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安全理事会

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2019 年 3 月 4 日秘书长给安全理事会主席的信

谨随函转递 2019 年 3 月 1 日禁止化学武器组织总干事的信，其中转递了 2018 年 4 月 7 日在阿拉伯叙利亚共和国杜马发生的据称将有毒化学品用作武器事件的实况调查团的报告(见附件)。

请提请安全理事会成员注意本信及其附件为荷。

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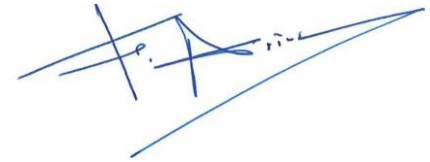
附件

[原件：阿拉伯文、中文、
英文、法文、俄文和西班牙文]

阁下：

我荣幸地向您交送技术秘书处题为“事实调查组关于在阿拉伯叙利亚共和国的杜马发生的将有毒化学品用作武器的指称事件（2018 年 4 月 7 日）的报告”的说明。

顺致最崇高的敬意！



费尔南多·阿里亚斯

附文

[原件：阿拉伯文、中文、
英文、法文、俄文和西班牙文]

技术秘书处的说明

事实调查组关于在阿拉伯叙利亚共和国的杜马发生的将有毒化学品用作武器的指称事件（2018 年 4 月 7 日）的报告

1. 导言

本文为关于禁化武组织派往叙利亚的事实调查组（事实调查组）就在阿拉伯叙利亚共和国杜马发生的将有毒化学品用作武器的指称事件（2018 年 4 月 7 日）开展工作的最终报告[1]。事实调查组的工作是根据下列决定和授权进行的：第 EC-M-48/DEC.1 号决定（2015 年 2 月 4 日）的序言部分第 8 段和执行部分第 5 及第 6 段；禁化武组织执行理事会（下称“执理会”）的其它有关决定；总干事肩负的关于始终如一地捍卫《化学武器公约》的目标和宗旨的授权，而该授权又因联合国安全理事会有关此类调查的第 2118（2013）号和第 2209（2015）号决议而得到了加强。下列文件述及了有关对指称事件进行调查的任务：技术秘书处（下称“技秘处”）第 NV/ODG/214589/18 号普通照会（2018 年 4 月 10 日）；阿拉伯叙利亚共和国第 38 号普通照会（2018 年 4 月 10 日）。

2. 概要

2.1 2018 年 4 月 10 日，技秘处和阿拉伯叙利亚共和国常驻禁化武组织代表团就下述事宜互换了普通照会：向大马士革紧急派遣事实调查组，以收集有关于 2018 年 4 月 7 日在杜马发生的将有毒化学品用作武器的指称事件的事实。遂于 2018 年 4 月 12 日派出了一个先遣组，并在次日派出了一个后续小组。全部人员于 4 月 15 日抵达了大马士革。4 月 16 日，向另外一个地点部署了第二个小组，以便就该指称事件开展进一步的活动。

2.2 由于其遇到的严重的安全风险，其中包括：没有爆炸的弹药、炸药和据信仍活跃于杜马的潜伏但有组织的小股人员，事实调查组在抵达后的近一个星期内无法进入杜马。4 月 18 日，在对两个相关的地点进行侦察访问期间，安全警卫遭遇了一伙敌对分子，并遭到了小型武器的射击，而且有人还向他们扔了一枚后来炸开了的手榴弹。据报道，这起事件导致了两人死亡和 1 人受伤[2]。

2.3 4 月 21 日，在解决了安全问题之后，并且在当时觉得可以安全进入杜马的情况下，事实调查组首次访问了相关的指称地点之一。在接下来的 10 天里，事实调查组又 4 次前往其它相关的地点，其中包括实地查访了阿拉伯叙利亚共和国的主管部门怀疑曾被用于生产

[1] 技秘处先前已发布了初步报告（S/1645/2018，2018 年 7 月 6 日）。

[2] 第 6 节详述了能够落实的安全措施和能够进行入的地点。

化学武器的一个仓库和一个设施。没有再发生其它安全事件，而且在现场查访期间，事实调查组在任何时候都与当地的人群和媒体人员隔离开来，从而使其能够不受干扰地开展活动。在其中一处地点，事实调查组队无法完全进入那些相关的公寓[3]。

2.4 事实调查组就在杜马发生的指称事件进行的活动包括：(a)现场查访；(b)化学侦检；(c)采集和接收环境样品；(d)采集和接收生物样品；及(e)对证人和伤员进行面询，包括在叙利亚境内进行者。这些活动都是严格按照禁化武组织的相关程序开展的。

2.5 在阿拉伯叙利亚共和国的代表在场的情况下，事实调查组在叙利亚境内采集了所有环境样品。事实调查组向叙利亚国家主管部门的代表移交了上述样品的分样。

2.6 在发生了有毒化学品指称使用事件的现场（2 号和 4 号地点）采集了若干环境样品，并检测到了并不天然存在于环境之中的氯化有机衍生物。基于这些氯化有机衍生物的水平，事实调查组得出如下结论：在两处地点采集到的样品所含的物质曾与一种或多种含有活性氯的化学品接触过[4]。

2.7 在优先分析的环境样品中，或在指称事件所致的伤员的血浆样品里，均未检测到有机磷神经毒剂、其降解产物或合成杂质。

2.8 除了其存在得到了令人满意的解释的附表 3.B.17 号化学品三乙醇胺和一种称为“AmgardV19”的附表 2.B.04 类化学品[5]以外，在分析过的环境样品中，没有检测到《化学武器公约》的《关于化学品的附件》所列的其它附表化学品或其降解产物。

2.9 根据对在现场查访涉嫌生产了化学武器的仓库和设施时收集的信息进行分析的结果，没有迹象表明这些设施的任何一个参与过制造化学武器。收集到的资料显示：这两处地点的活动主要与生产炸药有关。

2.10 据证人向事实调查组报告，与指称化学事件有关的死难者为 43 人，其中大部分人的遗照都出现在散落于在一幢多层公寓楼的地板上和同一栋楼前面的地上的录像和照片中。另外，据几个证人所报，他们在下列地点也见到了有人死去：这栋楼的地下室内、这栋楼的多个楼层里、街道上以及同一个小区内的若干幢楼的地下室中。一个联合国机构还报告了因接触了一种有毒化学品而死亡的案件[6]。然而，事实调查组并没有机会直接检查尸体，因为事发后的两周内事实调查组无法进入杜马（见第 2.2 段），而在这段时间里尸体已被埋葬。

2.11 医务人员、证人和伤员所报的许多征象和症状（以及证人提供的多个视频所显示者）、其迅速的发作以及据报受到了影响的人数之多均显示：这是中了一种吸入性刺激物或一

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[3] 第 6.9 和第 8.22 段载有对原因的说明。

[4] 活性氯（RC）是能够在特定环境中发生反应和相互转化的各种氯物质的聚合，其包括：游离氯（氯离子）、次氯酸和次氯酸根离子。第 8.6 至 8.15 段对其有进一步的详述。

[5] 第 8.7 段。

[6] 联合国人权理事会的报告，第 38 届会议，2018 年 6 月 20 日（A/HRC/38/CRP.3）；联合国人权理事会向大会提交的报告，第 39 届会议，2018 年 9 月 10 日至 28 日（A/HRC/39/65）。

种有毒化学品的毒。然而，基于审查过的资料，且鉴于缺乏来自尸体或任何尸检记录的生物医学样品，目前无法将征象和症状的原因与某种特定化学品精确地联系起来。

2.12 事实调查组在两个不同的地点（2 号和 4 号地点）[7]观察到了两个专用于盛装加压气体的黄色工业气罐，其尺寸约为 1.4 x 0.4 米。

2.13 事实调查组分析了手头上掌握的材料，并咨询了机械工程、弹道学和冶金学方面的独立专家。通过利用专用电脑建模技术，那些专家对在 2 号和 4 号地点发现的气罐的轨迹及其损坏情况进行了合格及胜任的评估。

2.14 分析结果表明在 2 号地点，钢筋混凝土平台的结构损坏是由一种具有几何对称形状的冲击物体和足以造成看得见的损坏的动能引起的。分析结果还显示：在屋顶露台上发现的气罐、缺口、阳台、周围的各个房间、下面的各个房间和上面的结构中看得到的损坏情况均与在那个地方发现的那个在露台上的气罐所新出现的看得见的缺口是一致的。

2.15 在 4 号地点，研究结果表明：通过调制所产生的缺口的形状与事实调查组观察到的形状和损坏情况相匹配。研究进一步显示：在穿透天花板并以较低的速度撞到了地板之后，气罐继续以改变了的轨迹滚落，直至到达其被发现的位置。

2.16 根据事实调查组从气罐采得的样品的分析结果、其在两个地点的接近程度以及第 2.6 段所述的样品的分析结果，气罐可能就是那些内含活性氯的化学品的来源[8]。

2.17 关于在阿拉伯叙利亚共和国的杜马发生的将有毒化学品用作武器的指称事件（2018 年 4 月 7 日），事实调查组对收集到的全部资料进行了评估和分析，这些资料包括：证人的证词、环境和生物医学样品的分析结果、专家提供的毒理学和弹道学分析结果、证人提供的补充数码资料。上述评估和分析结果提供了有关确实发生了将一种有毒化学品用作武器的事件的合理依据。这种有毒化学品含有活性氯。有毒化学品可能是分子氯。

3. 背景

3.1 2018 年 4 月 7 日，在社交媒体和平面媒体上开始传播关于如下内容的报道：同日 16 时（当地时间），在阿拉伯叙利亚共和国大马士革的古塔东区发生了一起指称化学袭击，并在同日晚约 19 时 30 分又发生了一起袭击。据报伤亡水平为 40 至 70 人死亡（其中包括大批儿童），数百人受到了化学品相关的损伤。关于使用了何种有毒化学品的报道五花八门，其中一些称是氯气，另一些称是沙林，或是两种化学品的混合物。网络上贴出的图片和视频显示了在一栋居民楼中的伤员，而且上面还有据报因化学品中毒而在一家医院接受治疗的受害者。在网上还有关于据称在两起袭击中使用过的气罐的图片和视频。

3.2 此后该事件受到了大范围的谴责，其中武装反对团伙将指称事件的责任归咎于阿拉伯叙利亚共和国军队。后者否认发动了袭击，并指责伊斯兰军的媒体编造了该事件，以陷害阿拉伯叙利亚的军队。

[7] 附件 6 和附件 7 载有对气罐的详述.

[8] 第 8.9 至 8.18 段。

3.3 2018 年 4 月 10 日，技秘处向阿拉伯叙利亚共和国发出了第 NV/ODG/214589/18 号普通照会，其中表示了拟向大马士革部署一支小组。阿拉伯叙利亚共和国常驻禁化武组织代表团正好发出了第 38 号普通照会，其中请求紧急派出一支事实调查组访问杜马镇，以便核实有关于 2018 年 4 月 7 日发生的有毒化学品的指称使用的信息。同日，俄罗斯联邦常驻禁化武组织代表向总干事提交了一封信函，他在其中欢迎阿拉伯叙利亚共和国的请求，并承诺为事实调查组的工作提供便利。

3.4 于 2018 年 4 月 12 日调动并部署了先遣组，于次日派出了后续小组。事实调查组于 2018 年 4 月 14 日进入了阿拉伯叙利亚共和国。

4. 事实调查任务的目标和范围

4.1 如第 FFM/050/18 号任务授权所规定的那样，事实调查组的目标如下：按照与阿拉伯叙利亚共和国政府的磋商情况，并根据事实调查组任务授权第 12 和 13 段，针对媒体报道的有关于 2018 年 4 月 7 日在阿拉伯叙利亚共和国东古塔地区的杜马发生的将有毒化学品用作武器的指称使用事件，收集有关事实并在完成事实调查组活动时向总干事作出汇报。操作性指示如下：

- 审查并分析与所报的将有毒化学品用作武器的指称事件有关的所有现有资料；
- 通过如下人员收集证词：受到将有毒化学品用作武器损害的人员，其中包括那些接受过治疗的人员；有毒化学品的指称使用的见证人；对可能受有毒化学品的指称使用损害并受到治疗的人员进行过治疗或与其有过接触的医疗人员；
- 如可能并认为必要时，进行医疗检查（其中包括尸检）并从那些据称受损害的人员身上收集生物医学样品；
- 如可能，对认为与调查有关的医院和其它地点进行查访；
- 审查并收集（如可能）医院记录的副本，其中包括患者登记表、治疗记录和任何其它认为必要的相关记录；
- 审查并收集（如可能）任何其它认为必要的文件资料和记录的副本；
- 采集照片和视频记录，审查并收集（如可能）视频和电话记录的副本；
- 如可能并认为必要时，对所调查的据称在事件期间使用过的弹药残余物、装置、气罐和容器等进行实地检查并收集样品；
- 如可能并认为必要时，在事件的指称地点或从周边区域收集环境样品；
- 对于收集到的样品，安排将其运往现场外以进行分析；并

- 将按照技秘处关于在紧急行动期间开展调查的有关程序（如适用）进行有关活动。

4.2 4 月 20 日，阿拉伯叙利亚共和国向技秘处提交了一份普通照会，其中正式请求总干事指示事实调查组在其任务的框架范围内进行查访，以便前往疑似储存了与化学武器生产有关的化学品的 1 个仓库，以收集与于 2018 年 4 月 7 日发生的指称事件有关的事实。

4.3 总干事签发了 3 份进一步的任务授权（FFM/049/18、FFM/051/18 和 FFM/057/18），其中对事实调查组了做出了如下指示：针对 2018 年 4 月 7 日在阿拉伯叙利亚共和国发生的将有毒化学品用作武器的指称事件，进一步开展与调查有关的活动。

5. 部署前的活动和时间节点

5.1 在媒体报导了于 4 月 7 日发生的指称使用事件之后，技术秘书处的信息分队立即告知了事实调查组并启动了对公开来源信息的搜索，以评估指称事件的可信度。主要来源包括了新闻媒体、博客和各类非政府组织的网站（见附件 2）。信息分队的最后评估意见是该指称事件的可信度较高。因此，依据该信息，总干事启动了现场调查。

5.2 于 2018 年 4 月 9 日调动了由 9 名视察员和两名译员组成的事实调查组，并立即启动了部署前活动。进行了有关准备工作，从而于 4 月 12 日部署了由 3 名视察员和 1 名译员组成的先遣小组，并于次日又部署了一支后续小组。信息分队向该小组简要介绍了截至当时收集到的所有相关信息。附件 3 载有本次视察任务所有重要事件的具体时间表。

6. 安保及进入指称事件现场

6.1 鉴于近来的军事行动及事实调查组部署之时杜马的动荡局势，对安保和安全的考量至关重要。投入了大量时间和精力进行讨论和规划，以减缓事实调查组和其它向杜马进行的部署所面临的内在的安保风险。据阿拉伯叙利亚共和国和俄罗斯宪兵部队的代表介绍，调查组面临着若干无法接受的风险，其中包括仍需清理的地雷和爆炸物、爆炸风险及被怀疑仍活跃在杜马地区的潜伏小组。联合国安全和安保部的代表介绍了该评估。此外，对那些已接受建议离开杜马的居民，正在对其进行撤离行动，他们走的是调查组将不得不踏上的同一条路。

6.2 最初，事实调查组表示按照一般规则，由负责接待的《化学武器公约》缔约国承担该任务的安保。在大马士革进行的初步会晤期间，叙利亚和俄罗斯的代表告事实调查组如下情况：只有让俄罗斯宪兵部队联合提供安保，阿拉伯叙利亚共和国才能确保事实调查组的安全。

6.3 在咨询了禁化武组织总部之后，技秘处、阿拉伯叙利亚共和国、俄罗斯宪兵部队、联合国项目事务厅及联合国安全和安保部的代表商定如下：可由俄罗斯宪兵部队提供在杜马地区的安保。于 2018 年 4 月 16 日对此予以了正式确认。因此，商定如下：从视察员居住的酒店到进入杜马地区前的位于瓦法丁的最后的检查站，阿拉伯叙利亚共和国将提供安保。在该检查站之后，阿拉伯叙利亚共和国将把安保职责交给俄罗斯宪兵部队。还商

定阿拉伯叙利亚共和国的代表将在现场活动期间陪同事实调查组，俄方人员仅限于提供安保。

6.4 联合国安全和安保部于 2018 年 4 月 18 日进行了侦查探访，以评估计划于次日查访的头两个地点。在此期间，安保小分队遭遇了一伙敌对群体，并受到了小型武器的袭击，还有 1 枚手榴弹在第 2 号地点（有关地点见下文第 8 节的图 2）爆炸。据报事件导致了两人死亡，1 名俄军士兵受伤。

6.5 事件发生后，事实调查组的原定部署被推迟，直至能够重新对安全形势进行评估。联合国安全和安保部的代表提议采取额外的措施以减缓居高不下的安保风险，这包括：

(a) 对视察组将查访的区域进行清理；

(b) 在部署前的 24 小时内确保该区域的安全；

(c) 增派护送人员的数量，同时在调查组抵达有关现场之前，派出联合国安全和安保部及俄罗斯宪兵部队的先遣队对该区域进行监控；

(d) 动用警力对人群进行管控；

(e) 鉴于可能有自杀式炸弹贴靠到视察组的附近，最大程度减少有关区域附近的平民往来；并

(f) 在相关现场周围的房顶部署狙击手。

6.6 找到了进入有关地点的新路径，因此制定了对最初的事实调查组部署计划的修订。这包括了缩减部署到实地的事实调查组的规模，以实现更好的安保控制，并限制每次部署期间将访问的现场数量。所有各方一致认为对事实调查组的各方面行动进行媒体报道和公开宣布，使得调查组面临的安保风险更加复杂，因此努力减缓这一风险要素。

6.7 一俟完成了安保重评估并实施了拟议的额外的减缓措施，事实调查组即按照最新的优先重点和拟议的时间表部署到了调查现场。

6.8 对于该任务的余下部分，事实调查组在部署中没有遭遇任何安保事件。一俟阿拉伯叙利亚共和国、俄罗斯宪兵部队及联合国安全和安保部能够确保充足的安保条件，即准许了进入视察组确认的地点。在现场查访期间，俄罗斯宪兵部队确保了调查组与当地民众和媒体人员完全隔离，从而使其能够不受干扰地开展活动。

6.9 事实调查组两次查访了第 4 号地点（见图 2）。在对第 2 号地点进行查访期间，阿拉伯叙利亚共和国的代表没有让事实调查组进入其请求的该建筑物内的部分相关公寓（当时被关闭）。阿拉伯叙利亚共和国的代表声称他们没有得到授权以强行进入锁着的公寓。

7. 调查组的活动

对方法的考虑

7.1 事实调查组采用了与此前的事实调查组报告所概述的相同的一般性方法，调查组在整个部署期间恪守了现有的最严格的规程[9]。事实调查组的 3 个分组在不同的时间间隔被部署到了两个地点，以便开展与各自任务相关的活动。

7.2 事实调查组在杜马的指称事件发生地点进行了环境取样，且在整个行动期间根据禁化武组织标准操作流程、工作须知和指导原则使用了其自己的设备并确保了监管链的实行。在阿拉伯叙利亚共和国代表在场的情况下，对样品进行了采集、密封并用照片和视频录像进行了记录，并在阿拉伯叙利亚共和国的一名代表在场的情况下，在禁化武组织实验室打开了包装，以便进行分样并重新分配给禁化武组织指定实验室。

7.3 事实调查组通过有关证人收到了更多的环境和生物样品（见附件 5）。从收到的那一刻起，如上文所述处理了这些样品。在对自称于 2018 年 4 月 7 日在杜马中了有毒化学品的毒的证人抽取血液样品时，事实调查组还进行了直接监督。

7.4 面询是由熟练掌握面询技巧的视察员按照禁化武组织工作须知中规定的严格程序来进行的。在开始面询前将流程告知了被面询人，并强调了如下事实：在被面询人同意的情况下，面询将进行音频和/或视频录像。在确认被面询人已理解了流程后，请其签署一份知情同意表。面询过程采取自由回忆的方式，用后续问题来获取有潜在证据价值的信息，并对证词的一些方面进行澄清。

7.5 使用了包括但不限于视频和照片的公开来源的材料，这主要是为了对活动进行规划，也被用于与事实调查组在调查过程中直接收集到的材料进行比较之目的。尽管如此，调查的结论并不依赖于从公开来源收集到的数据和资料。

有关活动

7.6 根据禁化武组织的指导原则、标准操作程序和工作须知开展了事实调查组的单项活动（见附件 1）。

7.7 这些活动包括了：

(a) 在与指称事件相关的地点（即第 1、2 和 4 号地点）以及另外两个的地点；阿拉伯叙利亚共和国主管部门怀疑在其中一处生产化学武器，并怀疑另一处为仓库；

[9] 事实调查组做出结论的依据如下：有可靠的且与其它资料相一致的一组证据（见附件 13[6、8、13]），这些证据倾向于表明曾发生过某事件或活动，以此为基础来确定是否有合理的理由令人相信曾有人使用过化学武器。注：方括号中的数字为本报告附件 13 中的文献查考号。

(b) 接收和记录由据称是受害者或证人带来的生物医学和环境样品，并监督对血样的直接采集；

(c) 对在第 2 和 4 号地点找到的气罐以及周围的物理环境进行拍照并收集数据；

(d) 在被阿拉伯叙利亚共和国主管部门怀疑用于生产化学武器的 1 个仓库和 1 个设施内拍照并收集数据；

(e) 对在杜马发生的指称化学袭击事件中的医务人员、伤员、紧急救援人员和证人进行面询；

(f) 审查公开来源的材料（见上文 7.5 段关于公开来源的材料的使用）；

(g) 对两个气罐贴上标签；及

(h) 与毒理学、弹道学、结构工程和冶金学领域的独立专家进行磋商。

7.8 技秘处考虑了如下可能性：从群葬墓中挖掘尸体以便采集生物医学样品；对据报在 2018 年 4 月 7 日的指称袭击事件中身中有毒化学品之毒的尸体进行检查。通过第 NV/ODG/214827/18 号普通照会告知了阿拉伯叙利亚共和国拟采取以上做法，同时技秘处已为这一可能的情况做了初步准备。阿拉伯叙利亚共和国通过第 45 号普通照会（2018 年 5 月 4 日）中作了回复，并列举了为开展开墓挖掘将需要满足的条件。考虑到自指称事件发生以来已过了一段时间，最终没有进一步探讨这种可能性。

8. 事实性结论

指称现场

8.1 事实调查组在部署期间查访过的地点包括了第 1 号地点、第 2 号地点和第 4 号地点，分别对应受害者据称在其中接受过化学品中毒治疗的医院、在屋顶阳台上有气罐的居民楼和在卧室中发现了气罐的公寓。第 3 号地点最初被认为是相关地点，但基于后来的资料而被放弃。查访了其它两个地点 — 1 个设施和 1 个仓库，以便收集资料来评估与制造化学武器有关的任何可能的关联性。以下关于杜马的卫星图像显示了第 1 至 4 号地点。

图 1：杜马在叙利亚的位置

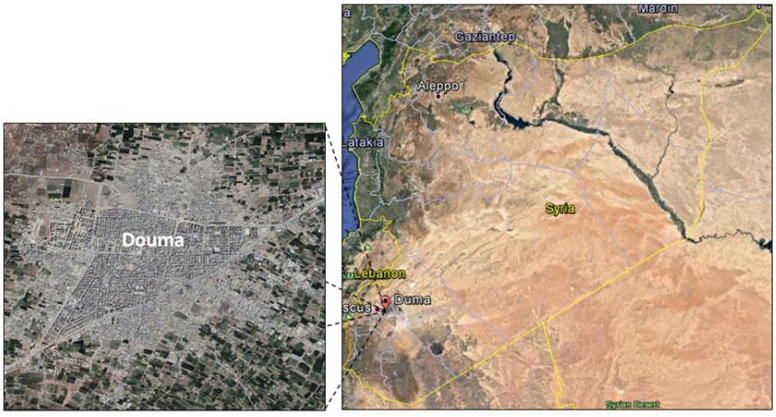


图 2：事实调查组在杜马查访的有关地点（1 至 4 号）

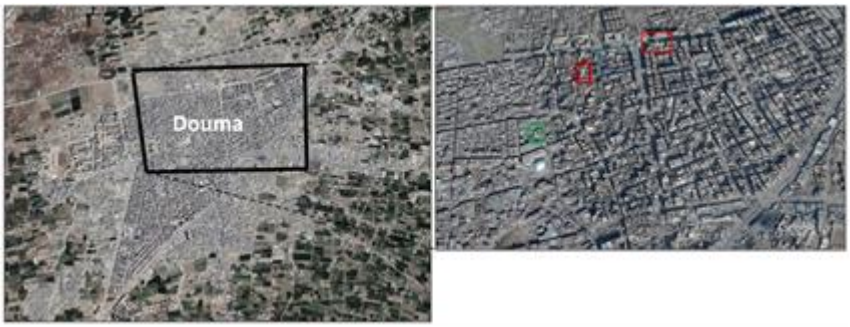


图 3：事实调查组在杜马查访的各个地点

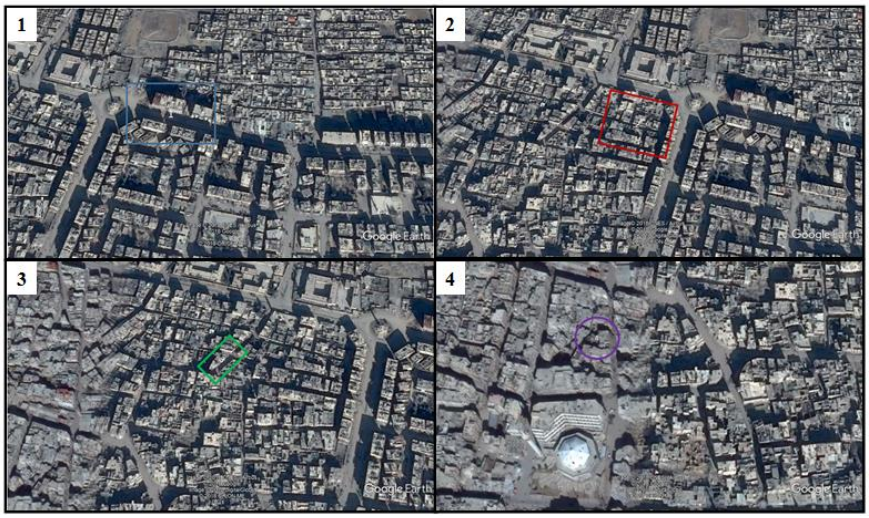
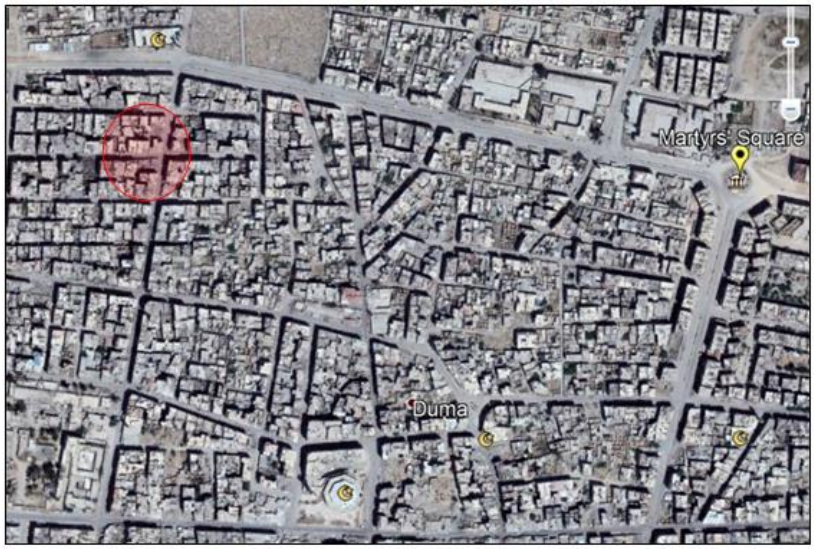


图 4：在第 2 号地点附近的其它相关区域

图 4 显示了第 2 号地点周围的区域、前往第 1 点（第 1 号地点）的通车隧道和证人提到的区域。白色阴影区是证人报称闻到过强烈气味的大致地点。红色阴影区是证人报称遭到了化学品袭击的建筑物/房屋/场所。

图 5：其它相关区域



红色阴影区是报称于 2018 年 4 月 7 日 16 时左右发生了指称氯气袭击的地点。

8.2 于 4 月 7 日在杜马发生指称事件前后，公开来源（darksky.net）记录的气象条件如下文表 1 所示：

表 1：2018 年 4 月 7 日杜马的气象条件

时间	气温	风向	风速	降雨	云团	湿度
19:00	26℃	东南风	11千米/小时	0.0 毫米	多云	27％

取样

8.3 事实调查组对每一起指称事件的现场都制定了详细的取样计划。这些计划依赖强有力的科学原理，而且在可能的条件下得到了同行评审的科学文献或已被证明的经验的支持，以便确定对任务最具有潜在证明价值的样品类型和地点。附件 4 载有关于取样过程的科学依据的详情。

8.4 调查组尽可能地执行了原定的取样计划，在必要条件下根据有关情况做出了相应调整。

8.5 鉴于查访地点的数量以及获得的潜在证据材料的多样性，共采集了 129 份样品并将其运至了禁化武组织实验室。为了加快对那些被认为最具证明价值或最容易降解的环境样品的分析，选取了 31 份样品供禁化武组织指定实验室进行首轮分析。还有一批 13 份样品被送走，用于日后进行第二轮分析。分析结论载列于附件 5。

对分析结论的讨论

8.6 事实调查组于 2018 年 5 月 22 日和 2019 年 2 月 8 日收到了对提交至指定实验室的优先样品的分析结论。无论是环境样品还是取自指称伤员的血浆样品，均未检测到有机磷神经剂或其降解产物。在来自第 2 和第 4 号地点的样品中发现了若干种氯化有机化学品以及炸药残余物。这些结论载于附件 5。

8.7 没有侦检到附表化学品或附表化学品的降解产物，除了如下的物质：(a)在属于指称受害者的不同衣物样品以及医院（第 1 号地点）的地下过道的泥浆中检测到了痕量水平的附表 3.B.17 化学品三乙醇胺；及(b)在一名指称受害者的衣物上侦检到了痕量水平的附表 2.B.04 化学品（被称为“AmgardV19”）。由于这两种化学品常用于织物的表面活性剂和阻燃剂配方，因此可以轻易地解释清楚其存在和浓度[10]的原因。

8.8 在各类样品中侦检到的其它化合物包括：2,4,6-三硝基甲苯（TNT）；乙酸的氯化衍生物；各种单氯苯酚、双氯苯酚和三氯苯酚及水合氯醛。所有树木样品均显示有不同含量的冰片基氯或 α-蒎烯（或二者兼有）[11]。

8.9 虽然氯在环境中快速降解，但众所周知，氯气本身或其降解产物在环境中与各类其它化学品发生反应，其中这类化学品包括有机物质和金属。这类产物非常稳定，因此能够提

[10] 附件 5，表 A5.1，条目 31、32 和 33。

[11] 附件 5，表 A5.1，条目 7、12、14、22 和 30。

供有关氯中毒的长寿命化学特征。有活性氯物质存在的主要依据是在树木样品中检测到了冰片基氯和/或三氯苯酚。冰片基氯是 α-蒎烯（主要在针叶树中常见的萜烯类化合物[1]）的氯化衍生物，其化学属性稳定。当遇上氯时，α-蒎烯可以转化为天然环境中不存在的冰片基氯这种化学品。虽然分子氯（氯气）与 α-蒎烯不直接发生反应，但已知分子氯的降解产物氯化氢可与其发生反应，从而生成冰片基氯[1][2]。在指称地点采集到的两份树木样品均显示有冰片基氯。

8.10 仅根据上述结果，尚不能毫无疑问地宣称树木接触过氯气，只能说接触过氯化氢或盐酸。从理论上说，其它化学品诸如光气或氯化氰也能通过降解生成氯化氢或盐酸，而且也能通过与树木中的 α-蒎烯反应生成冰片基氯。

8.11 在对所有树木样品进行分析时，还侦检到了三氯苯酚（苯酚的类似物）。与冰片基氯一样，这种化合物在天然树木中不存在。但在 1 个指定实验室进行了有关实验，结果发现通过将树木样品与氯气接触是可以生成氯化苯酚的。

8.12 酚能够借以进行环氯化的方式之一就是与次氯酸（分子氯的歧化产物）进行被称为亲电芳香取代的过程[3]。另一方面，盐酸作为光气和氯化氰的降解产物不会使酚氯化，因此，不论是光气还是氯化氰都无法生成样品中发现的三氯苯酚。这一观察倾向于认定如下情况：含有活性氯的有毒化学品既不是光气，也不是氯化氰，至少不是唯一存在的化学品。

8.13 应指出的是酚也可以被次氯酸钠（氯基漂白粉的主要组分[4][5]）氯化，从而生成三氯苯酚。

8.14 除了在树木样品中发现了冰片基氯和三氯苯酚之外，在指称事件发生地点采集的土壤、混凝土、树木和织物样品上都找到了其它各类氯化化合物，诸如双氯苯酚、三氯乙酸及水合氯醛。这些都是在天然环境中一般不存在的化合物，可通过与氯的活性物质（如分子氯、次氯酸、次氯酸钠或氯基漂白剂）发生反应而生成[5]。有关研究已表明当土壤或污水中的腐殖质与活性氯溶液混合时，除其它外，会形成各类氯化乙酸、氯乙醛和氯化酚[5]。在分析的样品中检测到了诸多这类化合物。

8.15 8.9 至 8.14 段讨论的结果表明了如下情况：有一种含有活性氯原子的物质或有关物质（诸如分子氯、次氯酸或次氯酸钠）的组合与在两起指称事件的地点（第 2 和第 4 号地点）采集到的诸多样品发生过反应。

8.16 在第 4 号地点，调查组观察到除了气罐本身、阀体和托架之外，在公寓内的金属物上有明显可见的腐蚀痕迹，例如在吊灯、床头灯、管线和抽屉把手上。所有金属物都有腐蚀，这清楚地表明了其接触过腐蚀性物质。在第 2 号地点也观察到了一些腐蚀的物件。尽管如此，事实调查组无法确定腐蚀是否与腐蚀性物质有关，或是与自然因素有关。在两个地点都没有漂白剂的明显痕迹或与漂白剂接触后出现的褪色现象。

8.17 根据样品分析和现场观察，有合理的依据表明两处地点的环境都接触过分子氯或次氯酸。由于已知次氯酸是分子氯与水接触形成的歧化产物，有合理的理由表明该环境中从一开始就有分子氯。

8.18 对于事实调查组从气罐中提取的样品，以及有关对于两处地点中气罐与接触过活性氯的其它取样点的临近关系，分析结论（见附件 5）均表明除了有氯化有机化合物之外，还有较高水平的氯[12]。

8.19 对于在通往第 1 点（第 1 号地点）的地下通车过道中采集的混凝土尘埃样品，分析表明了有如下物质：除了 TNT、三氯苯酚和四氯苯酚之外、3 种杀虫剂（氯菊酯、马拉硫磷和溴氰菊酯）、1 种除草剂（利谷隆）和 1 种 TNT 前体（二硝基甲苯胺）。侦检到的杀虫剂和除草剂的剂量对人无毒。检测到的杀虫剂和除草剂为农业用和家用类型。在发现了死者尸体的第 2 号地点没有这些物质，这排除了死亡与指称事件有关联的可能性。

物理数据收集

8.20 除了采样以外，事实调查组还收集了大量资料，其中包括：照片、视频录像、侦检计量、气罐和附着的金属结构的尺寸以及气罐所在的环境的空间排列图象。

第 2 号地点（“屋顶上的气罐”）

8.21 调查组于 2018 年 4 月 21 日部署至了第 2 号地点（北纬 33°34’ 25.6”，东经 36° 24’ 17.3”）。附件 6 载有关于结果和分析的进一步详情。

8.22 在查访第 2 号地点期间，阿拉伯叙利亚共和国的代表没有让事实调查组进入其请求进行的该建筑物内的部分公寓（当时被关闭）内。阿拉伯叙利亚共和国的代表声称他们没有得到授权，故不能强行进入锁着的公寓。就这一情况在当晚的部署后报告中向禁化武组织总部作了报告。

8.23 事实调查组全面进入了同一栋建筑内的其它有关区域，即：据称有气罐坠落其中的阳台、阳台正下方的公寓以及同一公寓单元的地下室。

讨论 1：对调查组观察到的第 2 号地点的描述

8.24 第 2 号地点的公寓楼有 5 层，即地下室、第一、第二、第三和第四层。从位于第一层的正门到达每一层都需要经过逆时针盘旋上升的中央楼梯，且每层都有两节楼梯和楼梯平台。在每层的第一节楼梯平台上（顶层除外），右侧有一间公寓，左侧有另一间公寓。顶层只有 1 间大型公寓。楼梯的每一层都有一个很高的窗户（玻璃已碎）对着街道。

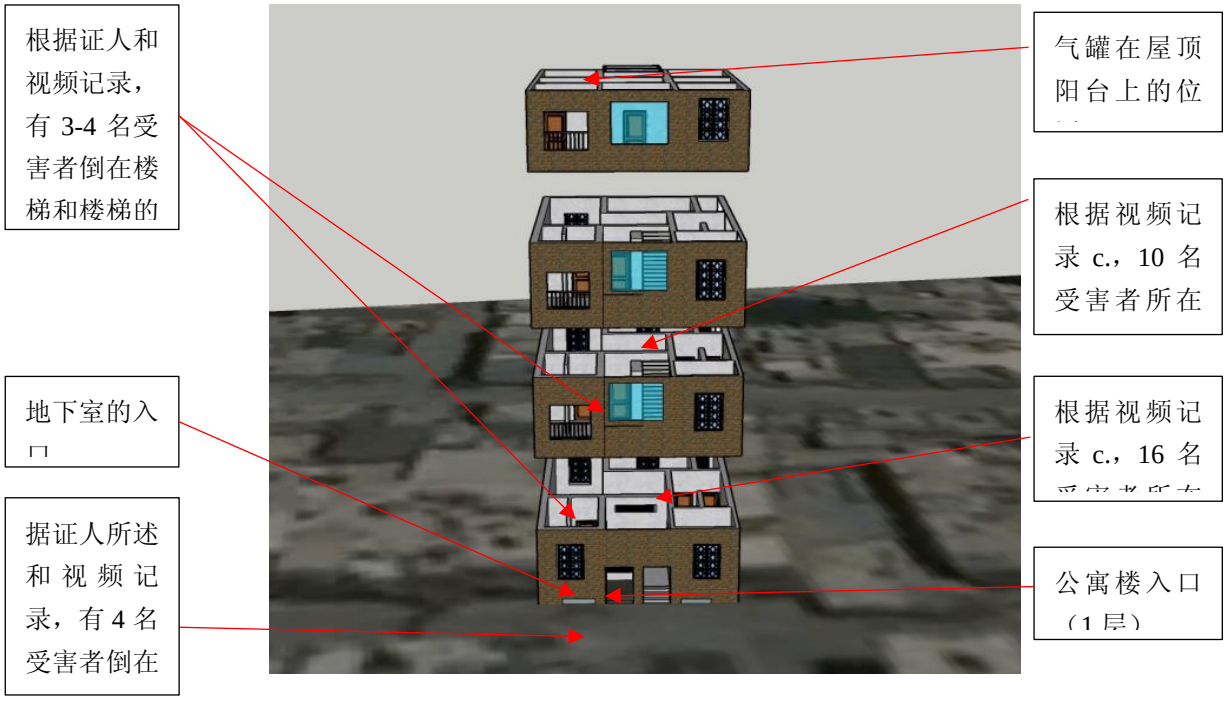
[12] 附件 5，表 A5.1，条目 1、2、3、4、8、17、20、21、22 和 30。

8.25 中央楼梯间不能向下到达地下室，只能从位于街道上的独立入口进入。在地下室天棚下方的每个角落，在入口的两侧各有两扇狭小的窗户向外开着，正好在高于街道路面高度的位置。在地下室内有一个看似狭小的通风管道，但不清楚该管道向何处通风。

8.26 气罐位于 4 层的屋顶平台的地面上，在该建筑物的东侧，其喷嘴置于混凝土的圆形开孔上。能看到气罐的屋顶平台对应着 3 层 1 个公寓内的 1 个房间的天棚。

8.27 根据证人提供的录像及其供述，以下 3 幅关于该公寓楼的空间布局图描绘了气罐撞击的指称点，并显示了受指称化学品袭击而倒地的受害者所在房间的位置之间的空间关系。

图 6：显示了房间分布情况和指称受害者报称的位置的第 2 号地点的 3D 布局图



讨论 2：对在第 2 号地点的屋顶平台找到的气罐的弹道效应的分析

8.28 事实调查组对在屋顶平台上的气罐、缺口、平台和平台周围以及缺口正下方的房间拍摄了若干张照片。调查组记录下了在钢筋混凝土屋顶上的缺口的尺寸以及气罐本体的损毁情况。

8.29 调查组分析了现有的材料，并咨询了机械工程、弹道学和冶金学领域的独立专家。借助专用电脑建模技术，那些专家对在 2 号地点发现的气罐的轨迹和损坏情况作了称职和胜任的评估。

8.30 对于钢制气罐对钢筋混凝土板的撞击，专家提供了有关报告和数字模拟情景，其中反映了事实调查组在杜马发现的现场状况。分析的结果包含：一般性介绍、几何数据、弹道

计算、实验计算和数字模拟情景。此外，有关专家在分析期间采用了不同的方法和方式，以便得到更全面的结果。使用了若干种专有的商用和有据可查/公认的软件进行了数字模拟（见附件 12）。

8.31 分析表明：第 2 号地点的钢筋混凝土平台遭受的结构性损坏是由物体撞击所致，该物体具有对称的几何形状，并具有足以造成观察到的损坏的动能。分析结果显示：所观察到的位于屋顶平台的气罐、缺口、阳台、周围房间、下方的房间和上层的结构遭受的损坏均符合该地点所见的气罐在平台上新造成的缺口的大小。

第 4 号地点（“卧室中的气罐”）

8.32 调查组于 4 月 25 日部署到了第 4 号地点（北纬 33° 34’ 20.5”、东经 36° 24’ 02.8”），并在那里还拍摄了照片、进行了测量并获取了侦检度数。此外，调查组采集了一大批样品。对被指称的气罐贯穿的屋顶阳台以及据信气罐在其中到达最终落点的房间进行了拍照和测量。附件 7 载有关于结果和分析的进一步详情。

8.33 从调查组观察到的情况看，在调查组查访该地点时，气罐似乎没有发生任何泄漏。调查组注意到在床上的气罐下方的有一长块的木头。调查组将这块木头的一部分作为样品带走。这块木头既潮湿又绵软。调查组在房间内用侦检设备进行了检测，但没有发现氯气。实验室的分析表明在所有带回的木头样品中，这块木头样品中的氯化有机化合物的含量最高。

图 7：电脑生成的关于屋顶阳台上的缺口的视图

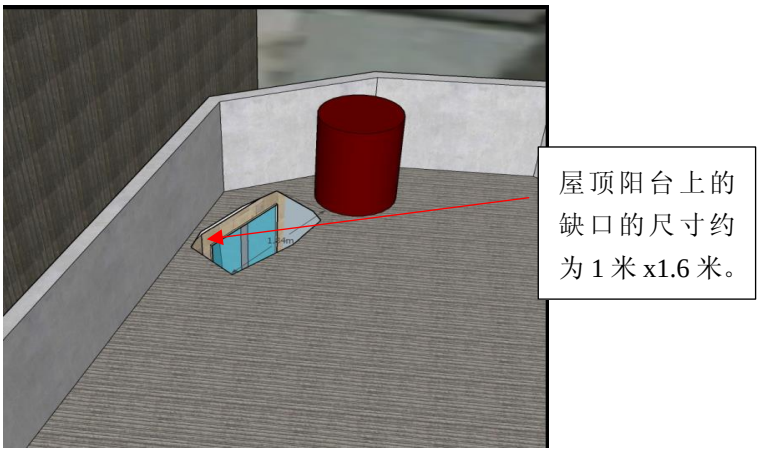


图 8：电脑生成的从附近建筑物的屋顶看到的平台及缺口

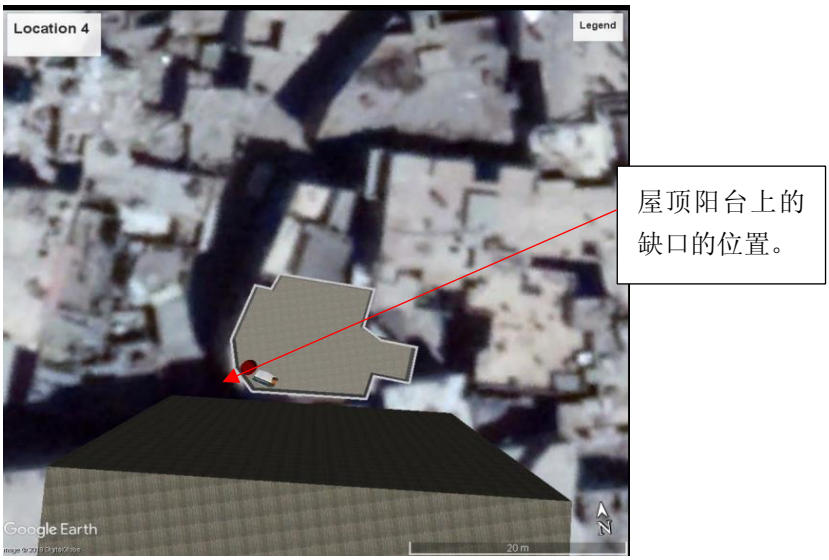


图 9：电脑生成的带缺口的屋顶阳台与邻近建筑物的视图

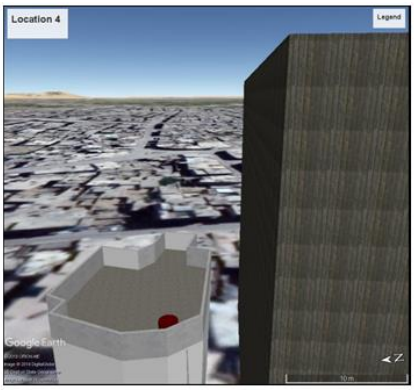


图 10：缺口和气罐撞击的计算机调变

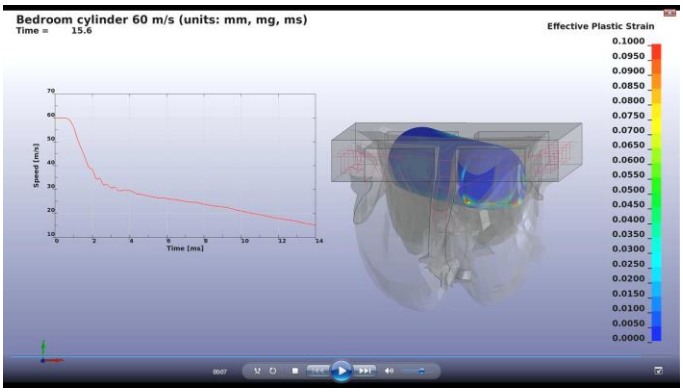
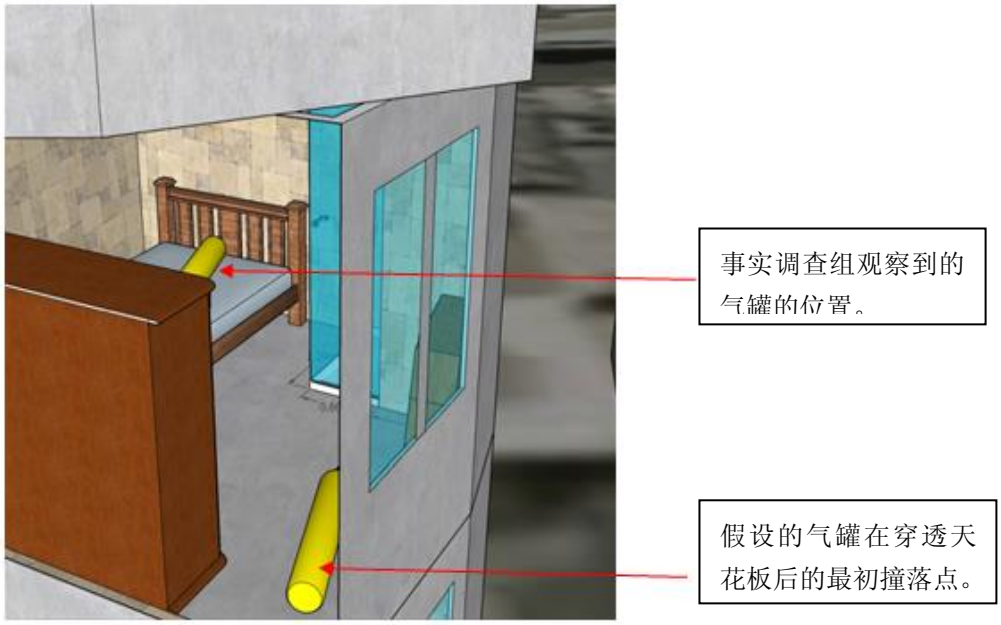
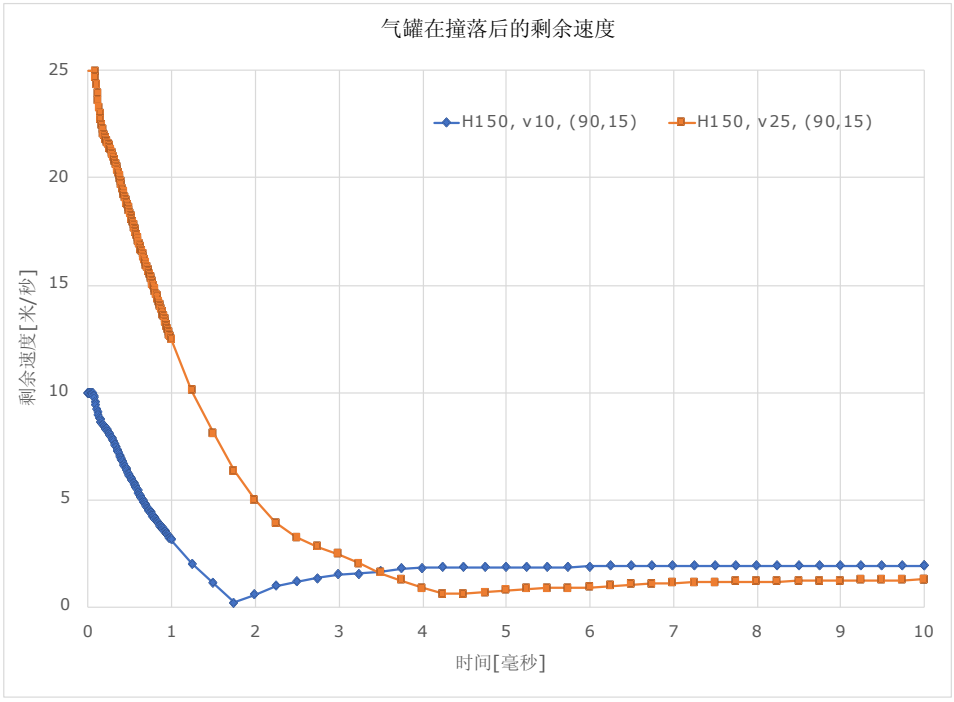


图 11：关于卧室和气罐位置的视图



8.34 调查组咨询了机械工程、弹道学和冶金学方面的专家，以请他们对为气罐的轨迹进行称职和胜任的评估。评估的结果表明：在调制下生成的缺口的形状与视察组观察到的形状和损坏情况吻合。评估进一步显示：在穿透屋顶并以低速撞到地板上后，气罐继续改变了滚动轨迹，直至滚到了其被发现的位置。

图 12：用以显示气罐可能的低速移动的图表



8.35 事实调查组采用类似的方式，评估了气罐上的结构性损毁与钢筋混凝土屋顶（据称气罐由此横贯而下）遭受的结构性损坏是否一致。图 13 和 14 显示了有关结论。

图 13：电脑调制下的气罐在贯穿屋顶时受到的损坏

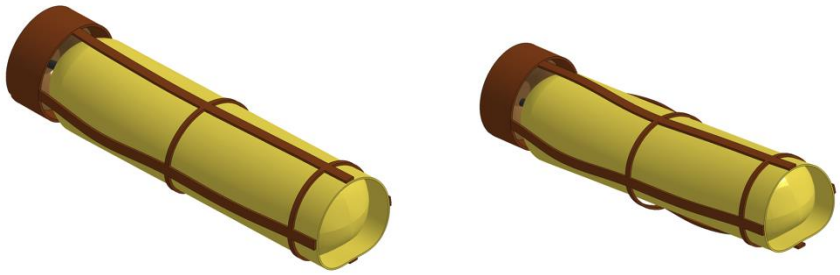


图 14：观察到的气罐上的损坏情况

1 号地点（医院）

8.36 事实调查组于 2018 年 5 月 1 日查访了 1 号地点。医院（位于北纬 33°34’27.4”、东经 36°24’25.2”）在一幢多层建筑物的地下室中运营。调查组被告医院有大约 200 名工作人

员。事实调查组到访时，该医院正在开展日常的活动。医院设施包括：一间手术室、一间恢复室、病房、重症监护室、一间实验室和一间药房。医院与一个地下通道相连接。

8.37 事实调查组请求提供以下信息：与在医院死亡的病人相关的程序。小组被告死亡的病人一般会被送到“200 号”（在医院里被用作停尸房的房间），在那里尸体会被当地的市政当局运走。后来证人提供的信息表明叙利亚民防署为这项工作提供了协助。

8.38 调查组被带到了在视频和照片中出现过的通道，而照片和视频显示：在这个通道里曾经有据报为指称化学袭击的死难者的尸体，且还有常规炸弹的受害者。在事实调查组到访时，在通道的区域内没有尸体。根据取样计划，在通道中采集了分析样品，但没有发现与指称事件相关的化学品。

被阿拉叙利亚共和国的主管部门怀疑为生产过化学武器的仓库和设施

8.39 在被阿拉伯叙利亚共和国的主管部门怀疑为生产过化学武器的位于杜马的仓库和设施中收集了资料，以便评估这些设施是否与化学武器或可被用做武器的有毒化学品的生产相关。从对这些地点的两次现场访问期间收集到的资料来看，没有迹象显示哪一个设施参与了化学战剂或可被用做武器的有毒化学品的生产。

8.40 收集到的信息显示两个设施均与炸药的生产有关联。这个结论基于以下事实：几乎所有存在的化学品都是常见的生产炸药的前体，而两个设施都没有生产化学武器（特别是神经剂或者发泡剂）的原材料或者适合的设备。完整的细节载于
附件 8。

面询

8.41 共面询了 39 名证人，其中的 13 人是在大马士革面询的。表 2 详细列出了受访人的身份。

表 2：受访人的身份

	受访人	男性	女性	一级伤员	二级伤员
施治医生	4	4	0	0	0
医务助理人员	7	6	1	1	0
证人	28	26	2	9	1
采样人	0	0	0	0	0
总数	39	36	3	10	1

8.42 在 39 名受访人之中，据称有 11 人为伤员。这些伤员中的 10 人据称是在下列地点接触了有毒化学品的一级伤员：2 号地点；紧邻 2 号地点的几栋建筑；地点一的车辆通道的出口处；同一区域的其它地点，在 2 号地点以南约 160 米处（见图 4 和图 5）。据称有 1 个人由于接触了死者尸体而二次中毒。

8.43 下文是事实调查组面询的证人证词的综合摘要[13]。

8.44 一次军事行动大约于 2018 年 4 月 6 日（星期五）的 16 时开始，一直持续到 2018 年 4 月 8 日（星期日）上午。在此期间，证人称大多数家庭在聚集后都躲到了整个杜马居民区内的房屋和/或建筑物的地下室之中。证人称有 1,000 至 1,500 人在瑞夫•迪马什克专科医院也称地点一（1 号地点）内躲避。根据证人证词，地面上的楼层用沙子加固过，使这所医院可以充当庇护所。

8.45 医疗点被描述成由两栋独立的楼组成，这两栋楼均有若干层。一栋楼的地下室用做急诊部，而另一栋楼的地下室则用做外科部。根据证人的描述，车辆可以通过一个地下通道到达急诊部。这个通道的出口位于地点一西南方向约 150 米处，且在第 2 号地点以东大约 50 米处。从其出口处开始，地下通道从下面穿过马特斯广场而与地点一的急诊部相连接（见图 4）。据报，叙利亚民防署在地点一一层的部分区域包裹了死者尸体。

8.46 4 月 7 日，医生们正在对外伤患者进行接诊和治疗。由于几天前很多医生和医务助理人员已经向北方撤离，因此在那天，很多志愿者在为医院的工作人员提供帮助。

8.47 在军事行动之前，叙利亚民防署负责与当地委员会协调埋葬死者。有一些证人报称其不清楚埋藏地点的位置。

8.48 事实调查组成员面询过的医务人员介绍了那天在医院里发生的情况。在这些证人中，有几人称猛烈的炮击造成的尘土瓦砾使很多人窒息而死。没有救护车和急救服务又造成了死亡人数的上升。

8.49 19 点过后不久，包括儿童和成人在内的 10 至 20 名病人分几批来到了杜马医院的急诊部。他们满身灰尘，且脸都被熏黑了。他们的呼吸系统出现了问题，这包括：呼吸困难、咳嗽以及接触烟尘之后造成的哮喘发作。同样据离杜马医院不远的其它医疗点的工作人员所称，他们也收治了呈现类似体征和症状的伤员。

8.50 据一位证人报告说，他从急诊部被叫去帮助医院工作人员清洗伤员。当他正在清洗时，有一位不是医院里的男子进来了，嘴里喊着“化学品！化学品！”，这引起了恐慌。然后，一些旁观都开始帮那些人脱衣服并进行清洗，但接着却给他们作了一些不妥当的处置。

8.51 医务人员用沙丁胺醇、地塞米松和氧气对伤员进行了治疗，并于 2018 年 4 月 8 日 1 点前让所有伤员出了院。由于缺少人手，没有对那天的伤员进行登记。

8.52 证人们还称猛烈的炮击造成了在杜马有几处起火和烟尘。同时，在地下室里烧木头、橡胶或者塑料来取暖或做饭是常见做法。有一些接受面询的医务人员没有从在互联网上流传的视频中或者从其他人那里听到过指称的化学袭击，而是几天后才听说了在 4 月 7 日发生的指称袭击事件。

[13] 对于那些来到了海牙的的据称是证人（出现在一些媒体中。见附件 2 第 2 条）所提供的证词，事实调查组将其视作来自于其它公开来源的视频材料。

8.53 有些证人称在 4 月 7 日这天，医院里有很多人由于猛烈的炮击和/或吸入烟尘后造成的窒息而死亡。急诊部的地面上躺着多达 50 具尚未掩埋的尸体。其他证人称 4 月 7 日在杜马医院没有死亡的病人，并且那天也没有尸体运到医院。

8.54 接受面询的几位据称 4 月 7 日在急诊部的医务人员强调说：伤员的症状与受到化学袭击后所预期的症状不一致。他们还报告称自己没有诊治化学武器伤员的经历。一些受访者说病人身上没有异味，而其他证人则表示他们在病人的衣服上闻到了一股烟味。

8.55 其他医务人员称在 4 月 7 日大约 16 点的时候，估计有 15 至 18 名呼吸困难的伤员来到了位于 Sector 3（见图 5）的叙利亚民防署中心。据证人们称，在离该中心很近的地方（见图 5）发生了氯气袭击。叙利亚民防署把约在同一时间发生的化学袭击事件通知了身处地点一的其他证人。在地点一没有关于这次事件伤员的报告。在叙利亚民防署中心用水对伤员进行了清洗，并用沙丁胺醇对他们进行了治疗。

8.56 日落后不久，地点一的医疗工作人员中有人被通知发生了一起指称化学袭击。19 点过后不久，伤员开始抵达急诊部，其症状包括：口腔内有大量口水或泡沫、呼吸困难、咳嗽和上呼吸道受到刺激。据报，有一些伤员失去了知觉。据称，一位志愿者对他们进行了冲洗，而医务人员则脱去了他们的衣服，并用氧气、支气管扩张剂（沙丁胺醇）和静脉输液进行了治疗。有一部分伤员还服用了阿托品。

8.57 在 4 月 7 日夜间被运到地点一的 3 具尸体曾口吐大量泡沫，且皮肤苍白，同时衣服上散发着一股刺鼻的味道。在 4 月 8 日上午被运到地点一的 40 具尸体是分批抵达的。运送是由叙利亚民防署进行。这些尸体被描述为皮肤呈一种蓝色，且口吐泡沫，同时一些衣服上带有尘土。与上述尸体有同样气味的那些尸体于同一天晚些时候被掩埋。

8.58 此后，事实调查组成员面询了据称的伤员、紧急救援人员和证人。据位于地点一西南方向 350 米距离以内的几个被用做庇护所的地下室中的证人称，大约在 19 点（当时天色尚未全黑），听到了被描述为一些桶从天而降以及桶、火箭弹或炮弹撞到地面上的声音。据称其中的两件没有炸开（或者与传统的爆炸相比，爆炸声较轻）；并且，随后很快在上述区域内的几个地下室中闻到了氯气的味道。

8.59 这种气味被描述为与含有氯的洗涤用品的味道类似，且有人提到了当地这类商品的品牌（如“Clor”和“Flash”）。他们补充说那股味道比洗涤用品要浓得多，且更刺鼻和更有酸性。其他证人描述了一种带来强烈不适感的味道，不过与氯气的味道不同，并且使人觉得气短、困乏和视觉模糊。还有人提到在同一时间在地点一也闻到了氯气。

8.60 据证人们回忆称，他们一闻到那股味道就产生了下列症状：呼吸困难、眼睛受到刺激、严重的咳嗽、呕心、呕吐、虚弱、视力下降和唾液过多。地下室中的人们试图上楼或从楼里出去，尽管当时还有猛烈的炮击。几位证人报告称他们用湿布蒙住了嘴和鼻子以便保护呼吸道，并且试图营救其他人。据证人称，他们自己逃脱了或在家人和邻居的帮助下上楼去呼吸新鲜空气，或者出去后向西走（那里的气味没那么重），要不就是去了地点一。根据证词，红十字会、叙利亚民防署以及医疗点的营救人员无法立即作出回应，因为当时有猛烈的炮击，而且没有能提供服务的营救车辆。

8.61 一些证人报告称看到了呈黄至绿色的云或烟团，而有一位证人则将其描述为在天空中呈绿色。在距通往地点一急诊部的通道的车辆入口处很近的街道上以及在 2 号地点的一层，都看到了这股云团。

8.62 据证人报告，大多数到了屋顶或向西走（远离地点一）的伤员都活下来了；而据报呆在建筑物或地下室里的伤员或者朝着通往地点一的通道出口走的其他伤员都死了。证人的证词称发现死者的地点如下：楼梯上、2 号地点的不同楼层的房间里、整个小区中相互毗邻的楼房内的地下室里、屋顶上和街上。此外，证人称在地点一有 6 位伤员死亡。

8.63 证人称叙利亚民防署在 4 月 7 日 19 点半至 20 点之间接到了事发通知，但由于炮击很猛烈，直到 21 点过后不久才得以抵达 2 号地点。叙利亚民防署开始抢救幸存者，而且在 2 号地点内和街上看到了很多具尸体。这些尸体带有很多口腔分泌物，且身上有多处青紫。据称叙利亚民防署设法从临近的建筑物中营救了 20 至 25 位伤员，然后将其送到了地点一。同时，很多伤员自己逃脱了。叙利亚民防署还向地点一运去了 3 具尸体，但医院工作人员建议不要再运来更多的死者，以防止发生二次污染。

8.64 根据证词，当叙利亚民防署的人员抵达 2 号地点时，那里有一股强烈的让人不适的气味，与氯气类似。据报，该气味在地下室和一层更重，使他们在里面呆的时间不能超过一两分钟。

8.65 一些证人报告称 4 月 7 日晚上，在 2 号地点三层公寓的一个阳台上看到了一个黄色的气罐。刺鼻的气味使任何其呼吸系统没有受到保护的人都无法接近。在接下来的几天里，该地点没有受到保护，故很多人进入了该建筑的顶层并且随后见到了这个气罐。

8.66 证人们将这个气罐描述为一个黄色的“桶”或者“火箭弹”，尺寸大约 1.5 米长和 0.4 米宽。气罐以一定角度躺着，其喷嘴侧位于露台地板的缺口中，对应于下方房间的天花板。

8.67 证人们回忆称叙利亚民防署把尸体存放在 2 号地点里，一直到 4 月 8 日大约 9 时（炮击是那时停止的）。应急救援人员将尸体从建筑物中搬出，并将其放在了建筑物前的街道上。在尸体上撒了水，并将其被运到了地点一准备掩埋。根据几份证人报告，这起事件共造成了 43 人死亡。受伤人员的总数很难估算，因为很多人没有马上去医疗点，但在其它地方（红十字会的设施、叙利亚民防署中心或者私人住宅）接受了清洗和救援。据另一位证人报告称，在地点一有 70 位与疑似化学品中毒有关的病人。

8.68 据 3 位伤员称，有另外一个装置落在了他们的房子（距 2 号地点的地下室大约 50 至 60 米）的前面，并且释放出了氯气。此外，有几位证人称其在地点一西南 250 米以内的不同地点闻到了一种化学品的气味。

8.69 4 月 7 日大约 22 点，紧急救援人员获悉在距离大清真寺不远处的一个居民楼（事实调查组将其称为 4 号地点）还有一个气罐。一位证人大约在 4 月 7 日午夜到了这个地方。气罐当时在一间顶层公寓里的一张床上，且发出一股刺鼻的气味，这被描述成与氯气相似。证人回忆称屋顶上有个孔，而气罐（据称 1.5 米长、0.5 米宽）被认为是穿过这个孔而落

到房间里的。证人称气罐当时在漏气，并且强烈的气味使他/她无法留在房间里。据称有两个人在到访了这个地点后受到了影响。据称是伤员的人们说其发生了下列症状：眼睛灼热、流泪、咳嗽和呕吐。

流行病学分析

流行病学的分析方法

8.70 流行病学对因果关系的判定是根据下列标准确立的：

- 在中毒和后果之间必须有在生物上能够解释得通的关联；
- 在中毒和后果之间必须有时间上的关系；及
- 对症状一定要没有任何可能的替代性解释。

8.71 流行病学调查包括：审查所有与一起指称事件相关的文件资料；对事件作出流行病学的描述；对证人、医护人员和紧急救援人员进行面询；对幸存者进行第一手面询；对症状和征象进行现场评估，其中包括评估其综合症的临床严重性。应该从与事件发生的时间有关联的医疗文档中查找关于中毒者的治疗和后果的进一步资料，并应对临床施治大夫进行进一步的面询。通过流行病学调查，应该获得关于每一起事件的规模的信息，同时还应取得背景和地理信息，而对后一种信息，应该由环境采样小组在此后进行反复核对和验证[7]。

8.72 事实调查组面询了 4 位医生、7 位医疗助理人员和 28 位证人/伤员。

8.73 事实调查组无法确认准确的伤员人数。但是，一些信息来源[14]报告称这一数字在 70 至 500 之间。其它的信息来源[15]否认有过与化学事件相关的伤员。

8.74 有一些证人称与指称的化学品中毒相关的死亡人数为 43 人，其中包括男性、女性、成人和儿童。

医疗人员

8.75 在此次事件期间，没有保留收治病人的记录，且在面询时也没有那些幸存伤员的伤情、年龄和性别等细节。据报，在指称的化学袭击发生后收治了 90 名病人（其中 4 人为儿科患者）。

8.76 据描述，一些伤员的衣服上有一种难以名状的味道。这些人在进入地点一之前被脱去了衣服并用水进行了冲洗。

[14] 第 8.44 至 8.69 段。

[15] 第 8.44 至 8.69 段。

8.77 由于接受治疗的伤员的数量众多，没有进行详细的身体检查，并且注意到的任何临床征象都是针对个案的。

8.78 根据医疗人员的陈述，多数伤员被描述为有较轻的中毒征象和症状，且可以走动。中度和重度伤员不能走路了，且被描述为精神状态发生了变化，并被搀扶至急诊部。

8.79 总的来说，病人被报告为有气短、胸部灼热、大量口腔分泌物或产生泡沫以及眼部受到刺激等症状。其它病情陈述包括：视力受干扰、流泪、发音困难、恶心、呕吐和瘙痒。被归为重度的一些伤员（具体人数不明）出现了癫痫发作时的症状，并被描述为其胳膊和腕部出现了屈曲。医务人员报称没有发现任何外伤的迹象。

8.80 据报，数量不明的病人呈现了瞳孔缩小或瞳孔散大的症状。虽然受访的医疗支助人员或医生没有直接观察到瞳孔缩小，但一名辅助人员表示曾直接看到 4 名被列为重度的伤员出现了瞳孔散大的情况。

8.81 根据判定的伤情，通过吸入器或喷雾器对患者使用了沙丁胺醇，还使用了糖皮质激素和阿托品。由于数量有限，吸氧治疗偶尔被采用。一些病人（具体人数不明）接受了气道辅助或气管内插管治疗。

8.82 尽管有些病人服用了阿托品，且活下来了并出了院，但是没有报告过下列关联：在有机磷中毒的情况下，与阿托品的使用相关的临床症状改善和其使用之间的关联。

8.83 据报，所有的治疗都是基于观察到的征象和症状。没有对任何伤员进行诊断性化验。在面询时，没有得到有关出院或病人跟进方面的资料。

8.84 3 名死者于 4 月 7 日晚上被运到了地点一。这些尸体被描述为口部有大量分泌物或泡沫、皮肤苍白且衣服上散发着一种说不清的强烈气味。

8.85 4 月 8 日上午送至地点一的 40 个死者是由叙利亚民防署分批运来的。尸体被描述为：皮肤上带有一种蓝色，并带有大量口腔分泌物或产生吐沫；另外一些的衣服上带有尘土。

8.86 事实调查组注意到了以下情况：对征象和症状的严重程度的判定取决于具体的医生或医务支助人员的评估，而不一定与其他人的判定一致。

数码资料中伤员的情况

8.87 事实调查组向 4 位毒理学家以及 1 位毒理学家兼医生进行了咨询，他们在化学武器或有毒工业化学品中毒方面均造诣不浅。

8.88 考虑到很多同样的信息源在网上可以找到，事实调查组查阅的材料是由伤员、证人和医疗人员提供给事实调查组的。为了本报告的目的，只对包含了元数据的数码资料进行了评估。

8.89 事实调查组分析了多份数码视频和指称受害者的静态照片。这些视频和照片看起来是在下列地点拍摄的：1 号地点（即叙利亚民防署中心）；在 2 号地点里面，建筑物前面的街道上；以及据报在地点一（1 号地点）内为死者准备的停尸区。数码视频和静态照片显示有活着的伤员和死者。建筑里和建筑外的视频和照片似乎是白天和夜间都拍下的。医疗治疗设施里的视频和照片是 2018 年 4 月 7 日晚上拍摄的。

8.90 基于检索到的元数据（附件 11），在 2 号地点内拍摄的视频是在所报事件发生后 13 至 16 个小时拍的。这些视频显示：大约 20 个人（男性、女性、成人和儿童/婴儿）躺在几个房间里（在地板和家具上），而且有些人躺在另一些人的上面。视频中出现的所有人看起来都已死亡。一位女性受害者呈现出角膜混浊的征象。由于视频的质量和拍摄的角度，没有注意到其它的眼部症状。几位受害者有一定程度的胸椎或颈椎拉伸。受害者中的很多人呈现出白色泡沫状的口腔和鼻腔分泌物，看起来与爆发性肺水肿的类似，但在很多情况下更严重而且似乎更粘稠。在他们的口鼻附近和地上都有分泌物。有些分泌物还另带一种淡棕色,这看起来类似于胃部容物或带血的痰。把成人和儿童分组进行比对，分泌物存在或不存在以及数量方面似乎没有相关性。在仅有的一例中，可见一个少女可能出现过尿失禁。在所有的受害者中都没有观察到大便失禁。几位受害者显示有眶周变色和早期尸斑迹象。在另一段视频中，很多受害者似乎已被搬到了同一个建筑中的一个房间里。而且在其中一例中，一位少年呈现出了明显的尸斑迹象。很多受害者的头发看起来是湿的，但其所处的环境似乎都是干燥的。没有看得见的外伤迹象。

8.91 根据检索的元数据，白天在建筑物外拍摄的视频是在所报事件发生后大约 13 小时拍摄的。夜间在建筑物外拍摄的视频似乎显示了以下情况：在距离建筑物的一个出口很近的地面上躺着 4 个成年人。白天的视频显示了很多在建筑物里曾见到过的那些受害者，以及此前没有见过的其他人。他们被从建筑物中运出来，然后用叙利亚民防署一辆消防车里的水进行了冲洗，并让他们上了一辆看起来像是民用车辆的车里，准备送走。一些受害者无法看清，因为他们被地毯或毯子裹起来或者盖住了。能看见的受害者们显示出重度或完全的尸僵，并且带有更严重的尸斑迹象。视频是在大约距离 1 至 5 米的地方拍摄的，故无法看清受害者的进一步细节。没有可见的外伤迹象。

8.92 在建筑物内外和医疗设施里面都拍摄了静态照片。照片中大多数都是女性和儿童，并且显示了视频中出现过的那些受害者们的脸部近照。很多受害者显示出有与视频中看到过的同样的呼吸道分泌物，并且在能很清楚看到脸部的地方，都显示出有角膜混浊和不同程度的眶周变色。一张照片显示了一位成年男性的脸部近照，他的脸上看起来被灰色尘土或土覆盖，并且脸上有大量泡沫状的呼吸道分泌物和血。在这些受害者身上没有注意到进一步的外伤迹象。

8.93 在医疗设施中拍摄的照片上，看到有人在帮一些儿童用水冲洗或戴上了氧气面罩。他们看起来都不像是病人。

8.94 据报拍摄于叙利亚民防署中心的一段视频显示了一个大约 5 岁的男孩，他呈现出明显的呼吸窘迫的客观体征，而且呼吸困难，并正在使用辅助呼吸肌。还在通过面罩给他使用小剂量的喷雾器。

8.95 在医疗治疗设施拍摄的一段视频显示了下列情况：有大约 20 名病人（男性、女性、成人和儿童）在看起来像是一个临时设施的地方接受治疗。有些视频包含元数据，是大约在所报事件发生时间后的 3 个小时拍摄的。对几位成人和 2 至 3 名儿童（大约 3 至 5 岁）采取了简单的洗消措施（用水冲洗）。注意到所有显示出的不适都是轻微的。有 3 个大约 12 至 18 个月的小孩儿（一个男性，一个女性，另一个无法辨识性别），他们每人都呈现出呼吸窘迫的客观体征，这表现为呼吸困难，并在使用辅助呼吸肌。3 个孩子都没有出现发绀的症状。一个（男性）孩子插了管，还看到有人帮他手动供氧，随后用机器为他供氧。另一个（无法辨识性别）孩子身体部分直立着，同一位成人坐在一起，且正在给对其使用一个简易氧气面罩。第三个（女性）孩子没有知觉，但正在对她使用辅助呼吸肌。不过她的瞳孔缩小了，估算缩瞳直径大约为 3 毫米。她没有显示出缺氧的客观体征。能看见通过定量吸入器或者小剂量喷雾器给很多儿童服用一种未知药物。视频中正在接受治疗的成人和其余的儿童均显示出轻微的呼吸窘迫和咳嗽等症状。除了前述的儿科病人之外，没有看见危重病人。没有可观察到的外伤迹象。

对数码资料及其与有毒化学品中毒的关系的分析

8.96 在建筑物内拍摄的视频的地点、位置以及受害者身上均没有可见的外伤的情况表明：这是中了一种快速致残或一种高毒性物质的毒。看起来，在受害者倒下后，他们并没有试图自行逃脱或者保护呼吸系统，这表明是非常迅速或瞬时的发作。这种迅速跌倒的情况显示出可能用了一种能快速致死或致残的制剂。

8.97 很多受害者身上可见的角膜混浊与酸或碱烧伤后可见的眼伤类似，但也与死亡后的尸体变化类似。死亡和拍摄视频/照片的时间之间的间隔时间很长。

8.98 在很多例子中，可见的呼吸道分泌物与中了化学武器、有毒工业化学品以及有毒的药物制剂的毒之后可见的分泌物类似，但是却更严重，且似乎其粘稠度更像粘性泡沫，而不像来自于上呼吸道或下呼吸道的典型分泌物。特别明显的是在彼此之间的距离非常接近的伤员之中，既有有分泌物的伤员，同时又有没有分泌物的伤员。总的来说，呼吸道分泌物的存在及其背景显示出其中了一种化学品的毒。

8.99 在很多受害者身上可见的胸椎和颈椎拉伸与那些经历了死亡前全身癫痫发作或角弓反张的病人的情况类似。同样，这在中毒身亡的例子中是可以观察得到的。

8.100 关于 8.98 至 8.100 段提及的各种考虑，在没有更多的具体资料的情况下，对这些观察到的现象的病因确定可以与范围很广的化学品相关[9 – 12]。

8.101 眶周变色与中了任何已知的特定毒素的毒没有相关性。要确定其是由于中了有毒化学品的毒后呈现的生理反应，还是确定这仅是因为死亡后尸体出现的变化，将需要采取更多的措施。

8.102 对在原本是干燥的环境中出现了湿头发这一现象很难评估，这也可能是因为在死亡之前曾大量出汗。

发病与指称的关系

8.103 医务人员、证人和伤员所报的（以及证人提供的多个视频中所显示的）许多征象和症状、其迅速的发作以及据报受到了影响的人数之多均显示：这是中了一种吸入性刺激物或一种有毒化学品的毒。然而，基于审查过的资料，且鉴于缺乏来自尸体或任何尸检记录的生物医学样品，目前无法将征象和症状的原因与某种特定化学品精确地联系起来。

事实调查组活动的结论

9.1 在发生了有毒化学品指称使用事件的现场（2 号和 4 号地点）采集了若干环境样品，并检测到了并不天然存在于环境之中的氯化有机衍生物。基于这些氯化有机衍生物的水平，事实调查组得出如下结论：在两处地点采集到的样品所含的物质曾与一种或多种含有活性氯的化学品接触过。

9.2 在优先分析的环境样品中，或在指称事件所致的伤员的血浆样品里，均未检测到有机磷神经毒剂、其降解产物或合成杂质。

9.3 除了其存在得到了令人满意的解释的附表 3.B.17 号化学品三乙醇胺和一种称为“AmgardV19”的附表 2.B.04 类化学品[16]以外，在分析过的环境样品中，没有检测到《化学武器公约》的《关于化学品的附件》所列的其它附表化学品或其降解产物。

9.4 根据对在现场查访涉嫌生产了化学武器的仓库和设施时收集的信息进行分析的结果，没有迹象表明这些设施的任何一个参与过制造化学武器。收集到的资料显示：这两处地点的活动主要与生产炸药有关。

9.5 据证人向事实调查组报告，与指称化学事件有关的死难者为 43 人，其中大部分人的遗照都出现在散落于在一幢多层公寓楼的地板上和同一栋楼前面的地上的录像和照片中。另外，据几个证人所报，他们在下列地点也见到了有人死去：这栋楼的地下室内、这栋楼的多个楼层里、街道上以及同一个小区内的若干幢楼的地下室中。一个联合国机构还报告了因接触了一种有毒化学品而死亡的案件[17]。然而，事实调查组并没有机会直接检查尸体，因为事发后的两周内事实调查组无法进入杜马（见第 2.2 段），而在这段时间里尸体已被埋葬。

9.6 医务人员、证人和伤员所报的许多征象和症状（以及证人提供的多个视频所显示者）、其迅速的发作以及据报受到了影响的人数之多均显示：这是中了一种吸入性刺激物或一种有毒化学品的毒。然而，基于审查过的资料，且鉴于缺乏来自尸体或任何尸检记录的生物医学样品，目前无法将征象和症状的原因与某种特定化学品精确地联系起来。

[16] 第 8.7 段。

[17] 见注脚 6。

9.7 事实调查组在两个不同的地点（2 号和 4 号地点）[18]观察到了两个专用于盛装加压气体的黄色工业气瓶，其尺寸约为 1.4 x 0.4 米。

9.8 事实调查组分析了手头上掌握的材料，并咨询了机械工程、弹道学和冶金学方面的独立专家。通过利用专用电脑建模技术，那些专家对在 2 号和 4 号地点发现的气瓶的轨迹及其损坏情况进行了合格及胜任的评估。

9.9 分析结果表明在 2 号地点，钢筋混凝土平台的结构损坏是由一种具有几何对称形状的冲击物体和足以造成看得见的损坏的动能引起的。分析结果还显示：在屋顶露台上发现的气瓶、孔径、阳台、周围的各个房间、下面的各个房间和上面的结构中看得到的损坏情况均与在那个地方发现的那个在露台上的气瓶所新出现的看得见的孔径是一致的。

9.10 在 4 号地点，研究结果表明：通过调制所产生的孔径的形状与事实调查组观察到的形状和损坏情况相匹配。研究进一步显示：在穿透天花板并以较低的速度撞到了地板之后，气瓶继续以改变了的轨迹滚落，直至到达其被发现的位置。

9.11 根据事实调查组从气瓶采得的样品的分析结果、其在两个地点的接近程度以及第 2.6 段所述的样品的分析结果，气瓶可能就是那些内含活性氯的化学品的来源[19]。

9.12 关于在阿拉伯叙利亚共和国的杜马发生的将有毒化学品用作武器的指称事件（2018 年 4 月 7 日），事实调查组对收集到的全部资料进行了评估和分析，这些资料包括：证人的证词、环境和生物医学样品的分析结果、专家提供的毒理学和弹道学分析结果、证人提供的补充数码资料。上述资料提供了有关确实发生了将一种有毒化学品用作武器的事件的合理依据。这种有毒化学品含有活性氯。有毒化学品可能是分子氯。

附件（仅以英文提供）：

附件 1： 参考用文件资料

附件 2： 公开的资料来源

附件 3： 任务时间表

附件 4： 方法的细节

附件 5： 分析结果

附件 6： 查访 2 号地点

附件 7： 查访 4 号地点

[18] 附件 6 和附件 7 载有对气瓶的详述.

[19] 第 8.9 至 8.18 段。

Annex 1

REFERENCE DOCUMENTATION

	Document Reference	Full title of Document
1.	QDOC/INS/SOP/IAU01 (Issue 1, Revision 1)	Standard Operating Procedure for Evidence Collection, Documentation, Chain-of-Custody and Preservation during an Investigation of Alleged Use of Chemical Weapons
2.	QDOC/INS/WI/IAU05 (Issue 1, Revision 2)	Work Instruction for Conducting Interviews during an Investigation of Alleged Use
3.	QDOC/INS/SOP/IAU02 (Issue 1, Revision 0)	Standard Operating Procedure Investigation of Alleged Use (IAU) Operations
4.	QDOC/INS/SOP/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

Open source internet links related to the incident in Douma on 07 April 2018
1. Video of alleged victims of alleged chemical attack: https://edition.cnn.com/2018/04/07/middleeast/syria-suspected-chemical-attack/index.html
2. Press conference by The Russian Federation Delegation, held at OPCW HQ in presence of alleged witnesses: https://www.youtube.com/watch?v=FF9KPKK2ARc
3. Online Article regarding Douma: http://www.heraldsun.com.au/news/breaking-news/syria-denies-chemical-attacks-on-douma/news-story/ddd7bfdc568594195f594f653ecab59f
4. Video of alleged casualties and victims: https://www.aljazeera.com/news/2018/04/suspected-chemical-attack-kills-dozens-syria-douma-180407202906316.html
5. Video of alleged victims at Location 2: https://youtu.be/m4lkf1SNcJI
6. Video of alleged casualties at hospital: https://youtu.be/KpwcV0sup_o
7. Video of alleged victims at Location 2: https://youtu.be/8TElceE3aLI
8. Video of alleged victims at Location 2: https://twitter.com/inegazili/status/982850611665428480
9. Tweet of photos of alleged victims at Location 2: https://twitter.com/Common_Mohammad/status/982854571952431104
10. Tweet of photos of alleged casualties: https://twitter.com/KokachOmar/status/982851902223286272
11. Tweet of photos of alleged casualties: https://twitter.com/KokachOmar/status/982851294154108929
12. Video of alleged casualties at hospital: https://youtu.be/-VmqS8786Q8
13. Tweet of photos of alleged casualties and victims: https://twitter.com/Charles_Lister/status/982714880154365952
14. Online Article about conflict in Douma: https://www.aljazeera.com/news/2018/04/syrian-forces-press-offernsive-rebel-held-douma-180407135235699.html
15. Facebook post about Douma: https://m.facebook.com/story.php?story_fbid=1739236919490549&id=111632495584341&refid=52&__tn__=-R
16. Tweet regarding alleged victims at Location 2: https://twitter.com/SyriaCivilDef/status/982623580180635648
17. Tweet of photos of alleged casualties: https://twitter.com/talentosprecato/status/982619592458752001

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

18. Tweet about alleged attack in Douma: https://twitter.com/Elizrael/status/982640972218675202

19. Tweet of photos of alleged casualties: https://twitter.com/SiegeUpdates/status/982630326387335170

20. Tweet of photos of alleged casualties: https://twitter.com/FSAPlatform/status/982627437082218496

21. Tweet about alleged chemical attack: https://twitter.com/HusamHezaber/status/982626159518277633

22. Video about alleged casualties at hospital: http://www.bbc.com/news/world-middle-east-43686157

23. Online Article regarding alleged chemical attack: https://www.sams-usa.net/press_release/sams-syria-civil-defense-condemn-chemical-attack-douma/

24. Online Article regarding alleged chemical attack: http://www.syriahr.com/en/?p=88799

25. Tweet of SCD statement: https://twitter.com/SyriaCivilDef/status/982976756163514368

26. Online Article regarding alleged evacuation of Douma: https://www.reuters.com/article/us-mideast-crisis-syria-deals/hostages-and-rebels-leave-douma-under-evacuation-deal-state-media-idUSKBN1HF0XO

27. Online Article regarding alleged evacuation of Douma : https://www.reuters.com/article/us-mideast-crisis-syria-ghouta-negotiati/rebel-fighters-begin-leaving-syrias-douma-after-weeks-long-military-assault-idUSKBN1HF09Z

28. Tweet of video at Location 4: https://twitter.com/AsaadHannaa/status/982998575222312961

29. Online Article regarding alleged evacuation of Douma : http://www.syriahr.com/en/?p=88870

30. Video of alleged victims: https://www.youtube.com/watch?v=PIyGJugmGaI

31. Video of alleged victims: https://www.youtube.com/watch?v=8TElceE3aLI

32. Video of alleged victims at Location 2: https://www.youtube.com/watch?v=LozZlXcYQ9c

33. Video of interview: https://www.youtube.com/watch?v=6F5ZNF8MDIA

34. Video of alleged casualties, video of 11 year old boy: https://www.youtube.com/watch?v=JPFaEG9vJT4

35. Video of alleged victims at Location 2: https://www.youtube.com/watch?v=2mw8DZEiSR0&feature=youtube.be

36. Online Article regarding alleged chemical attack in Douma: https://www.bellingcat.com/news/mena/2018/04/11/open-source-survey-alleged-chemical-attacks-douma-7th-april-2018/

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

37. Video regarding alleged production facility: https://sputniknews.com/middleeast/201804201063754094-russia-syria-douma-militants-lab/

38. Video of alleged victims at Location 2: https://www.youtube.com/watch?v=t99NFijj4Pg&oref=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Dt99NFijj4Pg&has_verified=1

39. Video of alleged victims at Location 2: https://www.youtube.com/watch?v=DfQiFEyin_4&oref=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DDfQiFEyin_4&has_verified=1

40. Video of alleged victims at Location 2: https://www.youtube.com/watch?v=0K9H8dh12uE&oref=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3D0K9H8dh12uE&has_verified=1

41. Video of alleged victims at Location 2: https://www.youtube.com/watch?v=ajpjrYSOoYM&oref=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DajpjrYSOoYM&has_verified=1

42. Online Article regarding alleged chemical attack in Douma: https://smartnews-agency.com/images/videos/2018/04/08/VNC-SY-180408-286/clip.mp4_1080.mp4

Annex 3
MISSION TIMELINE

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

Date	Activities
15 April	Written communication (FFM/05018-DOC 02) from the Director General through the FFM to Syrian Arab Republic representatives conveying his request for the Syrian Arab Republic to expedite security arrangements to facilitate the FFM activities.
15 April – 12 May	34 interviews conducted by FFM, including 13 in Damascus.
16 April	Second element of the FFM deploys from headquarters to conduct further interviews and sampling activities.
16 April	Note Verbale (NV/ODG/18) from TS to the Permanent Representative of the Syrian Arab Republic to the OPCW accepting the Syrian Arab Republic proposal that the MP from the Russian Federation present in Douma provide a security escort to the FFM, from the point of entry to the final point of exit to the sites relevant to the mandate of the FFM.
16 April	Meeting among members of FFM, UNOPS, UNDSS, and representatives of the Syrian Arab Republic and Russian military personnel to discuss security arrangements. First deployment agreed for 18 April.
17 April	A UNDSS team, accompanied by Russian MP, conducts a reconnaissance mission to Locations 1 and 2 to assess security for the proposed deployment on 18 April.
17 April	Security incident during the reconnaissance mission, involving use of light arms and hand-grenade explosion, requiring rapid exit of the reconnaissance team from target site at Location 2.
17 April	Team Leader (TL) redeployed for information gathering activities from all other available sources. Deputy TL takes over leadership in Damascus.
18 April	FFM receives environmental and biomedical samples from witnesses.
18 April	Meeting between representatives of the Syrian Arab Republic, Russian military personnel, the FFM, UNOPS, and UNDSS to discuss security situation in Douma, in particular the security related to the 17 April incident.
18 April	FFM received written reply to the questions and requests submitted to the Syrian Arab Republic on 15 April.

Date	Activities
19 April	UNDSS and OMS representatives approach the team with a proposal to conduct reconnaissance at Location 1 (hospital) on 19 April, with the possibility of deploying a reduced team to the same location on 20 April 2018. Due to the priorities set by the FFM, the proposal is not further explored.
19 April	FFM requests advice from HQ on legal implications of collecting privately owned items for evidence purposes.
20 April	Note Verbale (NV/ODG/214771/18) from TS to the Permanent Representative of the Syrian Arab Republic to the OPCW regarding the rights of the FFM with regard to collecting items of personal property as evidence for the investigation.
20 April	Note Verbale from the Syrian Arab Republic to the Director General of the OPCW requesting him to instruct the FFM to conduct a visit to a warehouse containing chemicals and equipment, within the framework of the FFM's mandate, to collect information surrounding the allegation of use of toxic chemical substances in the city of Douma in Rif Dimashq on 7 April 2018.
20 April	Reconnaissance mission to Location 2 by UNDSS escorted by Russian MP.
21 April	FFM receives environmental and biomedical samples.
21 April	FFM deploys to Location 2. Team collects samples, takes photos and conducts physical measurements.
22 April	FFM receives environmental samples from a witness.
22 April	First FFM progress report submitted to the Director General on the activities conducted from 14-21 April 2018.
23 April	Receipt of written reply to the request of the FFM for information on any activities by Russian military personnel at Location 2 since the alleged incident.
23April	Photos of seals on samples taken at Location 2 given to the Syrian Arab Republic.
23 April	Team informed of TS approval to deploy to Location 4 as next priority and instructed to also visit the warehouse referred to in the NV from the Syrian Arab Republic.

Date	Activities
23 April	FFM meets with UNDSS, UNOPS, the Syrian Arab Republic and Russian Federation military representatives to agree security arrangements for deployment to Location 4.
24 April	Reconnaissance of Location 4 by UNDSS escorted by Russian MP and approval from HQ for the FFM to deploy.
25 April	FFM deploys to Location 4, collects samples, takes photos, and conducts physical measurements.
25 April	Second FFM progress report submitted to the Director General
26 April	Note Verbale (NV/ODG/214827/18) from the Secretariat to the Permanent Representative of the Syrian Arab Republic to the OPCW, requesting information and assistance from the Government of the SAR in getting the FFM access to the remains of any interred persons whose death might have been associated with the alleged incident on 7 April, including the exhumation of human remains.
26 April	Note Verbale (NV/ODG/214836/18) from the TS to the Permanent Representative of the SAR to the OPCW, requesting that the SAR transport the cylinders observed at Locations 2 and 4 to a secure location for packing and facilitate the application of OPCW seals by the FFM for possible future evaluation by the Secretariat.
27 April	FFM visits the warehouse, collects samples, takes photos and conducts physical measurements.
27 April	Third FFM progress report submitted to the Director General
30 April	FFM deploys to the facility suspected of producing chemical weapons, collects samples, takes photos, and conducts physical measurements. A SAR representative informs the FFM that no decision has been made regarding the sealing of the cylinders.
30 April	Fourth FFM progress report submitted to the Director General
1 May	FFM visits Location 1 (hospital) and revisits Location 4 (takes photos and physical measurements). A SAR representative informs the TL that SAR Government will not accept the sealing of the cylinders.
2 May	FFM departs from Damascus.

Date	Activities
3 May	FFM returns to OPCW headquarters.
4 May	Secretariat receives Note Verbale (No. 44) replying to TS request to seal the cylinders in Note Verbale NV/ODG/214836/18
4 May	Secretariat receives Note Verbale (No. 45) from the SAR replying to the Technical Secretariat's request in Note Verbale (NV/ODG/214827/18) to exhume bodies for the purpose of taking bio samples.
9 - 15 May	FFM redeploys to conduct interviews.
24 May	FFM delivers fractions of samples to the SAR.
3 June	FFM tags and seals cylinders from Locations 2 and 4. The procedure is documented.
6 July	Interim Report issued by the Secretariat (S/1645/2018).
7 August	Secretariat receives Note Verbale (No. 60) from the SAR: Remarks of the Syrian Arab Republic on the FFM Interim Report on Douma Alleged Incident.
September	Consultations with toxicologists.
14 - 22 October	FFM redeploys to conduct interviews.
October	Consultations with toxicologists and engineering experts.
November	Consultations with engineering experts.
December	Reception of engineering studies.
8 February 2019	FFM receives lab results for the second batch of samples.

Annex 4

METHODOLOGY DETAILS

SAMPLING

Sample types

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

2. *Sampling for chlorine or chlorine derivatives:* Chlorine is a volatile gas that is two and a half times heavier than air. It is unstable both in the environment and *in vivo*, and generates decomposition products which are also very reactive or non-specific. Once released to the environment chlorine rapidly reacts with water or atmospheric moisture, generating hydrochloric acid and hypochlorous acid [14] [15]. Similarly, when chlorine comes in contact with moisture in nasal, trachial, and lung tissue, the chlorine disproportionates to the same acids [16]. Moreover, chlorine gas rapidly degrades with ultraviolet radiation, generating chlorine free radicles in daylight [12]. For that reason, detecting chlorine gas *per se* in the environment or in body tissue or fluids following exposure is highly unlikely, particularly if there is a significant delay in collecting the samples, as in this particular case.

3. Although chlorine decomposes rapidly in the environment, the gas itself or its decomposition products are known to react with a variety of other chemicals in the environment, including organic materials and metals [15] [17] [18] [19] [20]. Such products can be quite stable and therefore could provide long-lived chemical signatures of chlorine exposure. The possibility of finding such chlorine derivatives guided the FFM team in its selection of sample types as a means of indirectly demonstrating with a high level of confidence that chlorine gas, or at least a substance containing reactive chlorine, had been present in the environment of the alleged incident.

4. Just as chlorine or its decomposition product hypochlorous acid interacts with alkene moieties of inanimate organic matter, similar interactions can take place with biological materials. Although biomarkers that specifically indicate chlorine exposure remain unclear a limited number of biomarker studies for chlorine involving animal and human exposure have been published. They include studies on chlorinated derivatives of surfactant proteins in lung tissue, chlorotyrosines and phosphatidylglycerol chlorohydrins [21] [22] [23] [24] [25] [26]. While all of these chlorinated derivatives provide promising possibilities for detecting human or animal exposure to chlorine gas, reports indicate that, *in vivo*, they are relative short-lived biomarkers, with levels returning to baseline within periods ranging from 24 to 72 hours post-exposure.

5. Other studies have been conducted where markers for chlorine exposure have been detected up to periods of 7-10 days post-exposure [27]. The studies relate to the effects of chlorine on Clara cell secretory proteins in which chlorine exposure results in sloughing of Clara cells from tracheal epithelium.

6. Human hair was considered another relevant sample type as evidence for possible exposure to chlorine [28]. The interaction of chlorine with proteins such as cysteine and keratin in hair has been well studied.

7. Although molecular chlorine is not naturally present in the environment, chloride ions and many chlorinated organic derivatives exist in the natural background. For that reason it was important to gather control samples, wherever feasible, at locations not expected to have been exposed to chlorine gas.

PHYSICAL DATA COLLECTION

8. As with sampling, pre-deployment plans were developed to identify key measurements and photos to be taken during the visits to the various locations.

Annex 5

RESULTS OF ANALYSIS

TABLE A5.1: ENVIRONMENTAL SAMPLES RECEIVED OR COLLECTED BY THE FACT-FINDING MISSION

Samples collected from Location 2							
Entry #	Sample Code	Description	Evidence Reference Number	DL02 code	Results DL02	DL03 code	Results DL03
1.	10WPS	Swab from inside the cylinder orifice (level 3)	20180421190910	D	No chemicals relevant to Convention have been found.	E10	No CWC-scheduled chemicals detected.
2.	11WPS	Swab with water from inside the cylinder orifice (level 3)	20180421190911	E	Dichloroacetic acid, chloride.	E11	No CWC-scheduled chemicals detected.
3.	15WPS	Dry wipe of the cylinder thread (level 3)	20180421190915	A	Dichloroacetic acid	WP15	No CWC-scheduled chemicals detected [1], chloride: 13,000 ppm (IC), iron: 11 ppm (ICP-MS), manganese: 36 ppm (ICP-MS), zinc: 10,000 ppm (ICP-MS)
4.	19SLS	Concrete debris from the crater-edge in front of the cylinder nose (level 3)	20180421190919	F	Dichloroacetic acid, trichloroacetic acid, chloral hydrate, trichlorophenol.	C19	No CWC-scheduled chemicals detected. 2,4,6-trinitrotoluene*.
5.	21WPS	Wipe with water from the burnt wall in the room located under the cylinder (level 2)	20180421190921	B	No chemicals relevant to CWC have been found.	WA21	No CWC-scheduled chemicals detected [1], CLOC (trace, LC-HRMS)

Samples collected from Location 2							
Entry #	Sample Code	Description	Evidence Reference Number	DL02 code	Results DL02	DL03 code	Results DL03
6.	22WPS	Wipe with DCM from burnt wall from room under the cylinder (level 2)	20180421190922	C	No chemicals relevant to CWC have been found.	WD22	No CWC-scheduled chemicals detected [1], CLOC (trace, GC)
7.	25SDS	Wood fragment from kitchen door (level 2)	20180421190925	G	Dichloroacetic acid, trichloroacetic acid, chlorophenol.	V25	No CWC-scheduled chemicals detected. phenol, 2,4,6-trichlorophenol†, 2,4,6-trinitrotoluene*.
8.	24WPS	Dry wipe from kitchen wall above the oven (level 2)	20180421190924	D	No chemicals relevant to CWC have been found.	WP24	No CWC-scheduled chemicals detected [1], CLOC (trace, LC-HRMS) chloride: 1,100 ppm (IC), iron: 1.2 ppm (ICP-MS), manganese: 0.4 ppm (ICP-MS), zinc: 1.7 ppm (ICP-MS)
9.	01SLS	Concrete debris from the street, left side below window (level 0)	20180421190901	B	Dichloroacetic acid, trichloroacetic acid, chlorophenol, trinitrotoluene*.	C01	No CWC-scheduled chemicals detected, 2,4,6-Trinitrotoluene*.
10.	03SLS	Concrete debris from the middle of street opposite to the window (level 0)	20180421190903	C	Dichloroacetic acid, trichloroacetic acid, chlorophenol, dichlorophenol, trinitrotoluene*.	C03	No CWC-scheduled chemicals detected. 2,4,6-Trinitrotoluene*.

Samples collected from Location 2							
Entry #	Sample Code	Description	Evidence Reference Number	DL02 code	Results DL02	DL03 code	Results DL03
11.	35AQS	Water from water tank in basement (level -1)	20180421190935	K	No chemicals relevant to CWC have been found.	W35	No CWC-scheduled chemicals detected.
12.	32SDS	Water tank wood support in basement (level -1)	20180421190932	I	Dichloroacetic acid, trichloroacetic acid.	V32	No CWC-scheduled chemicals detected. alpha-pinene, bornyl chloride†, phenol, 2,4,6-trichlorophenol†, 2,4,6-trinitrotoluene*.
13.	30WPS	Dry wipe from bicycle rear cassette in basement (level -1)	20180421190930	H	No chemicals relevant to CWC have been found.	S30	No CWC-scheduled chemicals detected. .
14.	34SDS	Wood from partition frame in basement (level -1)	20180421190934	J	Dichloroacetic acid, trichloroacetic acid.	V34	No CWC-scheduled chemicals detected. phenol, 2,4,6-trichlorophenol†, 2,4,6-trinitrotoluene*.
15.	38WPS	Swab with water from electric socket basement (level -1)	20180421190938	F	No chemicals relevant to CWC have been found.	WA38	No CWC-scheduled chemicals detected [1]
16.	43WPS	Wipe with water from lavatory extractor pipe in basement (level -1)	20180421190943	G	No chemicals relevant to CWC have been found.	WA43	No CWC-scheduled chemicals detected [1]

* TNT = Explosive, [1] CWC-scheduled chemicals and degradation products (estimated detection limit: <100 ppb).
CLOC = Chlorine containing Organic Chemicals, †Chlorinated compounds from wood.

Samples collected from Location 4							
Entry #	Sample Code	Description	Evidence Reference Number	DL02 code	Results DL02	DL03 code	Results DL03
17.	11WPS-L4	Dry wipe from nozzle, front part next to thread	20180425178811	H	Trichloroacetic acid, 1-methyl-2,4,6-trinitrobenzene*	WP11	No CWC-scheduled chemicals detected [1], chloride: 15,000 ppm (IC), iron: 390 ppm (ICP-MS), manganese: 54 ppm (ICP-MS), zinc: 4,700 ppm (ICP-MS)
18.	17WPS-L4	Wipe with DCM of cylinder nozzle	20180425178817	K	No chemicals relevant to CWC have been found.	WD17	No CWC-scheduled chemicals detected [1], CLOC (trace, GC), 2,4,6-trinitrotoluene* (ultra-trace, LC-HRMS, GC)
19.	16WPS-L4	Wipe with DCM from headbed	20180425178816	J	No chemicals relevant to CWC have been found.	WD16	No CWC-scheduled chemicals detected [1], CLOC (trace, GC), 2,4,6-trinitrotoluene* (trace, LC-HRMS, GC)
20.	04SDS-L4	Blanket under cylinder	20180425178804	L	Dichloroacetic acid, trichloroacetic acid, chloral hydrate, trichlorophenol, trinitrotoluene*, chloride.	TL4	No CWC-scheduled chemicals detected. 2,4,6-trinitrotoluene*.

Samples collected from Location 4							
Entry #	Sample Code	Description	Evidence Reference Number	DL02 code	Results DL02	DL03 code	Results DL03
21.	10SDS-L4	Pillow cover on the bed , closer to the wall	20180425178810	N	Dichloroacetic acid, trichloroacetic acid, trichlorophenol, tetrachlorophenol, chloral hydrate, trinitrotoluene*, chloride.	T10	No CWC-scheduled chemicals detected. 2,4,6-trinitrotoluene*.
22.	06SDS-L4	Wet wood from under the cylinder	20180425178806	M	Bornyl chloride†, chloride.	V06	No CWC-scheduled chemicals detected. alpha-pinene, bornyl chloride†, phenol, 2,4,6-trichlorophenol†,
23.	13WPS-L4	Dry wipe from stains on the wall, behind the bed	20180425178813	O	No chemicals relevant to CWC have been found.	S13	No CWC-scheduled chemicals detected. 2,4,6-Trinitrotoluene*.
24.	14SDS-L4	Chips of paint from wall behind bed. Reading on LCD 3.3: GB,HD,VXR	20180425178814	I	Tetrachlorophenol, 1-methyl-2,4,6-trinitrobenzene*, amino dinitrotoluene$^{\Delta}$, (isomer not specified)	SS14	No CWC-scheduled chemicals detected [1], CLOC (trace, LC-HRMS), chloride: 2,600 ppm (IC), zinc: 150 ppm (ICP-MS)
25.	19SDS-L4	Gloves from stairs	20180425178819	L	Dichloroacetic acid, trichloroacetic acid, 1-methyl-2,4,6-trinitrobenzene*, amino dinitrotoluene$^{\Delta}$, Permethrin$^{\infty}$	SS19	No CWC-scheduled chemicals detected [1] CLOC (trace, LC-HRMS) chloride: 17,000 ppm (IC) zinc: 1,500 ppm (ICP-MS)

* TNT = Explosive, [1] CWC-scheduled chemicals and degradation products (estimated detection limit: <100 ppb).
CLOC = Chlorine containing Organic Chemicals, †Chlorinated compounds from wood.

Samples collected from Hospital							
Entry #	Sample Code	Description	Evidence Reference Number	DL02 code	Results DL02	DL03 code	Results DL03
26.	S6	Concrete dust 5-13 on right hand side at wall	20180501177906	N	Trichlorophenol (isomer not specified) tetrachlorophenol, Permethrin∞, Malathion∞, Deltamethrin∞, Linuron∞, 1-methyl-2,4,6-trinitrobenzene*, amino dinitrotoluene∆ (isomer not specified)	SS06	No CWC-scheduled chemicals detected [1] CLOC (trace, LC-HRMS) chloride: 830 ppm (IC) 2,4,6-trinitrotoluene* (ultra-trace, LC-HRMS, GC)
27.	S7	Grouting from 5-13 c. 1 m out from LHS wall	20180501177907	Q	No chemicals relevant to CW have been found.	C07	No nerve agent related chemicals detected. triethanolamine‡

* TNT = Explosive, [1] CWC-scheduled chemicals and degradation products (estimated detection limit: <100 ppb). ‡Surfactant for textiles
CLOC = Chlorine containing Organic Chemicals, ∞Pesticide, ∆Precursor of TNT

Sample collected from Alleged Production Facility							
Entry #	Sample Code	Description	Evidence Reference Number	DL02 code	Results DL02	DL03 code	Results DL03
28.	04WPS-PF	Swab sample with water from outlet valve on reactor	20180430150804	P	No chemicals relevant to CWC have been found.	E04	No CWC-scheduled chemicals detected.

Sample collected from Warehouse							
Entry #	Sample Code	Description	Evidence Reference Number	DL02 code	Results DL02	DL03 code	Results DL03
29.	41BSS-WH	Solid sample from white bag with Cheminol label and labelled as hexamine	20180427191404	M	1,3,5,7-Tetraazatricyclo[3.3.1.1^{3,7}]decane or hexamine	SS41	No CWC-scheduled chemicals detected [1] hexamine (high purity, LC-HRMS, GC, NMR)

Samples received from witnesses							
Entry #	Sample Code	Description	Evidence Reference Number	DL02 code	Results DL02	DL03 code	Results DL03
30.	FFM-49-18-SDS05	Pieces of timber	20180421178220	T	No chemicals relevant to CWC have been found.	V05	No CWC-scheduled chemicals detected. phenol, 2,4,6-trichlorophenol†, 2,4,6-trinitrotoluene*.

Samples received from witnesses							
Entry #	Sample Code	Description	Evidence Reference Number	DL02 code	Results DL02	DL03 code	Results DL03
31.	FFM-49-18-SDS07	Scarf collected from the basement	20180422174805	U	No chemicals relevant to CWC have been found.	T07	No nerve agent chemicals detected. triethanolamine‡, "AmgardV19" phosphonate♦, malathion∝, 2,4,6-trinitrotoluene*.
32.	FFM-49-18-SDS08	Toy stuffed animal collected from basement	20180422174804	V	No chemicals relevant to CWC have been found.	T08	No nerve agent chemicals detected. triethanolamine‡, 2,4,6-trinitrotoluene*.
33.	FFM-49-18-SDS04	Piece of clothes from victim	20180421178219	S	Dichloroacetic acid, trichloroacetic acid, dichlorophenol, trichlorophenol.	T04	No nerve agent related chemicals detected. triethanolamine‡, 2,4,6-trinitrotoluene*.

* TNT = Explosive, [1] CWC-scheduled chemicals and degradation products (estimated detection limit: <100 ppb).

† Chlorinated compounds from wood.

‡ Surfactant for textiles.

♦ Flame retardant for polyester textiles. ∝Pesticide

TABLE A5.2: BIOMEDICAL SAMPLES RECEIVED OR COLLECTED BY THE FACT-FINDING MISSION

Biological samples were sent on the first group to Designated Laboratories							
Entry number	**Sample Code**	**Description**	**Evidence Reference Number**	**DL02 code**	**Results DL02**	**DL 03 code**	**Results DL03**
1.	178201	Plasma	20180421178201	A	No relevant chemicals found	A	Nerve agent adducts of BChE* derived nonapeptide (G- and V-type agents): No compound found. Aged G agent adduct of BChE-derived nonapeptide: No compound found. Nerve agent adduct of tyrosine (G- and V-type agents): No compound found.
2.	178204	Plasma	20180421178204	B	No relevant chemicals found	B	
3.	178207	Plasma	20180421178207	C	No relevant chemicals found	C	
4.	178210	Plasma	20180421178210	D	No relevant chemicals found	D	
5.	178213	Plasma	20180421178213	E	No relevant chemicals found	E	
6.	175704A	Plasma	20180418175704A	F	Sample was not analysed	F	
7.	175703A	Plasma	20180418175703A	G	Sample was not analysed	G	
8.	1748PL	Plasma	201804211748PL	H	No relevant chemicals found	H	
9.	1753PL	Plasma	201804251753PL	I	No relevant chemicals found	I	
10.	1770PL	Plasma	201804211770PL	J	No relevant chemicals found	J	
11.	1795PL	Plasma	201804211795PL	K	No relevant chemicals found	K	

* BChE = butyrylcholinesterase

Annex 6

VISIT TO LOCATION 2

Visit to Location 2 (“Cylinder on the Roof”)

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

10. Selected photos taken by the FFM of the terrace, crater, cylinder, and room beneath are shown below.[20]

FIGURE A.6.1 PHOTOS OF TERRACE, CRATER, AND ROOM BENEATH

[20] Refer to Paragraph 8.23.

11. The aperture observed was circular in shape with approximately 45 degrees angular edges.

12. The mangled ironwork present on the patio indicated that there would have been a metallic frame and mesh covering it at one stage, though it was not clear whether this would have been present at the time of the alleged incident or had been demolished prior to that. The visual damage on the body of the cylinder indicates that the lateral aspect of the cylinder did not slide on the mesh but it hit perpendicularly.

FIGURE A.6.2 CYLINDER WITH VISIBLE DAMAGE LIKELY ORIGINATING FROM THE MESH

13. The FFM team noted that a similar crater (see photos below) was present on a nearby building.

FIGURE A.6.3 ADJACENT ROOF SHOWING A CRATER SIMILAR TO THE ONE ON THE ROOF TERRACE AT LOCATION 2

14. The team was not able to climb on to the top of the building due to the security restrictions, but was able to observe damage in the corner of the balcony location above the crater.

FIGURE A.6.4 DAMAGE ABOVE THE CRATER OBSERVED FROM DIFFERENT ANGLES

15. Observing the damage on the roof above the crater, the experts were able to provide an explanation of the cylinder not penetrating completely through the aperture. It can be seen that there was a large impact on the roof and walls above the balcony. The impact would decrease the velocity of the falling cylinder and changed

its trajectory while hitting the concrete floor of the balcony causing a hole in it, but without sufficient energy to fall through it.

FIGURE A.6.5 DAMAGE OBSERVED ON THE CYLINDER

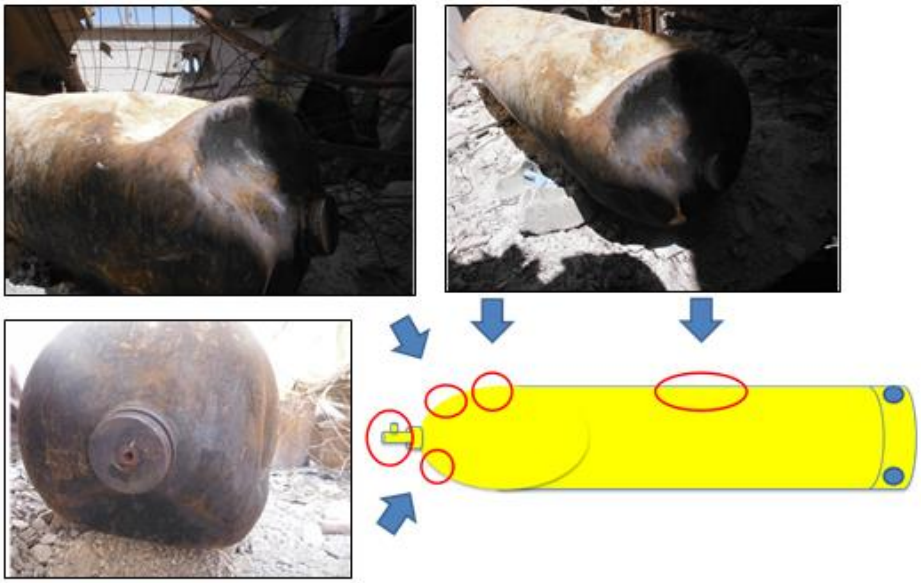
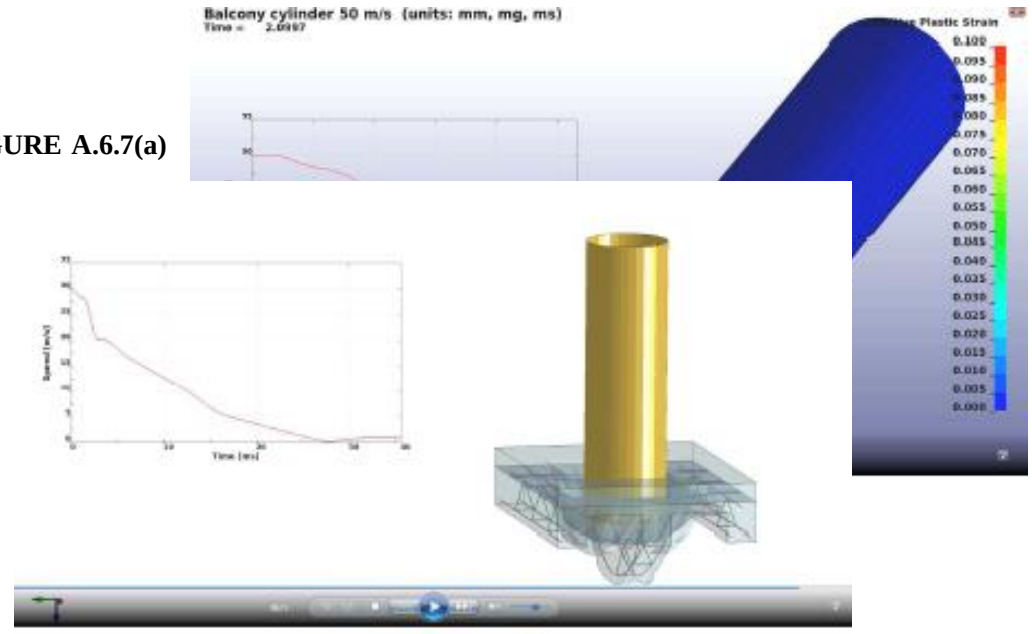


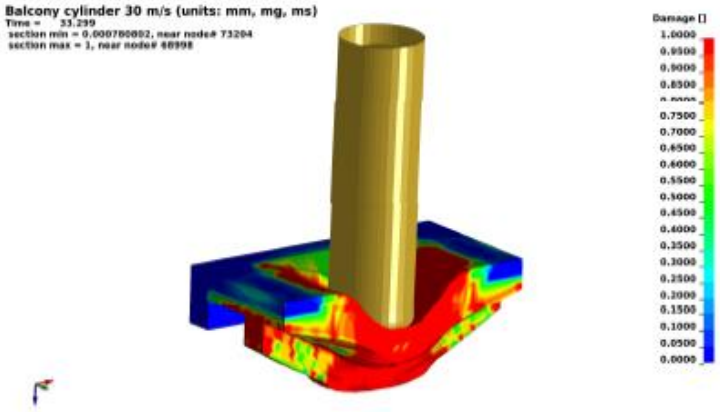
FIGURE A.6.6 CYLINDER FRONT END DEFORMATION IF IMPACTED WITH THE CORNER ON THE ROOF ABOVE THE BALCONY[21]

FIGURE A.6.7(a) MODULATION OF CYLINDER IMPACT ON BALCONY



[21] The angle shown in figures A.6.6, A.6.7 (a) to (c) are indicative only and not representing actual impact angle.

FIGURE A.6.7(b) DAMAGE ON THE CEILING IN THE CASE OF LOW SPEED IMPACT



Red colour indicates zone of complete disintegration

FIGURE A.6.7(c) NUMERICAL MODEL OF THE CRATER

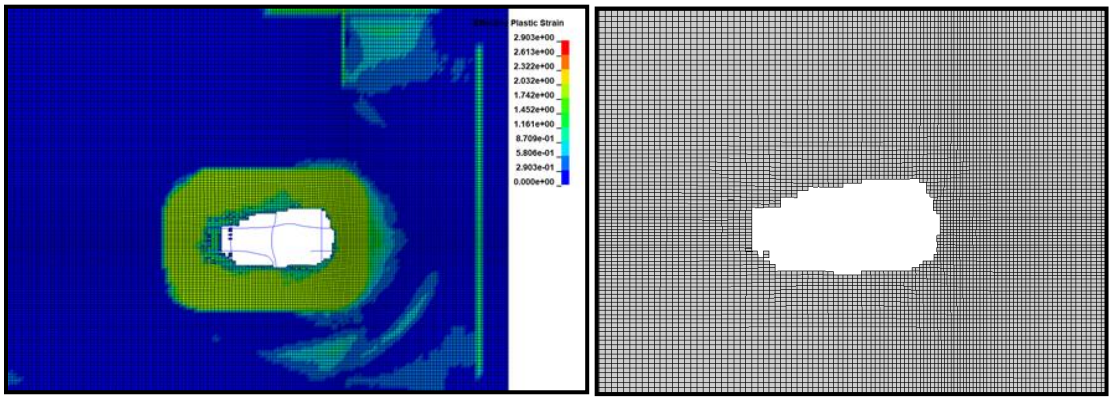


FIGURE A.6.8 CRATER AS SEEN BY FFM INSPECTORS

16. The FFM analysed the damage on the rooftop terrace and below the

crater in order to determine if it had been created by an explosive device. However, this hypothesis is unlikely given the absence of primary and secondary fragmentation characteristic of an explosion that may have created the crater and the damage surrounding it.

17. The FFM team noted the blackening of the ceiling and the rim of the aperture from the room immediately below the point of impact (see photo above). It also noted the blackened sooty walls in the corner of the room, as well as what appeared to be the ashen remnants of a small fire. One interviewed witness stated that a fire had been lit in the room after the alleged incident, reportedly to detoxify it of the alleged chemical.

Observed Changes to the Scene

18. The team observed during the visit that certain items were not present that had been seen in open source videos shortly after the alleged event or that had been seen in the video recording and photos taken during the reconnaissance visit. The following points are noted:

- the cylinder was sampled at least one (1) time prior to the FFM sampling;
- the cylinder was moved a number of times prior to the FFM visit;
- debris was moved in front of the cylinder; and
- the metal frame and fins, visible on the terrace in videos, were missing at the time of the FFM visit.

19. On 26 April the TS requested the SAR to transport the two cylinders that had been observed by the FFM team at Locations 2 and 4 to a safe storage area where the FFM team could apply OPCW tags and seals. SAR representatives informed the team that this would not be possible as the SAR wished to retain the cylinders for criminal investigation purposes. The team leader requested that the SAR inform the TS of this decision through a formal written reply to Note Verbale NV/ODG/214836/18. This was sent to the Technical Secretariat on 4 May. On 4 June, FFM team members tagged and sealed the cylinders from Locations 2 and 4, and documented the procedure.

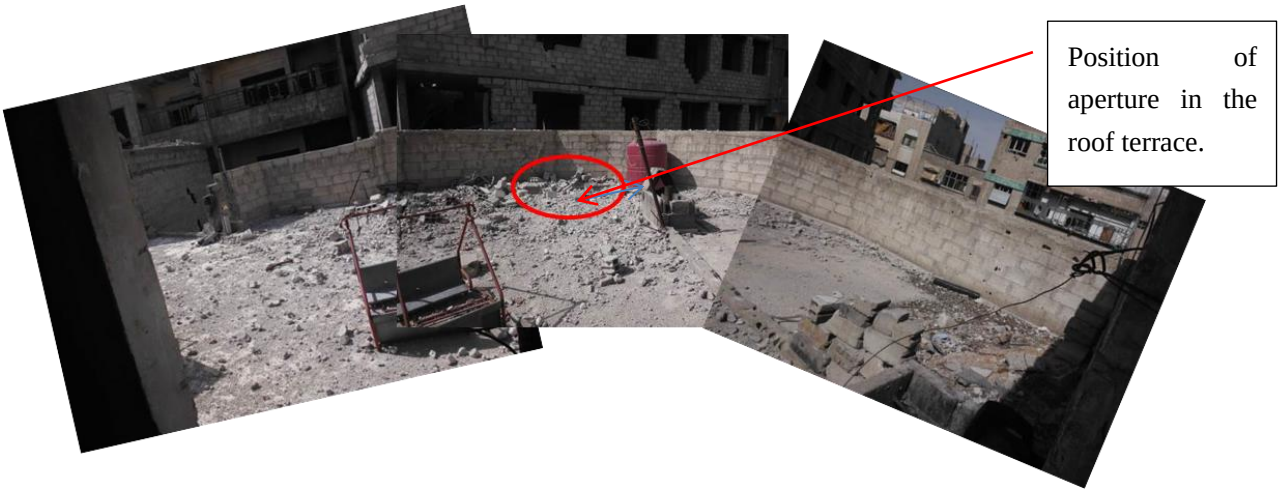
Annex 7
VISIT TO LOCATION 4

Visit to Location 4 (“cylinder in the bedroom”)

FIGURE A.7.1 THE AREA IN WHICH THE CYLINDER WAS OBSERVED IN A BEDROOM IN A TOP FLOOR APARTMENT

FIGURE A.7.2 LOCATION IN WHICH THE CYLINDER WAS OBSERVED IN A BEDROOM IN A TOP FLOOR APARTMENT

FIGURE A.7.3 ROOF OF LOCATION 4



The aperture was located close to a surrounding wall and next to the water tank with approximate dimensions of 166 x 105 cm. The distance from the adjacent building varies between 230 cm and 250 cm.

FIGURE A.7.4 CRATER ON THE ROOF OF LOCATION 4

FIGURE A.7.5 STRUCTURE OF THE CYLINDER WITH HARNESS AND STABILISING FINS

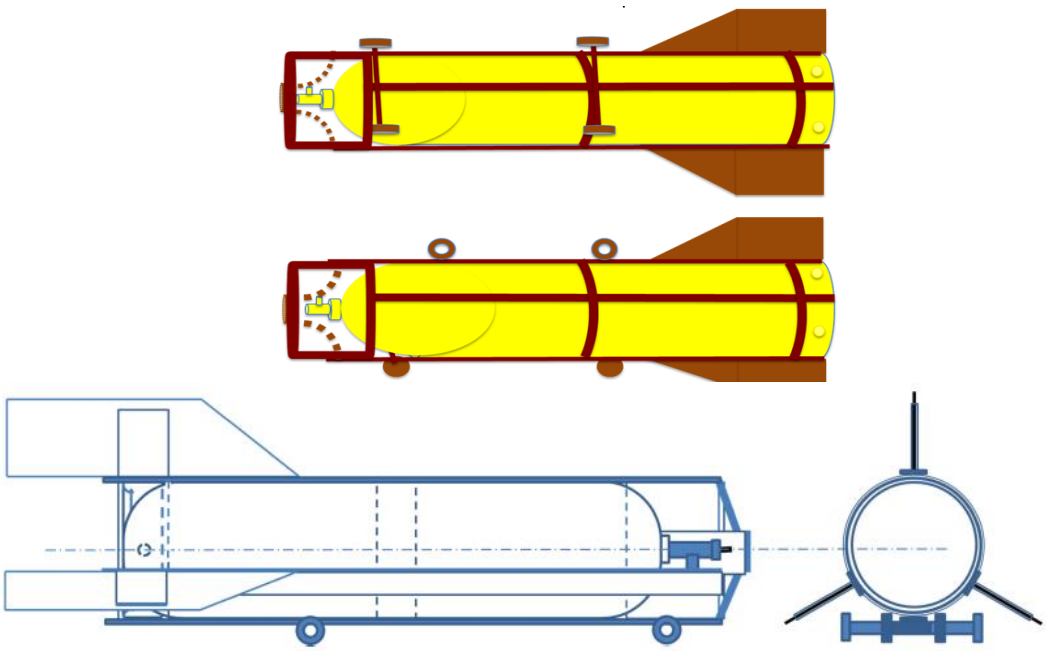
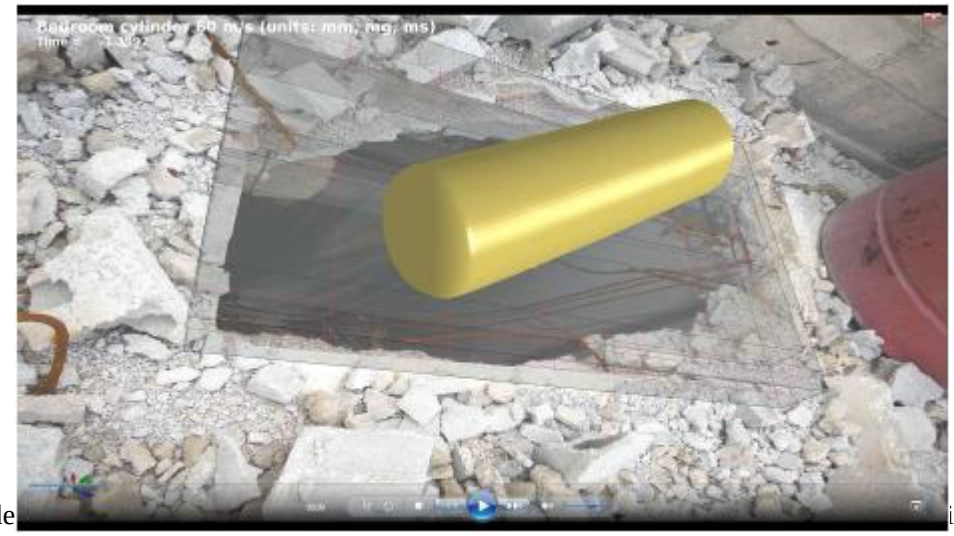


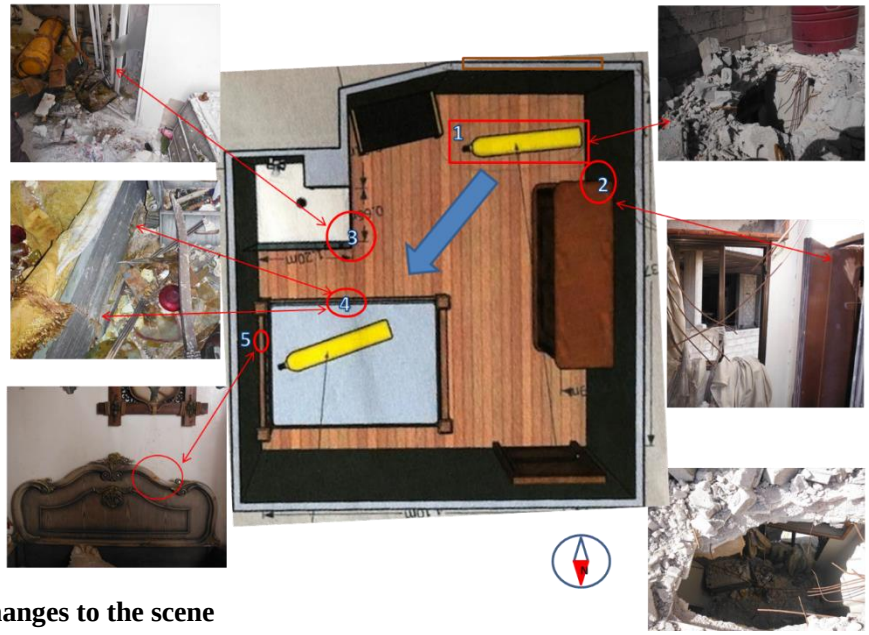
FIGURE A.7.6 SCALE REPRESENTATION OF LAYOUT OF LOCATION 4 ("CYLINDER IN A BEDROOM")

FIGURE A.7.6 SNAPSHOT OF SIMULATION OF THE POSSIBLE ROOF CRATER FORMATION



Conside ing wall adjacent to the hole in the roof, it was concluded that the cylinder impacted the roof as shown in Figure A.7.6. From the shape of the crater and damage on the cylinder, it is likely that the cylinder landed parallel to the ground creating a crater with dimensions of approximately 166 x 105 cm, which is in keeping with the dimensions of cylinder of 140 x 35 cm. It should be noted that the cylinder had an additional structure attached to the body, which is still in line with the dimensions of the crater. The damage observed on site by the FFM team and the possible trajectory of the cylinder based on observed damage and numerical calculations are represented in Figure A.7.7.

FIGURE A.7.7: POSSIBLE TRAJECTORY OF THE CYLINDER INSIDE THE ROOM



Observed changes to the scene

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

- The cylinder appears to have been cleaned. The layer of a white powder seen in the videos was not present when the FFM team visited the location.

FIGURE A.7.8 CHANGES IN THE SCENE

- The bedside lamp on the right side (towards the window) had been moved and was also missing in some photos.
- The FFM team observed a viscous liquid throughout the room, which was not apparent in videos. The same liquid was observed also before the entrance to the apartment and on disposable gloves present at the location (Annex 5).
- The round object similar to the funnel cap found at Location 2 was seen on the open source video.

FIGURE A.7.9 FUNNEL CAP

- Another discrepancy observed while comparing open source videos issued before the FFM visit is related to the cup on the shower cabin. In the initial videos, the cup was not present but on the photos and videos taken by the FFM, the cup is visible.

FIGURE A.7.10 OTHER DISCREPANCIES

Annex 8

VISIT TO THE WAREHOUSE AND FACILITY SUSPECTED OF PRODUCING CHEMICAL WEAPONS

Introduction

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

Visit to Warehouse

21. The FFM team deployed to the warehouse on 27 April 2018 to collect samples and take photos and physical measurements. The coordinates for the warehouse were measured as N 33° 34' 24", E 36° 23' 41.1". There were difficulties initially for the FFM team in gaining safe access to the basement where the warehouse was located. The team's monitoring equipment showed low oxygen levels in the basement as well as high levels of nitrous oxides. Both readings precluded a safe entry of the team and corrective measures had to be instigated. With the assistance of the representatives of the SAR it was possible to ventilate the basement sufficiently to bring oxygen and nitrous oxide levels to within acceptable levels to allow the team to safely work.

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

FIGURE A.8.1 LAYOUT OF THE WAREHOUSE IS GIVEN BELOW (NOT TO SCALE)

TABLE 1: TABLE A.8.1 LIST OF SUBSTANCES OBSERVED ON LABELS IN THE WAREHOUSE.

Labelling	Labelling
Cobalt octoate	Packing substances
Dr. Oxygen (for oxygen generation)	Stearic acid
Methyl ethyl ketone (MEK)	Enamel paint
Butyl acetate	Nickel sulfate
Butyl glycolether	Sodium carbonate
Dibutyl phthalate (DBP)	Sulfur
Toluene	Agricultural sulfur
Desmophen A 760 BA/X (hydroxyl bearing polyacrylate)	Oil 2.5
Carboxyl methyl cellulose (CMC)	Resin
TAJ Brilliant Freshness (Detergent)	Sulfuric acid
Engineering Plastics	Sodium nitrate
Aqua 95	Potassium nitrate
MHM	Ammonium perchlorate
Uplex	Polyamide granules
Methyl acetate	Wax

Labelling	Labelling
Desmodur NS (Resin solution)	Iron oxide
Lead octoate	Sodium hydroxide
Acetone	Butoxyethanol
Desmodur L 75 (Aromatic polyisocyanate based on toluene diisocyanate)	Burnt oil
EcoC (wetted with)	Hexanoic acid
Lama (Waterproofing polymer)	Anti-freeze
Calcium carbonate	Chlorinated paraffin
ROSK K 26 FASS 226 (contains styrene)	Propyl acetate
Diethanolamine	Sodium bicarbonate
LG – PP Seetec (polypropylene)	Potassium carbonate
Plastichem (plastics from Sprea Group)	Diesel
Hexamine	Polyethylene
Hydrochloric acid	Glycol
Propylene glycol	Vaseline
Diethylene glycol	Cytidine
Acrylic resin	Nitrocellulose
Xanthan	Aluminium sulfate
FLASH (Detergent for bathrooms)	

23. The chemicals identified and which were present in bulk quantities are precursors that are consistent with the production of explosives and propellants. Chemicals such as hexamine, diethylene glycol, carboxymethyl cellulose, toluene, acetone, sulphur, potassium nitrate, dibutyl phthalate, and diethanolamine are all key precursors for the production of explosives and propellants such as RDX, trinitrotoluene (TNT), nitrocellulose, nitrodiethanolamine dinitrate, ethylene glycol dinitrate and gun powder. Although nitric acid, the key nitrating agent for explosives production, was not observed by the FFM team, several litre quantities were seen in the open source video of the same warehouse. Large quantities of sulphuric acid, an important chemical in nitration processes, were also present.

24. The FFM team did not observe any major key precursors for the synthesis of chemical weapons agents, particularly for nerve agents such as sarin, or vesicants such as sulphur or nitrogen mustard. Although large quantities of hexamine, which can be used as an acid scavenger in binary-type sarin systems and not as a reactive ingredient, were present, no other sarin precursors were observed. In this context, the presence of hexamine, appeared consistent with the production of explosives such as RDX, for which it is the key ingredient.

25. Sulphur powder that serves as one component of binary VX was also observed. None of the precursors for the other component of the binary system, namely QL, were noted. In this context, the storage of sulphur at the site appeared consistent with the manufacture of gun powder, particularly since potassium nitrate was also present.

26. Although the team confirmed the presence of a yellow cylinder in the warehouse, reported in Note Verbale of the Syrian Arab Republic (Annex 10, point 2) as a chlorine cylinder, due to safety reasons (risk involved in manipulating the valve of the cylinder, see Figure A.8.2) it was not feasible to verify or sample the contents. There were differences in this cylinder compared to those witnessed at Locations 2 and 4. It should be noted that the cylinder was present in its original state and had not been altered. Chlorine gas is generally not a common chlorinating agent in the production of chemical weapons agents, except when used in conjunction with phosphorous trichloride, which was not present. Subsequently, the presence of a cylinder reported as containing chlorine gas is not indicative of the production of explosives.

FIGURE A.8.2 CYLINDER OBSERVED BY THE FFM TEAM AT THE WAREHOUSE

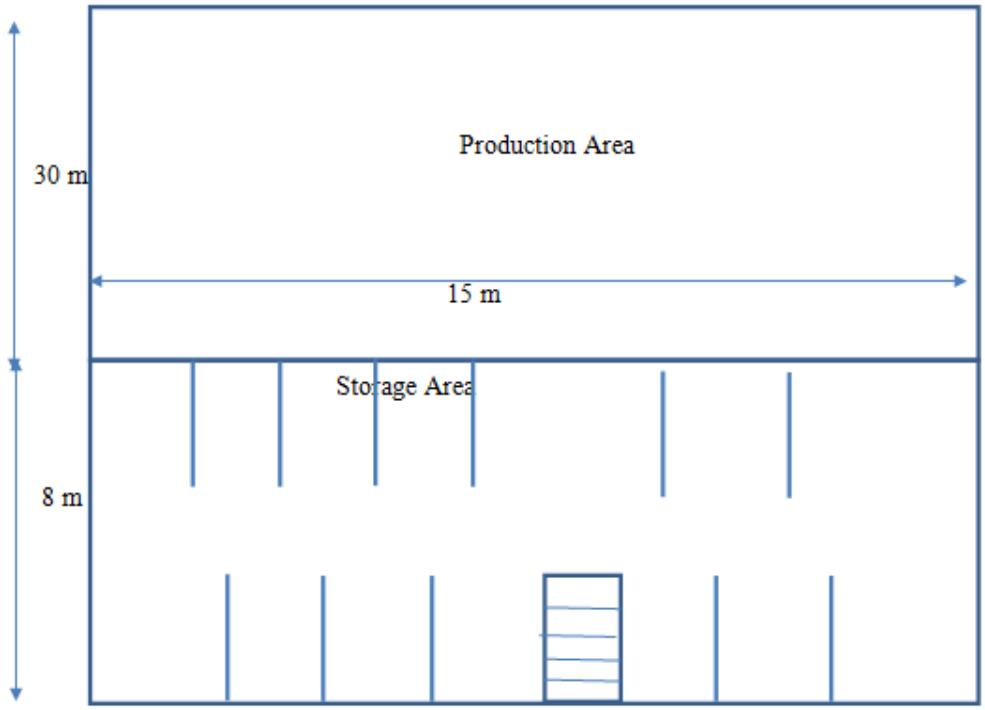
Visit to the facility suspected of producing chemical weapons

27. The facility was visited by the FFM team on 30 April. A description of the building and the main features as observed by the FFM team are provided below.

28. The facility is located in the basement of a multi-storey building located at GPS coordinates N 33^0 34’ 44.7”, E 36^0 24’ 2.9”. There are two main sections to the facility, one apparently for storage of materials and the other a larger open production area. The storage area in the basement which is demarcated by concrete walls into partly separated bays is accessed directly from road level and has dimensions of approximately 15 x 8 metres.

29. Adjacent to the storage area, is a larger open area of approximately 30 x 15 metres where a small amount of chemical production equipment is housed.

FIGURE A.8.3 LAYOUT PRODUCTION AREA AND STORAGE AREA[22]



The following was observed in the storage area:

- semi-open bays with concrete-partitioning walls between storage areas;
- bags of powder, mostly unlabelled and some carrying commercial brands such as “Lama” and “Bela”, in addition to wheat flour;
- unmarked metallic and plastic drums. An oily leakage on top of one unmarked plastic drum indicated the presence of nitrogen containing compounds on the team’s detection equipment;
- components relevant to explosive devices, such as hand-manufactured detonation cord and a bag labelled “RDX”;
- two cardboard boxes containing laboratory glassware, mostly Erlenmeyer flasks and another containing what appeared to be white ceramic balls;
- a number of 20-litre metallic drums, some fitted with crude cord-type fuses, which appeared to have been filled with plastic explosives to serve as improvised explosive devices; and
- a number of glass jars containing a light-brown waxy solid substance.

[22] Drawing not proportionally scaled on intention.

It is to be noted that the storage area was not equipped with any mechanical ventilation system.

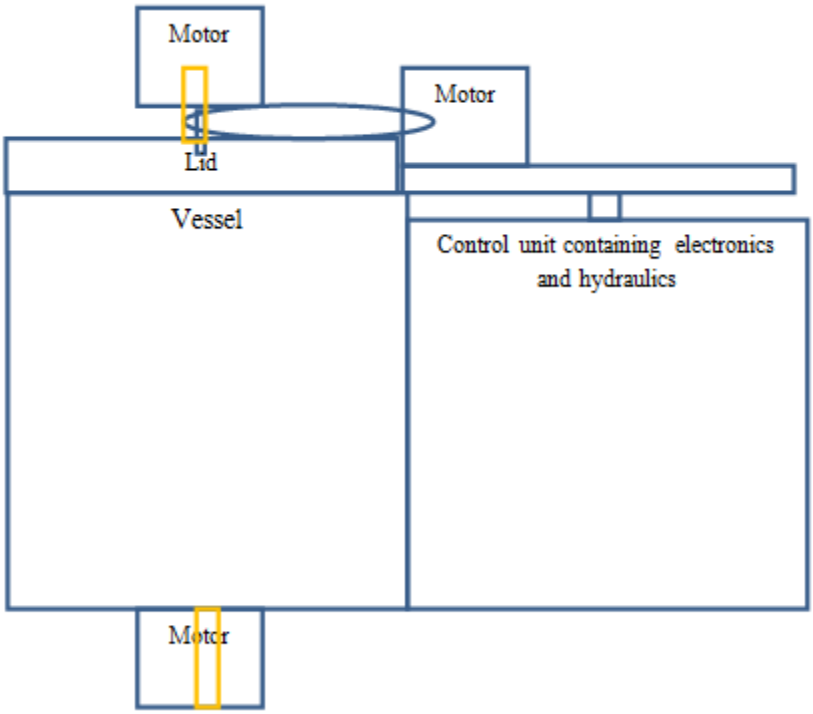
The following was observed in the production area:

- an open area of approximately 30 x 15 metres;
- a tiled area that appear to be part of a bathroom and toilet;
- an improvised extraction hood connected to a vent that was routed through the ceiling. Below were indications of a small open fireplace as well as a cooking pot filled with solid dark flaky substance;
- an electrical junction box; and
- chemical production equipment. Details of the production equipment are given below.

30. There were no indications that chemical warfare agents or highly toxic chemicals were being manufactured at this facility. As supporting evidence, the team took two wipe samples from the outlet of the vessel. No chemicals related to the production of chemical weapons were detected.

31. The mixing vessel was of a specific design, and the team considered that these design features did not make the unit particularly suited for chemical synthesis of toxic or any other chemicals. The installation appeared to be a heating and kneading unit that could be used for filling ammunition with liquid explosives or for mixing explosives with additives. Examples would include mixing of TNT with aluminium to produce tritonal, and mixing of RDX with liquid rubber for the production of plastic explosives.

FIGURE A.8.5 SCHEME OF MIXING VESSEL



32. Based on the gathered information, the FFM team was not able to establish the link between the warehouse visited on 27 April and the facility suspected of producing chemical weapons.

Description of the production equipment present in the Facility suspected of producing chemical weapons:

- The production equipment appeared to be a purpose-designed stainless steel unit mounted on a sturdy stainless steel frame.
- The main item of equipment included a jacketed stainless steel vessel of roughly 0.75 meters in diameter and 1.2 meters in height, with a volume of 500 litres.
- The vessel was fitted with three motors connected to multiple mixing paddles and a removable lid with a sight glass that could be raised by a hydraulic piston.
- Through the sight glass, residues of a brown paste on the mixing paddles and the walls of the vessel were visible.
- The vessel was fitted with a pressure gauge calibrated to 15 bar.
- There was a service line connected to the top of the jacket, passing through the ceiling from the ground floor above. However, the other end of the service line was not connected to anything at that location. There was another line of similar size exiting the bottom of the vessel jacket, which included a simple pressure relief valve. This appeared to be consistent with a steam jacket serving the vessel for heating, with condensate removal at the bottom.
- There was a line going into the top of the reactor, presumably for addition of water given that the supply line was also connected to washbasins in the room.

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

33. Based on the chemicals and the equipment present, as well as the lack of protective mechanisms against toxic chemicals, it is highly unlikely that chemical weapons agents were being manufactured in the location described. With the chemical ingredients present, or suggested to be present, it is not possible to manufacture either nerve agents or vesicants. Some of the chemicals observed could be used to manufacture at least two of the Schedule 3A chemicals, hydrogen cyanide and cyanogen chloride, both highly toxic blood agents (not found on the location). As these are either low boiling liquids (hydrogen cyanide boils at 26 ^{0}C) or gases (cyanogen chloride boils at 13^{0}C), it would make it very difficult to handle these chemicals, particularly in the absence of any personal protective equipment, abatement systems or appropriate storage equipment.

34. On the other hand, there is high consistency between the equipment and chemicals present in terms of production of explosives. All of the chemicals observed are common in the production of explosives and propellants.

Annex 9

Information collected BY THE FFM

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

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

Electronic data collected by the FFM		
Entry number	**Assigned Package Code**	**Folder location**

Electronic data collected by the FFM									
1.	1508	D:\1508\Camera 1 - 1508\removable disk\dcim\104_fuji\							
File names									
dscf4405.jpg	dscf4424.jpg	dscf4443.jpg	dscf4462.jpg	dscf4481.jpg	dscf4500.jpg	dscf4519.jpg	dscf4538.jpg	dscf4557.jpg	dscf4576.jpg
dscf4406.jpg	dscf4425.jpg	dscf4444.jpg	dscf4463.jpg	dscf4482.jpg	dscf4501.jpg	dscf4520.jpg	dscf4539.jpg	dscf4558.jpg	dscf4577.jpg
dscf4407.jpg	dscf4426.jpg	dscf4445.jpg	dscf4464.jpg	dscf4483.jpg	dscf4502.jpg	dscf4521.jpg	dscf4540.jpg	dscf4559.jpg	dscf4578.jpg
dscf4408.jpg	dscf4427.jpg	dscf4446.jpg	dscf4465.jpg	dscf4484.jpg	dscf4503.jpg	dscf4522.jpg	dscf4541.jpg	dscf4560.jpg	dscf4579.jpg
dscf4409.jpg	dscf4428.jpg	dscf4447.jpg	dscf4466.jpg	dscf4485.jpg	dscf4504.jpg	dscf4523.jpg	dscf4542.jpg	dscf4561.jpg	dscf4580.jpg
dscf4410.jpg	dscf4429.jpg	dscf4448.jpg	dscf4467.jpg	dscf4486.jpg	dscf4505.jpg	dscf4524.jpg	dscf4543.jpg	dscf4562.jpg	dscf4581.jpg
dscf4411.jpg	dscf4430.jpg	dscf4449.jpg	dscf4468.jpg	dscf4487.jpg	dscf4506.jpg	dscf4525.jpg	dscf4544.jpg	dscf4563.jpg	dscf4582.jpg
dscf4412.jpg	dscf4431.jpg	dscf4450.jpg	dscf4469.jpg	dscf4488.jpg	dscf4507.jpg	dscf4526.jpg	dscf4545.jpg	dscf4564.jpg	dscf4583.jpg
dscf4413.jpg	dscf4432.jpg	dscf4451.jpg	dscf4470.jpg	dscf4489.jpg	dscf4508.jpg	dscf4527.jpg	dscf4546.jpg	dscf4565.jpg	dscf4584.jpg
dscf4414.jpg	dscf4433.jpg	dscf4452.jpg	dscf4471.jpg	dscf4490.jpg	dscf4509.jpg	dscf4528.jpg	dscf4547.jpg	dscf4566.jpg	dscf4585.jpg
dscf4415.jpg	dscf4434.jpg	dscf4453.jpg	dscf4472.jpg	dscf4491.jpg	dscf4510.jpg	dscf4529.jpg	dscf4548.jpg	dscf4567.jpg	dscf4586.jpg
dscf4416.jpg	dscf4435.jpg	dscf4454.jpg	dscf4473.jpg	dscf4492.jpg	dscf4511.jpg	dscf4530.jpg	dscf4549.jpg	dscf4568.jpg	dscf4587.jpg

Electronic data collected by the FFM									
dscf4417.jpg	dscf4436.jpg	dscf4455.jpg	dscf4474.jpg	dscf4493.jpg	dscf4512.jpg	dscf4531.jpg	dscf4550.jpg	dscf4569.jpg	dscf4588.jpg
dscf4418.jpg	dscf4437.jpg	dscf4456.jpg	dscf4475.jpg	dscf4494.jpg	dscf4513.jpg	dscf4532.jpg	dscf4551.jpg	dscf4570.jpg	dscf4589.jpg
dscf4419.jpg	dscf4438.jpg	dscf4457.jpg	dscf4476.jpg	dscf4495.jpg	dscf4514.jpg	dscf4533.jpg	dscf4552.jpg	dscf4571.jpg	dscf4590.jpg
dscf4420.jpg	dscf4439.jpg	dscf4458.jpg	dscf4477.jpg	dscf4496.jpg	dscf4515.jpg	dscf4534.jpg	dscf4553.jpg	dscf4572.jpg	dscf4591.jpg
dscf4421.jpg	dscf4440.jpg	dscf4459.jpg	dscf4478.jpg	dscf4497.jpg	dscf4516.jpg	dscf4535.jpg	dscf4554.jpg	dscf4573.jpg	dscf4592.jpg
dscf4422.jpg	dscf4441.jpg	dscf4460.jpg	dscf4479.jpg	dscf4498.jpg	dscf4517.jpg	dscf4536.jpg	dscf4555.jpg	dscf4574.jpg	dscf4593.jpg
dscf4423.jpg	dscf4442.jpg	dscf4461.jpg	dscf4480.jpg	dscf4499.jpg	dscf4518.jpg	dscf4537.jpg	dscf4556.jpg	dscf4575.jpg	dscf4594.jpg

Entry number	Assigned Package Code	Folder location
1.	1508	D:\1508\Camera 2 - 1508\removable disk\dcim\100nikon\

dscn2306.mov	dscn2313.jpg	dscn2320.jpg	dscn2327.jpg	dscn2334.jpg	dscn2341.jpg	dscn2348.jpg	dscn2355.jpg	dscn2362.jpg	dscn2369.jpg
dscn2307.jpg	dscn2314.jpg	dscn2321.jpg	dscn2328.jpg	dscn2335.jpg	dscn2342.jpg	dscn2349.jpg	dscn2356.jpg	dscn2363.jpg	dscn2370.jpg
dscn2308.jpg	dscn2315.jpg	dscn2322.jpg	dscn2329.jpg	dscn2336.jpg	dscn2343.jpg	dscn2350.jpg	dscn2357.jpg	dscn2364.jpg	dscn2371.jpg
dscn2309.jpg	dscn2316.jpg	dscn2323.jpg	dscn2330.jpg	dscn2337.jpg	dscn2344.jpg	dscn2351.jpg	dscn2358.jpg	dscn2365.jpg	dscn2372.jpg

Electronic data collected by the FFM									
dscn2310.jpg	dscn2317.jpg	dscn2324.jpg	dscn2331.jpg	dscn2338.jpg	dscn2345.jpg	dscn2352.jpg	dscn2359.jpg	dscn2366.jpg	dscn2373.jpg
dscn2311.jpg	dscn2318.jpg	dscn2325.jpg	dscn2332.jpg	dscn2339.jpg	dscn2346.jpg	dscn2353.jpg	dscn2360.jpg	dscn2367.jpg	dscn2374.jpg
dscn2312.jpg	dscn2319.jpg	dscn2326.jpg	dscn2333.jpg	dscn2340.jpg	dscn2347.jpg	dscn2354.jpg	dscn2361.jpg	dscn2368.jpg	dscn2375.jpg
dscn2306.mov	dscn2313.jpg	dscn2320.jpg	dscn2327.jpg	dscn2334.jpg	dscn2341.jpg	dscn2348.jpg	dscn2355.jpg	dscn2362.jpg	dscn2369.jpg

Entry number	Assigned Package Code	Folder location
1.	1508	D:\1508\Video Camera - 1508\removable disk\avf_info\

avin0001.bnp	avin0001.inp	avin0001.int	prv00001.bin

Entry number	Assigned Package Code	Folder location
1.	1508	D:\1508\Video Camera - 1508\removable disk\dcim\100msdcf\

dsc00682.jpg	dsc00683.jpg	dsc00684.jpg	dsc00685.jpg	dsc00686.jpg	dsc00687.jpg	dsc00688.jpg	dsc00689.jpg	dsc00690.jpg

Entry number	Assigned Package Code	Folder location
1.	1508	D:\1508\Video Camera - 1508\removable disk\mp_root\100anv01\

mah00681.mp4	mah00692.mp4	mah00694.mp4	mah00696.mp4	mah00698.mp4	mah00700.mp4	mah00702.mp4	mah00681.mp4
mah00681.thm	mah00692.thm	mah00694.thm	mah00696.thm	mah00698.thm	mah00700.thm	mah00702.thm	mah00681.thm
mah00691.mp4	mah00693.mp4	mah00695.mp4	mah00697.mp4	mah00699.mp4	mah00701.mp4	mah00703.mp4	mah00691.mp4

Entry number	Assigned Package Code	Folder location
2.	1741	D:\1741\evidence\1741 original\خرائط\الكيماوي مجزرة\

Electronic data collected by the FFM			
٢٠١٨٠٤٢٥_١٥٠٣٢٢. png	٢٠١٨٠٤٢٥_١٥١٠١٤. png	٢٠١٨٠٤٢٥_١٥١٣٠٢. png	٢٠١٨٠٤٢٥_١٥١٤٠٢. png

Entry number	Assigned Package Code	Folder location
2.	1741	D:\1741\evidence\1741 original\050\صور\الكيماوي مجزرة\الشهداء\

a4443.jpgمجزرة الكيماوي	a4666-1.jpg مجزرة الكيماوي	a4707-1.jpg مجزرة الكيماوي	a4727.jpgمجزرة الكيماوي	a4732.jpgمجزرة الكيماوي
a4783.jpgمجزرة الكيماوي	a4787.jpgمجزرة الكيماوي	a4789.jpgمجزرة الكيماوي	a4792.jpgمجزرة الكيماوي	a4807.jpgمجزرة الكيماوي
a4808.jpgمجزرة الكيماوي	a4814.jpgمجزرة الكيماوي	a4837.jpgمجزرة الكيماوي	a4838.jpgمجزرة الكيماوي	

Entry number	Assigned Package Code	Folder location	File Name
2.	1741	D:\1741\evidence\1741 original\الشهداء صور\الكيماوي مجزرة\	١-1.jpg

Entry number	Assigned Package Code	Folder location
2.	1741	D:\1741\evidence\1741 original\050\فيديو\الكيماوي مجزرة\

a4774.mp4مجزرة الكيماوي	a4799.mp4مجزرة الكيماوي	a4836.mp4مجزرة الكيماوي

Entry number	Assigned Package Code	Folder location
2.	1741	D:\1741\evidence\1741 working copy\1741 working copy\الكيماوي مجزرة\maps\

٢٠١٨٠٤٢٥_١٥٠٣٢٢. png	٢٠١٨٠٤٢٥_١٥١٠١٤. png	٢٠١٨٠٤٢٥_١٥١٣٠٢. png	٢٠١٨٠٤٢٥_١٥١٤٠٢. png

Entry number	Assigned Package Code	Folder location
2.	1741	D:\1741\evidence\1741 working copy\1741 working copy\الكيماوي مجزرة\photos\

a4443.jpg	a4666-1.jpg	a4707-1.jpg	a4727.jpg	a4732.jpg
a4783.jpg	a4787.jpg	a4789.jpg	a4792.jpg	a4807.jpg
a4808.jpg	a4814.jpg	a4837.jpg	a4838.jpg	١-1.jpg

Electronic data collected by the FFM				
Entry number	**Assigned Package Code**	**Folder location**		
2.	1741	D:\1741\evidence\1741 working copy\1741 working copy\الكيماوي مجزرة\video\		
a4774.mp4	a4799.mp4	a4836.mp4		
Entry number	**Assigned Package Code**	**Folder location**		
3.	1742	D:\1742\evidence\original\		
050a4783.jpg	050a4792.jpg	٢٠١٨٠٤٠٧_١٦٠ ٩٢٦.jpg	٢٠١٨٠٤٠٧_١٦٢ ٨٤٨.mp4	٢٠١٨٠٤٠٨_٠٢٠ ٢١٩.mp4
٢٠١٨٠٤٠٨_٠٢٠ ٣٢٩.mp4	٢٠١٨٠٤٠٨_٠٢٠ ٤٠٩.jpg	٢٠١٨٠٤٠٨_٠٢٠ ٤٢٧.mp4	٢٠١٨٠٤٠٨_٠٢٠ ٥٢٥.jpg	٢٠١٨٠٤١١_٠٠٣ ٤٣١.mp4
٢٠١٨٠٤١١_٠٠٣ ٥٢٥.mp4	٢٠١٨٠٤١١_٠٠٣ ٥٣٢.jpg	٢٠١٨٠٤١١_٠٠٣ ٦٣٨.jpg	٢٠١٨٠٤١١_٠٠٣ ٦٤٤.jpg	٢٠١٨٠٤١١_٠٠٤ ١٠٠.mp4
Entry number	**Assigned Package Code**	**Folder location**		
3.	1742	D:\1742\evidence\working copy\		
050a4783.jpg	050a4792.jpg	٢٠١٨٠٤٠٧_١٦٠ ٩٢٦.jpg	٢٠١٨٠٤٠٧_١٦٢ ٨٤٨.mp4	٢٠١٨٠٤٠٨_٠٢٠ ٢١٩.mp4
٢٠١٨٠٤٠٨_٠٢٠ ٣٢٩.mp4	٢٠١٨٠٤٠٨_٠٢٠ ٤٠٩.jpg	٢٠١٨٠٤٠٨_٠٢٠ ٤٢٧.mp4	٢٠١٨٠٤٠٨_٠٢٠ ٥٢٥.jpg	٢٠١٨٠٤١١_٠٠٣ ٤٣١.mp4
٢٠١٨٠٤١١_٠٠٣ ٥٢٥.mp4	٢٠١٨٠٤١١_٠٠٣ ٥٣٢.jpg	٢٠١٨٠٤١١_٠٠٣ ٦٣٨.jpg	٢٠١٨٠٤١١_٠٠٣ ٦٤٤.jpg	٢٠١٨٠٤١١_٠٠٤ ١٠٠.mp4
Entry number	**Assigned Package Code**	**Folder location**		
4.	1748	D:\1748\evidence\		
fb_img_143976227 7929.jpg	vid-20180416-wa0057.mp4	010 صوت_ sd.m4a	٢٠١٨٠٤١٠_١١٤٠١٩.jpg	
Entry number	**Assigned Package Code**	**Folder location**	**File Name**	
5.	1757	D:\1757\evidence\	00010.mts	
Entry number	**Assigned Package Code**	**Folder location**		
5.	1757	D:\1757\evidence\تحقيق\		

Electronic data collected by the FFM							
imag0090.jpg	video0005.mp4	video0006.mp4	video0007.mp4	video0008.mp4	video0009.mp4	video0010.mp4	video0016.mp4
video0017.mp4	video0018.mp4	video0019.mp4	video0028.mp4	video0029.mp4	video0030.mp4	video0053.mp4	video0054.mp4

Entry number	Assigned Package Code	Folder location
6.	1779	D:\1779\Camera 1 - 1779\removable disk\dcim\103_fuji\

dscf3538.jpg	dscf3547.jpg	dscf3556.jpg	dscf3565.jpg	dscf3574.jpg	dscf3583.jpg	dscf3592.jpg	dscf3601.jpg	dscf3610.jpg
dscf3539.jpg	dscf3548.jpg	dscf3557.jpg	dscf3566.jpg	dscf3575.jpg	dscf3584.jpg	dscf3593.jpg	dscf3602.jpg	dscf3611.jpg
dscf3540.jpg	dscf3549.jpg	dscf3558.jpg	dscf3567.jpg	dscf3576.jpg	dscf3585.jpg	dscf3594.jpg	dscf3603.jpg	dscf3612.jpg
dscf3541.jpg	dscf3550.jpg	dscf3559.jpg	dscf3568.jpg	dscf3577.jpg	dscf3586.jpg	dscf3595.jpg	dscf3604.jpg	dscf3613.jpg
dscf3542.jpg	dscf3551.jpg	dscf3560.jpg	dscf3569.jpg	dscf3578.jpg	dscf3587.jpg	dscf3596.jpg	dscf3605.jpg	dscf3614.jpg
dscf3543.jpg	dscf3552.jpg	dscf3561.jpg	dscf3570.jpg	dscf3579.jpg	dscf3588.jpg	dscf3597.jpg	dscf3606.jpg	dscf3615.jpg
dscf3544.jpg	dscf3553.jpg	dscf3562.jpg	dscf3571.jpg	dscf3580.jpg	dscf3589.jpg	dscf3598.jpg	dscf3607.jpg	dscf3616.jpg
dscf3545.jpg	dscf3554.jpg	dscf3563.jpg	dscf3572.jpg	dscf3581.jpg	dscf3590.jpg	dscf3599.jpg	dscf3608.jpg	dscf3617.jpg

Entry number	Assigned Package Code	Folder location
6.	1779	D:\1779\Camera 2 - 1779\removable disk\dcim\104_fuji\

dscf4595.jpg	dscf4600.jpg	dscf4605.jpg	dscf4610.jpg	dscf4615.jpg	dscf4620.jpg	dscf4625.jpg	dscf4630.jpg	dscf4635.jpg	dscf4640.jpg
dscf4596.jpg	dscf4601.jpg	dscf4606.jpg	dscf4611.jpg	dscf4616.jpg	dscf4621.jpg	dscf4626.jpg	dscf4631.jpg	dscf4636.jpg	dscf4641.jpg
dscf4597.jpg	dscf4602.jpg	dscf4607.jpg	dscf4612.jpg	dscf4617.jpg	dscf4622.jpg	dscf4627.jpg	dscf4632.jpg	dscf4637.jpg	dscf4642.jpg

Electronic data collected by the FFM									
dscf4598.jpg	dscf4603.jpg	dscf4608.jpg	dscf4613.jpg	dscf4618.jpg	dscf4623.jpg	dscf4628.jpg	dscf4633.jpg	dscf4638.jpg	dscf4643.jpg
dscf4599.jpg	dscf4604.jpg	dscf4609.jpg	dscf4614.jpg	dscf4619.jpg	dscf4624.jpg	dscf4629.jpg	dscf4634.jpg	dscf4639.jpg	dscf4644.jpg
dscf4645.jpg		dscf4646.jpg		dscf4647.jpg		dscf4648.jpg		dscf4649.jpg	

Entry number	Assigned Package Code	Folder location
6.	1779	D:\1779\Camera 3 - 1779\removable disk\dcim\100nikon\

dscn2376.jpg	dscn2377.jpg	dscn2378.jpg	dscn2379.jpg	dscn2380.jpg	dscn2381.jpg	dscn2382.jpg	dscn2383.jpg	dscn2384.jpg	dscn2385.jpg
dscn2386.jpg	dscn2387.jpg	dscn2388.jpg	dscn2389.jpg	dscn2390.jpg	dscn2391.jpg	dscn2392.jpg	dscn2393.jpg	dscn2394.jpg	dscn2395.jpg
dscn2396.jpg	dscn2397.jpg	dscn2398.jpg	dscn2399.jpg	dscn2400.jpg	dscn2401.jpg	dscn2402.jpg	dscn2403.jpg	dscn2404.jpg	dscn2405.jpg
dscn2406.jpg	dscn2407.jpg	dscn2408.jpg	dscn2409.jpg	dscn2410.jpg	dscn2411.jpg	dscn2412.jpg	dscn2413.jpg	dscn2414.jpg	dscn2415.jpg
dscn2416.jpg	dscn2417.jpg	dscn2418.jpg	dscn2419.jpg	dscn2420.jpg	dscn2421.jpg	dscn2422.jpg	dscn2423.jpg	dscn2424.jpg	dscn2425.jpg
dscn2426.jpg	dscn2427.jpg	dscn2428.mov	dscn2429.jpg	dscn2430.jpg	dscn2431.jpg	dscn2432.jpg	dscn2433.jpg		

Entry number	Assigned Package Code	Folder location
6.	1779	D:\1779\Video of repacking samples - 1779\removable disk\mp_root\100anv01\

avin0001.bnp	avin0001.inp	avin0001.int	prv00001.bin

Entry number	Assigned Package Code	Folder location
6.	1779	D:\1779\Video of repacking samples - 1779\removable disk\avf_info\

mah00704.mp4	mah00704.thm	mah00705.mp4	mah00705.thm

Entry number	Assigned Package Code	Folder location
6.	1779	D:\1779\Video of repacking samples - 1779\removable disk\private\avchd\bdmv\clipinf\

00000.cpi	00001.cpi	00002.cpi

Entry number	Assigned Package Code	Folder location
6.	1779	D:\1779\Video of repacking samples - 1779\removable disk\private\avchd\bdmv\

index.bdm	movieobj.bdm

Entry number	Assigned Package Code	Folder location	File Name
8.	1788	D:\1779\Video of repacking samples - 1779\removable disk\private\avchd\bdmv\playlist\	00000.mpl

Entry number	Assigned Package Code	Folder location
6.	1779	D:\1779\Video of repacking samples - 1779\removable disk\private\avchd\bdmv\stream\

00000.mts	00001.mts	00002.mts

Entry number	Assigned Package Code	Folder location
7.	1782	D:\1782\1782\sd\dcim\105_fuji\

dscf5499.jpg	dscf5515.jpg	dscf5531.jpg	dscf5547.jpg	dscf5563.jpg	dscf5579.jpg	dscf5595.jpg	dscf5611.jpg	dscf5627.jpg	dscf5643.jpg
dscf5500.jpg	dscf5516.jpg	dscf5532.jpg	dscf5548.jpg	dscf5564.jpg	dscf5580.jpg	dscf5596.jpg	dscf5612.jpg	dscf5628.jpg	dscf5644.jpg
dscf5501.jpg	dscf5517.jpg	dscf5533.jpg	dscf5549.jpg	dscf5565.jpg	dscf5581.jpg	dscf5597.jpg	dscf5613.jpg	dscf5629.jpg	dscf5645.jpg

dscf5502.jpg	dscf5518.jpg	dscf5534.jpg	dscf5550.jpg	dscf5566.jpg	dscf5582.jpg	dscf5598.jpg	dscf5614.jpg	dscf5630.jpg	dscf5646.jpg
dscf5503.jpg	dscf5519.jpg	dscf5535.jpg	dscf5551.jpg	dscf5567.jpg	dscf5583.jpg	dscf5599.jpg	dscf5615.jpg	dscf5631.jpg	dscf5647.jpg
dscf5504.jpg	dscf5520.jpg	dscf5536.jpg	dscf5552.jpg	dscf5568.jpg	dscf5584.jpg	dscf5600.jpg	dscf5616.jpg	dscf5632.jpg	dscf5648.jpg
dscf5505.jpg	dscf5521.jpg	dscf5537.jpg	dscf5553.jpg	dscf5569.jpg	dscf5585.jpg	dscf5601.jpg	dscf5617.jpg	dscf5633.jpg	dscf5649.jpg
dscf5506.jpg	dscf5522.jpg	dscf5538.jpg	dscf5554.jpg	dscf5570.jpg	dscf5586.jpg	dscf5602.jpg	dscf5618.jpg	dscf5634.jpg	dscf5650.jpg
dscf5507.jpg	dscf5523.jpg	dscf5539.jpg	dscf5555.jpg	dscf5571.jpg	dscf5587.jpg	dscf5603.jpg	dscf5619.jpg	dscf5635.jpg	dscf5651.jpg
dscf5508.jpg	dscf5524.jpg	dscf5540.jpg	dscf5556.jpg	dscf5572.jpg	dscf5588.jpg	dscf5604.jpg	dscf5620.jpg	dscf5636.jpg	dscf5652.jpg
dscf5509.jpg	dscf5525.jpg	dscf5541.jpg	dscf5557.jpg	dscf5573.jpg	dscf5589.jpg	dscf5605.jpg	dscf5621.jpg	dscf5637.jpg	dscf5653.jpg
dscf5510.jpg	dscf5526.jpg	dscf5542.jpg	dscf5558.jpg	dscf5574.jpg	dscf5590.jpg	dscf5606.jpg	dscf5622.jpg	dscf5638.jpg	dscf5654.jpg
dscf5511.jpg	dscf5527.jpg	dscf5543.jpg	dscf5559.jpg	dscf5575.jpg	dscf5591.jpg	dscf5607.jpg	dscf5623.jpg	dscf5639.jpg	dscf5655.jpg
dscf5512.jpg	dscf5528.jpg	dscf5544.jpg	dscf5560.jpg	dscf5576.jpg	dscf5592.jpg	dscf5608.jpg	dscf5624.jpg	dscf5640.jpg	dscf5656.jpg
dscf5513.jpg	dscf5529.jpg	dscf5545.jpg	dscf5561.jpg	dscf5577.jpg	dscf5593.jpg	dscf5609.jpg	dscf5625.jpg	dscf5641.jpg	dscf5657.jpg
dscf5514.jpg	dscf5530.jpg	dscf5546.jpg	dscf5562.jpg	dscf5578.jpg	dscf5594.jpg	dscf5610.jpg	dscf5626.jpg	dscf5642.jpg	dscf5658.jpg
dscf5659.jpg									

Entry number	Assigned Package Code	Folder location
8.	1788	D:\1788\100GOPRO A.G\

gopr0001.jpg	gopr0002.jpg	gopr0003.jpg	gopr0004.lrv	gopr0004.mp4	gopr0004.thm

Entry number	Assigned Package Code	Folder location
8.	1788	D:\1788\100GOPRO M.F\

gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gp010001.lrv	gp010001.mp4	gp020001.lrv	gp020001.mp4
gp030001.lrv	gp030001.mp4	gp040001.lrv	gp040001.mp4	gp050001.lrv	gp050001.mp4	gp060001.lrv
gp060001.mp4	gp070001.lrv	gp070001.mp4	gp080001.lrv	gp080001.mp4	gp090001.lrv	gp090001.mp4

Entry number	Assigned Package Code	Folder location
8.	1788	D:\1788\101GOPRO M.L\

gopr0001.lrv	gopr0001.lrv	gopr0001.lrv	gopr0001.lrv	gopr0001.lrv	gopr0001.lrv	gopr0001.lrv	gopr0001.lrv	gopr0001.lrv

Entry number	Assigned Package Code	Folder location
8.	1788	D:\1788\101NIKON M.L\100gopro m.l\

gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm

Entry number	Assigned Package Code	Folder location

8.	1788	D:\1788\101NIKON M.L\						
dscn2096.jpg	dscn2103.jpg	dscn2110.jpg	dscn2117.jpg	dscn2124.mov	dscn2131.jpg	dscn2138.jpg	dscn2145.jpg	dscn2152.jpg
dscn2097.jpg	dscn2104.jpg	dscn2111.jpg	dscn2118.jpg	dscn2125.mov	dscn2132.jpg	dscn2139.jpg	dscn2146.jpg	dscn2153.jpg
dscn2098.jpg	dscn2105.jpg	dscn2112.jpg	dscn2119.jpg	dscn2126.mov	dscn2133.jpg	dscn2140.jpg	dscn2147.jpg	dscn2154.jpg
dscn2099.jpg	dscn2106.jpg	dscn2113.jpg	dscn2120.jpg	dscn2127.jpg	dscn2134.jpg	dscn2141.jpg	dscn2148.jpg	dscn2155.jpg
dscn2100.jpg	dscn2107.jpg	dscn2114.jpg	dscn2121.jpg	dscn2128.mov	dscn2135.jpg	dscn2142.jpg	dscn2149.jpg	dscn2156.jpg
dscn2101.jpg	dscn2108.jpg	dscn2115.jpg	dscn2122.jpg	dscn2129.jpg	dscn2136.jpg	dscn2143.jpg	dscn2150.jpg	dscn2157.jpg
dscn2102.jpg	dscn2109.jpg	dscn2116.jpg	dscn2123.jpg	dscn2130.jpg	dscn2137.jpg	dscn2144.jpg	dscn2151.jpg	dscn2158.jpg
dscn2159.jpg			dscn2160.jpg			dscn2161.jpg		

Entry number	Assigned Package Code	Folder location
8.	1788	D:\1788\103_FUJI A.G\

dscf3444.jpg	dscf3452.jpg	dscf3460.jpg	dscf3468.jpg	dscf3476.jpg	dscf3484.jpg	dscf3492.jpg	dscf3500.jpg	dscf3508.jpg	dscf3516.jpg
dscf3445.jpg	dscf3453.jpg	dscf3461.jpg	dscf3469.jpg	dscf3477.jpg	dscf3485.jpg	dscf3493.jpg	dscf3501.jpg	dscf3509.jpg	dscf3517.jpg
dscf3446.jpg	dscf3454.jpg	dscf3462.jpg	dscf3470.jpg	dscf3478.jpg	dscf3486.jpg	dscf3494.jpg	dscf3502.jpg	dscf3510.jpg	dscf3518.jpg
dscf3447.jpg	dscf3455.jpg	dscf3463.jpg	dscf3471.jpg	dscf3479.jpg	dscf3487.jpg	dscf3495.jpg	dscf3503.jpg	dscf3511.jpg	dscf3519.jpg
dscf3448.jpg	dscf3456.jpg	dscf3464.jpg	dscf3472.jpg	dscf3480.jpg	dscf3488.jpg	dscf3496.jpg	dscf3504.jpg	dscf3512.jpg	dscf3520.jpg
dscf3449.jpg	dscf3457.jpg	dscf3465.jpg	dscf3473.jpg	dscf3481.jpg	dscf3489.jpg	dscf3497.jpg	dscf3505.jpg	dscf3513.jpg	dscf3521.jpg
dscf3450.jpg	dscf3458.jpg	dscf3466.jpg	dscf3474.jpg	dscf3482.jpg	dscf3490.jpg	dscf3498.jpg	dscf3506.jpg	dscf3514.jpg	dscf3522.jpg
dscf3451.jpg	dscf3459.jpg	dscf3467.jpg	dscf3475.jpg	dscf3483.jpg	dscf3491.jpg	dscf3499.jpg	dscf3507.jpg	dscf3515.jpg	dscf3523.jpg
dscf3524.jpg	dscf3525.jpg	dscf3526.jpg	dscf3527.jpg	dscf3528.jpg	dscf3529.jpg				

Entry number	Assigned Package Code	Folder location
8.	1788	D:\1788\103_FUJI M.F\

dscf3775.jpg	dscf3792.jpg	dscf3809.jpg	dscf3826.jpg	dscf3843.jpg	dscf3860.jpg	dscf3877.jpg	dscf3894.jpg	dscf3911.jpg	dscf3928.jpg
dscf3776.jpg	dscf3793.jpg	dscf3810.jpg	dscf3827.jpg	dscf3844.jpg	dscf3861.jpg	dscf3878.jpg	dscf3895.jpg	dscf3912.jpg	dscf3929.jpg
dscf3777.jpg	dscf3794.jpg	dscf3811.jpg	dscf3828.jpg	dscf3845.jpg	dscf3862.jpg	dscf3879.jpg	dscf3896.jpg	dscf3913.jpg	dscf3930.jpg
dscf3778.jpg	dscf3795.jpg	dscf3812.jpg	dscf3829.jpg	dscf3846.jpg	dscf3863.jpg	dscf3880.jpg	dscf3897.jpg	dscf3914.jpg	dscf3931.jpg
dscf3779.jpg	dscf3796.jpg	dscf3813.jpg	dscf3830.jpg	dscf3847.jpg	dscf3864.jpg	dscf3881.jpg	dscf3898.jpg	dscf3915.jpg	dscf3932.jpg
dscf3780.jpg	dscf3797.jpg	dscf3814.jpg	dscf3831.jpg	dscf3848.jpg	dscf3865.jpg	dscf3882.jpg	dscf3899.jpg	dscf3916.jpg	dscf3933.jpg
dscf3781.jpg	dscf3798.jpg	dscf3815.jpg	dscf3832.jpg	dscf3849.jpg	dscf3866.jpg	dscf3883.jpg	dscf3900.jpg	dscf3917.jpg	dscf3934.jpg

dscf3782.jpg	dscf3799.jpg	dscf3816.jpg	dscf3833.jpg	dscf3850.jpg	dscf3867.jpg	dscf3884.jpg	dscf3901.jpg	dscf3918.jpg	dscf3935.jpg
dscf3783.jpg	dscf3800.jpg	dscf3817.jpg	dscf3834.jpg	dscf3851.jpg	dscf3868.jpg	dscf3885.jpg	dscf3902.jpg	dscf3919.jpg	dscf3936.jpg
dscf3784.jpg	dscf3801.jpg	dscf3818.jpg	dscf3835.jpg	dscf3852.jpg	dscf3869.jpg	dscf3886.jpg	dscf3903.jpg	dscf3920.jpg	dscf3937.jpg
dscf3785.jpg	dscf3802.jpg	dscf3819.jpg	dscf3836.jpg	dscf3853.jpg	dscf3870.jpg	dscf3887.jpg	dscf3904.jpg	dscf3921.jpg	dscf3938.jpg
dscf3786.jpg	dscf3803.jpg	dscf3820.jpg	dscf3837.jpg	dscf3854.jpg	dscf3871.jpg	dscf3888.jpg	dscf3905.jpg	dscf3922.jpg	dscf3939.jpg
dscf3787.jpg	dscf3804.jpg	dscf3821.jpg	dscf3838.jpg	dscf3855.jpg	dscf3872.jpg	dscf3889.jpg	dscf3906.jpg	dscf3923.jpg	dscf3940.jpg
dscf3788.jpg	dscf3805.jpg	dscf3822.jpg	dscf3839.jpg	dscf3856.jpg	dscf3873.jpg	dscf3890.jpg	dscf3907.jpg	dscf3924.jpg	dscf3941.jpg
dscf3789.jpg	dscf3806.jpg	dscf3823.jpg	dscf3840.jpg	dscf3857.jpg	dscf3874.jpg	dscf3891.jpg	dscf3908.jpg	dscf3925.jpg	dscf3942.jpg
dscf3790.jpg	dscf3807.jpg	dscf3824.jpg	dscf3841.jpg	dscf3858.jpg	dscf3875.jpg	dscf3892.jpg	dscf3909.jpg	dscf3926.jpg	dscf3943.jpg
dscf3791.jpg	dscf3808.jpg	dscf3825.jpg	dscf3842.jpg	dscf3859.jpg	dscf3876.jpg	dscf3893.jpg	dscf3910.jpg	dscf3927.jpg	dscf3944.jpg

Entry number	Assigned Package Code	Folder location
8.	1788	D:\1788\Recce 24042018\removable disk\dcim\100gopro\

gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gp010001.lrv	gp010001.mp4
gp020001.lrv	gp020001.mp4	gp030001.lrv	gp030001.mp4	gp040001.lrv
gp040001.mp4	gp050001.lrv	gp050001.mp4	gp060001.lrv	gp060001.mp4

Entry number	Assigned Package Code	Folder location	File Name
8.	1788	D:\1788\Recce 24042018\removable disk\misc\	version.txt

Entry number	Assigned Package Code	Folder location
9.	1799	D:\1799\evidence\

الكيماوي شهداء إخلاء.mp4	كيماوي إخلاء.mp4	الكيماوي شهداء .mp4	طفل.mp4	مجزرةالكيماوي شهداء لإخلاء مقاطع.mp4

Entry number	Assigned Package Code	Folder location
9.	1799	D:\1799\evidence\أخرى تصويرات\

photo_2018-04-07_16-55-05.jpg	photo_2018-04-07_23-31-13.jpg	photo_2018-04-07_23-31-17.jpg
photo_2018-04-07_16-55-07.jpg	photo_2018-04-07_23-31-14.jpg	photo_2018-04-07_23-31-20.jpg
photo_2018-04-07_23-31-10.jpg	photo_2018-04-07_23-31-15.jpg	photo_2018-04-08_01-01-38.jpg
photo_2018-04-07_23-31-12.jpg	photo_2018-04-07_23-31-16.jpg	photo_2018-04-08_02-24-57.jpg
photo_2018-04-08_02-25-03.jpg		

Entry number	Assigned Package Code	Folder location	File Name
9.	1799	D:\1799\evidence\تصويري\	20180409_190227.mp4

Entry number	Assigned Package Code	Folder location

9.	1799	D:\1799\evidence\							
dsc_0060.jpg			mov_0059.mp4			mov_0062.mp4			
Entry number	**Assigned Package Code**	**Folder location**							
10.	1900	D:\1900\evidence\							
dsc_0153.mov	dsc_0233.mov	dsc_0234.mov	dsc_0235.mov	imag0957.jpg	imag0958.jpg	imag0959.jpg	imag0960.jpg		
video0219.mp4				20180427-تكمير١t134702z-001.zip					
Entry number	**Assigned Package Code**	**Folder location**							
11.	1909	D:\1909\100GOPRO A.G\							
gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm	gp010001.lrv			
gp010001.mp4	gp020001.lrv	gp020001.mp4	gp030001.lrv	gp030001.mp4	gp040001.lrv	gp040001.mp4			
Entry number	**Assigned Package Code**	**Folder location**							
11.	1909	D:\1909\100GOPRO I.H\							
gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm	gp010001.lrv	gp010001.mp4		
gp020001.lrv	gp020001.mp4	gp030001.lrv	gp030001.mp4	gp040001.lrv	gp040001.mp4	gp050001.lrv	gp050001.mp4		
Entry number	**Assigned Package Code**	**Folder location**							
11.	1909	D:\1909\100GOPRO M.F\							
gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gp010001.lrv	gp010001.mp4	gp020001.lrv	gp020001.mp4			
gp030001.lrv	gp030001.mp4	gp040001.lrv	gp040001.mp4	gp050001.lrv	gp050001.mp4	gp060001.lrv			
gp060001.mp4	gp070001.lrv	gp070001.mp4	gp080001.lrv	gp080001.mp4	gp090001.lrv	gp090001.mp4			
Entry number	**Assigned Package Code**	**Folder location**							
11.	1909	D:\1909\100GOPRO M.L\							
gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm	gopr0003.lrv			
gopr0003.mp4	gopr0003.thm	gp010003.lrv	gp010003.mp4	gp020003.lrv	gp020003.mp4	gp030003.lrv			
gp030003.mp4	gp040003.lrv	gp040003.mp4	gp050003.lrv	gp050003.mp4	gp060003.lrv	gp060003.mp4			
Entry number	**Assigned Package Code**	**Folder location**							
11.	1909	D:\1909\100NIKON M.L\							
dscn2042.jpg	dscn2047.jpg	dscn2052.jpg	dscn2057.jpg	dscn2062.jpg	dscn2067.jpg	dscn2072.jpg	dscn2077.jpg	dscn2082.jpg	dscn2087.jpg
dscn2043.jpg	dscn2048.jpg	dscn2053.jpg	dscn2058.jpg	dscn2063.jpg	dscn2068.jpg	dscn2073.jpg	dscn2078.jpg	dscn2083.jpg	dscn2088.jpg
dscn2044.jpg	dscn2049.jpg	dscn2054.jpg	dscn2059.jpg	dscn2064.jpg	dscn2069.jpg	dscn2074.jpg	dscn2079.jpg	dscn2084.jpg	dscn2089.jpg
dscn2045.jpg	dscn2050.jpg	dscn2055.jpg	dscn2060.jpg	dscn2065.jpg	dscn2070.jpg	dscn2075.jpg	dscn2080.jpg	dscn2085.jpg	dscn2090.jpg

dscn2046.jpg	dscn2051.jpg	dscn2056.jpg	dscn2061.jpg	dscn2066.jpg	dscn2071.jpg	dscn2076.jpg	dscn2081.jpg	dscn2086.jpg	dscn2091.jpg
dscn2092.jpg			dscn2093.jpg			dscn2094.jpg			dscn2095.jpg
Entry number	**Assigned Package Code**			**Folder location**					
11.	1909			D:\1909\103_FUJI A.G\					
dscf3322.jpg	dscf3334.jpg	dscf3346.jpg	dscf3358.jpg	dscf3370.jpg	dscf3382.jpg	dscf3394.jpg	dscf3406.jpg	dscf3418.jpg	dscf3430.jpg
dscf3323.jpg	dscf3335.jpg	dscf3347.jpg	dscf3359.jpg	dscf3371.jpg	dscf3383.jpg	dscf3395.jpg	dscf3407.jpg	dscf3419.jpg	dscf3431.jpg
dscf3324.jpg	dscf3336.jpg	dscf3348.jpg	dscf3360.jpg	dscf3372.jpg	dscf3384.jpg	dscf3396.jpg	dscf3408.jpg	dscf3420.jpg	dscf3432.jpg
dscf3325.jpg	dscf3337.jpg	dscf3349.jpg	dscf3361.jpg	dscf3373.jpg	dscf3385.jpg	dscf3397.jpg	dscf3409.jpg	dscf3421.jpg	dscf3433.jpg
dscf3326.jpg	dscf3338.jpg	dscf3350.jpg	dscf3362.jpg	dscf3374.jpg	dscf3386.jpg	dscf3398.jpg	dscf3410.jpg	dscf3422.jpg	dscf3434.jpg
dscf3327.jpg	dscf3339.jpg	dscf3351.jpg	dscf3363.jpg	dscf3375.jpg	dscf3387.jpg	dscf3399.jpg	dscf3411.jpg	dscf3423.jpg	dscf3435.jpg
dscf3328.jpg	dscf3340.jpg	dscf3352.jpg	dscf3364.jpg	dscf3376.jpg	dscf3388.jpg	dscf3400.jpg	dscf3412.jpg	dscf3424.jpg	dscf3436.jpg
dscf3329.jpg	dscf3341.jpg	dscf3353.jpg	dscf3365.jpg	dscf3377.jpg	dscf3389.jpg	dscf3401.jpg	dscf3413.jpg	dscf3425.jpg	dscf3437.jpg
dscf3330.jpg	dscf3342.jpg	dscf3354.jpg	dscf3366.jpg	dscf3378.jpg	dscf3390.jpg	dscf3402.jpg	dscf3414.jpg	dscf3426.jpg	dscf3438.jpg
dscf3331.jpg	dscf3343.jpg	dscf3355.jpg	dscf3367.jpg	dscf3379.jpg	dscf3391.jpg	dscf3403.jpg	dscf3415.jpg	dscf3427.jpg	dscf3439.jpg
dscf3332.jpg	dscf3344.jpg	dscf3356.jpg	dscf3368.jpg	dscf3380.jpg	dscf3392.jpg	dscf3404.jpg	dscf3416.jpg	dscf3428.jpg	dscf3440.jpg
dscf3333.jpg	dscf3345.jpg	dscf3357.jpg	dscf3369.jpg	dscf3381.jpg	dscf3393.jpg	dscf3405.jpg	dscf3417.jpg	dscf3429.jpg	dscf3441.jpg
dscf3442.jpg			dscf3443.jpg			dscf3444.jpg			
Entry number	**Assigned Package Code**			**Folder location**					
11.	1909			D:\1909\103_FUJI M.F					
dscf3661.jpg	dscf3672.jpg	dscf3683.jpg	dscf3694.jpg	dscf3705.jpg	dscf3716.jpg	dscf3727.jpg	dscf3738.jpg	dscf3749.jpg	dscf3760.jpg
dscf3662.jpg	dscf3673.jpg	dscf3684.jpg	dscf3695.jpg	dscf3706.jpg	dscf3717.jpg	dscf3728.jpg	dscf3739.jpg	dscf3750.jpg	dscf3761.jpg
dscf3663.jpg	dscf3674.jpg	dscf3685.jpg	dscf3696.jpg	dscf3707.jpg	dscf3718.jpg	dscf3729.jpg	dscf3740.jpg	dscf3751.jpg	dscf3762.jpg
dscf3664.jpg	dscf3675.jpg	dscf3686.jpg	dscf3697.jpg	dscf3708.jpg	dscf3719.jpg	dscf3730.jpg	dscf3741.jpg	dscf3752.jpg	dscf3763.jpg
dscf3665.jpg	dscf3676.jpg	dscf3687.jpg	dscf3698.jpg	dscf3709.jpg	dscf3720.jpg	dscf3731.jpg	dscf3742.jpg	dscf3753.jpg	dscf3764.jpg
dscf3666.jpg	dscf3677.jpg	dscf3688.jpg	dscf3699.jpg	dscf3710.jpg	dscf3721.jpg	dscf3732.jpg	dscf3743.jpg	dscf3754.jpg	dscf3765.jpg
dscf3667.jpg	dscf3678.jpg	dscf3689.jpg	dscf3700.jpg	dscf3711.jpg	dscf3722.jpg	dscf3733.jpg	dscf3744.jpg	dscf3755.jpg	dscf3766.jpg
dscf3668.jpg	dscf3679.jpg	dscf3690.jpg	dscf3701.jpg	dscf3712.jpg	dscf3723.jpg	dscf3734.jpg	dscf3745.jpg	dscf3756.jpg	dscf3767.jpg
dscf3669.jpg	dscf3680.jpg	dscf3691.jpg	dscf3702.jpg	dscf3713.jpg	dscf3724.jpg	dscf3735.jpg	dscf3746.jpg	dscf3757.jpg	dscf3768.jpg
dscf3670.jpg	dscf3681.jpg	dscf3692.jpg	dscf3703.jpg	dscf3714.jpg	dscf3725.jpg	dscf3736.jpg	dscf3747.jpg	dscf3758.jpg	dscf3769.jpg
dscf3771.jpg			dscf3772.jpg			dscf3773.jpg			dscf3774.jpg

Entry number	Assigned Package Code	Folder location
11.	1909	D:\1909\Recce 17042018\sd\dcim\100gopro\

gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm	gopr0003.lrv	gopr0003.mp4	gopr0003.thm
gopr0004.lrv	gopr0004.mp4	gopr0004.thm	gopr0005.lrv	gopr0005.mp4	gopr0005.thm	gopr0006.lrv	gopr0006.mp4	gopr0006.thm

Entry number	Assigned Package Code	Folder location
11.	1909	D:\1909\Recce20042018\sd\dcim\100gopro\

gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm	gopr0003.lrv	gopr0003.mp4
gopr0003.thm	gopr0004.lrv	gopr0004.mp4	gopr0004.thm	gopr0005.lrv	gopr0005.mp4	gopr0005.thm	gopr0006.lrv
gopr0006.mp4	gopr0006.thm	gp010006.lrv	gp010006.mp4	gp020006.lrv	gp020006.mp4		

Entry number	Assigned Package Code	Folder location
12.	1914	D:\1914\Camera 1 - 1914\removable disk\dcim\103_fuji\

dscf3946.jpg	dscf3947.jpg	dscf3948.jpg	dscf3949.jpg	dscf3950.jpg	dscf3951.jpg	dscf3952.jpg	dscf3953.jpg	dscf3954.jpg	dscf3955.jpg
dscf3956.jpg	dscf3957.jpg	dscf3958.jpg	dscf3959.jpg	dscf3960.jpg	dscf3961.jpg	dscf3962.jpg	dscf3963.jpg	dscf3964.jpg	dscf3965.jpg
dscf3966.jpg	dscf3967.jpg	dscf3968.jpg	dscf3969.jpg	dscf3970.jpg	dscf3971.jpg	dscf3972.jpg	dscf3973.jpg	dscf3974.jpg	dscf3975.jpg
dscf3976.jpg	dscf3977.jpg	dscf3978.jpg	dscf3979.jpg	dscf3980.jpg	dscf3981.jpg	dscf3982.jpg	dscf3983.jpg	dscf3984.jpg	dscf3985.jpg
dscf3986.jpg	dscf3987.jpg	dscf3988.jpg	dscf3989.jpg	dscf3990.jpg	dscf3991.jpg	dscf3992.jpg	dscf3993.jpg	dscf3994.jpg	dscf3995.jpg
dscf3996.jpg	dscf3997.jpg	dscf3998.jpg	dscf3999.jpg						

Entry number	Assigned Package Code	Folder location
12.	1914	D:\1914\Camera 1 - 1914\removable disk\dcim\104_fuji\

dscf4001.jpg	dscf4041.jpg	dscf4081.jpg	dscf4121.jpg	dscf4161.jpg	dscf4201.jpg	dscf4241.jpg	dscf4281.jpg	dscf4321.jpg	dscf4361.jpg
dscf4002.jpg	dscf4042.jpg	dscf4082.jpg	dscf4122.jpg	dscf4162.jpg	dscf4202.jpg	dscf4242.jpg	dscf4282.jpg	dscf4322.jpg	dscf4362.jpg
dscf4003.jpg	dscf4043.jpg	dscf4083.jpg	dscf4123.jpg	dscf4163.jpg	dscf4203.jpg	dscf4243.jpg	dscf4283.jpg	dscf4323.jpg	dscf4363.jpg
dscf4004.jpg	dscf4044.jpg	dscf4084.jpg	dscf4124.jpg	dscf4164.jpg	dscf4204.jpg	dscf4244.jpg	dscf4284.jpg	dscf4324.jpg	dscf4364.jpg
dscf4005.jpg	dscf4045.jpg	dscf4085.jpg	dscf4125.jpg	dscf4165.jpg	dscf4205.jpg	dscf4245.jpg	dscf4285.jpg	dscf4325.jpg	dscf4365.jpg
dscf4006.jpg	dscf4046.jpg	dscf4086.jpg	dscf4126.jpg	dscf4166.jpg	dscf4206.jpg	dscf4246.jpg	dscf4286.jpg	dscf4326.jpg	dscf4366.jpg
dscf4007.jpg	dscf4047.jpg	dscf4087.jpg	dscf4127.jpg	dscf4167.jpg	dscf4207.jpg	dscf4247.jpg	dscf4287.jpg	dscf4327.jpg	dscf4367.jpg
dscf4008.jpg	dscf4048.jpg	dscf4088.jpg	dscf4128.jpg	dscf4168.jpg	dscf4208.jpg	dscf4248.jpg	dscf4288.jpg	dscf4328.jpg	dscf4368.jpg
dscf4009.jpg	dscf4049.jpg	dscf4089.jpg	dscf4129.jpg	dscf4169.jpg	dscf4209.jpg	dscf4249.jpg	dscf4289.jpg	dscf4329.jpg	dscf4369.jpg
dscf4010.jpg	dscf4050.jpg	dscf4090.jpg	dscf4130.jpg	dscf4170.jpg	dscf4210.jpg	dscf4250.jpg	dscf4290.jpg	dscf4330.jpg	dscf4370.jpg
dscf4011.jpg	dscf4051.jpg	dscf4091.jpg	dscf4131.jpg	dscf4171.jpg	dscf4211.jpg	dscf4251.jpg	dscf4291.jpg	dscf4331.jpg	dscf4371.jpg

dscf4012.jpg	dscf4052.jpg	dscf4092.jpg	dscf4132.jpg	dscf4172.jpg	dscf4212.jpg	dscf4252.jpg	dscf4292.jpg	dscf4332.jpg	dscf4372.jpg
dscf4013.jpg	dscf4053.jpg	dscf4093.jpg	dscf4133.jpg	dscf4173.jpg	dscf4213.jpg	dscf4253.jpg	dscf4293.jpg	dscf4333.jpg	dscf4373.jpg
dscf4014.jpg	dscf4054.jpg	dscf4094.jpg	dscf4134.jpg	dscf4174.jpg	dscf4214.jpg	dscf4254.jpg	dscf4294.jpg	dscf4334.jpg	dscf4374.jpg
dscf4015.jpg	dscf4055.jpg	dscf4095.jpg	dscf4135.jpg	dscf4175.jpg	dscf4215.jpg	dscf4255.jpg	dscf4295.jpg	dscf4335.jpg	dscf4375.jpg
dscf4016.jpg	dscf4056.jpg	dscf4096.jpg	dscf4136.jpg	dscf4176.jpg	dscf4216.jpg	dscf4256.jpg	dscf4296.jpg	dscf4336.jpg	dscf4376.jpg
dscf4017.jpg	dscf4057.jpg	dscf4097.jpg	dscf4137.jpg	dscf4177.jpg	dscf4217.jpg	dscf4257.jpg	dscf4297.jpg	dscf4337.jpg	dscf4377.jpg
dscf4018.jpg	dscf4058.jpg	dscf4098.jpg	dscf4138.jpg	dscf4178.jpg	dscf4218.jpg	dscf4258.jpg	dscf4298.jpg	dscf4338.jpg	dscf4378.jpg
dscf4019.jpg	dscf4059.jpg	dscf4099.jpg	dscf4139.jpg	dscf4179.jpg	dscf4219.jpg	dscf4259.jpg	dscf4299.jpg	dscf4339.jpg	dscf4379.jpg
dscf4020.jpg	dscf4060.jpg	dscf4100.jpg	dscf4140.jpg	dscf4180.jpg	dscf4220.jpg	dscf4260.jpg	dscf4300.jpg	dscf4340.jpg	dscf4380.jpg
dscf4021.jpg	dscf4061.jpg	dscf4101.jpg	dscf4141.jpg	dscf4181.jpg	dscf4221.jpg	dscf4261.jpg	dscf4301.jpg	dscf4341.jpg	dscf4381.jpg
dscf4022.jpg	dscf4062.jpg	dscf4102.jpg	dscf4142.jpg	dscf4182.jpg	dscf4222.jpg	dscf4262.jpg	dscf4302.jpg	dscf4342.jpg	dscf4382.jpg
dscf4023.jpg	dscf4063.jpg	dscf4103.jpg	dscf4143.jpg	dscf4183.jpg	dscf4223.jpg	dscf4263.jpg	dscf4303.jpg	dscf4343.jpg	dscf4383.jpg
dscf4024.jpg	dscf4064.jpg	dscf4104.jpg	dscf4144.jpg	dscf4184.jpg	dscf4224.jpg	dscf4264.jpg	dscf4304.jpg	dscf4344.jpg	dscf4384.jpg
dscf4025.jpg	dscf4065.jpg	dscf4105.jpg	dscf4145.jpg	dscf4185.jpg	dscf4225.jpg	dscf4265.jpg	dscf4305.jpg	dscf4345.jpg	dscf4385.jpg
dscf4026.jpg	dscf4066.jpg	dscf4106.jpg	dscf4146.jpg	dscf4186.jpg	dscf4226.jpg	dscf4266.jpg	dscf4306.jpg	dscf4346.jpg	dscf4386.jpg
dscf4027.jpg	dscf4067.jpg	dscf4107.jpg	dscf4147.jpg	dscf4187.jpg	dscf4227.jpg	dscf4267.jpg	dscf4307.jpg	dscf4347.jpg	dscf4387.jpg
dscf4028.jpg	dscf4068.jpg	dscf4108.jpg	dscf4148.jpg	dscf4188.jpg	dscf4228.jpg	dscf4268.jpg	dscf4308.jpg	dscf4348.jpg	dscf4388.jpg
dscf4029.jpg	dscf4069.jpg	dscf4109.jpg	dscf4149.jpg	dscf4189.jpg	dscf4229.jpg	dscf4269.jpg	dscf4309.jpg	dscf4349.jpg	dscf4389.jpg
dscf4030.jpg	dscf4070.jpg	dscf4110.jpg	dscf4150.jpg	dscf4190.jpg	dscf4230.jpg	dscf4270.jpg	dscf4310.jpg	dscf4350.jpg	dscf4390.jpg
dscf4031.jpg	dscf4071.jpg	dscf4111.jpg	dscf4151.jpg	dscf4191.jpg	dscf4231.jpg	dscf4271.jpg	dscf4311.jpg	dscf4351.jpg	dscf4391.jpg
dscf4032.jpg	dscf4072.jpg	dscf4112.jpg	dscf4152.jpg	dscf4192.jpg	dscf4232.jpg	dscf4272.jpg	dscf4312.jpg	dscf4352.jpg	dscf4392.jpg
dscf4033.jpg	dscf4073.jpg	dscf4113.jpg	dscf4153.jpg	dscf4193.jpg	dscf4233.jpg	dscf4273.jpg	dscf4313.jpg	dscf4353.jpg	dscf4393.jpg
dscf4034.jpg	dscf4074.jpg	dscf4114.jpg	dscf4154.jpg	dscf4194.jpg	dscf4234.jpg	dscf4274.jpg	dscf4314.jpg	dscf4354.jpg	dscf4394.jpg
dscf4035.jpg	dscf4075.jpg	dscf4115.jpg	dscf4155.jpg	dscf4195.jpg	dscf4235.jpg	dscf4275.jpg	dscf4315.jpg	dscf4355.jpg	dscf4395.jpg
dscf4036.jpg	dscf4076.jpg	dscf4116.jpg	dscf4156.jpg	dscf4196.jpg	dscf4236.jpg	dscf4276.jpg	dscf4316.jpg	dscf4356.jpg	dscf4396.jpg
dscf4037.jpg	dscf4077.jpg	dscf4117.jpg	dscf4157.jpg	dscf4197.jpg	dscf4237.jpg	dscf4277.jpg	dscf4317.jpg	dscf4357.jpg	dscf4397.jpg
dscf4038.jpg	dscf4078.jpg	dscf4118.jpg	dscf4158.jpg	dscf4198.jpg	dscf4238.jpg	dscf4278.jpg	dscf4318.jpg	dscf4358.jpg	dscf4398.jpg
dscf4039.jpg	dscf4079.jpg	dscf4119.jpg	dscf4159.jpg	dscf4199.jpg	dscf4239.jpg	dscf4279.jpg	dscf4319.jpg	dscf4359.jpg	dscf4399.jpg
dscf4040.jpg	dscf4080.jpg	dscf4120.jpg	dscf4160.jpg	dscf4200.jpg	dscf4240.jpg	dscf4280.jpg	dscf4320.jpg	dscf4360.jpg	dscf4400.jpg
dscf4401.jpg			dscf4402.jpg		dscf4403.jpg			dscf4404.jpg	

Entry number	Assigned Package Code	Folder location

12.	1914	D:\1914\Camera 2 - 1914\removable disk\dcim\100nikon\							
dscn2162.jpg	dscn2177.jpg	dscn2192.jpg	dscn2207.jpg	dscn2222.jpg	dscn2236.jpg	dscn2250.jpg	dscn2264.jpg	dscn2278.jpg	dscn2292.jpg
dscn2163.jpg	dscn2178.jpg	dscn2193.jpg	dscn2208.jpg	dscn2223.jpg	dscn2237.jpg	dscn2251.jpg	dscn2265.jpg	dscn2279.jpg	dscn2293.jpg
dscn2164.jpg	dscn2179.jpg	dscn2194.jpg	dscn2209.jpg	dscn2224.jpg	dscn2238.jpg	dscn2252.jpg	dscn2266.jpg	dscn2280.jpg	dscn2294.jpg
dscn2165.jpg	dscn2180.jpg	dscn2195.jpg	dscn2210.jpg	dscn2225.jpg	dscn2239.jpg	dscn2253.jpg	dscn2267.jpg	dscn2281.jpg	dscn2295.jpg
dscn2166.jpg	dscn2181.jpg	dscn2196.jpg	dscn2211.jpg	dscn2226.jpg	dscn2240.jpg	dscn2254.jpg	dscn2268.jpg	dscn2282.jpg	dscn2296.jpg
dscn2167.jpg	dscn2182.jpg	dscn2197.jpg	dscn2212.jpg	dscn2227.jpg	dscn2241.jpg	dscn2255.jpg	dscn2269.jpg	dscn2283.jpg	dscn2297.jpg
dscn2168.jpg	dscn2183.jpg	dscn2198.jpg	dscn2213.jpg	dscn2228.jpg	dscn2242.jpg	dscn2256.jpg	dscn2270.jpg	dscn2284.jpg	dscn2298.jpg
dscn2169.jpg	dscn2184.jpg	dscn2199.jpg	dscn2214.jpg	dscn2229.jpg	dscn2243.jpg	dscn2257.jpg	dscn2271.jpg	dscn2285.jpg	dscn2299.jpg
dscn2170.jpg	dscn2185.jpg	dscn2200.jpg	dscn2215.jpg	dscn2230.jpg	dscn2244.jpg	dscn2258.jpg	dscn2272.jpg	dscn2286.jpg	dscn2300.jpg
dscn2171.jpg	dscn2186.jpg	dscn2201.jpg	dscn2216.jpg	dscn2231.jpg	dscn2245.jpg	dscn2259.jpg	dscn2273.jpg	dscn2287.jpg	dscn2301.jpg
dscn2172.jpg	dscn2187.jpg	dscn2202.jpg	dscn2217.jpg	dscn2232.jpg	dscn2246.jpg	dscn2260.jpg	dscn2274.jpg	dscn2288.jpg	dscn2302.jpg
dscn2173.jpg	dscn2188.jpg	dscn2203.jpg	dscn2218.jpg	dscn2233.jpg	dscn2247.jpg	dscn2261.jpg	dscn2275.jpg	dscn2289.jpg	dscn2303.jpg
dscn2174.jpg	dscn2189.jpg	dscn2204.jpg	dscn2219.jpg	dscn2234.jpg	dscn2248.jpg	dscn2262.jpg	dscn2276.jpg	dscn2290.jpg	dscn2304.jpg
dscn2175.jpg	dscn2190.jpg	dscn2205.jpg	dscn2220.jpg	dscn2235.jpg	dscn2249.jpg	dscn2263.jpg	dscn2277.jpg	dscn2291.jpg	dscn2305.jpg
dscn2176.jpg		dscn2191.jpg			dscn2206.jpg			dscn2221.jpg	

Entry number	Assigned Package Code	Folder location
12.	1914	D:\1914\Camera 3 - 1914\removable disk\dcim\103_fuji\

dscf3530.jpg	dscf3531.jpg	dscf3532.jpg	dscf3533.jpg	dscf3534.jpg	dscf3535.jpg	dscf3536.jpg	dscf3537.jpg

Entry number	Assigned Package Code	Folder location
12.	1914	D:\1914\Go Pro Camera - 1914\removable disk\dcim\100gopro\

gopr0001.lrv	gopr0001.mp4	gopr0001.thm	gopr0002.lrv	gopr0002.mp4	gopr0002.thm	gp010001.lrv	gp010001.mp4	gp010002.lrv
gp010002.mp4	gp020002.lrv	gp020002.mp4	gp030002.lrv	gp030002.mp4	gp040002.lrv	gp040002.mp4	gp050002.lrv	gp050002.mp4

Entry number	Assigned Package Code	Folder location
13.	1919	D:\1919\evidence\dcim\

img_20180411_131125.jpg	img_20180411_132009.jpg	img_20180411_133516.jpg	vid_20180411_132233.mp4
img_20180411_131138.jpg	img_20180411_132031.jpg	img_20180411_133519.jpg	vid_20180411_132501.mp4
img_20180411_131155.jpg	img_20180411_132035.jpg	img_20180411_133523.jpg	vid_20180411_132616.mp4
img_20180411_131357.jpg	img_20180411_132039.jpg	img_20180411_133536.jpg	vid_20180411_132706.mp4
img_20180411_131402.jpg	img_20180411_132253.jpg	img_20180411_133542.jpg	vid_20180411_132832.mp4

img_20180411_131405.jpg	img_20180411_132256.jpg	img_20180411_133545.jpg	vid_20180411_132904.mp4
img_20180411_131408.jpg	img_20180411_132258.jpg	img_20180411_133646.jpg	vid_20180411_133149.mp4
img_20180411_131453.jpg	img_20180411_132301.jpg	img_20180411_133648.jpg	vid_20180411_133222.mp4
img_20180411_131552.jpg	img_20180411_132304.jpg	img_20180411_133650.jpg	vid_20180411_133254.mp4
img_20180411_131555.jpg	img_20180411_132308.jpg	img_20180411_133655.jpg	vid_20180411_133326.mp4
img_20180411_131559.jpg	img_20180411_132310.jpg	img_20180411_134047.jpg	vid_20180411_133553.mp4
img_20180411_131605.jpg	img_20180411_132426.jpg	img_20180411_134051.jpg	vid_20180411_133631.mp4
img_20180411_131614.jpg	img_20180411_132429.jpg	img_20180411_134107.jpg	vid_20180411_134152.mp4
img_20180411_131620.jpg	img_20180411_132433.jpg	img_20180411_134113.jpg	vid_20180411_135015.mp4
img_20180411_131707.jpg	img_20180411_132446.jpg	img_20180411_134117.jpg	vid_20180411_135051.mp4
img_20180411_131713.jpg	img_20180411_132449.jpg	img_20180411_134119.jpg	٢٠١٨٠٤٠٨_١٧٢٩٥٥.mp4
img_20180411_131716.jpg	img_20180411_132746.jpg	img_20180411_134130.jpg	٢٠١٨٠٤٠٨_١٧٣٠٤٧.jpg
img_20180411_131719.jpg	img_20180411_132749.jpg	img_20180411_134941.jpg	٢٠١٨٠٤٠٨_١٧٣٠٥٣.jpg
img_20180411_131942.jpg	img_20180411_132751.jpg	img_20180411_134950.jpg	٢٠١٨٠٤٠٨_١٧٣٠٥٥.jpg
img_20180411_131944.jpg	img_20180411_132753.jpg	img_20180411_134956.jpg	٢٠١٨٠٤٠٨_١٧٣٠٥٨.jpg
img_20180411_131946.jpg	img_20180411_132756.jpg	img_20180411_135000.jpg	٢٠١٨٠٤٠٨_١٧٣١٣٣.jpg
img_20180411_131950.jpg	img_20180411_132759.jpg	img_20180411_135005.jpg	٢٠١٨٠٤٠٨_١٧٣٤٥٠.mp4
img_20180411_131952.jpg	img_20180411_133131.jpg	img_20180411_135008.jpg	٢٠١٨٠٤٠٨_١٧٣٧٣٤.jpg
img_20180411_131954.jpg	img_20180411_133137.jpg	vid_20180411_131315.mp4	٢٠١٨٠٤٠٨_١٧٣٧٣٩.jpg
img_20180411_132001.jpg	img_20180411_133146.jpg	vid_20180411_131348.mp4	٢٠١٨٠٤٠٨_١٧٣٧٤٢.jpg
img_20180411_132003.jpg	img_20180411_133357.jpg	vid_20180411_131902.mp4	٢٠١٨٠٤٠٨_١٧٣٩٢٠.jpg
img_20180411_132007.jpg	img_20180411_133505.jpg	vid_20180411_131933.mp4	٢٠١٨٠٤٠٨_١٧٣٩٢٣.jpg
٢٠١٨٠٤٠٨_١٧٤٠١٠.mp4	٢٠١٨٠٤٠٨_١٧٥٢٢٠.mp4	٢٠١٨٠٤٠٨_١٨٥٨٥٩.mp4	٢٠١٨٠٤٠٨_١٧٤٠١٠.mp4
٢٠١٨٠٤٠٨_١٧٥٢٢٠.mp4	٢٠١٨٠٤٠٨_١٨٥٨٥٩.mp4	٢٠١٨٠٤٠٨_١٧٤٠١٠.mp4	٢٠١٨٠٤٠٨_١٧٥٢٢٠.mp4
img_20180411_131125.jpg	img_20180411_132009.jpg	img_20180411_133516.jpg	vid_20180411_132233.mp4
٢٠١٨٠٤٠٨_١٨٥٨٥٩.mp4			

Entry number	Assigned Package Code	Folder location
14.	1515	D:\1515\evidence\توثيق\

1.mov	2.mov	3.mov	4.mov	5.mov	6.mov

mvi_9495.mov	خاص جدًا مع عدم النشر.mov	دخول ششرطة عسكرية روسية لمعاينة مكان مجزرة الكيماوي بدوما.mp4	نهائي رحلة بدون تذكرة.mp4

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

Entry number	Assigned Package Code	Evidence Reference Number	Description
1.	1748	20180422174806	Drawing
2.	1748	20180422174807	Drawing
3.	1900	20180427190004	Drawing
4.	1920	20180425192003	Drawing
5.	1793	20180416179303	Drawing
6.	1916	20180416191603	Drawing
7.	1907	20180415190703	Drawing
8.	1931	20181019193103	Drawing
9.	1935	20181018193503	Drawing

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

Entry number	Sample Description	Evidence Reference Number	Source
1	Concrete debris from the street, left side below the window (level 0)	20180421190901	Collected by the FFM
2	Concrete debris from the street opposite side of the entry of location 2 (level 0)	20180421190902	Collected by the FFM
3	Concrete debris from the middle of the street opposite to the window (level 0)	20180421190903	Collected by the FFM
4	Control sample: debris 20 meters west of the building entry (level 0)	20180421190904	Collected by the FFM
5	Swab blank with DCM	20180421190905	Collected by the FFM
6	Wipe blank with DCM	20180421190906	Collected by the FFM
7	Swab blank with water	20180421190907	Collected by the FFM
8	Wipe blank with water	20180421190908	Collected by the FFM
9	Fabric stuck to metal bars from the terrace where the cylinder is (level 3)	20180421190909	Collected by the FFM
10	Swab from inside the orifice of the cylinder (level 3)	20180421190910	Collected by the FFM
11	Swab with water from inside the orifice of the cylinder (level 3)	20180421190911	Collected by the FFM
12	Metal fragment from the terrace (level 3)	20180421190912	Collected by the FFM
13	Wipe with DCM from the external surface of the cylinder (level 3)	20180421190913	Collected by the FFM
14	Wipe with water from the external surface of the cylinder (level 3)	20180421190914	Collected by the FFM
15	Dry wipe of the cylinder thread (level 3)	20180421190915	Collected by the FFM
16	Metal object from the terrace (Level 3)	20180421190916	Collected by the FFM
17	Concrete debris from the base of the cylinder (level 3)	20180421190917	Collected by the FFM
18	Metal bar at cylinder nose (Level 3)	20180421190918	Collected by the FFM
19	Concrete debris from the crater-edge in front of the cylinder nose (level 3)	20180421190919	Collected by the FFM
20	Tile from the terrace wall (level 3)	20180421190920	Collected by the FFM
21	Wipe with water from the burnt wall in the room located under the cylinder (level 2)	20180421190921	Collected by the FFM
22	Wipe with DCM from the burnt wall from room under the cylinder (level 2)	20180421190922	Collected by the FFM

Entry number	Sample Description	Evidence Reference Number	Source
23	Swab with water from wall plug in the room under the cylinder (level 2)	20180421190923	Collected by the FFM
24	Dry wipe from the kitchen wall above the oven (level 2)	20180421190924	Collected by the FFM
25	Wood fragment from the kitchen door (level 2)	20180421190925	Collected by the FFM
26	Towel from the room located under the cylinder (level 2)	20180421190926	Collected by the FFM
27	Exposed electrical wires from the room under the cylinder (level 2)	20180421190927	Collected by the FFM
28	Lump of concrete from floor debris in the room under the cylinder (level 2)	20180421190928	Collected by the FFM
29	Soap bar from the room under the cylinder (level 2)	20180421190929	Collected by the FFM
30	Dry wipe from a bicycle rear cassette in the basement (level -1)	20180421190930	Collected by the FFM
31	Swab with DCM from a bicycle rear cassette in the basement (level -1)	20180421190931	Collected by the FFM
32	Water tank wood support in the basement (level -1)	20180421190932	Collected by the FFM
33	Light bulb from the basement (level -1)	20180421190933	Collected by the FFM
34	Wood from the partition frame in the basement (level -1)	20180421190934	Collected by the FFM
35	Water from water tank in basement (level -1)	20180421190935	Collected by the FFM
36	Telephone from the basement (level -1)	20180421190936	Collected by the FFM
37	2 nails and 2 screws from a wall in the basement (level -1)	20180421190937	Collected by the FFM
38	Swab with water from an electric socket in the basement (level -1)	20180421190938	Collected by the FFM
39	Swab with DCM from an electric socket in the basement (level -1)	20180421190939	Collected by the FFM
40	Damp wall board from the basement to the left of the stairs (level -1)	20180421190940	Collected by the FFM
41	Wipe with water from a wall in the basement (level -1)	20180421190941	Collected by the FFM
42	Wipe with DCM from a wall in the basement (level -1)	20180421190942	Collected by the FFM
43	Wipe with water from a lavatory extractor pipe in the basement (level -1)	20180421190943	Collected by the FFM
44	Insect from the lavatory in the basement (level -1)	20180421190944	Collected by the FFM
45	Pillow from the bed under the cylinder	20180425178801	Collected by the FFM

Entry number	Sample Description	Evidence Reference Number	Source
46	Metal fragment from the bedroom floor	20180425178802	Collected by the FFM
47	Metal object from the dresser	20180425178803	Collected by the FFM
48	Piece of blanket under the cylinder	20180425178804	Collected by the FFM
49	Control sample: piece of blanket on the opposite side of the bed, on the floor	20180425178805	Collected by the FFM
50	Wet wood from under the cylinder	20180425178806	Collected by the FFM
51	Insects and dust from the tray in the bedroom shower	20180425178807	Collected by the FFM
52	Bedside lamp on top of the mattress	20180425178808	Collected by the FFM
53	Copper wire attached to the roof, hanging from the ceiling lamp	20180425178809	Collected by the FFM
54	Pillow cover on the bed, closer to the wall	20180425178810	Collected by the FFM
55	Dry wipe from nozzle, front part close to the thread	20180425178811	Collected by the FFM
56	Dry wipe from the cylinder thread	20180425178812	Collected by the FFM
57	Dry wipe from stains on the wall, behind the bed	20180425178813	Collected by the FFM
58	Chips of paint from the wall behind the bed	20180425178814	Collected by the FFM
59	Wipe with DCM blank	20180425178815	Collected by the FFM
60	Wipe with DCM from the headbed	20180425178816	Collected by the FFM
61	Wipe with DCM from the cylinder nozzle	20180425178817	Collected by the FFM
62	Calid paper from wall	20180425178818	Collected by the FFM
63	Gloves from the stairs	20180425178819	Collected by the FFM
64	Wipe with DCM from the door threshold, at the entrance of the apartment	20180425178820	Collected by the FFM
65	Solid sample from a white bag under a jar (made in China) labelled as hexamine	20180427191401	Collected by the FFM
66	Solid sample from a jar labelled as hexamine	20180427191402	Collected by the FFM
67	Solid sample from a white bag next to a jar labelled as hexamine	20180427191403	Collected by the FFM
68	Solid sample from a white bag with Cheminol label and labelled as hexamine	20180427191404	Collected by the FFM

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

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

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

Annex 10

DOCUMENTS RECEIVED FROM THE STATE PARTY

TABLE A.10.1 NOTES VERBALES RECEIVED FROM THE SYRIAN ARAB REPUBLIC

1. **Note Verbale No. 38**: Permanent Representative of the Syrian Arab Republic requests that a Fact-Finding Mission be dispatched urgently to visit the town of Douma to verify the information surrounding the alleged use of toxic chemicals on 7 April 2018.

2. **Note Verbale No. 43**: from the SAR to the Director General of the OPCW requesting the Director General to instruct the FFM team to carry out a visit to a warehouse containing chemicals and equipment within the framework of the FFM's mission to gather facts surrounding the allegation of use of toxic chemical substances in the city of Douma in Rif Dimashq on 7 April 2018,.

3. **Note Verbale No. 44**: from the SAR to the Director General of the OPCW replying to the Technical Secretariat's note NV/ODG/214836/18, dated April 26th 2018.

4. **Note Verbale No. 45**: from the SAR to the Director General of the OPCW replying to the Technical Secretariat's note NV/ODG/214827/18, dated April 26th 2018.

5. **Note Verbale No. 56**: from the SAR to TS replying to the request to seal the cylinders in Note Verbale NV/ODG/214836/18.

6. **Note Verbale No. 57**: from the SAR replying to the Technical Secretariat's request in Note Verbale (NV/ODG/214827/18) to exhume bodies for the purpose of taking bio samples.

7. **Note Verbale No. 60:** from the SAR: Remarks of the Syrian Arab Republic on the Fact Finding Mission Interim Report on the Alleged Incident in Douma.

TABLE A.10.2 ELECTRONIC DATA HANDED OVER BY THE SYRIAN ARAB REPUBLIC

Entry number	Assigned Package Code	Folder location					
1.	1744	E:\1744\DVD 1\video_ts\					
File names							
video_ts.bup	video_ts.ifo	video_ts.vob	vts_01_0.bup	vts_01_0.ifo	vts_01_0.vob	vts_01_1.vob	vts_01_2.vob
Entry number	**Assigned Package Code**	**Folder location**					
1.	1744	E:\1744\DVD 2\video_ts\					
File names							
video_ts.bup	video_ts.ifo	video_ts.vob	vts_01_0.bup	vts_01_0.ifo	vts_01_1.vob	video_ts.bup	video_ts.ifo

Annex 11

DIGITAL INFORMATION ANALYSIS

The FFM team analysed the videos and photos in detail to ascertain their authenticity and potential as confirming evidence.

The analysis involved, inter alia:

1. Gathering metadata to verify the dates and time the videos and photos were created.

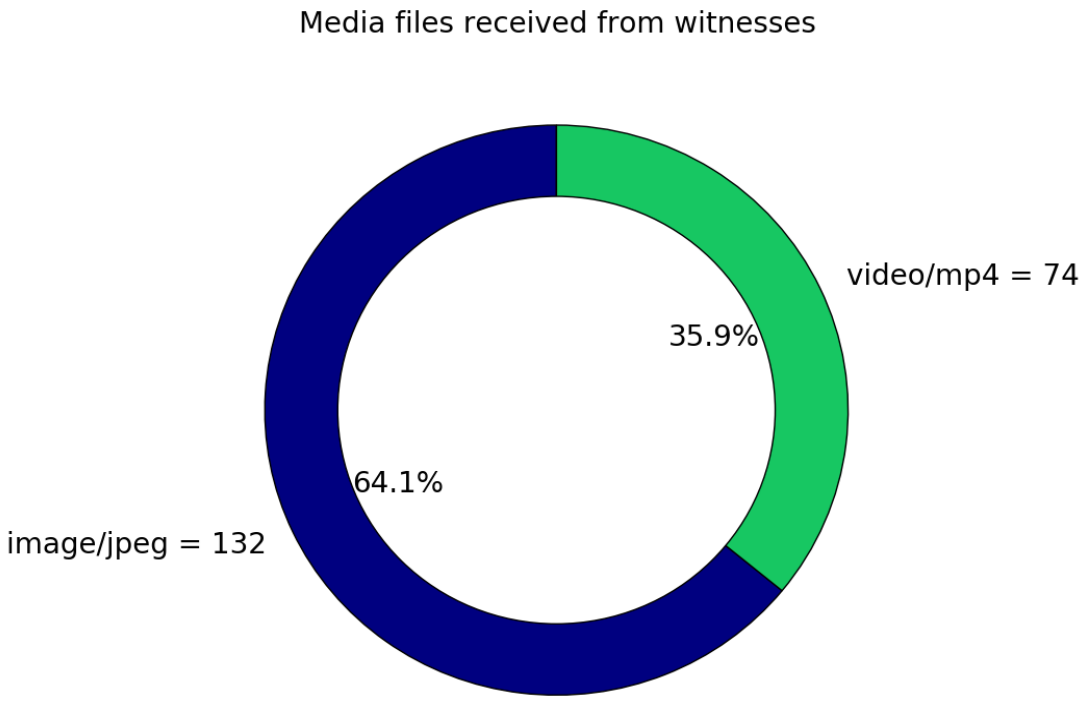
2. Corroborating information gathered through interviews. Only digital information that contained metadata was evaluated for the purposes digital information analysis of this report.

3. Comparing clinical signs displayed by the victims in the videos with known presentations of chemical exposure.

MEDIA FILES RECEIVED BY THE FFM

A total of 206 media files were collected directly from witnesses, namely videos and photographs (Annex 9).

Figure A11.1 Distribution of type of media files received



Metadata was extracted from 54.9% of the media files.

Figure A11.2 Distribution of media files with/without extracted metadata

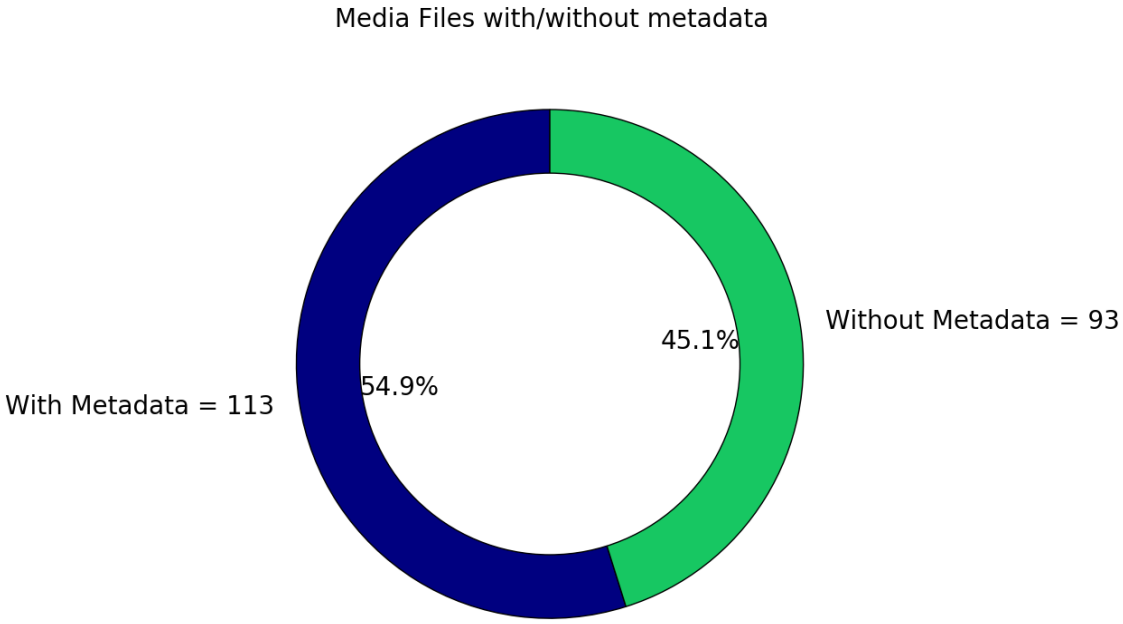
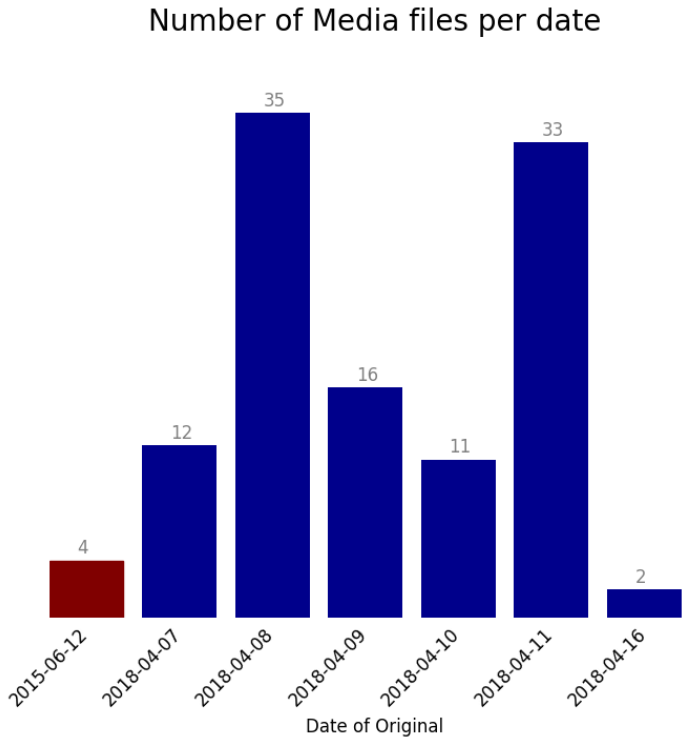


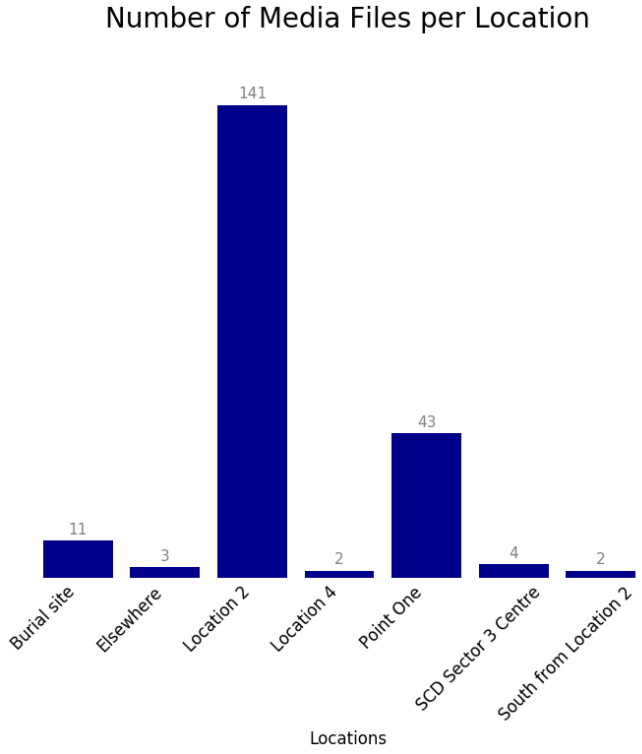
Figure A11.3 Distribution of media files according to their Date of Original. The bar marked in red belongs to four files likely to be generated with a device on which date/time setting were not properly set.



The extracted metadata show that media files originated between 7 and 16 of April 2018, except for four files dated 12 June 2015. After inspecting the latter, the conclusion is that the content is related to the incident on 7 April 2018 in Douma and the incorrect timestamp on the metadata is likely to be due to incorrect date/time settings on the device that generated the files. In an abundance of caution, the FFM excluded those files from the analysis.

According to witness testimonies, and after evaluating the content of the files, the distribution of the images per location of origin is as shown in Figure A11.4. The majority of the images were created at Location 2 and Point One.

Figure A11.4 Distribution of media files according to the place they were recorded



According to content, the f

Figure A.11.5 Classification of images according to their content

A timeline was created using the content and dates of the files extracted from the metadata (see Figure A.11.6 below). From figure A.11.6 and A.11.7, it is clear that living casualties started appearing after midday on 7 April. Afterwards, there has been a gap until new casualties were reported. Then, there was another gap in time while there were no images of casualties on 8 April between 2:00 and 14:00 hours. Note that the timeline was created using only the images with available metadata.

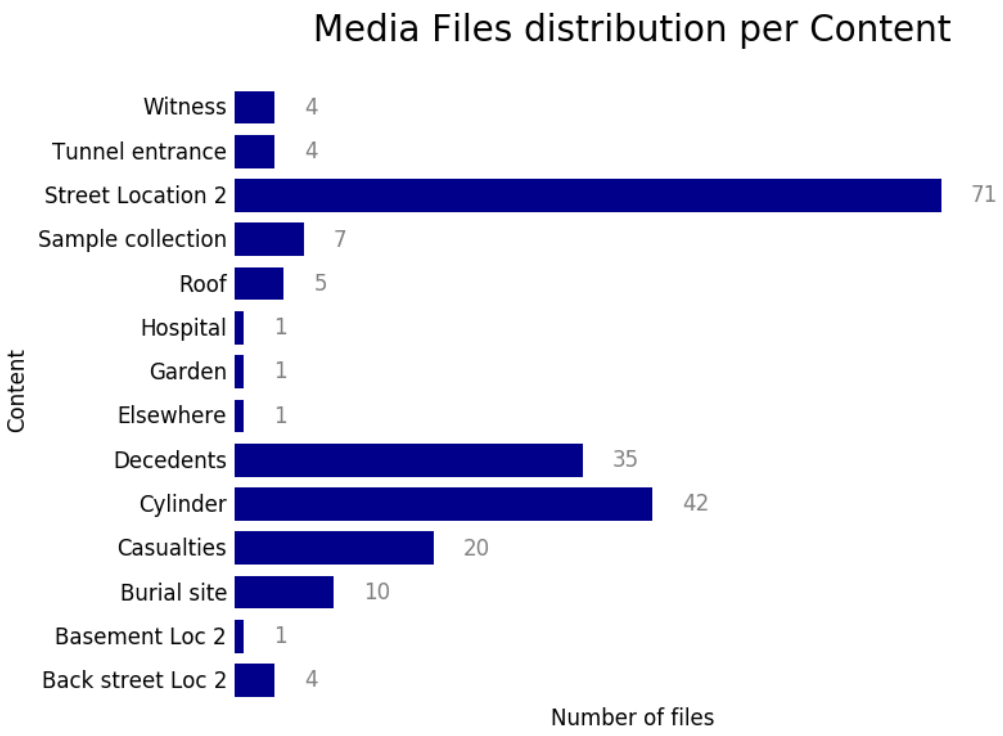


Figure A.11.6 Timeline made with the date of original of the file with extracted metadata

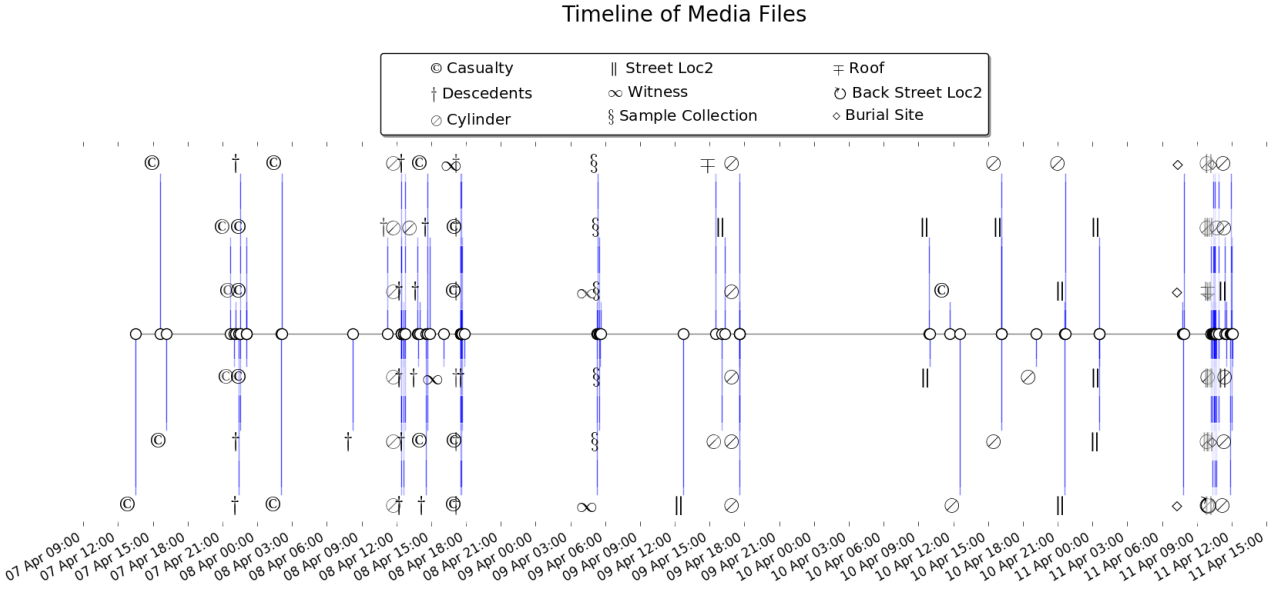


Figure A.11.7 Timeline of media files with images of living casualties. The last image on 10 April 2018 was taken by a casualty showing the evolution of clinical signs.

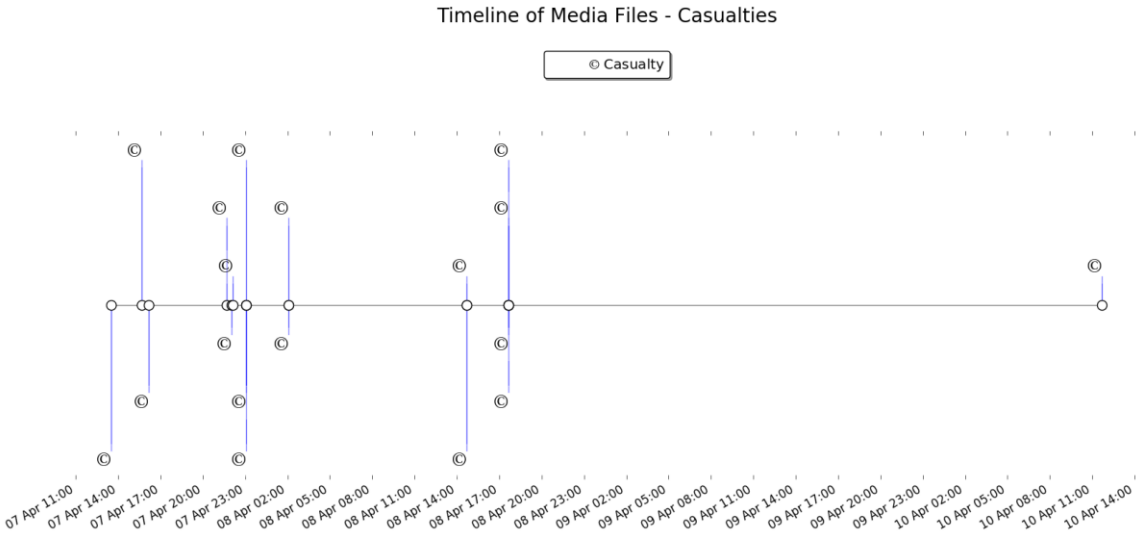


Figure A.11.8 shows the timeline of images depicting decedents. The first were taken between 22:00 and 23:00 on 7 April. The next group of pictures was taken on 8 April after 8:00 AM.

Figure A.11.8 Timeline of media files with images depicting decedents.

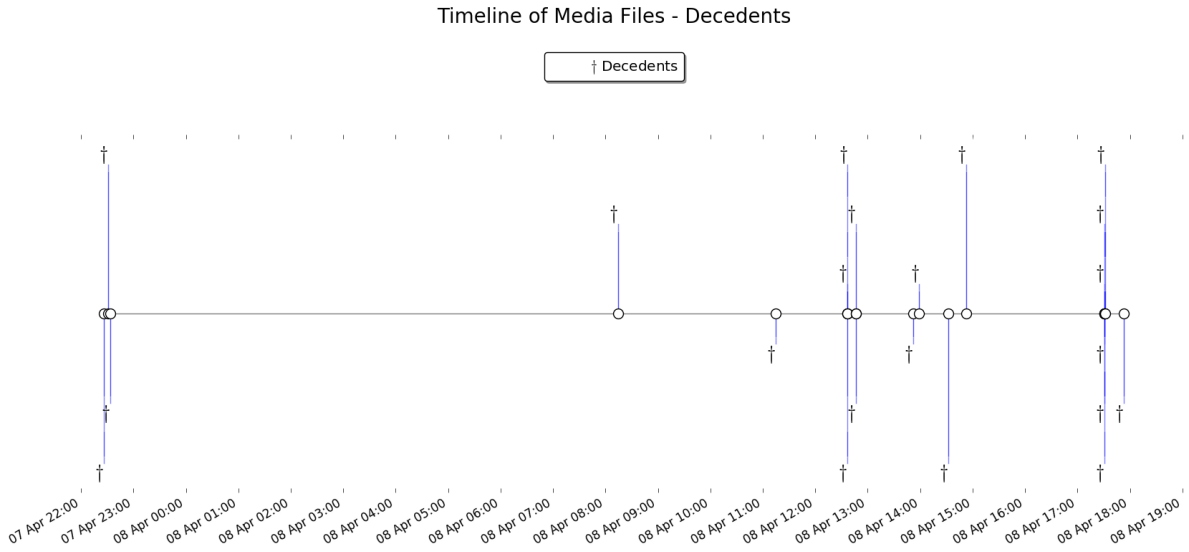


Figure A.11.9 Timeline of media files with images of cylinders

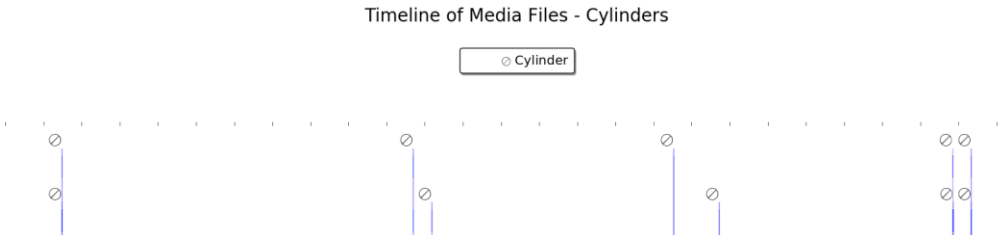


Figure A.11.9 shows the timeline of images with cylinders. Only one video showing the cylinder at Location 4 contained metadata and it was recorded on 10 April 2018 21:41:05. All other images of cylinders were taken at Location 2.

The following observations are noted by the FFM team after the analysis of digital information:

- From an examination of the metadata, the videos and photos provided by witnesses in relation to Locations 1, 2, and 4 were created at the reported time of the alleged incident.
- From the various videos showing the deceased victims throughout the interior of Location 2, some of the victims had been moved between video recordings.

Annex 12

EXPERTS' ANALYSES ON INDUSTRIAL-TYPE CYLINDERS

Experts' Analyses for Industrial Cylinders found in Douma at the Site of Alleged Use of 7 April 2018

- The FFM requested three independent analyses from experts recognised by their respective institutions and the international community for their knowledge, skills, and experience.
- The experts consulted came from three different countries and have expertise in engineering, ballistics, metallurgy, construction, and other relevant fields.
- The analyses were focussed on the damage observed on the industrial cylinders and their surroundings in both locations where they were found in Douma.
- The experts provided reports and numerical simulations on the impact of steel cylinders on reinforced concrete slabs, in line with the two locations observed by the FFM team members in Douma.
- The analyses included general descriptions, geometrical data, trajectory calculations, empirical calculations, and numerical simulations.
- The international experts used different methodologies and approaches for their analyses in order to produce more comprehensive results. Proprietary, commercial referenced software solutions were used for numerical simulations.
- The independent analyses results were complementary and, as such, presented in the main body of the report.
- Consultations with the international experts were conducted in accordance with OPCW confidentiality procedures.

Annex 13
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