features of Video 27 (Sat 12/4/14 4:33pm)

People

	
Unidentified male in camouflage dress.	Unidentified male in dark overalls and headwear bearing gun.

The people featuring in this video seem to vary drastically, especially in terms of dress. It appears to depict a casual scene with bicycles being ridden and people walking around. There appears to be members of some form of militia dressed in black, and an unidentified male walks past bearing a gun. Moreover, there is a male wearing camouflage overalls, which would also suggest that he was part of some military organisation. However, these militia have not been identified due to blurry footage and little reliable political information from Kafr Zita at the time in question.

Buildings

	
Building with brickwork	Building with pillars in front

Although the above buildings appear to have distinctive features, it is difficult to identify where they are without street view on Google Maps or Google Earth. Similar infrastructure exists throughout Kafr Zita and therefore is at least consistent with the style of buildings.

Conclusion for landscape

Based on our findings, Videos 15 and 20 do not contradict the circumstances of the relevant chemical attack. Given the corroborating features of the explosion and the weather conditions, it is possible that they do depict the moment at which the bomb fell on 11 April 2014. Nevertheless, without substantial knowledge on chlorine attacks it is questionable whether the videos could be considered as strong evidence since the smoke had only a slight colouration of yellow; whether these videos would be indicative of chlorine is left undetermined.

In contrast, we were unable to conclude on the time or location of Video 28 due to the low quality and lack of distinctive features.

The footage in Video 19 aligns with what would be expected during the immediate aftermath of a chemical attack. However, the absence of clear identifying features limited our ability to ascertain whether it depicts the specific chemical attack in Kafr Zita. Similarly, although the infrastructure and surrounding environment portrayed in Video 27 is consistent with the characteristics of Kafr Zita and hence suggests that they may have been filmed at the correct location, there is insufficient evidence to make an absolute determination.

Unfortunately, we were unable to conclusively assert or deny the authenticity of all the videos. Despite this fact we have come to the tentative conclusion that Video 15 and 20 have the highest degree of reliability followed by Video 19 and 27 whereas Video 28 is unlikely to prove useful.

Uploader identity

The uploaders of all videos are as follows:

Video no.	Kafzita	Aous Hassan	ShaamNetwork S.N.N	مهددي ابو معاذ (translation: Moaz Abu Mahdi)
1			✓	
2	✓			
3	✓			
4		✓		
5	✓			
6		✓		
7	✓			
8		✓		
9	✓			
10	✓			
11	✓			
12	✓			
13		✓		
14		✓		
15				✓
16	✓			
17				✓
18	✓			
19	✓			
20	✓			
21	✓			
22				✓
23		✓		
24		✓		
25		✓		
26	✓			
27	✓			
28		✓		
29	✓			
30	✓			

Kafrzita

“Kafrzita” has a channel on **Youtube**⁴⁸, active since July 2011⁴⁹. The channel is less active since 2015, indicated by the number of videos uploaded compared to pre-2015. Most videos uploaded through this channel purport to show demonstrations, armed or unarmed attacks, casualties or destructions in Kafr Zita.

The uploader also has a page on **Facebook**⁵⁰ named “مدينة في الثورة السورية” (Google translation: “Syrian revolution in the city of Kafr Zeita”). It was created in 2011, but the first post was written in 2014. The page was only active since 2016, sharing allegedly first-hand news and photos of attacks, aftermaths and casualties.

There is also a **Twitter**⁵¹ account which has already been suspended.

Aous Hassan

This uploader has a **Youtube** channel⁵². He claims to be a media activist in the description of the video (اوس الاعلامى الناشط).

His first video⁵³ on channel was uploaded on 24 Dec 2012⁵⁴. He uploaded some other videos showing medical practitioners explaining chlorine bomb explosion and patients’ condition, and hospitals with patients suffering from suffocation and breathing in oxygen with the help of the oxygen suppliers. All videos were uploaded on 17 July 2014, allegedly related to the 2014 chemical attack, but no prior history of uploading videos.

A search of the name “Aous Hassan” on **Twitter** would provide the result of this profile⁵⁵. His bio says “From the countryside of Hama, the land of championships” and he has set his location to be “Hama / Kafrzita”. This profile joined Twitter in December 2012. This seems to be his personal account where he uploads both his personal life and Syrian civil war issues. He closely monitored the situation in Syria on Twitter. On 12 April 2014, he posted a tweet that says “2014-04-12 Hama-Kfarzita - To date there are some cases of suffocation in field hospitals”. This is likely to refer to the chemical attack on 11 April 2014. From this we can conclude that Aous Hassan is likely to be a media activist located in Kafr Zita and has covered the chemical attack in Kafr Zita in April 2014.

⁴⁸ <https://www.youtube.com/channel/UC3q4wY8QQeH1fXKGYQEzCw>

⁴⁹ Link to their first video: <https://www.youtube.com/watch?v=DWT7Bqz2fhA>

⁵⁰ <https://www.facebook.com/kafrzita2011>

⁵¹ <https://twitter.com/account/suspended>

⁵² <https://www.youtube.com/channel/UCuxP5sU5BpRjVydp79x7Nwg>

⁵³ <https://www.youtube.com/channel/UCuxP5sU5BpRjVydp79x7Nwg>

⁵⁴ <https://www.youtube.com/watch?v=JoUpts11zdM>

⁵⁵ <https://twitter.com/AousHassan>



His **Facebook** page⁵⁶ is also a personal account, where he uploaded about his personal life and friends commented on them. He only occasionally talk about Syrian issues. He lives in Kafer Zita, and quoted (in translation): “Powerful people, they are not always victorious, but they who did not give up when they lose.” His posts on Facebook are largely identical to his Twitter.

مهدي ابو معاذ (Translation: Moaz Abu Mahdi)

For his **Youtube** account⁵⁷, he joined on 3 June 2012, and he posted 3 videos on 11 April 2014 and another one the day after. 3 videos also showed footages of people affected by the chemical attack. He is allegedly a member of Hama Revolution Union and a photographer.

Moaz Abu Mahdi has a **Twitter** account with the name of Abu Mahdi al-Hamwi. We can see from his Twitter account that he joined in June 2012 and his last post was on 24 April 2014. From the description on the Twitter account, it states that he was a media activist in the Syrian revolution⁵⁸. His photos were taken from a more photographic perspective than other activists’ pages, which is consistent with his description on Youtube.

We also used <http://foller.me/hamafree90> and we can see that he posted numerous posts related to the topic of the Syrian regime.

This uploader has a **Facebook** page⁵⁹ which is not viewable.

⁵⁶ <https://www.facebook.com/profile.php?id=100010559987120>

⁵⁷ <https://www.youtube.com/user/hamafree90>

⁵⁸ <https://twitter.com/hamafree90>

⁵⁹ <https://www.facebook.com/hamafree90>

ShaamNetwork S.N.N.

ShaamNetwork has a **Youtube** channel⁶⁰ opened since 26 Feb 2011. The personnel behind are allegedly Syrian activists who started documenting since “the very early stages of the Syrian revolution”. Videos include the typical content such as casualties from human right infringement activities, and most notably, this uploader uploads videos commenting on the revolution









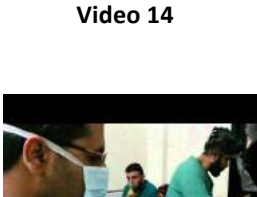

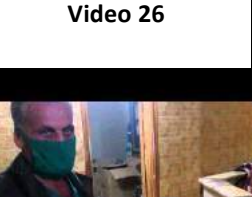

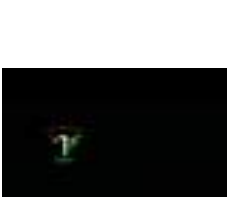

According to its **Facebook** account⁶¹, S.N.N. refers to Shaam News Network. The Facebook account was founded on 28 February 2011. The videos in the Facebook account do not include any videos regarding the Kafr Zita 2014 chemical attack. According to the description, the network was based in Damascus, Syria, and delivers the latest news, videos and reports on the situation in Syria. All news with the hashtag #SNN has been verified and checked for credibility. In the Facebook account, there is also a link linking to its website, however the website has already been taken down. Using Wayback Machine, we have found the 14 March 2014 version of the website, and see that all of the news articles that they were reporting were regarding the Syrian revolution⁶². However, there was no version saved at the time when the Kafr Zita chemical attack actually happened.

⁶⁰ <https://www.youtube.com/user/SHAMSNN/featured>

⁶¹ <https://www.facebook.com/ShaanewsNetwork/>

⁶² <https://web.archive.org/web/20140314001310/http://en.shaam.org:80/>

Timeline for Videos 1-28 (all from 2014)

11 April (alleged date of 1 st attack)	12 April	13 April	16 April (alleged date of 2 nd attack)	18 April
 <p>Video 21</p>	 <p>Video 27</p>	 <p>Video 28</p>	 <p>Video 8</p>	 <p>Video 14</p>
 <p>Video 20</p>	 <p>Video 25</p>		 <p>Video 6</p>	 <p>Video 13</p>
 <p>Video 19</p>	 <p>Video 24</p>	 <p>Video 16</p>	 <p>Video 5</p>	 <p>Video 12</p>

11 April
(alleged date of 1st attack)



Video 18



Video 17

12 April



Video 23



Video 22

13 April

16 April
(alleged date of 2nd attack)



Video 4



Video 3



18 April



Video 11



Video 10

11 April (alleged date of 1 st attack)	12 April	13 April	16 April (alleged date of 2 nd attack)	18 April
 <p data-bbox="207 541 310 569">Video 15</p>			   <p data-bbox="1052 888 1138 915">Video 2</p> <p data-bbox="987 1024 1203 1052">(SAME AS VIDEO 8)</p>  <p data-bbox="1052 1255 1138 1283">Video 1</p>	   <p data-bbox="1352 961 1438 989">Video 9</p>    <p data-bbox="1352 1549 1438 1577">Video 7</p>

Video Information Index

Video	Date on which the video was uploaded	Uploader	Translated title of the video
Video 15	11 April 2014	معاذ ابو مهدي	"Havaam Kafrzita The moment of descent and the explosion of the barrel in the town and the rise of toxic gases 11-4-2014"
Video 17	11 April 2014	معاذ ابو مهدي	"Cases of Poisoning Resulting from the Shelling of Kfar Zeita 11-4-2014 c"
Video 18	11 April 2014	Kafrzita	"Cases of suffocation and poisoning due to inhalation of chlorine gas poison in barrels"
Video 19	11 April 2014	Kafrzita	"The first moments to save people who are poisoned by the chlorine gas present in the"
Video 20	11 April 2014	Kafrzita	"Important moment for the flags of Kfrzita protectors moment of the fall of explosive barrels carrying toxic substances from aeronautics on"
Video 21	11 April 2014	Kafrzita	"Important Hama Kafr Zeita cases of poisonous poisoning and tour in the hospitals that received most of these cases 11 4 2014"
Video 22	12 April 2014	معاذ ابو مهدي	"Hama - Kafr Zeita A child infected by poison gas that was bombed by the town 12-4-2014"
Video 23	12 April 2014	Aous Hassan	"Hama-Kafrzita - Increasing suffocation due to toxic gases thrown at the city"
Video 24	12 April 2014	Aous Hassan	"Hama-Kafrzita - cases of suffocation among the residents of the second day as a result of toxic gases"
Video 26	12 April 2014	Kafrzita	"Hama Kafrzita for the second time bombarded the city with chlorine gas poison and serious injuries among the people 12 4 2014"
Video 27	12 April 2014	Kafrzita	"Hama Kafrazita Place of fall of fragmentation bombs, which emit the smell of gases"
Video 16	13 April 2014	Kafrzita	"Hama Kafrazita The large container that was carrying inside it a tank of coriander dumped from flying on the helicopters"
Video 25	13 April 2014	Aous Hassan	"One of the doctors speaks in English about the bombing of the town of Kfar Zeita with poison gas"
Video 28	13 April 2014	Aous Hassan	"Hama-Kafrzita - The moment of the fall of the container containing the poisonous gases"
Video 1	16 April 2014	ShaamNetwork S.N.N	"Rural villages of Hama Kafr Zeita Choking cases of children with chlorine gas 16 4 2014 Video warning too harsh c 2"
Video 2	16 April 2014	Kafrzita	"2014 4 16 Cases of choking gas chlorine poison"
Video 3	16 April 2014	Kafrzita	"1 The Engineering Corps confirms the use of the toxic gas system in the city of Kafr Zeita for the fourth time"
Video 4	16 April 2014	Aous Hassan	"Hama-Kafrzita - one of the doctors during the treatment of cases of suffocation explains in English"

Video	Date on which the video was uploaded	Uploader	Translated title of the video
Video 5	16 April 2014	Kafzita	"2014 4 16 Hama Kafrazita Night bombardment of the city by the toxic chlorine bacillus"
Video 6	16 April 2014	Aous Hassan	"Hama-Kafzita - Cases of suffocation for the fourth day by the dumping of toxic gases on the city"
Video 8	16 April 2014	Aous Hassan	"Hama-Kafzita - cases of suffocation for the fifth day in the ranks of children and women"
Video 7	18 April 2014	Kafzita	"Important to the media tour inside the hospital and one of the doctors speaks in English what is happening in the city of Kafr Zeita from the bombing of"
Video 9	18 April 2014	Kafzita	"The evacuation of the wounded and the crew of one of the hospitals as a result of the city 's targeting of chlorine poison gas"
Video 10	18 April 2014	Kafzita	"Hazem Kfrzita, the cases of suffocation and poisonous chlorine poisoning as a result of the city's targeting of the dead bile"
Video 11	18 April 2014	Kafzita	"Hama Kfrzita Engineering Battalion Mohammed Sut Al Haq dismantles the mechanism of the explosion of a barrel containing chlorine gas poison"
Video 12	18 April 2014	Kafzita	"Hamat Kfrzita Mohammed Sout Al Haq Engineering Group dismantles one of the non-explosive drums carrying toxic materials"
Video 13	18 April 2014	Aous Hassan	"Hama-Kfar Zeita - One of the doctors talking about cases of suffocation, which exceeded 50 cases"
Video 14	18 April 2014	Aous Hassan	"Hama-Kafzita- Dr. Hassan Al-Aaraj talks about the symptoms that have emerged on the injured"