

Report of Examination Results in connection with the Shooting Incident
in the vicinity of #389 Sixth Street, Ayden, North Carolina on 19 April
2005, and in the death of Christopher Foggs.

Prepared for the Office of District Attorney Clark Everett, Greenville,
North Carolina 27835

By

Stephen G. Bunch
Forensic Firearms Examiner/Consultant
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12/08/2010

Evidence/documentation submitted:

1. Fired cartridge case recovered from corner of 6th and High Streets, marked as Q1
2. Fired cartridge case recovered from corner of 6th and High Streets, marked as Q2
3. Fired cartridge case recovered from corner of 6th and High Streets, marked as Q3
4. Fired cartridge case recovered from corner of 6th and High Streets, marked as Q4
5. Fired cartridge case recovered from corner of 6th and High Streets, marked as Q5
6. Fired cartridge case recovered from corner of 6th and High Streets, marked as Q6
7. Fired cartridge case recovered from corner of 6th and High Streets, marked as Q7
8. Fired cartridge case recovered from corner of 6th and High Streets, marked as Q8

9. Damaged bullet recovered from eave of porch of house located at 389 6th Street, marked as Q9
10. Partial bullet jacket fragment recovered off front walkway of house at 389 6th Street, marked as Q10
11. Small, partial bullet jacket or metal fragment recovered beside vehicle parked in front of 389 6th Street, marked as Q11
12. Small metal fragment recovered on front porch of house at 389 6th Street, marked as Q12
13. Small metal fragment recovered on front porch of house at 389 6th Street, marked as Q13
14. Small metal fragment recovered on window sill of front porch of house at 389 6th Street, marked as Q14.

15. Transcript of testimony of Jamaul Green, from his trial in 2006
16. Volumes 1 – 10 of transcripts of various witnesses' testimony in trial of Vonzeil Adams, 2009
17. Report of Investigation by Medical Examiner, Dr. Gilliland
18. Various reports and diagrams of incident by officers of Ayden Police Department and Pitt County Sheriff's Office
19. State of North Carolina Search Warrant for search of Caprice Classic
20. North Carolina State Bureau of Investigation Laboratory report dated 11 July 2006, by Beth S. Desmond
21. North Carolina State Bureau of Investigation Laboratory report dated 27 July 2006, by Beth S. Desmond
22. One page of examination notes on Q9 and Q10, dated 11 July 2006, assumed written by Beth S. Desmond
23. North Carolina State Bureau of Investigation Laboratory report dated 16 August 2005, by Elizabeth K. Patel
24. Notes and transcripts of interviews of various witnesses
25. Two reports by Thomas C. Smith of Thomas C. Smith Investigations
26. Twelve photographs of incident scene, assumed taken by Officer Charles Mitchell on the evening of the incident. Includes close-ups of fired cartridge cases at base of tree, roadways, vehicles, and houses
27. Two poster diagrams in overhead view of the overall scene, prepared by C.E. Mitchell

Note: Items 15 – 25 above are copies of the original documents.

The general approach and principles informing this analysis of the shooting incident:

As much as possible, inferences are made only from accepted facts and from the firearm and trajectory-related evidence and examination results. No consideration or evaluation is afforded, for example, the credibility of the various witnesses or legal technicalities. Thus no inferences or consideration is given to the ultimate issue of guilt. Such is outside the scope of this scientific investigation and report. Witness statements, law enforcement reports, medical examiner reports, forensic examiner reports, and court testimony transcripts, etc., were reviewed in order to ensure that all theories surrounding the shooting aspects of the incident are adequately considered. Given these various hypotheses, the firearms and trajectory-related material is then analyzed for the purpose of assessing the merits of the various hypotheses. The approach here is not legal but rather scientific and "problem solving" in nature.

Requests by client:

- (1) To re-examine the firearms-related physical evidence recovered at the scene and report findings; and
- (2) To review documentary materials relating to the shooting incident in order to evaluate the various possible hypotheses and to report findings on same.

General matters apparently not in dispute:

1. That Christopher Foggs died of a gunshot wound from a single bullet and fell in the area between the house at 389 6th street and the adjacent house to the East
2. That at least eight shots were fired during the incident
3. That eight fired cartridge cases were recovered in a single location adjacent to a tree
4. That no other fired cartridge cases were recovered
5. That a single bullet, along with other bullet or metal fragments were recovered on the property of the house located at 389 6th Street, or recovered very near the property
6. That the bullet causing the death of Christopher Foggs was not recovered
7. That Jamaul Green brought a firearm to the scene and fired several or more rounds of ammunition

Matters in dispute and possible theories as they relate to the shooting itself:

1. The firearm origin of the Q9 bullet and Q10 bullet jacket fragment
2. Did Jamaul Green fire all the rounds discharged at the scene?
3. Did Vonzeil Adams also fire a shot or shots?
4. Did an additional person(s) fire a shot or shots, possibly the fatal one?

Observations and Examination Results:

Examination of Q1—Q14:

From visible inspection and microscopic examinations, the Q1—Q8 9mm Luger fired cartridge cases were determined to have been fired from the same firearm. (Note: the strength of this conclusion is one of practical certainty, or reasonable degree of scientific certainty.) The marks present on these specimens are consistent with those imparted to cartridge cases fired from Hi-Point pistols. However, no definitive conclusion can be reached on this matter; other makes/models of firearms could also impart similar marks.

The Q11 bullet jacket fragment bears no marks of value for comparison purposes.

The Q12—Q14 metal fragments bear no marks of value for comparison purposes.

The Q9 bullet bears five land impressions and five groove impressions and appears to be of full-metal-jacket design. Though deformed, it is consistent in appearance, weight (damaged weight), and dimensions with originally belonging to the 9mm/38 caliber family of bullets. It also is consistent in these characteristics with bullets commercially loaded into 9mm Luger ammunition, but other loaded ammunition in the 9mm/38 caliber family cannot be excluded—ammunition such as 9mm Makarov, 38 Special, and 357 Magnum, among others.

From the Q9 examination data, a General Rifling Characteristics (GRCs) database search yielded Hi-Point pistols in both 380 Auto caliber and 9mm Luger as having possibly fired this bullet. (See attached printout of GRC results.) It must be noted that this database is neither exhaustive nor necessarily error-free.

The Q10 bullet jacket fragment bears two land impressions and two groove impressions that are compatible with those of the Q9 bullet, especially when viewed side-by-side under the comparison microscope.

Both Q9 and Q10 are most consistent with having originally borne nine (9) land and nine (9) groove impressions, with a left twist. (For the method used for reaching this conclusion, see copy of attached examination notes.) This is not a definitive conclusion, but is most consistent with the observed and measured data and with alternative possibilities.

From the Q10 examination data, a GRC database search yielded Hi-Point pistols in both 380 Auto caliber and 9mm Luger as having possibly fired this fragment/bullet. (See attached printout of GRC results.) It again must be noted that this database is neither exhaustive nor necessarily error-free.

The Q9/Q10 microscopic comparison was inconclusive. As indicated, the rifling impressions were compatible; and there was some degree of correspondence in the microscopic detail between the two specimens. Thus the two specimens could have been fired from the same barrel; however, no definitive conclusion could be reached on this question.

Recovered bullets and metal fragments:

These specimens, from the locations from which they were recovered, and based on the trajectory estimations made by Officer Mitchell in his reports and/or testimony, are consistent with having been fired from a firearm in the vicinity of the recovered cartridge cases, very near a tree adjacent to the eastern edge of High street, just south of the intersection of 6th and High streets.

Note that a full-scale trajectory reconstruction employing probes and angle measurements, for those projectiles and fragments impacting on or around the residence at 389 6th Street, is no longer possible given that both this dwelling and the adjacent dwelling to the east no longer exist.

The bullet that caused the death of Christopher Foggs:

This bullet was not recovered. From the medical examiner's report, this bullet did not strike bone, but instead perforated soft tissue only. The design of this bullet—whether a full-metal-jacket design, hollowpoint, or some other design—is obviously unknown. Moreover, without adequate testing in tissue stimulant, with the ammunition and firearm used, the velocity of the bullet exiting Mr. Foggs' back cannot be estimated, and even with testing, the results could be of very limited usefulness. Clearly the exact position of Mr. Foggs' body at the time of bullet impact is unknown and perhaps a matter of dispute. Also unknown is the *exact* track of the bullet within the body and thus the angle of exit from the body (though this can be very roughly estimated from the medical examiner's report). Further, very often bullets exiting bodies and objects are in an unstable yaw condition, with the subsequent downrange flight also possibly unstable. Thus, with these unknowns compounding one another, the flight path of the bullet upon exiting Mr. Foggs' body cannot be reasonably estimated. In this vein also, it cannot be reasonably estimated how far downrange this bullet may have traveled before striking an object or the ground.

Recovered cartridge cases:

Eight 9mm Luger fired cartridge cases were observed, photographed in place, and recovered near the above-mentioned tree. According to Officer Mitchell's testimony in one of the trials, these cartridge cases lay within an area roughly the size of the witness box he was testifying in. From the photographs, it would appear this was an area roughly elliptical in shape, with a length along the "major axis" of the ellipse of approximately 3 – 4 feet, and width along the "minor axis" of approximately 2 – 3 feet.

[For the purposes of this analysis, it's assumed that the fired cartridge cases did not "bounce around" *significantly* on impact with the ground or the nearby tree, which is reasonable given the surface was mostly grass and given the relatively small impact area; it's also assumed that no person intentionally or unintentionally moved the cartridge cases once they impacted the ground, nor a vehicle or other object accidentally disturbed them. From my review of the available documents, there's no indication or suggestion any of these things happened.] No other fired cartridge cases were observed or recovered at the scene.

Conclusions and Assessments of the various Theories:

It's not a matter of dispute that Jamaul Green fired numerous shots from a position near the aforementioned tree. From the GRC database results, the firearm could quite possibly have been a Hi-Point semi-automatic pistol, though this is not definitive. No firearms-related evidence refutes either of these propositions.

Did Vonzeil Adams "snatch" the pistol from Jamaul Green and also fire shots? Clearly the firearms-related evidence alone cannot speak to this question except on one level: *If we assume as a hypothetical* that Ms. Adams did in fact shoot, then it had to be from a position reasonably close to Jamaul's shooting position, or else it's highly unlikely the fired cartridge cases would have come to rest in the locations that they did, within a fairly small area. Moreover, the farther away we might assume her shooting position to be from Mr. Green's, the more implausible the proposition that she fired any shots. The relatively small ejection pattern is most consistent with the pistol being held in the same general orientation, elevation, and location during the firing of all eight shots.

However, there are always uncertainties with ejection patterns and these must be acknowledged. Did either Jamaul or Vonzeil—not both—hold the gun in an unusual orientation or elevation from the ground? Did one shooter's ejected cartridge cases strike the tree trunk and drop while the other shooter's ejected cases did not? Given these unknowns, it's always possible that Vonzeil could have been positioned slightly further from Jamaul's position than the ejection pattern otherwise suggests.

Leaving the unknowns aside, clearly the ejection pattern at the scene is silent on whether Vonzeil Adams fired shots; but it strongly suggests that *if she did shoot*, she fired from a position close to Jamaul Green's position; that is to say, for example, one can very plausibly exclude a hypothetical shooting position for Vonzeil that was 20 feet from Jamaul's shooting position.

Were there additional shooters, over and above the hypothetical possibility of Vonzeil Adams as a second shooter? That is, does the firearms-related evidence tend to support or refute the theory that another shooter or shooters could have fired a shot or shots from another firearm(s), from a position(s) somewhere removed from Mr. Green, including a shot that killed Mr. Foggs?

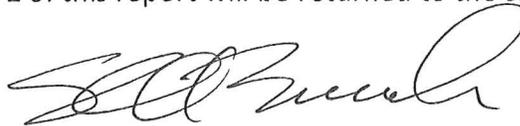
The firearms evidence and other undisputed facts are also indefinite regarding this possibility; an overall consideration of the positive physical evidence neither points to this theory nor excludes the possibility. It may be an example of a theory that for all practical purposes is "untestable." However it is significant that there's apparently no positive physical evidence to support it: there were no recovered bullets or fragments that couldn't have been fired from a single firearm; no fired cartridge cases in unexpected or otherwise inexplicable locations; no recovered bullets or fragments in unexpected or otherwise inexplicable locations; and no bullet impacts/tracks in unexpected or otherwise inexplicable locations.

No final impact-site candidates for the fatal bullet were reported; nor was the fatal bullet recovered at all. But these facts are unsurprising given this was an outdoor shooting scene, given the confounding unknowns surrounding Mr. Fogg's position when struck, and given the oft-difficulty of tracking and discovering fired bullets at an outdoor scene.

The absence of visible gunshot residues (GSR) on the victim's body is not particularly significant. Dr. Gilliland's report states that "No soot or powder is seen on the skin and no clothing accompanies the body." Upon discharge, any intervening object or layer between a firearm muzzle and skin, such as clothing, very often prevents the deposition of gunshot residues on the skin. There is no mention in Dr. Gilliland's

report of gunshot residues observed within the wound track or on the skin around the entry wound. Nor was there any indication in the documentation I reviewed of any GSR testing performed on the victim's outer clothing for the purpose of detecting possible non-visible GSR; nor was there any indication of the type and thickness of the clothing the victim wore on his upper body—if any—and whether there was any ripping or tearing of the fabric around the entry bullet-hole. Thus reasoning strictly from the available GSR facts and considerations yields the conclusion that the fatal shot could have been fired from virtually any reasonable muzzle-to-victim distance.

The evidence and documentary material listed on page 2 of this report will be returned to the client separately.



12/8/10

Attachments:

1. An appendix containing "Further discussion of the examination of the Q9 bullet and Q10 bullet jacket fragment." (Pagination inclusive.)
2. Copies of re-examination bench notes for Q9 and Q10 only, along with GRC search results. (Separate pagination.)
3. Copies of representative photomicrographs from the examinations of Q1 – Q14. (Separate pagination.)

Further discussion of the examination of the Q9 bullet and Q10 bullet jacket fragment:

From a review of the trial transcripts, it quickly became clear that this was a matter of some controversy and debate. The central issue was over the rifling characteristics imparted to both specimens, especially to specimen Q10; for if the rifling impressions between the two specimens had been deemed clearly incompatible in their number, widths, or directions of twist, then an Exclusion finding would have been justified and expected; indeed no other conclusion would have been justified. But my finding from this examination was Inconclusive, with a "tilting" towards the proposition that they could have been fired from the same barrel, the latter based on the class characteristics match and some observed correspondence in microscopic detail between the two specimens.

As one can observe from the two separate photographs of Q9 and Q10, the rifling characteristics first appear to be distinctly different. However, once the "driving" edges of the land impressions were observed more closely under magnification and identified, and once the two specimens were mounted on the comparison microscope and observed, it became clear that the rifling impressions on Q10 and Q9 were indeed compatible, as is shown in the subsequent photographs. Moreover, some microscopic detail between land impressions on Q9 and Q10 was also observed to correspond. Thus these two specimens could have been fired from the same barrel, though the quality and quantity of microscopic correspondence was insufficient to justify a definitive conclusion.

During the examination it was observed that the driving edges (or "leading edges") were on the left side of the land impressions when the specimens were oriented in the "nose up" position (the nose-up position for the fragment could be determined from the presence of metal comprising an enclosed base.) Thus, like Q9, the Q10 fragment exhibited rifling impressions not only with similar widths to those of Q9, but also impressions with a leftward direction of twist (when looking down a barrel, either from the breech end or the muzzle end, and if one imagines one's fingertips in the grooves and moving down the barrel, the hand rotates in a counter-clockwise direction).

From trial testimony transcripts, defense counsel in my opinion asked logical questions about the method by which one could determine or estimate the original presence of nine land and nine groove impressions on the bullet and fragment, especially when only two were actually visible on the Q10 jacket fragment. Outwardly, for example, it appears one cannot soundly reason from the fact of two land impressions on a partial bullet fragment to the conclusion of the prior existence of nine land impressions on the original intact bullet.

However, though there are uncertainties involved, performing such estimations/determinations is both reasonable and a common/accepted practice in the discipline. Taking the case of the Q10 fragment, I first determined the data above; namely, I measured the widths of the land and groove impressions that were visible, and also reasoned from observing the driving edges that the specimen exhibited rifling impressions with a left twist. But at this point in the examination, one is still missing an important variable for estimating or determining the number of original land and groove impressions: the diameter of the original bullet.

For many hypothetical bullet fragments the original diameters cannot be determined or estimated. But in this case it could be estimated, for the originally-circular base of the bullet jacket fragment was intact and “folded” along one axis. If one takes a sheet of paper in the shape of a circle, and then folds it near the diameter or centerline, then the long linear leg of the remaining “half moon” is still the diameter. I measured this dimension on the fragment. It was approximately 0.37 inches. From this measurement I reasoned the original bullet was very likely in the 9mm/38 caliber family, and using next the simple mathematical expression for the circumference of a circle, $C = 2\pi R$, where R is twice the diameter, I calculated the most likely number of land and groove impressions present on the original intact bullet when fired from the firearm—nine or ten. (Though nine is more likely than ten, in part owing to the dimensional compatibility of the impressions with those of Q9 under the comparison microscope, and given that the 9/left conclusion for Q9 is of greater reliability.)

But what about the Q9 bullet? How did I estimate its diameter given that the base of the bullet was distorted? In this case it was from a combination of factors: the appearance of the bullet was consistent with common 9mm/38 caliber bullets; the weight of 93.3 grains was consistent with a 9mm/38 caliber bullet being deformed in the way it was; and the deformed base (now elliptical in cross-section) had dimensions also consistent with a 9mm/38 caliber bullet. Then from this assumption of 9mm/38 caliber, the number of land and groove impressions could be estimated by calculation.

Note again, however, that the conclusions of 9/left are not definitive but rather constitute best estimates, especially for Q10. There are multiple layers of uncertainty inherent in this procedure and with these specimens, and errors at different levels can possibly cascade into a larger single error. “Consistent with” does not equate to certainty. There clearly is the possibility of measurement error, especially with a distorted specimen. And given that one is not actually estimating the circumference of a circle but rather the perimeter of a polygon when measuring the widths of rifling impressions; and given that the identification of a driving edge to a land impression is a subjective judgment and cannot reach complete certainty, etc., no conclusion of certainty is warranted with regard to the estimation of 9/left.

The above notwithstanding, in my judgment conclusions for Q9 and Q10 that a rifling pattern of 9/left is *most* consistent with the data are reasonable and warranted: The impression-width measurements are very obtainable and reasonable, especially for Q9; the direction of twist assessments are very reasonable and justifiable; the caliber family estimations (diameters) are reasonable and fit the observations/measurements better than do the nearest likely alternatives for handgun bullets—32 caliber and 40 caliber; and the microscopic rifling-impression dimensional correspondence between Q9 and Q10 was excellent.

Examination Notes

Green/Adams shooting incident, North Carolina

11/18/2010

11/19/2010

Q9 Bullet

Deformed/damaged condition. Copper color jacket. No cannelures visible. Appears to be FMJ with open base and lead core.

5 land impressions visible. Driving edge on left side when nose forward. Therefore consistent with left twist.

5 groove impressions visible.

Land impression widths:

0.053"

0.053"

0.053"

0.053"

0.056"

Groove impression widths:

0.056"

0.061"

0.065"

0.065"

0.065"

Weight: 93.3 gr.

Length ~0.83"; Minor diameter of base ~0.27"; Major diameter ~0.49"

Thus bullet is consistent in its characteristics with belonging to the 9mm/38 caliber family. If we assume this is true, then can estimate the number of original land/groove impressions:

$C = 2\pi r = \pi d$, where C is the circumference of a circle and d is the diameter. Pi (π) is a constant with approximate value of 3.14159. To check best fit for number of lands/grooves:

$8(0.054 + 0.062) = \pi d = 0.928$; thus $d = 0.30$ " (approx.)

$9(0.054 + 0.062) = 1.044$; thus $d = 0.33$ "

$10(0.054 + 0.062) = 1.18$; thus $d = 0.37$ "

Given that it is the secant segments of the circle that are measured when measuring L/G widths, and not the arc length, summing the land and groove widths around the inside-the-circle "polygon" necessarily slightly understates the actual circumference of the circle, and thus slightly understates the actual diameter. The nominal diameter of 9mm/38 caliber bullets ranges from approximately 0.355 to 0.363 inches. Thus for this bullet, the measurements are most consistent with 9 lands/grooves.

Examination Notes

Green/Adams shooting incident, North Carolina

11/18/2010

11/19/2010

Note that this bullet is consistent in observable characteristics with bullets commonly and commercially loaded into 9mm Luger ammunition, but other ammunition types in the 9mm/38 caliber family cannot be excluded—ammunition such as 380 Auto, 9mm Makarov, 38 Special, and 357 Magnum, among others.

A General Rifling Characteristics database search on Q9 yielded Hi-Point pistols chambered for both 380 Auto and 9mm Luger ammunition, which means these pistols are candidates for having fired this bullet. It must be noted, however, that this database is neither exhaustive nor necessarily error-free.

Examination Notes

Green/Adams shooting incident, North Carolina

11/18/2010

11/19/2010

Q10 Bullet Jacket Fragment

Deformed/damaged condition. Copper color. No cannelures visible. Closed base.

With naked eye appears to be 2 rifling impressions present. However, on closer inspection under magnification, the two driving edges contraindicate one land impression and one groove impression, but rather indicate 2 land impressions and 2 groove impressions. This is corroborated under the comparison microscope with Q9 and Q10, where the faint trailing edge of one Q10 land impression becomes much more apparent.

Driving edges of land impressions appear to be on left side, when nose-end of original jacket is forward. This is consistent with a left twist rifling direction.

Land impression widths:

0.050"

0.057" though faint

Groove impression widths:

0.060"

0.050 though faint

These impression widths are consistent/compatible with those of Q9, and most importantly, appear so under the comparison microscope.

Base of fragment ~0.37" in diameter, though significantly deformed along 90 degree axis to this measured one, in the same plane. But most consistent with 9mm/38 caliber family.

Using the measured rifling impression widths, and the assumption of 9mm/38 caliber family, the original number of land/groove impressions can be estimated:

$C = \pi d$; $9(0.054 + 0.055) = 0.98$; therefore $d \text{ approximately} = 0.98/\pi$; $d = \text{approx. } 0.31"$.

$10(0.054 + 0.055) = 1.09$; therefore $d \text{ approximately} = 0.35"$.

Given that it is the secant segments of the circle that are measured when measuring L/G widths, and not the arc length, summing the land and groove widths around the inside-the-circle "polygon" necessarily understates the actual circumference of the circle, and thus understates the actual diameter. The nominal diameter of 9mm/38 caliber bullets ranges from approximately 0.355 to 0.363 inches. Thus for this fragment, the measurements are consistent with either 9 or 10 lands/grooves, though from comparison microscopy, the visual land/groove impression compatibility with Q9 favors the 9 L/G conclusion.

Examination Notes

Green/Adams shooting incident, North Carolina

11/18/2010

11/19/2010

A General Rifling Characteristics database search on Q10 yielded Hi-Point pistols chambered for both 380 Auto and 9mm Luger ammunition, which means these pistols are candidates for having fired this bullet jacket fragment. It must be noted, however, that this database is neither exhaustive nor necessarily error-free.

GRC Results (all data)

User Search Parameters

Cartridge:	Caliber:	Lwdmin:	0.053
Manufacturer:	L/G:	Lwdmax:	0.056 Firing Pin:
Model:	Twist:	Gwdmin:	0.056 Extractor:
Type:	Poly/Conv.:	Gwdmax:	0.065 Ejector:
Country:	Rim/Center:	GRC +/-:	0.005 BoB:

Department: Forensic Firearms Consultants, LLC

Case/Lab Number: Green/Adams Case, North Ca

Examiner: Stephen G. Bunch

Exhibit Number: Q9 Bullet

CARTRIDGE CALIBER	MANUFACTURER MODEL	COUNTRY TYPE PC	L/G TWIST	LWDMIN LWDMAX	GWDMIN GWDMAX	EJ EX	FP BOB
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380 AUTO / 9mm KURZ 38	HI-POINT FIREARMS CF380	US PI C	9 L	0.058 0.062	0.061 0.065	PIN 3	C P
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Notes:

380 AUTO / 9mm KURZ 38	HI-POINT FIREARMS CF	US PI C	9 L	0.048 0.052	0.070 0.074	? ?	H ?
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Notes:

9mm LUGER (9x19mm) 38	HI-POINT FIREARMS C	US PI C	9 L	0.051 0.055	0.065 0.072	PIN 3	H P
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Notes:

9mm LUGER (9x19mm) 38	HI-POINT FIREARMS C	US PI C	9 L	0.051 0.055	0.066 0.070	PIN 3	H P
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Notes:

9mm LUGER (9x19mm) 38	HI-POINT FIREARMS 995	US RC C	9 L	0.050 0.051	0.069 0.071	? ?	H P
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Notes:

9mm LUGER (9x19mm) 38	HI-POINT FIREARMS C	US PI C	9 L	0.050 0.053	0.069 0.073	PIN 3	H P
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Notes:

GRC Results (all data)

User Search Parameters

Cartridge:	Caliber:	L/G:	9	Lwdmin:	0.050	Firing Pin:	
Manufacturer:	Twist:		L	Lwdmax:	0.057	Extractor:	
Model:	Poly/Conv.:		C	Gwdmin:	0.050	Ejector:	
Type:	Country:	Rim/Center:		Grdmax:	0.060	BoB:	
				GRC +/-:	0.005		

Department: Forensic Firearms Consultants, LLC

Case/Lab Number: Green/Adams Case, North Ca

Examiner: Stephen G. Bunch

Exhibit Number: Q10 Bullet Jacket Fragment

CARTRIDGE	MANUFACTURER	COUNTRY	L/G	LWDMIN	GWDMIN	EJ	FP
CALIBER	MODEL	TYPE PC	TWIST	LWDMAX	GWDMAX	EX	BOB

380 AUTO / 9mm KURZ	HI-POINT FIREARMS	US	9	0.058	0.061	PIN	C
38	CF380	PI C	L	0.062	0.065	3	P

Notes:

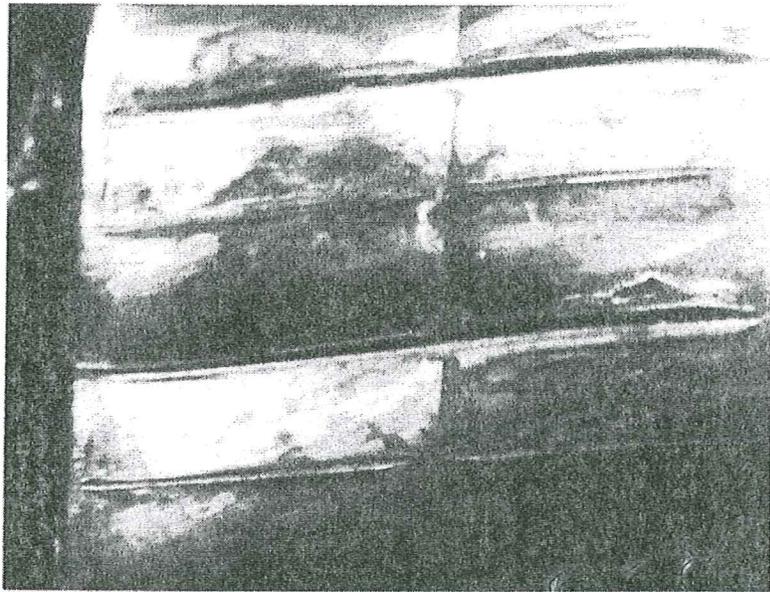
9mm LUGER (9x19mm)	HI-POINT FIREARMS	US	9	0.051	0.065	PIN	H
38	C	PI C	L	0.055	0.072	3	P

Notes:

Green/Adams shooting incident, North Carolina

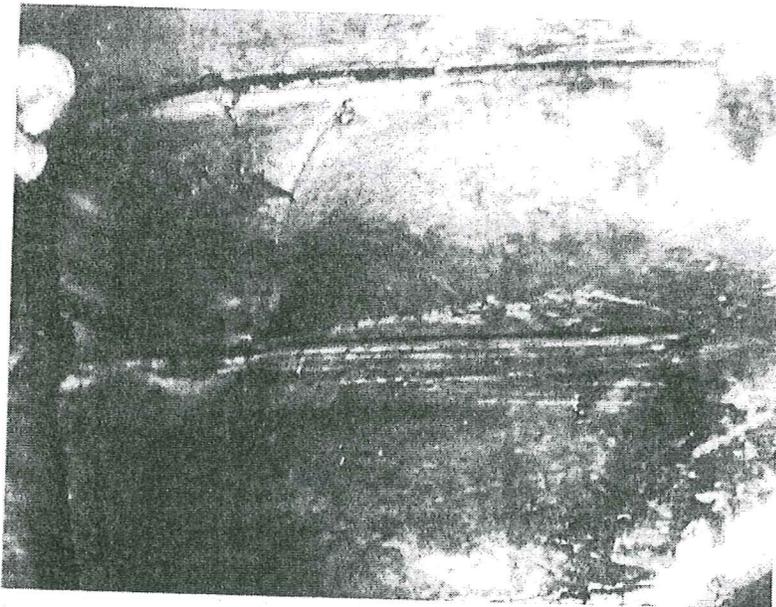
12/4/10

SB



Q9

10x



Q10

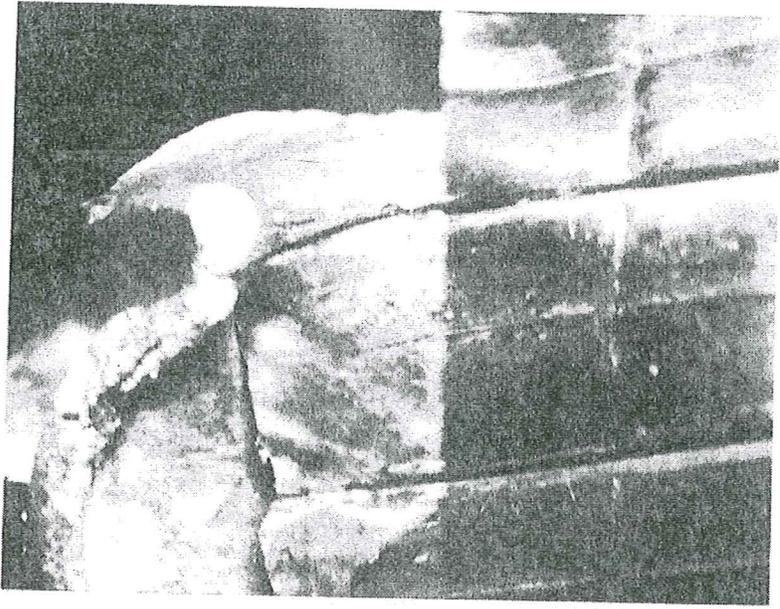
10x

~~Q9~~
SB

Green/Adams
slurting incident,
North Carolina

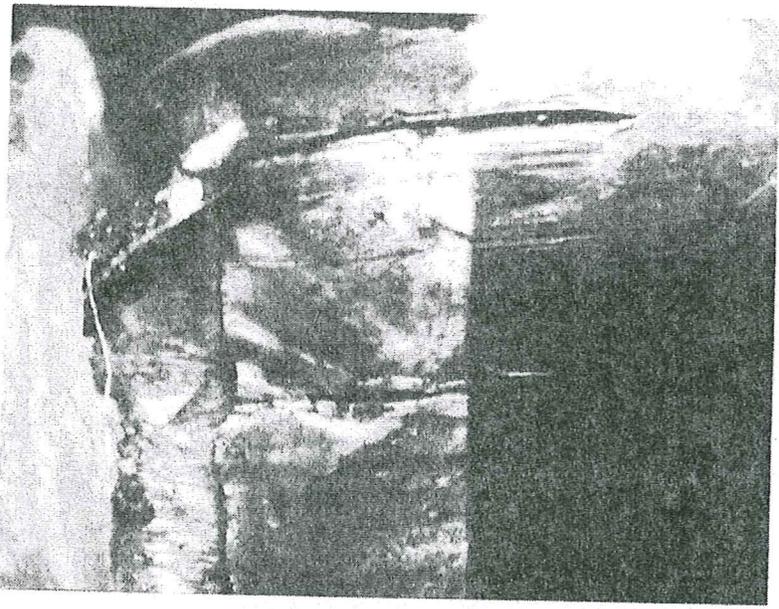
12/4/10
SIS

Q10
10x



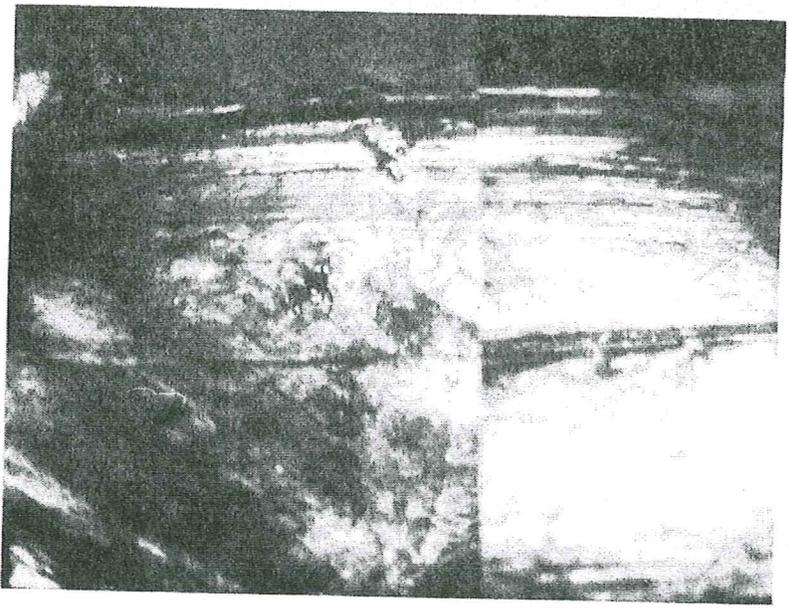
Q9

Q10
10x



Q9

Q10
20x



Q9

Green Adams
shooting incident,
North Carolina

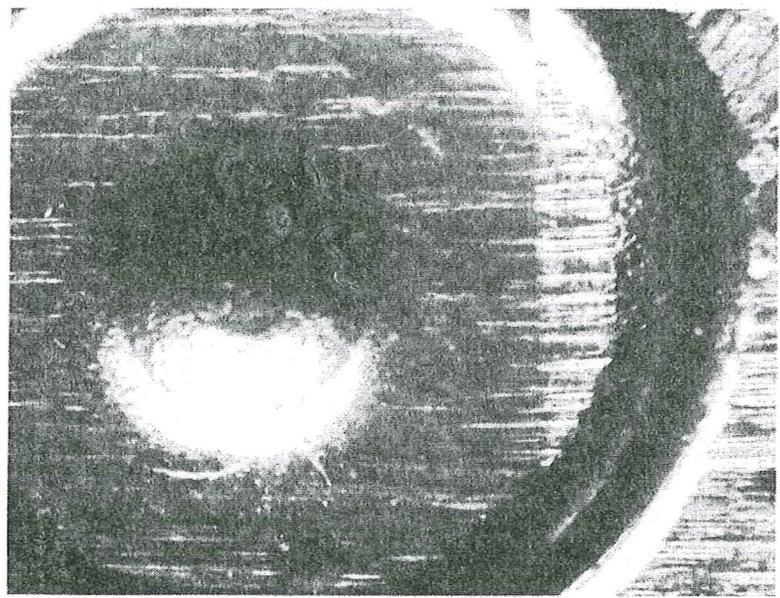
12/4/10
SB

Q1
20x



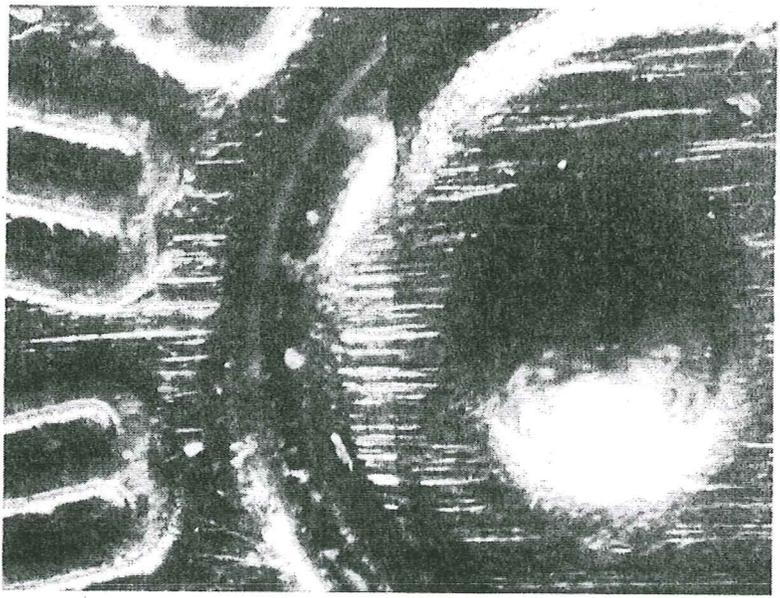
Q2

Q1
20x



Q2

Q3
20x



Q4
20x