

Report for QIS OQI as of 28/06/2022 10:14:35 AM

## Report for QIS OQI - 21222 CWIQEXT20080620\_02 DNA IQ investigation

### OQI Details

<b>Status</b>	Closed Approved
<b>Subject</b>	When doing IQ extraction batch checks for [REDACTED] (sexual assault case in Rockhampton), it was found that sample [REDACTED] [REDACTED] (voume crime from Lawnton) showed below threshold similarities to intimate samples and complainant profile in [REDACTED]. Below threshold analysis (using Genemapper) on sample [REDACTED] supported the match.
<b>Source of OQI</b>	Internal Problem
<b>Date Identified</b>	28/10/2008

### OQI Creator Contact Details

<b>Creator</b>	Julie CONNELL
<b>Organisational Unit/s</b>	Reporting 3
<b>Service/s</b>	
<b>Site Location/s</b>	Coopers Plains

### Investigator/Actioner Contact Details

<b>Actioner</b>	Thomas NURTHEN
<b>Organisational Unit/s</b>	Analytical
<b>Service/s</b>	
<b>Site Location/s</b>	Coopers Plains

### Investigation Details

**Investigation Completed** 14/05/2009      **Root Cause Type** | Procedure/Method/Process  
**Investigation Details** Original

73	81	89
288898049	82	90
288898035	83	91
76	84	92
77	85	93
288898026	365654129	94
288898062	87	95
288898053	88	96

Store  

--	--	--

73	81	89
364910060	82	90
364910074	83	91
76	84	92
77	85	93
364910083	364910110	94
364910092	87	95
364910104	88	96

## Spin basket

73	81	89
364910006	82	90
364910015	83	91
76	84	92
77	85	93
364910029	364910051	94
364910038	87	95
364910047	88	96

This batch of casework samples appears to have a single contamination event.

- Position F11 (86) contains a mixture. The mixture was consistent with the DNA profile found in 5 positions (B10/74, C10/75, F10/78, G10/79, and H10/80).
- Re-extraction of the stored lysate of the contaminated sample (F11/86) yielded a DNA profile consistent with the original contamination.
- Re-extraction of the original substrate (F11/86) yielded an NSD profile with an undetermined Quant value.

- Direction of contamination – left to right.

A contamination of the samples has occurred at a point during the extraction process before the removal of the lysate but after removal of the substrate, as some of the lysate profiles are contaminated (consistent with original 9PLEX contamination). The right to left direction of contaminations are consistent with robotic movement. Contamination may have occurred during storage, during plate agitation on the robot, by robotic dripping, or by the removal of plate seals.

**Performed By** Thomas NURTHEN

**Investigation Completed**  
**Investigation Details**

11/12/2008      **Root Cause Type** | Procedure/Method/Process  
 Re-extraction of the stored lysates of the potential contributors and of the affected sample confirms the contributing profile. Analysis of the affected sample with low threshold GeneMapper software reveals a mixture. Re-extraction of the substrate from the affected sample failed to yield any DNA profile. The presence of the mixture in the stored lysate and the apparent movement of the DNA from a well or wells left to right indicate the event occurred after the removal of the substrate but prior to the removal of the lysate. The event may have been caused by seepage of the plate seal, removal of the plate seal, agitation on the instrument or during storage. The most likely cause is believed to be seepage from position 78 (Quantitation value of around 11ng/uL) into position 86. Seepage between wells has been observed previously -OQI XXXX, and can be attributed to the plate seal not fully

sealing between adjacent wells. this is because the plate seal used for this procedure was not designed to seal deep well plates.

**Performed By** Quality Information System

## Action Details

<b>Action Complete Title</b>	26/05/2009	<b>Action Fix Type</b>   Changed ProcessIntroduction of new
<b>Action Description</b>	<p>process</p> <p>A new process for reporting DNA IQ cases has been implemented within the Forensic Reporting and Intelligence team, no result is released without being checked to see if results are reportable</p> <p>Please note in the investigation reference was made to OQI xxxx. This actually refers to all OQIs raised for DNA IQ adverse events. Please see list below</p> <p>19330 FTAEXT20080205_01  19349 CWIQEXT20080225_02  19477 CWIQEXT20080430_01  19767 FTAEXT20080515_01  19768 CWIQEXT20080506_01  20231 CWIQEXT20080417_01  20351 CWIQEXT20080402_01  20422 CWIQEXT20080506_02  20437 CWIQEXT20080630_01  20615 CWIQEXT20080409_01  20617 CWIQEXT20080614_02  20690 CWIQEXT20080628_01  20925 CWIQEXT20080403_01  21222 CWIQEXT20080620_02  21309 CWIQEXT20080531_01  22880 CWIQEXT20080614_02  22882 CWIQEXT20080507_01</p>	
<b>Action Complete Title</b>	26/05/2009	<b>Action Fix Type</b>   Changed ProcessModifications to
<b>Action Description</b>	<p>Automated DNA IQ protocol</p> <ul style="list-style-type: none"> <li>• Modifications have been made to the automated DNA IQ extraction procedure (including the use of an alternative to the adhesive seal and an alternative resin mixing procedure).</li> <li>• This modified procedure will undergo extensive verification and approval from the DNA Analysis management team will be obtained prior to re-introduction. A report for this re-verification will be written and made available to all staff</li> </ul>	
<b>Action Complete Title</b>	15/05/2009	<b>Action Fix Type</b>   No Fix RequiredNil action
	<b>Action Description</b> Nil	

## Task Details

No Tasks found

## Follow-up And Approval

<b>Follow-up Status</b>	Accepted
<b>Follow-up Status Comment</b>	<p><u>26/05/2009 2:04:47 PM Thomas NURTHEN:</u></p> <p>Actions added as per Approver</p> <p><u>26/05/2009 1:59:13 PM Thomas NURTHEN:</u></p>

	Add details of new plate checking process for all DNA IQ cases
	<u>25/05/2009 7:45:30 PM Thomas NURTHEN:</u>
	On Behalf of Julie Connell with permission from Justin Howes
<b>Approver</b>	Paula BRISOTTO
<b>Approval/Rejection Date</b>	26/05/2009
<b>Approval/Rejection Comment</b>	<u>26/05/2009 2:12:28 PM Paula TAYLOR:</u>
	Agree with all actions and proposed actions
	<u>26/05/2009 12:24:32 PM Paula TAYLOR:</u>
	Can you please add the same actions as from the other OQI's raised in relation to the automation contamination events

## Associations

No Associations found

## Records

No Records found

21222 CWIQEXT20080620\_02 DNA IQ investigation  
 Copyright © 2015, Health Services Support Agency, Queensland Health - All Rights Reserved