

Volume Crime Processing in P+ instead of PP21

Evidence Recovery staff began ordering PowerPlex21 - PP21 tests on casework on 3rd December 2012. At the time of implementation all casework samples both volume (priority 3) and major crime samples (priority 2) were being processed with the PowerPlex21 kit. While this approach simplified the ordering of tests, workflows (including batch types) and reduced the laboratories reagent stock requirements, it was found that the overall turn-around-times on case management was adversely affected. Case management of PP21 was found to be substantially more time consuming than Profiler case management as:

- there was more data to assess with the increase in number of loci
- an addition of the statistical interpretation using STRmix
- time for staff to adapt to the new processes.

The change to work practices was unusually large change for the laboratory, due to the co-introduction of both a new kit (PP21) and a new analysis tool (STRmix) on the same date. New elements of case management for staff included: interpretation of PP21 profiles, STRmix analysis methodology, EXH reporting lines and case management workflows.

As a result of the increased case management time for PP21 samples in the period from December 2012 to May 2013, there was an increase in the turn-around times of results sent to Queensland Police Service. In an effort to return to pre-PowerPlex21 results turn-around times, Forensic DNA Analysis decided to return Priority 3 Volume samples to Profiler on the 6th May 2013. This change did aid in the reduction turn-around times for case management and release of results.

Given that staff have now gained significant skill and experience in the interpretation and analysis of Powerplex21 profiles, it would be advisable to review the selection of kit for Volume sample case management at a future date, particularly given that additional information that is able to be obtained with this kit.