DISCUSSION DOCUMENT – ROGER DIXON'S 212 AFFIDAVIT – INGE LOTZ CASE

By Calvin Mollett and Thomas Mollett – Revised September 2020

Background

In the months leading up to the case of State vs Fred Barend van der Vyver (SS 190/06) ("Fred"), the State formally requested Senior Supt Roger Dixon ("Dixon"), a Control Forensic Analyst at the Scientific Analysis Unit of the Forensic Science Laboratory in Pretoria to examine a fingerprint lift (aka Folien 1) in order to determine whether it was lifted from a DVD cover or from a drinking glass.

Folien #1 was one of eleven fingerprint lifts taken by the police in the flat where Inge Lotz, Fred van der Vyver's girlfriend, was murdered. According to the affidavits and court testimony of Constable Elton Swartz, the officer that did the fingerprint lifting, Folien #1 was lifted from a DVD cover that was found on a coffee table next to the couch on which the victim was killed. The DVD cover belonged to The Video Place – a video rental store close the victim's flat.

On 12 April 2005 a fingerprint on Folien #1 was matched to the left index fingerprint of Fred van der Vyver. That the police made a correct match in this instance has never been disputed by anyone, including internationally renowned fingerprint experts hired by the defence.

On 13 April 2005 the police found that the victim rented the DVD at 15:07 on 16 March 2005 – only a few hours before her murder. If Folien #1 was lifted from the DVD, as the police alleged, it means that Fred van der Vyver must have been with Inge, or at least in Stellenbosch, close to the time of her death. Fred van der Vyver vehemently denies that he has been in Stellenbosch or with the victim that afternoon, and claims that he was at his work at Old Mutual in Pinelands, Cape Town about 45 km away.

On the basis of this fingerprint evidence and some other circumstantial evidence the police arrested Fred van der Vyver and charged him with the murder of Inge Lotz.

In late 2005 the defence hired a retired police officer and fingerprint expert Daan Bekker to investigate Folien #1 – not to dispute the fingerprint linked to Fred van Der

Vyver but rather the surface (substrate) from which Folien #1 was lifted. Daan Bekker was the first expert to raise the possibility that Folien #1 was not lifted from a DVD cover but rather from a drinking glass. As Fred has been in Inge's flat several times his fingerprint on a drinking glass would not implicate him in the same way as a print from the DVD cover did.

In response to the Bekker report the State and Defence jointly decided to ask an independent police expert, with no knowledge of the case, to investigate Folien #1 in light of Daan Bekker's findings. They selected Director Ruben Botha from the LCRC in King William's Town to do this investigation. Botha's report concluded that the Folien #1 was in all likelihood lifted from a DVD cover.

Then the Defence retained Mr Pat Wertheim, an internationally renowned fingerprinting expert from the United States to investigate Folien #1 in light of the findings of Daan Bekker and Dir Ruben Botha. Wertheim also conducted several experiments with DVD's and drinking glasses and came to the conclusion that Folien #1 was lifted from a drinking glass and not from a DVD cover. He went on to allege that the police purposefully mislabelled a lift from a drinking glass to be from a DVD cover – in order "to frame Fred van der Vyver for the murder of Inge Lotz".

It was in response to the Wertheim report that the State (themselves) requested the help of Dixon to investigate Folien #1 to determine whether it came from a DVD cover or from a drinking glass.

Dixon started his investigation on 5 December 2006 at the offices of the LCRC in Paarl, Western Cape. With the assistance of a Captain van der Westhuizen he conducted tests on various DVD covers and a total of 11 drinking glasses. The various DVD covers, which included the actual cover purportedly rented by Inge, and 11 drinking glasses, purportedly collected from the victim's flat, were provided to Dixon by Van der Westhuizen.

The tests basically involved planting fingerprints and marks on the DVD covers and drinking glasses and then dusting them with aluminum powder, before using foliens to take a lift from each object. For some objects the test was repeated after they were cleaned with ethanol (DVD's) or soap and water (drinking glasses).

Then through a process that '<u>required skills in image analysis and comparison</u>' Dixon compared the different test lifts with Folien #1 and came to the ultimate conclusion that in

his <u>opinion</u> Folien #1 was not lifted from a DVD but instead from one of four glasses found in Inge's flat. Dixon's final conclusion, verbatim:

> *<u>In my opinion</u> the back folien described in paragraph 3.2.1.1 was not "lifted from a DVD" but instead from one of the four glasses described in paragraph 6.4. The features observed on the folien match test lifts made from the glasses, and not those made from the DVD covers.* [Underscoring here and throughout added for emphasis by authors]

Dixon reported his results in a signed affidavit, dated 12 December 2006, in terms of Section 212 of the Criminal Procedure Act 1977 (Act 51 of 1977).

This affidavit compelled the Adv Rodney De Kock, the Director of Public Prosecutions to, on 13 December 2006, send a letter to the Adv Dup de Bruyn, Fred's defence lawyer, in which he stated:

> *I hereby confirm that the State no longer intends to proceed with evidence concerning your client's alleged finger print on the DVD holder.*

This affidavit was accepted as *prima facie* evidence in Court. Dixon was not called to testify.

Therefore, in terms of **Veldhuizen** 1982 (3) SA 413 (A), the Court was therefore compelled to accept that *prima facie* proof has been presented that Folien #1 was lifted from a drinking glass found in Inge's flat and not from a DVD holder.

> "*The word `prima facie evidence' cannot be brushed aside or minimized. As used in this section they mean that the judicial officer will accept the evidence as prima facie proof of the issue and, in absence of other credible evidence, that prima facie proof will become conclusive proof.*" – (416G).

On the first day of trial against Fred, 12 February 2007, his Plea Explanation, in terms of Article 115(2), was read out in court. *Attachment 3* of the Plea Explanation was Dixon's Section 212 Affidavit.

> The State has now, after Mr Wertheim's report was handed to the State, conceded that the fingerprint is not from a DVD holder, but from a glass alleged by my experts from the onset. In this regard I attach a letter from the Director of Public prosecutions dated 13 December 2006 (FVDV2). Attached to the letter is a report by Senior Superintendent Dixon from the SAPS dated 12 December 2006 that came to the same conclusion as my experts. It is attachment 3. I have been advised that the concession by the State does not prevent by legal advisors to still deal with the fingerprint issue during the trial. It is indeed my case that the evidence around the fingerprint was fabricated and fraudulent. Therefore respectfully, on my behalf it will be put forward that the fingerprint evidence taints the State case against me.

Note that at this point Dixon's affidavit was not referred to as a Section 212 Affidavit but rather as a 'report'. This compelled the State to put the fingerprint evidence before the Court for the court to decide about the *bona fides* or *mal fides* of those involved.

> MNR VAN DER VIJVER [State Prosecutor]: Now your Honour, the summary of facts that is in front of you in terms of Article 144 of the Criminal Procedure Act off-course refers to the alleged fingerprint of the accused that was found on the DVD holder that was rented earlier. It is indeed so that the State is not proceeding with this evidence anymore. It is a decision that was made for specific reasons by the prosecuting authority. If it seems during the trial, and I think we saw a glimpse of it this morning, it will form part if the trial, and will it be necessary for the State to present evidence around the lifting of the fingerprints in the deceased flat the evening of 16 March, or more specifically the morning of the 17 March in order to place the court in a position the judge for itself the bona fides or the mala fides of the people involved. It looks like it will become very relevant in the case and under those circumstances the State will present this evidence.

Folien #1 then became a key piece of evidence which compelled the Defence to bring two international fingerprints experts – Pat Wertheim and Arie Zeelenberg – in to testify.

Dixon's affidavit was used extensively by the Defence in cross-examination to 'attack' Constable Swartz, the fingerprint lifter, and his supervisor Captain Matheus.
Judging from Judge Deon van Zyl's statement below, from his official Judgment, Dixon's affidavit **<u>was crucial to the outcome of the case</u>**. It dealt the legitimacy of Folien #1, as possible evidence disproving Fred's alleged alibi, a severe blow.

> [140] It follows that the state in no way submitted sufficient evidence to affect the prima facie case, as contained in Senior Supt Dixon's affidavit in the least. This prima facie case was indeed strengthened considerably by the highly expert presentations of Mr Wertheim and Mr Zeelenberg….
> [141] In their comprehensive reports and impressive testimonies, did they affirm and expanded on Senior Superintendent Dixon's findings in his affidavit point by point.[…] They were both of the opinion that its (Folien 1) came from a comical drinking glass about 80 mm high. ...

<u>However, in terms of the admissibility or inadmissibility of Dixon's Section 212 Affidavit as *prima facie* evidence, the following must be taken into account</u>:

1) Roger Dixon's affidavit does not comply with the statutory provisions of Section 212 of the Criminal Procedure Act, 1977 (Act No 51 of 1977).

Section 212(4)(a) of the Act reads as follows:

> *212 Proof of certain facts by affidavit or certificate*
>
> *(4)(a) Whenever any <u>fact</u> established by any examination or process requiring any skill-*

(i) in biology, chemistry, physics, astronomy, geography or geology;

(ii) in mathematics, applied mathematics or mathematical statistics or in the analysis of statistics;

(iii) in computer science or in any discipline of engineering;

(iv) in anatomy or in human behavioural sciences;

(v) in biochemistry, in metallurgy, in microscopy, in any branch of pathology or in toxicology; or

(vi) in ballistics, in the identification of finger prints or palm-prints or in the examination of disputed documents,

is or may become relevant to the issue at criminal proceedings, a document purporting to be an affidavit made by a person who in that affidavit alleges that he or she is in the service of the State or of a provincial administration or is in the service of or is attached to the South African Institute for Medical Research or any university in the Republic or any other body designated by the Minister for the purposes of this subsection by notice in the Gazette, and that he or she has established such fact by means of such an examination or process, <u>shall, upon its mere production at such proceedings be prima facie proof of such fact</u>: Provided that the person who may make such affidavit may, in any case in which skill is required in chemistry, anatomy or pathology, issue a certificate in lieu of such affidavit, in which event the provisions of this paragraph shall mutatis mutandis apply with reference to such certificate.

Dixon's investigation consisted of two processes:

Process 1: Devising, and then supervising, experiments that involved taking test lifts with folien from on a number of DVD holders and drinking glasses.

Process 2: Using his skills in **image analysis and comparison** he analysed and then compared each test lift with Folien 1.

From Paragraph 5: *"... I examined the exhibits, as described in paragraphs 3.1.1 and 3.2.1.1, the drinking glasses, other DVD covers and the lifts produced during the tests, through a process that requires skill in image analysis and comparison."*

2) As the Act requires, Dixon's Section 212 Affidavit does not explicitly explain which skill(s) was/were required to establish the test lifts he analysed using his skills in "image analysis and comparison".

Dixon only indicated which skills were required for Process 2 – whereby he compared Folien #1 with each test lift. He, however, did not indicate which skills were required for the first stage where he 'produced' each lift.

When a scientist, for example, conducts a DNA analysis or determine the blood alcohol content of a blood sample he/she does so according to specific laboratory protocols and SOPs – according to well documented industry standards – using calibrated equipment and quality controlled processes. One would therefore expect that the same results would be obtained if other scientists were to analyse the same blood sample. The purpose of a Section 212 Affidavit is then simply to present those results to the court as factual evidence.

Devising an experiment is not a 'hard science'. In this particular case, if the task were assigned to a different expert, he/she would likely have devised a different experiment/s, which likely would have led to different results and perhaps even in different conclusions than Dixon's experiment.

There are many variables involved in taking a folien lift from a DVD cover. In addition to the characteristics of the cover itself, there are the technique of the duster, the technique of the lifter, the method of the lifting process, the quality of aluminum powder – to name but a few. When designing an experiment one of the objectives is to control for as many of these variables to the best extent possible.

Another expert would likely have involved the duster, Inspector Mariaan Booysens, and the lifter Constable Swartz, in an attempt to control for the differences in dusting and lifting techniques, but he chose to use only Captain van Der Westhuizen to perform the dusting

and the lifting. Some experts would have used Captain van der Westhuizen and others, in addition to Booysens and Swartz, as a control.

In addition it is highly likely that another expert would have followed the exact process that Swartz followed when he handled the DVD at the crime scene. According to Swartz, after he received the dusted DVD cover from Booysens, he applied a folien to the front bottom half of the DVD cover. After removing this lift he observed that there were no useable fingerprints on it and he decided to discard this lift. At this stage the powder over the bottom half has been removed. He then applied a second lift to the top half of the DVD, such that the bottom edge of this second lift overlapped onto the area cleaned by the first lift. This second lift was labelled "Folien #1".

From Par 6.1 it is clear that Dixon <u>did not</u> follow this procedure:

> *6.1 Lifts were made of DVD cover #1 as described in paragraph 3.1.1 <u>on the top half of the front of the cover</u> as demonstrated to me by Constable Swartz.*

Nowhere in his affidavit is it documented that a first folien was placed over the bottom half before placing a folien over the top half of the front of the cover.

In this Par 6.1 Dixon committed <u>perjury</u> when he claimed that Constable Swartz demonstrated to him how Folien #1 was lifted. The truth is that Constable Swartz has to this day never met Roger Dixon, and has never done any demonstrations to him.

And then then in Par 7.5 Dixon concluded:

> *7.5 … The concentration of powder on the lower line is not consistent with the line having been produced as a result <u>of a first lift from the middle of the DVD cove</u>r, representing the edge of the previous folien, but rather consistent with an edge having been powered.*

From Par 7.5 it is clear that Dixon was aware of the "double lift" performed by Swartz, and yet Dixon himself did not perform "double lifts".

In conclusion: There is no industry accepted and documented standards, protocols and methods to determine if a specific folien came from a DVD cover or a drinking glass. The methodology selected by Dixon is just one of many he could have chosen, and it is possible that different methodologies could have led to different conclusions. In addition, it seems that there are several very questionable aspects around Dixon's methodology and skills in devising valid experiments – most critically his failure to follow Swartz's methodology precisely.

3) The skill Dixon used to analyse the test lifts – "Image analysis and comparison" – is not a recognised skill area as per Par 212(4)(a) of the Act.

From Paragraph 5: *"... I examined the exhibits, as described in paragraphs 3.1.1 and 3.2.1.1, the drinking glasses, other DVD covers and the lifts produced during the tests, through a process that requires skill in <u>image analysis and comparison</u>."*

"Image analysis and comparison" is not a recognised skill area listed in Section 212 (4)(a). It would not be accurate to argue that "*image analysis and comparison*" is a combination of the recognised skill areas e.g. "*mathematics*" and "*identification of finger or palm-prints*".

Dixon's work with Folien #1 and drinking glasses did not require skills in *"identification of finger or palm-prints*". It has already been determined conclusively that the print on Folien #1 belonged to Fred van der Vyver. He was thus not required to identify who the print belonged to.

When investigating whether a certain drinking glass could have made the curves on Folien #1, there are three parameters to consider:

1. Are the distances between the respective sets of lines the same?
2. Are the radii of the two respective top curves the same?
3. Are the radii of the two respective bottom curves the same?

This comparison can be done mathematically – the distance, top radius and bottom radius can be mathematically calculated for a drinking glass of any dimension using basic trigonometry. Then there are various scientific and mathematical techniques to estimate the radii of the existing curves on a folien. It is then possible to scientifically compare the parameters (distance, top radius, bottom radius) as they are on the test lifts with the parameters as they are on Folien 1.

From Dixon's affidavit it is evident the only 'mathematics' skill he applied was to measure the distance between the curved lines.

> *6.4 The distance between the two parallel curved lines which are visible on Folien 1, as described in paragraph 3.2.1.1, was measured and compared to the heights of the eleven (11) drinking glasses collected from 21 Shiraz flats. Four matching glasses of the eleven were found to have the same height as the distance between the lines …*

There is no evidence whatsoever that Dixon mathematically analysed Folien #1 and the experimental lifts to determine whether the curves were concentric and circular (as they should be if they were made by a conical drinking glass) and also what the radii of the curves are. There is also no evidence that he subjected the dimensions of the different drinking glasses to a mathematical analysis to calculate the radii of the curves each glass would have left on a lift.

It appears that the results of Dixon's comparisons and conclusions are based on a very limited and incomplete mathematical comparison of the key parameters (he only measured and compared distance between lines). It can therefore not be said that he applied his skills in "mathematics".

It appears that Dixon relied only on a visual comparison.

4) The Act doesn't permit Opinion Evidence

In 1998 the Legislature amended Section 212 of the Act to outlaw statements containing opinions. Dixon's final conclusion, which is clearly expressed as his opinion, therefore does not comply with the provisions of the Act.

> *In my **opinion** the black Folien described in paragraph 3.2.1.1 was not "lifted from a DVD" but instead lifted from one of four glasses described in Paragraph 6.4. The features observed on the Folien match test lifts made from glasses and not those made from DVD covers.*

In **Nkhumeleni** 1986 (3) SA 102 (VSC) and **Lange** 1969 (3) SA 40 (N) where the High Courts, with reference to the pre-amended section 212(4), clearly indicated that opinion evidence cannot be adduced **via** a Section 212(4) statement.

5) The dusting and lifting of prints from the drinking glasses were not performed by Roger Dixon himself but by a Captain Van Der Westhuizen – the Act doesn't permit such hearsay evidence.

In **Paulsen** 1995 (1) SACR 518 (C) the deponent failed to indicate that he analysed the blood sample himself. The court ruled that the Section does not allow the deponent to state what factual finding was made by another person – to do so would amount to double hearsay and that this is not allowed by the Section. The Court stressed that in order to be admissible, Section 212(4) statements (affidavits) should strictly comply with the requirements of the Section. The conviction was set aside on Appeal.

6) The drinking glasses Roger Dixon used in his experiments, and which he claimed, were collected from the victim's flat, does not meet the chain of custody requirements of the Act.

Dixon's final conclusion, verbatim:

> *In my opinion the black Folien described in paragraph 3.2.1.1 was not "lifted from a DVD" but instead lifted from one of four glasses described in Paragraph 6.4. The features observed on the Folien match test lifts made from glasses and not those made from DVD covers.*

The four glasses described in Paragraph 6.4 are a set of identical glasses and were part of the eleven (11) glasses Dixon claimed was collected from 21 Shiraz, Inge Lotz's flat.

Dixon's affidavit makes no mention of chain of custody evidence for the 11 glasses purportedly collected from 21 Shiraz by the police and delivered to Dixon by Captain Van der Westhuizen.

Judging by the court testimony of Mrs Juanita Lotz, the victim's mother, it is highly unlikely that all 11 glasses were from Inge flat, and even if they were, there was no chain of custody evidence that Dixon could have relied on.

Even Pat Wertheim, a fingerprint expert that testified for the Defence had this to say during his court testimony (Page 3046 Lines 3 to 9):

> "*M'Lord, I was advised that the drinking glasses in Inge Lotz' flat, many of them had been retrieved by her family, rather than collecting at the scene, the police had recovered them from her family at a later date. Again there's no continuity, there's no chain of custody, there's no provenance to a drinking glass received from the Lotz family that might have come from Inge's flat*."

Some time after her daughter's death, Mrs Juantia Lotz, with the assistance of a friend, cleared away all of Inge's belongings in the flat and took them to her house in Welgemoed, drinking glasses included. Below is a translated extract of Mrs Lotz's cross-examination by Adv Dup de Bruyn:

> De Bruyn: Yes, madam, the contents of Inge's flat was at some stage taken to your house, in that correct?
> Mrs Lotz: That is correct
> De Bruyn: Do you remember glasses that were taken back to your house? That came from the flat?
> Mrs Lotz: Everything that was in her flat came home.
> De Bruyn: Everything
> Mrs Lotz: Including glasses.
> De Bruyn: Including glasses. Now did the glasses ever leave the house again?
> Mrs Lotz: I gave some of the glasses to the police for tests.
> De Bruyn: When was that, can you remember?
> Mrs Lotz: I can't remember at all.
> De Bruyn: It is important to us. Was it this year, or was it last year or was it in the same year, 2005?
> Mrs Lotz: I cannot remember
> De Bruyn: Can you not ... did the police ever came to you and looked at the glasses at your home and took measurements at your home or can't you remember?
> Mrs Lotz: I can't remember. The glasses that came from the flat, I kept just like that in boxes, so when they enquired I took the glasses from the boxes and gave them to the police.
> De Bruyn: I see
> Court: Just a sample, just single ones?
> Mrs Lotz: Yes, a prototype of each type that was in her flat.
> De Bruyn: Excuse me, madam, it is important, I did hear what you just said?
> Court: A prototype..

> De Bruyn: A prototype?
>
> Court: ... of each that was in her flat
>
> De Bruyn: Sorry, do I understand your testimony correctly, the glasses arrived at you packed in boxes
>
> Mrs Lotz: As we packed it in her flat.
>
> De Bruyn: I understand.
>
> Mrs Lotz: We had to clear her flat.
>
> De Bruyn: And then the police came and said they wanted to do tests?
>
> Mrs Lotz: I did, let me rather say, that is what I assumed.
>
> De Bruyn: Yes
>
> Mrs Lotz: They asked if I can show them a similar glass of each type that she had in her flat.
>
> De Bruyn: I understand that madam. Can you remember if it was Director Trollip?
>
> Mrs Lotz: It might have been. I can't precisely remember.
>
> De Bruyn: So then you removed an example of each glass and gave it to the police
>
> Mrs Lotz: Yes.
>
> De Bruyn: Did you ever get the glasses back?
>
> Mrs Lotz: That I can't remember either.

On 19 December 2005, Supt Ruben Botha signed a sworn statement that stated amongst others:

> *On 2005-12-14 we went together with Director Trollip to the house of the deceased mother, in Welgemoed. We measured glasses which she apparently removed from the deceased flat and departed for Port Elizabeth thereafter.*

Dixon made a definitive and far-reaching statement in a Section 212 Affidavit, and which the Court had to accept as factual evidence, that Folien #1 came from one of 4 glasses that were removed from the scene at Inge's flat, in spite of the fact that there was no evidence

that the police removed these glasses directly from Inge's flat, and in spite of the fact that these glasses had no chain of custody evidence.

The importance that a Section 212 must prove the chain of custody was emphasised by the Court of Appeal in Sithole vs. State (2012) – Case Number: A1051/11.

During the criminal trail the accused was found guilty of raping a 14-year old girl and sentenced to 18 years in prison. The State's case rested on a Section 212 Affidavit, which stated that the accused's DNA matched the DNA of a child that the victim gave birth to after the rape. During the criminal trial the Defence challenged the chain of custody of the blood sample that was taken from the accused, claiming that it was "tampered" with. The Defendant's lawyer, however, was unable to prevent the Court from accepting the Section 212 Affidavit and accepting the contents thereof as *prima facie* evidence. The sentence was appealed (Sithole vs. State (2012) – Case Number: A1051/11). The Appeals judge found that the Section 212 Affidavit was inadmissible because it contained insufficient evidence to prove the chain of custody.

> *"3.1 During the course of my official duties on 2010-08-10, I received the case file and thereafter interpreted the DNA results of the crime scene and reference sample pertaining to SASELAMANI CAS 31/09/09 (LAB No 178134/09 [2009110485]) by process requiring competency in Biology."*

This Paragraph does not say from whom he received the case file containing the reference sample and the results of the DNA analysis. This is what the judge thought of it:

> *14. Regarding the receipt of the exhibits at the laboratory, <u>the statement lacks any reference from whom the samples were received.</u> Section 212(8)(a)(ii)(aa) clearly requires that the "person, institute, State department or body" from whom the exhibits were received, has to be specified. The mere reference to a "case file" and "SASELAMANI CAS 3109/09", although it has the appearance of a police docket reference, is in my view*

insufficient proof of the identity of the entity or person who packed, marked or dispatched the exhibits to the laboratory. The statement, in my view, does therefore not comply with the requirements of the said subsection and does accordingly not constitute prima facie proof in that regard.

This omission was a serious one. It let to the Appeals judge finding the affidavit "irrelevant and inadmissible". And without the affidavit the State only had the testimony of the victim to rely on, which the Appeals judge didn't find credible. Consequently the appeal was upheld and the conviction and sentence was set aside.

33. Pertaining to the chain evidence regarding the gathering of the samples and the marking and safekeeping thereof before it was dispatched to the laboratory whilst not dealt with in the Section 212 statement, it follows that the chain evidence regarding those issues was not proved. Accordingly, in view of the lacking of the said linking chain evidence, the section 212 statement in any event became irrelevant and inadmissible evidence. It should therefore have been disregarded by the trial court.

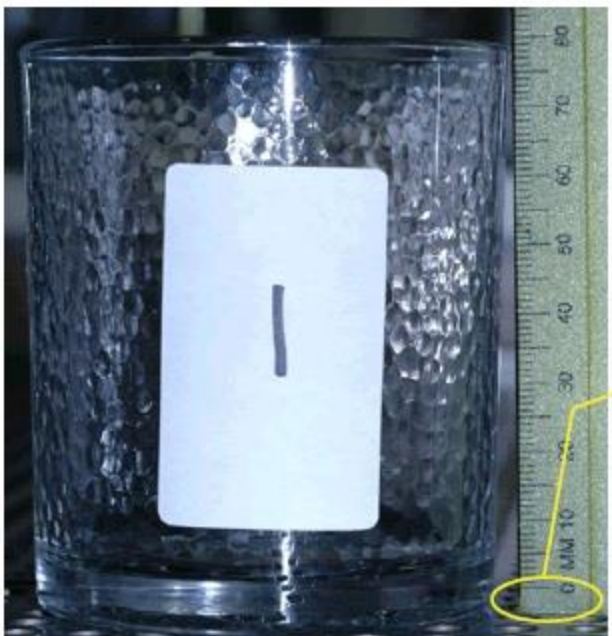
This case illustrates how important it is that the evidence used to establish the facts(s) in a Section 212 Affidavit have a proven chain of custody.

It is clear that Dixon conducted experiments and drew definitive conclusions from drinking glasses for which chain of custody evidence wasn't and couldn't be proven. As such, based on Sithole vs. State (2012), the trial judge should have disregarded Dixon's Section 212 Affidavit.

7) Roger Dixon lied when he inferred that the distance between the lines on Folien #1 is the same as the height of the glass that he claimed Folien #1 was lifted from.

The Mollett Investigation managed to obtain photographs taken by Dixon of the glasses purportedly collected by the police from 21 Shiraz.

Below is an image of Glass # 1. This glass was one of the set of 4 identical glasses – which he referred to in his final conclusion. Thus according to Dixon Folien #1 was lifted from this glass or one of the other three (#'s 6, 7 and 8), which are all identical. Therefore the height of this glass, according to Dixon, should be the same as the distance between the lines on Folien 1. (See Par 6.4) The height of Glass #1 is **83 mm** and the height between the lines on Folien #1 is (and was undisputedly and generally accepted to be) **80 mm**. A glass of 83 mm high simply cannot leave lines/curves that are 80 mm apart from each other. It is physically impossible.



Above: Photographic proof that the implicated glass (or as one of a set of four similar glasses) was not 80 mm high. None of the 11 glasses were 80 mm high.

Thus Dixon had no scientific basis to make the statement:

> *6.4 The distance between the two parallel curved lines which are visible on Folien 1, as described in paragraph 3.2.1.1, was measured and compared to the heights of the eleven (11) drinking glasses collected from 21 Shiraz flats.* *Four matching glasses of the eleven were found to have the* ***same height*** *as the distance between the lines* *….*

It should be noted that Dixon's affidavit does not contain the dimensions of the 11 glasses that he used to make tests lifts with.

8) Roger Dixon lied when he stated that Constable Swartz demonstrated to him how he lifted Folien #1 from the DVD cover, and thus committed perjury.

In Paragraph 6.1 of his affidavit Roger Dixon stated:

> *6.1 Lifts were made of DVD cover #1 as described in paragraph 3.1.1 on the top half of the front of the cover* ***as demonstrated to me by Constable Swartz****.*

According to Constable Swartz he has never personally met or communicated with Roger Dixon and he has never demonstrated to Roger Dixon how he lifted Folien #1. Dixon also did not state in his affidavit where and when such meeting would have taken place.

9) Roger Dixon did not describe in sufficient detail how the drinking glasses were handled during his experiments.

> *6.4 ….With glass 8, while holding it in the right hand, a drinking action was performed in order to replicate the lipmark on Folien 1.*

7.3 The positions of the fingers and the right thumb, as seen on folien 1, is consistent with the lift having been taken from one of the four drinking glasses described in paragraph 6.4. In addition, the lip mark drinking from glass 8 is in the same position as that observed on Folien 1, <u>above the left fingers</u>.

In Par 6.4 Dixon performed a drinking action holding the glass in his right hand. Then in Par 7.3 he talks about the left finger prints and right thumb prints on Folien #1 that are consistent with the fingerprints he took from Glass #8 (one of the four drinking glasses). But where did the left finger print on Glass #8 come from if he only performed a drinking action with the right hand? If at some point he handled the glass with his left hand – why did he not describe the action he used? Was it because he used an unusual and unnatural drinking action in order to 'force' a result – just like Pat Wertheim did when he compiled his report in the presence of Fred's father?

If Dixon did use Wertheim undeclared and therfore 'secret' method to get the thumb print above the left fingers, how did he know about it? What type of communication was there between Wertheim and Dixon prior to Dixon's study? If Dixon only had access to Wertheim's report and he followed the drinking action described therein precisely, he would not have been able to place his lip print above the left fingers.

10) Roger Dixon's made statements about the dry water drop marks, that have no basis in science, and that are contradictory to what one would reasonably expect of a person with a Masters Degree in Geology.

Roger Dixon, since deceased, held a Masters Degree in Geology from the University of Cape Town. One would therefore imagine that he should have had a reasonable understanding of fluid properties and dynamics, ot at least he should have been able to some basic research into the topic. That is why it is so hard to understand how Dixon, in good conscience, could have made the following statement:

7.4 The water droplets observed on Folien #1 are consistent with water droplets having dried on a vertical surafce. They are oval in shape with their longitudenal axis parallel to the bottom of a glass.

This statement has absolutely no scientific merit. When a water drop hits a horizontal surface at an angle, it forms an oval drop – the sharper the angle the longer and thinner the drop. And it is quite possible for the longetudinal axes of such oval drops to end up parallell to the edge of a flat object – such as for example a DVD cover. Futhermore there is no rule in fluid dynamics that drops on a vertical surface will always be oval, with the long axis parralell to the horizontal.

Based on the reasons explained in this document, it is abundantly clear that Roger Dixon's Section 212 Affidavit is inadmissible and should never have been accepted by the Court. By accepting it, the legal process and Court was misdirected and the proper administration of justice was severly compromised. Without Dixon's report the trial could and would have taken a diffrent and more just course, possibly resulting in a different outcome. The acceptance thereof can therefore be seen as an ERROR OF LAW – and basis for a retrial.

Especially keeping the following infuence his affidavit had, in mind:

1) <u>Compelling the State to withdraw the fingerprint evidence, and not to further rely on it to dispute Fred's alibi. The State lost confidence in a key piece of evidence.</u>
2) <u>Conversely, at the same time, it gave the Defence confidence – so much so that they wanted to bring it back into the trial, to use it to further discredit the police and accuse them of evidence fabrication.</u>
3) **<u>Very important: The judge used it comprehensively in his judgement to strengthen and support Wertheim and Zeelenberg's testimonies (and vice versa)</u>.**