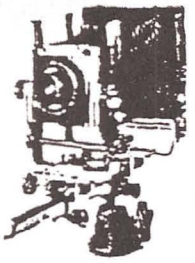
LABORATORY OF FORENSIC SCIENCE



HERBERT LEON MacDONELL, DIRECTOR
POST OFFICE BOX 1111
CORNING, NEW YORK 14830

TELEPHONE NO. (607) 962-6581
FAX (607) 936-6936

Please refer to Case No. 00-070

Mr. Lee Markovitz, Esq.
1220 Grant Building
Pittsburgh, Pennsylvania 15219

13 December 2000

Re: Charles J. Goldblum (00-070)

AFFIDAVIT

Herbert Leon MacDonell, the undersigned affiant, of lawful age, being duly sworn, states that he resides in the township of Corning, New York; that he was graduated from Alfred University in 1950 with the degree of Bachelor of Arts having majored in chemistry; that he was graduated from the University of Rhode Island in 1956 with the degree of Master of Science having a major in Analytical Chemistry; that he held the position of Graduate Assistant at both of these universities in Analytical Chemistry, Spectroscopy, Microscopy and Criminalistics; that he is a graduate of many training programs held in Rhode Island, New York and Pennsylvania; that in 1951 he was employed as Assistant Spectrographer for the New York State College of Ceramics; that he was Professor and Head of the Department of Chemistry at Milton College from 1951 to 1954; that he was a Research Analytical Chemist for the DuPont Company in Philadelphia from 1956 to 1957; that he was a Research Analytical Chemist for Corning Glass Works from 1957 to 1972 during which he measured physical properties and determined the chemical composition of numerous glass types; that he has been an Instructor in Police Science from 1960 to 1967 and Adjunct Professor of Criminalistics since 1972 at Corning Community College; that he also has been Adjunct Professor of Criminalistics at Elmira College from 1972 to 1983; that he has been the Director of the Laboratory of Forensic Science since 1970; that he has been retained hundreds of times as a consultant by law enforcement agencies, prosecutors and defense attorneys in criminal and civil cases in all 50 states, the District of Columbia and fifteen foreign countries since 1950.

Affiant further states that as Instructor of Police Science, and later Adjunct Professor of Criminalistics, he taught Criminalistics to hundreds of law enforcement officers since 1960 at both Corning Community College and Elmira College. Criminalistics deals with the application of science to the investigation of crime which is

EXHIBIT
tabbies
EVIDENCE 14

primarily concerned with the examination of physical evidence. Affiant further states that as Adjunct Professor of Criminalistics at Elmira College he taught several forensic subjects in addition to Basic Criminalistics. These included: Personal Identification, Firearms Identification, Forensic Photography, Death Investigation, Forensic Microscopy, Investigation of Contemporary Homicide and Breathalyzer Operator Certification.

Affiant further states that he has presented over 600 lectures on the subject of scientific crime investigation before hundreds of technical societies, universities and police training academies in the United States and many foreign countries. He has spoken before forensic meetings in Australia, Canada, England, Germany, Holland, Hungary, Iceland, Italy, New Zealand, Puerto Rico, Scotland, Switzerland, and Taiwan. He has conducted independent forensic research sponsored by the National Institute of Law Enforcement and Criminal Justice, United States Department of Justice, and has conducted and participated in many institutes for law enforcement officers under the sponsorship of the Law Enforcement Assistance Administration.

Professor MacDonell developed the Bloodstain Evidence Institute in March 1973. To date he has instructed this one week program fifty-seven times in twelve states, the District of Columbia, Australia, Holland, England and Sweden. Over thirteen hundred students from forty-six states and nineteen foreign countries have attended the Institute. In addition, he has directed over sixty seminars of one to four days duration on bloodstain evidence and has given over six hundred lectures on the significance of bloodstain patterns in many countries.

Affiant was elected a Fellow in the American Academy of Forensic Science in 1964 after being a Past Secretary and Past Chairman of the Criminalistics Section of that society; Fellow and Past President of the Police-Law Society; the founder, Distinguished Member, and Historian of the International Association of Bloodstain Pattern Analysts; Life Member, Distinguished Member, and Past Chairman of the Science and Practice Committee of the International Association for Identification; Former Fellow of the Fingerprint Society (England); member of the Canadian Identification Society; one of the Founding Members of the Association of Firearm and Toolmark Examiners; member and former President of the New York State Division of the International Association for Identification; Life Member of the Canadian Society of Forensic Sciences; member of the Forensic Science Society (England), and member of the Northeastern Association of Forensic Scientists, the Midwest Association of Forensic Scientists, Life Member of the American Chemical Society, and member of Sigma Xi.

Affiant has been the author of over one hundred original papers on both analytical chemistry and forensic science. His articles have been published in England, Canada, Taiwan, and the United States. He is the author of *BLOODSTAIN PATTERN INTERPRETATION* (1983), a

revision of his 1971 LEAA report *FLIGHT CHARACTERISTICS AND STAIN PATTERNS OF HUMAN BLOOD*, a study which was sponsored by the United States Department of Justice; *BLOODSTAIN PATTERNS* (1993); and its revision, *BLOODSTAIN PATTERNS - REVISED EDITION* (1997). Affiant is the subject and a co-author of the book, *THE EVIDENCE NEVER LIES* (1984). Affiant holds patents on chemical separation processes and methods of personal identification.

Affiant is the inventor of the MAGNA Brush, a propriety device for processing latent fingerprints. This device has been adopted by identification bureaus on a worldwide basis. In recognition of his contributions to the field of forensic science affiant has received the Dondaro award from the International Association for Identification in 1974, the first American Institute of Applied Science Award in 1979 and various other awards both foreign and domestic. Affiant was designated the first Distinguished Member of the International Association of Bloodstain Pattern Analysts in 1985.

Affiant has been accepted as an expert witness in many forensic disciplines and has testified in thirty-five states at all levels of jurisdiction including federal and military courts. Affiant has also presented expert testimony in various Canadian courts, and was asked to testify before the highest Appellate Court in Quebec. He has also given expert testimony in Australia, Bermuda, Germany, and Grand Cayman.

In July 1970 affiant was appointed by the then President of the International Association for Identification to serve on a select committee whose objective was "to review at length the principles upon which friction ridge identification is predicated and, based upon the result of its findings, submit a technical resolution setting forth such minimal requirements." Following their three year study, the committee's final report was presented to and adopted by the International Association for Identification during their 1973 annual conference. That report was subsequently accepted by every major identification bureau in the world, including the Federal Bureau of Investigation.

Affiant has been certified as a Senior Crime Scene Analyst by the International Association for Identification.

With specific reference to the above cited case, in mid-November 2000 I was asked to review certain documents in the 1974 case of the Commonwealth of Pennsylvania v. Charles J. "Zeke" Goldblum. Several documents were obtained by downloading affidavits of Drs. Baden, Lee, Wecht, and Wolf from website: http://www.frezeeke.org. I can not verify the accuracy of these documents but if they are incorrect they still agree with other information I received.

I also reviewed a transcript of Ronald B. Freeman relative to his observations of bloodstains on the dashboard of a vehicle. The pages received are numbered 1247-1254.

Apparently, no detailed photographs showing the small bloodstains reportedly present on or around the dashboard of the vehicle in question were taken. The description given by Mr. Freeman in his testimony is typical of individuals who are attempting to relate what they observed regarding bloodstains. From what he said it is may be concluded that blood was projected onto the dashboard area as a result of some kind of a bloody object being swung from left to right. This instrument, be it a knife, wrench, hammer, or short club, would almost certainly have to be swung by someone sitting or otherwise positioned in the front seat.

Had some bloody instrument been swung by someone in the rear of the vehicle, it is virtually impossible that cast-off blood could have left a narrow bloodstain pattern with well defined tails on their right side as has been described. Blood that is cast-off from an instrument follows well established laws of physics. Its behavior is similar to that of shotgun pellets when they leave the muzzle of a shotgun. Air resistance causes pellets to spread and the greater distance between the muzzle and the target the greater the spread of the pattern. Likewise, when a bloody instrument is swung, blood will be cast-off and the greater the distance between the end of the instrument and the surface upon which the blood droplets land, the greater the dispersion and spread of the pattern. Basically, spread is a function of time and air resistance. The longer small droplets of blood are traveling through air the larger will be the resulting bloodstain pattern.

Well defined tails on small bloodstains suggest that they impacted the dashboard at an acute rather than obtuse angle. Therefore, it is essentially impossible that someone sitting in the back seat of the vehicle could swing a bloody instrument close enough to the dashboard to produce elongated bloodstains with well defined tails. Such an improbability is even more unlikely if two persons were in the front seat of the vehicle as has been reported.

I have reviewed the affidavits of Drs. Baden, Lee, Wecht, and Wolf, all of whom are well known to me. I respect each and every one of them as competent forensic professionals within their individual disciplines. It is unnecessary and would only be redundant for me to restate what they have all so clearly written. Therefore, I shall only state that I concur completely with Dr. Henry C. Lee, the only criminalist in the group, only because he is a physical scientist rather than a medical expert. This should not be interpreted to suggest that Drs. Baden, Wecht, and Wolf are incorrect in anything that they have concluded, it is simply that I am not a medical doctor and wish to remain within my own field of expertise which is physical science.

It is unfortunate that there are no photographs of the bloodstains in the vehicle. Such photographs would be allow a more accurate interpretation of their pattern type and mechanism of production than a verbal description of their appearance. Nevertheless, the

absence of photographs does not prevent general conclusions from being drawn based upon the description of the bloodstains as was reported in this case. A drop of blood impacting a surface at ninety degrees will produce a bloodstain that is round and it will not have a tail. The more acute the angle of impact the more elongated the resulting bloodstain will be. Tails on a bloodstain do not normally appear at angles greater than thirty degrees.

Therefore, in consideration of the description of the bloodstain pattern on the dashboard, the instrument from which the blood was cast far more likely than not was being swung by someone who was sitting in the front seat.

Naturally, I have considered the dying declaration reportedly made by the victim, George Wilhelm. However, it is not something that should be a factor in forming an opinion by a physical scientist. Nevertheless, while it supports the conclusion that the person responsible for the death of Mr. Wilhelm was sitting in the front seat, it is only that, supporting evidence and not something that should be considered by a physical scientist in forming an opinion.

Respectfully submitted,

Herbert Leon MacDonell

Herbert Leon MacDonell, Director
LABORATORY OF FORENSIC SCIENCE

New York State
Steuben County
Signed this 13th day of December, 2000.

Martha L Force

MARTHA L. FORCE
Notary Public, State of New York
Qualified In Steuben County
My Commission Expires May 16, 2002.
Registration # 4920775