B2.1. ISSUE FULL REPORT

Sending samples to the forensic laboratory:

On the morning of the 27th-November-2015 it received in the laboratory a package with the code case, Preliminary Proceedings "GHEPMIX6" from the Court of Instruction No. 0 of Madrid. This package contains:

- a tube with hyssop, labeled "M1 vaginal swab", contained in a self-closing bag transparent, labeled "GHEPMIX6-doubted".
- 2 tubes with hyssop, each labeled as "M2 undoubted victim" and "M3 undoubted victim" contained in a self-closing bag transparent, labeled "GHEPMIX6-victim".
- 2 tubes with hyssop, each labeled as "M4 undoubted suspect" and "M5 undoubted suspect", contained in a self-closing bag transparent, labeled "GHEPMIX6-suspect".
- Envelope with documentation:
 - >> Written official of the court, which indicate what is sent,
 - Sample submission form, completed by the Coroner Forensic Medicine Institute "IML-GHEPMIX6" indicating the samples that are sent perfectly identified. Furthermore, it indicates that it is a "Sexual Assault", which was committed in the morning (02:00 h.) of day 24 November-2015, when she was returning home after leaving with some friends on the night of 23 -November-2015. There was a single assailant, it was a vaginal aggression without prophylactic and external ejaculation, and the victim washed "above" (in the words of the victim) after the reported incidents, as soon as she got home. Sampling was conducted in the morning (12:00 h.) on 24-November-2015, after making the complaint at a police station,
 - Coroner's report that outlines, apart from data already collected in the samples form, a consensual relationship 30 hours before the attack (22-November-2015) with their regular partner. In such relationship no prophylactic measures were used, and also indicates that the victim does not remember if there were internal ejaculation,
 - Informed consent forms of sampling for all undoubted samples collected. With regard to samples taken from the "Suspect", it also indicates in the documentation that a lawyer assisted him.

n⁰ lab

2nd shipment of samples to the forensic laboratory:

Later, in the morning on 01-December-2015, it was received a new package associated with the same case, Preliminary Proceedings "GHEPMIX6", but this time, it was directly sent by the "IML-GHEPMIX6". This package contains:

- 2 tubes with hyssop, each labeled as "M1 undoubted partner" and "M2 undoubted partner", contained in a self-closing bag transparent, labeled "GHEPMIX6-couple".
- Envelope with documentation:
 - Sample submission form, completed by the Coroner Forensic Medicine Institute "IML-GHEPMIX6" indicating the samples that are sent, perfectly identified. It also states that it is the "Regular partner" of "Victim" and that the sampling was conducted in the morning (10:00 h.) of 30th-November-2015,
 - Informed consent form of sampling, indicating the purpose of the same, which is to "discard".

B2.2. ISSUE FULL REPORT

Custody and work in the forensic laboratory. Results:

After reception of the samples in the center, they were referred to the Service of Biology, where the analysis began the same day 27-November-2015. Samples received on 1 December-2015 were also referred to the Service of Biology, and their analysis began that same day. All the analytical part in the lab was completed on 14-December-2015, with the following results:

 Undoubted samples: medium swab from each samples were extracted, obtaining a duplicate profile of each of the persons involved in the case: "Victim", "Couple" and "Suspect". The following table corresponding results are reported:

Arrested suspect profiles:

	Suspect 1
Amelogenin	X-Y
D10S1248	14-15
vWA	14-16
D16S539	13
D2S1338	17-22
D8S1179	13
D21S11	29-32.2
D18S51	15
D22S1045	16
D19S433	13-14
TH01	6-9.3
FGA	22
D2S441	10-11.3
D3S1358	14-15
D1S1656	15-16.3
D12S391	21

	Suspect 1
DYS456	16
DYS3891	13
DYS390	24
DYS38911	29
DYS458	17
DYS19	14
DYS385	12-14
DYS393	13
DYS391	11
DYS439	12
DYS635	23
DYS392	13
GATAHA.1 (H4)	21(12)
DYS437	14
DYS438	12
DYS448	18

n⁰ lab

Regular partner profiles:

	Regular partner	
Amelogenin	X-Y	
D10S1248	13-16	
vWA	14-18	
D16S539	12-13	
D2S1338	20-24	
D8S1179	12-13	
D21S11	29	
D18S51	15-17	
D22S1045	15-16	
D19S433	14-16	
TH01	7-8	
FGA	24-25	
D2S441	11-14	
D3S1358	17-18	
D1S1656	15-17	
D12S391	19-19.3	

	Regular partner
DYS456	15
DYS3891	13
DYS390	24
DYS38911	30
DYS458	18
DYS19	13
DYS385	15-16
DYS393	15
DYS391	11
DYS439	11
DYS635	22
DYS392	14
GATAHA.1 (H4)	20(11)
DYS437	14
DYS438	8
DYS448	21

Victim profile:

	Victim
Amelogenin	X-X
D10S1248	16-17
vWA	16-17
D16S539	9-12
D2S1338	18-19
D8S1179	13-15
D21S11	29-31.2
D18S51	11-16
D22S1045	15
D19S433	13-15
TH01	7-9.3
FGA	21-24
D2S441	11
D3S1358	14-16
D1S1656	15.3-18.3
D12S391	20-25

Doubted samples:

Ø PSA + weak

SERATE	EC [®] PSA C T	
GHEPN	IIX6_M1 (hise	opo vaginal)

 \square Microscopy staining "Christmas Tree": 5 heads (in an aliquot of 10 μ L)

 $\ensuremath{\boxtimes}$ Cell fraction: only one profile is obtained matching with "Victim" profile

- ☑ Seminal fraction:
 - Quantification by Quantifiler® Trio:

ADN_Large:	0.600	ng/μL
ADN_small:	0.700	ng/μL
ADN_Large:	0.380	ng/μL
ID:	1.167	

- > Amplification by NGM®, 1µL: Autosomal mixture profile
- > Amplification by Yfiler®, 1µL: Y-chromosome mixture profile